NEW ISSUE – BOOK-ENTRY-ONLY **Ratings: See "RATINGS" herein.**

In the opinion of Co-Bond Counsel, interest on the First Series Bonds (defined herein) is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions, subject to the condition described in "TAX MATTERS" herein and interest on the First Series Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax; however, such interest is taken into account in determining the annual adjusted financial statement income of applicable corporations (as defined in Section 59(k) of the Internal Revenue Code of 1986, as amended) for the purpose of computing the alternative minimum tax imposed on corporations. Under the laws of the Commonwealth of Pennsylvania, interest on the First Series Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax. For a more complete discussion, see "TAX MATTERS" herein.

PENNA TURN PIKE

$280,495,000
PENNSYLVANIA TURNPIKE COMMISSION
TURNPIKE REVENUE REFUNDING BONDS, FIRST SERIES OF 2024

Dated: Date of Delivery **Due: As shown on Inside Front Cover**

The Pennsylvania Turnpike Commission Turnpike Revenue Refunding Bonds, First Series of 2024 (the ***"First Series Bonds"***) are being issued pursuant to a Supplemental Trust Indenture No. 76 dated as of September 1, 2024 (***"Supplemental Indenture No. 76"***) to the Amended and Restated Trust Indenture dated as of March 1, 2001, as previously amended and supplemented (the ***"Restated Indenture,"*** and together with Supplemental Indenture No. 76, is referred to herein as, the ***"Senior Indenture"***), between the Pennsylvania Turnpike Commission (the ***"Commission"***) and U.S. Bank Trust Company, National Association, as successor trustee (the ***"Trustee"***). The proceeds of the First Series Bonds, together with other available funds held by the Trustee pursuant to the Senior Indenture, will be used for the purposes of financing: (i) the costs of the current refunding, redemption and defeasance of (a) all the Commission's Outstanding Turnpike Revenue Bonds, Series A of 2012, and (b) a portion of the Commission's Outstanding Turnpike Revenue Bonds, Series A of 2014 and Turnpike Revenue Bonds, Series C of 2014 (collectively, the ***"Refunded Bonds"***) and (ii) the costs of issuing the First Series Bonds. See "PLAN OF FINANCE" and "ESTIMATED SOURCES AND USES OF FUNDS" herein.

The First Series Bonds will be dated the date of initial issuance and delivery thereof. The First Series Bonds will mature on December 1 of the years and bear interest from their delivery date at the rates shown on the inside front cover page hereof, calculated on the basis of a year of 360 days consisting of twelve 30-day months. Interest on the First Series Bonds will be payable on each June 1 and December 1, commencing December 1, 2024.

The First Series Bonds are deliverable in fully registered form and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (***"DTC"***), which will act as securities depository for the First Series Bonds. Beneficial ownership interests in the First Series Bonds will be recorded in book-entry only form in denominations of $5,000 or any multiple thereof. Purchasers of the First Series Bonds will not receive bonds representing their beneficial ownership in the First Series Bonds, but will receive a credit balance on the books of their respective DTC Direct Participants or Indirect Participants (as such terms are defined herein). So long as Cede & Co. is the registered owner of the First Series Bonds, principal of and interest on the First Series Bonds will be paid to Cede & Co., as nominee of DTC, which will, in turn, remit such principal and interest to the Direct Participants and Indirect Participants for subsequent disbursement to the Beneficial Owners, as described herein. The First Series Bonds will be transferable or exchangeable to another nominee of DTC or as otherwise described herein. So long as Cede & Co. is the registered owner of the First Series Bonds, payments of principal and interest on the First Series Bonds will be made directly by the Trustee under the Senior Indenture, as described herein. See "DESCRIPTION OF THE FIRST SERIES BONDS – Book-Entry Only System" herein.

The First Series Bonds will be subject to optional redemption prior to maturity as described herein. See "DESCRIPTION OF THE FIRST SERIES BONDS – Redemption of First Series Bonds" herein.

THE FIRST SERIES BONDS ARE LIMITED OBLIGATIONS OF THE COMMISSION AND SHALL NOT BE DEEMED TO BE A DEBT OF THE COMMONWEALTH OF PENNSYLVANIA (THE "*COMMONWEALTH*") OR A PLEDGE OF THE FAITH AND CREDIT OF THE COMMONWEALTH, BUT THE FIRST SERIES BONDS SHALL BE PAYABLE SOLELY FROM THE TRUST ESTATE (AS DEFINED HEREIN) WHICH CONSISTS PRIMARILY OF TOLLS FROM THE SYSTEM (AS DEFINED HEREIN). THE COMMONWEALTH IS NOT OBLIGATED TO LEVY OR PLEDGE ANY FORM OF TAXATION WHATSOEVER FOR PAYMENT OF THE FIRST SERIES BONDS OR TO MAKE ANY APPROPRIATION FOR THE PAYMENT OF THE FIRST SERIES BONDS. THE COMMISSION HAS NO TAXING POWER.

THIS COVER PAGE CONTAINS CERTAIN INFORMATION FOR QUICK REFERENCE ONLY. IT IS NOT A SUMMARY OF THIS ISSUE. INVESTORS MUST READ THE ENTIRE OFFICIAL STATEMENT TO OBTAIN INFORMATION ESSENTIAL TO THE MAKING OF AN INFORMED INVESTMENT DECISION.

The First Series Bonds are being offered when, as and if issued and accepted by the Underwriters, subject to prior sale, withdrawal or modification of the offer without notice, to certain legal matters being passed upon by Saul Ewing LLP and Eckert Seamans Cherin & Mellott, LLC, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the Underwriters by Clark Hill PLC, counsel for the Underwriters. Certain legal matters will be passed upon for the Commission by its Chief Counsel, Doreen A. McCall, Esquire, and by Stradley Ronon Stevens & Young, LLP, Disclosure Counsel to the Commission. It is anticipated that delivery of the First Series Bonds in book-entry form will be made through the facilities of DTC in New York, New York on or about September 4, 2024.

Raymond James

RAMIREZ & CO., INC. **WAUBANK SECURITIES LLC**

CABRERA CAPITAL MARKETS **DREXEL HAMILTON, LLC** **R. SEELAUS & CO., LLC**

This Official Statement is dated August 14, 2024.

MATURITY SCHEDULE

\$280,495,000
PENNSYLVANIA TURNPIKE COMMISSION
TURNPIKE REVENUE REFUNDING BONDS, FIRST SERIES OF 2024

First Series Serial Bonds

Maturity Date (December 1)	Principal Amount	Interest Rate	Yield	Price	CUSIP No. (709225)*
2026	\$1,905,000	5.000%	2.700%	104.966	KZ8
2028	12,910,000	5.000	2.680	109.239	LA2
2030	4,240,000	5.000	2.760	112.758	LB0
2038	31,105,000	5.000	3.220(C)	115.419(C)	LC8
2039	34,215,000	5.000	3.300(C)	114.667(C)	LD6
2040	37,565,000	5.000	3.380(C)	113.920(C)	LE4
2041	41,095,000	5.000	3.500(C)	112.812(C)	LF1
2042	44,860,000	5.000	3.570(C)	112.171(C)	LG9
2043	48,870,000	5.000	3.610(C)	111.807(C)	LH7
2044	23,730,000	5.000	3.680(C)	111.173(C)	LJ3

(C) Calculated to first optional redemption date of December 1, 2034.

PENNSYLVANIA TURNPIKE COMMISSION

No dealer, broker, salesman or other person has been authorized by the Commission or the Underwriters to give any information or to make any representations, other than those contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by any or either of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the First Series Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from the Commission, the Underwriters, DTC and other sources which are believed to be reliable but is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the Underwriters. The information and expressions of opinion contained herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in any of the information set forth herein since the date hereof.

The First Series Bonds are not and will not be registered under the Securities Act of 1933, as amended, or under any state securities laws, and the Senior Indenture has not been and will not be qualified under the Trust Indenture Act of 1939, as amended, because of available exemptions therefrom. Neither the United States Securities and Exchange Commission (the ***"SEC"***) nor any federal, state, municipal, or other governmental agency will pass upon the accuracy, completeness, or adequacy of this Official Statement.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

No quotations from or summaries or explanations of provisions of law and documents herein purport to be complete and reference is made to such laws and documents for full and complete statements of their provisions. This Official Statement is not to be construed as a contract or agreement between the Commission and the purchasers or holders of any of the securities described herein. Any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representations of fact. The cover page hereof, list of officials, this page and the Appendices attached hereto are part of this Official Statement.

If and when included in this Official Statement, the words "expects," "plans," "forecasts," "projects," "intends," "anticipates," "estimates," "assumes" and analogous expressions are intended to identify forward-looking statements, and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those that have been projected. Such risks and uncertainties, which could affect the amount of tolls and other revenue collected by the Commission, include, among others, changes in economic conditions and various other events, conditions and circumstances, many of which are beyond the control of the Commission. Such forward-looking statements speak only as of the date of this Official Statement. The Commission disclaims any obligation or undertaking to release publicly any updates or revision to any forward-looking statement contained herein to reflect any changes in the

Commission's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

THE ORDER AND PLACEMENT OF MATERIALS IN THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, ARE NOT TO BE DEEMED TO BE A DETERMINATION OF RELEVANCE, MATERIALITY, OR IMPORTANCE, AND THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, MUST BE CONSIDERED IN ITS ENTIRETY. THE OFFERING OF THE FIRST SERIES BONDS IS MADE ONLY BY MEANS OF THIS ENTIRE OFFICIAL STATEMENT.

THIS OFFICIAL STATEMENT MAY BE AVAILABLE TO PROSPECTIVE PURCHASERS IN EITHER BOUND OR PRINTED FORMAT ("ORIGINAL BOUND FORMAT"), OR IN ELECTRONIC FORMAT FROM THE FOLLOWING WEBSITES: WWW.MCELWEEQUINN.COM AND WWW.EMMA.MSRB.ORG. THE ELECTRONIC MUNICIPAL MARKET ACCESS SYSTEM IS THE SOLE NATIONALLY RECOGNIZED MUNICIPAL SECURITIES INFORMATION REPOSITORY. PROSPECTIVE PURCHASERS MAY RELY ON THE INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT IN THE ORIGINAL BOUND FORMAT OR ONLY IF SAVED IN FULL FROM SUCH WEBSITES; PROVIDED, HOWEVER, THAT PROSPECTIVE PURCHASERS SHOULD READ THE ENTIRE OFFICIAL STATEMENT (INCLUDING THE COVER PAGE, THE INSIDE FRONT COVER PAGE AND ALL APPENDICES ATTACHED HERETO) TO OBTAIN INFORMATION ESSENTIAL TO THE MAKING OF AN INFORMED INVESTMENT DECISION. IN THE EVENT OF ANY INCONSISTENCY BETWEEN THE ORIGINAL BOUND FORMAT AND THE ELECTRONIC FORMAT, THE ORIGINAL BOUND FORMAT SHALL CONTROL.

REFERENCES TO WEBSITE ADDRESSES PRESENTED HEREIN, INCLUDING THE COMMISSION'S WEBSITE OR ANY OTHER WEBSITE CONTAINING INFORMATION ABOUT THE COMMISSION OR ANY THIRD PARTY 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 OFFICIAL STATEMENT FOR ANY PURPOSE INCLUDING FOR PURPOSES OF RULE 15c2-12 PROMULGATED BY THE SEC PURSUANT TO THE SECURITIES EXCHANGE ACT OF 1934.

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OFFICIAL STATEMENT

$280,495,000
PENNSYLVANIA TURNPIKE COMMISSION
TURNPIKE REVENUE REFUNDING BONDS, FIRST SERIES OF 2024

INTRODUCTION

This Official Statement, which includes the cover page, the inside front cover page and the Appendices hereto, is furnished by the Pennsylvania Turnpike Commission (the ***"Commission"***) in connection with the issuance of $280,495,000 aggregate principal amount of Pennsylvania Turnpike Commission Turnpike Revenue Refunding Bonds, First Series of 2024 (the ***"First Series Bonds"***).

Certain information concerning the Commission is attached hereto as APPENDIX A. Audited financial statements of the Commission for the years ended May 31, 2023 and May 31, 2022 are attached hereto as APPENDIX B. A summary of certain provisions of the Senior Indenture (as defined herein) is attached hereto as APPENDIX C. The form of the opinions of Co-Bond Counsel to be delivered in connection with the issuance of the First Series Bonds is attached hereto as APPENDIX D. A table setting forth the total debt service requirements for the Turnpike Senior Revenue Bonds (as defined herein), the Subordinate Revenue Bonds (as defined herein) and the Special Revenue Bonds (as defined herein) is attached hereto as APPENDIX E. The Traffic Study (as defined herein) prepared by CDM Smith is attached hereto as APPENDIX F. The form of the Continuing Disclosure Agreement (as defined herein) to be executed and delivered by the Commission in connection with the issuance of the First Series Bonds is attached hereto as APPENDIX G.

If and when included in this Official Statement, the words "expects," "plans," "forecasts," "projects," "intends," "anticipates," "estimates," "assumes" and analogous expressions are intended to identify forward-looking statements, and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those that have been projected. Such risks and uncertainties, which could affect the amount of tolls and other revenues collected or received by the Commission include, among others, changes in economic conditions and various other events, conditions and circumstances, many of which are beyond the control of the Commission. Such forward-looking statements speak only as of the date of this Official Statement. The Commission disclaims any obligation or undertaking to release publicly any updates or revision to any forward-looking statement contained herein to reflect any changes in the Commission's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

All capitalized terms not otherwise defined herein shall have the same meanings ascribed to them in the definitions set forth in APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – DEFINITIONS OF CERTAIN TERMS" attached hereto. All references herein to the Enabling Acts (as defined herein), the First Series Bonds, the Senior Indenture and the Continuing Disclosure Agreement are qualified in their entirety by reference to the complete texts thereof. Copies of drafts of such documents, except for the Enabling Acts, may be obtained during the initial offering period from the respective principal offices of the

Underwriters and, thereafter, executed copies may be obtained from U.S. Bank Trust Company, National Association, as successor trustee (the ***"Trustee"***). All statements in this Official Statement involving matters of opinion, estimates, forecasts, projections or the like, whether or not expressly so stated, are intended as such and not as representations of fact. No representation is made that any of such statements will be realized.

Pennsylvania Turnpike Commission

The Commission is an instrumentality of the Commonwealth of Pennsylvania (the ***"Commonwealth"***) created by the Enabling Acts, with the power to construct, operate and maintain the System (as defined herein) and to perform other functions authorized by Act 44 (as defined herein). Its composition, powers, duties, functions, duration and all other attributes are derived from the Enabling Acts, as amended and supplemented from time to time. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION." Except as provided therein, the Enabling Acts may be modified, extended, suspended or terminated at any time by further legislation. See "INVESTMENT CONSIDERATIONS" herein.

Senior Indenture and Enabling Acts

The First Series Bonds are being issued pursuant to a Supplemental Trust Indenture No. 76 dated as of September 1, 2024 (***"Supplemental Indenture No. 76"***) to the Amended and Restated Trust Indenture dated as of March 1, 2001, as previously amended and supplemented (the ***"Restated Indenture,"*** and together with Supplemental Indenture No. 76, the ***"Senior Indenture"***), between the Commission and the Trustee, all pursuant to and authorized by an Act of the General Assembly of Pennsylvania approved July 18, 2007, P.L. 169, No. 44 (***"Act 44"***), and various Acts of the General Assembly approved on several dates, including the Act of May 21, 1937, P.L. 774, Act 211; the Act of May 24, 1945, P.L. 972; the Act of February 26, 1947, P.L. 17; the Act of May 23, 1951, P.L. 335; the Act of August 14, 1951, P.L. 1232; and the Act of September 30, 1985, P. L. 240, No. 61, to the extent not repealed by Act 44, the Act of August 5, 1991, P.L. 238, No. 26 and the Act of November 25, 2013, P.L. 974, No. 89 (***"Act 89"***) (collectively, the ***"Enabling Acts"***), and the Resolutions adopted by the Commission on October 3, 2023, as amended on March 5, 2024 (solely with respect to the October 3, 2023 Resolution appointing underwriters of the First Series Bonds).

Plan of Finance

The proceeds of the First Series Bonds, together with other available funds held by the Trustee pursuant to the Senior Indenture, will be used for the purposes of financing: (i) the costs of the current refunding, redemption and defeasance of (a) all the Commission's Outstanding Turnpike Revenue Bonds, Series A of 2012, and (b) a portion of the Commission’s Outstanding Turnpike Revenue Bonds, Series A of 2014 and Turnpike Revenue Bonds, Series C of 2014 (collectively, the ***"Refunded Bonds"***) and (ii) the costs of issuing the First Series Bonds. See "PLAN OF FINANCE" and "ESTIMATED SOURCES AND USES OF FUNDS" herein.

Upon issuance of the First Series Bonds, a portion of the proceeds thereof will be deposited with the Escrow Agent (as defined herein) under an Escrow Agreement (as defined herein) and will be used, together with other available moneys, consisting of amounts released from the Debt

Service Fund and the Debt Service Reserve Fund to defease, pay and redeem the Refunded Bonds. See "PLAN OF FINANCE" and "ESTIMATED SOURCES AND USES OF FUNDS" herein.

Traffic Study

The Pennsylvania Turnpike 2023 Traffic and Revenue Forecast Study prepared by CDM Smith dated May 31, 2023 (the ***"2023 Traffic Study"***) was updated by a "bring down" letter developed by CDM Smith dated March 22, 2024 (the ***"March 2024 Bring Down Letter"*** and together with the 2023 Traffic Study, collectively, the ***"Traffic Study"***). The Traffic Study covers Fiscal Years 2025 through 2054 (the ***"Forecast Period"***).

For further information about the Traffic Study, see "PENNSYLVANIA TURNPIKE SYSTEM - Traffic Study" herein and "PENNSYLVANIA TURNPIKE SYSTEM - Traffic Study" in APPENDIX A. In addition, the Traffic Study is attached hereto as APPENDIX F. The Traffic Study should be read in its entirety.

DESCRIPTION OF THE FIRST SERIES BONDS

General

The First Series Bonds will bear interest at fixed rates and will mature, subject to prior redemption, on the dates and in the amounts set forth on the inside front cover page of this Official Statement. Interest on the First Series Bonds will accrue from the Dated Date (as defined herein) and will be payable semi-annually to maturity (or earlier redemption) on each June 1 and December 1 (each an ***"Interest Payment Date"***), commencing on December 1, 2024.

The First Series Bonds shall have a Series Issue Date which shall be the date of original issuance and first authentication and delivery against payment therefor. The First Series Bonds issued prior to the first Interest Payment Date shall have a "Dated Date" that is the same as the Series Issue Date.

Payment of Principal of and Interest on the First Series Bonds. So long as the First Series Bonds are in book-entry only form, the principal or redemption price of, and interest on, such First Series Bonds is payable by check or draft mailed or wire transferred to Cede & Co., as nominee for DTC and Registered Owner of the First Series Bonds, for redistribution by DTC to its Participants and in turn to Beneficial Owners as described under "DESCRIPTION OF THE FIRST SERIES BONDS – Book-Entry Only System."

The principal of and redemption premium, if any, and interest on the First Series Bonds shall be payable in any coin or currency of the United States of America which on the respective dates of payment thereof is legal tender for the payment of public and private debts. The principal of and the redemption premium, if any, on all First Series Bonds shall be payable at maturity or upon earlier redemption to the Persons in whose names such First Series Bonds are registered on the Bond Register at the maturity or redemption date thereof, upon the presentation and surrender of such First Series Bonds at the designated office of the Trustee or of any Paying Agent named in the First Series Bonds.

The interest payable on each First Series Bond on any Interest Payment Date shall be paid by the Trustee to the Person in whose name such First Series Bond is registered on the Bond Register at the close of business on the Record Date (as defined herein) for such interest, such payment to be made (i) by check or draft mailed on the applicable Interest Payment Date to such Registered Owner at the address as it appears on such Bond Register or at such other address as is furnished to the Trustee in writing by such Owner or (ii) by electronic transfer in immediately available funds, if the First Series Bonds are held by a Securities Depository, or at the written request addressed to the Trustee by any Owner of First Series Bonds in the aggregate principal amount of not less than $1,000,000, such request to be signed by such Owner, and containing the name of the bank (which shall be in the continental United States), its address, its ABA routing number, the name and account number to which credit shall be made and an acknowledgment by the Owner that an electronic transfer fee is payable. Any such written request must be filed with the Trustee no later than ten (10) Business Days (as defined herein) before the applicable Record Date preceding such Interest Payment Date. "***Business Day***" means a day other than (i) a Saturday and Sunday, (ii) a day on which the Trustee, Paying Agent or banks and trust companies in New York, New York are authorized or required to remain closed, or (iii) a day on which the New York Stock Exchange is closed.

The ***"Record Date"*** for determining the Owner entitled to payment of interest with respect to the First Series Bonds on any given Interest Payment Date is the fifteenth (15^{th}) day (whether or not a Business Day) of the month immediately preceding such Interest Payment Date.

In the event interest on any First Series Bond is not paid when due (***"Defaulted Interest"***), the provisions relating to Defaulted Interest under Supplemental Indenture No. 76 shall apply. See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Defaulted Interest" for information with respect to the payment of Defaulted Interest.

Authorized Denominations. The First Series Bonds will be issued as fully registered bonds in authorized denominations of $5,000 and any integral multiple thereof.

Registration, Transfer and Exchange. The Trustee has been appointed Bond Registrar and as such shall keep the Bond Register at its designated office. The Person in whose name any First Series Bond shall be registered on the Bond Register shall be deemed and regarded as the absolute Owner of such First Series Bond for all purposes, and payment of or on account of the principal of and redemption premium, if any, and interest on any such First Series Bond shall be made only to or upon the order of the Registered Owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such First Series Bond, including the interest thereon, to the extent of the sum or sums so paid.

Any First Series Bond may be transferred only upon the Bond Register upon surrender thereof to the Trustee duly endorsed for transfer or accompanied by an assignment duly executed by the Registered Owner or his attorney or legal representative in such form as shall be satisfactory to the Trustee. Upon any such transfer, the Commission shall execute, and the Trustee shall authenticate and deliver in exchange for such First Series Bond a new First Series Bond or First Series Bonds, registered in the name of the transferee, of any Authorized Denomination and of the same maturity and bearing interest at the same rate.

The Commission, the Securities Depository or 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 or exchange. In the event any Bond Owner of a First Series Bond fails to provide a correct taxpayer identification number to the Trustee, the Trustee may impose a charge against such Bond Owner sufficient to pay any governmental charge required to be paid as a result of such failure. In compliance with Section 3406 of the Code (as defined herein), such amount may be deducted by the Trustee from amounts otherwise payable to such Bond Owner.

The Trustee shall not be required to (i) transfer or exchange any First Series Bond during a period beginning at the opening of business fifteen (15) days before the day of the mailing of a notice of redemption of such First Series Bond and ending at the close of business on the day of such mailing, or (ii) transfer or exchange any First Series Bond so selected for redemption in whole or in part, or (iii) transfer or exchange any First Series Bond during a period beginning at the opening of business on any Record Date for such First Series Bond and ending at the close of business on the relevant Interest Payment Date therefor. See also "DESCRIPTION OF THE FIRST SERIES BONDS – Book-Entry Only System" herein for further information regarding registration, transfer and exchange of the First Series Bonds.

The Senior Indenture, and all provisions thereof, are incorporated by reference in the text of the First Series Bonds, and the First Series Bonds provide that each Registered Owner, Beneficial Owner, Participant or Indirect Participant (as such terms are defined herein), by acceptance of a First Series Bond (including receipt of a book-entry credit evidencing an interest therein), assents to all of the provisions of the Senior Indenture.

Redemption of First Series Bonds

Optional Redemption. The First Series Bonds maturing on or after December 1, 2038, are subject to optional redemption by the Commission in whole or in part at any time and from time to time on or after December 1, 2034, at a redemption price of 100% of the principal amount thereof to be redeemed plus, in each case, accrued interest on the First Series Bonds to be redeemed to the redemption date.

See also APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Redemption of Bonds" attached hereto.

Selection of First Series Bonds to Be Redeemed. First Series Bonds shall be redeemed only in Authorized Denominations. Any First Series Bonds subject to partial optional redemption shall be redeemed in any order of maturity and in any principal amount within a maturity and interest rate as designated by the Commission. The particular First Series Bonds within a maturity and interest rate to be redeemed shall be determined by the Trustee by lot or by such other method as the Trustee deems fair and appropriate.

In the case of a partial redemption of First Series Bonds, when any First Series Bonds of denominations greater than the minimum Authorized Denomination are then Outstanding, then for all purposes in connection with such redemption each principal amount equal to the minimum Authorized Denomination shall be treated as though it was a separate First Series Bond of the minimum Authorized Denomination.

If it is determined that a portion, but not all, of the principal amount represented by any First Series Bond is to be selected for redemption, then upon notice of intention to redeem such portion, the Owner of such First Series Bond or such Owner's attorney or legal representative shall forthwith present and surrender such First Series Bond to the Trustee (i) for payment of the redemption price (including the premium, if any, and interest to the date fixed for redemption) of the principal amount called for redemption, and (ii) for exchange, without charge to the Owner thereof for a new First Series Bond or First Series Bonds of the aggregate principal amount of the unredeemed portion of the principal amount of such First Series Bond. If the Owner of any such First Series Bond shall fail to present such First Series Bond to the Trustee for payment and exchange as aforesaid, said First Series Bond shall, nevertheless, become due and payable on the redemption date to the extent of the principal amount called for redemption (and to that extent only).

The Trustee shall call First Series Bonds for optional redemption and payment upon receipt by the Trustee at least forty-five (45) days (or such shorter time as is reasonably acceptable to the Trustee) prior to the redemption date of a written request of the Commission. Such request shall specify the principal amount of First Series Bonds and the maturities so to be called for redemption, the applicable redemption price or prices and the provision or provisions above referred to pursuant to which such First Series Bonds are to be called for redemption.

Notice and Effect of Call for Redemption. Official notice of any such redemption shall be given by the Trustee on behalf of the Commission by mailing a copy of an official redemption notice by first class mail at least thirty (30) days and not more than sixty (60) days prior to the redemption date to each Registered Owner of the First Series Bonds to be redeemed at the address shown on the Bond Register or at such other address as is furnished in writing by such Registered Owner to the Trustee. Official notice of redemption having been given as aforesaid, the First Series Bonds or portions of First Series Bonds so to be redeemed shall, on the redemption date, become due and payable at the redemption price specified therein, and from and after such date (unless the Commission shall default in the payment of the redemption price) such First Series Bonds or portions of First Series Bonds shall cease to bear interest.

For as long as DTC is effecting book-entry transfers of the First Series Bonds, notice of redemption shall be sent to DTC as provided in the Senior Indenture. It is expected that DTC shall, in turn, notify its DTC Participants and that the DTC Participants, in turn, will notify or cause to be notified the Beneficial Owners. Any failure of DTC to advise any DTC Participant, or of any DTC Participant, Indirect Participant or nominee to notify the Beneficial Owner, of any such notice and its content or effect will not affect the validity of the redemption of the First Series Bonds called for redemption. See "Book-Entry Only System" below.

An optional redemption notice may state (1) that it is conditioned upon the deposit of moneys, in an amount equal to the amount necessary to effect the redemption, with the Trustee no later than the redemption date and/or (2) that the Commission retains the right to rescind such notice at any time prior to the scheduled redemption date if the Commission delivers a certificate of a Commission Official to the Trustee instructing the Trustee to rescind the redemption notice (in either case, a ***"Conditional Redemption"***), and such notice and redemption shall be of no effect if such moneys are not so deposited or if the notice is rescinded as described below.

Any Conditional Redemption may be rescinded in whole or in part at any time prior to the redemption date if the Commission delivers a certificate of a Commission Official to the Trustee instructing the Trustee to rescind the redemption notice. The Trustee shall give prompt notice of such rescission to the affected Bondholders. Any First Series Bonds subject to Conditional Redemption where redemption has been rescinded shall remain Outstanding, and the rescission shall not constitute an Event of Default.

Further, in the case of a Conditional Redemption, the failure of the Commission to make funds available in part or in whole on or before the redemption date shall not constitute an Event of Default.

Failure to give any notice to any Owner, or any defect therein, shall not affect the validity of any proceedings for the redemption of any other First Series Bonds. Any notice mailed (or given in accordance with DTC operating procedures while the First Series Bonds are in book entry mode) shall be conclusively presumed to have been duly given and shall become effective upon mailing, whether or not any Owner receives the notice. See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Notice of Redemption" attached hereto.

Book-Entry Only System

The Depository Trust Company (***"DTC"***), New York, New York, will act as securities depository for the First Series Bonds. The First Series 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 First Series Bond certificate will be issued in the aggregate principal amount of each maturity and interest rate of the First Series Bonds, as applicable, 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 3.6 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 (the ***"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. DTCC 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 (the ***"Indirect Participants"***). DTC has a Standard & Poor's rating of "AA+". The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.*

Purchases of First Series Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the First Series Bonds on DTC's records. The ownership interest of each actual purchaser of each First Series Bond (the ***"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 or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the First Series Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in First Series Bonds, except in the event that use of the book-entry system for the First Series Bonds is discontinued.

To facilitate subsequent transfers, all First Series 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 First Series Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the First Series Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such First Series Bonds are credited, which may or may not be the Beneficial Owners. The Direct 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 First Series Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the First Series Bonds, such as redemptions, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of First Series Bonds may wish to ascertain that the nominee holding the First Series Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the First Series Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the First Series Bonds unless authorized by a Direct Participant in accordance with

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* The information contained on such website link is not incorporated by reference in this Official Statement.

DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Commission 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 the First Series Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal of, redemption premium, if any, and of interest on the First Series 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 Commission or the Trustee on payable dates 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 (nor its nominee), the Trustee, or the Commission, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments of principal, redemption premium, if any, and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) are the responsibility of the Commission 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 First Series Bonds at any time by giving reasonable notice to the Commission or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, First Series Bond certificates are required to be printed and delivered.

The Commission may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, First Series 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 Commission believes to be reliable, but is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the Underwriters, the Trustee, or the Commission.

NEITHER THE COMMISSION NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DIRECT OR INDIRECT PARTICIPANTS, BENEFICIAL OWNERS OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS FOR: (1) SENDING TRANSACTION STATEMENTS; (2) MAINTAINING, SUPERVISING OR REVIEWING, OR THE ACCURACY OF, ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS; (3) PAYMENT OR THE TIMELINESS OF PAYMENT BY DTC TO ANY DIRECT PARTICIPANT, OR BY ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNER, OF ANY AMOUNT DUE IN RESPECT OF THE PRINCIPAL OF OR REDEMPTION PREMIUM, IF ANY, OR INTEREST ON BOOK-ENTRY FIRST SERIES BONDS; (4) DELIVERY OR TIMELY DELIVERY BY DTC TO ANY DIRECT PARTICIPANT, OR BY ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY

BENEFICIAL OWNERS, OF ANY NOTICE (INCLUDING NOTICE OF REDEMPTION) OR OTHER COMMUNICATION WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE SENIOR INDENTURE TO BE GIVEN HOLDERS OR OWNERS OF BOOK-ENTRY FIRST SERIES BONDS; (5) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF BOOK-ENTRY FIRST SERIES BONDS; OR (6) ANY ACTION TAKEN BY DTC OR ITS NOMINEE AS THE REGISTERED OWNER OF BOOK-ENTRY FIRST SERIES BONDS.

In the event that the Book-Entry Only System is discontinued and the Beneficial Owners become Registered Owners of the First Series Bonds, the First Series Bonds will be transferable in accordance with the provisions of the Senior Indenture.

PENNSYLVANIA TURNPIKE SYSTEM

The following provides a general description of the Pennsylvania Turnpike System and certain other information relating to operations of the Commission. Such information is not complete and is qualified by reference to the more complete information set forth in this Official Statement in APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION."

Overview of the System

The present Pennsylvania Turnpike System is composed of the following: (i) the 359-mile Turnpike Mainline traversing the southern portion of Pennsylvania from east to west; (ii) the 110-mile north/south section identified as the Northeast Extension; (iii) the approximately 16-mile north/south connection, known as the Beaver Valley Expressway which intersects the Turnpike Mainline in the southwestern portion of the Commonwealth; (iv) the approximately 13-mile Amos K. Hutchinson Bypass, which adjoins the Turnpike Mainline near the New Stanton Interchange; (v) the completed portion of the Mon/Fayette Expressway project totaling approximately 48-miles; (vi) a six-mile section of the Southern Beltway project from PA 60 to U.S. 22; and (vii) a 13-mile section of the Southern Beltway between U.S. 22 and Interstate Route 79, which opened in October 2021, leads to I-79 at the Allegheny-Washington County line. Such roads, together with any other roads for which the Commission has operational responsibility and is collecting Tolls (as defined herein), presently constitute the ***"System."***

The Turnpike Mainline connects with the Ohio Turnpike at its western terminus and with the New Jersey Turnpike at its eastern terminus. The Turnpike Mainline commences on the eastern boundary of Pennsylvania at the Delaware River Bridge which connects the System to the New Jersey Turnpike. The Turnpike Mainline traverses the state in a westerly direction generally paralleling the southern border of the state immediately north of Philadelphia and south of Harrisburg to the vicinity of Somerset. West of Somerset, the highway follows a northwesterly direction to the northeast of Pittsburgh and to the Ohio state line, south of Youngstown, Ohio. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE TURNPIKE SYSTEM – General."

The System has a total of 73 toll interchanges which connect it with major arteries and population centers in its 565-mile traffic corridor. 36 of the interchanges are located on the Turnpike Mainline, including barriers at the New Jersey and Ohio state lines, and 11 interchanges are situated on the Northeast Extension. The additional 26 interchanges are located on the Beaver Valley Expressway, Amos K. Hutchinson Bypass, and completed segments of the Mon/Fayette expressway and Southern Beltway.

There are 17 service plazas along the System providing gasoline and diesel fuel, other automotive supplies and services, and restaurant services. Compressed natural gas refueling and electric recharging services are now available at select locations along the System. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE TURNPIKE SYSTEM – Interchanges and Service Plazas."

Toll Collection

The following information describes the infrastructure of the Commission's toll collection system. See "CERTAIN FINANCIAL INFORMATION – Toll Schedule and Rates" in APPENDIX A attached hereto for information regarding the Commission's toll rates.

The System currently uses an all-electronic, cashless system to collect tolls, using a combination of E-ZPass and Toll-By-Plate. The Commission has installed E-ZPass, a form of electronic toll collection, throughout the System. The benefits of E-ZPass include enhanced safety and convenience for users of the System, improved traffic flow and reduced congestion at the System's busiest interchanges. E-ZPass is available on the entire System. In addition, Express E-ZPass lanes have been constructed at seven interchanges and permit E-ZPass customers to travel through the toll plaza at highway speeds. As of the date of this Official Statement, E-ZPass customers traveling in 18 other states that have implemented E-ZPass technology are able to use E-ZPass in those states. The Commission has a contract, extending through 2027, with TransCore Company for the design, installation and maintenance of the E-ZPass system software and hardware and the operation of the E-ZPass Customer Service and Violations Processing Centers. See "THE COMMISSION – Recent Developments and Legislation – *Julie E. Thomas v. TransCore, LP & Pennsylvania Turnpike Commission*" herein for information about recent litigation.

The Commission also offers E-ZPass customers the ability to participate in E-ZPass Plus, which allows customers to use their transponder to pay for parking at participating facilities.

Toll-By-Plate is supplemental to E-ZPass toll collections and utilizes technology where cameras read the license plates of all non-E-ZPass customers, as they pass through each toll gantry. The registered owner of the vehicle is then invoiced for the assessed tolls. Commencing January 3, 2021, the Commission began imposing an additional toll increase on Toll-By-Plate transactions equal to 45% of the toll that would otherwise be due to cover the additional costs to operate the Toll-By-Plate system versus E-ZPass and to account for partial non-payment of tolls (***"Revenue Leakage"***) associated with Toll-By-Plate. In addition to the additional 45% charge on all Toll-By-Plate transactions, which was implemented to encourage increased use of E-ZPass and to offset estimated Revenue Leakage, the Commission continues to actively work to address Revenue Leakage due to AET (as defined herein) through various initiatives that address customer behaviors and system improvement.

See "INVESTMENT CONSIDERATIONS – Collection Risk" herein and "THE TURNPIKE SYSTEM – Toll Collection" in APPENDIX A attached hereto for more AET toll collection and the Commission's efforts to mitigate Revenue Leakage.

The Commission plans to fully convert the System to open road tolling (***"ORT"***) collection operations where cameras on overhead gantries capture a vehicle's license plate at highway speed, and a toll invoice is mailed to the vehicle's registered owner. The overhead gantries will also read the transponder signals for E-ZPass customers to pay tolls at such locations. An initial pilot of the ORT system was installed along the new section of the Southern Beltway which opened in October 2021. The Turnpike Mainline transition to ORT is scheduled to commence on a portion of the System from the Reading Interchange to the New Jersey border and along the entire Northeast Extension in January 2025. Conversion to ORT for the balance of the Turnpike Mainline west of the Reading Interchange is scheduled for completion in 2027. Existing toll booths will be decommissioned and removed from service at locations where ORT is implemented.

Conversion of the ticket system from an entry-exit system to segment-based tolling, also known as open road tolling (ORT), will begin on the Northeast Extension and the eastern part of the state (east of Reading) in 2025, while ORT will roll out in the western part of the state beginning in late 2026, with completion in 2027. Although the conversion will significantly alter the way in which tolls are charged, there is expected to be no net revenue impact to the Turnpike System. Under the segment-based system there will be a toll gantry in between each set of interchanges, and drivers will be charged a given rate at each gantry they pass through rather than one rate based on entry and exit points. As a result, the number of transactions on the Ticket System will increase significantly once ORT is implemented although gross revenue is intended to remain unchanged on a system-wide basis. The segment-based system will result in a simpler toll rate structure with each segment having a set price and no need for a complex matrix of entry-exit combinations. Additionally, the toll overhead toll gantries on the Mainline will eliminate the need for toll plazas on entrance and exit ramps, which will be removed and allow for free-flowing traffic on the ramps.

The operation of an AET (as defined herein) toll collection system inherently involves many risks including, but not limited to, threats to the integrity and security of the Commission's information and technology. See "INVESTMENT CONSIDERATIONS – Cybersecurity Threats" herein and see "CERTAIN OTHER INFORMATION – Cybersecurity" in APPENDIX A attached hereto.

Revenue Sources of the Commission

The Commission's revenues are principally derived from three separate sources: (i) toll revenues from the operation of the System; (ii) revenue derived from a portion of the Commonwealth's Oil Franchise Tax; and (iii) revenue derived from a portion of the Commonwealth's vehicle registration fee revenues.

<u>Toll Revenues</u>. The largest part of the Commission's revenues is derived from the collection of all rates, rents, fees, charges, fines or other income derived by the Commission from the vehicular usage of the System and all rights to receive the same (as defined in the Senior Indenture, collectively the ***"Tolls"***). The Tolls are pledged to secure the Commission's

Outstanding turnpike revenue bonds issued under the Senior Indenture (collectively, the ***"Turnpike Senior Revenue Bonds"***) and other parity and subordinate obligations under the Senior Indenture (including certain interest rate swap agreements), which are subject to or may be issued under the terms of the Senior Indenture.

Tolls are not pledged to secure the Subordinate Revenue Bonds, the Special Revenue Bonds, the Oil Franchise Tax Revenue Bonds (as defined herein) and the Registration Fee Revenue Bonds (as defined herein). Certain payments made from moneys in the General Reserve Fund which are derived from Tolls are, however, pledged on a wholly subordinate basis to secure payments due on Subordinate Revenue Bonds and Special Revenue Bonds. See "ADDITIONAL INDEBTEDNESS OF THE COMMISSION – Subordinate Indenture Bonds" herein and "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS" and "CERTAIN OTHER INFORMATION – Financial Policies and Guidelines" in APPENDIX A attached hereto.

Since 2009, the Commission has implemented annual increases in toll rates and other charges, as well as modifications to its commercial discounts, and expects to continue to implement future toll increases as determined by the Commission to be necessary to meet the then existing debt, capital and operational obligations of the Commission, including its payment obligations under Act 44. For a discussion of the Commission's revenue sources, including current rates and tolls and forecasted toll rate increases, see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – FINANCIAL PLAN" and "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN FINANCIAL INFORMATION – Revenue Sources of the Commission," and " – Toll Schedule and Rates."

The Commission is permitted under the terms of the Senior Indenture to exclude certain roads, other than the Turnpike Mainline and the Northeast Extension, from the System for the purposes of the Senior Indenture which would eliminate toll revenues from such roads from the definition of Tolls under the Senior Indenture. However, the Commission has never excluded any roads from the System and currently has no plans to remove any roads from the System. In addition, under the Senior Indenture, the Commission has covenanted that it will not sell, lease or otherwise dispose of real estate or personal property comprising a portion of the System except upon compliance with the provisions of the Senior Indenture, including a determination by resolution that the Net Revenues of the Commission will not be materially adversely affected. The Commission from time to time may consider various proposals that could involve the transfer or other disposition of Commission property. Any such transfer or disposition would be required to comply with the provisions of the Senior Indenture.

<u>Turnpike Senior Revenue Bonds</u>. As of the date of this Official Statement, the Commission has $7,302,910,000 in aggregate principal amount of Turnpike Senior Revenue Bonds Outstanding under the Restated Indenture. The foregoing amount includes certain notes evidencing and securing $88,500,000 in loans through the Immigrant Investor Program (known as the EB-5 visa program) administered by the U.S. Citizenship and Immigration Services, the proceeds of which were used to fund a portion of the projects identified in the Commission's 2016-2017 Ten-Year Capital Plan (the ***"EB-5 Loans"***). See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS" for additional information on the EB-5 Loans.

Also included in the principal amount Outstanding under the Restated Indenture as of the date of this Official Statement is $649,300,000 aggregate principal amount of variable rate obligations. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Direct Purchase Obligations" for a summary of direct purchase obligations of the Commission. Upon the issuance of the First Series Bonds and the refunding and defeasance of the Refunded Bonds, $7,267,145,000 in aggregate principal amount of Turnpike Senior Revenue Bonds will be Outstanding under the Senior Indenture. See "PLAN OF FINANCE" and "INVESTMENT CONSIDERATIONS" herein.

Other obligations incurred and Outstanding under the Restated Indenture include the Commission's obligations under various interest rate swap agreements having a total current notional amount of $650,402,500 as of August 1, 2024.

Subordinate Revenue Bonds. As of the date of this Official Statement, the Commission has $6,099,822,116 in aggregate principal amount of Subordinate Revenue Bonds Outstanding under the Subordinate Indenture (as defined herein) (including compounded amounts as of June 1, 2024, for Outstanding capital appreciation bonds). The foregoing amounts include $291,850,000 aggregate principal amount of floating rate notes constituting a direct purchase obligation. Subordinate Revenue Bonds are issued and secured by the Commission under and pursuant to the Subordinate Trust Indenture dated as of April 1, 2008, between the Commission and Computershare Trust Company, National Association, as amended and supplemented (the ***"Subordinate Indenture"***), and are subordinate to the Turnpike Senior Revenue Bonds issued under the Turnpike Senior Indenture. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION –COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness – *Turnpike Subordinate Revenue Bonds*" attached hereto for more information.

Other obligations incurred and Outstanding under the Subordinate Indenture include the Commission's obligations under an interest rate swap agreement having a notional amount of $291,850,000 as of August 1, 2024.

Motor License Fund-Enhanced Turnpike Subordinate Special Revenue Bonds. As of the date of this Official Statement, the Commission has $963,068,593 in aggregate principal amount of Motor License Fund-Enhanced Turnpike Subordinate Special Revenue Bonds (referred to herein as the ***"Special Revenue Bonds"***), which are secured by Commission payments on a subordinate basis to the Subordinate Revenue Bonds.

Oil Franchise Tax Revenues. The Commission's second principal stream of revenues consists of that portion of the Commonwealth's oil franchise tax revenues (the ***"Oil Franchise Tax Revenues"***) allocated by statute to the Commission or the holders of the Commission's Oil Franchise Tax Revenue Bonds (the ***"Oil Franchise Tax Revenue Bonds"***). As of the date of this Official Statement, the Commission has (i) $860,371,225 in aggregate principal amount of Oil Franchise Tax Senior Revenue Bonds, including accreted interest through June 1, 2024, and (ii) $599,965,000 in aggregate principal amount of Oil Franchise Tax Subordinated Revenue Bonds Outstanding, the proceeds of which were spent on portions of the Mon/Fayette Expressway and the Southern Beltway, are secured solely by Oil Franchise Tax Revenues. In addition to the Outstanding Oil Franchise Tax Revenue Bonds, the Commission has various interest rate swap agreements having a total current notional amount of $320,000,000 as of August 1, 2024, that are also secured by Oil Franchise Tax Revenues. **The Oil Franchise Tax Revenues are not pledged to secure the First Series Bonds, other Turnpike Senior Revenue Bonds, other obligations under the Senior Indenture, the Subordinate Indenture Bonds or the Registration Fee Revenue Bonds.** See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness – *Oil Franchise Tax Revenue Bonds*" attached hereto for more information.

Registration Fee Revenues. The Commission's third principal stream of revenues consists of that portion of the Commonwealth's vehicle registration fee revenues (the ***"Registration Fee Revenues"***) allocated by statute to the Commission or the holders of any of the Commission's Registration Fee Revenue Bonds (the ***"Registration Fee Revenue Bonds"***). As of the date of this Official Statement, $306,820,000 in aggregate principal amount of the Commission's Registration Fee Revenue Bonds is Outstanding. The Registration Fee Revenue Bonds, the proceeds of which were spent on portions of the Mon/Fayette Expressway and the Southern Beltway, are secured by and paid solely from the Registration Fee Revenues. In addition to the Outstanding Registration Fee Revenue Bonds, the Commission also has various interest rate swap agreements having a total current notional amount of $231,425,000 as of August 1, 2024, that are also secured by Registration Fee Revenues. **The Registration Fee Revenues are not pledged to secure the First Series Bonds, other Turnpike Senior Revenue Bonds, other obligations under the Senior Indenture, the Subordinate Indenture Bonds or the Oil Franchise Tax Revenue Bonds.** See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness – *Registration Fee Revenue Bonds*" attached hereto for more information about the Commission's Outstanding Registration Fee Revenue Bonds.

Neither the Subordinate Indenture Bonds, the Oil Franchise Tax Revenue Bonds, the Registration Fee Revenue Bonds nor any other obligations (including swaps) secured under the respective indentures governing the Subordinate Indenture Bonds, the Oil Franchise Tax Revenue Bonds or the Registration Fee Revenue Bonds are secured by or have any interest in the Trust Estate.

Pennsylvania Legislation Affecting Transportation Funding

Pursuant to Act 89, the Commission's funding obligations under Act 44 changed significantly. Starting in Fiscal Year 2023 the Commission's obligation to provide annual Act 44/Act 89 Payments to support the Commonwealth's transit capital, operating, multi-modal and other non-highway programs decreased from $450 million to $50 million. Pursuant to statute, all $50 million is required to be funded by current revenues of the Commission. For a discussion of such legislative changes and their impact on Act 44 and the Commission generally, see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE COMMISSION – Enabling Acts" and "– Recent Developments and Legislation" attached hereto.

Traffic Study

The Traffic Study is attached hereto as APPENDIX F. There will be no further update to the Traffic Study prior to the issuance of the First Series Bonds. The 2023 Traffic Study and the

March 2024 Bring Down Letter speak only as of their respective dates. In addition to incorporating an additional 10 months of actual data (through January 2024), and forecasted results for the period of Fiscal Year 2025 through Fiscal Year 2054, the March 2024 Bring Down letter also removes adjustments to the forecast regarding recovery of passenger car transactions from the COVID-19 pandemic, revised socioeconomic variables, the elimination of the modest downward adjustments to transactions and gross toll revenue from the previously assumed recession in late 2023 or early 2024, and a slight upward revision to bad debt expense.

The Traffic Study is not a guarantee of any future events or trends and contains material information, forecasts, findings, assumptions and conclusions concerning traffic volume and toll revenue on the System. The Traffic Study contains certain "forward-looking statements" concerning the Commission's operations, performance and financial condition, including the Commission's future economic performance, plans and objectives. Such statements are based upon several assumptions and estimates which are subject to uncertainties, many of which are beyond the control of the Commission.

Additional details of the Traffic Study are discussed in "PENNSYLVANIA TURNPIKE SYSTEM - Traffic Study" in APPENDIX A. The Traffic Study is included as APPENDIX F hereto and the description in APPENDIX A and the full text of the Traffic Study included as APPENDIX F should be read their entirety for additional information and a full description of the assumptions and methodologies used to develop the forecasts included in the Traffic Study.

Based on the Traffic Study and the Fiscal Year 2025 Financial Plan (as defined in APPENDIX A), which are both forward-looking reports, the Commission expects that it will have sufficient revenue to meet the debt, capital and operational obligations of the Commission in the current fiscal year and in future years. This expectation is based on several assumptions which includes future annual toll increases throughout the Forecast Period of the Traffic Study. See "INVESTMENT CONSIDERATIONS" herein, and APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – FINANCIAL PLAN" and APPENDIX F – "TRAFFIC STUDY" attached hereto.

PLAN OF FINANCE

The proceeds of the First Series Bonds, together with other available funds held by the Trustee pursuant to the Senior Indenture, will be used for the purposes of financing: (i) the costs of the current refunding, redemption and defeasance of (a) all the Commission's Outstanding Turnpike Revenue Bonds, Series A of 2012, and (b) a portion of the Commission's Outstanding Turnpike Revenue Bonds, Series A of 2014 and Turnpike Revenue Bonds, Series C of 2014 (collectively, the ***"Refunded Bonds"***) and (ii) the costs of issuing the First Series Bonds. The refunding, redemption and defeasance of the Refunded Bonds is referred to herein as the ***"First Series Refunding Project."***

Upon issuance of the First Series Bonds, a portion of the proceeds thereof will be deposited with the Trustee, serving as escrow agent (the ***"Escrow Agent"***) under a Pledge and Escrow Agreement between the Commission and the Escrow Agent (the ***"Escrow Agreement"***) and will be used, together with other available moneys consisting of amounts released from the Debt Service Reserve Fund and Debt Service Fund, to invest in certain Government Obligations. Based upon the arithmetic verification of the mathematic calculations of the cash and maturing principal of and interest on the Government Obligations, the principal of and interest on the Government Obligations, together with uninvested moneys, will be sufficient to pay the principal of and interest as due on the Refunded Bonds and to redeem the Refunded Bonds on December 3, 2024 (the ***"Redemption Date"***), at a redemption price equal to 100% of the principal amount of such Refunded Bonds, redemption premium (if any), plus accrued interest thereon, pursuant to the optional redemption provisions of the Refunded Bonds. Pursuant to the defeasance provisions of Section 1102 of the Senior Indenture, upon such deposit with the Escrow Agent, the Refunded Bonds will be deemed not to be Outstanding under the Senior Indenture. See "VERIFICATION OF MATHEMATICAL CALCULATIONS" herein.

On December 28, 2022 the Commission entered into a Continuing Covenant Agreement providing for, *inter alia*, the forward delivery of $233,015,000 of the Commission's Turnpike Revenue Bonds, Series of 2024 (Forward Delivery) (the ***"Forward Delivery Bonds"***), the proceeds of which will be applied, on or about December 3, 2024, to currently refund certain unrefunded maturities of the series of bonds of which certain of the Refunded Bonds are a part (e.g., the Commission's Turnpike Revenue Bonds, Series A of 2014 and Turnpike Revenue Bonds, Series C of 2014). The Forward Delivery Bonds are expected to be delivered to the direct purchaser thereof on or about October 23, 2024. See APPENDIX A - "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations – *Forward Delivery Direct Purchase Transaction*" for information about the Forward Delivery Bonds.

ESTIMATED SOURCES AND USES OF FUNDS

SOURCES OF FUNDS	
Par Amount of First Series Bonds	$280,495,000.00
Plus Original Issue Premium	36,018,174.20
Available Monies [(1)]	5,246,771.42
TOTAL SOURCES	$321,759,945.62
USES OF FUNDS	
Deposit with Escrow Agent for the First Series Refunding Project	$319,953,224.86
Costs of Issuance [(2)]	$1,806,720.76
TOTAL USES	$321,759,945.62

(1) Represents moneys released from the Debt Service Reserve Fund and the Debt Service Fund.

(2) Costs of Issuance include, but are not limited to, Underwriters' discount, legal fees (including Underwriters' Counsel), rating agency fees, printing expenses, Financial Advisors' fees, Trustee and Escrow Agent fees, Verification Agent fees, and other miscellaneous costs and expenses.

SECURITY FOR THE FIRST SERIES BONDS

Security

The First Series Bonds are limited obligations of the Commission. They are secured, along with the other Outstanding Turnpike Senior Revenue Bonds and certain other Parity Obligations issued under the Senior Indenture, by the pledge by the Commission to the Trustee of: (i) all Revenues (which includes all Tolls); (ii) all moneys deposited into accounts or funds, other than the Rebate Fund, created by the Senior Indenture; (iii) any insurance proceeds required to be deposited under the Senior Indenture; (iv) all payments received pursuant to Parity Swap Agreements; and (v) all investment earnings on all moneys held in accounts and funds, other than the Rebate Fund, established by the Senior Indenture (all five of these items being collectively referred to as the ***"Trust Estate"***).

OIL FRANCHISE TAX REVENUES AND REGISTRATION FEE REVENUES, AS WELL AS OTHER SOURCES OF THE COMMISSION'S REVENUES NOT DERIVED FROM TOLLS, INCLUDING CONCESSION REVENUES, ARE EXCLUDED FROM THE TRUST ESTATE. THE TRUST ESTATE ALSO EXCLUDES ALL MONEYS HELD IN THE REBATE FUND. ANY ADDITIONAL BONDS AND PARITY OBLIGATIONS ISSUED PURSUANT TO THE SENIOR INDENTURE (OTHER THAN SUBORDINATED INDEBTEDNESS) WILL BE EQUALLY AND RATABLY SECURED UNDER THE SENIOR INDENTURE, EXCEPT TO THE EXTENT SUCH ADDITIONAL BONDS ARE NOT DEBT SERVICE RESERVE FUND BONDS. THE COMMISSION HAS NO TAXING POWER.

THE FIRST SERIES BONDS SHALL NOT BE DEEMED TO BE A DEBT OF THE COMMONWEALTH OR A PLEDGE OF THE FAITH AND CREDIT OF THE COMMONWEALTH. THE COMMONWEALTH IS NOT OBLIGATED TO LEVY OR PLEDGE ANY FORM OF TAXATION WHATSOEVER THEREFOR OR TO MAKE ANY APPROPRIATION FOR THE PAYMENT OF ANY OF THE FIRST SERIES BONDS.

Payments of the principal of and the interest on the Turnpike Senior Revenue Bonds, including the First Series Bonds and any Additional Bonds and payments on certain other Parity Obligations, are secured, pro rata and without preference or priority of one Turnpike Senior Revenue Bond or Parity Obligation over another, by a valid pledge of the Trust Estate and by the Senior Indenture, except to the extent that such Bonds are not Debt Service Reserve Fund Bonds. **The First Series Bonds have been designated as Debt Service Reserve Fund Bonds and are secured by moneys in the Debt Service Reserve Fund.**

The Senior Indenture further provides that the Commission may not issue Additional Bonds or incur other Parity Obligations except upon satisfaction of various requirements as expressly provided in the Senior Indenture. See "SECURITY FOR THE FIRST SERIES BONDS – Additional Bonds Test" herein and APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE" attached hereto.

Rate Covenant

The Commission has agreed in the Senior Indenture that it will at all times establish and maintain schedules of Tolls for traffic over the System so that the Net Revenues of the System in each Fiscal Year will at all times be at least sufficient to provide funds in an amount not less than (1) the greater of (i) 130% of the Annual Debt Service for such Fiscal Year on account of all Applicable Long-Term Indebtedness then Outstanding under the provisions of the Senior Indenture; or (ii) 100% of the Maximum Annual Debt Service on all Applicable Long-Term

Indebtedness, plus (a) the amount of required transfers from the Revenue Fund to the credit of the Reserve Maintenance Fund pursuant to the Annual Capital Budget, and (b) an amount sufficient to restore any deficiency in the Debt Service Reserve Fund, if applicable, within an 18-month period; plus (2) the amount of any Short-Term Indebtedness Outstanding pursuant to the Senior Indenture for more than 365 consecutive days. In addition, the amount of Net Revenues in excess of the sum of the amounts set forth in clauses (1) and (2) above, together with Other Revenues pledged to the payment of Subordinated Indebtedness, shall be sufficient to pay the Annual Debt Service for any Subordinated Indebtedness.

See also "SECURITY FOR THE FIRST SERIES BONDS – General Reserve Fund; Supplemental Capital Fund" below for discussion of the rate covenant applicable to Subordinate Indenture Bonds under the Subordinate Indenture.

The Commission's failure to meet the Rate Covenant shall not constitute an Event of Default under the Senior Indenture if (i) no Event of Default occurred in debt service payments on Turnpike Senior Revenue Bonds or other Parity Obligations as a result of such failure and (ii) the Commission promptly after determining that the Rate Covenant was not met retains a Consultant to make written recommendations as to appropriate revisions to the schedules of Tolls necessary or appropriate to meet the Rate Covenant and advises the Trustee in writing of such retention. Anything in the Senior Indenture to the contrary notwithstanding, if the Commission shall comply with the recommendations of the Consultant in respect of Tolls, it will not constitute an Event of Default under the provisions of the Senior Indenture if the Commission fails to meet the Rate Covenant during the succeeding Fiscal Year as long as no Event of Default has occurred in debt service payments on Turnpike Senior Revenue Bonds or other Parity Obligations. If the Commission does not comply with the recommendations of the Consultant in respect of Tolls, the Trustee may, and upon the request of the holders of not less than 25% in Principal Amount of the Turnpike Senior Revenue Bonds then Outstanding and upon being indemnified to its satisfaction shall, institute and prosecute in a court of competent jurisdiction any appropriate action to compel the Commission to revise the schedules of Tolls. The Commission covenants that it will adopt and charge Tolls in compliance with any final order or decree entered in any such proceeding.

In the event that the Consultant shall fail to file with the Commission such recommendations in writing within sixty (60) days after such retention, the Trustee may designate and appoint a different Consultant to make recommendations as to an adjustment of the schedules of Tolls, which recommendations shall be reported in writing to the Commission and to the Trustee within sixty (60) days after such retention. Such written report shall for all purposes be considered to be the equivalent of and substitute for the recommendations of the Consultant retained by the Commission.

In preparing its recommendations, the Consultant may rely upon written estimates of Revenues prepared by the other Consultants of the Commission. Copies of such written estimates signed by such Consultants shall be attached to such recommendations. The Commission covenants that promptly after receipt of such recommendations and the adoption of any revised schedules of Tolls, certified copies thereof will be filed with the Trustee. The ability of the Commission to collect Tolls in an amount sufficient to comply with the Rate Covenant could be adversely affected by many factors, some of which are beyond the Commission's control.

The Commission covenanted in the Senior Indenture that Tolls will be classified in a reasonable way to cover all traffic, so that the Tolls may be uniform in application to all traffic falling within any reasonable class regardless of the status or character of any Person (including, any person, firm or corporation) participating in the traffic; provided, however, that the foregoing shall not be interpreted to restrict the Commission's right, in its discretion in connection with its management of the System, to establish and maintain flexible Toll schedules including, but not limited to, provisions for, utilizing or otherwise taking into account, peak and nonpeak pricing, introductory pricing, weight, method of payment, frequency, carpooling, electronic or other Toll collection technologies, traffic management systems, and similar classifications. The Commission has covenanted in the Senior Indenture that it shall not grant free passage or reduced Tolls within a class, except in the limited manner permitted by the Senior Indenture, which includes, among others, for operational or safety reasons including, but not limited to, reasons arising out of a work stoppage, work slowdown or work action, and for use by Commission employees and the Army, Air Force, Navy, Coast Guard, Marine Corps or militia or any branch thereof in time of war or other emergency. Any reduced Toll or grant of free passage shall be reviewed by the Commission with a Consultant before implementing the same unless the same is temporary (e.g., having a duration of less than one year).

In the event the Commission does not meet the Rate Covenant for the preceding Fiscal Year, any classification resulting in a reduced Toll or new classification shall be subject to a Consultant approving the same before it is implemented. In all events, the Commission shall not make a change in classification or any new classification which would cause the Commission to fail to meet the Rate Covenant.

In addition, in the event the Commission does not meet the Rate Covenant for the preceding Fiscal Year, any reduced Toll or free passage shall be subject to a Consultant approving the same before it is implemented by the Commission unless the circumstances require immediate implementation, in which event the Commission shall obtain such approval promptly following implementation. In all events, the Commission shall not reduce Tolls or grant free passage if it would cause the Commission to fail to meet the Rate Covenant.

The Commission's covenant as to uniformity of Tolls shall not be construed as requiring that Tolls for any given class of traffic be identical in amount throughout the entire System for trips of approximately identical lengths. The Commission may fix and place in effect schedules of Tolls for any given class of traffic wherein the Tolls charged for travel on a given section of the System shall be different from the Tolls charged on another section of the System notwithstanding the fact that both of said sections may be of identical or approximately identical length.

Revenue Fund

All Revenues will be deposited daily, as near as practicable, with the Trustee or in the name of the Trustee with a depositary or depositaries designated by the Commission and approved by the Trustee, to the credit of the Revenue Fund. The moneys in the Revenue Fund are to be held by the Trustee in trust and applied in accordance with the Senior Indenture.

Except as otherwise provided in the Senior Indenture, transfers from the Revenue Fund shall be made to the following funds and in the following order of priority:

a) Rebate Fund;

b) Operating Account;

c) Debt Service Fund;

d) Reserve Maintenance Fund;

e) Debt Service Reserve Fund, if applicable; and

f) General Reserve Fund.

Operating Account

The Commission shall establish an account known as the Operating Account which shall be held by the Commission in the name of the Commission outside of the Senior Indenture until applied as set forth in the Senior Indenture. The Trustee shall transfer from the Revenue Fund on or before the last Business Day of each month to the credit of the Operating Account an amount equal to (a) the amount shown by the Annual Operating Budget to be necessary to pay Current Expenses for the ensuing month and (b) an amount certified by a Commission Official as being reasonably necessary to pay Current Expenses which are expected for such month, after taking into account the amount on deposit in the Operating Account (including the amount described in clause (a) above).

Debt Service Fund

After first having made the foregoing specified deposits to the Operating Account, the Trustee is required to withdraw from the Revenue Fund and deposit to the applicable account in the Debt Service Fund held by the Trustee under the Senior Indenture, the amounts hereinafter specified which shall be applied by the Trustee for the purposes for which the same shall be deposited:

(a) On or before the last Business Day preceding an Interest Payment Date, an amount which equals the interest due on such Interest Payment Date on any Turnpike Senior Revenue Bonds or Parity Obligations; provided, however, that in the case of any fixed rate bonds, term mode bonds and multi-modal fixed mode bonds (collectively, ***"Fixed Rate Bonds"***), the withdrawal from the Revenue Fund and deposit to the Debt Service Fund shall be made on or before the first Business Day of each calendar month in an amount which equals the amount necessary to pay, and for the purpose of paying, one-sixth (1/6) of the interest due on any Fixed Rate Bonds issued under the Senior Indenture on the next succeeding Interest Payment Date (or, in the case of the period from the date of issuance of such Fixed Rate Bonds to the first Interest Payment Date for the applicable Fixed Rate Bonds, a monthly amount equal to the interest amount owed on such first Interest Payment Date divided by the number of months from the date of issuance of such Fixed Rate Bond to such first Interest Payment Date) plus any accumulated unfunded balance relating to prior months' deposit requirements;

(b) On or before the last Business Day preceding a principal payment date, an amount which equals the principal amount of the Turnpike Senior Revenue Bonds or Parity Obligations maturing on such principal payment date; provided, however, that in the case of any Fixed Rate Bonds, the withdrawal from the Revenue Fund and deposit to the Debt Service Fund shall be made on or before the first Business Day of each calendar month in an amount which equals one-twelfth (1/12) of the amount necessary to pay and for the purpose of paying the principal amount of any Fixed Rate Bonds issued under the Senior Indenture maturing (including mandatory sinking fund installments) on the next succeeding principal payment date (or, in the case of the period from the date of issuance of such Fixed Rate Bonds to the first date on which principal is due on such Fixed Rate Bonds, a monthly amount equal to the principal amount owed on such first principal maturity date divided by the number of months from the date of issuance of such Fixed Rate Bond to such first principal maturity date) plus any accumulated unfunded balance relating to prior months' deposit requirements; and

(c) On the dates specified in any Supplemental Indenture relating to Additional Bonds or Parity Obligations, the amounts required to be deposited on said dates to the credit of the Interest Account or Principal Account pursuant to the provisions of such Supplemental Indenture for the purpose of paying the interest on and the principal of such Additional Bonds.

The Trustee is required to pay out of the Interest Account, from time to time, without further authorization from the Commission, and as the same shall become due and payable, the interest upon the Turnpike Senior Revenue Bonds, except to the extent payable from funds and accounts other than the Debt Service Fund, as provided in any Supplemental Indenture. The Trustee is required likewise to pay out of the Principal Account, from time to time, without further authorization from the Commission, as the same shall become due and payable, the principal of the Turnpike Senior Revenue Bonds, except to the extent payable from funds and accounts other than the Debt Service Fund, as provided in any Supplemental Indenture.

If at the time the Trustee is required to make a withdrawal from the Debt Service Fund and the moneys therein shall not be sufficient for such purpose, the Trustee shall withdraw the amount of such deficiency from the moneys on deposit in the following funds or accounts and transfer the same to the Debt Service Fund in the following order: the Debt Service Reserve Fund, if applicable, the General Reserve Fund, and the Reserve Maintenance Fund. **The First Series Bonds have been designated as Debt Service Reserve Fund Bonds and are secured by moneys in the Debt Service Reserve Fund.** See " - Debt Service Reserve Fund" below.

Reserve Maintenance Fund

In each Fiscal Year, after first having made the deposits provided by the Senior Indenture with respect to the Rebate Fund, the Operating Account and the Debt Service Fund, the Trustee shall transfer from the Revenue Fund on or before the last Business Day of each month to the credit of the Reserve Maintenance Fund the amount shown in the Annual Capital Budget for the ensuing month.

Except as otherwise provided in the Senior Indenture, or except in case of an emergency, as characterized in a certificate signed by a Commission Official stating that the moneys to the credit of the Operating Account are insufficient to meet such emergency, moneys in the Reserve Maintenance Fund shall be disbursed to pay current capital expenditures shown in the Annual Capital Budget for the System, plus the cost of unusual or extraordinary maintenance (as determined solely by the Commission) and shall be disbursed only for such purposes, except to the extent hereinafter provided. Such purposes shall include, but not be limited to, paying the cost of constructing, improving and reconstructing improvements and betterments to all parts of the System now or hereafter open to vehicular traffic, including, without limitation, additional lanes, tunnels, interchanges, toll plazas, bridges and connecting roads, transit interface facilities and any other improvements deemed necessary or desirable by the Commission.

Payments from the Reserve Maintenance Fund, except the transfers which the Trustee is authorized to make, shall be made pursuant to a requisition process which follows the process described in the Senior Indenture for payments from the Construction Fund.

The Trustee shall transfer any moneys from the Reserve Maintenance Fund to the credit of the General Reserve Fund from time to time upon the receipt of a certificate of a Commission Official certifying that the amount so to be transferred is not required for the purposes for which the Reserve Maintenance Fund has been created.

Debt Service Reserve Fund

A Debt Service Reserve Fund has been established under the Senior Indenture to provide additional security for Debt Service Reserve Fund Bonds. **The First Series Bonds are Debt Service Reserve Fund Bonds and are secured by moneys in the Debt Service Reserve Fund.**

The Senior Indenture requires that the balance in the Debt Service Reserve Fund be maintained at the Debt Service Reserve Requirement, which is an amount equal to the Maximum Annual Debt Service on account of all the Debt Service Reserve Fund Bonds. Debt Service Reserve Fund Bonds include Long-Term Indebtedness specified by the Commission in a Supplemental Indenture as being secured by the Debt Service Reserve Fund. See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Debt Service Reserve Fund" for information with respect to the Debt Service Reserve Fund under the Senior Indenture.

Following the issuance of the First Series Bonds, the refunding and defeasance of the Refunded Bonds, and the application of moneys in the Debt Service Reserve Fund in connection therewith, funds on deposit in the Debt Service Reserve Fund will be sufficient, in the aggregate, to meet the Debt Service Reserve Requirement under the Senior Indenture, in the amount of $461,273,473.29 taking into account the First Series Bonds, but excluding the defeased Refunded Bonds.

General Reserve Fund; Supplemental Capital Fund

After first having made the above specified deposits to the Operating Account, the Debt Service Fund, the Reserve Maintenance Fund and the Debt Service Reserve Fund, and while any Turnpike Senior Revenue Bonds are Outstanding, the Trustee is required to transfer from the Revenue Fund on or before the last Business Day of each year (or more frequently if requested by a Commission Official) to the credit of the General Reserve Fund any funds which a Commission Official determines to be in excess of the amount required to be reserved therein for future transfers to the Debt Service Fund. Moneys in the General Reserve Fund may be expended by the Commission to restore deficiencies in any funds or accounts created under the Senior Indenture, and absent any such deficiency, for any of the following purposes, with no one item having priority over any of the others:

a) to purchase or redeem Turnpike Senior Revenue Bonds;

b) to secure and pay the principal or redemption price of, and interest on, any Subordinated Indebtedness;

c) to make payments into the Construction Fund;

d) to fund improvements, extensions and replacements of the System; or

e) to further any corporate purpose.

The Trustee has been directed to disburse from the General Reserve Fund, to the trustee under the Subordinate Indenture, funds sufficient to meet debt service requirements on the Subordinate Indenture Bonds. Under the Subordinate Indenture, the Commission has agreed that it will at all times establish and maintain Tolls for traffic over the System so that the amount paid into the General Reserve Fund in each Fiscal Year after deducting any liquidity reserve or other required holdback or deposit then in effect will be at least sufficient to provide funds in an amount not less than (i) 115% of the annual debt service on Subordinate Revenue Bonds (and obligations on parity with Subordinate Revenue Bonds), plus (ii) 100% of the annual debt service on Special Revenue Bonds (and obligations on a parity with Special Revenue Bonds and certain further subordinated bonds), plus (iii) any amount required under the Subordinate Indenture to restore within eighteen (18) months any deficiency in the debt service reserve fund held under the Subordinate Indenture. Failure to meet this covenant will not constitute a default under the Subordinate Indenture (or the Senior Indenture) but will require the Commission to retain a consultant to advise with respect to schedules of Tolls in order to bring the Commission into compliance. The Trustee has never withdrawn funds from the General Reserve Fund to meet regularly scheduled debt service payments on Turnpike Senior Revenue Bonds Outstanding under the Senior Indenture nor has the General Reserve Fund been used to restore any shortfalls in the Debt Service Reserve Fund for any Turnpike Senior Revenue Bonds. See also "ADDITIONAL INDEBTEDNESS OF THE COMMISSION – Subordinate Indenture Bonds" herein.

The following chart sets forth the balances held in the General Reserve Fund as of the fiscal year end dates set forth below.

General Reserve Fund Balances
as of May 31

2024†	**2023**	**2022**	**2021**	**2020**
$441,159,085	$386,315,789	$437,513,657	$452,045,842	$404,330,774

† Unaudited.

As of May 31, 2024, the Commission had an estimated $441.2 million on deposit in the General Reserve Fund. This amount is approximately 14.2% greater than the General Reserve Fund's Fiscal Year 2023 end balance. See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – General Reserve Fund" for information with respect to the General Reserve Fund under the Senior Indenture.

Pursuant to Supplemental Indenture No. 59, dated as of June 2, 2021, the Commission has established a Supplemental Capital Fund (the ***"Supplemental Capital Fund"***) under the Senior Indenture for deposit and disbursement of certain of the Commission's generally available Revenues for improvements, extensions and replacements to the System, or otherwise for any Project which may be identified by the Commission, and not otherwise funded, as set forth in the Commission's capital plans (collectively, the ***"Additional Capital Projects"***). The Supplemental Capital Fund is pledged as part of the Trust Estate under the Senior Indenture and will be funded solely from such amounts as the Commission, in its sole and absolute discretion, may transfer to it from the General Reserve Fund. Proceeds of Bonds, other Parity Obligations and Subordinated Indebtedness will not be deposited in the Supplemental Capital Fund. Funds may not be requisitioned from the Supplemental Capital Fund for Additional Capital Projects if a deficiency exists in any of the funds and accounts established under the Senior Indenture. Notwithstanding any other provision of the Senior Indenture or the occurrence or continuation of any event or circumstance, monies on deposit in the Supplemental Capital Fund: (i) will be transferred to the General Reserve Fund to the extent not needed to fund such Additional Capital Projects; and (ii) may be transferred to the General Reserve Fund, in such amounts, and from time to time, as the Commission, in its sole and absolute discretion, shall determine. As of May 31, 2024, the Commission had approximately $20 million on deposit in the Supplemental Capital Fund. Since the establishment of the Supplemental Capital Fund, $205 million was deposited and $193 million was expended on Additional Capital Projects.

See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Supplemental Capital Fund" for information with respect to the Supplemental Capital Fund under the Senior Indenture.

Additional Bonds Test

The Commission is permitted to issue Additional Bonds and other Indebtedness under the terms of the Senior Indenture, having a lien on the Trust Estate, in the form of Short-Term Indebtedness, Long-Term Indebtedness, Subordinated Indebtedness and Approved Swap Agreements, provided that there is no default, that certain resolutions, opinions, supplemental indentures, certifications and moneys and securities, if necessary, are delivered to the Trustee and that the following conditions are met:

(a) with respect to Short-Term Indebtedness, (1) immediately after the incurrence of such Short-Term Indebtedness, the Outstanding principal amount of all Short-Term Indebtedness issued pursuant to the Senior Indenture may not exceed 30% of the Revenues for the most recent Fiscal Year for which audited financial statements are available; and (2) for a period of not fewer than seven consecutive days within each Fiscal Year, commencing with the Fiscal Year following the issuance of such Short-Term Indebtedness, the aggregate principal amount of all Outstanding

Short-Term Indebtedness is reduced to less than 5% of the Revenues for the immediately preceding Fiscal Year for which audited financial statements are available. Short-Term Indebtedness issued pursuant to the Senior Indenture will be on a parity with other Additional Bonds;

(b) with respect to Long-Term Indebtedness (which, upon issuance, includes the First Series Bonds), prior to or contemporaneously with the incurrence thereof (1) a certificate of a Commission Official certifying that the Historical Pro Forma Debt Service Coverage Ratio for the most recent Fiscal Year preceding the delivery of such certificate for which audited financial statements are available was not less than 1.75; or (2) a report of a Consultant to the effect that (i) the Net Revenues of the Commission during the preceding Fiscal Year were at least 130% of the Maximum Annual Debt Service on all Applicable Long-Term Indebtedness then Outstanding and on any Applicable Long-Term Indebtedness proposed to be issued (which report may assume any revisions of the Tolls which have been approved by the Commission after the beginning of such Fiscal Year were in effect for the entire Fiscal Year) and (ii) the Projected Debt Service Coverage Ratio is not less than 1.30; or (3) if the Long-Term Indebtedness is being incurred solely for the purpose of refunding, repurchasing or refinancing (whether in advance or otherwise) any Outstanding Long-Term Indebtedness, a certificate of a Commission Official certifying the Maximum Annual Debt Service on all Applicable Long-Term Indebtedness prior to the issuance of the proposed Long-Term Indebtedness is greater than the Maximum Annual Debt Service on all Applicable Long-Term Indebtedness after the issuance of such proposed Long-Term Indebtedness;

(c) with respect to Subordinated Indebtedness, there is no limit, provided that the Subordinate Indebtedness is subordinate and junior in all respect to payment of all Turnpike Senior Revenue Bonds and other Parity Obligations incurred under the Senior Indenture so that the same is payable as to principal and interest once all other payments have been made under the Senior Indenture from amounts on deposit to the credit of the General Reserve Fund as long as prior to or contemporaneously with the incurrence there is delivered to the Trustee, a certificate of a Commission Official certifying that the Rate Covenant would have been met during the preceding Fiscal Year taking into account the Maximum Annual Debt Service on such Subordinated Indebtedness. Such Subordinated Indebtedness and the payment thereof may be secured by a lien and pledge (a) subordinate to that of the Turnpike Senior Revenue Bonds on the Revenues or (b) prior to, on a parity with or subordinate to, that of the Turnpike Senior Revenue Bonds on Other Revenues, in which event the Commission and the Trustee may establish such other accounts under the Senior Indenture as they deem necessary or appropriate; and

(d) with respect to Approved Swap Agreements, no Approved Swap Agreement will be entered into unless prior to or contemporaneously with the incurrence thereof, a certificate of a Commission Official as described in (b)(1) above, or a report of a Consultant as described in (b)(2) above, which takes into account the expected payments by and to the Commission pursuant to such Approved Swap Agreement in calculating Annual Debt Service is delivered.

See APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE – THE SENIOR INDENTURE – Additional Bonds" attached hereto.

ADDITIONAL INDEBTEDNESS OF THE COMMISSION

Bonds and Other Parity Obligations

The Commission has previously issued Turnpike Senior Revenue Bonds and Notes under the terms of the Senior Indenture (including the Refunded Bonds) that have an equal claim to the Trust Estate with the First Series Bonds. As of the date of this Official Statement, $7,302,910,000 in aggregate principal amount of Turnpike Senior Revenue Bonds (including the Refunded Bonds) are Outstanding under the Senior Indenture. The principal amount Outstanding under the Senior Indenture on the date of this Official Statement also includes: (i) certain notes evidencing and securing $88,500,000 in EB-5 Loans, the proceeds of which were used to fund a portion of certain projects in the Commission's current or any prior ten year capital plan (see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN FINANCIAL INFORMATION" for additional information on the EB-5 Loans); and (ii) $649,300,000 aggregate principal amount of variable rate obligations. Upon the issuance of the First Series Bonds and the refunding and defeasance of the Refunded Bonds, $7,267,145,000.00 in aggregate principal amount of Turnpike Senior Revenue Bonds will be Outstanding under the Senior Indenture. See "PLAN OF FINANCE" and "INVESTMENT CONSIDERATIONS" herein. Also see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations" attached hereto, for a discussion of future financings currently by the Commission, including refunding a portion of the Commission's Outstanding Turnpike Senior Revenue Bonds.

Other obligations issued and Outstanding under the Senior Indenture include the Commission's obligations under various interest rate swap agreements having a current notional amount of $650,402,500 as of August 1, 2024. Under the terms of the Senior Indenture, regularly scheduled amounts payable under Parity Swap Agreements, and in certain cases termination payments, are secured on a parity with the Bonds by the Trust Estate. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Financial Policies and Guidelines" and APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE."

The Tolls are not pledged to secure the Subordinate Revenue Bonds, the Special Revenue Bonds, the Oil Franchise Tax Revenue Bonds and the Registration Fee Revenue Bonds. Certain payments made from moneys released from the General Reserve Fund which are derived from Tolls are, however, pledged on a wholly subordinate basis to secure payments due on Subordinate Revenue Bonds and Special Revenue Bonds.

Subordinate Indenture Bonds

Act 44 authorizes the Commission to issue bonds for the purpose of paying costs of the Pennsylvania Department of Transportation (***"PennDOT"***) and bond-related expenses. Proceeds of such bonds may be applied toward the satisfaction of the Commission's annual payment obligations to PennDOT under the Amended Funding Agreement (as defined in APPENDIX A hereto). As of the date of this Official Statement, the Commission has $6,099,822,116 aggregate principal amount Outstanding (including compounded amounts as of June 1, 2024 for the Commission's Outstanding capital appreciation bonds) of Subordinate Revenue Bonds under the

Subordinate Indenture under the authorization of Act 44 to be paid solely from moneys released from the General Reserve Fund (such bonds are therefore subordinate to Bonds and other Parity Obligations under the Senior Indenture). Other obligations issued and Outstanding under the Subordinate Indenture include the Commission's obligations under an interest rate swap agreement having a total current notional amount of $291,850,000 as of August 1, 2024. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Financial Policies and Guidelines" for additional information relating to swaps.

Upon fulfillment of conditions set forth in the Subordinate Indenture, the Commission may issue additional Subordinate Revenue Bonds under the terms of the Subordinate Indenture. In addition to any Subordinate Revenue Bonds, the Commission is authorized under the terms of the Subordinate Indenture to enter into various interest rate exchange agreements that will constitute parity swap agreements under the Subordinate Indenture. Under the terms of the Subordinate Indenture, amounts payable under parity swap agreements, including termination payments, may be secured on a parity with the Subordinate Revenue Bonds.

There is no statutory limit on the amount of Subordinate Revenue Bonds that may be issued by the Commission. To date, the Commission has issued Subordinate Revenue Bonds under the Subordinate Indenture, but has not issued any Subordinated Indebtedness under the Senior Indenture. The Commission has no plans to issue any Subordinated Indebtedness under the Senior Indenture.

Previously, under Act 44, the Commission was able to issue up to $5 billion of Special Revenue Bonds guaranteed by the Motor License Fund under Act 44 (the ***"Special Revenue Bonds"*** and, together with the Subordinate Revenue Bonds, the ***"Subordinate Indenture Bonds"***) which are subordinate to Parity Obligations issued under the Senior Indenture and to the Subordinate Revenue Bonds issued under the Subordinate Indenture. However, other than bonds issued to refund Outstanding Special Revenue Bonds, pursuant to Act 89, effective July 1, 2014, Special Revenue Bonds may no longer be issued by the Commission to fund any portion of its payment obligation under the Amended Funding Agreement. The Commission has issued Special Revenue Bonds currently Outstanding in the aggregate principal amount of $963,068,593 (inclusive of compounded amounts as of June 1, 2024 for capital appreciation bonds). Debt service on the Special Revenue Bonds shall be payable from any available funds of the Commission, but is additionally secured by amounts payable from the Motor License Fund created under Act 44 required to pay any debt service shortfall; all such debt service payments are subordinate obligations of the Commission payable solely from certain money in, or periodically released from, the General Reserve Fund after meeting all other Commission requirements pursuant to any financial documents, financial covenants, insurance policies, liquidity policies or agreements in effect at the Commission; and the proceeds from the issuance of the Special Revenue Bonds may only be used for roads and bridges. The Amended Funding Agreement provides that the Commission is obligated to pay all debt service due with respect to the Special Revenue Bonds. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE COMMISSION – Enabling Acts" for a description of the Subordinate Revenue Bonds and Special Revenue Bonds which the Commission is authorized to issue under the Enabling Acts.

Other Bonds Issued by the Commission – No Claim on Trust Estate

The Commission has also issued Oil Franchise Tax Revenue Bonds of which (i) $860,371,225 in aggregate principal amount of Oil Franchise Tax Senior Revenue Bonds, including accreted interest through June 1, 2024, and (ii) $599,965,000 in aggregate principal amount of Oil Franchise Tax Subordinated Revenue Bonds are Outstanding as of the date of this Official Statement. The Commission has also issued Registration Fee Revenue Bonds of which $306,820,000 are Outstanding as of the date of this Official Statement. The Commission has entered into various interest rate exchange agreements (swaps) with respect to certain of the Oil Franchise Tax Revenue Bonds and Registration Fee Revenue Bonds. Neither the Oil Franchise Tax Revenue Bonds nor the Registration Fee Revenue Bonds or any of the various swaps with respect to the Oil Franchise Tax Revenue Bonds and Registration Fee Revenue Bonds are secured by or have any interest in the Trust Estate. Furthermore, neither the Oil Franchise Tax Revenues nor the Registration Fee Revenues are pledged to secure the First Series Bonds.

Future Commission Financings

The Fiscal Year 2025 Financial Plan anticipates that the estimated $7.5 billion in net costs associated with the Fiscal Year 2025 Capital Plan will be funded with approximately $3.5 billion on a pay-as-you-go basis, with the remaining approximately $4.0 billion funded with proceeds from Turnpike Senior Revenue Bonds.

For further information regarding future financing matters, see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations" and "FINANCIAL PLAN – Fiscal Year 2025 Financial Plan" herein for more information.

INVESTMENT CONSIDERATIONS

There are various investment considerations which could adversely affect the sufficiency of the Trust Estate and which, if present, may result in an inability to meet the debt service requirements on the First Series Bonds. The following is intended only as a summary of certain investment considerations attendant to an investment in the First Series Bonds and is not intended to be exhaustive. To identify risk factors and make informed investment decisions, potential investors should be thoroughly familiar with the entire Official Statement (including each Appendix hereto), and the Senior Indenture and related documents to make a judgment as to whether the First Series Bonds are an appropriate investment. The following risk factors are among those which should be considered by a potential investor:

Commission Revenues may decline

The actual amount of future toll revenues collected by the Commission depends upon a number of factors, including rates established by the Commission and the level and composition of traffic on the System. Many of these factors are beyond the control of the Commission. The Commission is obligated under the terms of the Amended Funding Agreement, Act 44 and Act 89, the Senior Indenture, and the Subordinate Indenture to fix and revise tolls at levels that will generate revenues (together with other available moneys) sufficient to pay all of its obligations under the Amended Funding Agreement, to construct and maintain the System and to pay debt service obligations and other amounts payable to PennDOT or the Commonwealth. However, the amount of traffic on the System cannot be predicted with certainty and may decline due to general economic conditions, diversion of some traffic to alternative non-toll routes to avoid toll rate increases or because of increased fuel costs, increased mileage standards, higher fuel taxes or other factors. There is insufficient data to assess these risk factors fully. However, based on historical variations in such factors and the recent toll increases, the Commission reasonably expects to have sufficient revenues to meet its payment obligations, including payment obligations with respect to the First Series Bonds. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Performance Audit by the Auditor General" attached hereto.

Traffic Study

In addition, as set forth in the Traffic Study, there is considerable uncertainty inherent in future traffic and revenue forecasts for any toll facility, and differences between forecasted and actual results (which may be material) may occur due to events and circumstances beyond the control of the forecasters, including without limitation, economic conditions, and other factors. See APPENDIX F – "TRAFFIC STUDY" and APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE TURNPIKE SYSTEM – Traffic Study" attached hereto. While future traffic volume and revenues cannot be predicted with certainty, the Commission reasonably expects that it will have sufficient revenue to meet the then existing debt and operational obligations of the Commission. But see APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Performance Audit by the Auditor General" attached hereto.

Collection Risk

In addition to implementing the additional 45% charge on all Toll-By-Plate transactions, which was implemented to encourage increased use of E-ZPass, offset additional operational costs of the Toll-By-Plate system versus E-ZPass and to cover estimated Revenue Leakage, the Commission continues to actively work to address Revenue

Leakage through various initiatives that address customer behaviors and system improvement. See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – TURNPIKE SYSTEM – Toll Collection" attached hereto.

If Commission experiences financial problems, delays in payment or losses on the First Series Bonds may result

Adverse changes in the financial condition of the Commission could result in a failure to make its payments, or a delay in payments, to the Trustee with respect to the First Series Bonds. In addition to a potential decline in revenues, the Commission's financial condition could be adversely affected by a number of factors including, but not limited to:

- Increased and/or unanticipated costs of operation and maintenance of the System;
- Decreased toll revenues due to declines in usage or otherwise;
- Increased use of remote work environments and technology among the general population that may decrease levels of commuting or travel for business or other purposes;
- Increased use of mass transit systems;
- Improvements in alternative infrastructure and transportation routes and changes in market conditions that may impact the level of commercial freight traffic utilizing the System;
- Work stoppage, slowdown, or action by unionized employees;
- Complete or partial destruction or temporary closure of the System due to events beyond the control of the Commission;
- Cybersecurity incidents that materially disrupt the operations of the Commission or one of its vendors or contractors, and/or cause physical or monetary damage;
- Increased unfunded pension benefits;
- Future unfunded healthcare and other non-pension post-employment benefits;
- Failure to pay the purchase price on outstanding floating rate notes or other variable rate obligations issued by the Commission subject to maturity or mandatory tender;

- Increased fuel costs; and
- Claims or adverse litigation judgments for monetary damages not covered by insurance.

The Commission's financial condition may be adversely affected as a consequence of adverse changes in the financial condition of third-party financial institutions

Adverse changes in the financial condition of certain third-party financial institutions, including swap counterparties, providers of credit facilities (including providers of direct-pay letters of credit and bond insurers which have issued or may issue insurance policies on one or more Series of Bonds) may adversely affect the Commission's financial position. Different types of investment and contractual arrangements may create exposure for the Commission to such institutions including:

- Risk to the Commission's investment portfolio due to defaults or changes in market valuation of the debt securities of such institutions; and
- Counterparty risk related to swaps used by the Commission to hedge its cost of funds.
- Risk of rating changes of the Commission's credit enhancers or liquidity providers which may adversely affect the interest costs on the Commission's variable rate debt, or which may render such variable rate debt unmarketable.

See APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS" and "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Financial Policies and Guidelines" attached hereto.

Litigation and Other Actions Against the Commission

The Commission is subject to litigation from time to time and may be subject to litigation and other actions in the future which could adversely affect the financial position of the Commission. The Commission cannot predict when or if any action will be brought against the Commission in the future, and, if brought, whether any action would be successful or result in monetary damages or other relief being imposed upon the Commission. See "LITIGATION" herein and APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE COMMISSION – Recent Developments and Legislation – *Julie E. Thomas v. TransCore, LP & Pennsylvania Turnpike Commission*" and "– *Black & Veatch Construction, Inc.*" attached hereto for more information regarding (i) the lawsuit against the

Commission, and TransCore, L.P. centered on video tolls, an E-ZPass charge that is assessed when, for any reason, a customer's E-ZPass transponder is not read on both the customer's entry and exit from the System, resulting in a toll assessment based upon a video snapshot of the customer's license plate and (ii) two separate claims filed by Black & Veatch Construction, Inc. (***"BVCI"***) relating to work done by BVCI for the design-build fiber optic network installation on (a) the Turnpike Mainline between milepost 247.4 and milepost H-42.70, the liquidated damages assessed by the Commission due to BVCI's 489-day late delivery of such project, and BVCI’s claim of approximately $44 million in alleged breaches of contract and other alleged Commission-caused impacts as reasons for BVCI’s late delivery of such project, and (b) the northeastern extension of the Pennsylvania Turnpike between mileposts 333.30 and A130.60, the liquidated damages assessed by the Commission due to BVCI's 689-day late delivery of such project, and BVCI’s claim of approximately $44 million in alleged breaches of contract and other alleged Commission-caused impacts as reasons for BVCI’s late delivery of such project.

Certain legislative actions may result in adverse changes to the Commission, Act 44, or Act 89

From time to time, legislation is introduced in the Pennsylvania General Assembly which may affect the Commission and therefore may affect certain of the assumptions made in this Official Statement. The Commission cannot predict if any of such bills or other legislation will be enacted into law, or how any such legislation may affect the Commission's ability to make timely payments on the First Series Bonds.

Bankruptcy risk; Lien position

The rights and remedies of Bondholders could be limited by the provisions of the Federal Bankruptcy Code, as now or hereafter enacted (the ***"Bankruptcy Code"***), or by other laws or legal or equitable principles which may affect the enforcement of creditors' rights. Chapter 9 of the Bankruptcy Code permits, under prescribed circumstances, a political subdivision or public agency or instrumentality of a state, such as the Commission, to commence a voluntary bankruptcy proceeding and to file a plan of adjustment in the repayment of its debts, if such entity is generally not paying its debts as they become due (unless such debts are the subject of a bona fide dispute) or is unable to pay its debts as they become due. Under the Bankruptcy Code, an involuntary petition cannot be filed against a political subdivision, public agency, or instrumentality of a state.

In order to proceed under Chapter 9 of the Bankruptcy Code, state law must authorize the political subdivision, public agency, or instrumentality to file a petition under the Bankruptcy Code. THE ENABLING ACTS DO NOT CURRENTLY AUTHORIZE THE COMMISSION TO FILE A PETITION UNDER THE BANKRUPTCY CODE.

Reductions in federal subsidy payable to the Commission for its Outstanding Build America Bonds due to sequestration

A series of automatic federal deficit reduction spending cuts known as "sequestration" became effective on March 1, 2013, as a result of the failure by Congress to adopt alternative deficit reduction legislation; recent legislation has extended sequestration through the 2030 federal fiscal year. Sequestration will affect the federal subsidy payable to the Commission with respect to its Outstanding Build America Bonds. The federal subsidy has been reduced in each fiscal year, commencing with the federal fiscal year ended September 30, 2013. In August 2020, based on guidance issued by the Internal Revenue Service, such federal subsidy of 35% is reduced by 5.7% for payments from October 1, 2020, through September 30, 2030. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequester, at which time the sequestration reduction rate is subject to change. Reductions of the federal subsidies payable to the Commission with respect to its Outstanding Build America Bonds in future federal fiscal years could be caused by future action or inaction by Congress, cannot be predicted, and could result in the federal subsidy being reduced to zero. Adverse changes in the amount of the federal subsidy the Commission receives on its Build America Bonds will require the Commission to use other funds to offset the loss of this subsidy. The Commission currently has approximately $875 million of Turnpike Senior Revenue Bonds Outstanding issued as Build America Bonds. In Fiscal Year 2023, the Commission received federal Build America Bond subsidies in the amount of approximately $16.5 million.

Possible changes in federal or Commonwealth tax laws could affect the excludability or deductibility of interest on tax-

Current and future legislative proposals, if enacted into law, could cause interest on the First Series Bonds to be subject, directly, or indirectly, to federal income taxation, or to be subject to or not be exempted from income taxation imposed by the Commonwealth, or otherwise prevent the owners of

exempt bonds such as the First Series Bonds	the First Series Bonds from realizing the full current benefit of the tax status of such interest. The introduction and/or enactment of any such legislative proposals may also affect the market price for, or marketability of, the First Series Bonds. Prospective purchasers of the First Series Bonds should consult their own tax advisors regarding any pending or proposed federal tax legislation, as to which Co-Bond Counsel will express no opinion. See "TAX MATTERS" herein.
The First Series Bonds may be repaid early due to the exercise of the redemption option. If this happens, First Series Bondholders will bear reinvestment risk which could be at lower yields than the yields on the First Series Bonds	The First Series Bonds may be redeemed prior to their final maturity if the Commission exercises its option to redeem the First Series Bonds. Bondholders bear the risk that monies received upon such redemption cannot be reinvested in comparable securities or at comparable yields. See "DESCRIPTION OF THE FIRST SERIES BONDS – Redemption of First Series Bonds – Optional Redemption" herein.
Uncertainty as to available remedies	The remedies available to owners of the First Series Bonds upon an Event of Default under the Senior Indenture or other documents described herein are in many respects dependent upon regulatory and judicial actions which often are subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, the remedies specified by the Senior Indenture and such other documents may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the issuance of the First Series Bonds will be qualified, as to the enforceability of the various legal instruments, by limitations imposed by bankruptcy, reorganization, insolvency, or other similar laws affecting the rights of creditors generally.
Covenants and restrictions in other agreements vary from provisions of the Senior Indenture	The Commission has entered into agreements with certain financial institutions relating to certain indebtedness, including Parity Obligations under the Senior Indenture, some of which contain additional covenants and restrictions for the benefit of such financial institutions, including provisions that a ratings downgrade triggers an increase in the interest rate on certain obligations. See the Commission's Bank Loan Disclosures available at https://emma.msrb.org/IssuerHomePage/Issuer?id=4F1C21

25DAC85ABFE053151ED20AC6F6&type=M[‡] and APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN OTHER INFORMATION – Financial Policies and Guidelines" attached hereto.

Cybersecurity Threats

The Commission, the Commonwealth and many of their respective vendors and contractors are dependent on information and computing technology to conduct general business operations, including toll transactions, toll collections, and customer account services. While to date the Commission has not experienced a materially disruptive cybersecurity threat, computer hacking, cyber-attacks or other malicious activities directed at the Commission's information systems or those of its vendors or contractors, could disrupt Commission services or cause physical or financial harm to the Commission in the future. Further, cybersecurity breaches such as leakage or loss of confidential or proprietary data and failure or disruption of information technology systems could materially and adversely affect the Commission's reputation, which could lead to significant outlays and decreased performance that insurance may not cover.

The Commission has a robust cybersecurity framework that leverages multiple layers of protection including edge and internal firewalls, an intrusion prevention system, security incident and event management, multi-layered anti-virus, malware protection and spam filters. The Commission performs regular security patching and regular internal and external vulnerability scans. Periodic security assessment and penetration testing is performed regularly by qualified third parties. The Commission has implemented cybersecurity awareness training and simulated phishing attacks, and has published third-party security requirements that define general security requirements, requirements for vendors providing hosting cloud-based systems, and requirements for vendors providing on-premises systems or devices physically connected to the Commission's networks. All Commission employees are required to complete annual information technology security training and phishing simulation campaigns are performed regularly. Additionally, the Commission has cyber insurance which also provides immediate access to third party forensic

[‡] The information contained on such website link is not incorporated by reference in this Official Statement.

investigation experts to assist the Commission with any data or system breaches.

Although the Commission devotes significant resources to maintain and regularly upgrade its systems and processes that are designed to protect the security of its computer systems, software, networks and other technology assets and the confidentiality, integrity and availability of information belonging to customers, there is no assurance that all these security measures will provide absolute security or prevent the risk of the Commission's finances or operations being negatively impacted by a cybersecurity threat directed at one of the Commission's vendors or contractors. These risks may increase in the future as the Commission continues to utilize AET, mobile payments and other internet-based applications both internally and externally. A successful cybersecurity attack on the Commission, the Commonwealth or one of their respective vendors or contractors, could have a materially adverse effect on the financial condition and/or the operations of the Commission.

Environmental, Social and Governance Factors

For information regarding certain elements of the Commission's operations relating to environmental, social and governance factors see "THE COMMISSION – Long Term and Strategic Planning" and "CERTAIN OTHER INFORMATION – Environmental, Social and Governance Factors" in APPENDIX A attached hereto. Such information is not exhaustive and should be evaluated considering the entirety of the information regarding the Commission, the System, and the Commission's finances and operations set forth in this Official Statement.

TAX MATTERS

Tax Exemption - Opinion of Co-Bond Counsel

The Internal Revenue Code of 1986, as amended (the "Code") contains provisions relating to the tax-exempt status of interest on obligations issued by governmental entities which apply to the First Series Bonds. These provisions include, but are not limited to, requirements relating to the use and investment of the proceeds of the First Series Bonds, and the rebate of certain investment earnings derived from such proceeds to the United States Treasury Department on a periodic basis. These and other requirements of the Code must be met by the Commission subsequent to the issuance and delivery of the First Series Bonds in order for interest thereon to be and remain excludable from gross income for purposes of federal income taxation. The Commission has made covenants to comply with such requirements.

In the opinion of Co-Bond Counsel, interest on the First Series Bonds is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions. The opinion of Co-Bond Counsel is subject to the condition that the Commission complies with all applicable federal income tax law requirements that must be satisfied subsequent to the issuance of the First Series Bonds in order that interest thereon continues to be excluded from gross income. Failure to comply with certain of such requirements could cause the interest on the First Series Bonds to be so includable in gross income retroactive to the date of issuance of the First Series Bonds. The Commission has covenanted to comply with all such requirements. Interest on the First Series Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax; however, such interest is taken into account in determining the annual adjusted financial statement income of applicable corporations (as defined in Section 59(k) of the Code) for the purpose of computing the alternative minimum tax imposed on corporations.

In addition to the matters addressed below, prospective purchasers of the First Series Bonds should be aware that ownership of the First Series Bonds may result in collateral tax consequences to certain taxpayers, including but not limited to, foreign corporations, certain S corporations, financial institutions, recipients of social security and railroad retirement benefits and property or casualty insurance companies. Co-Bond Counsel expresses no opinion regarding any other federal tax consequences relating to the First Series Bonds or the receipt of interest thereon. **Prospective purchasers of the First Series Bonds should consult their own tax advisors as to the impact of these other tax consequences**.

In the opinion of Co-Bond Counsel, under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof, interest on the First Series Bonds is free from taxation for state and local purposes within the Commonwealth of Pennsylvania, but such exemption does not extend to gift, estate, succession or inheritance taxes or any other taxes not levied or assessed directly on the First Series Bonds or the interest thereon. Profits, gains or income derived from the sale, exchange or other disposition of the First Series Bonds are subject to state and local taxation within the Commonwealth of Pennsylvania. Specifically, the interest on the First Series Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax.

Co-Bond Counsel's opinion will be based on existing law, which is subject to change. Such opinion is further based on factual representations made to Co-Bond Counsel as of the date of delivery of the First Series Bonds. Co-Bond Counsel assumes no duty to update or supplement its opinion to reflect any facts or circumstances that may thereafter come to Co-Bond Counsel's attention, or to reflect any changes in law that may thereafter occur or become effective.

Alternative Minimum Tax

Interest on the First Series Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax. However, such interest is taken into account in determining the annual adjusted financial statement income of applicable corporations (as defined in Section 59(k) of the Code) for the purpose of computing the alternative minimum tax imposed on corporations.

Deduction for Interest Paid by Financial Institutions to Purchase or Carry Tax-Exempt Obligations

The Code, subject to limited exceptions not applicable to the First Series Bonds, denies the interest deduction for indebtedness incurred or continued to purchase or carry tax-exempt obligations, such as the First Series Bonds. With respect to banks, thrift institutions and other financial institutions, the denial to such institutions is one hundred percent (100%) for interest paid on funds allocable to the First Series Bonds and any other tax-exempt obligations acquired after August 7, 1986.

Accounting Treatment of Amortizable Bond Premium

Each maturity of the First Series Bonds are hereinafter referred to as the "Premium Bonds." An amount equal to the excess of the initial public offering price of a Premium Bond set forth on the inside front cover page over its stated redemption price at maturity constitutes premium on such Premium Bond. A purchaser of a Premium Bond must amortize any premium over such Premium Bond's term using constant yield principles, based on the purchaser's yield to maturity. As premium is amortized, the purchaser's basis in such Premium Bond is reduced by a corresponding amount, resulting in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes upon a sale or disposition of such Premium Bond prior to its maturity. Even though the purchaser's basis is reduced, no federal income tax deduction is allowed.

Purchasers of any Premium Bonds should consult their own tax advisors with respect to the determination and treatment of original issue premium for federal income tax purposes and with respect to state and local tax consequences of owning Premium Bonds.

Reportable Payments and Backup Withholding

The payments of interest on the First Series Bonds will be reported to the Internal Revenue Service by the payor on Form 1099 unless the Bondholder is an "exempt person" under Section 6049 of the Code. A Bondholder who is not an exempt person may be subject to "backup withholding" at a specified rate prescribed in the Code if the Bondholder does not file Form W-9 with the payor advising the payor of the Bondholder's taxpayer identification number. Bondholders should consult with their brokers regarding this matter.

The payor will report to the Bondholders and to the Internal Revenue Service for each calendar year the amount of any "reportable payments" during such year and the amount of tax, if any, with respect to payments made on the First Series Bonds.

CHANGES IN FEDERAL AND STATE TAX LAW

Legislative or administrative actions and court decisions, at either the federal or state level, could have an impact on the treatment of interest on the First Series Bonds for federal or state income tax purposes, and thus on the value or marketability of the First Series Bonds. This could result 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 otherwise. It cannot be predicted whether or in what form any such proposals may be enacted or whether if enacted such proposals would apply to bonds issued prior to enactment. In addition, regulatory or other actions are from time to time announced or proposed which, if implemented or concluded in a particular manner, could adversely affect the market value, marketability, or tax status of the First Series Bonds. It cannot be predicted whether any such regulatory or other actions will be implemented or whether the First Series Bonds would be impacted thereby.

Purchasers of the First Series Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation. The opinions expressed by Co-Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of issuance and delivery of the First Series Bonds, and Co-Bond Counsel has expressed no opinion as of any date subsequent thereto or with respect to any proposed or pending legislation, regulatory initiatives or litigation.

Prospective purchasers of the First Series Bonds should be aware that the ownership of tax-exempt obligations**, such as the First Series Bonds, may result in collateral federal income tax consequences. Such prospective purchasers should consult their own tax advisors as to the consequences of investing in the First Series Bonds.**

CONTINUING DISCLOSURE

The Commission will enter into a Continuing Disclosure Agreement for the benefit of the Underwriters and the Registered Owners from time to time of the First Series Bonds (the ***"Continuing Disclosure Agreement"***) pursuant to Rule 15c2-12 promulgated by the Securities and Exchange Commission (the ***"SEC"***) under the Securities Act of 1934, as amended (the ***"Rule"***). The form of the Continuing Disclosure Agreement is attached hereto as APPENDIX G – "FORM OF CONTINUING DISCLOSURE AGREEMENT." The Commission has engaged Digital Assurance Certification, L.L.C. (the ***"Dissemination Agent"***), to serve as the initial Dissemination Agent with respect to the Continuing Disclosure Agreement.

Pursuant to the Continuing Disclosure Agreement, the Commission will provide or cause to be provided to the Municipal Securities Rulemaking Board (the ***"MSRB"***), which is currently the sole nationally recognized municipal securities information repository (the ***"Repository"***) under the Rule, via electronic transmissions pursuant to the MSRB's Electronic Municipal Market Access System (***"EMMA"***), accessible at *http://emma.msrb.org*, certain financial and operating information and notices, all as set forth in the Continuing Disclosure Agreement.

A default under the Continuing Disclosure Agreement shall not be deemed to be a default under the First Series Bonds or the Senior Indenture, and the sole remedy to enforce the provisions of the Continuing Disclosure Agreement shall be the right of any Registered Owner, by mandamus, suit, action or proceeding at law or in equity, to compel the Commission to perform the provisions and covenants contained in the Continuing Disclosure Agreement.

During the five (5) year period preceding the date of this Official Statement, the Commission failed to timely meet certain of its disclosure obligations under its outstanding continuing disclosure undertakings, specifically: (i) notices of certain events and certain financial and operating information that were made available in a timely manner on EMMA, were not initially linked to all relevant CUSIP numbers, and (ii) with respect to the Commission's Outstanding Registration Fee Revenue Bonds the quarterly reporting of liquidity fund balances was not reported on a timely basis on two occasions. The Commission has worked with the Dissemination Agent to correct these issues and enhance compliance with the Commission's continuing disclosure obligations in the future.

VERIFICATION OF MATHEMATICAL COMPUTATIONS

When the First Series Bonds are issued, Causey Demgen & Moore P.C. (the ***"Verification Agent"***), will deliver to the Commission a report indicating that it has verified the arithmetic accuracy of (a) the mathematical calculations of the adequacy of the cash and the maturing principal amounts of, and the interest on, the escrow securities held pursuant to the Escrow Agreement to pay the interest and redemption price coming due on the Refunded Bonds and (b) certain yield calculations relating to the escrow securities and the First Series Bonds.

RATINGS

Moody's Investors Service, Inc., S&P Global Ratings, Fitch Ratings, and Kroll Bond Rating Agency have assigned their municipal bond ratings of "Aa3", "AA-", "AA-", and "AA-", respectively, to the First Series Bonds.

An explanation of the significance of each of such ratings and any outlook may be obtained from the rating agency furnishing the same at the following addresses: Moody's Investors Service, Inc., 7 World Trade Center at 250 Greenwich Street, New York, New York 10007; S&P Global Ratings at 55 Water Street, New York, New York 10041; Fitch Ratings, 33 Whitehall Street New York, New York 10004; and Kroll Bond Rating Agency, 845 Third Avenue, New York, New York 10022. Certain materials and information not included in this Official Statement may have been furnished to such rating agencies. A rating is not a recommendation to buy, sell or hold securities. There is no assurance that such ratings will continue for any given period of time or that they may not be lowered or withdrawn entirely by the rating agencies, or any of them, if, in their or its judgment, circumstances so warrant. Any such downward change in or withdrawal of such ratings, or any of them, may have an adverse effect on the market price of the First Series Bonds.

Neither the Underwriters nor the Commission (except to the extent the Commission is required pursuant to the provisions of the Continuing Disclosure Agreement) have undertaken any responsibility to bring to the attention of the holders of the First Series Bonds any proposed or actual change in or withdrawal of any rating or the outlook of any rating and neither the Underwriters nor the Commission have undertaken any responsibility to oppose any proposed change or withdrawal of any rating or the outlook thereof. See APPENDIX G – "FORM OF CONTINUING DISCLOSURE AGREEMENT" attached hereto.

AUDITED FINANCIAL STATEMENTS

The financial statements of the Commission for the years ended May 31, 2023 and May 31, 2022 are set forth in APPENDIX B – "AUDITED FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED MAY 31, 2023 AND 2022." The financial statements for the fiscal years ended May 31, 2023 and May 31, 2022 were audited by SB & Company, LLC in its capacity as the Commission's Independent Auditor. SB & Company, LLC has not been engaged to perform nor has it performed, since the date of its auditor's report, any procedures on the financial statements addressed in the reports. Additionally, SB & Company, LLC has not performed any procedures related to this Official Statement or other debt-related offering documents.

The Commission expects the audited financial statements for the fiscal year ended May 31, 2024 to be available in October 2024.

LITIGATION

General

There is no controversy or litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the First Series Bonds, or in any way contesting or affecting the validity of the First Series Bonds or any proceedings of the Commission taken with respect to the offer or sale thereof, or the pledge or application of any monies or security provided for the payment of the First Series Bonds, the existence or powers of the Commission, or the authority for the Commission to undertake the First Series Refunding Project.

The Commission is covered by Act No. 152, approved September 28, 1978, *42 Pa.C.S. § 8528,* which provides for a limited waiver of sovereign immunity by the Commonwealth. Damages for any loss are limited to $250,000 for each plaintiff or $1,000,000 in the aggregate. On March 11, 2024 the Pennsylvania Supreme Court granted appeal in *Freilich v. Se. Pennsylvania Transportation Auth*., 302 A.3d 1261 (Pa. Commw. Ct. 2023), appeal granted, No. 245 EAL 2023, 2024 WL 1044586 (Pa. Mar. 11, 2024). In granting the appeal in *Freilich*, the Pennsylvania Supreme Court will consider whether Section 8528(b)'s statutory cap on damages of $250,000 violates Article I, Sections 6 and 11 of the Pennsylvania Constitution. In the event that the Pennsylvania Supreme Court determines that such statutory cap is unconstitutional, the Commission could be subject to significant additional liabilities in personal injury and related litigation matters. The Commission currently self-insures against tort claims. The Commission is unable to presently predict the availability and cost of commercial insurance coverages, should the Commission choose to obtain third party insurance against such claims in the future. Accordingly, the Commission is currently unable to predict the impact on the Commission's finances should the *Freilich* matter result in an elimination of the statutory caps. The Southeastern Pennsylvania Transportation Authority filed its brief on the matter with the Pennsylvania Supreme Court on August 2, 2024. On that date, the Commission also joined a brief, as *amici curiae*, filed with the Pennsylvania Supreme Court, asking the Court to rule that the statutory caps on damages are constitutional. On July 25, 2024 Senate Bill No. 1300 was introduced in the General Assembly of Pennsylvania which, if enacted, would, *inter alia,* increase the limitations on damages in cases involving permanent dismemberment or death, in which case damages arise from the same cause of action or transaction or occurrence or series of causes of action or transactions or occurrences to an amount not exceed $1,000,000 in favor of any plaintiff or $2,000,000 in the aggregate.

The Commission is subject to claims for personal injury and/or property damage pending against the Commission pertaining to matters normally incidental to routine operations. Currently, none of such claims, individually or in the aggregate, are deemed to expose the Commission to a material risk of loss.

Certain Litigation

The Commission may be subject to additional litigation or other actions from time to time in the future which cannot be predicted at this time. See "INVESTMENT CONSIDERATIONS – Litigation and Other Actions Against the Commission" herein and APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – THE COMMISSION – Recent Developments and Legislation – *Julie E. Thomas v. TransCore, LP & Pennsylvania Turnpike Commission*" and "– *Black & Veatch Construction, Inc.*"

LEGAL MATTERS

Certain legal matters with respect to the First Series Bonds will be passed upon Saul Ewing LLP and Eckert Seamans Cherin & Mellott, LLC, Co-Bond Counsel. A copy of the proposed form of opinion of Co-Bond Counsel which will be delivered on the date of issuance and delivery of the First Series Bonds is set forth in APPENDIX D – "FORM OF OPINION OF CO-BOND COUNSEL." Certain other legal matters will be passed upon for the Underwriters by their Counsel, Clark Hill PLC and for the Commission by its Chief Counsel, Doreen A. McCall, Esquire, and Stradley Ronon Stevens & Young, LLP, as Disclosure Counsel to the Commission.

The various legal opinions to be delivered concurrently with the delivery of the First Series Bonds express the professional judgment of the attorneys rendering the opinion as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or the future performance of the parties to the transaction. In addition, the rendering of an opinion does not guarantee the outcome of any legal dispute that may arise out of the transaction.

UNDERWRITING

Raymond James & Associates, Inc., on behalf of itself and the other Underwriters shown on the front cover page hereof (collectively, the ***"Underwriters"***), is expected to enter into a bond purchase agreement (the ***"Purchase Agreement"***) with the Commission pursuant to which the Underwriters will agree, subject to certain customary conditions precedent to closing, to purchase the First Series Bonds from the Commission at a purchase price equal to $315,532,542.50 (representing the par amount of the First Series Bonds, plus original issue premium of $36,018,174.20, and less an Underwriters' discount of $980,631.70). Pursuant to the Purchase Agreement, the Underwriters will be obligated to purchase all of the First Series Bonds if any of such First Series Bonds are purchased.

The First Series Bonds may be offered and sold to certain dealers (including the Underwriters and other dealers depositing such First Series Bonds into investment trusts) at prices lower than such public offering prices (and such public offering prices may be changed, from time to time, by the Underwriters) only after a public offering of the First Series Bonds at the initial offering price.

The obligation of the Underwriters to accept delivery of the First Series Bonds is subject to the terms and conditions set forth in the Purchase Agreement, the approval of legal matters by counsel and other conditions.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the Commission, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and/or instruments of the Commission (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Commission.

The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

CO-FINANCIAL ADVISORS

The Commission has retained Phoenix Capital Partners, LLP, Philadelphia, Pennsylvania, and Public Resources Advisory Group, Inc., Media, Pennsylvania, as Co-Financial Advisors with respect to the authorization and issuance of the First Series Bonds. The Co-Financial Advisors are not obligated to undertake or assume responsibility for, nor have they undertaken or assumed responsibility for, an independent verification of the accuracy, completeness or fairness of the information contained in this Official Statement. Each Co-Financial Advisor is a registered independent advisory firm and is not engaged in the business of underwriting, trading, or distributing municipal securities or other public securities.

TRUSTEE AND ESCROW AGENT

The Commission has appointed U.S. Bank Trust Company, National Association, Philadelphia, Pennsylvania, as the Trustee and Authenticating Agent under the Senior Indenture and as Escrow Agent under the Escrow Agreement. The obligations and duties of the Trustee are as described in the Senior Indenture. The duties of the Escrow Agent are as described in the Escrow Agreement. The Trustee has not evaluated the risks, benefits or propriety of any investment in the First Series Bonds, and makes no representation, and has reached no conclusions, regarding the validity of the First Series Bonds, the security therefor, the adequacy of the provisions for payment thereof or the tax status of the interest on the First Series Bonds. The Trustee has relied upon the opinions of Co-Bond Counsel for the validity and tax status of the interest on the First Series Bonds as well as other matters set out in such opinions. Furthermore, the Trustee has no oversight responsibility, and is not accountable, for the use or application by the Commission of any of the

First Series Bonds authenticated or delivered pursuant to the Senior Indenture or for the use or application of the proceeds of such First Series Bonds by the Commission.

Under the terms of the Senior Indenture, the Trustee shall not be responsible for any loss or damage resulting from any action or inaction taken in good faith in reliance upon an opinion of counsel and the Trustee is liable only for those damages caused by its gross negligence or willful misconduct.

Under the Senior Indenture, the Trustee is not required to take notice, and is not deemed to have notice, of any default under the Senior Indenture (except for defaults in payment of debt service by the Commission), unless the Trustee has been specifically notified in writing of such default by the owners of at least 25% in aggregate principal amount of the Outstanding Bonds (as defined in the Senior Indenture). In the absence of any such notice, the Trustee may conclusively assume no Event of Default exists. The summary of the Trustee's rights, duties, obligations and immunities is not intended to be a complete summary and reference must be made to the Senior Indenture for a complete statement of the Trustee's rights, duties, obligations and immunities.

MISCELLANEOUS

The financial data and other information contained herein have been obtained from the Commission's records, audited financial statements and other sources which are believed to be reliable. No guarantee is given that any of the assumptions, forecasts or estimates contained herein will be realized.

The references herein to the Enabling Acts, the First Series Bonds, the Restated Indenture, Supplemental Indenture No. 76, the Subordinate Indenture, the Traffic Study, the Continuing Disclosure Agreement, the Escrow Agreement and other laws and documents are brief summaries of certain provisions thereof. Such summaries do not purport to be complete and, accordingly, are qualified by reference to and are subject to the full texts thereof.

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Neither this Official Statement nor any other disclosure in connection with the First Series Bonds is to be construed as a contract with the holders of the First Series Bonds. Any statements made in this Official Statement involving matters of opinion or estimates, whether or not expressly so identified, are intended merely as such and not as representations of fact. No representation is made that any of such statements will be realized.

PENNSYLVANIA TURNPIKE COMMISSION

By: *_/s/ Richard C. Dreher_*
Richard C. Dreher
Chief Financial Officer

APPENDIX A

THE PENNSYLVANIA TURNPIKE COMMISSION

TABLE OF CONTENTS

The information in this Appendix A is intended to provide general information regarding the Commission, the Turnpike System, and certain financial, regulatory and operational matters. The order and placement of information in this Appendix A are not an indication of relevance, materiality or relative importance, and this Appendix A should be read in its entirety together with the forepart of this Official Statement and all other Appendices.

Capitalized terms used in this Appendix A and not otherwise defined have the meanings ascribed in the forepart of this Official Statement.

References to website addresses, articles, or reports presented herein, including the Commission's website or any other website containing information about the Commission, 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 Official Statement for any purpose including for purposes of Rule 15c2-12 promulgated by the U.S. Securities and Exchange Commission.

THE COMMISSION

General

The Commission is an instrumentality of the Commonwealth of Pennsylvania (the "***Commonwealth***") existing pursuant to an Act of the General Assembly of Pennsylvania approved on July 18, 2007, P. L. 169, No. 44 ("***Act 44***") and various Acts of the General Assembly approved on several dates, including the Act of May 21, 1937, P.L. 774, Act 211; the Act of May 24, 1945, P.L. 972; the Act of February 26, 1947, P.L. 17; the Act of May 23, 1951, P.L. 335; the Act of August 14, 1951, P.L. 1232; the Act of September 30, 1985, P.L. 240, No. 61, to the extent not repealed by Act 44; the Act of August 5, 1991, P.L. 238, No. 26 ("***Act 26***") and the Act of November 25, 2013, P.L. 974, No. 89 ("***Act 89***") (collectively, the "***Enabling Acts***").

Pursuant to the Enabling Acts, the Commission has the power to construct, operate and maintain the Pennsylvania Turnpike System (as further described herein, the "***System***" or the "***Turnpike System***"). The Commission's composition, powers, duties, functions, duration and all other attributes are derived from the Enabling Acts. The Enabling Acts may be modified, suspended, extended or terminated at any time by further legislation.

Commission Members

The Commission is composed of five members, including one ex officio member, the Secretary (the "***Secretary***") of the Department of Transportation of the Commonwealth of Pennsylvania ("***PennDOT***"). Any vacancy in the membership of the Commission (other than the Secretary of Transportation) must be filled by appointment of the Governor, with the advice and consent of two-thirds of the members of the Pennsylvania Senate.

Act 89 enacted additional provisions pertaining to membership of the Commission. The term of confirmed members of the Commission (other than the Secretary of PennDOT) is a period of four years and members may serve a maximum of two terms. Upon the expiration of a term, a member may continue to hold the office of Commissioner for a period of 90 days or until their successor is appointed and qualified, whichever is less. The limitations on Commissioner terms under Act 89, including provisions for the appointment of successor Commissioners, do not apply to members of the Commission who were appointed for the first time prior to Act 89's effective date in 2013.

The present members of the Commission and the expiration dates of their respective terms (which, in the case of all of the members of the Commission except Commissioner Leaphart, would be extended until reappointment or until a successor is appointed and confirmed) are as follows:

Michael Carroll is the current Chair of the Commission, and serves as the Secretary of PennDOT and the ex-officio member of the Commission. A former legislator who worked on transportation throughout his time in public office, Mr. Carroll was first elected to the Pennsylvania House of Representatives in 2006 and subsequently re-elected for seven additional terms. Mr. Carroll also served as the Democratic chairman of the House Transportation Committee from 2018 through 2022. In addition to his work as a former State Representative, Mr. Carroll formerly worked as the chief of staff for then-state Rep. John Yudichak, served as legislative liaison for PennDOT under Gov. Robert Casey and served as district office director for Congressman Paul Kanjorski. Mr. Carroll earned a Bachelor of Arts in Liberal Studies from the University of Scranton.

William K. Lieberman is the current Vice Chair of the Commission, and was first appointed to serve as a Commissioner in July 2010. Mr. Lieberman previously served as Chair of the Commission from January 2011 until January 2015. Mr. Lieberman has been President of The Lieberman Companies, an insurance and pension provider, since 2003. He serves on the board of AMPCO Pittsburgh. A graduate of The Pennsylvania State University, he is a University of Pittsburgh Trustee and former Chair of the Manchester-Bidwell Corp., Pittsburgh, Pennsylvania. Mr. Lieberman was re-nominated to serve as a Commissioner by Governor Tom Wolf and his re-nomination to serve another four-year term as a Commissioner was unanimously confirmed by the Pennsylvania State Senate in November 2019. His term as a Commissioner formally expired in November 2023 and Mr. Lieberman shall be entitled to continue to serve as a Commissioner until his successor is appointed and qualified.[1]

Dr. Keith Leaphart is the current Secretary-Treasurer of the Commission, and was appointed to serve as a Commissioner in July 2023. Dr. Leaphart is a physician, entrepreneur, and philanthropist who applies his medical training to inform and expertly advance high functioning, interdisciplinary businesses. Dr. Leaphart serves as a staff relief physician for Bryn Mawr Rehab Hospital, and simultaneously owns and runs Replica Global, LLC, a print firm offering boutique creative services for a variety of industries. Dr. Leaphart is also the founder and chairman of Philanthropi, the first full-service philanthropy fintech firm designed to match charities with individual givers. Dr. Leaphart formerly served as a member, and later chair, of the Lenfest Foundation where Dr. Leaphart oversaw the distribution of over $300 million to Philadelphia based nonprofit organizations over ten years. Dr. Leaphart's extensive board service also includes, and is not limited to, the Public Healthcare Management Corporation, The Philadelphia Inquirer - Independent Director, Comcast NBCUniversal Joint Diversity Advisory Council, University City Science Center, Greater Philadelphia Chamber of Commerce, Pennsylvania Osteopathic Medical Association, and Medical Society of Eastern

[1] On July 9, 2024 Governor Josh Shapiro nominated Douglas Farnham of McMurray, Pennsylvania as Mr. Lieberman's successor. Such nomination was placed on the Executive Calendar of the Senate of Pennsylvania on July 10, 2024 and is expected to be considered for confirmation by the Senate in the fall of 2024.

Pennsylvania. In September 2023, Keith Leaphart, DO, MBA, was named Enterprise Executive Vice President (EVP) and Humana Chief Health Equity and Community Impact Officer for Thomas Jefferson University, Jefferson Health and Jefferson Health Plans. His term as a Commissioner expires in June 2027.

Pasquale T. Deon, Sr., an established businessman, has served as a Commissioner since 2002. Mr. Deon served as Chair of the Board of Directors of the Southeastern Pennsylvania Transportation Authority (SEPTA) until January 2024. He is also a service-industry entrepreneur involved in real-estate development, beverage distribution and construction services. He is the owner of WBCB-1490AM Radio, Levittown, Pennsylvania. Mr. Deon was re-nominated to serve as a Commissioner by Governor Tom Wolf and his re-nomination to serve another four-year term as a Commissioner was confirmed by the Senate in May 2018 and again on October 26, 2022. His term as a Commissioner expires in October 2026.

Sean F. Logan, a former State Senator, was appointed to the Commission in July 2022. Mr. Logan previously served on the Commission's governing body, having first been appointed to the Commission in July 2013. He was elected Chairman of the Commission in January 2015, and served in that role through 2017. Mr. Logan was appointed to a two-year term as a commissioner on the Pennsylvania Gaming Control Board in February 2017 and reappointed to additional two- year terms in January 2019 and in January 2021. Prior to such roles, Mr. Logan was elected to the Pennsylvania State Senate representing the 45th District in Allegheny and Westmoreland counties for three terms, from 2001 until 2010. Mr. Logan serves as Chairman of the UPMC-East board of directors and a board member for UPMC McKeesport. Commissioner Logan holds a bachelor's degree in political science from the University of Pittsburgh. Mr. Logan is the Executive Director/CEO of the Convention and Visitors Bureau of Greater Monroeville. His term as a Commissioner expires in July 2026.

Executive Personnel

Mark P. Compton assumed the position of Chief Executive Officer of the Commission on February 1, 2013. Mr. Compton previously served as Deputy Secretary of Administration of PennDOT, overseeing eight bureaus within the agency, including: human resources, information systems governance, business solutions and services, infrastructure and operations, and fiscal management. Before joining PennDOT, Mr. Compton served as Director of Government Affairs for all four companies of American Infrastructure, a heavy-duty civil construction company headquartered in Worcester, Pennsylvania. Prior to that, he worked in various public and private operations, focusing largely on transportation, construction and economic development.

Craig R. Shuey is the Chief Operating Officer of the Commission. He joined the Commission in August 2009 as Director of Government Affairs and was named Chief Operating Officer in January 2011. Mr. Shuey served as Acting Chief Executive Officer from October 2012 to February 2013. Prior to joining the Commission, Mr. Shuey was executive director of the Pennsylvania Senate Transportation Committee from 2001 to 2009. He also served as a representative on the Senate Transportation Commission and on various advisory committees in areas such as air, rail, freight movement and safety.

Richard C. Dreher was named the Chief Financial Officer in August 2020. Prior to that, he held the position of Assistant Chief Financial Officer for Financial Management with the Commission where he managed and coordinated the Commission's municipal debt activities and oversaw the Debt and Derivatives, Risk Management, Treasury and Investment departments. Before joining the Commission in 2013, Mr. Dreher served as the Director of the Bureau of Revenue, Capital and Debt in the Governor's Office of the Budget, Commonwealth of Pennsylvania from 2003 to 2013 where he managed the Commonwealth's general obligation debt and directed the Commonwealth's Capital Budget program. In addition, during his time at the Governor's Office of the Budget from 1997 through 2013, Mr. Dreher managed and expanded the largest economic redevelopment program in the Commonwealth totaling over $4 billion and involving nearly 2,000 projects across the Commonwealth.

Bradley J. Heigel, P.E., was named Chief Engineer in April 2012. He was previously employed by the Commission from 1990 to 2010 and served as the Total Reconstruction Program Manager from 2000 to 2010. From 2010 to 2012, he was employed as a Vice President with Michael Baker, Jr., Inc., an engineering unit of Michael Baker Corporation.

Doreen A. McCall, *Esq.*, has been the Chief Counsel since July 2005. Prior to that time, she served as Chief Counsel to the Pennsylvania Historical and Museum Commission from February 2003 to July 2005 and as Deputy General Counsel in the Governor's Office of General Counsel from April 2000 to January 2003. From September 1996 to April 2000, she was an Assistant General Counsel and from November 1993 to August 1996, she was a staff attorney in the Office of Inspector General.

Robert Taylor, P.E., PTOE was named the Chief Technology Officer in February 2017. He focuses on the use of technology and innovation to improve customer safety and mobility as well as to enable and modernize business operations. Mr. Taylor oversees a $50 million technology program that includes enterprise business systems, geoanalytics, technology infrastructure and cybersecurity. Prior to that, Mr. Taylor served as Manager of Traffic Operations where he managed the traffic incident management program, work zone operations, intelligent transportation systems and connected and automated vehicle technologies. Mr. Taylor worked at Gannett Fleming for over 20 years where he was responsible for the planning and deployment of transportation and security systems. He also served on the board of directors of Avant IMC which provided management consulting, planning, and engineering services for organizations that own and maintain large infrastructure systems.

Kelli Roberts was named Chief Strategy and Communications Officer in October 2023. Since joining the Commission in 2013, Ms. Roberts has held positions in the Communications, Engineering, and Policy and External Affairs Departments providing leadership on initiatives of strategic importance. Prior to joining the Commission, Ms. Roberts most notably served as Deputy Director of Communications in the Pennsylvania Governor's Office from 2011 through 2013 and Special Assistant to the Director of Public Affairs in the U.S. Department of Transportation in 2005.

Enabling Acts

Act 44 and the Act 44 Funding Agreement

On July 18, 2007, Act 44 was enacted, creating a "public-public partnership" between the Commission and PennDOT to provide funding for roads, bridges and transit throughout the Commonwealth. Subsequently, in order to, among other things, effectuate the provisions of Act 44 requiring the Commission to make substantial annual payments to PennDOT as described below, the Commission and PennDOT entered into a Lease and Funding Agreement (the "***Act 44 Funding Agreement***"), incorporating many of the terms of Act 44.

The Act 44 Funding Agreement also granted the Commission the option to lease the portion of Interstate Route 80 ("***I-80***") located in the Commonwealth from PennDOT upon, among other things, the approval of the Federal Highway Administration ("***FHWA***") of the conversion of such portion into a toll road (the "***Conversion***"). The Conversion was not approved by FHWA and neither the Commission nor PennDOT appealed the decision. The Commission did not exercise its option to lease such portion of I-80, and the period during which the Commission could exercise its option under the Act 44 Funding Agreement lapsed on October 14, 2010 without the Commission effectuating the Conversion or having the ability to do so in the future, leaving all legal, financial and operational responsibility for I-80 solely with PennDOT.

Pursuant to Act 44 and the Act 44 Funding Agreement, the Commission is obligated to make scheduled annual payments to PennDOT ("***Act 44/Act 89 Payments****").* Previously, aggregate annual payments in the amount of $450 million were due through 2057, payable in equal quarterly installments, with $200 million of the scheduled annual payments supporting road and bridge projects and $250 million supporting transit projects throughout the Commonwealth. However, commencing with Fiscal Year 2023, the Commission's current annual Act 44/Act 89 Payment obligation was reduced to $50 million. See "*Act 89 and the Act 89 Amendments*" below and "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Other Obligations" herein for more information on the total amount paid by the Commission under the Amended Funding Agreement (as hereinafter defined).

Act 89 and the Act 89 Amendments

On November 25, 2013, Act 89 was enacted to provide (i) substantial revenue enhancements to support investment in the Commonwealth's aging transportation infrastructure, and (ii) substantial reductions in the Commission's obligations with respect to the Act 44/Act 89 Payments. The revenue enhancements providing additional funds each year for investment in the Commonwealth's transportation infrastructure were fully implemented in Fiscal Year 2018.

Revisions to the Commission's Act 44/Act 89 Payment obligations enacted under Act 89 were implemented by Amendment Number One to Lease and Funding Agreement (the "***Act 89 Amendment***" and together with the Act 44 Funding Agreement, the "***Original Amended Funding Agreement***") executed by the Commission and PennDOT on April 4, 2014.

In accordance with Act 89 and the Original Amended Funding Agreement, the Commission's aggregate annual Act 44/Act 89 Payment to PennDOT for Fiscal Year 2014 through Fiscal Year 2022 was $450 million, with at least $30 million of such annual amount required to be paid from current revenues, and the remainder funded by the proceeds of bonds issued under the Subordinate Revenue Indenture (as hereinafter defined).

The Original Amended Funding Agreement was subsequently further amended, on July 31, 2018, by Amendment Number Two to Lease and Funding Agreement (the "***Amendment Two***"), and on June 11, 2020, by Amendment Number Three to the Lease and Funding Agreement (the "***Amendment Three,***" and together with the Original Amended Funding Agreement and Amendment Two, the "***Amended Funding Agreement***"), both of which were executed by all parties to provide current year adjustments for certain due dates for Act 44/Act 89 Payments in Fiscal Years 2019 through 2021. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Other Obligations" below for more information on the total amount paid by the Commission under the Amended Funding Agreement.

Act 89 relieved the Commission from over $15 billion in future Act 44/Act 89 Payments to PennDOT during Fiscal Years 2023 through 2057 (the term of the Amended Funding Agreement), by reducing the Commission's aggregate annual Act 44/Act 89 Payments to PennDOT to $50 million, which amount must be paid from current revenues of the Commission. Further, Act 89 revised the use of the Commission's annual Act 44/Act 89 Payments. Effective July 1, 2014, none of the Commission's Act 44/Act 89 Payments may be used to support the Commonwealth's road and bridge projects. Instead, during Fiscal Years 2015 through 2022, $420 million of the scheduled annual Act 44/Act 89 Payments was required to be used to support mass transit capital and operating needs and other transportation programs of statewide significance, and $30 million was required be used to support multi-modal projects, which may include: aviation projects; rail freight projects; port projects; bicycle projects and pedestrian projects. Act 89 further provides that commencing with Fiscal Year 2023, the Commission's $50 million scheduled annual Act 44/Act 89 Payments must be used to support mass transit capital and operating needs. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Other Obligations – Act 44/Act 89 Payments to PennDOT" below for more information on the total amount paid by the Commission under the Amended Funding Agreement.

Rules Relating to Governance and Accountability Under the Enabling Acts

The Enabling Acts set forth certain rules relating to governance and accountability of the Commission, including, but not limited to: requiring the Commission to file an annual financial plan with the Pennsylvania Secretary of the Budget no later than June 1 of each year (see "FINANCIAL PLAN" herein); having an audit of the Commission's finances (including a review of its performance, procedures, operating budget, capital budget and debt) conducted by the Auditor General every two years (such audit to be paid for by the Commission) (see "CERTAIN OTHER INFORMATION – Performance Audit by the Auditor General" herein); adopting a comprehensive code of conduct for Commissioners and executive-level employees, which the Commission adopted on October 31, 2007 and revised January 7, 2014 and January 28, 2015; and upon request, at least one Commission member shall testify annually before the appropriations committee of the Pennsylvania House of Representatives and the Senate of Pennsylvania.

Recent Developments and Legislation

Senate Resolution 209

A resolution was adopted by the Senate of Pennsylvania on January 24, 2018 (the "***Senate Resolution 209***") directing the Joint State Government Commission to conduct an analysis of a potential consolidation of interstate operations at PennDOT and the Commission. The Joint State Government Commission is the primary non-partisan research organization that serves the Pennsylvania General Assembly. Senate Resolution 209 tasked the Joint State Government Commission to, among other things, study all of the following:

1. Evaluate the cost savings, efficiencies and customer service improvements that may materialize as a result of consolidating the interstate operations, including personnel, equipment, facilities and highway administration.

2. Identify Federal and State laws that could impact the consolidation of interstate operations.

3. Review cases in other states where tolled bridges or roadways are effectively governed under a state department of transportation.

4. Evaluate and make recommendations on how to manage the Commission's debt as a result of the consolidation of interstate operations.

5. Evaluate and make recommendations on how to align contractual agreements, including labor agreements, bondholder agreements or other partnership agreements, as a result of the consolidation of interstate operations.

6. Propose legislation required to implement the consolidation of interstate operations.

On January 10, 2020, the Joint State Government Commission issued its report (the "***Report***") pursuant to Senate Resolution 209. The Report does not make any recommendations as to whether to consolidate the interstate operations of PennDOT or the Commission but rather identifies numerous issues that should be considered by the General Assembly. The Report also specifically responds to each of the items enumerated in Senate Resolution 209.

1. With respect to potential cost savings or efficiencies from a consolidation, the Report concludes that minor operational efficiencies could be realized. Specifically, the Report estimates that $5.3 million in annual costs savings could be generated. When compared to the combined operating budgets of PennDOT and the Commission totaling $10.3 billion annually, the projected savings would total roughly 0.05%.

2. The Report concludes that existing federal law does not preclude a possible consolidation of interstate operations of PennDOT and the Commission.

3. An examination of other states managing both tolled and free highways concluded that in most instances the states created a semi-independent

instrumentality to operate the tolled highways within the state transportation agency. Financial protection of a state's transportation agency and the state was the primary reason to do this so that the public is not directly obligated to repay the bonds for the tolled roads.

4. The Report concludes that the Commission's outstanding debt of over $14 billion "could serve as a potential barrier to its consolidation within the department." Further, the Joint State Government Commission concluded that "it is unclear as to how the Commonwealth can lawfully assume the commission's bond debt." Finally, as a result of the financial burden of the Commission's currently outstanding debt, the Report concludes that "the Commonwealth would be unlikely to expand its subsidy for transportation elsewhere in the Commonwealth based on turnpike revenue nor would it be likely to relieve the pressure to continue to generate turnpike revenue robust enough to service the outstanding debt."

5. Preexisting contractual obligations at both PennDOT and the Commission would also likely present many complications to a consolidation of interstate operations.

6. As required by Senate Resolution 209, the Report includes proposed legislation to implement a consolidation of the interstate operations at PennDOT and the Commission. The proposed legislation does not appear to address or resolve many of the operational or legal obstacles identified in the Report.

The Commission cannot predict if the Report may lead to the introduction or adoption of legislation that may affect the Commission and/or its operations. Furthermore, the Commission cannot predict, at this time what action, if any, may be taken by the Pennsylvania General Assembly as a result of the Report, or what effect, if any, a consolidation of the Commission and PennDOT would have on the Commission's debt or the security for such debt.

TROC Report

On March 12, 2021, Governor Wolf signed Executive Order No. 2021-02 which established the Governor's Transportation Revenue Options Commission ("***TROC***"), an official advisory commission comprised of key stakeholders, including experts from the transportation industry, environmental community, business community, energy community, multimodal community and local government representatives. TROC was charged with developing a comprehensive, strategic proposal for addressing the transportation funding needs of the Commonwealth. TROC delivered its final report to the Governor on July 30, 2021 (the "***TROC Report***"). The TROC Report is available online at: https://www.penndot.pa.gov/about-us/funding/Documents/TROC-Final-Report.pdf.[2]

The TROC Report estimates that the Commonwealth's state-level annual unmet transportation funding needs will reach $14.5 billion over the next ten years and attributes the funding gap to several factors: (i) over-reliance on shrinking gas tax revenues; (ii) Act 44 and Act 89 providing insufficient

[2] The information contained on such website link is not incorporated by reference in this Appendix A.

funding to address transportation funding statewide; (iii) dramatic increases in emergency repair needs; (iv) rigorous and costly interstate pavement standards; (v) federal transportation gas tax funding remaining static for almost 30 years; (vi) the increased costs created by deferred maintenance; and (vii) reduction in purchase power caused by inflation.

The TROC Report presents a strategic funding proposal, intended to effectively address all modes of transportation, which contemplates three phases of funding to close the gap over time. Notably, with respect to the Commission's outstanding Oil Franchise Tax Revenue Bonds, the TROC Report identifies the gas tax (which includes the Oil Franchise Tax) as an eroding revenue source that needs to be eliminated and replaced by various proposed revenue sources. Further, the TROC Report acknowledges that (i) the Commission's outstanding Oil Franchise Tax Revenue Bonds are secured by the Commission Allocation portion of Oil Franchise Tax revenues, and (ii) that portion of the Oil Franchise Tax would need to remain in place until the Commission's outstanding Oil Franchise Tax Revenue Bonds are retired or defeased.

To date, no action has been taken by the Governor or the General Assembly with respect to the TROC Report. The Commission cannot predict what resulting actions the Governor and/or the General Assembly may take as a result of the TROC Report, if any.

Julie E. Thomas v. TransCore, LP & Pennsylvania Turnpike Commission.

On April 28, 2021, Julie Thomas (the "***Plaintiff***"), an E-ZPass customer and frequent traveler on the System, filed a putative class action lawsuit against the Commission, and TransCore, L.P. ("***TransCore***"), as the vendor that provides, operates, and maintains the Electronic Toll Collection Customer Service Center and Violations Processing Center.

The Commission and TransCore were served with the complaint on May 24, 2021. The complaint centers mostly on video tolls ("***V-Tolls***"). A V-Toll is an E-ZPass charge that is assessed when, for any reason, the customer's E-ZPass transponder is not read on both the customer's entry and exit from the System, resulting in a toll assessment based upon a video snapshot of the customer's license plate.

The Plaintiff asserts claims for conversion and unjust enrichment against the Commission, as well as additional claims against TransCore. The Plaintiff principally alleges that (i) the V-Tolls charged to her account are excessive and amount to disproportionate fines and penalties, (ii) refunds should be made to the customer's bank accounts, not the E-ZPass account, and (iii) the Commission and TransCore failed to notify E-ZPass customers that newly installed tolling equipment is incompatible with older E-ZPass transponders; resulting in more V-Tolls and overall higher tolls. Based on these allegations, the Plaintiff seeks, among other things, compensatory and punitive damages, as well as attorney's fees and costs, and asked the court to certify a class action. To date, no specific dollar demand has been made in the Plaintiff's complaint.

On June 14, 2021, TransCore filed a notice of removal seeking to move this matter from Dauphin County Court of Common Pleas. The matter was removed to the U.S. District Court for the Eastern District of Pennsylvania. On June 21, 2021, both the Commission and TransCore filed motions to dismiss. In response, Plaintiff filed a motion to remand the action to state court, which the Commission and TransCore opposed. On March 30, 2022, the court denied Plaintiff's motion to remand and the motions to dismiss of both the Commission and TransCore without prejudice, and allowed the Plaintiff 45 days to take jurisdictional discovery.

Following jurisdictional discovery, Plaintiff renewed her motion for remand which was denied. Plaintiff subsequently filed an amended complaint on May 19, 2023. On June 30, 2023, the Commission filed a motion to dismiss Plaintiff's amended complaint. Briefing on the motions to dismiss the amended complaint was completed on August 17, 2023 and the motions are awaiting a decision.

The Commission is evaluating the lawsuit and cannot, at this time, predict the ultimate outcome. However, the Commission continues to assert all available defenses against these allegations in court.

Black & Veatch Construction, Inc.

Black & Veatch Construction Inc. ("***BVCI***") has filed two separate claims with respect to contracts with the Commission.

On September 22, 2023, BVCI filed a claim with the Commission related to the Commission's Contract No. EN-00232-03-02 for the design build fiber optic network installation on the Turnpike Mainline between milepost 247.4 and milepost H-42.70 ("***BVCI Contract #1***"). BVCI submitted a bid for the work for the first of the five contracts and was the low bidder at approximately $45 million. In September 2019, following the award, BVCI and the Commission entered into BVCI Contract #1 with respect to such work. Although the BVCI Contract #1 completion date was November 19, 2021, BVCI did not achieve substantial completion with respect thereto until June 2, 2023. The Commission assessed liquidated damages in excess of $3 million due to BVCI's 489-day late delivery of the project under BVCI Contract #1. BVCI seeks approximately $44 million in alleged breaches of contract and other alleged Commission caused impacts as reasons for BVCI's late delivery of the project under BVCI Contract #1. A Claims Review Meeting with respect to BVCI Contract #1 was held in April 2024. A final determination denying BVCI's claims with respect to BVCI Contract #1 was issued by the Commission's Contracting Officer's designee on August 5, 2024. On August 20, 2024, BVCI filed a complaint with the Board of Claims with respect to BVCI Contract #1 and the Commission's response thereto is due by September 19, 2024.

On May 3, 2024, BVCI filed a claim with the Commission related to the Commission's Contract No. EN-00232-03-03 for the design build fiber optic network installation on the northeastern extension of the Pennsylvania turnpike between mileposts 333.30 and A130.60 ("***BVCI Contract #2***"). BVCI submitted a bid for the work for the second of the five contracts and was the low bidder at approximately $50 million. On December 2, 2019, following the award, BVCI and the Commission entered into BVCI Contract #2 with respect to such work. Although the BVCI Contract #2 completion date was December 17, 2021, BVCI did not achieve substantial completion with respect thereto until November 6, 2023. The Commission assessed liquidated damages in excess of $4.3 million due to BVCI's 689-day late delivery of the project under BVCI Contract #2. BVCI seeks approximately $44 million in alleged breaches of contract, alleged differing site conditions and other alleged Commission caused impacts as reasons for BVCI's late delivery of the project under BVCI Contract #2. A final determination is anticipated to be issued by September 3, 2024. If the Contracting Officer's designee denies BVCI Contract #2 claim, in whole or in part, BVCI may elect to file a complaint with the Board of Claims by September 18, 2024.

It is too early to tell the likelihood of an unfavorable outcome and an estimate of the amount or range of the potential loss with respect to either BVCI Contract #1 or BVCI Contract #2. However, the Commission will vigorously defend such claims and will assert all available defenses in both matters.

Litigation Relating to Sovereign Immunity in Pennsylvania

The Commission is covered by Act No. 152, approved September 28, 1978, *42 Pa.C.S. § 8528,* which provides for a limited waiver of sovereign immunity by the Commonwealth. Damages for any loss are limited to $250,000 for each plaintiff or $1,000,000 in the aggregate. On March 11, 2024 the Pennsylvania Supreme Court granted appeal in *Freilich v. Se. Pennsylvania Transportation Auth*., 302 A.3d 1261 (Pa. Commw. Ct. 2023), appeal granted, No. 245 EAL 2023, 2024 WL 1044586 (Pa. Mar. 11, 2024). In granting the appeal in *Freilich*, the Pennsylvania Supreme Court will consider whether Section 8528(b)'s statutory cap on damages of $250,000 violates Article I, Sections 6 and 11 of the Pennsylvania Constitution. In the event that the Pennsylvania Supreme Court determines that such statutory cap is unconstitutional, the Commission could be subject to significant additional liabilities in personal injury and related litigation matters. The Commission currently self-insures against tort claims. The Commission is unable to presently predict the availability and cost of commercial insurance coverages, should the Commission choose to obtain third party insurance against such claims in the future. Accordingly, the Commission is currently unable to predict the impact on the Commission's finances should the *Freilich* matter result in an elimination of the statutory caps. SEPTA filed its brief on the matter with the Pennsylvania Supreme Court on August 2, 2024. On that date the Commission also joined a brief filed with the Pennsylvania Supreme Court as *amici curiae*, asking the Court to rule that the statutory caps on damages are constitutional. On July 25, 2024 Senate Bill No. 1300 was introduced in the General Assembly of Pennsylvania which, if enacted, would, *inter alia*, increase the limitations on damages in cases involving permanent dismemberment or death, in which damages arise from the same cause of action or transaction or occurrence or series of causes of action or transactions or occurrences to an amount not to exceed $1,000,000 in favor of any plaintiff or $2,000,000 in the aggregate.

Additional Matters

The Commission continues to be actively engaged with other Commonwealth administrative agencies in initiatives to streamline project delivery and increase operational efficiencies. Among such undertakings are a number of collaborative programs with PennDOT in various administrative and technical areas, including integration of communication and information systems, standardization of manuals and publications, and coordination of training, operations, project planning and construction phasing.

Recently Enacted Legislation

Act 112 was enacted on November 3, 2022, and became effective January 2, 2023, which lowered the threshold for a vehicle registration suspension of Pennsylvania motorists for unpaid tolls from six to four outstanding toll invoices, and for unpaid tolls from $500 to $250. Act 112 also increased the timing for the statute of limitations for enforcing unpaid tolls from three years to five years. See " – *Toll Violation Enforcement*" below.

On December 14, 2023, the Commonwealth enacted Act 38 of 2023 ("***Act 38***") which reauthorizes and permanently extends the automated speed-enforcement system in active work zones previously provided for in Act 86 of 2018 (formerly Senate Bill 172) ("***Act 86***"). The provisions of Act 38 have been established as the Work Zone Speed Safety Cameras ("***WZSSC***") program. The same requirements listed in Act 86 were adopted in Act 38. See "THE TURNPIKE SYSTEM – Work Zone Safety" herein for additional information.

Legislative Proposals

From time to time, legislation is introduced in the Pennsylvania General Assembly (with respect to the Enabling Acts and otherwise) and in the United States Congress, the nature and content of which may affect the Commission. The Commission cannot predict whether any such legislation will be enacted into law, or how any such legislation may affect the Commission's ability to pay the Turnpike Senior Revenue Indenture Obligations (as hereinafter defined), the Subordinate Revenue Indenture Obligations (as hereinafter defined), the Oil Franchise Tax Revenue Bonds (as hereinafter defined) or the Registration Fee Revenue Bonds (as hereinafter defined), or to perform its operations and financial obligations pursuant to the Enabling Acts.

The Pennsylvania House of Representatives and the Pennsylvania Senate convene for a two-year session on the first Tuesday after New Year's Day in odd numbered years and adjourn (Sine Die) on November 30 of the next even numbered year. The 2023-2024 legislative session began on January 3, 2023, and is scheduled to adjourn on November 30, 2024.

In the past, legislation has been introduced, but not enacted, to, among other things, further reduce the payments due by the Commission under Act 44, waive tolls for emergency vehicles in certain situations, grant disabled veterans a discount, create a partnership with the United States Treasury to collect delinquent taxes and debt (including tolls), obligate the Commission to construct, operate and maintain portions of the Southern Beltway, reinstate laid off toll and fare collection employees, and impose various regulations affecting the operations of the Commission. The Commission cannot predict whether similar legislation or other legislation may be considered by the General Assembly or if any proposals or initiatives may lead to the adoption of legislation that may affect the Commission and/or its operations.

Legislation either in discussion or introduced in the Pennsylvania General Assembly during the 2023-24 legislative session, that if enacted could materially affect the Commission, includes the following:

House Bill 299, known as "The Jake Schwab Worker Safety Bill" proposes to require the Commonwealth (and its respective agencies & commissions) to become an OSHA-approved state program, which would require significant modifications to the Commission's safety programs. The Intergovernmental Operations Committee met on September 19, 2023 for a hearing regarding House Bill 299 and no further action has been taken as of the date of this Official Statement.

House Bill 516, which if enacted would prohibit the Commission from imposing and collecting a surcharge or other fee for toll collection by registration plate from an operator or owner of a vehicle registered in the Commonwealth, in excess of the rate fixed by the Commission for collection using electronic toll devices issued by the Commission, was introduced and referred to the Transportation Committee on March 17, 2023.

House Bill 524, which if enacted would require the approval by the General Assembly in order to authorize the conversion of an existing public roadway to a toll road, either in whole or a portion, not including bridges and tunnels. This proposed legislation was introduced on March 17, 2023, and has been referred to the House Transportation Committee.

House Bill 1327, which if enacted would streamline the Commission's and PennDOT's construction contracts by using the design build best value process, was introduced and referred to the House Transportation Committee on June 6, 2023.

Senate Bill 41, which if enacted would create the "Turnpike-to-Port Freight Reimbursement Fund" at the Pennsylvania Treasury for the purpose of providing Commonwealth- funded reimbursement for certain Pennsylvania-based companies for their tolls when transporting goods to the Port of Philadelphia for shipping, was introduced and referred to the Transportation Committee on January 18, 2023.

Senate Bill 419, which if enacted would create the "Commuter and Commerce Toll Tax Credit" offering an annual 50 percent tax credit for tolls paid with a $500-cap per filer, was introduced and referred to the Finance Committee on March 14, 2023. Similar to Senate Bill 419, House Bill 1222 was introduced on May 24, 2023, and was referred to the Finance Committee. House Bill 1222 contemplates an annual credit of 50 percent tax credit for tolls paid with a $1,000- cap per filer.

Senate Bill 473, which provides for the intercept of Pennsylvania lottery winnings in excess of $2,500 for a single prize and state income tax refunds due to persons with unpaid tolls, for the amount of tolls due to the Commission plus any penalties or associated fees. Senate Bill 473 was passed by the Senate on October 4, 2023, and is currently in the House of Representatives.

Long Term and Strategic Planning

2040 Capital & Asset Analysis. In 2021, the Commission developed its Capital & Asset Analysis 2040 (the "***2040 Capital & Asset Analysis***"), which serves as an update to the 2016 Long Range Plan. The 2040 Capital & Asset Analysis provides evaluations for the asset condition of the Highway, Facilities, Fleet Equipment and Technology Programs to help the Commission make the most informed decisions on where it wants to take its assets in the long-term. Among other items, the 2040 Capital & Asset Analysis, includes recommendations for increasing the number of miles of total reconstruction per year. In December of 2023, the 2040 Capital & Asset Analysis was updated because of the sharp rise in the costs of construction and vehicle/equipment procurement. This rise is tied to the abnormally high inflation, labor shortages and material delivery issues. A copy of the 2040 Capital & Asset Analysis and the subsequent update are available by request.

2020 Strategic Plan. Adopted in January 2020, the Commission's 2019-2024 Strategic Plan (the "***Strategic Plan***") established the Commission's current vision, commitments, and values. The vision is: "Driving the standard for safety, customer service, and mobility." The Commission's organizational commitments are: (1) improve safety – zero fatalities, no work-zone injuries, reduced incidents; (2) achieve accessible, reliable, and uninterrupted travel; (3) manage all assets in a restorative manner; and (4) be the leader in transportation services. The Strategic Plan is available online at: https://www.paturnpike.com/docs/default-source/resources/financials-and-planning/strategic_plan.pdf?sfvrsn=9d2ec1ab_17.[3] The Commission has recently initiated a process to update its Strategic Plan for the next five year cycle for 2024-2029.

[3] The information contained on such website link is not incorporated by reference in this Appendix A.

2022 Sustainability Report. The Commission's 2022 Sustainability Report focuses on the applicable elements of the United Nations Seventeen Sustainable Development Goals and reflects the benefit of the Commission's internal sustainable strategies as well as its continued work with the Commonwealth's GreenGov Council. The 2022 Sustainability Report is available online at: https://files.paturnpike.com/production/docs/default-source/resources/responsibility-matters/2022-ptc-sustainability-report.pdf?sfvrsn=98eb7727_3.[4]

Extreme Weather and Climate Resiliency Report. In July 2022 the Commission released the Extreme Weather and Climate Resiliency Report, which reflected a comprehensive assessment of the Commission's internal planning, operations, best management practices related to extreme weather events such as flooding, blizzards, hurricanes, and heatwaves, and opportunities to further improve preparedness and responsiveness to create a more resilient System. The Extreme Weather and Climate Resiliency Report may be found on the Commission's website at: https://files.paturnpike.com/production/docs/default-source/resources/responsibility-matters/ptc-extreme-weather-and-climate-resiliency-report_2022-07.pdf?sfvrsn=d96da44a_1.[5]

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[4] The information contained on such website link is not incorporated by reference in this Appendix A.
[5] The information contained on such website link is not incorporated by reference in this Appendix A.

THE TURNPIKE SYSTEM

General

The present Turnpike System is composed of:

- the 359-mile Turnpike Mainline traversing the southern portion of Pennsylvania from east to west;
- the 110-mile north/south section identified as the Northeast Extension;
- the approximately 16-mile north/south connection, known as the Beaver Valley Expressway, which intersects the Turnpike Mainline in the southwestern portion of the Commonwealth;
- the approximately 13-mile Amos K. Hutchinson Bypass which adjoins the Turnpike Mainline near the New Stanton Interchange;
- the completed portion of the Mon/Fayette Expressway totaling approximately 48 miles;
- a six-mile section of the Southern Beltway from PA 60 to U.S. 22; and
- a 13-mile section of the Southern Beltway between U.S. 22 and Interstate Route 79 ("***I-79***"), which opened on October 15, 2021.

For a more complete description of the Mon/Fayette Expressway and Southern Beltway projects, see "CAPITAL IMPROVEMENTS – Mon/Fayette Expressway and Southern Beltway" herein.

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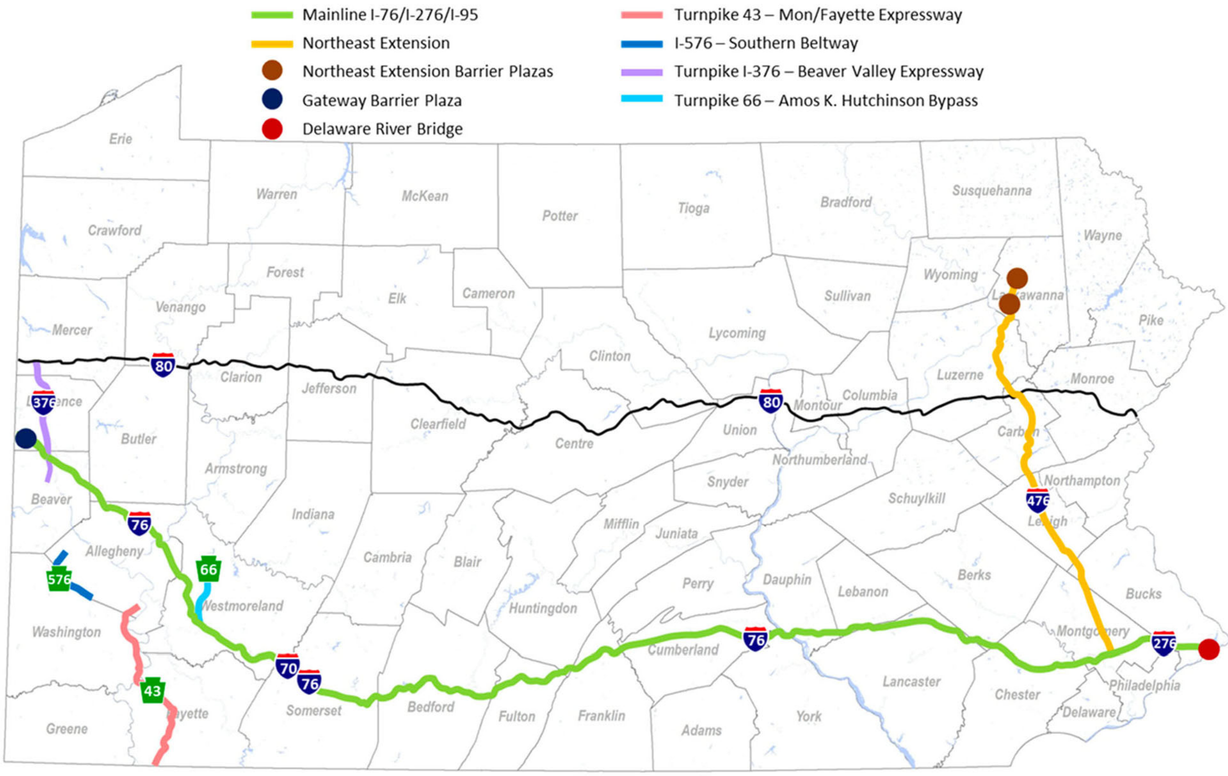
A map of the Turnpike System is provided below.



Note: I-80 is not a part of the Turnpike System.

The Turnpike Mainline connects with the Ohio Turnpike at its western terminus and with the New Jersey Turnpike at its eastern terminus. The Turnpike Mainline commences on the eastern boundary of Pennsylvania at the Delaware River Bridge which connects the System to the New Jersey Turnpike. The Turnpike Mainline traverses the state in a westerly direction generally paralleling the southern border of the state immediately north of Philadelphia and south of Harrisburg to the vicinity of Somerset. West of Somerset, the highway follows a northwesterly direction to the northeast of Pittsburgh and to the Ohio state line, south of Youngstown, Ohio.

The System was constructed prior to the development of the National Interstate Highway System and no Federal Highway Trust Fund monies have been utilized in the construction of the Turnpike Mainline, Northeast Extension, Beaver Valley Expressway or Amos K. Hutchinson Bypass section of the Turnpike System. However, portions of the System have been designated as Interstate Routes. The Turnpike Mainline has been designated as Interstate Route 276 between the area where Interstate Route 95 ("***I-95***") crosses the System and the Valley Forge Interchange. With the September 2018 opening of the interchange connecting the Turnpike Mainline with I-95, the portion of the Turnpike Mainline east of the new interchange has been designated as I-95. The portion of the Turnpike Mainline west of the Valley Forge Interchange to the western terminus at the Ohio state line has been designated as part of Interstate Route 76. In addition, the Turnpike Mainline between the

New Stanton and Breezewood Interchanges has been designated as part of Interstate Route 70 ("***I-70***"). The Northeast Extension has been designated as part of Interstate Route 476. Portions of the Beaver Valley Expressway are designated as part of Interstate Route 376 ("***I-376***").

The System was constructed and opened to traffic in sections. The original Turnpike Mainline segment between Irwin and Carlisle was opened in 1940. Ten years later, in 1950, the 100-mile section between Carlisle and King of Prussia was completed and opened. After 1950, construction of new segments of the System occurred at more frequent intervals with the Turnpike Mainline segment placed in service as of May 1956. The initial segment of the Northeast Extension between the Turnpike Mainline and the temporary interchange just south of the Lehigh Tunnel was opened in 1955. The final segment, from the temporary interchange to Scranton, was completed and opened for traffic in November 1957.

The Delaware River Bridge, which connects the Turnpike Mainline with the New Jersey Turnpike System, is owned jointly by the Commission and the New Jersey Turnpike Authority ("***NJTA***").

Interchanges and Service Plazas

The System has a total of 73 toll interchanges which connect it with major arteries and population centers along its 565-mile traffic corridor. 36 of the interchanges are located on the Turnpike Mainline, including Turnpike Mainline barriers at the New Jersey and Ohio state lines, and 11 interchanges are situated on the Northeast Extension. The additional 26 interchanges are located on the Beaver Valley Expressway, Amos K. Hutchinson Bypass, and completed segments of the Mon/Fayette Expressway and Southern Beltway.

There are 17 service plazas along the System providing gasoline and diesel fuel, other automotive supplies and services, and restaurant services. Beginning in 2005, the Commission entered into long term service plaza redevelopment agreements with Applegreen ("***Applegreen***"), in its capacity as successor to HMSHost Restaurants, LLC, and 7-Eleven, Inc. ("***7-Eleven***"), in its capacity as successor to Sunoco, Inc.[6], to design, reconstruct, finance, operate and maintain all 17 of the service plazas. The Commission has no responsibility for maintaining the service plazas under the agreements. Cumulatively, Applegreen and 7-Eleven have invested approximately $190 million in service renovation projects, at no cost to the Commission. The Commission recognized capital contribution revenues of $4.8 million and $5.5 million, related to these agreements for the Fiscal Years ended May 31, 2023, and 2022, respectively, which is based on the capital assets provided by Applegreen and 7-Eleven. The preliminary / unaudited capital contribution revenues for the Fiscal Year ended May 31, 2024 is $4.8 million.

Additional Services

In addition to the 806 field personnel in 23 facilities as of August 1, 2024 available to keep the roadway open and safe in the event of unfavorable road conditions, the Commission has a 24/7 Traffic Operations Center which monitors conditions on the System and provides emergency dispatch.

[6] Pursuant to an Assignment and Assumption of Real Property Lease Agreement executed on January 23, 2018, Sunoco assigned its interest in the lease agreement by and between the Commission and Sunoco, as amended and supplemented, to 7-Eleven, Inc.

In 2019, the Commission discontinued its Turnpike Roadway Information Program, which provided real-time data to drivers, and joined with PennDOT's 511PA travel program. The 511PA travel program offers motorists one source to obtain travel information for both the System and PennDOT roadways throughout the Commonwealth. It offers a suite of traveler resources such as the 511PA mobile app, a personal alerts subscription service, a website with a travel conditions map and access to travel information by dialing 511 from any phone. The 511PA travel program offers roadway conditions, slowdown information, live traffic camera images, highway construction updates, weather conditions and alerts, as well as other travel resources.

As part of this modernization, the Commission discontinued its Highway Advisory Radio alert system, which experienced significant reductions in use as travelers turned to digital sources for travel information. However, the Commission's Customer Assistance Center is still available for System-specific phone inquiries during weekday business hours.

The Commission currently has an agreement with Blink Charging, Co., to provide electric vehicle charging stations at the following service plazas: New Stanton, Oakmont, King of Prussia, Bowmansville and Peter J. Camiel. Additionally, through Applegreen's partnership with Tesla, 48 Tesla superchargers were installed at six service plazas: North Somerset, South Somerset, Peter J. Camiel, Bowmansville, North Hickory Run and South Hickory Run. The Commission is actively engaged in efforts to provide additional EV charging opportunities across the entire System. The Commission has selected Applegreen Electric, a subsidiary of Applegreen, as its EV charging vendor to deploy and operate additional EV chargers at the service plazas along the System, and expects to enter into agreements with respect thereto shortly. The Commission is also working in cooperation with FHWA and PennDOT on the Commonwealth's National Electric Vehicle Infrastructure program. See "CERTAIN OTHER INFORMATION – Environmental, Social and Governance Factors – *Electrical and Alternative Fuel Vehicles*" herein for more information.

The Commission's fiber optic cable network project is intended to provide the information backbone from which tolling information, real-time traffic and crash data for intelligent transportation system devices, connected vehicles, financial information, and other communications can be transmitted. The adoption of open road tolling ("ORT") will be made easier with the completion of the fiber optic cable project. See "– Toll Collection" below.

In the summer of 2019, the Commission bid two design-build projects for the fiber optic network on the Mainline from the Harrisburg East interchange to the Delaware River Bridge ("***Contract 1***"), and for the entire length of the Northeast Extension ("***Contract 2***") to augment the existing digital microwave network utilized throughout the System. Notices to proceed for Contracts 1 and 2 were issued in the fall of 2020. Construction has been completed for Contract 1 and Contract 2. Additionally, the Commission released a request for proposals for the operation, maintenance and commercialization of the fiber optic network in December 2019, and the notice to proceed was issued in February 2021. The Commission has provided notices to proceed on the design-build projects for the remaining segments (the "***Western Network***") of the fiberoptic network from (i) the Harrisburg East Interchange and the Gettysburg Pike Interchange (Contract 2.5), (ii) the Gettysburg Pike Interchange to the New Stanton Interchange (Contract 3), and (iii) from the New Stanton Interchange to the Ohio state line (Contract 4), and expects completion of the Western Network in 2026.

Toll Collection

The following information describes the infrastructure of the Commission's all-electronic tolling ("AET") toll collection system. See "CERTAIN FINANCIAL INFORMATION – Toll Schedule and Rates" herein for information regarding the Commission's toll rates. The operation of an AET toll collection system inherently involves many risks including, but not limited to, threats to the integrity and security of the Commission's information and technology. See "INVESTMENT "CONSIDERATIONS – Cybersecurity Threats" in the forepart of this Official Statement and see "CERTAIN OTHER INFORMATION – Cybersecurity" herein.

All Electronic Tolling

Early in 2011, the Commission initiated a feasibility study to examine the benefits and potential issues associated with converting the toll road to an all-electronic, cashless system. The team of McCormick Taylor/CDM Smith was selected and completed the feasibility report (the "***Feasibility Report***") in March 2012. At that time, the Commission determined, based on the assumptions in the Feasibility Report, that conversion to an all-electronic, cashless system was technically feasible from both a financial and physical perspective. In July 2012, the Commission selected HNTB Corporation to act as its Program Manager to lead and direct the multi-disciplinary efforts required to manage and coordinate the design and implementation of an all-electronic, cashless system. The resulting Conceptual Implementation Plan report, including a schedule for conversion, was issued in October 2014, and contemplated full conversion to a non-stop AET system by 2018. However, following the enactment of Act 89, the Commission re-evaluated the schedule and determined that a modified schedule for implementation would be necessary. The Commission's re-evaluation of the transition to a cashless, non-stop system resulted in a planned approach whereby the existing toll lanes were initially equipped with the technology for Toll-By-Plate tolling to allow for cashless tolling to occur (for vehicles not utilizing an E-ZPass transponder) at the existing plaza locations, with the ultimate conversion of the remaining System utilizing an ORT system originally scheduled for October 2021. The Commission also authorized the deployment of an initial six segments of the System consisting of the Delaware River Bridge, which went into operation in January 2016; the Beaver Valley Expressway, which went into operation in April 2017; Keyser Avenue/Clarks Summit, which went into operation in April 2018; the Findley Connector, which went into operation in June 2018; and the Amos K. Hutchinson Bypass and Gateway segments, which went into operation in October 2019.

On March 16, 2020, in response to the public health concerns resulting from the COVID-19 pandemic, the Commission moved to AET collection, removed toll collectors from toll booths and transitioned to only utilizing Toll-By-Plate and E-ZPass toll collection across the System. Initially intended to be a temporary response to the impact of the COVID-19 pandemic, the Commissioners, on June 2, 2020, unanimously approved the permanent transition to AET collection operations.

Toll-By-Plate is supplemental to E-ZPass toll collections and utilizes technology where cameras read the license plates of all non-E-ZPass customers, as they pass through each toll gantry. The registered owner of the vehicle is then invoiced for the assessed tolls. Commencing January 3, 2021, the Commission began imposing an additional toll increase on Toll-By-Plate transactions equal to 45% of the toll that would otherwise be due to cover the additional costs to operate the Toll-By-Plate system versus E-ZPass and to account for partial non-payment of tolls ("**Revenue Leakage**") associated with Toll-By-Plate. The additional 45% charge on all Toll-By-Plate transactions was implemented to encourage increased use of E-ZPass and to offset estimated Revenue Leakage. The Commission continues to actively work to address Revenue Leakage due to AET through various initiatives that address customer behaviors and system improvement.

The Commission plans to fully convert the System to ORT collection operations where cameras on overhead gantries capture a vehicle's license plate at highway speed, and a toll invoice is mailed to the vehicle's registered owner. The overhead gantries will also read the transponder signals for E-ZPass customers to pay tolls at such locations. An initial pilot of the ORT system was installed along the new section of the Southern Beltway which opened in October 2021. ORT gantries and support buildings are being installed and constructed at various points along the Turnpike Mainline between the Reading Interchange and the New Jersey border and across the entire length of the Northeast Extension, tolling equipment has been installed on such gantries and are currently undergoing testing. The Mainline transition to ORT is scheduled to commence on a portion of the System from the Reading Interchange to the New Jersey border as well as the entire length of the Northeast Extension in January 2025. Conversion to ORT for the balance of the Mainline west of the Reading Interchange is scheduled for completion in 2027. Existing toll booths will be decommissioned and removed from service at locations in which ORT is implemented.

In addition to implementing the additional 45% charge on all Toll-By-Plate transactions, which was implemented to encourage increased use of E-ZPass, offset additional operating costs associated with the Toll-By-Plate system and to offset estimated revenue leakage, the Commission continues to actively work to address revenue leakage due to AET through various initiatives that address customer behaviors and system improvement. In response to unpaid invoices, the Commission attempts to collect outstanding amounts via various options where practical and permitted by law. These include but are not limited to: (i) collection agency actions; (ii) vehicle registration suspensions; and (iii) court actions. See " – *Toll Violation Enforcement*" below. The Commission provides a 15% discount for Toll-By-Plate customers that pre-register their address and/or credit card for invoicing and has established a cash payment channel for unbanked customers through a partnership with Kubra. The Commission is also pursuing reciprocity agreements with other states to enhance cross state collections and is pursuing legislative changes to strengthen enforcement measures for toll violators.

E-ZPass

The Commission has installed E-ZPass, a form of electronic toll collection, throughout the System. The benefits of E-ZPass include enhanced safety and convenience for users of the System, improved traffic flow and reduced congestion at the System's busiest interchanges.

E-ZPass is available on the entire System. In addition, Express E-ZPass lanes have been constructed at seven interchanges and permit E-ZPass customers to travel through the toll plaza at highway speeds. As of the date of this Official Statement, E-ZPass customers traveling in 19 other states that have implemented E-ZPass technology are able to use E-ZPass in those states.

The Commission has a contract, extending through 2027, with TransCore Company for the design, installation and maintenance of the E-ZPass system software and hardware and the operation of the E-ZPass Customer Service and Violations Processing Centers. See "THE COMMISSION – Recent Developments and Legislation – *Julie E. Thomas v. TransCore, LP & Pennsylvania Turnpike Commission*" herein for information about recent litigation.

The Commission also offers E-ZPass customers the ability to participate in E-ZPass Plus, which allows customers to use their transponder to pay for parking at participating facilities.

The following table shows that during Fiscal Year 2023 approximately 77.40% of all transactions were E-ZPass and the remaining 22.6% of transactions were Toll-By-Plate transactions which are invoiced to the registered owner of the vehicle.

E-ZPass Transactions vs. Non-E-ZPass Transactions

Fiscal Year	E-ZPass*	Non-E-ZPass**
2019	82.58%	17.42%
2020	83.51%	16.49%
2021	77.28%	22.72%
2022	77.21%	22.79%
2023	77.40%	22.60%
Preliminary 2024	77.06%	22.94%

*E-ZPass column includes E-ZPass and VES (as defined herein) transactions.
**Non-E-ZPass column includes TBP and Non-ETC (as defined herein) transactions.

ETC Penetration Rates

Prior to the Commission's transition to AET, the Commission's annual revenues from electronic toll collection, which includes revenues from E-ZPass and Toll-By-Plate transactions (collectively, "***ETC***") were approximately $1.1 billion for Fiscal Years 2020 and 2019. The Commission's annual revenues from ticketed drivers (i.e., Non-ETC Transactions) decreased to $170.2 million in Fiscal Year 2020 from $233.9 million in Fiscal Year 2019. Fiscal Year 2021 was the first Fiscal Year for which the Commission almost exclusively utilized electronic tolling across the whole System. All locations, except the Mon/Fayette Expressway, which was converted to AET in mid-June 2020, utilized electronic tolling exclusively for the full fiscal year.

The following table shows the Commission's ETC penetration rates among passenger and commercial users for Fiscal Years 2019 through 2024. This table reflects a trend of both the passenger and commercial customers increasingly adopting electronic tolling prior to the transition to AET in March 2020.

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ETC as a Percentage of Total Volumes

	ETC				Non-ETC				
	Toll-By-Plate*		E-ZPass		Cash		Totals		
Fiscal Year	Passenger	Commercial	Passenger	Commercial	Passenger	Commercial	Passenger	Commercial	Grand Total
2019	2.72%	0.31%	69.24%	13.34%	13.34%	1.05%	85.30%	14.70%	100.00%
2020	4.69	0.67	68.79	14.72	10.36	0.77	83.84	16.16	100.00
2021	20.04	2.64	61.12	16.16	0.04**	0.00	81.20	18.80	100.00
2022	20.06	2.74	62.46	14.74	0.00	0.00	82.52	17.48	100.00
2023	19.80	2.80	62.80	14.60	0.00	0.00	82.60	17.40	100.00
Preliminary 2024	20.08	2.86	62.76	14.30	0.00	0.00	82.84	17.16	100.00

* Includes V-Tolls which are assessed when, for any reason, the customer's E-ZPass transponder is not read on both the customer's entry and exit from the System, resulting in a toll assessment based upon a video snapshot of the customer's license plate.

**Related to Mon/Fayette Expressway which converted to AET collection operations in June 2020. All other locations were converted to AET prior to June 1, 2020.

Toll Violation Enforcement

To help ensure the collection of toll revenue due to the Commission, a Violation Enforcement System ("***VES***") has been installed at all E-ZPass interchanges to identify violators (customers who travel through E-ZPass lanes and do not have E-ZPass) and motorists with problem tags that are unreadable. VES enables the Commission to collect appropriate tolls and other additional fees relating to violations. Act 89 and other statutory provisions governing VES and procedures for enforcement and collection provide for enhanced fare evasion measures and criminal penalties pertaining to E-ZPass violators. Under Act 89, motorists who commit or attempt to commit fare evasion on the System shall have committed a summary offense and upon conviction, shall be fined a sum between $100 and $1,000 in addition to civil penalties that are already in place. Further, upon conviction, motorists who take affirmative action to evade a System fare can be found to have committed a misdemeanor of the third degree, punishable by fines ranging from $3,000 to $6,500 (depending on the number of offenses), and imprisonment of not more than six months for a second offense.

Revenue generated from the additional fare evasion fines imposed by Act 89 is to be deposited in the Commonwealth's Motor License Fund (as hereinafter defined) rather than with the Commission; however, restitution for the full fare is paid to the Commission. Act 165 was signed into law in 2016 which, among other things, allows for the suspension of vehicle registration for unpaid tolls. Specifically, the vehicle suspension process is triggered by the failure to pay six (6) or more violations or incurring unpaid tolls or administrative fees of $500. Additionally, Act 165 assists the Commission with the collection of unpaid out-of-state tolls by authorizing PennDOT to enter into a reciprocity agreement for purposes of toll collection and enforcement penalties with another state or tolling entity. Effective September 11, 2018, PennDOT and the State of Delaware Department of Transportation, Division of Motor Vehicles ("***DelDOT***") entered into the first reciprocity agreement under Act 165, generally providing that PennDOT and DelDOT will suspend or hold the registration of vehicles upon unpaid tolls, consistent with the laws and regulations of the other state, upon the request of such state.

In January 2018, the Commission began sending notices of possible vehicle registration suspensions under authority from Act 165 and in February 2018, PennDOT began suspending certain vehicle registrations. In April 2018, the Commission began filing criminal charges against some of the largest toll violators for theft of services.

Further, as previously mentioned, Act 112 which became effective January 2, 2023, lowers the threshold for a vehicle registration suspension of Pennsylvania motorists for unpaid tolls from six violations to four violations, and for administrative fines from $500 to $250. Act 112 also extends the statute of limitations for enforcing unpaid toll violations from three years to five years.

The Commission's Toll Revenue Enforcement ("***TRE***") unit conducts all internal and external investigations including working with the local District Attorneys' Offices in pursuing criminal prosecutions of the Commission's most egregious toll violators. Additionally, the Commission has initiated a pilot program with several local magisterial districts to bring civil cases for unpaid tolls. TRE's efforts are part of the Commission's coordinated toll collection and enforcement and fraud detection efforts.

In January 2023, the United States Attorney's Office for the Middle District of Pennsylvania announced the indictment of two individuals accused of perpetuating criminal activity involving the acquisition and sale of fraudulent E-ZPass transponders. The investigation and resulting indictments reflect the Commission's continued efforts to identify and mitigate toll revenue enforcement risks.

Work Zone Safety

Signed into law on October 19, 2018, Act 86 of 2018 (formerly Senate Bill 172) ("***Act 86***") authorized the Commission and PennDOT to conduct speed-enforcement operations inside active work zones ("***Enforcement Zones***") using an automated speed-enforcement system and technology (the "***Automated System***"). By its own terms, the speed-enforcement authorizations set forth in Act 86 expired after five years in February 2024. The Automated System is only used in active Enforcement Zones when proper notice is provided to motorists. The Automated System generates violation notices which are sent, via first class mail, to the registered owners of vehicles that travel 11 mph or more over the posted speed limit in an active Enforcement Zone. A registered owner's first-time violation receives a written warning, the second violation is a $75 fine and the third and all subsequent violations are a $150 fine. After a 60-day pre-enforcement pilot period, enforcement began on March 9, 2020. Fines collected pursuant to Act 86 do not become revenues of the Commission.

On December 14, 2023, the Commonwealth enacted Act 38, which reauthorizes and permanently extends the Automated System in active work zones and is now known as the WZSSC program. The same requirements listed in Act 86 were adopted in Act 38.

TRAFFIC STUDY

The Pennsylvania Turnpike 2023 Traffic and Revenue Forecast Study prepared by CDM Smith dated May 31, 2023 (the ***"2023 Traffic Study"***) was updated by a "bring down" letter developed by CDM Smith dated March 22, 2024 (the ***"March 2024 Bring Down Letter"*** and together with the 2023 Traffic Study, collectively, the ***"Traffic Study"***). The 2023 Traffic Study and the March 2024 Bring Down Letter speak only as of their respective dates. In addition to incorporating an additional 10 months of actual data (through January 2024), and forecasted results for the period of Fiscal Year 2025 through Fiscal Year 2054 (the "***Forecast Period***"), the March 2024 Bring Down letter also removed adjustments to the forecast regarding recovery of passenger car transactions from the COVID-19 pandemic, revised socioeconomic variables, eliminated the modest downward adjustments to transactions and gross toll revenue from the previously assumed late 2023 or early 2024 recession, and made a slight upward revision to bad debt expense.

The Traffic Study is not a guarantee of any future events or trends and contains material information, forecasts, findings, assumptions and conclusions concerning traffic volume and toll revenue on the System. The Traffic Study contains certain "forward-looking statements" concerning the Commission's operations, performance and financial condition, including the Commission's future economic performance, plans and objectives. Such statements are based upon several assumptions and estimates which are subject to uncertainties, many of which are beyond the control of the Commission.

Notably, the Traffic Study assumes, among other things: (i) annual toll rate increases across the entire Turnpike System throughout the Forecast Period, with annual toll rate increases at 5.0% through 2025 before tapering down to 3.0% in 2028 through 2054; (ii) E-ZPass market share is expected to become saturated around 2027, with E-ZPass market shares of 89.8% for passenger cars, 93.5% for commercial vehicles, and 90.4% total, and only fractionally increase during the remainder of the Forecast Period; (iii) no net revenue impacts due to either the January 2025 conversion of the entire System to an axle/height vehicle classification or the conversion to ORT along the eastern segment of the Mainline and the Northeast Extension; and (iv) due to the transition to AET, the ongoing impacts of associated consumer behaviors regarding a portion of unpaid tolls and future annual toll increases, bad debt expenses will continue to increase in value but generally remain a steady percentage of net toll revenue over the Forecast Period. Although the dollar value of bad debt expense continues to grow each year, Fiscal Year 2024 represents the peak in the forecasted value in relation to net toll revenue. In Fiscal Year 2024, bad debt expense is forecast to equal 7.4% of net toll revenue. This figure is expected to gradually decline throughout the Forecast Period, reaching 6.8% of net toll revenue by Fiscal Year 2051.

The material information, forecasts, findings, assumptions and conclusions concerning traffic volume and toll revenue on the System set forth in the Traffic Study differ in a variety of ways from that presented in prior traffic studies and bring down letters. The Traffic Study is included as APPENDIX F to this Official Statement and should be closely reviewed in its entirety.

CAPITAL IMPROVEMENTS

Ten-Year Capital Plan

The Commission prepares a ten-year capital plan for its facilities and equipment (exclusive of the Mon/Fayette Expressway and Southern Beltway projects), consisting of the Highway Program, the Technology Program, Fleet Equipment, and Facilities and Energy Management Operations, which it updates each year. All capital projects are reviewed and prioritized and the most critical and important projects necessary to maintain the System in a state of good repair are pursued.

On May 7, 2024, the Commission adopted its current ten-year capital plan for Fiscal Year 2025 (the "***Fiscal Year 2025 Capital Plan***"). The Fiscal Year 2025 Capital Plan demonstrates the Commission's continued strategic intent to enhance its level of capital reinvestment and align with the decrease in Act 44/Act 89 Payments which began in Fiscal Year 2023.

The Fiscal Year 2025 Capital Plan continues the Commission's efforts for (i) total roadway reconstruction and resurfacing, (ii) the rehabilitation or replacement of structurally deficient bridges, (iii) the implementation of ORT, (iv) facilities and energy management improvements including repair and replacement of maintenance facilities, and (v) the development and installation of a fiber optic network.

The Fiscal Year 2025 Financial Plan anticipates that approximately $3.5 billion will be funded on a pay-as-you-go/federal funds basis and the remaining approximately $4.0 billion will be funded with proceeds from Senior Revenue Bonds (as hereinafter defined). The Commission expects that the capital spending and additional debt issuance, will require the imposition of annual toll increases throughout the ten-year period and beyond. The Traffic Study assumes annual toll increases ranging between 3.0% to 5.0% in each year of the ten-year capital plan period. See "TRAFFIC STUDY," "CERTAIN FINANCIAL INFORMATION – Revenue Sources of the Commission," and "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations" below.

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Capital expenditures by program category in the Fiscal Year 2025 Capital Plan are shown below.

FY2025 Ten Year Capital Plan (YOE)

Program	Category	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	Total FINAL PLAN
Highway	Roadway/Safety	144,641,000	104,169,083	92,863,638	98,409,276	97,461,215	100,385,051	103,396,603	106,498,501	109,693,456	127,604,698	1,085,122,519
Highway	Bridge,Tunnels & Misc Structure	164,698,484	121,767,306	101,544,288	93,623,910	96,833,861	88,328,665	90,378,601	69,361,752	72,079,064	90,558,235	989,174,165
Highway	Total Reconstruction	261,884,978	228,663,638	207,619,545	195,213,121	261,698,183	252,304,209	302,057,492	316,742,702	289,869,410	369,523,220	2,685,576,497
Highway	Interchanges w/o AET	61,069,500	40,460,095	26,773,105	60,478,418	96,078,740	72,271,366	77,880,228	101,235,407	100,962,879	28,877,132	666,086,871
Highway	Highway Miscellaneous	45,662,290	41,543,232	37,578,692	33,383,896	34,811,790	36,071,650	37,039,328	37,866,264	38,333,969	38,533,436	380,824,549
Highway	Total	677,956,252	536,603,354	466,379,268	481,108,621	586,883,788	549,360,942	610,752,252	631,704,625	610,938,778	655,096,721	5,806,784,601
FEMO	Re-capitalization	5,271,000	5,387,175	2,350,640	2,421,159	2,493,794	2,568,608	2,645,666	3,095,790	3,188,663	2,890,991	32,313,487
FEMO	Sustainment	6,186,000	3,040,925	4,822,833	4,952,518	5,086,093	5,281,921	5,425,379	5,511,348	5,661,688	5,816,539	51,785,244
FEMO	Compliance	9,172,000	8,668,125	8,821,564	9,086,211	8,680,214	9,057,110	9,448,808	10,350,195	10,151,533	10,456,079	93,891,837
FEMO	New Energy Initiative	2,223,000	2,551,275	5,399,543	2,706,648	2,787,847	2,871,482	2,957,627	3,046,356	3,137,746	3,231,879	30,913,403
FEMO	Facilities Design	12,367,000	46,983,750	32,471,883	33,188,002	30,589,412	30,666,035	34,225,683	35,252,454	36,310,027	41,332,649	333,386,895
FEMO	Total	35,219,000	66,631,250	53,866,463	52,354,538	49,637,360	50,445,157	54,703,164	57,256,142	58,449,658	63,728,137	542,290,867
Fleet Equipment	Total	28,223,130	21,585,406	21,321,000	21,960,630	22,619,449	19,803,328	20,097,465	20,391,428	21,003,171	21,208,775	218,213,783
Technology	Functional Business Software	38,738,103	38,401,979	36,300,033	26,023,441	29,856,556	30,728,406	30,540,391	24,328,496	15,607,722	30,727,245	301,252,373
Technology	Infrastructure HW / SW	18,927,350	12,170,464	12,803,088	23,786,070	19,998,240	20,622,034	22,465,841	15,751,591	17,820,872	18,355,498	182,701,048
Technology	Toll Collection / Operations	4,400,000	3,105,000	3,198,150	3,294,095	3,392,917	3,494,705	3,599,546	3,707,532	3,818,758	3,933,321	35,944,025
Technology	Total	62,065,453	53,677,443	52,301,271	53,103,606	53,247,714	54,845,145	56,605,778	43,787,619	37,247,353	53,016,064	519,897,446
EN-00115	Cashless Tolling Conversion	115,600,000	139,049,250	58,168,088	49,952,618	28,160,596	15,493,192	9,118,850	0	0	0	415,542,593
	Grand Total (PSEXP)	919,063,835	817,546,703	652,036,090	658,480,012	740,548,906	689,947,763	751,277,508	753,139,814	727,638,960	793,049,698	7,502,729,290
	Reimbursed/Supplemental Funds	0	0	0	0	0	5,000,000	15,000,000	20,000,000	0	0	40,000,000
	Grand Total (PSNET)	919,063,835	817,546,703	652,036,090	658,480,012	740,548,906	684,947,763	736,277,508	733,139,814	727,638,960	793,049,698	7,462,729,290

Highway Program

The Highway Program consists of roadway, bridge, tunnel and toll plaza/interchange projects. The Technology Program consists of toll collection, communication, and other electronic information management projects. The Fleet Program funds rolling stock that is required to maintain the System. The Facilities and Energy Management Program consists of buildings and large, heavy or high value equipment needs.

The highest priority highway project for the Commission is the ongoing full depth roadway total reconstruction of the east/west Turnpike Mainline and Northeast Extension. This work includes the reconstruction and widening of the roadway, the widening of the median, and the replacement of both Mainline and overhead bridges. To date, the Commission has completed reconstruction of 155 miles of the Mainline with most of these sections widened to six lanes. Approximately another 27 miles are currently in total reconstruction and 80 miles are currently in design.

Based on the Fiscal Year 2025 Capital Plan, the Commission plans to spend approximately $2.7 billion on total reconstruction projects and approximately $1 billion on various bridge and tunnel projects over the next ten years. In total, the Highway Program includes funding of approximately $5.8 billion over the next ten fiscal years.

Technology Program

The Information Technology ("***IT***") department is responsible for overseeing the development, implementation, maintenance, and support of all information management technologies across the enterprise in two main categories. Functional Business Software includes planning, designing, and implementing systems and application technologies in the following program areas: GIS and Data Analytics, Enterprise and Business Systems, and Technology and Innovation Management. Infrastructure Hardware/Software includes maintenance, security, upgrades, and enhancements to the Central Office Data Center; the Wide Area Network and public safety radio system; and desktop technologies. This category also includes the following program areas: Server & Storage Management, End User Support, and Transportation Technologies and Communications, Intelligent Transportation Systems, Connected and Autonomous Vehicles, and IT Security. The Technology Program includes funding of approximately $520 million over the next ten years to address the Commission's technology needs including toll collection projects, communication, application development and technical operational needs. The Commission has implemented SAP ERP to provide a set of integrated business processes supported by multi- module application software with a centralized data repository.

Fleet Program

The Fiscal Year 2025 Capital Plan includes approximately $218 million of funding for the Fleet Program to purchase rolling stock to insure adequate maintenance of the roadway system.

Facilities and Energy Management Program

The Fiscal Year 2025 Capital Plan includes approximately $542 million of funding for the Facilities and Energy Management Program to repair and replace the aging facilities of the

Commission. This commitment will ensure that major equipment and facilities are in good repair to support ongoing Turnpike System operations.

While the Commission has moved to a fully cashless tolling system as of March 2020, additional capital investments are required to support an AET collection system and the eventual conversion to an ORT system. The implementation of and long-term conversion to a cashless tolling system is estimated to require approximately $415 million in capital funding over the next ten fiscal years. See "THE TURNPIKE SYSTEM – Toll Collection" herein for additional information.

I-95 Interchange

I-95 was completed in 1969 without an interchange connecting it to the Turnpike Mainline. Interstate travelers were required to either by-pass the Philadelphia area entirely or exit the interstate system and navigate a complex system of local roadways to access I-95 again in New Jersey.

The main objectives of the Pennsylvania Turnpike/I-95 Interchange Project (the "***Interchange Project***") are to improve the linkage between I-95 and the Turnpike Mainline to create continuity in the interstate system, relieve congestion on local roads which are currently used by travelers to make the connection between I-95 and the Turnpike Mainline, create additional capacity on the Turnpike Mainline and I-95 to accommodate the transfer of traffic from the local roadway system, and improve travel times through the interchange area.

The first phase of the Interchange Project included preparatory work and construction of a portion of the interchange between I-95 and the Turnpike Mainline, including northbound I-95 to the eastbound Turnpike Mainline and westbound Turnpike Mainline to southbound I-95. This phase included construction of a new Turnpike Mainline toll plaza and a cashless tolling plaza westbound, which opened in January 2016. The first phase of the Interchange Project was completed and opened to traffic in September 2018. The portion of the Turnpike Mainline from the Interchange Project eastward to the Delaware River Bridge in Bucks County has been redesignated as I-95. The second phase of the Interchange Project will include the completion of the reconstruction and widening of the remaining interchange connectors. The Section D30 was bid and awarded which will extend the reconstruction and widening of the mainline approximately 2 miles to the west of the I-95 connection. The third phase will be the construction of a new wider bridge over the Delaware River, referenced as the Delaware River Bridge (DRB), replacing the existing bridge. The Commission has completed an alternative analysis for the DRB. In coordination with FHWA, a Supplemental Environmental Impact Statement will be required and will parallel the preliminary design for the replacement of the DRB. Funding for the initial design costs of the subsequent phases was included in the Fiscal Year 2025 Capital Plan.

Mon/Fayette Expressway and Southern Beltway

Four projects constructed as part of the Mon/Fayette Expressway are now in operation. One is an approximately six-mile toll road between I-70 and U.S. Route 40 in Washington County. This project was built by PennDOT and turned over to the Commission upon its opening in 1990. The second is an approximately twelve-mile section of toll road from I-68 near Morgantown, West Virginia, to Fairchance, Pennsylvania, which is located just south of Uniontown. The third project is an approximately sixteen-mile section of the Mon/Fayette Expressway from I-70 in Washington

County to Pennsylvania Route 51 in Allegheny County, which opened in April 2002. The fourth is an approximately fifteen-mile section from Uniontown to Brownsville, including a 3,022-foot bridge over the Monongahela River, which opened to traffic in July 2012. These four contiguous projects, which total 48 miles from Morgantown, West Virginia to Pennsylvania Route 51 south of Pittsburgh, are now part of the System.

On March 21, 2017, the Commission announced that it would stop engineering-design activities on the final 14-mile section of the Mon/Fayette Expressway, extending from Pennsylvania Route 51 to I-376 near Monroeville east of Pittsburgh, in light of the Southwestern Pennsylvania Commission's decision to table the project. On June 26, 2017, the Southwestern Pennsylvania Commission voted to add the final 14-mile segment of the Mon/Fayette Expressway to its long-range plan. This action will allow FHWA to approve changes to the environmental impact statement ("***EIS***"), a requirement for construction to commence. The current estimates to complete the final 14 miles of the Mon/Fayette Expressway to I-376 are in excess of $2 billion. An EIS re-evaluation was completed for the Mon/Fayette Expressway and approved by PennDOT and FHWA in 2019. Final design is now proceeding on the 14-mile southern section of the Mon/Fayette Expressway. The initial sections MFE 53A1 and MFE 53A2 of the southern section have been bid and are under construction. The next section MFE 53B1A will bid in mid-2025. Subsequent sections will be evaluated as funding becomes available. When completed, the Mon/Fayette Expressway will extend from Interstate 68 in West Virginia to I-376 in Monroeville, which is east of Pittsburgh.

The Southern Beltway is to be constructed from the Mon/Fayette Expressway, near Finleyville, extending as part of a beltway south of Pittsburgh to I-376 at the Pittsburgh International Airport. It is comprised of three distinct projects: (1) the six-mile project from I-376 to U.S. 22 (also known as the Findlay Connector) which opened to traffic in October 2006; (2) the 13-mile project from U.S. 22 to I-79, which opened October 15, 2021; and (3) the remaining Southern Beltway project, from I-79 to the Mon/Fayette Expressway, which received environmental clearance in May 2009.

To date, the Commission has used the net proceeds of various series of its Oil Franchise Tax Revenue Bonds and Registration Fee Revenue Bonds, along with then currently available revenues, to fund the construction of the Mon/Fayette Expressway and Southern Beltway projects. It is currently anticipated that the remaining costs to complete the Mon/Fayette Expressway and the Southern Beltway will be financed over time using Oil Franchise Tax Revenues (on a pay-as- you-go basis and/or bonded basis) and other funding sources. Although the open sections of the Mon/Fayette Expressway and the Southern Beltway are toll roads, the Tolls (as hereinafter defined) pledged for the repayment of Turnpike Senior Revenue Bonds will not be applied to the costs of construction of these projects, which are instead expected to be funded by Oil Franchise Tax Revenues.

The unfinished portions of the Mon/Fayette Expressway and Southern Beltway projects are not part of the Commission's ten-year capital plan, and the Commission has no legal obligation to fund the completion of such projects. To date, Act 89 has generated annual Oil Franchise Tax Revenues for the Commission in excess of the debt service coverage requirements for the Commission's outstanding Oil Franchise Tax Revenue Bonds.

Condition of the Turnpike System

The Commission's engineering and maintenance staff performs maintenance on, and repairs to, the System. In addition, the Commission also uses staff and consultants to perform periodic inspections of the System. Pursuant to the terms of the Turnpike Senior Revenue Indenture (as hereinafter defined), the Commission must arrange for the System to be inspected at least once every three years by engaging one or more consultants to conduct inspections and prepare a report. The report must state (a) whether the System has been maintained in good repair, working order and condition since the last inspection report and (b) any recommendations which such consultants may have as to revisions or additions to the Commission's annual capital budget.

The most recent inspection report completed in December 2023, the Pennsylvania Turnpike Condition Assessment Report 2023 (the "***Condition Assessment Report***"), was prepared by the General Consulting Engineer ("***GCE***") Michael Baker International.

Based on reviews performed by others as well as their own observations, the authors of the Condition Assessment Report found that, "overall, the Turnpike System is in Good condition." Three out of the four asset groups, including Roadways, Structures, and Technology, are rated in Good condition, while the Facilities Asset Group is rated in Good/Fair condition.

Each of the asset groups are in good working order based on the condition ratings of the individual assets within the asset group. The individual asset condition rating was developed through an extensive evaluation of qualitative and quantitative performance data. There are several different evaluation measures used across the array of the Commission's assets included in the Condition Assessment Report. The following is an overall summary of the conditions, and some, but not all, of the GCE's recommendations regarding each of the four asset groups.

Roadways Asset Group

The overall condition of the Roadways Asset Group is Good. This asset group is made up of pavement, guide rail, attenuators, concrete median barrier, signs, pavement markings, rock cut slopes, drainage infrastructure, and stormwater management. The data sources for this group are from inspections completed primarily by the PTC Engineering and Maintenance Departments, along with the support of the GCE and other consultants.

The System's pavement is measured with a Pavement Condition Rating (PCR) and an International Roughness Index (IRI) score. The PCR has been steady and ranks within established metrics and statewide averages. The IRI has shown improvement since the last Condition Assessment. The condition of concrete median barrier dropped slightly from the 2020 report. The PTC replaces barrier when a section is being reconstructed or if deterioration/damage compromises barrier integrity. The minor decline can be attributed to a combination of fewer miles of Total Reconstruction being completed since the last assessment and allocating available funds towards other roadway expenditures. The remaining assets in the Roadways Asset Group have the same rating as the last report.

Some key Roadways recommendations are for the PTC departments/units to investigate a single source of electronic data collection for efficiency, consistency, and cost-effectiveness. As technology improves, many departments are using or evaluating the use of electronic data collection. Many vendors can collect multiple types of data concurrently, which would benefit the PTC.

Structures Asset Group

The overall condition of the Structures Asset Group is Good. The asset group is made up of bridges and culverts, sign structures, retaining walls and noise barriers, tunnels and portal buildings, high mast light poles, and tolling gantries. The data sources for this group are from inspections completed primarily by the consultants contracted to follow national inspection criteria and frequencies. Maintenance Department personnel perform additional cursory or walk-through inspections on some assets.

The PTC Bridge Unit continues to be an industry leader with a low percentage of Poor bridges. The development of a PTC Tunnel Management Committee has increased communication and effectiveness of all staff involved in identifying and remediating deficiencies within the tunnels. Aided by a rehabilitation, the tunnel asset improved its rating since the last condition assessment report. All other assets maintained the same rating, and a tolling gantries asset was added based on recommendations from the previous Condition Assessment report.

The GCE's recommendations regarding the Structures Asset Group include the PTC closely monitors the condition of long-span bridges and develop maintenance and preservation plans to maximize the structure's service life. Tunnel Management Committee meetings should continue the lines of communication with all parties involved. Databases for sign structures should be harmonized between departments to ensure accurate inventory information. Tolling gantry inspection information should be incorporated into the Bridge Management Software (BrM) as available, and decommissioned gantries because of ORT should also be updated promptly.

Facilities Asset Group

The overall condition of the Facilities Asset Group is Good/Fair. The asset group is made up of service plazas and buildings for maintenance, interchange, administration, and district fare collection. State police barracks, warehouse and training facilities, stockpiles (remote salt storage), communication towers, and access gates are also included in the asset group. Inspections completed primarily by the Pennsylvania State Facilities Engineering Institute ("PSFEI") and with the support of the PTC Facilities Unit are the data sources for the group.

Increases in facility appraisal values, along with increases in construction materials, equipment, and labor, have created more volatility in the Facilities Asset Group than in previous reports. In this group, maintenance buildings, warehouse and training facilities, and stockpiles all have lower ratings than in 2020, and the ratings for interchange buildings improved. The Devault maintenance building was the poorest rated facility for the PTC. A new facility is under construction to replace the current one and is anticipated to be completed in late FY24 and improve the maintenance overall asset rating. The GCE analyzed deficiencies related to the physical asset and omitted other planning-level data collected by the PSFEI.

The GCE's recommendations regarding the Facilities Asset Group include, as costs continue to increase, the PTC is carefully reviewing the PSFEI Facility Condition Index ("FCI") ratings and evaluate Capital Plan funding for Poor or Critical assets not currently scheduled for replacement. The interchange facilities scheduled for demolition should be removed expeditiously to reduce associated operational and maintenance costs.

Technology Asset Group

The overall condition of the Technology Asset Group is Good. The asset group is made up of all electronic tolling, intelligent transportation systems ("ITS"), communication systems, the fiber optic broadband network, and cybersecurity controls for operational technology. The data sources for this group are from inspections completed primarily by contractors who have contractual agreements to manage, operate, and maintain these technologies for the PTC.

Technology is a rapidly changing asset group at the PTC as it seeks to stay at the forefront of expanding technologies to monitor and protect the system. The PTC utilizes All-Electronic Tolling (AET), making these technologies a critical component of its operations. A statewide Fiber Optic Broadband Network (FOBN) is under construction and will enhance capacity, bandwidth, and reliability. The PTC has in place industry-leading Cybersecurity controls for Operational Technology processes that protect and secure the technologies and their systems.

The GCE's recommendations regarding the Technology Asset Group include the PTC ensuring that proper maintenance procedures are in place to maximize technology asset lifetimes and get the most use out of the investments. The FOBN is managed by a Fiber Infrastructure Operations, Maintenance, and Commercialization Services (FOMC) contract. The GCE also recommended that the PTC maintain close communication with the FOMC provider to ensure accurate as-builts are provided and to capitalize on commercialization assets.

FINANCIAL PLAN

General

Act 44 requires the Commission to prepare and submit an annual financial plan (the "***Financial Plan***") to the Secretary of the Budget of the Commonwealth no later than June 1 of each year for the ensuing fiscal year, describing its proposed operating and capital expenditures, borrowings, liquidity and other financial management covenants and policies, estimated toll rates and all other revenues and expenses. The purpose of the annual Financial Plan is to demonstrate that the Commission's operation in accordance with such plan can be reasonably anticipated to generate unencumbered funds sufficient to make all Act 44/Act 89 Payments due to PennDOT in the upcoming year after all other Commission obligations and interest thereon, sinking fund requirements of the Commission, and other requirements in any trust indenture, notes or resolutions have been met. Any deviations and the causes therefor in prior year plans must be explained.

Since the enactment of Act 44 in 2007, the Commission's annual Financial Plan has demonstrated that for the prior Fiscal Year that the Commission was able to meet all of its financial covenants and obligations under the Enabling Acts and was able to progress with its then-current capital plan. The Commission delivered to the Secretary of the Budget its Financial Plan for Fiscal Year 2025 on May 13, 2024 (the "***Fiscal Year 2025 Financial Plan***").

Fiscal Year 2025 Financial Plan

The Fiscal Year 2025 Financial Plan sets forth the reasonably expected revenues the Commission will generate necessary to meet required Turnpike operating and maintenance expenses, debt service payments, capital expenses, and liquidity requirements, and included the adoption of the Fiscal Year 2025 Capital Plan. The Fiscal Year 2025 Financial Plan indicates that in Fiscal Year 2024 and Fiscal Year 2025, the Commission was able to meet all of its financial covenants and obligations under the Enabling Acts and was able to progress with its then-current capital plan. A copy of the Fiscal Year 2025 Financial Plan is available on the Commission's website at: https://files.paturnpike.com/production/docs/default-source/resources/investor-relations/act-44/act-44-financial-plan.pdf?sfvrsn=fb5d2fc5_4.[7]

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[7] The information contained on such website link is not incorporated by reference in this Appendix A.

CERTAIN FINANCIAL INFORMATION

Revenue Sources of the Commission

The Commission's revenues are principally derived from three separate sources: toll revenues from the operation of the System, revenue derived from a portion of the Commonwealth's Oil Franchise Tax Revenues, and revenue derived from a portion of the Commonwealth's vehicle registration fee revenues.

Toll Revenues

The largest part of the Commission's revenues is derived from the collection of all rates, rents, fees, charges, fines and other income derived by the Commission from the vehicular usage of the System and all rights to receive the same (the "***Tolls***"). Tolls are pledged to secure the Commission's outstanding Turnpike Senior Revenue Bonds and other parity and subordinate obligations issued under the Turnpike Senior Revenue Indenture. See "– Toll Schedule and Rates" and "– Five-Year Financial History" below for more information regarding the Tolls. See also "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness" herein.

Oil Franchise Tax Revenues

The Commission's second principal stream of revenues consists of that portion of the Commonwealth's oil company franchise tax revenues (the "***Oil Franchise Tax Revenues***") allocated by statute to the Commission. The Oil Franchise Tax was first imposed in 1981 by Act 35, in the amount of 35 mills on each gallon of petroleum sold. The tax was increased by an additional 25 mills in 1983 by Act 32 and an additional 55 mills in 1991 by Act 26. With Act 3 of 1997, the tax was increased by an additional 38.5 mills to a total of 153.5 mills on all liquid fuels (primarily gasoline) and an additional 55 mills (for a total increase of 93.5 mills) for a total of 208.5 mills on liquid fuels and other fuels (diesel fuel and all other special fuels except dyed diesel fuel, liquid fuels and alternative fuels). Oil Franchise Tax Revenues consist of the Commission's allocation of 14% of the additional 55 mills of Oil Franchise Tax which became effective September 1, 1991, pursuant to Act 26 (the "***Commission's Allocation***"). Act 26 provides for monthly payments of Oil Franchise Tax Revenues to the Commission. Oil Franchise Tax Revenues are primarily pledged to the trust estate securing the Commission's Oil Franchise Tax Revenue Bonds. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness" herein.

After making all the deposits required to the trust estate securing the Commission's Oil Franchise Tax Revenue Bonds, the Trustee is required to transfer from the Revenue Fund to the credit of the Oil Franchise Tax General Fund the balance, if any, in excess of $10 million remaining in such revenue fund. As of June 1, 2024, the balance in the Oil Franchise Tax General Fund was approximately $202.5 million. Funds in the Oil Franchise Tax General Fund represent excess oil franchise tax revenues not required for debt service and such funds may be used by the Commission for any of its purposes.

The following table reflects the five-year history of annual Oil Franchise Tax Revenues collected by the Commonwealth and the annual amounts allocated to the Commission.

Five-Year History of Oil Franchise Tax Collections and Commission Allocation

(in thousands)

Fiscal Year (actual)	Oil Franchise Tax Collections (1)	Commission Allocation (2) (3)
2020	929,683	141,665
2021	906,855	114,176
2022	950,192	136,522
2023	953,660	130,812
2024(4)	961,400	137,514

(1) Amount determined at the end of the Commonwealth's fiscal year ending June 30th of each year.

(2) Amount determined at the end of the Commission's fiscal year ending May 31st of each year.

(3) The amount of the Commission's Allocation does not equal exactly 14% of the tax collected from the added 55 mills due to the difference between the Commonwealth's and the Commission's fiscal years.

(4) Preliminary, unaudited.

Registration Fee Revenues

The Commission's third principal stream of revenues consists of a portion of the Commonwealth's vehicle registration fee revenues (the "***Registration Fee Revenues***"). Registration Fee Revenues consist of an annual appropriation of $28 million of increased registration fees allocated to the Commission, in monthly installments of $2,333,333.33, pursuant to Act 3 of 1997. Registration Fee Revenues are primarily pledged to secure payment of the Commission's Registration Fee Revenue Bonds. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Commission Indebtedness" herein.

Toll Schedule and Rates

The current System generally employs a closed or ticket system method for toll collection. Tolls are determined based on the length of the trip and vehicle class. There are nine vehicle classes determined either by axles or, in the case of commercial vehicles, by axles and weight. Historically, all drivers were issued a ticket upon entering the System and were required to surrender the ticket and pay the appropriate toll upon exiting. The System permanently transitioned to AET collection methods in March 2020. See "THE TURNPIKE SYSTEM – Toll Collection" herein.

The Turnpike is the only remaining road in the United States that still establishes tolls based on vehicle weight. As part of its efforts to continue to modernize its operations, the Commission is using an upgraded vehicle classification system at two tolling locations. In Spring 2018, the Commission began utilizing an "axle/height" system that calculates tolls based on the vehicle's height plus the number of axles. The axle/height classification system is currently utilized in eastern Pennsylvania at the Clarks Summit and Keyser Avenue tolling points on the Northeast Extension and also in western Pennsylvania on the Southern Beltway. Beginning in January 2025, the entire Mainline System will convert to the axle/height classification giving customers more predictability while reflecting the classification systems of the other roadways they travel. This change will decrease costs which are currently high for the maintenance and operation of the scales and increase safety by minimizing the traffic disruption needed to service and replace the scales within the pavement.

In January 2025, the Commission will bring the future of toll collection to Pennsylvania through ORT. ORT is a safer, more convenient way of travel for customers. It is a cashless, free-flowing mode of collecting tolls that operates without traditional toll booths. In an ORT system, tolls are charged electronically as customers drive at highway speeds without slowing down or stopping beneath overhead structures — called gantries — located between interchanges. ORT will begin on January 5, 2025 east of Reading and on the entire Northeast Extension, with the rest of the system adopting this change two years later, in early 2027. Although the conversion will significantly alter the way in which tolls are charged, there is expected to be no net revenue impact to the Turnpike System. Under the segment-based system there will be a toll gantry in between each set of interchanges, and drivers will be charged a given rate at each gantry they pass through rather than one rate based on entry and exit points. As a result, the number of transactions on the Ticket System will increase significantly once ORT is implemented although gross revenue is intended to remain unchanged on a system-wide basis. The segment-based system will result in a simpler toll rate structure with each segment having a set price and no need for a complex matrix of entry-exit combinations. Additionally, the overhead toll gantries on the Mainline System will eliminate the need for toll plazas on entrance and exit ramps, which will be removed and allow for free-flowing traffic on the ramps.

Table I below illustrates the tolls and per mile rates applicable to each vehicle class for a trip on the Turnpike Mainline from Neshaminy Falls (#353) and Warrendale (#30) following the toll increase that became effective in January 2024:

TABLE I

Current Tolls and Per Mile Rates for Mainline Roadway East – West Trip
Neshaminy Falls – Warrendale

Vehicle Toll Class	Gross Vehicle Weight (Thousand Pound)	Toll By Plate Effective 1/2024	Per Mile Toll By Plate	Toll Rate EZ-Pass Effective 1/2024	Per Mile EZ-Pass Rate
1	1-7	95.50	0.296	47.30	0.146
2	7-15	140.10	0.434	69.20	0.214
3	15-19	169.00	0.523	83.40	0.258
4	19-30	202.70	0.628	100.30	0.311
5	30-45	284.00	0.879	140.60	0.435
6	45-62	356.00	1.102	176.40	0.546
7	62-80	509.30	1.577	252.50	0.782
8	80-100	667.70	2.067	331.00	1.025
9	Over 100	667.70	2.067	331.00	1.025

Notes:
The above rates represent an "East West" trip for the toll system between Neshaminy Falls (#353) and Warrendale (#30). For purposes of the Senior Indenture, the Mainline is the entire length of the roadway between Ohio and the Delaware River Bridge. The 30-mile Gateway to Warrendale roadway between Warrendale and the Ohio Turnpike has a barrier toll at the Gateway Mainline interchange (#2). The toll on the Gateway connector is payable only when traveling eastbound. The toll on the Delaware River Bridge to Neshaminy Falls portion is a one-way toll westbound only.

Additional toll rate information can be found at https://www.paturnpike.com/toll-calculator/toll-schedules.[8]

The most recent toll increase, which was 5%, took effect on January 7, 2024. The Traffic Study assumes that the Commission will continue to increase tolls annually throughout the forecast period, which ends in 2054. The Commission approved a 5% increase at its July 2, 2024 meeting which will take effect on January 5, 2025. At that time, the Commission will also have a new toll schedule that will reflect the implementation of ORT on the Northeast Extension and on the Mainline System from the Reading Interchange to New Jersey. The toll collection will also convert from a closed ticket/exit-entry system to segment based tolling.

Act 44 requires the Commission to fix toll rates such that revenues from tolls and other sources to the Commission are sufficient to pay the cost of the System's operation, construction, expansion and maintenance, all Commission obligations and interest thereon, sinking fund requirements of the Commission, other requirements in any trust indentures, notes or resolutions, and the Act 44/Act 89 Payments to PennDOT under the Amended Funding Agreement.

Between 1957 and 2008, the Commission implemented only five revisions in its toll schedule. However, with the enactment of Act 44 and the significant increases in the Commission's funding obligations, from 2008 to 2021, the Commission implemented annual revisions to its toll schedule to maintain rates consistent with inflation, capital improvements and operational costs, Act 44/Act 89 Payment obligations, and the modernization of toll collection methods.

The following table summarizes the fundamental rate increases for the last ten years:

Recent Toll Rate Increase History

	Percent (%) Increase	
Effective Date	**Toll-By-Plate [(1)]**	**E-ZPass**
1/4/2015	5	5
1/3/2016	6	6
1/8/2017	6	6
1/7/2018	6	6
1/6/2019	6	6
1/5/2020	6	6
1/3/2021	6	6
1/2/2022	5	5
1/8/2023	5	5
1/7/2024	5	5

(1) Effective March 16, 2020, the Commission permanently transitioned to AET toll collection system, that now only utilizes Toll-By-Plate and E-ZPass. See "THE TURNPIKE SYSTEM – Toll Collection" above. Commencing January 3, 2021, the Commission began imposing an additional toll increase on Toll-By-Plate transactions equal to 45% of the toll that would otherwise be due to cover the estimated Revenue Leakage associated with Toll-By-Plate. Non-E-ZPass users that pre-register their vehicle receive a discount.

[8] The information contained on such website link is not incorporated by reference in this Appendix A.

Five-Year Financial History

The following Tables II and III summarize certain operating and financial information with respect to the System for the Fiscal Years from 2020 to 2024. This information is derived from the Commission's regularly prepared books and records. The financial information presented in Table III is a combination of cash basis financial statements with certain accruals included. **Certain information is not presented in accordance with generally accepted accounting principles and has not been audited.**

Tables II and III should be read in conjunction with the financial statements prepared in accordance with generally accepted accounting principles and related notes included in "APPENDIX B – AUDITED 2023 AND 2022 FINANCIAL STATEMENTS" of this Official Statement (the "***Financial Statements***").

The Commission expects the audited financial statements for the fiscal year ended May 31, 2024 to be available in October 2024.

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TABLE II

Number of Vehicle Transactions and Fare Revenues Summarized by Fare Classification
(in thousands)

	Fiscal Year Ended May 31				
	2020 [(1)]	**2021**	**2022**	**2023**	**2024**[(2)]
Number of Vehicle Transactions: [(3)]					
Passenger	158,738	137,714	165,128	170,355	173,231
Commercial	30,602	31,887	34,976	35,898	35,885
Total [(4)]	189,340	169,601	200,104	206,253	209,116
Toll Revenue:					
Passenger	$683,511	$610,353	$819,784	$868,352	$925,750
Commercial	606,050	648,458	749,243	793,355	829,259
Total	$1,289,561	$1,258,811	$1,569,027	$1,661,707	$1,755,009
Net Discounts, Adjustments and Toll Bad Debt	-41,782	-68,392	-109,111	-121,002	-146,216
Net Toll Revenues	$1,247,779	$1,190,419	$1,459,916	$1,540,705	$1,608,793

(1) Fiscal Year 2020 Net Fare Revenues are approximately $32.0 million less than presented in previous official statements. This is because of a reclassification of toll related bad debt from Miscellaneous to Discounts, Adjustments and Toll Bad Debt. Also, see note on Table III

(2) Preliminary, unaudited.

(3) Number of vehicle transactions is unaudited.

(4) The number of vehicle transactions presented in Table II for fiscal year 2020 is slightly less than numbers presented in previous official statements. The slight 0.6 % decrease is the result of a change in methodology for reporting orphan transactions. Orphan transactions are transactions that cannot be correlated because of a missing entry or exit record for the transaction. This change was implemented as part of a reporting enhancement project. Prior years were restated for consistency with the current methodology.

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TABLE III

Summary of System Revenues and Operating Expenditures Before Interest and Other Charges[1]
(000's Omitted)

	Fiscal Year Ended May 31,				
	2020[2]	2021	2022	2023[3]	2024[4]
Revenues					
Net Fare Revenues	$1,247,779	$1,190,419	$1,459,916	$1,540,705	$1,608,793
Concession Revenues	4,426	3,652	5,008	4,819	4,775
Senior Interest Income	20,605	13,391	12,534	24,027	31,520
Subordinate Interest Income	6,758	5,514	5,142	7,193	10,073
MLF Enhanced Interest Income	638	462	441	510	656
Miscellaneous	31,578	36,101	38,654	45,959	50,167
Total Revenues	$1,311,784	$1,249,539	$1,521,695	$1,623,213	$1,705,984
Operating Expenditures					
General & Administrative	$52,122	$50,860	$63,196	$68,162	$69,965
Traffic Engineering and Operations	3,162	3,396	3,471	3,454	3,749
Service Centers	41,972	48,334	59,688	70,033	72,570
Employee Benefits[5]	91,161	86,087	16,100	47,092	38,405
Toll Collection	58,129	31,261	26,237	26,453	24,784
Normal Maintenance	64,636	74,891	78,065	78,379	81,528
Facilities and Energy Mgmt. Operations	11,344	11,400	11,763	12,402	11,461
Turnpike Patrol	53,638	55,593	53,738	60,504	69,439
Total Operating Expenditures[5]	$376,164	$361,822	$312,258	$366,479	$371,901
Revenues less Operating Expenditures	$935,620	$887,717	$1,209,437	$1,256,734	$1,334,083
Senior Annual Debt Service Requirement	$306,338	$234,905	$311,234	$372,520	$419,102
Coverage Ratio[6]	3.03	3.75	3.87	3.35	3.16
Annual Subordinate Debt Service Requirement	$320,707	$261,311	$331,983	$334,737	$347,450
Coverage Ratio[7]	1.49	1.79	1.88	1.78	1.74
Annual MLF Enhanced Debt Service Requirement	$42,057	$48,818	$49,385	$53,427	$56,583
Coverage Ratio[8]	1.40	1.63	1.75	1.65	1.62

(1) This summary of revenues and operating expenditures is not intended to present results of operations in conformity with generally accepted accounting principles. Debt service is net of capital interest and receipt of Federal Subsidy.

(2) Certain Fiscal Year 2020 revenues, presented in previous official statements, have been reclassified to conform to the Fiscal Year 2021 financial statement presentation. Approximately $32.0 million of toll- related bad debt, was reclassified from Miscellaneous to Net Fare Revenues. The reclassifications between these two categories did not change Total Revenues previously presented.

(Notes Continue on Following Page)

[3] A forthcoming immaterial restatement will be included in the upcoming FY 24 ACFR for the required implementation of GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*.
[4] Preliminary, unaudited.
[5] Operating expenses for Fiscal Year 2022 include accounting entries to pension and OPEB expenses that reduce the reported operating expenses by $59 million. Without these entries, estimated Fiscal Year 2022 operating expenses would be $371 million.
[6] Calculated using Senior Interest Income.
[7] Calculated using Senior and Subordinate Interest Income.
[8] Calculated using Senior, Subordinate and MLF Enhanced Interest Income.

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COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS

Commission Indebtedness

Authority to Issue Debt

Under the Enabling Acts, the Commission is authorized and empowered, among other things, to issue turnpike revenue bonds, notes or other obligations (either senior on a parity basis or subordinate) to pay (i) pursuant to the Amended Funding Agreement, if applicable, the costs of construction, reconstructing, widening, expanding or extending I-80 or any other costs of I-80 and the System, (ii) Act 44/Act 89 Payments to PennDOT, (iii) costs of improvements to the System, and (iv) certain amounts pursuant to the Amended Funding Agreement, to be used for mass transit programs, multi-modal transportation programs and, other transportation programs of statewide significance, alternative energy transportation programs (provided that, pursuant to the terms of the Amended Funding Agreement, the proceeds of any Special Revenue Bonds (as hereinafter defined) may not be applied for payments to mass transit programs, multi-modal transportation programs or alternative energy transportation programs).

The bonds authorized to be issued by the Commission under Act 44 included up to $5 billion of Special Revenue Bonds. Proceeds of such bonds were applied toward the satisfaction of the Commission's scheduled annual Act 44/Act 89 Payment obligations under the Amended Funding Agreement and the Enabling Acts, except for that portion of the annual payment obligations to be deposited in the Public Transportation Trust Fund pursuant to the terms of the Amended Funding Agreement. Since all of the Commission's Act 44/Act 89 Payments to PennDOT under the Amended Funding Agreement are being deposited into the Public Transportation Trust Fund commencing July 1, 2014, as of such date, the Commission is no longer issuing Special Revenue Bonds to fund its obligations under the Amended Funding Agreement. See "*Statutory Limitations on the Incurrence of Special Revenue Bonds*" below. The Amended Funding Agreement provides that the Commission is obligated to pay all debt service due with respect to the Special Revenue Bonds.

Outstanding Indebtedness

The Commission has the following outstanding indebtedness: (1) Turnpike Senior Revenue Bonds secured by the pledge of the Trust Estate under the Turnpike Senior Revenue Indenture consisting primarily of Tolls received by or on behalf of the Commission from the System; (2) Turnpike Subordinate Revenue Bonds (as hereinafter defined) secured by a pledge of the Trust Estate under the Turnpike Subordinate Revenue Indenture consisting primarily of Commission Payments from amounts transferred from the General Reserve Fund under the Turnpike Senior Revenue Indenture after the payment of all Turnpike Senior Revenue Indenture Obligations; (3) Motor License Fund-Enhanced Turnpike Subordinate Special Revenue Bonds (referred to herein as the "***Special Revenue Bonds***") secured by Commission Payments on a subordinate basis to Turnpike Subordinate Revenue Bonds; (4) Oil Franchise Tax Revenue Bonds secured by a pledge of the Oil Franchise Tax Revenues; and (5) Registration Fee Revenue Bonds secured by revenues received from the Motor License Fund.

The following table summarizes the Commission's outstanding indebtedness as of the date of this Official Statement.

Outstanding Commission Indebtedness

	Outstanding Principal	Accreted thru 6/1/2024	Total Outstanding
Turnpike Senior Revenue Bonds	$7,302,910,000		$7,302,910,000
Turnpike Subordinate Revenue Bonds	6,060,504,489	$39,317,627	6,099,822,116
Special Revenue Bonds	911,541,334	51,527,259	963,068,593
Oil Franchise Tax Revenue Bonds	1,442,556,247	17,779,979	1,460,336,225
Registration Fee Revenue Bonds	306,820,000		306,820,000

After the issuance of the First Series Bonds, $7,267,145,000 in aggregate principal amount of Turnpike Senior Revenue Bonds will be outstanding. See "PLAN OF FINANCE" and "ESTIMATED SOURCES AND USES OF FUNDS" in the forepart of this Official Statement for more information. Also see " – Future Financing Considerations" below for information about the Forward Delivery Bonds (as defined herein).

As of the date of this Official Statement, approximately 92.73% of the Commission's outstanding debt is fixed rate, 6.64% is synthetic fixed, and 0.63% is unhedged variable rate. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS " – Direct Purchase Obligations," " – Letter of Credit Agreements" and " – Interest Rate Exchange Agreements" below for information.

Turnpike Senior Revenue Bonds

Turnpike Senior Revenue Bonds are issued under that certain Amended and Restated Trust Indenture originally dated as of July 1, 1986, and Amended and Restated as of March 1, 2001, between the Commission and U.S. Bank Trust Company, National Association, as trustee (the "***Turnpike Senior Revenue Indenture Trustee***"), as supplemented and amended (the "***Turnpike Senior Revenue Indenture***"). Tolls are presently pledged to secure the Turnpike Senior Revenue Bonds, as well as Turnpike Senior Revenue Indenture Parity Obligations, and any subordinated indebtedness that may be issued under the Turnpike Senior Revenue Indenture (collectively, the "***Turnpike Senior Revenue Indenture Obligations***").

As of the date of this Official Statement, the Commission has $7,302,910,000 in principal amount of Turnpike Senior Revenue Bonds outstanding under the Turnpike Senior Revenue Indenture. The foregoing amount includes certain notes evidencing and securing $88,500,000 in loans through the Immigrant Investor Program (known as the EB-5 visa program) administered by the U.S. Citizenship and Immigration Services, the proceeds of which were used to fund a portion of the projects identified in the Commission's 2016-2017 Ten-Year Capital Plan (the "***EB-5 Loans***"). See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Direct Purchase Obligations – *EB-5 Loans (Senior)*." After the issuance of the First Series Bonds, $7,267,145,000 in principal amount of Turnpike Senior Revenue Bonds will be outstanding. The Commission has not issued any subordinated indebtedness under the Turnpike Senior Revenue Indenture.

Also included in the principal amount outstanding under the Turnpike Senior Revenue Indenture as of the date of this Official Statement is $649,300,000 aggregate principal amount of variable rate obligations. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Direct Purchase Obligations" for a summary of direct purchase obligations of the Commission. Other obligations incurred and outstanding under the Turnpike Senior Revenue Indenture include the Commission's obligations under various interest rate swap agreements having a total current notional amount of $650,402,500 as of August 1, 2024. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations" below for information about the Forward Delivery Bonds.

Tolls are not pledged to secure the Oil Franchise Tax Revenue Bonds, the Registration Fee Revenue Bonds or the bonds and other obligations issued (or otherwise secured) under the Subordinate Revenue Indenture (the "***Turnpike Subordinate Revenue Indenture Obligations***"). All Turnpike Subordinate Revenue Indenture Obligations are subordinated to the payment of the Turnpike Senior Revenue Indenture Obligations issued under the Turnpike Senior Revenue Indenture.

Neither the Turnpike Subordinate Revenue Indenture Obligations, the Oil Franchise Tax Revenue Bonds, nor the Registration Fee Revenue Bonds are secured by or have any interest in the Trust Estate established pursuant to the Turnpike Senior Revenue Indenture.

The Commission may in the future, under the terms of the Turnpike Senior Revenue Indenture, identify in writing certain roads, other than the Turnpike Mainline and the Northeast Extension, as not being part of the System for the purposes of the Turnpike Senior Revenue Indenture which would eliminate toll revenues from these portions from the definition of Tolls under the Turnpike Senior Revenue Indenture. The Commission currently has no plans to remove any roads from the System.

In addition, under the Turnpike Senior Revenue Indenture, the Commission has covenanted that it will not sell, lease, or otherwise dispose of real estate or personal property comprising a portion of the System except upon compliance with the provisions of the Turnpike Senior Revenue Indenture, including a determination by resolution that the Net Revenues of the Commission will not be materially adversely affected. The Commission from time to time may consider various proposals that could involve the transfer or other disposition of Commission property. Any such transfer or disposition would be required to comply with the provisions of the Turnpike Senior Revenue Indenture.

Turnpike Subordinate Revenue Bonds

Pursuant to the terms of the Subordinate Trust Indenture dated as of April 1, 2008, between the Commission and Computershare Trust Company, National Association (the "***Turnpike Subordinate Revenue Indenture Trustee***"), as amended and supplemented (the "***Turnpike Subordinate Revenue Indenture***"), the Commission has covenanted to direct the Turnpike Senior Revenue Indenture Trustee to pay to the Turnpike Subordinate Revenue Indenture Trustee, after payment of all required debt service on all Turnpike Senior Revenue Indenture Obligations and subject to the provisions of the Turnpike Senior Revenue Indenture, out of the General Reserve Fund established under the Turnpike Senior Revenue Indenture, such amounts as are required by the Turnpike Subordinate Revenue Indenture, by a supplemental indenture to the Turnpike Subordinate Revenue Indenture or by a parity swap agreement to pay, at the times specified, all amounts due in respect of the Turnpike Subordinate Revenue Indenture Obligations outstanding under the Turnpike Subordinate Revenue Indenture or under a parity swap agreement.

Accordingly, the Commission is required to instruct and furnish a debt service schedule to the Senior Revenue Indenture Trustee providing (i) for the payment to the Subordinate Revenue Indenture Trustee out of available funds held in the General Reserve Fund of the amount from time to time necessary to satisfy all required deposits under the Turnpike Subordinate Revenue Indenture to the Commission Payments Fund established under the Turnpike Subordinate Revenue Indenture and (ii) for the payment of debt service on the outstanding Turnpike Subordinate Revenue Indenture Obligations and all other payments required from time to time under the Subordinate Revenue Indenture and in any supplemental indenture to the Turnpike Subordinate Revenue Indenture (collectively, the "***Commission Payments***").

Under the Turnpike Subordinate Revenue Indenture, the Commission may, from time to time, issue additional bonds to satisfy its payment obligations under the Enabling Acts, including (a) bonds issued for the purpose of making Act 44/Act 89 Payments to PennDOT to finance transit programs, and which are not secured by payments from the Motor License Fund, but have a senior claim on Commission Payments (the "***Subordinate Revenue Bonds***") and (b) Special Revenue Bonds. The Commission intends that any long-term indebtedness to be issued under the Turnpike Subordinate Revenue Indenture is to be paid solely from Commission Payments. Such obligations, if issued, are subordinate to the Turnpike Senior Revenue Bonds issued under the Turnpike Senior Revenue Indenture. Such Subordinate Revenue Bonds will be parity obligations with the outstanding Turnpike Subordinate Revenue Bonds already issued under the Turnpike Subordinate Revenue Indenture.

As of the date of this Official Statement, the Commission has $6,099,822,116 in aggregate principal amount of Turnpike Subordinate Revenue Bonds outstanding under the Turnpike Subordinate Revenue Indenture (including compounded amounts as of June 1, 2024, for outstanding capital appreciation bonds). The foregoing amounts include $291,850,000 aggregate principal amount of floating rate notes constituting a direct purchase obligation. See " – Direct Purchase Obligations" below for a summary of direct purchase obligations of the Commission. Other obligations incurred and outstanding under the Turnpike Subordinate Revenue Indenture include the Commission's obligations under an interest rate swap agreement having a notional amount of $291,850,000 as of August 1, 2024.

Statutory Limitations on the Incurrence of Special Revenue Bonds

Under the Enabling Acts, the Commission is authorized to issue, by resolution, Special Revenue Bonds (as contemplated in §9511.2 of Act 44), and as issued as such under the Turnpike Subordinate Revenue Indenture up to an aggregate principal amount of $5 billion, exclusive of original issue discount, for the purpose of paying bond related expenses and costs of PennDOT, including the costs of highway, road, tunnel and bridge construction, renovation and expansion, including acquisition of land, rights, machinery and equipment and certain finance charges relating thereto, planning, engineering, administrative and other expenses, and debt service. No more than $600 million in aggregate principal amount of such Special Revenue Bonds, exclusive of original issue discount, may be issued in any calendar year. No such bonds may be issued unless the Amended Funding Agreement is in effect, and no such bonds may be outstanding beyond the stated term of the Amended Funding Agreement at the time of issuance. Special Revenue Refunding Bonds (as defined in §9511.9 of Act 44) shall not be deemed to count against the total or annual maximum issuance volume under Act 44. Pursuant to Act 89, Special Revenue Bonds may not be issued by the Commission to fund any portion of its annual payment obligation commencing July 1, 2014, as all of such annual payment obligation is to be deposited in the Public Transportation Trust Fund after such date, although Special Revenue Refunding Bonds could be issued.

Special Revenue Bonds have been issued under the Turnpike Subordinate Revenue Indenture. As of the date of this Official Statement, the Commission has $963,068,593 in aggregate principal amount of Special Revenue Bonds outstanding under the Turnpike Subordinate Revenue Indenture (including compounded amounts as of June 1, 2024, for capital appreciation bonds). Special Revenue Bonds have a right to payment from Commission Payments that is subordinate to the rights of payment of the holders of Turnpike Subordinate Revenue Bonds issued under the Turnpike Subordinate Revenue Indenture.

Should the Commission fail to timely make required debt service deposits for Special Revenue Bonds, the Subordinate Revenue Indenture Trustee shall proceed under the terms of Act 44 and a Memorandum of Agreement between PennDOT, the Office of the Budget of the Commonwealth and the Pennsylvania State Treasurer, dated July 16, 2010 (the "***MOA***"), to notify PennDOT of such default, and thereafter, PennDOT shall give notice to the Office of the Budget of the Commonwealth of such deficiency, the Office of the Budget of the Commonwealth shall request that the Treasurer of the Commonwealth transfer funds to the Subordinate Revenue Indenture Trustee in an amount necessary to cure such deficiency, and the Treasurer of the Commonwealth shall transfer such funds to the Subordinate Revenue Indenture Trustee but only from amounts available for such purpose in the Motor License Fund. The appropriation of money in the Commonwealth's Motor License Fund in respect of Special Revenue Bonds issued by the Commission under Act 44 is continuing and non-lapsing. The Commonwealth has no obligation to appropriate any funds, other than available funds on deposit in the Motor License Fund, for the payment of any such Special Revenue Bonds. Pursuant to the MOA, certain funds equal to the maximum annual debt service on outstanding Special Revenue Bonds are to be set aside (but not pledged) in the Motor License Fund for this purpose upon the issuance of Special Revenue Bonds. Funds in such amounts were set aside in the Motor License Fund in connection with the issuance of fourteen series of the Commission's Motor License Fund-Enhanced Turnpike Subordinate Special Revenue Bonds. The Commission is obligated pursuant to the Amended Funding Agreement to reimburse the Treasurer of the Commonwealth for any amounts withdrawn from the Motor License Fund in order to cure a default in the payment by the Commission with respect to the annual debt service on any such Special Revenue Bonds. This reimbursement obligation is subject to and junior to the payment obligations of the Commission under the Special Revenue Bonds.

Oil Franchise Tax Revenue Bonds

As of the date of this Official Statement, the Commission has (i) $860,371,225 in aggregate principal amount of Oil Franchise Tax Senior Revenue Bonds, including accreted interest through June 1, 2024, and (ii) $599,965,000 in aggregate principal amount of Oil Franchise Tax Subordinated Revenue Bonds, outstanding under that certain trust indenture relating to such bonds. Oil Franchise Tax Revenue Bonds are secured solely by the trust estate securing those bonds which includes, among other things, Oil Franchise Tax Revenues allocated to the Commission. **The Oil Franchise Tax Revenues are not pledged to secure any Turnpike Senior Revenue Indenture Obligations, any Subordinate Revenue Indenture Obligations or any Registration Fee Revenue Bonds.** Note, however, that funds in the Oil Franchise Tax General Fund may be used by the Commission for any purposes as authorized by the Enabling Acts. See "CERTAIN FINANCIAL INFORMATION –

Revenue Sources of the Commission – Oil Franchise Tax Revenues" herein.

Registration Fee Revenue Bonds

As of the date of this Official Statement, the Commission has $306,820,000 in aggregate principal amount of the Commission's Registration Fee Revenue Bonds (the "***Registration Fee Revenue Bonds***") under that certain trust indenture relating to such bonds. $231,425,000 of the outstanding Registration Fee Revenue Bonds constituting floating rate notes. Registration Fee Revenue Bonds are issued under a separate indenture, as subsequently amended and supplemented, securing Registration Fee Revenue Bonds. The proceeds of the Registration Fee Revenue Bonds were spent on portions of the Mon/Fayette Expressway and the Southern Beltway, are secured by, and are to be paid solely from, Registration Fee Revenues. See "– Direct Purchase Obligations" and "– Future Financing Considerations" below and "CERTAIN FINANCIAL INFORMATION – Revenue Sources of the Commission – Registration Fee Revenues" herein for more information regarding Registration Fee Revenue Bonds.

Direct Purchase Obligations

Below is a summary of direct purchase obligations of the Commission outstanding as of the date of this Official Statement. These transactions may include terms and provisions, including but not limited to covenants and events of default, that are different from those contained in the Turnpike Senior Revenue Indenture and Subordinate Revenue Indenture. The Direct Purchase Obligations issued to date are not additionally secured by a Debt Service Reserve Fund. Copies of certain agreements relating to these transactions may be viewed on the Municipal Securities Rulemaking Board – Electronic Municipal Market Access system ("***EMMA***").

EB-5 Loans

As of the date of this Official Statement, there is an aggregate of $88,500,000 in EB-5 Loans that are outstanding as Turnpike Senior Revenue Indenture Obligations. The Commission previously obtained an up to $800 million draw-down loan under the EB-5 visa program available to be drawn in separate tranches, of which $183,500,000 has been drawn to date, leaving $616,500,000 of EB-5 Loans currently not drawn. The EB-5 Loans issued to date under this facility have been issued in four tranches: one on February 21, 2018, a second tranche on November 13, 2018, a third tranche on November 6, 2019, and a fourth tranche on January 22, 2020. Each tranche of the EB-5 Loans has a five-year term and is secured as parity obligations with Turnpike Senior Revenue Bonds and other parity obligations issued under the Turnpike Senior Revenue Indenture. Each of the first two tranches of the EB-5 loans was fully repaid on its five-year maturity date.[9] The third and fourth tranches are expected to be converted to additional bonds under the Turnpike Senior Revenue Bond Indenture in November 2024 and January 2025, respectively, consistent with the terms of the original loan agreement and will not be secured by a debt service reserve fund.

First Series of 2022 Bonds (Subordinate)

Turnpike Subordinate Revenue Refunding Bonds, First Series of 2022 (the "***First Series of 2022 Bonds***"), of which $291,850,000 aggregate principal amount is outstanding as of the date of this

[9] See the Fiscal Year 2025 Financial Plan at https://www.paturnpike.com/about-us/investor-relations/act-44-plan for additional information regarding the EB-5 Loans.

Official Statement, were issued under the Subordinate Revenue Indenture on April 28, 2022 and are parity obligations with certain Subordinate Revenue Bonds and other parity obligations issued under the Subordinate Revenue Indenture. Additional information regarding the First Series of 2022 Bonds can be found at: https://emma.msrb.org/P11599155-P11233724-P11656323.pdf.[10]

Turnpike Revenue Bonds, Series B of 2024 (Senior)

Turnpike Revenue Bonds, Series B of 2024 (the "***Series B of 2024 Bonds***"), of which $90,000,000 aggregate principal amount is outstanding as of the date of this Official Statement, were issued under the Turnpike Senior Revenue Indenture on February 15, 2024 and are parity obligations with certain Turnpike Senior Revenue Bonds and other parity obligations issued under the Turnpike Senior Revenue Indenture. The Series B of 2024 Bonds will not be secured by a debt service reserve fund. Additional information regarding the Series B of 2024 Bonds can be found at: https://emma.msrb.org/P21803313.pdf.[11]

Line of Credit

In June 2020, the Commission obtained a $200 million one-year revolving line of credit from PNC Bank, National Association, authorized to be used for the purposes of funding or refinancing costs including general working capital needs of the Commission, funding/reimbursing necessary reserves and the payment of debt service on certain Turnpike Senior Revenue Bonds, which the Commission utilized to pay a prior EB-5 Loan. The Commission renewed the Line of Credit, in June 2021, June 2022, June 2023, and June 2024 to provide funding for (or refinancing) costs including general working capital needs of the Commission. The Line of Credit constitutes Short-Term Indebtedness and a Parity Obligation under the Turnpike Senior Revenue Indenture. To date, no draws have been made on the current Line of Credit.

Forward Delivery Bonds

See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Future Financing Considerations" below for information about the Forward Delivery Bonds.

Letter of Credit Agreements

The Commission has entered into letter of credit agreements related to certain of its Turnpike Senior Revenue Bonds as detailed in the following table. The letter of credit agreements may contain provisions that are different from, and may be more restrictive than, the Turnpike Senior Revenue Indenture.

[10] The information contained on such website link is not incorporated by reference in this Appendix A.
[11] The information contained on such website link is not incorporated by reference in this Appendix A.

Summary of Letter of Credit Agreements for Turnpike Senior Revenue Bonds
(as of the date of this Official Statement)

Variable Rate Bond Issue	Amount Outstanding	Provider	Expiration Date
Series of 2020	$225,820,000	TD Bank, N.A.	06/24/2025
Series A of 2020	93,540,000	Barclays Bank PLC	06/12/2026
Second Series of 2019	139,815,000	TD Bank, N.A.	06/01/2028
Series B of 2023	190,125,000	TD Bank, N.A.	11/09/2028

Interest Rate Exchange Agreements

The Commission has interest rate exchange agreements with respect to certain portions of its Turnpike Senior Revenue Bonds, Series 2009A, Second Series of 2019, Series of 2020, Series 2020A and Series 2023B. In addition, the Commission has interest rate exchange agreements with respect to its Turnpike Subordinate Revenue Refunding Bonds, First Series of 2022, Registration Fee Revenue Refunding Bonds, Series of 2023, and Oil Franchise Tax Revenue Bonds, Series 2009B and 2016A.

Interest Rate Exchange Agreements
(as of August 1, 2024)

Lien	Current Notional	Mark to Market Valuation
Turnpike Senior Revenue Bonds	$650,402,500	$(43,145,092)
Turnpike Subordinate Revenue Bonds	291,850,000	35,749,003
Motor Vehicle Registration	231,425,000	(32,807,120)
Oil Franchise Tax Revenue Bonds	320,000,000	(2,140,021)

See Note 4, Note 8, and Note 10 to the Financial Statements for additional information relating to the interest rate exchange agreements. The Commission does not have any interest rate exchange agreements associated with its Special Revenue Bonds.

There are a number of risks associated with Swaps (as hereinafter defined) that could affect the value of the Swaps, the ability of the Commission to accomplish its objectives in entering into the Swaps and the ability of the Commission to meet its obligations under the Swaps. These risks include, among others, the following: counterparty risk – the failure of the counterparty to make required payments; credit risk – the occurrence of an event modifying the credit rating of the Commission or its counterparty; termination risk – the need to terminate the transaction in a market that dictates a termination payment by the Commission under certain events, including but not limited to, credit rating downgrades of the Commission, defaults, etc.; collateral posting risk – the risk of the Commission posting collateral upon certain credit rating downgrades; tax risk – the risk created by potential tax events that could affect Swap payments; and basis risk – the mismatch between actual variable rate debt service and variable rate indices used to determine Swap payments.

Prior to June 30, 2023, certain of the Commission's Swaps used London Interbank Offered Rate ("***LIBOR***") based rates as a reference rate for determining the interest rate and/or other payment obligations thereunder. On January 3, 2022, the Commission submitted an Adherence Letter to the

International Swaps and Derivatives Association, Inc., ("***ISDA***") indicating the Commission's adherence to the ISDA 2020 LIBOR Fallbacks Protocol (the "***ISDA Protocol***"). The Commission received confirmation that ISDA accepted the Commission's Adherence Letter on January 3, 2022. Each of the Commission's swap counterparties adhered to the ISDA Protocol, which together with the Commission's adherence, incorporated ISDA Protocol interest rate fallback language in the respective Interest Rate Exchange Agreements providing for the use of the secured overnight funding rate ("***SOFR***"), plus the defined spread, to determine a replacement rate for LIBOR after its permanent discontinuance on June 30, 2023.

The Commission actively monitors the degree of risk and exposure associated with the Swaps to which it is a party but can offer no assurances that compliance with its Swap Policy (as hereinafter defined) will prevent the Commission from suffering adverse financial consequences as a result of these transactions.

Other Obligations

Act 44/Act 89 Payments to PennDOT

The Enabling Acts provide that all Act 44/Act 89 Payments shall be subordinate obligations of the Commission payable solely from the General Reserve Fund after meeting all other Commission requirements pursuant to any financial documents, financial covenants, liquidity policies or agreements in effect at the Commission. Pursuant to the Amended Funding Agreement, the Act 44/Act 89 Payments to PennDOT over the seven Fiscal Years ended May 31, 2014, were allocated between deposits to the Commonwealth Motor License Fund (the "***Motor License Fund***") for road and bridge work and deposits into the Public Transportation Trust Fund for distribution to Pennsylvania's local and regional public transportation agencies for operating and capital purposes.

No portion of the Act 44/Act 89 Payments to be deposited into the Public Transportation Trust Fund may be made with proceeds of Special Revenue Bonds. Effective July 1, 2014, 100% of the scheduled Act 44/Act 89 Payments to PennDOT are being deposited into the Public Transportation Trust Fund and may be used to support transit operating and capital costs, multi- modal transportation capital project costs and alternative energy transportation capital project costs.

As reflected in the following table, as of the date of this Official Statement, the Commission has paid a total amount of $8,012,500,000 under the Amended Funding Agreement.

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Act 44/Act 89 Payments
(in millions)

Fiscal Year Ended May 31	Payments to Motor License Fund	Payments to Public Transportation Trust Fund	Total
2008	$450.0	$300.0	$750.0
2009	500.0	350.0	850.0
2010	500.0	400.0	900.0
2011	200.0	250.0	450.0
2012	200.0	250.0	450.0
2013	200.0	250.0	450.0
2014	200.0	250.0	450.0
2015	0.0	450.0	450.0
2016	0.0	450.0	450.0
2017	0.0	450.0	450.0
2018	0.0	450.0	450.0
2019	0.0	0.0	0.0
2020	0.0	900.0	900.0
2021	0.0	450.0	450.0
2022	0.0	450.0	450.0
2023	0.0	50.0	50.0
2024	0.0	50.0	50.0
2025	0.0	12.5	12.5
Totals:	**$2,250.0**	**$5,762.5**	**$8,012.5**

As a result of the materially adverse impact of the COVID-19 pandemic, the Commission and PennDOT agreed, pursuant to Amendment Three to the Original Amended Funding Agreement, to extend the payment dates for the Commission's July 2020 and October 2020 scheduled payments of $112.5 million each, to January 29, 2021. The Commission ultimately paid the full $450 million within Fiscal Year 2021, issuing Subordinate Revenue Bonds in January 2021 to fund the Fiscal Year 2021 Act 44/Act 89 obligation covering payments originally due in July 2020 and October 2020, as well as the payment due January 2021 and a portion of the April 2021 payment.

The Act 44/Act 89 Payments due to PennDOT for Fiscal Year 2022 totaled $450 million and were paid in July 2021 with $420 million of the net proceeds of the Commission's 2021B Subordinate Revenue Bonds and $30 million of current revenues. Beginning in Fiscal Year 2023 through 2057 (the term of the Amended Funding Agreement), the annual Act 44/Act 89 Payments were reduced to $50 million, to be paid from the current revenues of the Commission. The Commission paid the entire Fiscal Year 2023 and Fiscal Year 2024 Act 44/Act 89 Payment obligations as scheduled.

The Commission's obligation to pay the annual debt service on any Special Revenue Bonds on a timely basis continues to be part of its payment obligation under the Amended Funding Agreement.

The Enabling Acts provide that if the Secretary of the Budget notifies the Commission of a failure to make Act 44/Act 89 Payment to PennDOT under the Amended Funding Agreement, all actions of the Commission taken by a vote of the Commissioners thereafter must be approved by a unanimous vote of all Commissioners until such time as the Act 44/Act 89 Payment is made. However, a unanimous vote is not required if it would prevent the Commission from complying with covenants with "current bondholders, debt holders or creditors." These voting procedures have never been used as the Commission has not missed any Act 44/Act 89 Payments under the Amended Funding Agreement.

The Commission is required by the terms of the Amended Funding Agreement and Act 44 to fix and adjust tolls at levels that will generate revenues (together with other available moneys) sufficient to pay, among other things, amounts to PennDOT pursuant to the Amended Funding Agreement when due and other obligations of the Commission, and the Commission has covenanted in the Subordinate Revenue Indenture to set tolls at a level sufficient to meet its coverage obligations taking into account any additional debt incurred in order to make such payments.

The Commission believes that System revenues should enable it to satisfy its payment obligations as set forth in the Amended Funding Agreement.

Future Financing Considerations

General

The Commission may issue additional bonds and obligations under the Turnpike Senior Revenue Indenture and/or the Subordinate Revenue Indenture. In addition, the Commission may, from time to time, issue other notes and bonds payable from such sources as may be available so long as the Tolls, the Oil Franchise Tax Revenues securing the Oil Franchise Tax Revenue Bonds or the Registration Fee Revenues securing the Registration Fee Revenue Bonds are not pledged to such other notes and bonds or, if pledged, are pledged on a subordinate basis. The Commission regularly evaluates market conditions with respect to the possible refunding of its outstanding Senior Revenue Bonds, Subordinate Revenue Bonds, Special Revenue Bonds, Oil Franchise Tax Revenue Bonds and Registration Fee Revenue Bonds.

The Fiscal Year 2025 Financial Plan anticipates that between Fiscal Years 2025-2034, the estimated \$7.5 billion in net costs associated with the Fiscal Year 2025 Capital Plan will be funded with approximately \$3.5 billion on a pay-as-you-go basis, with the remaining approximately \$3.8 billion funded with proceeds from additional Senior Revenue Bonds, as well as \$144 million in funds from prior bond issuances and \$40 million from expected federal funds reimbursement. See "CAPITAL IMPROVEMENTS – Ten-Year Capital Plan" and "FINANCIAL PLAN – Fiscal Year 2025 Financial Plan" herein for more information.

The Commission may from time to time increase toll rates to meet the debt, capital and operational obligations of the Commission. The most recent toll increase took effect in January 2024. See "CERTAIN FINANCIAL INFORMATION – Toll Schedule and Rates" above for further information.

The ability of the Commission to repay such borrowings could be adversely affected by many factors, some of which are beyond the control of the Commission. For example, economic circumstances which result in significant declines in motor vehicle acquisition or operating cost increases could adversely affect the number of motor vehicles in use. An increase in the cost of fuel could adversely affect both the number of motor vehicles using the System and the mileage that such vehicles travel. Government regulations, such as Clean Air Act requirements, might also significantly restrict motor vehicle use and therefore diminish Tolls. See "INVESTMENT CONSIDERATIONS" in the forepart of this Official Statement.

Forward Delivery Direct Purchase Transaction

Pursuant to the authority granted in a resolution adopted by the Commission on November 1, 2022, the Commission has determined to issue in October 2024 its Turnpike Revenue Bonds, Series of 2024 (Forward Delivery) (the "***Forward Delivery Bonds***") for the purpose of providing funds to redeem certain maturities or sinking fund maturities of its Turnpike Revenue Bonds, Series A of 2014, (ii) Turnpike Revenue Refunding Bonds, Series of 2014, and (iii) Turnpike Revenue Bonds, Series C of 2014.

The Forward Delivery Bonds are being purchased by Wells Fargo Municipal Capital Strategies, LLC (the "***Purchaser***") pursuant to a Continuing Covenant Agreement dated December 28, 2022 (the "***Continuing Covenant Agreement***"), between the Commission and the Purchaser, and will be issued pursuant to the Indenture, as supplemented by a certain Supplemental Trust Indenture No. 76 to be executed and delivered at the time of issuance of the Forward Delivery Bonds. Additionally, pursuant to that certain Supplemental Trust Indenture No. 67 between the Commission and the Trustee dated as of December 28, 2022 and as required by the Continuing Covenant Agreement, the Commission has issued to the Purchaser a Turnpike Senior Revenue Bond as an Additional Bond pursuant to the Turnpike Senior Revenue Indenture (the "***Additional Bond (Breakage)***") which secures the payment of certain breakage fees and cost of capital fees due to the Purchaser, in the event the Commission does not issue the Forward Delivery Bonds subject to certain terms and conditions set forth in the Continuing Covenant Agreement. Additional information regarding the Forward Delivery Bonds and the Additional Bond (Breakage) can be found at: https://emma.msrb.org/P21644096-P21265428-P21691905.pdf. [12]

Potential Refunding and Swap Transaction

The Commission continues to evaluate financing options to achieve the lowest possible borrowing cost and these strategies may include swaps. For several months, the Commission along with its Co-Financial Advisors and its Swap Advisor have been evaluating a proposed synthetic fixed rate refunding that would include a Swap. The proposed transaction was approved at the August 6, 2024 meeting of the Commissioners. There is no guarantee that the proposed transaction will be executed.

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[12] The information contained on such website link is not incorporated by reference in this Appendix A.

CERTAIN OTHER INFORMATION

General Reserve Fund; Supplemental Capital Fund

After first having made requisite deposits under the Turnpike Senior Revenue Indenture, the Turnpike Senior Revenue Indenture Trustee is required to transfer from the Revenue Fund to the credit of the General Reserve Fund such funds which are determined to be in excess of the amount required to be reserved therein for future transfers to the Debt Service Fund. Moneys in the General Reserve Fund may be expended by the Commission to restore deficiencies in any funds or accounts created under the Turnpike Senior Revenue Indenture, and absent any such deficiency, for any of the following purposes, with no one item having priority over any of the others:

a. to purchase or redeem Turnpike Senior Revenue Bonds;

b. to secure and pay the principal or redemption price of, and interest on, any Subordinated Indebtedness;

c. to make payments into the Construction Fund;

d. to fund improvements, extensions, and replacements of the System; or

e. to further any corporate purpose.

Under the Turnpike Subordinate Revenue Indenture, the Commission has agreed that it will at all times establish and maintain Tolls for traffic over the System so that the amount paid into the General Reserve Fund in each Fiscal Year after deducting any liquidity reserve or other required holdback or deposit then in effect will be at least sufficient to provide funds in an amount not less than (i) 115% of the annual debt service on Subordinate Revenue Bonds (and obligations on parity with Subordinate Revenue Bonds), plus (ii) 100% of the annual debt service on Special Revenue Bonds (and obligations on a parity with Special Revenue Bonds and certain further subordinated bonds), plus (iii) any amount required under the Turnpike Subordinate Revenue Indenture to restore within eighteen (18) months any deficiency in the debt service reserve fund held under the Turnpike Subordinate Revenue Indenture. Failure to meet this covenant will not constitute a default under the Turnpike Subordinate Revenue Indenture (or the Turnpike Senior Revenue Indenture) but will require the Commission to retain a consultant to advise with respect to schedules of Tolls in order to bring the Commission into compliance. The Trustee has never withdrawn funds from the General Reserve Fund to meet regularly scheduled debt service payments on Turnpike Senior Revenue Bonds outstanding under the Turnpike Senior Revenue Indenture nor has the General Reserve Fund been used to restore any shortfalls in the Debt Service Reserve Fund for any Turnpike Senior Revenue Bonds.

The following chart sets forth the balances held in the General Reserve Fund as of the fiscal year end dates set forth below.

General Reserve Fund Balances
as of May 31

2024[13]	2023	2022	2021	2020
$441,159,085	$386,315,789	$437,513,657	$452,045,842	$404,330,774

As of May 31, 2024, the Commission had approximately $441.2 million on deposit in the General Reserve Fund. This amount is approximately 14.2% greater than the General Reserve Fund's Fiscal Year 2023 ending balance.

The balance in the General Reserve Fund can vary substantially, both month to month and year to year, due not only to variations in revenues, but also to the timing of expenditures, particularly capital expenditures, any transfers which may be made to the Supplemental Capital Fund for funding Additional Capital Projects (as defined herein), the Commission's equity contribution toward its Act 44/Act 89 Payment obligations and the Commission's deposit to the Pennsylvania Turnpike Commission Retiree Medical Trust. See "CERTAIN OTHER INFORMATION – Other Post-Employment Benefit Liabilities" herein. During Fiscal Years 2012 to 2024, the Commission utilized $1,327.0 million in General Reserve Fund balances to: (a) fund a portion of its Act 44/Act 89 Payment obligations in the amount of $570.0 million; (b) make contributions to the Retiree Medical Trust of $167.4 million in excess of its annual required contribution; (c) redeem a portion of its Floating Rate Notes issued under the Turnpike Senior Revenue Indenture at maturity on December 1, 2017 ($100 million) and December 1, 2018 ($50 million); (d) contribute $234.6 million to cash defease a portion of its outstanding Senior and Subordinate Revenue Bonds; and (e) contribute $205.0 million to the Supplemental Capital Fund.

Pursuant to Supplemental Indenture No. 59, dated as of June 2, 2021, the Commission established a Supplemental Capital Fund (the "***Supplemental Capital Fund***") under the Turnpike Senior Revenue Indenture for deposit and disbursement of certain of the Commission's generally available Revenues for improvements, extensions and replacements to the System, or otherwise for any Project which may be identified by the Commission, and not otherwise funded, as set forth in the Commission's capital plans (collectively, the "***Additional Capital Projects***"). The Supplemental Capital Fund is pledged as part of the Trust Estate under the Turnpike Senior Revenue Indenture and is funded solely from such amounts as the Commission, in its sole and absolute discretion, may transfer to it from the General Reserve Fund. Proceeds of Bonds, other Parity Obligations and Subordinated Indebtedness will not be deposited in the Supplemental Capital Fund. Funds may not be requisitioned from the Supplemental Capital Fund for Additional Capital Projects if a deficiency exists in any of the funds and accounts established under Turnpike Senior Revenue Indenture. Notwithstanding any other provision of the Turnpike Senior Revenue Indenture or the occurrence or continuation of any event or circumstance, monies on deposit in the Supplemental Capital Fund: (i) will be transferred to the General Reserve Fund to the extent not needed to fund such Additional Capital Projects; and (ii) may be transferred to the General Reserve Fund, in such amounts, and from time to time, as the Commission, in its sole and absolute discretion, shall determine. As of May 31, 2024, the Commission had approximately $20 million on deposit in the Supplemental Capital Fund.

13 Unaudited.

Since the establishment of the Supplemental Capital Fund, \$205 million was deposited and \$193 million was expended on Additional Capital Projects.

Budget Process

The Commission's Finance and Administration Department develops preliminary budget information for all Commission departments. This information is provided to each of the respective departments for their review and to enable them to make any proposed revisions for their budget requests. The information is then returned to the Finance and Administration Department and a Commission wide preliminary budget is prepared. This budget is reviewed by senior management and, in cooperation with the respective departments, revisions are made when necessary to conform to the annual Financial Plan. The final recommended budget is then presented to the Board of Commissioners for formal approval.

The Commission also annually prepares its annual Financial Plan as required under Act 44. See "FINANCIAL PLAN" herein.

Financial Policies and Guidelines

The Commission's Investment Policy and Guidelines, adopted on June 6, 1997, and amended from time to time thereafter (the "***Investment Policy***"), sets forth the purpose, objectives and investment guidelines for eligible securities for the investment of financial assets of the Commission. Eligible securities include those that are consistent with the Turnpike Senior Revenue Indenture. For a discussion of the Commission's concentration of credit risk to particular issuers, see Note 4 to the Financial Statements.

The Investment Policy provides that appropriate benchmarks shall be developed for the various funds invested by the Commission and that the returns of the Commission's individual portfolio segments are to be compared to such benchmarks. Pursuant to the Investment Policy, the Commission's Investment Policy Committee must prepare an investment report for the Commissioners on a quarterly basis, including a management summary that provides a clear picture of the status of the current investment portfolio and transactions made over the latest reporting period. The report is to include investment performance and demonstrate conformity with the Investment Policy.

The Commission adopted three additional financial policies on April 20, 2004: a Liquidity Standard Policy; a Debt Management Policy; and an Interest Rate Swap Management Policy (the "***Swap Policy***"). These financial management policies were developed in recognition of the increasing financial sophistication of the Commission with respect to its debt structure and to provide guidance governing the issuance, management, ongoing evaluation and reporting of all debt obligations.

The Liquidity Standard Policy requires that the Commission maintain sufficient year-end fund balances to ensure levels of uncommitted reserves necessary to secure and protect its long- term debt and other financial obligations. Under this policy, the Commission budgets and maintains cumulative fund balances, including balances in the Reserve Maintenance Fund and the General Reserve Fund, equal to the greater of maximum annual debt service on those bonds not secured by a debt service reserve fund or 10% of annual budgeted revenues.

The Debt Management Policy establishes parameters and provides guidance governing the issuance and management of Commission debt. It addresses such issues as usage of unhedged variable rate debt, rate covenants and limitations on additional bonds and disclosure. Notwithstanding the rate covenants in the Turnpike Senior Revenue Indenture (as hereinafter defined), the Commission's Debt Management Policy requires the Commission's management to maintain 2.00 debt service coverage on the Turnpike Senior Revenue Bonds, 1.30 debt service coverage on the Subordinate Revenue Bonds and 1.20 debt service coverage on the Special Revenue Bonds.

The Commission's Swap Policy establishes guidelines for the use and management of all interest rate management agreements, including, but not limited to, interest rate swaps, swaptions, caps, collars and floors (collectively, "***Swaps***") incurred in connection with the incurrence of debt. The Commission's Swap Policy was amended in October 2018 to reflect current regulations and best practices in the derivatives industry, particularly with respect to the selection requirements and on-going monitoring related to swap advisors.

The Swap Policy authorizes the Commission to use Swaps to hedge interest rate movement, basis risk and other risks, to lock in a fixed rate or, alternatively, to create synthetic variable rate debt. Swaps may also be used to produce interest rate savings, limit or hedge variable rate payments, alter the pattern of debt service payments, manage exposure to changing market conditions in advance of anticipated bond issues (through the use of anticipatory hedging instruments) or for asset/liability matching purposes.

At least annually, the Commission, in consultation with the Commission's Swap Advisor and legal counsel, must evaluate the risks associated with outstanding Swaps and provide to the senior executives and the Commissioners a written report of the findings based upon criteria set forth in the Swap Policy.

The Commission has also adopted additional financial policies related to post issuance compliance procedures and continuing disclosure.

The Tax-Exempt Debt, Build America Bonds and Other Tax-Advantaged Debt Post- Issuance Compliance Policies and Procedures (the "***Post Issuance Compliance Policy***") became effective on December 21, 2011, and implemented various policies and procedures to ensure that the Commission complies with all applicable federal tax rules related to its tax-exempt debt, Build America Bonds and other tax-advantaged debt issuances. Among other items, the policy requires compliance with all applicable federal tax documentation and filing requirements, yield restriction limitations, arbitrage rebate requirements, use of proceeds and financed projects limitations and recordkeeping requirements.

The Continuing Disclosure Policy was adopted by the Commission on February 2, 2016, and applies to all publicly offered Commission municipal securities that are subject to federal securities laws and/or continuing disclosure agreements. The policy requires the Commission to comply with all applicable securities laws, satisfy in a timely manner all contractual obligations undertaken pursuant to continuing disclosure agreements or otherwise, and to adhere to best practices for disclosure. The policy also requires the development, establishment and implementation of written procedures necessary to implement the Continuing Disclosure Policy, identifies key Commission participants responsible for disclosure, defines the role of Commission Disclosure Counsel and addresses training and document retention related to disclosure obligations.

Copies of the Commission's Investment Policy, Liquidity Standard Policy, Debt Management Policy, Swap Policy, Post Issuance Compliance Policy and Continuing Disclosure Policy can be found on the Commission's website at: https://www.paturnpike.com/about-us/policies-standards/policy-letters. [14]

The policies of the Commission described above may be revised or amended at any time at the discretion of the Commission.

Personnel and Labor Relations

As of August 1, 2024, the Pennsylvania Turnpike Commission employed a total of 1,389 persons, consisting of 479 management and supervisory union employees and 910 full-time non-supervisory union employees. Fifty-nine percent (59.2%) of all employees are engaged in maintenance operations and interchange operations. There are 806 field personnel located across 23 facilities, which is comprised of employees in the maintenance and facilities operations departments. The Commission currently employs 1,177 or 46.2% fewer employees than it did at the peak employment year of 2002.

The Commission has three Labor Agreements and one Memorandum of Understanding (MOU) with the Teamsters. The Local 77 and 250 Field Agreement and the Local 77 Central Office Agreement are effective from December 5, 2023, to September 30, 2027. The Local 30 Non-Supervisory Professional Agreement is effective October 1, 2023, to September 30, 2027. The Local 30 Supervisory MOU is in place and is negotiated as needed.

Retirement Plan

The State Employee's Retirement System of the Commonwealth ("***SERS***") is one of the nation's oldest and largest statewide retirement plans for public employees. SERS administers both a defined benefit plan and a defined contribution plan. The defined benefit plan is funded through a combination of employee contributions, employer contributions and investment earnings. The defined contribution plan (Commonwealth of Pennsylvania Deferred Compensation Program) is funded by voluntary employee contributions and investment earnings.

Substantially all employees of the Commission are covered by SERS. The costs of the defined benefit plan are paid by the Commission quarterly based upon a stipulated contribution rate. Participating agency contributions, including those for the Commission, are mandated by statute and are based upon an actuarially determined percentage of gross pay that is necessary to provide SERS with assets sufficient to meet the benefits to be paid to SERS members.

Article II of the Pennsylvania Constitution provides the General Assembly with the authority to establish or amend benefit provisions. Act 2001-9, signed into law on May 17, 2001, established Class AA ("***Class AA***") membership whereby, generally, annual full retirement benefits for electing active members is 2.5% of the member's highest three-year average salary (final average salary) multiplied by years of service. Commission employees hired after June 30, 2001, but before January 1, 2011, are Class AA members. Members hired on or before June 30, 2001, had the option, but were not required, to elect Class AA membership.

[14] The information contained on such website link is not incorporated by reference in this Appendix A.

Those members not electing Class AA membership are considered Class A ("***Class A***"). The general annual benefit for full retirement for Class A members is 2% of the member's final average salary multiplied by years of service. Retirement benefits for Class A and AA employees vest after 5 years of credited service. Class A and AA employees who retire at age 60 with three years of service or with 35 years of service if under age 60 are entitled to an unreduced annual retirement benefit.

On July 6, 2010, Pennsylvania Act 2010-46 was enacted which reduced the employer contribution rates for Fiscal Year 2010-2011, thus reducing the Commission's contribution rates for Fiscal Year 2010-2011 from 3.80% for Class A employees and 4.75% for Class AA employees to 3.29% for Class A employees and 4.11% for Class AA employees. This rate reduction was only for one year.

On November 23, 2010, Pennsylvania Act 120 of 2010 ("***Act 120***") was enacted. Under this legislation, effective January 1, 2011, benefit reductions are mandated for future SERS members; however, benefits for current members are preserved. New employees are subject to a higher contribution rate, an increase in the vesting period from five to ten years, elimination of lump-sum withdrawals, and an increase to the normal retirement age to obtain full, unreduced pension benefits. Rather than the current full benefit provision of 35 years of credited service, new employees' age and combined years of service must equal 92, including a minimum of 35 years of credited service, before they may receive full benefits. Act 120 established Class A-3 and Class A-4 memberships. Effective January 1, 2011, all new members to the System must elect one of these new membership classes. New members who elect Class A-3 will accrue benefits at 2% of their final average salary multiplied by years of service. Those members choosing Class A-4 will accrue benefits at 2.5% of their final average salary multiplied by years of service. Under Act 120, retirement benefits for Class A-3 and A-4 vest after 10 years of credited service. Class A-3 and A-4 members who retire at age 65 with three years of service or when the member's age (last birthday) plus their completed years of credit service total at least 92 (Rule of 92) are entitled to an unreduced annual retirement benefit. Members hired prior to January 1, 2011, retain their current full benefit provision of 35 years of credited service.

On June 12, 2017, Governor Wolf signed Act 5 of 2017 ("***Act 5***") into law that fundamentally changed retirement options for most new Commission employees beginning January 1, 2019. Act 5 allowed current Commission employees/SERS members to opt-in to one of the three new options between January 1, 2019, and March 31, 2019.

Among other changes, Act 5 creates three new classes of service which include: two new hybrid defined benefit/defined contribution tiers ("***A-5***" and "***A-6***"); and a straight defined contribution plan ("***DC***") for SERS. The new classes of service apply to all Commission employees who first become SERS members on or after January 1, 2019. Benefit reductions and increased retirement ages are mandated for future SERS members. Beginning January 1, 2019, new A-5 employees will annually accrue benefits at a rate of 1.25% and A-6 employees will annually accrue benefits at a rate of 1.0%. A-5, A-6 and DC employees will be subject to different employee contribution rates for the defined benefit and defined contribution plans and the vesting period for the defined benefit portion will be ten years while the defined contribution portion vests after three years. Additionally, Act 5 increases the normal retirement age to obtain full, unreduced defined benefit pension benefits for new A-5 and A-6 employees to age 67 and it requires 35 years of service and utilizes the "Rule of 97" (i.e., years of service plus age equal or exceed 97). The final average salary used to calculate defined benefits will be the employee's five highest salary years. Employer contribution rates for the defined contribution plan for A-5, A-6 and 401(a)DC employees will be 2.25%, 2.0% and 3.5%, respectively.

Act 5 does not affect current Commission retirees' pension benefits, nor does it reduce benefits for Commission employees hired before January 1, 2019. Act 5 also provides special benefit enhancements for current A-3 and A-4 Commission employees who will be allowed to take certain lump sum withdrawals upon retirement. Additionally, A-3 and A-4 employee pension contribution rates will go down when SERS investment returns exceed return targets. This provision balances the current downside risk-sharing required of A-3 and A-4 members as required by Act 120.

For more information on SERS, including Act 120 and Act 5, see the SERS website at https://sers.pa.gov/Newsroom.html[15], https://www.sers.pa.gov/about-legislation.html[16], and the disclosure under the heading "Other State Related Obligations – Pensions and Retirement" in Exhibit B attached to the Official Statement for the Commonwealth's General Obligation Bonds, First Series of 2023, dated December 6, 2023, which may be found at the EMMA website at https://emma.msrb.org/P11619029-P11248114-P11672409.pdf.[17] **See also Note 9 to the Commission's Financial Statements and related Required Supplementary Information for more information on the Commission's pension liabilities.**

Covered Class A, Class AA, Class A-3, A-4, A-5, A-6 and 401(a)DC employees are required by statute to contribute to SERS at a rate of 5.00%, 6.25%, 6.25%, 9.30%, 8.25%, 7.5% and 7.5%, respectively, of their gross pay. Employees' contributions are recorded in individually identified accounts, which are also credited with interest, calculated quarterly to yield 4.00% per annum, as mandated by statute. Accumulated employee contributions and credited interest vest immediately and are returned to the employee upon termination of service if the employee is not eligible for other benefits.

Participating agency contributions, including those for the Commission, are also mandated by statute and are based upon an actuarially determined percentage of gross pay that is necessary to provide SERS with assets sufficient to meet the benefits to be paid to SERS members. The Commission's total required retirement contribution (for both defined benefit and defined contribution), as a percentage of covered payroll, by class for the most recent five (5) Fiscal Years of the Commonwealth, is as follows:

[15] The information contained on such website link is not incorporated by reference in this Appendix A.
[16] The information contained on such website link is not incorporated by reference in this Appendix A.
[17] The information contained on such website link is not incorporated by reference in this Appendix A.

Year Ended June 30 (Commonwealth's Fiscal Year)	Class A	Class AA	Class A-3	Class A-4	Class A-5	Class A-6	401(a)DC
2024	32.24%	41.09%	27.60%	27.60%	19.65%	19.65%	19.60%
2023	30.44	38.82	26.05	26.05	18.43	18.43	18.37
2022	29.98	37.46	25.90	25.90	19.93	19.93	19.88
2021	29.48	36.84	25.47	25.47	19.59	19.59	19.56
2020	28.84	36.04	24.92	24.92	19.18	19.18	19.12

The Commission's required contributions and percentage contributed for most recent five (5) Fiscal Years of the Commission are as follows:

Year Ended May 31	Commission Required Contribution (in millions)	Percent (%) Contributed
2024 Preliminary / Unaudited	$35.2	100
2023	32.9	100
2022	31.4	100
2021	31.7	100
2020	37.8	100

The Commission has budgeted $39.8 million for pension expense for Fiscal Year 2025. The SERS required contributions are expected to be approximately $38.3 million. The Commission's higher budgeted amount for pension expense is calculated on an accrual basis, while the SERS required contribution amount is calculated based on budget estimates for salaries, employee pension classes, and approved SERS employer contribution rates.

A copy of SERS's annual financial statements may be obtained by writing to: State Employees' Retirement System, 30 North Third Street, P.O. Box 1147, Harrisburg, Pennsylvania, 17108-1147. Additional information about SERS, including its Comprehensive Annual Financial Reports and actuarial valuation reports, are available at http://www.sers.pa.gov .[18]

Act 120 also imposes limits referred to as "collars" on annual increases to employer contribution rates (i.e., the employer contribution rate for a particular year may not exceed the sum which results from adding the collar applicable for such year to the prior year's contribution rate). The collar for Commonwealth Fiscal Year 2015-2016 was 4.5% and no longer applies effective July 1, 2017.

At Fiscal Year ended May 31, 2023, the Commission reported a liability of $331.6 million for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. See Note 9 to the Commission's Financial Statements for additional information on how such pension liability was calculated.

[18] The information contained on such website link is not incorporated by reference in this Appendix A.

Other Post-Employment Benefit Liabilities

The Commission maintains another postemployment welfare plan program (the "***Plan***") for the purpose of providing benefits to eligible retirees and their dependents. The Plan is a single employer, defined benefit plan. The Plan's financial statements are not included in the financial statements of the public employee retirement system. The Plan issues a stand-alone financial report, which can be obtained by contacting the Commission's Accounting and Financial Reporting Department.

The Commission established the Pennsylvania Turnpike Commission Retiree Medical Trust (the "***Trust***") on May 30, 2008, as an irrevocable trust, tax-exempt under the Internal Revenue Code, to provide funding for the Plan. The Trust is administered by five trustees appointed by the Commission, who each serve two-year terms. The chairman and vice chairman of the Trust are appointed by the Trustees and serve two-year terms. PNC Bank, N.A. serves as custodian of the assets of the Plan. Disbursement of Plan assets are made by the custodian at the direction of the Trustees.

Plan benefit provisions and retiree and dependent contribution rates are established and may be amended by the Commission.

Management and Supervisory Union Employees/Retirees. The benefits funded by the Trust include certain post-employment medical, prescription drug, dental and vision benefits to management and supervisory union employees based upon their date of hire and years of service. Eligibility categories generally include:

- Employees hired before March 1, 2016, who have reached 20 years of service and are under age 60; benefit eligibility changes from 20 to 10 years for retirees 60 years of age or older. The last five years of service must be with the Commission.

- Employees hired on or after March 1, 2016, who have reached 30 years of service and are under age 60; benefit eligibility changes from 30 to 25 years for retirees 60 years of age or older. The last ten years of service must be with the Commission. (Some current and previous Commonwealth employees hired on or after this date would be grandfathered under the first eligibility category.)

The same coverage is provided to surviving spouses and dependents of management and supervisory union retirees who retired on or after March 1, 2001. Surviving spouses of retirees who retired prior to March 1, 2001, may purchase medical coverage at the group rate and dependents are offered coverage under the Consolidated Omnibus Budget Reconciliation Act (COBRA). Medicare Part B premiums are paid by the retiree, spouse or dependent if age 65 or over, or under age 65 and disabled.

Non-Supervisory Union Employees/Retirees. The Benefits also include certain post-employment medical and prescription drug benefits to non-supervisory union employees who have satisfied the eligibility requirements in the applicable collective bargaining agreement.

- For Local 30 Professionals who were hired prior to January 1, 2011, and Local 250 and 77 employees who were hired prior to January 27, 2016, the earlier of completion of 20 years of credited service or the later of attainment of age 60 and completion of 10 years of credited service. The last 5 years of credited service must be with the Commission.

- For Local 30 Professionals who were hired on or after January 1, 2011, and Local 250 and 77 employees who were hired on or after January 27, 2016, the earlier of completion of 30 years of credited service or the later of attainment of age 60 and completion of 25 years of credited service. The last 10 years of credited service must be with the Commission.

The same coverage is provided to spouses and dependents of eligible non-supervisory union retirees until the death of the retiree. Surviving spouses are required to contribute the full cost of coverage and dependents are offered coverage under COBRA.

In accordance with the pronouncements of the Governmental Accounting Standards Board ("***GASB***"), the Commission implemented GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions during Fiscal Year 2008. GASB Statement No. 45 was superseded by GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Statement No. 75 addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. Statement No. 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expenses. The Commission adopted Statement No. 75 for its Fiscal Year ended May 31, 2019.

The Commission's Net OPEB asset was $110 million as of May 31, 2023. This asset was determined by an actuarial valuation as of May 31, 2022. Based on this valuation, the Plan's total OPEB liability was $463 million; the Plan's Fiduciary Net Position was $573 million resulting in a 124% funded status (Plan fiduciary net position as a percent of total OPEB liability) at the measurement date.

The Commission began making contributions to the Trust in Fiscal Year 2008 and adopted a Retiree Medical Trust Funding Policy, effective September 17, 2008. In accordance with the Funding Policy, the Commission anticipates approving an annual contribution to the Trust in the amount of the Annual Required Contribution ("***ARC***") as determined by the Commission's actuary in accordance with GASB Statement No. 45, during the approval of its annual operating budget. With the implementation of GASB Statement No. 75, the Commission will now refer to the Actuarially Determined Contribution ("***ADC***") instead of the ARC.

The ADC for Fiscal Year 2023 and 2022 was $0 due to the funded status of the Plan. The Commission's Fiscal Year 2023 OPEB contributions were $14.7 million. The contributions were to cover the current year OPEB service costs and to help maintain the 100+% funded status. The ADC for Fiscal Year 2024 was $0 and the Commission's preliminary / unaudited contributions were $13.4 million.

The Plan's financial statements are not included in the financial statements of the Commission. For additional information regarding the Benefits and the Plan, including funding status and actuarial methods and assumptions, see Note 12 to the Commission's Financial Statements.

Insurance

The Commission maintains All-Risk Property, Builder's Risk, Public Official bonds, Cybersecurity, Crime and Fiduciary insurance coverage and is self-insured for Workers' Compensation, Auto Liability, and General Liability claims.

For capital projects, the Commission maintains Builders' Risk insurance that covers buildings and structures, including temporary structures, while being constructed, erected or fabricated on Commission property. This insurance provides coverage against risk of physical damage and/or loss (subject to policy exclusions) to all buildings and structures during construction. Upon completion, a project is then covered under an All-Risk insurance policy that has a $200 million per occurrence policy limit. See "CAPITAL IMPROVEMENTS – Condition of Turnpike System – *Structures; Status of Delaware River Bridge*" herein.

Deductibles range in amount depending on the line of coverage and the nature of the claim. For bridges, tunnels, overpasses, underpasses and viaducts, the deductible is $5 million. For buildings (including contents), toll plazas and equipment, warehouses and similar facilities, the deductible is $1 million. The Commission's All Risk Insurance policy also includes loss of income coverage subject to a seven-day waiting period.

Certain pre-specified construction projects are insured under an "Owner Controlled Insurance Program" until completion. Under these programs, the Commission, contractors and subcontractors are insured for Workers' Compensation, General Liability, Builder's Risk and other project-specific insurance with limits and large deductibles varying by project.

Performance Audit by the Auditor General

The Enabling Acts require the Auditor General of the Commonwealth to conduct an audit of the accounts of the Commission and to review its performance, procedures, operating budget, capital budget and debt every two years. The Act of October 23, 1988, P. L. 1059, No. 122 ("***Act 122***") also requires the Auditor General to conduct a financial audit and a compliance audit of the Commission every four years.

On September 7, 2022, Auditor General Timothy L. DeFoor issued a final report presenting the results of the statutorily required performance audits of the Commission under Act 44 and Act 122 (the "***September 2022 Performance Audit***").

The performance portion of the audit covered the period from June 1, 2018, to June 13, 2022. The Auditor General's office did not conduct its own financial audit but reviewed audits and supporting documentation of the independent firm that audits the Commission's financial statements annually, including working papers for the Fiscal Years ended May 31, 2018, through and including 2021.

The performance audit had three objectives: (1) to determine if the Commission's revenue collections are meeting projected toll revenue expectations in order to meet its payment obligations and planned capital improvement projects; (2) evaluate the Commission's processes for collecting tolls, including but not limited to E-ZPass and Toll-By-Plate, determine both the amount of tolls collected and the amount not collected, and examine possible enforcement mechanisms for uncollected tolls; and (3) evaluate the Commissions vendor contracts and its related policies pertaining to customer service at rest areas for provisions regarding prohibiting racial discrimination and sexual harassment.

The September 2022 Performance Audit presented three findings and 23 recommendations with 21 directed to the Commission and two to the Pennsylvania General Assembly. The three Findings are as follows:

Finding 1. The Commission continues to face significant challenges to raise toll revenue in order to make future toll Act 44/Act 89 Payments to PennDOT under the current Act 44/Act 89 financial structure, its associated debt payments, and expenditures for capital projects.

Finding 2. Uncollected tolls have continued to increase and therefore, the Commission must continue to seek new ways to collect tolls due from both in and out-of-state travelers.

Finding 3. The anti-discrimination language in the Commission's contracts for amenities provided to its customers at service plazas is outdated and lacking content.

With respect to Finding 1, the September 2022 Performance Audit recommended that the Commission ensure traffic projections are conservative and realistic; evaluate and scrutinize revenue sources and operating expenses to find ways to increase revenues while reducing costs; evaluate ways to increase passenger car and commercial use of the Turnpike; continue to analyze and manage its debt; and pursue opportunities to collaborate with other state agencies.

Also, with respect to Finding 1, the September 2022 Performance Audit recommended that the Pennsylvania General Assembly immediately re-evaluate Acts 44 and 89 and consider drafting and enacting new legislation to help ensure the current debt burden placed on the Commission is considerably mitigated for the continued viability of the Commission and the toll road system in Pennsylvania. The Auditor General also recommended that the General Assembly refrain from increasing the $50 million annual Act 44/Act 89 Payment scheduled to begin during the Fiscal Year ending May 31, 2023, and further consider removing the Commission's requirement to pay PennDOT $50 million each year through 2057. See "COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS – Other Obligations" herein for more information.

With respect to Finding 2, the September 2022 Performance Audit provided eleven recommendations focused on the Commission continuing to research and offer additional payment options, and working with the Pennsylvania State Police, the General Assembly, PennDOT, other states, and collection agencies to increase administrative and operational tools for improving toll collection enforcement.

With respect to Finding 3, the September 2022 Performance Audit provided five recommendations for amending and administering its contracts, which included, among other things, amending contracts to include current and appropriate anti-discrimination language; establishing policies or procedures to monitor lessees' compliance with non-discrimination provisions; and considering requiring lessees that provide customer service at service plazas to post signage with a customer complaint number.

The September 2022 Performance Audit also reiterated a finding from prior performance audits (2013 and 2016) concerning Commission employees being permitted to ride the Turnpike toll-free, even for personal travel. While the Commission did implement techniques for monitoring usage and identifying potential misuse, the Auditor General recommended that the Commission reconsider its decision to not rescind previously implemented policies that provide for toll-free employee travel.

The full text of the Department of Auditor General's final report and the Commission's response may be found on the Auditor General's website at: https://www.paauditor.gov/Media/Default/Reports/Pennsylvania%20Turnpike%20Commission%20-%20Audit%20Period%20June%201,%202018%20to%20June%2013,%202022.pdf.[19]

Commission Compliance

The Commission's activities regarding compliance are centered in the offices of Internal Audit Services, Advisory Services and Diversity and Inclusion. Together these offices provide Code of Conduct and Business Conduct Guidelines training to all Commission employees, construction contractors, and vendors, consultants and other business partners in the construction services sector, and develop and manage a comprehensive audit program that examines and promotes the adequacy and effectiveness of the Commission's internal control systems.

Labor Relations Investigative Unit

The Labor Relations Investigative Unit ("***LRIU***"), formerly the Office of Special Investigations, conducts numerous investigations of fraud, waste, abuse and misconduct. Among other things, LRIU's responsibilities include processing grievances, reviewing disciplinary action requests, and developing and coordinating the contract administration of the Commission's three collective bargaining agreements and one memorandum of understanding.

Environmental, Social and Governance Factors

The following information contained in this section describes certain elements of the Commission's operations relating to environmental, social and governance factors. The information under this subheading is not exhaustive and should be evaluated considering the entirety of the information regarding the Commission, the System, and the Commission's finances and operations set forth in this Appendix A and the forepart of this Official Statement. For information regarding the Commission's long term and strategic planning regarding sustainability and capital and asset management see "THE COMMISSION – Long Term and Strategic Planning" above.

Stormwater Mitigation. The Turnpike System consists of over 2,400 lane miles of roadways throughout the Commonwealth which either directly or indirectly discharge stormwater runoff. For decades, the Commission has taken numerous steps to better control stormwater runoff as well as to limit impurities in runoff across the System. In 2020, the Commission, developed its current Stormwater Asset Management Program to provide a centralized, common operating platform to support infrastructure inspection and evaluation, work order development and tracking, and reporting for all Commission-owned stormwater assets and features. The Commission installs and maintains Stormwater Control Measures ("***SCMs***") to control stormwater runoff from the System and the Commission's supporting facilities. These SCMs are engineered structures or devices designed to slow down, hold, infiltrate, and/or treat stormwater runoff before it enters waterbodies and groundwater.

[19] The information contained on such website link is not incorporated by reference in this Appendix A.

The Commission's efforts to reduce pollutants in stormwater during construction activities is achieved through its erosion and sedimentation control measures, and in a perpetual manner through post-construction stormwater management. To mitigate the impacts of sediment entering waterways during construction, erosion and sedimentation best management practices are implemented and maintained throughout the course of construction until the vegetative cover is restored, and erosion potentials have diminished. Through its post-construction storm management measures, the Commission develops and implements plans for mitigating increased stormwater runoff from impervious surfaces.

The Commission also meets regularly with executives of both DEP and PennDOT to discuss issues, define direction and explore future collaborative initiatives.

Extreme Weather and Climate Resiliency Report. In July 2022, the Commission released the Extreme Weather and Climate Resiliency Report which reflected a comprehensive assessment of the Commission's internal planning, operations, best management practices related to extreme weather events such as flooding, blizzards, hurricanes, and heatwaves, and opportunities to further improve preparedness and responsiveness to create a more resilient System. The assessment concluded that the Commission is prepared for extreme weather events based on its efforts to improve agency coordination and planning for extreme weather events, and implementation of effective strategies and technology solutions.

Electric and Alternative Fuel Vehicles. Since 2005, the Commission has been involved in various efforts to support and deploy clean and environmentally friendly vehicles. The Commission obtained propane powered vehicles for every maintenance shed and provided each maintenance shed with a propane vehicle fueling station.

The Commission currently has an agreement with Blink Charging, Co., to provide electric vehicle charging stations at the following service plazas: New Stanton, Oakmont, King of Prussia, Bowmansville and Peter J. Camiel. Additionally, through Applegreen's partnership with Tesla, 48 Tesla superchargers were installed at six service plazas: North Somerset, South Somerset, Peter J. Camiel, Bowmansville, North Hickory Run and South Hickory Run.

The Commission has approved the negotiation and execution of an agreement with Applegreen Electric for the deployment of an additional 80 DC fast chargers across the System. In September 2023, PennDOT announced the award of the Commonwealth's first round of funding through the FHWA's National Electric Vehicle Infrastructure program, which includes an award to Applegreen Electric to fund a portion of the new fast charging stations.

The Commission remains actively engaged in efforts to provide additional EV charging opportunities across the entire System.

The Commission is also focused on decreasing greenhouse gas emissions from the Commission's fleet of vehicles. This has been accomplished through the introduction of federally mandated emissions on dump trucks including exhaust gas recirculation, and diesel exhaust fluids. To decrease idle time emissions, dump trucks were upfitted with idle free systems to keep the cab and certain components warm to prevent long idle times. The Commission previously piloted two different compressed natural gas vehicles within its fleet, with limited success. The Commission plans to incorporate an electric vehicle pilot program for a portion of the Commission's passenger car fleet.

Renewable Energy. Further to its sustainability efforts, the Commission has designed and constructed a microgrid at its Greensburg maintenance shed which is expected to eliminate both energy and demand charges for electricity at the facility. This project combines natural gas and solar array to supply all power needs to the facility and any excess power will go back to the grid; generating additional revenue for the Commission. The project became operational in January 2023. The Commission is designing and will construct additional microgrids and solar projects at various facilities.

Green and Automated Buildings. The Commission works to ensure that each of its new buildings is designed using LEED certification, with the Commission's Central Administration Building being the first large building project incorporating LEED principles. Five of the Commission's facilities hold either a silver or gold LEED certification. The Commission's use of LEED projects is intended to maximize the use of locally sourced sustainable materials and provide the most environmentally friendly and energy efficient heating ventilation and air conditioning ("***HVAC***") systems possible. Other elements of LEED design leveraged by the Commission include daylighting, rainwater collection and reuse for toilet water and truck washing water, waterless urinals, and the most efficient LEED lighting systems with sophisticated controls that automatically dim the lights when bright sunlight is available and turn the lights off when the space is unoccupied.

The Commission also utilizes Building Automation Systems ("***BAS***") as a remote monitoring and early problem warning system. BAS monitoring is tailored and includes HVAC, water, lighting, commercial power and emergency generator operation, and serves as the first line of defense against leaks and malfunctioning equipment. BAS also aides in the reduction of energy by scheduling hours of use and maintaining temperature ranges throughout the facility.

Diversity, Equity, and Inclusion Council (DE&I Council). The council is a voluntary, employee-led resource group comprised of 20 employees from various departments throughout the Commission. The DE&I Council has four subcommittees: (1) Healing & Education; (2) Equitable Hiring & System Reform; (3) Transportation Justice & Equities; and (4) Marketing & Public Engagement. Each subcommittee is engaged in efforts to examine practices, polices, and procedures and provide relevant recommendations that foster a more collaborative and inclusive Commission.

Cybersecurity. The Commission and many of its vendors and contractors are dependent on information and computing technology to conduct general business operations, including toll transactions, toll collections, and customer account services. While to date the Commission has not experienced a materially disruptive cybersecurity threat, computer hacking, cyber-attacks or other malicious activities directed at the Commission's information systems or those of its vendors or contractors, could disrupt Commission services or cause physical or financial harm to the Commission, in the future. Further, cybersecurity breaches such as leakage or loss of confidential or proprietary data and failure or disruption of information technology systems could materially and adversely affect the Commission's reputation, which could lead to significant outlays and decreased performance that insurance may not cover.

The Commission has a robust cybersecurity framework that leverages multiple layers of protection including edge and internal firewalls, an intrusion prevention system, security incident and event management, multi-layered anti-virus, malware protection and spam filters. The Commission performs regular security patching and regular internal and external vulnerability scans. Periodic security assessment and penetration testing is performed regularly by qualified third parties.

The Commission has purchased and implemented cybersecurity awareness training and simulated phishing attacks, and has published third-party security requirements that define general security requirements, requirements for vendors providing hosting cloud-based systems, and requirements for vendors providing on-premises systems or devices physically connected to the Commission's networks. All Commission employees are required to complete annual information technology security training and phishing simulation campaigns are performed regularly. Additionally, the Commission has purchased cyber insurance which also provides immediate access to third party forensic investigation experts to assist the Commission with any data or system breaches.

Although the Commission devotes significant resources to maintain and regularly upgrade its systems and processes that are designed to protect the security of its computer systems, software, networks and other technology assets and the confidentiality, integrity and availability of information belonging to customers, there is no assurance that all these security measures will provide absolute security or prevent the risk of the Commission's finances or operations being negatively impacted by a cybersecurity threat directed at one of the Commission's vendors or contractors. These risks may increase in the future as the Commission continues to utilize AET, mobile payments and other internet-based applications both internally and externally. A successful cybersecurity attack on the Commission or one of its vendors or contractors, could have a material adverse effect on the financial condition and/or the operations of the Commission.

See "INVESTMENT CONSIDERATIONS – Cybersecurity Threats" in the forepart of this Official Statement.

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APPENDIX B

AUDITED FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED MAY 31, 2023 AND 2022

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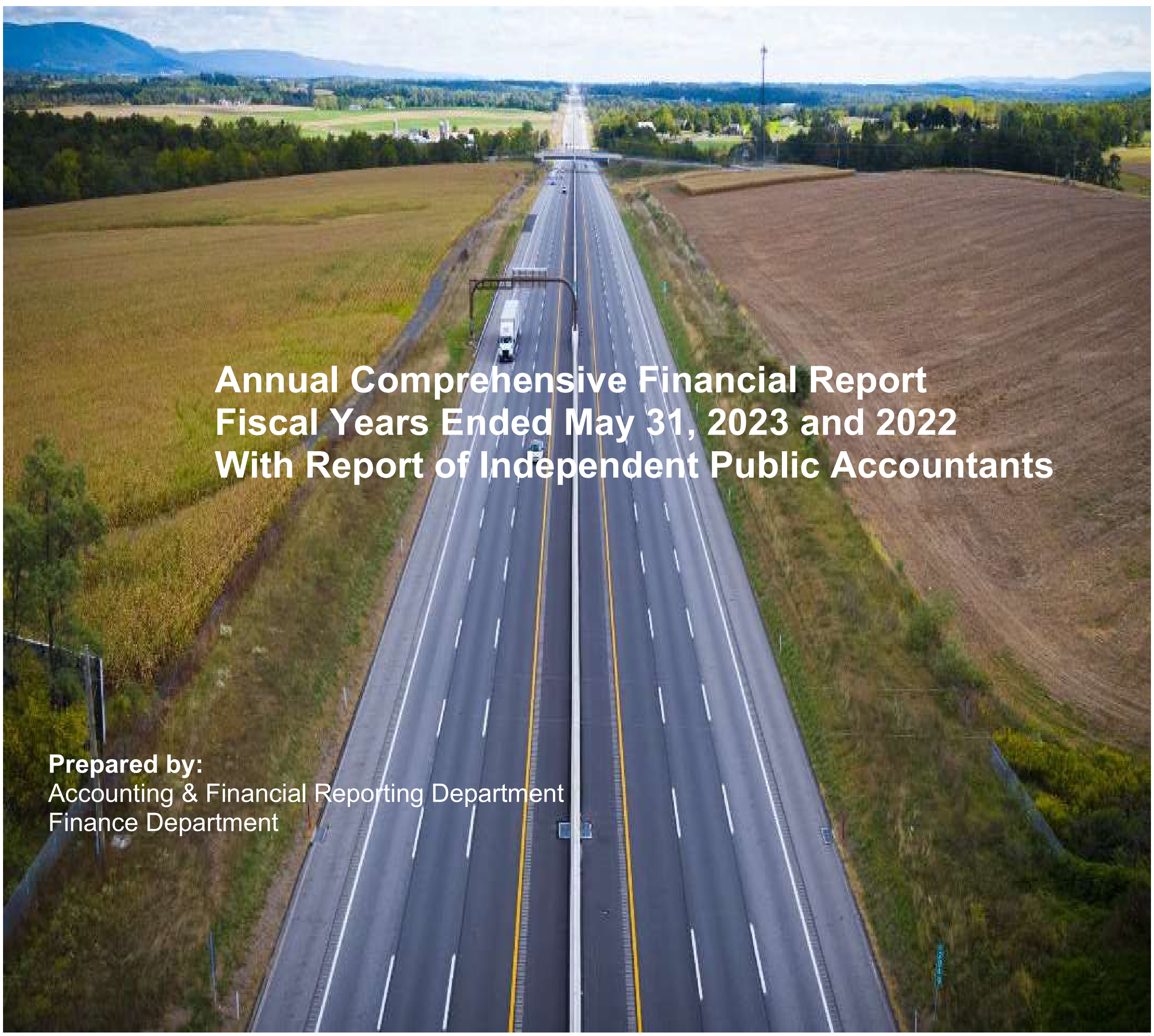
PENNA TURN-PIKE

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania



Annual Comprehensive Financial Report
Fiscal Years Ended May 31, 2023 and 2022
With Report of Independent Public Accountants

Prepared by:
Accounting & Financial Reporting Department
Finance Department

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PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Annual Comprehensive Financial Report
Fiscal Years Ended May 31, 2023 and 2022

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Pennsylvania Turnpike Commission
PO Box 67676
Harrisburg PA 17106-7676
717.939.9551

October 6, 2023

To the Bondholders of the Pennsylvania Turnpike Commission:

Introduction

The annual comprehensive financial report (ACFR) of the Pennsylvania Turnpike Commission (Commission) for the fiscal year ended May 31, 2023, is hereby submitted. The Commission covenants in the Senior Indenture that it will cause an annual audit to be made of its books and accounts of each fiscal year by an independent certified public accountant. A copy of such audit shall be filed with the Trustee promptly after the receipt by the Commission for such purpose.

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the Commission. To the best of our knowledge and belief, the enclosed data are accurate in all material respects and are reported in a manner designed to present fairly the financial position, changes in financial position, and cash flows of the Commission. All disclosures necessary to enable the reader to gain an understanding of the Commission's financial activities have been included. Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative overview and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

The Commission was created as an instrumentality of the Commonwealth of Pennsylvania (Commonwealth) on May 21, 1937, with powers to construct, operate, and maintain the Turnpike System, and to issue Turnpike revenue bonds, repayable solely from tolls and other Commission revenues. The Commission is considered a discretely presented component unit of the Commonwealth of Pennsylvania. The Commission is composed of five members, one of whom is the Commonwealth of Pennsylvania's Secretary of Transportation. The others are appointed by the Governor with the advice and consent of a two-thirds majority of the Senate.

The Pennsylvania Turnpike Commission (the Employer) maintains an other postemployment welfare plan program (the Plan) for the purpose of providing non-pension other postemployment benefits (OPEB) for employees who meet the age and service requirements outlined in the Employer's plan documents. In accordance with GASB Statement No. 84, *Fiduciary Activities*, the Plan is a fiduciary component unit of the Commission.

The financial statements of the Commission's business-type activities (enterprise fund) and fiduciary activities (fiduciary fund) have been prepared in conformity with accounting principles generally accepted in the United States (U.S. GAAP) as applied to government units. The Commission's enterprise and fiduciary fund financial statements (the financial statements) are presented on the accrual basis of accounting.

Turnpike System

As of May 31, 2023, the Turnpike System is composed of:

- the 359-mile Turnpike Mainline traversing the southern portion of Pennsylvania from east to west;

- the 110-mile north/south section identified as the Northeast Extension;
- the approximately 16-mile north/south connection, known as the Beaver Valley Expressway, which intersects the Turnpike Mainline in the southwestern portion of the Commonwealth;
- the approximately 13-mile Amos K. Hutchinson Bypass, which adjoins the Turnpike Mainline near the New Stanton Interchange;
- the completed portion of the Mon/Fayette Expressway project totaling approximately 48 miles;
- a six-mile section of the Southern Beltway project from PA 60 to US 22; and
- a 13-mile section of the Southern Beltway between U.S. 22 and Interstate Route 79, which opened on October 15, 2021.

The Turnpike Mainline connects with the Ohio Turnpike at its western terminus and with the New Jersey Turnpike at its eastern terminus. The Turnpike Mainline commences on the eastern boundary of Pennsylvania at the Delaware River Bridge which connects the Turnpike System to the New Jersey Turnpike. A barrier toll, based on the vehicle's number of axles and regardless of distance traveled, is paid at the Delaware River Bridge for those vehicles traveling westbound. The closed toll system based on axles, weight and distances traveled begins approximately six miles from the Delaware River Bridge at Neshaminy Falls. The Turnpike Mainline traverses the state in a westerly direction generally paralleling the southern border of the state immediately north of Philadelphia and south of Harrisburg to the vicinity of Somerset. West of Somerset, the highway follows a northwesterly direction to the northeast of Pittsburgh and to the Ohio state line, south of Youngstown, Ohio. A barrier toll, by vehicle class and regardless of distance traveled, is paid at the western most interchange (Gateway) for those vehicles traveling eastbound. The closed toll system begins approximately 30 miles from the Ohio state line at Warrendale.

The Northeast Extension is approximately 110 miles in length and connects the Turnpike Mainline and the area north of Scranton. The Northeast Extension meets the Turnpike Mainline at a point north of Plymouth Meeting and traverses the eastern portion of Pennsylvania in a northerly direction through Allentown and Scranton to its northern terminus where it connects with U.S. Route 6 and Interstate Route 81.

For additional information, see discussion of the Mon/Fayette Expressway and Southern Beltway in the Capital Improvements Program section of this letter.

The Turnpike System was constructed prior to the development of the National Interstate Highway System and no Federal Highway Trust Fund monies were utilized in the initial construction of the Turnpike Mainline, Northeast Extension, Beaver Valley Expressway or the Amos K. Hutchinson Bypass section of the Turnpike System. However, portions of the Turnpike System have been designated as Interstate Routes. The Turnpike Mainline has been designated as Interstate Route 276 (I-276) between the area where Interstate Route 95 (I-95) crosses the Turnpike System and the Valley Forge Interchange. With the September 2018 opening of the interchange connecting the Turnpike Mainline with I-95, the portion of the Turnpike Mainline east of the new interchange has been designated as I-95. The Commission received $241.9 million of federal funding for the I-95 portion of the Turnpike System. The portion of the Turnpike Mainline west of the Valley Forge Interchange to the western terminus at the Ohio state line has been designated as Interstate Route 76 (I-76). In addition, the Turnpike Mainline between the New Stanton and Breezewood Interchanges has been designated as Interstate Route 70 (I-70). The Northeast Extension has been designated as Interstate Route 476 (I-476). Portions of the Beaver Valley Expressway are designated as Interstate Route 376 (I-376).

The Turnpike System was constructed and opened to traffic in sections. The original Turnpike Mainline segment between Irwin and Carlisle was opened in 1940. Ten years later, in 1950, the 100-mile section between Carlisle and Valley Forge was completed and opened. After 1950, construction of new segments of the Turnpike System occurred at more frequent intervals with the Turnpike Mainline segment placed in service as of May 1956. The initial segment of the Northeast Extension between the Turnpike Mainline and the temporary interchange just south of the Lehigh Tunnel was opened in 1955. The final segment, from the temporary interchange to Scranton, was completed and opened for traffic in November 1957.

The Delaware River Bridge, which connects the Turnpike Mainline with the New Jersey Turnpike System, is owned jointly by the Commission and the New Jersey Turnpike Authority.

The Turnpike System has a total of 73 toll interchanges which connect it with major arteries and population centers along its 565-mile traffic corridor. Thirty-six of the interchanges are located on the Turnpike Mainline, including Turnpike Mainline barriers at the New Jersey and Ohio state lines, and 11 interchanges are situated on the Northeast Extension. The additional 26 interchanges are located on the Beaver Valley Expressway, Amos K. Hutchinson Bypass, and completed segments of the Mon/Fayette Expressway and Southern Beltway.

On March 16, 2020, in response to the public health concerns resulting from the COVID-19 pandemic, the Commission moved to all-electronic toll (AET) collection, removed toll collectors from toll booths and transitioned to only using Toll By Plate and E-ZPass toll collection across the Turnpike System. Initially intended to be a temporary response to the impact of the COVID-19 pandemic, the Commissioners, on June 2, 2020, unanimously approved the permanent transition to AET collection operations.

Toll By Plate is supplemental to E-ZPass toll collections and utilizes technology where cameras read the license plates of all non-E-ZPass customers, as they pass through each toll gantry. The registered owner of the vehicle is then invoiced for the assessed tolls. Commencing January 3, 2021, the Commission began imposing an additional toll increase on Toll By Plate transactions equal to 45% of the toll that would otherwise be due to cover the costs of non-payment associated with Toll By Plate.

The Commission plans to fully convert the Turnpike System to ORT collection operations where cameras on overhead gantries capture a vehicle’s license plate at highway speed, and a toll invoice is mailed to the vehicle’s registered owner. The overhead gantries will also read the transponder signals for E-ZPass customers to pay tolls at such locations. An initial pilot of the ORT system was installed along the new section of the Southern Beltway which opened in October 2021. The Mainline transition to ORT was initially scheduled to commence on a portion of the Turnpike System from the Reading Interchange to the New Jersey border in October 2022. However, as result of reductions in spending under the Fiscal Year 2021 Capital Plan, ORT conversion was deferred to January 2025. Conversion to ORT for the balance of the Mainline west of the Reading Interchange is scheduled for completion in January 2027. Existing toll booths would be decommissioned and removed from service at locations in which ORT is implemented.

The Commission has installed E-ZPass, a form of electronic toll collection, throughout the Turnpike System. The benefits of E-ZPass include enhanced safety and convenience for users of the Turnpike System, improved traffic flow and reduced congestion at the Turnpike System's busiest interchanges.

E-ZPass is available on the entire Turnpike System. In addition, Express E-ZPass lanes have been constructed at seven interchanges and permit E-ZPass customers to travel through the toll plaza at highway speeds. In addition, and as of August 2023, E-ZPass customers traveling in 19 other states that have implemented E-ZPass technology are able to use E-ZPass in those states.

To help ensure the collection of toll revenue due to the Commission, a Violation Enforcement System (VES) has been installed at all E-ZPass interchanges to identify violators (customers who travel through E-ZPass lanes and do not have E-ZPass) and motorists with problem tags that are unreadable. VES enables the Commission to collect appropriate tolls and other additional fees relating to violations. Act 89 and other statutory provisions governing VES and procedures for enforcement and collection provide for enhanced fare evasion measures and criminal penalties pertaining to E-ZPass violators. Under Act 89, motorists who commit or attempt to commit fare evasion on the Turnpike System shall have committed a summary offense and upon conviction, shall be fined a sum between $100 and $1,000 in addition to civil penalties that are already in place. Further, upon conviction, motorists who take affirmative action to evade a Turnpike System fare can be found to have committed a misdemeanor of the third degree, punishable by fines ranging from $3,000 to $6,500 (depending on the number of offenses), and imprisonment of not more than six months for a second offense.

Revenue generated from the additional fare evasion fines imposed by Act 89 is to be deposited in the Commonwealth's Motor License Fund rather than with the Commission; however, restitution for the full fare is paid to the Commission. Act 165 was signed into law in 2016 which, among other things, allows for the suspension of vehicle registration for unpaid tolls. Specifically, the vehicle suspension process is triggered by the failure to pay six (6) or more violations or incurring unpaid tolls or administrative fees of $500. Additionally, Act 165 assists the Commission with the collection of unpaid out-of-state tolls by authorizing the Pennsylvania Department of Transportation (PennDOT) to enter into a reciprocity agreement for purposes of toll collection and enforcement penalties with another state or tolling entity. Effective September 11, 2018, PennDOT and the State of Delaware Department of Transportation, Division of Motor Vehicles (DelDOT) entered into the first reciprocity agreement under Act 165, generally providing that PennDOT and DelDOT will suspend or hold the registration of vehicle upon unpaid tolls, consistent with the laws and regulations of the other state, upon the request of such state.

In January 2018, the Commission began sending notices of possible vehicle registration suspensions under authority from Act 165 and in February 2018, PennDOT began suspending certain vehicle registrations. In April 2018, the Commission also began filing criminal charges against some of the largest toll violators for theft of services.

Further, Act 112, which became effective January 2, 2023, lowers the threshold for a vehicle registration suspension for unpaid tolls from six violations to four violations, and for administrative fines from $500 to $250. Act 112 also extends the statute of limitations for enforcing unpaid tolls violations from three years to five years.

The Commission's Toll Revenue Enforcement unit (TRE) conducts all internal and external investigations including working with the local District Attorney's Offices in pursuing criminal prosecutions of the Commission's most egregious toll violators. Additionally, the Commission has initiated a pilot program with several local magisterial districts to bring civil cases for unpaid tolls. TRE's efforts are part of the Commission's coordinated toll collection and enforcement and fraud detection efforts.

Signed into law on October 19, 2018, Act 86 of 2018 authorizes the Commission and PennDOT to conduct speed-enforcement operations inside active work zones (Enforcement Zones) using automated speed-enforcement systems and technology (Automated System). The Automated System is only used in active Enforcement Zones when proper notice is provided to motorists. The Automated System generates violation notices which are sent, via first class mail, to the registered owners of vehicles that travel 11 mph or more over the posted speed limit in an active Enforcement Zone. A registered owner's first-time violation receives a written warning, the second violation is a $75 fine and the third and all subsequent violations are a $150 fine. After a 60-day pre-enforcement pilot period, enforcement began on March 9, 2020.

Long-Range Financial Planning Process

Annually, the Commission prepares an Operating Budget, a Ten-Year Capital Plan and an Act 44 Financial Plan.

The Operating Budget is an estimate of the expenses to maintain, support and operate the roadway and facilities for the next fiscal year. The fiscal year 2024 Operating Budget was approved for $437.7 million on May 2, 2023.

The Commission prepares the Ten-Year Capital Plan for its facilities and equipment (exclusive of Mon/Fayette and Southern Beltway projects), consisting of the Highway Program, the Technology Program, Fleet Equipment, and Facilities and Energy Management Operations, which it updates each year. All capital projects are reviewed and prioritized and the most critical and important projects necessary to maintain the Turnpike System in a state of good repair are pursued. The Capital Plan for fiscal year 2024 was adopted by the Commission on May 2, 2023. The adopted Capital Plan calls for an investment of $7.5 billion, net of federal reimbursements, over the coming decade.

The Act 44 Financial Plan is the Commission's long-range financial plan and incorporates the Operating Budget and the Ten-Year Capital Plan. This long-range financial plan reflects the Commission's commitment to operate and maintain its toll facilities, support a capital investment program at levels consistent with the adopted Ten-Year Capital Plan, and fully fund its Act 44/Act 89 obligations. At the same time, the financial plan assumes the Commission will maintain debt service coverage ratios of at least 2.00x on annual debt service for its Turnpike Senior Revenue Bonds, 1.30x on combined debt service for its Turnpike Senior Revenue and Subordinate Revenue Bonds, and 1.20x for all three of its liens. In addition, a liquidity level equal to at least 10% of operating revenues is assumed to be maintained. These coverage and liquidity targets reflect the Commission's goal to maintain financial flexibility consistent with its credit ratings.

The Commission delivered to the Secretary of the Budget its Financial Plan for Fiscal Year 2024 on June 1, 2023.

Capital Improvements Program

Act 61 Projects

In 1985, the General Assembly of the Commonwealth enacted legislation, which among other things, authorized and empowered the Commission to undertake the construction of new projects and to operate them as part of the Turnpike System. This legislation, known as the "Turnpike Organization, Extension and Toll Road Conversion Act," also known as Act 1985-61 (Act 61), included several groups of projects for the Turnpike System. Act 61 grouped the improvement and extension authorizations into four major groups of projects.

The initial group of projects included, among others, the following, a portion of which have been financed and completed with bond proceeds: the Beaver Valley Climbing Lane; the Downingtown Interchange; the Fort Washington, Willow Grove and Philadelphia Interchanges; the Mid-County Expressway Connection (Montgomery County); the Mon/Fayette Expressway and Southern Beltway; the Beaver Valley Expressway; the Amos K. Hutchinson Bypass [formerly the Greensburg (North-South) Bypass]; the Keyser Avenue Interchanges (Wilkes-Barre/Scranton Area); and an additional tube at the Lehigh Tunnel on the Northeast Extension.

Act 26 of 1991 made certain changes to Act 61 of 1985, by shifting priorities of certain projects and adding provisions regarding new projects. Act 26 also increased the Commonwealth's Oil Company Franchise Tax by 55 mills with 14% of such increase being dedicated to toll road projects under Act 61.

Act 3 of 1997 appropriated to the Commission annual allocations from the Commonwealth's Motor License Fund for the purpose of funding capital improvement projects authorized by Act 61.

Act 44 of 2007, P.L. 169, repealed Act 61 but provided that all activities initiated under Act 61 shall continue and remain in full force and effect and may be completed under Act 44.

Please refer to the MD&A (Events That Will Impact Financial Position section) and Note 10 (Commitments and Contingencies) for additional information regarding Act 44 and other related legislation and agreements.

Mon/Fayette Expressway and Southern Beltway

Four projects constructed as part of the Mon/Fayette Expressway are now in operation. One is an approximately six-mile toll road between I-70 and U.S. Route 40 in Washington County. This project was built by the Pennsylvania Department of Transportation and turned over to the Commission upon its opening in 1990. The second is an approximately twelve-mile section of toll road from I-68 near Morgantown, West Virginia, to Fairchance, Pennsylvania, which is located just south of Uniontown. The third project is an approximately sixteen-mile section of the Mon/Fayette Expressway from I-70 in Washington County to Pennsylvania Route 51 in Allegheny County, which opened in April 2002. The fourth is an approximately fifteen-mile section from Uniontown to Brownsville, including a 3,022-foot bridge over the Monongahela River, which opened to traffic in July 2012. These four contiguous projects, which total 48 miles from Morgantown, West Virginia to Pennsylvania Route 51 south of Pittsburgh, are now part of the Turnpike System.

On March 21, 2017, the Commission announced that it would stop engineering-design activities on the final 14-mile section of the Mon-Fayette Expressway, extending from Pennsylvania Route 51 to I-376 near Monroeville east of Pittsburgh, in light of the Southwestern Pennsylvania Commission's decision to table the project. On June 26, 2017, the Southwestern Pennsylvania Commission voted to add the final 14-mile segment of the Mon/Fayette Expressway to its long-range plan. This action will allow FHWA to approve changes to the environmental impact statement (EIS), a requirement for construction to commence. The current estimates to complete the final 14 miles of the Mon/Fayette Expressway to I-376 are in excess of $2.0 billion. An EIS re-evaluation was completed for the Mon/Fayette Expressway and approved by PennDOT and FHWA in 2019. Final design is now proceeding on the 14-mile southern section of the Mon/Fayette Expressway. The initial section of the southern section was bid in December 2022, and a notice to proceed was given in January 2023. When completed, the Mon/Fayette Expressway will extend from Interstate 68 in West Virginia to I-376 in Monroeville, which is east of Pittsburgh.

The Southern Beltway is to be constructed from the Mon/Fayette Expressway, near Finleyville, extending as part of a beltway south of Pittsburgh to I-376 at the Pittsburgh International Airport. It is comprised of three distinct projects: (1) the six-mile project from I-376 to U.S. 22 (also known as the Findlay Connector) which opened to traffic in October 2006; (2) the 13-mile project from U.S. 22 to Interstate 79 (I-79), which opened on October 15, 2021; and (3) the remaining Southern Beltway project, from I-79 to the Mon/Fayette Expressway, which received environmental clearance in May 2009.

I-95 Interchange

I-95 was completed in 1969 without an interchange connecting it to the Turnpike Mainline. Interstate travelers were required to either by-pass the Philadelphia area entirely or exit the interstate system and navigate a complex system of local roadways to access I-95 again in New Jersey.

The Commission completed the first of three phases of its Pennsylvania Turnpike/I-95 Interchange Project in September 2018. The main objectives of the Interchange Project are to improve the linkage between I-95 and the Turnpike Mainline to create continuity in the interstate system, relieve congestion on local roads which are currently used by travelers to make the connection between I-95 and the Turnpike Mainline, create additional capacity on the Turnpike Mainline and I-95 to accommodate the transfer of traffic from the local roadway system, and improve travel times through the interchange area.

The first phase of the Interchange Project included preparatory work and construction of a portion of the interchange between I-95 and the Turnpike Mainline, including northbound I-95 to the eastbound Turnpike Mainline and westbound Turnpike Mainline to southbound I-95. This phase included construction of a new Mainline toll plaza and a cashless tolling plaza westbound, both of which opened in January 2016. The first phase of the Interchange Project was completed and open to traffic in September 2018. The portion of the Turnpike Mainline from the Interchange Project eastward to the Delaware River Bridge in Bucks County has been redesignated as Interstate 95. The second phase of the Interchange Project will include the completion of the reconstruction and widening of the remaining interchange connectors. The third phase will be the construction of a new wider bridge over the Delaware River, replacing the existing bridge. Funding for the initial design costs of the subsequent phases was included in the Fiscal Year 2024 Capital Plan.

Economic Outlook

Pennsylvania benefits from a highly diversified economy with a mix of industries. No single employment sector dominates Pennsylvania. The state includes two of the larger metro areas in the country in Philadelphia and Pittsburgh, with the remainder of the state featuring smaller cities and towns that support both service and goods-producing sectors. The state's education providers, especially its notable research universities, not only provide jobs on campus but also help develop new businesses. As of January 2023, Pennsylvania total nonfarm employment was up 0.8 percent from 2022 levels. The expected pullback in the national economy is projected to cause a gradual decrease in payrolls across the country in 2023. As a result, total nonfarm payrolls in the state are projected to drop by 1.0 percent over the period from Q1 2023 to Q1 2024.

Natural gas production in Pennsylvania has shown little growth for several months despite historically high output prices. The rapid increase in production over the last decade or so spurred a wave of pipeline-building to move the gas to markets, but that buildout has since stalled, creating a firm ceiling on output in the short-to-medium term. The state's massive reserve of natural gas in the Marcellus and Utica Shales also led to construction of a large plant in western Pennsylvania by Royal Dutch Shell. Part of the plant's activity includes turning natural gas liquids into 1.6 million metric tons of pellets to be used in producing plastics. The plant began production in late 2022 and employs 600. The state is also pursuing projects in developing hydrogen production and carbon capture and storage, part of the ongoing evolution of the energy sector.

The state's high-tech sectors continue to make immense contributions to Pennsylvania's economic growth. Pittsburgh has emerged as a leading center of research into commercial development of robotics, advanced manufacturing, artificial intelligences, and related technologies. Philadelphia's life science sector, in the meantime, is seeing a resurgence of investment in development and manufacturing of new technologies. Children's Hospital of Philadelphia is set to begin construction of a 290,000-square-foot research center on the east bank of the Schuylkill River. The new facility will continue the hospital's work in cell-and-gene therapy. Pittsburgh International Airport's cargo facility will undergo an expansion and upgrade that will bring new technology and increased capacity.

Pennsylvania has posted steady employment gains over the past year. However, health care services, notably in hospitals, nursing homes, and daycare centers, have had more difficulty in restoring jobs than initially anticipated. High-tech fields such as artificial intelligence, industrial automation, and biosciences will see the most growth, while more traditional fields such as legal services will see more moderate gains.

Internal Control

Management of the Commission is responsible for establishing and maintaining internal controls designed to ensure that the assets of the Commission are protected from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America. The internal controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgements by management.

Trust Indentures

Operations of the Commission are substantially controlled by the provisions of five separate Trust Indentures (collectively referred to as Indentures):

- A Senior Trust Indenture dated July 1, 1986, which was amended and restated as of March 1, 2001, as supplemented, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- An Oil Franchise Tax Trust Indenture dated August 1, 1998, as supplemented, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- A Registration Fee Revenue Trust Indenture dated August 1, 2005, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- A Subordinate Trust Indenture dated April 1, 2008, as supplemented, between the Commission and Computershare Trust Company, N.A., as successor Trustee; and
- A Special Obligation Trust Indenture dated September 1, 2014, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee.

Accordingly, certain activities of the Commission are restricted by these Indentures.

As demonstrated by the statements included in the financial section of this report, the Commission continues to meet its responsibility for sound financial management and compliance with the Indentures.

Other Information

Awards

Government Finance Officers' Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Pennsylvania Turnpike Commission for its annual comprehensive financial report (ACFR) for the fiscal year ended May 31, 2022. This was the 35th consecutive year that the Commission has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized ACFR. The report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current ACFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Independent Audit

The Trust Indentures require an annual audit of the Commission's financial statements be performed by independent certified public accountants. The accounting firm of SB & Company, LLC was engaged by the Commission to perform the audit for the fiscal year ended May 31, 2023. The independent public accountants' report on the financial statements is included in the financial section of this report.

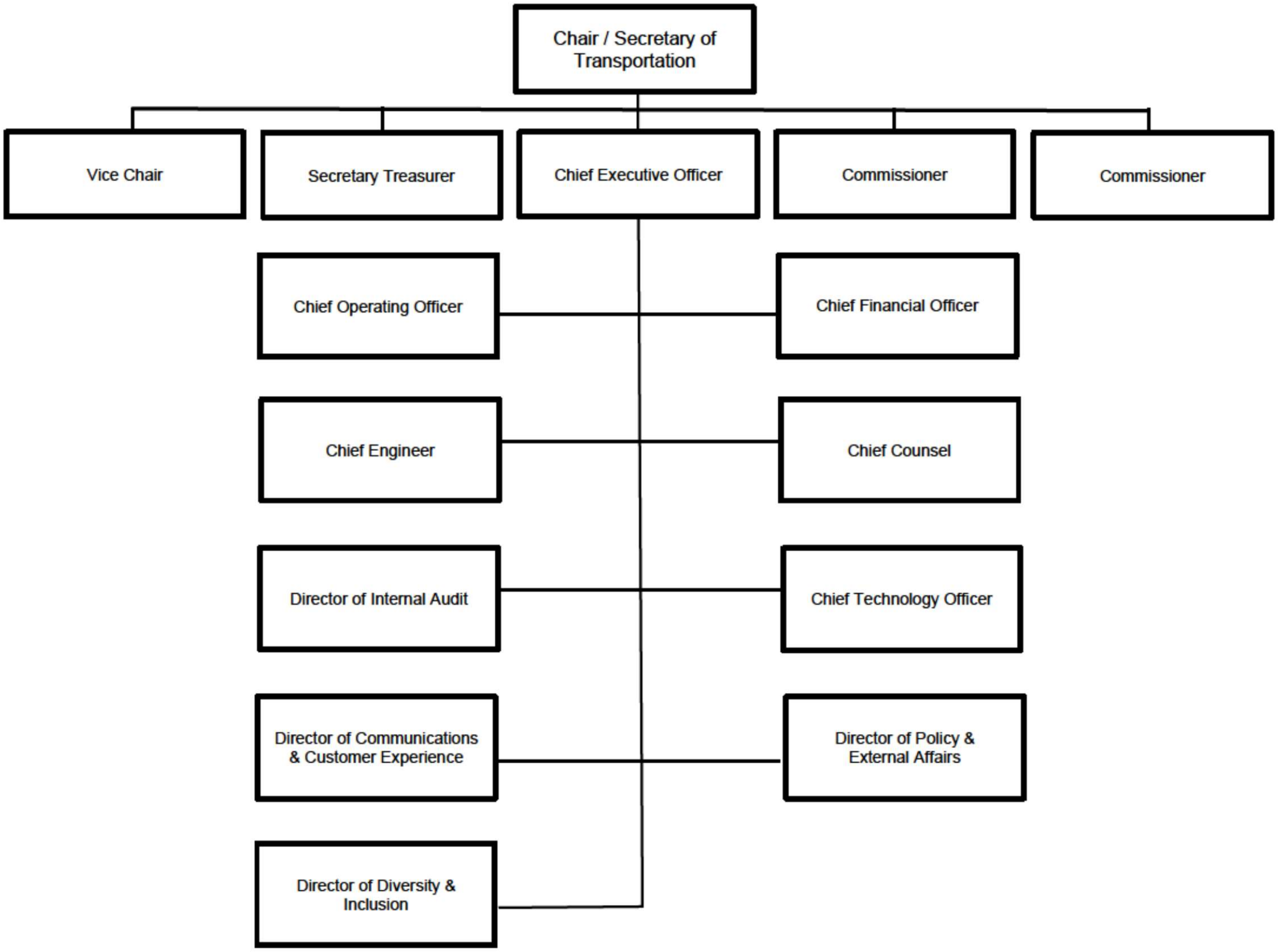
Acknowledgments

We wish to express our sincere appreciation to the staff of the Accounting and Financial Reporting and Finance departments whose time and dedicated effort made this report possible.

In addition, without the leadership and support of the Commissioners and executive staff of the Pennsylvania Turnpike Commission, preparation of this report would not have been possible.

Richard C Dreher Digitally signed by Richard C Dreher Date: 2023.10.06 13:58:32 -04'00'

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Organization Chart
As of May 31, 2023



PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
List of Principal Officials
As of May 31, 2023

Title	Name
Commission Chair / Secretary of Transportation	Michael Carroll
Commission Vice Chair	William K. Lieberman
Commission Secretary Treasurer[1]	Sean Logan
Commissioner	Pasquale T. Deon, Sr.
Commissioner	Wadud Ahmad, Esq.[1]
Chief Executive Officer	Mark P. Compton
Chief Operating Officer	Craig R. Shuey
Chief Financial Officer	Richard C. Dreher
Chief Engineer	Bradley J. Heigel, P.E.
Chief Counsel	Doreen A. McCall, Esq.
Chief Technology Officer	Robert J. Taylor, P.E., PTOE
Director of Communications & Customer Experience	Carl E. Defebo, Jr.
Director of Policy & External Affairs	Kelli E. Roberts
Director of Internal Audit	Joan Resek
Director of Diversity & Inclusion	Catherine Clements-Jenkins

[1] On June 6, 2023, Commissioner Ahmad resigned. On June 27, 2023, Dr. Keith Leaphart was confirmed by the Pennsylvania State Senate to fill the vacancy. Subsequently, at Dr. Leaphart's first Commission meeting (July 5, 2023), the Commissioners reorganized. Dr. Leaphart was elected as the Secretary Treasurer.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Pennsylvania Turnpike Commission

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

May 31, 2022

Christopher P. Morrill

Executive Director/CEO

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FINANCIAL SECTION

SB & COMPANY, LLC
KNOWLEDGE • QUALITY • CLIENT SERVICE

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

The Commissioners
Pennsylvania Turnpike Commission

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and fiduciary activities of Pennsylvania Turnpike Commission (the Commission), a component unit of the Commonwealth of Virginia, as of and for the years ended May 31, 2023 and 2022, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the respective financial position of the business-type activities and fiduciary activities of the Commission as of May 31, 2023 and 2022, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

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

Emphasis of Matter

Change in Accounting Principle

As discussed in Note 2 to the financial statements, effective July 1, 2021, the Commission adopted new accounting guidance for leases. The guidance requires lessees to recognize a right-to-use lease asset and corresponding lease liability and lessors to recognize a lease receivable and corresponding deferred inflow of resources for all leases with lease terms greater than twelve months. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

The Commission's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, 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.

1500 Market Street • 12th Floor, East Tower • Philadelphia • Pennsylvania 19102 • P 215.665.5749 • F 215.569.8228

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 Commission'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.

Auditor's 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 auditor's report that includes our opinions. 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 Commission'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 Commission'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

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the Schedule of Commission's Proportionate Share of Net Pension Liability – Pennsylvania State Employees' Retirement System – Pension Fund, the Schedule of Commission's Contributions – Pennsylvania State Employees' Retirement System – Pension Fund, the Schedule of Changes in the Commission's Net OPEB Liability and Related Ratios, and the Schedule of Commission's Contributions to the Other Postemployment Welfare Plan Program on pages 17 through 30 and pages 118 through 123 be presented to supplement the basic financial statements.

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Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board 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 audit 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 audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Commission's basic financial statements. The Section Information on pages 124 through 137 is presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Section Information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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 Section Information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information Included in the Annual Report

Management is responsible for the other information included in the Annual Comprehensive Financial Report. The other information comprises the introductory and statistical sections but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Philadelphia, Pennsylvania
October 6, 2023

SB + Company, LLC

The management of the Pennsylvania Turnpike Commission (hereinafter referred to as the Commission) offers this narrative overview and analysis of the Commission's business-type (enterprise fund) and fiduciary (fiduciary fund) activities for the years ended May 31, 2023 and 2022, which should be read in conjunction with the Commission's financial statements.

Financial Highlights

- The Commission implemented Government Accounting Standards Board (GASB) Statement No. 87, *Leases*, for fiscal year 2023. This included restatement of some May 31, 2022 balances.
- In July 2021, the Commission made its final $450.0 million payment to PennDOT, as mandated by Act 44 and Act 89.
- Opened the Southern Beltway in October 2021 which resulted in $681.4 million in assets under construction being moved to infrastructure assets.

Overview of the Basic Financial Statements

This Management's Discussion and Analysis (MD&A) is intended to serve as an introduction to the Commission's enterprise and fiduciary fund financial statements (the financial statements). While the Commission is considered a discretely presented component unit of the Commonwealth of Pennsylvania (Commonwealth), it is also an enterprise fund. Therefore, the Commission's financial statements are presented in a manner similar to a private-sector business and have been prepared according to accounting principles generally accepted in the United States of America (U.S. GAAP). All of the current year's revenues are recorded when earned and expenses are recorded as they are incurred, regardless of when the cash is received or disbursed.

The Statements of Net Position present information on all of the Commission's assets and deferred outflows of resources, liabilities and deferred inflows of resources, with the differences being reported as net position. Over time, increases or decreases in net position serve as a relative indicator of the change in financial position of the Commission.

The Statements of Revenues, Expenses, and Changes in Net Position show the result of the Commission's total operations during the fiscal year and reflect both operating and nonoperating activities and capital contributions. Changes in net position (increases or decreases) reflect current year activities and the impact on the overall financial position of the Commission.

The Statements of Cash Flows provide a detailed analysis of all sources and uses of cash. The direct method of cash flows is presented, along with a reconciliation of operating income to net cash provided by operating activities. The Statements of Cash Flows are divided into the following activities sections – operating, investing, capital and related financing, and noncapital financing.

The Pennsylvania Turnpike Commission (the Employer) maintains an other postemployment welfare plan program (the Plan) for the purpose of providing non-pension other postemployment benefits (OPEB) for employees who meet the age and service requirements outlined in the Employer's plan documents. In accordance with GASB Statement No. 84, *Fiduciary Activities*, the Plan is a fiduciary component unit of the Commission. Fiduciary funds are used to account for resources held for the benefit of parties outside the Commission.

Overview of the Basic Financial Statements *(continued)*

The Statements of Fiduciary Net Position present information on all of the Plan's assets, liabilities and fiduciary net position. Over time, increases or decreases in fiduciary net position serve as a relative indicator of the change in the financial position of the Plan.

The Statements of Changes in Fiduciary Net Position present information about the Plan's additions to, deductions from, and net increase (or decrease) in fiduciary net position. Changes in fiduciary net position (increases or decreases) reflect the current fiscal year's impact upon the overall financial position of the Plan.

Notes to the financial statements contain information and offer explanations to the financial statements. The notes are intended to assist the reader in understanding the Commission's financial statements.

Financial Analysis

Comparative Condensed Statements of Net Position

	May 31		
	2023	2022 (RESTATED)	2021
		(In thousands)	
Assets and deferred outflows of resources			
Current assets	$ 2,239,543	$ 2,234,990	$ 1,460,205
Noncurrent investments	1,037,627	1,298,734	1,255,843
Capital assets, net of accumulated depreciation	7,164,775	6,771,182	6,676,046
Other assets	178,831	222,001	32,620
Total assets	10,620,776	10,526,907	9,424,714
Total deferred outflows of resources	399,559	382,926	545,956
Total assets and deferred outflows of resources	11,020,335	10,909,833	9,970,670
Liabilities and deferred inflows of resources			
Current liabilities	1,282,098	1,002,358	1,135,109
Debt, net of unamortized premium	16,566,893	16,843,788	15,323,360
Net pension/OPEB liability	331,574	219,303	303,263
Other noncurrent liabilities	105,509	149,314	278,928
Total liabilities	18,286,074	18,214,763	17,040,660
Total deferred inflows of resources	318,876	432,024	204,978
Total liabilities and deferred inflows of resources	18,604,950	18,646,787	17,245,638
Net position			
Net investment in capital assets	(1,476,501)	(1,422,146)	(1,115,845)
Restricted for construction purposes	320,558	311,045	276,847
Restricted for debt service	84,920	64,781	45,913
Unrestricted	(6,513,592)	(6,690,634)	(6,481,883)
Total net position	$ (7,584,615)	$ (7,736,954)	$ (7,274,968)

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

Financial Analysis *(continued)*

Comparative Condensed Statements of Net Position *(continued)*

The Commission's total net position increased $152.3 million for the fiscal year ended May 31, 2023. This increase in net position is mainly the result of the reduction in annual payment requirements under Act 44, Act 89 and the Amended Lease and Funding Agreement (Amended Funding Agreement) from $450.0 million to $50.0 million. The Commission's total net position decreased $462.0 million for the fiscal year ended May 31, 2022. This decrease in net position was mostly due to the requirements of Act 44, Act 89 and the Amended Funding Agreement between the Commission and Pennsylvania Department of Transportation (PennDOT) and costs associated with the related debt. Please refer to Note 10, Commitments and Contingencies, of the financial statements and to the Events That Will Impact Financial Position section of this MD&A for additional information regarding Act 44, Act 89 and the Amended Funding Agreement between the Commission and PennDOT. See also Note 8, Debt, in reference to the related debt.

Restricted net position is restricted for construction projects and debt service as defined in Trust Indentures and applicable bond issue official statements.

The Commission's total assets and deferred outflows of resources increased by $110.5 million in fiscal year 2023. This 2023 increase is mostly related to increases in capital assets of $393.6 million offset by a decrease in cash and investments of $283.3 million. The increase in capital assets is mostly related to capital asset additions of $806.9 million, offset by $408.8 million of depreciation expense. The decrease in cash and investments is primarily due to decreased unspent proceeds related to Oil Franchise Tax and Mainline Senior bond issuances.

Total liabilities and deferred inflows of resources decreased by $41.8 million in fiscal year 2023. The decrease for fiscal year 2023 was mainly related to Oil Franchise Tax and Motor License Registration Fee Debt principal payments exceeding accretion of Capital Appreciation Bonds by $35.4 million. In addition, Mainline Motor License Fund Enhanced principal payments exceeded accretion of Capital Appreciation Bonds by $8.7 million. The expected decreases related to the Mainline Subordinate Debt related to Act 44, Act 89 and the Amended Funding Agreement were offset by increases in Mainline Senior Debt. See Note 8, Debt, for additional information regarding debt activity. Please refer to Note 10, Commitments and Contingencies, of the financial statements and to the Events That Will Impact Financial Position section of this MD&A for additional information regarding Act 44, Act 89 and the Amended Funding Agreement between the Commission and PennDOT.

Financial Analysis *(continued)*

Comparative Condensed Statements of Net Position *(continued)*

The Commission's total assets and deferred outflows of resources increased by $939.2 million in fiscal year 2022. This 2022 increase is mostly related to increases in cash and investments of $813.3 million, capital assets of $95.1 million and other assets of $189.4 million. These increases were offset by a decrease in deferred outflows of resources of $163.0 million. The increase in cash and investments is the primarily the result of new money bond issuances for Mainline Senior and Oil Franchise which increased the balances in their construction accounts by approximately $653.2 million. The increase in capital assets is mostly related to capital asset additions of $578.2 million, offset by $431.2 million of depreciation expense. The increase in other assets is due to the net OPEB liability becoming a net OPEB asset based on the most recent actuarial valuation as described in Note 12 as well as the implementation of GASB Statement No. 87 which restated fiscal year 2022 balances. The decrease in deferred outflows of resources is mostly related to decreases in deferred outflows of resources from hedging derivatives which is the result of the cumulative change in fair values and a decrease in deferred outflows of resources from refunding bonds which is the result of refunding Mainline Senior, Mainline Subordinate and Oil Franchise debt and the related amortization.

Total liabilities and deferred inflows of resources increased by $1,401.1 million in fiscal year 2022. The increase for fiscal year 2022 was mainly related to the issuance of Mainline Senior, Mainline Subordinate and Oil Franchise debt. See Note 8, Debt, for additional information regarding the new issuances of debt. Please refer to Note 10, Commitments and Contingencies, of the financial statements and to the Events That Will Impact Financial Position section of this MD&A for additional information regarding Act 44, Act 89 and the Amended Funding Agreement between the Commission and PennDOT.

Financial Analysis *(continued)*

Comparative Statements of Revenues, Expenses, and Changes in Net Position

	Year ended May 31		
	2023	**2022 (RESTATED)**	**2021**
		(In thousands)	
Operating revenues			
Fares	$ 1,540,705	$ 1,459,916	$ 1,190,419
Other	55,942	47,283	41,130
Total operating revenues	1,596,647	1,507,199	1,231,549
Operating expenses			
Cost of services	536,313	438,923	509,381
Depreciation	408,785	431,195	373,924
Total operating expenses	945,098	870,118	883,305
Operating income	651,549	637,081	348,244
Nonoperating revenue (expenses)			
Investment (loss) earnings	55,950	(71,591)	15,336
Other nonoperating revenue	12,728	21,503	12,996
Act 44 payments to PennDOT	(50,000)	(450,000)	(450,000)
Capital assets transferred to Commonwealth	(2,852)	(51,908)	(2,769)
Interest and bond expense	(685,346)	(716,212)	(671,774)
Nonoperating expenses, net	(669,520)	(1,268,208)	(1,096,211)
Loss before capital contributions	(17,971)	(631,127)	(747,967)
Capital contributions	170,310	169,141	164,147
Increase (decrease) in net position	152,339	(461,986)	(583,820)
Net position at beginning of year, as restated[1]	(7,736,954)	(7,274,968)	(6,691,148)
Net position at end of year, as restated[1]	$ (7,584,615)	$ (7,736,954)	$ (7,274,968)

[1] The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

For the fiscal years ended May 31, 2023 and 2022, operating and nonoperating revenues totaled $1,665.3 million and $1,457.1 million, respectively, while operating and nonoperating expenses totaled $1,683.3 million and $2,088.2 million, respectively.

Total operating and nonoperating revenues for fiscal year 2023 were $208.2 million, or 14.3% higher than fiscal year 2022. The increase is due primarily to an increase in fare revenues and a $127.5 million improvement in investment returns resulting from rising interest rates during fiscal year 2023. Fare revenues increased $80.8 million because of increased traffic volumes and from the January 2023 toll increase of 5.0% for all customers as well as the full-year impact of the January 2022 toll increase of 5.0% for all customers, except those travelling on the Southern Beltway.

Financial Analysis *(continued)*

Comparative Statements of Revenues, Expenses, and Changes in Net Position *(continued)*

Total operating and nonoperating revenues for fiscal year 2022 were $197.2 million, or 15.7% higher than fiscal year 2021. The increase is due primarily to a $275.7 million increase in operating revenue that was the result of the increase in traffic as the impact of the COVID-19 pandemic had diminished along with the January 2022 toll increase of 5.0% for all customers except those travelling on the Southern Beltway, as well as the full-year impact of the January 2021 toll increase of 6.0% for all customers. This was partially offset by the $86.9 million change from investment earnings to investment loss.

Total operating and nonoperating expenses for fiscal year 2023 were $404.9 million lower than fiscal year 2022. This is primarily due to the $400.0 million decrease in Act 44/89 Payments to PennDOT. Please refer to Note 10, Commitments and Contingencies, of the financial statements and to the Events That Will Impact Financial Position section of this MD&A for additional information regarding Act 44, Act 89 and the Amended Funding Agreement between the Commission and PennDOT.

Total operating and nonoperating expenses for fiscal year 2022 were $80.4 million higher than fiscal year 2021. This is primarily due to a $57.3 million increase in depreciation expense, a $44.4 million increase in interest and bond expenses and a $49.1 million increase in capital assets transferred to the Commonwealth. These changes are offset with a $70.5 million decrease in cost of services.

Capital contributions increased by $1.2 million in fiscal year 2023 due to a $2.9 million increase in Federal reimbursements offset with a $1.0 million decrease in Oil Company Franchise Tax revenues. Capital contributions decreased by $5.0 million in fiscal year 2022 due to a $9.2 million increase in Oil Company Franchise Tax revenues offset with a $3.8 million decrease in Federal reimbursements. See Note 2.

Financial Analysis *(continued)*

Capital Assets and Debt Administration

Capital Assets

Capital assets consist of land and intangible assets (right-of-way easements), assets under construction, buildings, improvements, equipment and infrastructure. Infrastructure assets are typically items that are immovable such as highways, bridges and tunnels.

	Year ended May 31		
	2023	2022	2021
		(In thousands)	
Capital assets not being depreciated	$ 1,957,256	$ 1,830,670	$ 2,730,566
Capital assets being depreciated	12,553,781	11,957,535	10,694,766
Accumulated depreciation	7,346,262	7,017,023	6,749,286
Total capital assets being depreciated, net	5,207,519	4,940,512	3,945,480
Total capital assets	$ 7,164,775	$ 6,771,182	$ 6,676,046

The Commission's investment in capital assets as of May 31, 2023 amounted to $14.5 billion of gross asset value with accumulated depreciation of $7.3 billion, leaving a net book value of $7.2 billion. The net book value of capital assets as of May 31, 2022 was $6.8 billion. Capital assets represented 65.0% and 62.1% of the Commission's total assets and deferred outflows of resources as of May 31, 2023 and 2022, respectively.

Assets under construction at the end of fiscal year 2023 were $1,481.8 million, which was $112.0 million higher than in fiscal year 2022. Assets under construction at the end of fiscal year 2022 were $1,369.8 million, which was $918.5 million lower than in fiscal year 2021. In fiscal year 2023, $665.1 million of constructed capital assets were completed, which was $800.5 million less than the $1,465.6 million of constructed capital assets completed in fiscal year 2022. In addition to constructed capital assets, the Commission had capital asset additions from purchases of approximately $29.8 million and $31.2 million in fiscal years 2023 and 2022, respectively.

The Commission's Ten-Year Capital Plan (i) continues the Commission's efforts for total roadway reconstruction and resurfacing, (ii) continues the rehabilitation of structurally deficient bridges, (iii) provides for the renovation of various tunnels, (iv) continue to provide for the implementation of Open Road Tolling, and (v) provides for the development and installation of a fiber optic network. A high priority for the Commission is the ongoing full depth roadway total reconstruction of the east/west Turnpike Mainline and Northeast Extension. This work includes the reconstruction and widening of the roadway, the widening of the median, replacement of both mainline and overhead bridges as well as many safety enhancements. To date, approximately 155 miles of total reconstruction have been completed. Currently, approximately 23 miles are in construction and approximately 81 miles are in design. Also, the Commission completed two miles of brand-new roadway and 61 miles of roadway resurfacing during fiscal year 2023, helping to maintain a quality-riding surface with a Turnpike System-wide median IRI (International Roughness Index) of 65, which is rated as good.

Financial Analysis *(continued)*

Capital Assets and Debt Administration *(continued)*

Capital Assets (continued)

In fiscal year 2023, the Commission constructed four new bridges, completely replaced seven aging original bridges with new bridges, redecked or rehabilitated another eight bridges, constructed three new retaining walls and one new sound wall. Of the Commission's bridges, 865 bridges that are inspected biennially, 1.9% are rated structurally deficient which is below the national average of 6.9%. All 15 bridges currently rated structurally deficient are either in construction or design for rehabilitation.

The Commission has five sets of tunnels across the system. The Tuscarora Tunnel is currently going through a complete rehabilitation and will be completed the end of 2023. Blue and Kittatinny Tunnels are in final design for a complete rehabilitation and are scheduled to commence construction within the next five years.

Facility projects continue to focus on environmental and safety compliance, and on the maintenance and repair of existing buildings including HVAC, electrical and plumbing systems based on deficiencies identified during facility condition assessments. The new Eastern Training Facility and Devault Maintenance Facility are both in construction. Design has started on the new Bowmansville, Harrison City and New Cumberland Maintenance Facilities. Design for a new Trades Building and Pennsylvania State Police Barracks in District 3 has also begun.

Electric vehicle (EV) charging stations have been installed at Oakmont Plum, New Stanton, North Somerset, South Somerset, Bowmansville, Peter J. Camiel, King of Prussia, and Hickory Run Northbound and Southbound service plazas.

The Mon/Fayette Expressway is open to traffic from the Pennsylvania/West Virginia line to PA 51 in Jefferson Hills Borough, a distance of 48 miles. The preliminary design for the remainder of the Mon/Fayette Expressway project, extending from PA Route 51 to Interstate Route 376 in Pittsburgh, has been completed. The current estimates to complete the final 14 miles of the Mon/Fayette Expressway to Interstate Route 376 are in excess of $2.0 billion. Limited funding provided through Act 89 will be used to advance this project.

The Southern Beltway is a series of three independent projects that extend from the Mon/Fayette Expressway near Finleyville to Interstate 376 (I-376) at the Pittsburgh International Airport. One project constructed as part of the Southern Beltway, a six-mile section of toll road in Allegheny County that connects I-376 to U.S. Route 22 (U.S. 22), is in operation. The project from U.S. 22 to Interstate 79 (I-79) opened in October 2021. The project from I-79 to Mon/Fayette Expressway is currently in the final design phase.

The Commission has no legal obligation to complete the unfinished portions of the Mon/Fayette Expressway and Southern Beltway projects at this time.

Financial Analysis *(continued)*

Capital Assets and Debt Administration (continued)

Capital Assets (continued)

The Commission completed the first of three phases of its Pennsylvania Turnpike/I-95 Interchange Project in September 2018. The main objectives of the Interchange Project are to improve the linkage between I-95 and the Turnpike Mainline to create continuity in the interstate system, relieve congestion on local roads which are currently used by travelers to make the connection between I-95 and the Turnpike Mainline, create additional capacity on the Turnpike Mainline and I-95 to accommodate the transfer of traffic from the local roadway system, and improve travel times through the interchange area.

The first phase of the Interchange Project included preparatory work and construction of a portion of the interchange between I-95 and the Turnpike Mainline, including northbound I-95 to the eastbound Turnpike Mainline and westbound Turnpike Mainline to southbound I-95. This phase included construction of a new mainline toll plaza and a cashless tolling plaza westbound, which opened in January 2016. The first phase of the Interchange Project was completed and open to traffic in September 2018. The portion of the Turnpike Mainline from the Interchange Project eastward to the Delaware River Bridge in Bucks County has been redesignated as Interstate 95. The second phase of the Interchange Project will include the completion of the reconstruction and widening of the remaining interchange connectors. The third phase will be the construction of a new wider bridge over the Delaware River, replacing the existing bridge. Funding for the initial design costs of the subsequent phases is included in the Fiscal Year 2024 Capital Plan.

The above paragraphs describe the changes in capital assets occurring during the fiscal years ended May 31, 2023 and 2022. Please refer to the capital assets section in the notes to the financial statements (Note 5) for schedules summarizing changes in capital assets.

Debt Administration – Mainline

In July 2021, the Commission issued $385,800,000 of 2021 Series B Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2051. The 2021 Series B Senior Revenue Bonds were issued to refund a portion of the 2014 Series B-1 Senior Revenue Bonds ($150,000,000), 2018 Series A-1 Senior Revenue Bonds ($39,710,000), 2018 Series B Senior Revenue Bonds ($70,000,000), to finance the cost of various capital expenditures set forth in the Commission's Ten-Year Capital Plan, including but not limited to the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or rehabilitation of certain interchanges and for paying the costs of issuing the 2021 Series B Senior Revenue Bonds.

In July 2021, the Commission issued $393,790,000 of 2021 Series B Subordinate Revenue Bonds at a fixed rate with a maturity date of December 1, 2051. The 2021 Series B Subordinate Revenue Bonds were issued primarily to finance a portion of the cost of making payments to PennDOT in accordance with Act 44 and Act 89 and paying the cost of issuing the 2021 Series B Subordinate Revenue Bonds.

Financial Analysis *(continued)*

Capital Assets and Debt Administration *(continued)*

Debt Administration – Mainline (continued)

In November 2021, the Commission issued $275,000,000 of 2021 Series C Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2051. The 2021 Series C Senior Revenue Bonds were primarily issued to refund a portion of the 2011 Series A Senior Revenue Bonds ($8,445,000), to finance the cost of various capital expenditures set forth in the Commission's Ten-Year Capital Plan, including but not limited to the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or rehabilitation of certain interchanges and for paying the costs of issuing the 2021 C Senior Revenue Bonds.

In November 2021, the Commission cash defeased the December 1, 2022 and December 1, 2023 maturities of the Commission's 2011 Series B Subordinate Revenue Bonds ($7,560,000) and 2012 Series A Subordinate Revenue Bonds ($5,620,000).

In November 2021, the Commission cash defeased the December 1, 2022 through December 1, 2024 maturities of the Commission's 2011 Series B Motor License Fund-Enhanced Subordinate Special Revenue Bonds ($1,845,000) and 2012 Series A Motor License Fund-Enhanced Subordinate Special Revenue Bonds ($2,340,000).

In April 2022, the Commission issued, as a Direct Placement, $291,850,000 of 2022 First Series Subordinate Revenue Refunding Bonds at a variable rate with a maturity of December 1, 2041. The 2022 First Series Subordinate Revenue Refunding Bonds were primarily issued to refund the 2017 First Series Subordinate Revenue Refunding Bonds and for paying the costs of issuing the 2022 First Series Subordinate Revenue Refunding Bonds.

In September 2022, the Commission issued $254,730,000 of 2022 Series A Senior Revenue Refunding Bonds at a fixed rate with a maturity date of December 1, 2041. The 2022 Series A Senior Revenue Refunding Bonds were issued pursuant to the Tender Offer to refund a portion of the 2013 Series C Senior Revenue Bonds ($23,875,000), 2014 Series A Senior Revenue Bonds ($15,295,000), 2014 Series C Senior Revenue Bonds ($43,055,000), 2014 Series Refunding Senior Revenue Bonds ($140,830,000), 2015 Series A-1 Senior Revenue Bonds ($23,475,00), 2015 Series B Senior Revenue Bonds ($5,885,000), and 2020 First Series Senior Revenue Refunding Bonds ($21,405,000) and paying for the costs of issuing the 2022 Series A Senior Revenue Refunding Bonds.

In December 2022, the Commission issued $293,840,000 of 2022 Series B Senior Revenue Bonds at a fixed rate with a maturity date of December 1, 2052. The 2022 Series B Senior Revenue Bonds were issued to finance the costs of various capital expenditures set forth in the Commission's current ten-year capital plan, including any amendments thereto, or any prior capital plan including, but not limited to, the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or the rehabilitation of certain interchanges; to refund the 2018 EB-5 Loan 1st Tranche ($50,000,000) and the payment of the costs of issuing the 2022 Series B Senior Revenue Bonds.

Financial Analysis *(continued)*

Capital Assets and Debt Administration *(continued)*

Debt Administration – Mainline (continued)

In March 2023, the Commission issued $343,800,000 of 2023 First Series Subordinate Revenue Refunding Bonds at a fixed rate with a maturity date of December 1, 2043. The 2023 First Series Subordinate Revenue Refunding Bonds were issued pursuant to the Tender Offer to refund a portion of the 2009 Series C Subordinate Revenue Bonds ($26,275,000), 2009 Series E Subordinate Revenue Bonds ($48,350,000), 2013 Series B-3 Subordinate Revenue Bonds ($295,000), 2014 Series A-1 Subordinate Revenue Bonds ($34,210,000), 2014 Series B Subordinate Revenue Bonds ($65,180,00), 2015 Series A-1 Subordinate Revenue Bonds ($23,485,000), 2015 Series B Subordinate Revenue Bonds ($23,145,000), 2016 Refunding Subordinate Revenue Bonds ($24,410,000), 2016 Series A-1 Subordinate Revenue Bonds ($23,090,000), 2017 Series A Subordinate Revenue Bonds ($76,870,000), 2019 First Series Subordinate Revenue Refunding Bonds ($6,555,000), and 2020 First Series Subordinate Revenue Refunding Bonds ($5,500,000); and paying for the costs of issuing the 2023 First Series Subordinate Revenue Refunding Bonds.

Debt Administration – Oil Franchise Tax

In September 2021, the Commission issued $327,520,000 2021 Series A Oil Franchise Tax Senior Revenue Bonds at a fixed rate with a maturity date of December 1, 2051. The 2021 Series A Oil Franchise Tax Senior Revenue Bonds were issued primarily to provide funds for the refunding of the Commission's 2009 Series A-1 Oil Franchise Tax Senior Revenue Bonds ($3,855,000), financing the 2021 Construction Project and paying the costs of issuing the 2021 Series A Oil Franchise Tax Senior Revenue Bonds.

In September 2021, the Commission issued $201,480,000 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds at a fixed rate with a maturity date of December 1, 2053. The 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds were issued primarily to provide funds for the refunding of the Commission's 2009 Series D-1 Oil Franchise Tax Subordinate Revenue Bonds ($19,070,000), 2009 Series D-2 Oil Franchise Tax Subordinate Revenue Bonds ($405,000), financing the 2021 Construction Project, and paying the costs of issuing the 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds.

Debt Administration - Bond Ratings

In August 2022, the Commission received an upgrade to both its Mainline Senior and Subordinate credit ratings from Fitch Ratings. Fitch upgraded the Commission's outstanding Mainline Senior lien bonds to 'AA-' from 'A+' and the Mainline Subordinate lien bonds to 'A' from 'A-'.

In January 2023, the Commission received a downgrade to both its Oil Franchise Tax Senior and Subordinate credit ratings from Fitch Ratings due to the expectations for weakening long-term pledged revenue growth prospects given the Commonwealth of Pennsylvania's declining trend in fuel consumption. Fitch downgraded the Commission's outstanding Oil Franchise Tax Senior lien bonds to 'AA-' from 'AA' and the Oil Franchise Tax Subordinate lien bonds to 'A' from 'A+'.

Financial Analysis *(continued)*

Capital Assets and Debt Administration *(continued)*

Debt Administration - Bond Ratings (continued)

In January 2023, the Commission received an upgrade to its Mainline Senior, Mainline Subordinate and 2005 Motor License Registration Fee credit ratings from S&P Global Ratings. S&P upgraded the Commission's outstanding Mainline Senior lien bonds to 'AA-' from 'A+' and the Mainline Subordinate lien bonds to 'A+' from 'A'. Additionally, S&P upgraded the Commission's outstanding 2005 Motor License Registration Fee bonds to 'AA-' from 'A+'.

In August 2023, the Commission received an upgrade to both its Mainline Senior and Subordinate credit ratings from Moody's Ratings. Moody's upgraded the Commission's outstanding Mainline Senior lien bonds to 'Aa3' from 'A1' and the Mainline Subordinate lien bonds to 'A2' from 'A3'. Additionally, Moody's revised the Commission's revenue bond outlook to stable from positive.

The preceding paragraphs describe debt activity occurring during the fiscal years ended May 31, 2023 and 2022. Please refer to the debt and commitments and contingencies notes to the financial statements (Notes 8 and 10) for more detailed schedules and descriptions of long-term debt and swap activity.

Events That Will Impact Financial Position

On July 18, 2007, Act 44 was enacted, creating a "public-public partnership" between the Commission and PennDOT to provide funding for roads, bridges and transit throughout the Commonwealth. Subsequently, in order to, among other things, effectuate the provisions of Act 44 requiring the Commission to make substantial annual payments to PennDOT, as described in the following paragraphs, the Commission and PennDOT entered into a Lease and Funding Agreement (the Act 44 Funding Agreement), incorporating many of the terms of Act 44.

The Act 44 Funding Agreement also granted the Commission the option to lease the portion of Interstate 80 (I-80) located in the Commonwealth from PennDOT upon, among other things, the approval of the Federal Highway Administration (FHWA) of the conversion of such portion into a toll road (the Conversion). The Conversion was not approved by FHWA and neither the Commission nor PennDOT appealed the decision. The Commission did not exercise its option to lease such portion of I-80, and the period during which the Commission could exercise its option under the Act 44 Funding Agreement lapsed on October 14, 2010, without the Commission effectuating the Conversion or having the ability to do so in the future, leaving all legal, financial and operational responsibility for I-80 solely with PennDOT.

Events That Will Impact Financial Position *(continued)*

Pursuant to Act 44 and the Act 44 Funding Agreement, the Commission is obligated to make scheduled annual payments to PennDOT (*Act 44/Act 89 Payments*). Previously, payments in the amount of $450.0 million were due through 2057, payable in equal quarterly installments, with $200.0 million of the scheduled annual payments supporting road and bridge projects and $250.0 million supporting transit projects throughout the Commonwealth. However, the Commission's current annual Act 44/Act 89 Payment obligation is now $50.0 million. See the following paragraphs for more information on the total amount paid by the Commission under the Amended Funding Agreement.

On November 25, 2013, Act 89 was enacted to provide (i) substantial revenue enhancements to support investment in the Commonwealth's aging transportation infrastructure, and (ii) substantial reductions in the Commission's obligations with respect to the Act 44/Act 89 Payments. The revenue enhancements providing additional funds each year for investment in the Commonwealth's transportation infrastructure were fully implemented in fiscal year 2018.

Revisions to the Commission's Act 44/Act 89 Payment obligations enacted under Act 89 were implemented by Amendment Number One to Lease and Funding Agreement (the *Act 89 Amendment* and together with the Act 44 Funding Agreement, the *Original Amended Funding Agreement*) executed by the Commission and PennDOT on April 4, 2014.

In accordance with Act 89 and the Original Amended Funding Agreement, the Commission's aggregate annual Act 44/Act 89 Payment to PennDOT for fiscal year 2014 through fiscal year 2022 is $450.0 million, with at least $30.0 million of such annual amount required to be paid from current revenues and the remainder expected to be funded by the proceeds of bonds issued under the Subordinate Revenue Indenture.

The Original Amended Funding Agreement was subsequently further amended, on July 31, 2018, by Amendment Number Two to Lease and Funding Agreement (the *Amendment Two)* and on June 11, 2020, by Amendment Number Three to the Lease and Funding Agreement (the *Amendment Three*, and together with the Original Amended Funding Agreement and Amendment Two, the *Amended Funding Agreement*) both of which were executed by all parties to provide current year adjustments for certain due dates for Act 44/Act 89 Payments in fiscal years 2019 through 2021.

Act 89 relieved the Commission from over $15.0 billion in future Act 44/Act 89 Payments to PennDOT during fiscal years 2023 through 2057 (the term of the Amended Funding Agreement), by reducing the Commission's aggregate annual Act 44/Act 89 Payments to PennDOT to $50.0 million, which amount shall be paid from then current revenues of the Commission. Act 89 further provided that commencing with fiscal year 2023, the Commission's $50.0 million scheduled annual Act 44/Act 89 Payments must be used to support Commonwealth mass transit capital and operating needs.

Events That Will Impact Financial Position *(continued)*

The provisions of Act 44 and the Amended Funding Agreement require the Commission to provide a financial plan to the Secretary of the Budget of the Commonwealth on, or before, June 1 of each year that describes the Commission's proposed operating and capital expenditures, borrowings, liquidity and other financial management covenants and policies, estimated toll rates and all other revenue and expenditures for the ensuing fiscal year. Act 44 requires that the financial plan demonstrate that the operation of the Commission can reasonably be anticipated to result in having sufficient funds to make payments due to PennDOT pursuant to the Amended Funding Agreement and Act 44 during the ensuing and future fiscal years. The financial plan does not cover the funding needs for the Mon/Fayette or the Southern Beltway projects, which are separately financed by certain dedicated tax and fee revenue sources of the Commonwealth. Those revenue sources include Oil Franchise Tax Revenues and Registration Fee Revenues and are not pledged to pay debt service on the Commission's Senior Revenue Bonds, Subordinate Revenue Bonds or Subordinate Special Revenue Bonds.

The Commission delivered to the Secretary of the Budget its Financial Plan for Fiscal Year 2024 on June 1, 2023. The Fiscal Year 2024 Financial Plan indicated that in fiscal year 2023, the Commission was able to meet all of its financial covenants and obligations under the Enabling Acts and was able to progress with its then-current Capital Plan.

The Fiscal Year 2024 Financial Plan defines the reasonably expected revenues the Commission will generate necessary to meet required Turnpike operating and maintenance expenses, debt service payments, capital expenses, and liquidity requirements, and includes the adoption of the Commission's Fiscal Year 2024 Ten-Year Capital Plan which was adopted by the Commission in May 2023. The Fiscal Year 2024 Financial Plan indicates that in fiscal year 2023, the Commission was able to meet all of its financial covenants and obligations under the Enabling Acts. A copy of the Fiscal Year 2024 Financial Plan is available on the Commission's website.

Additionally, the Fiscal Year 2024 Financial Plan concludes that the Commission is projected to generate sufficient resources to operate and maintain the Turnpike, provide for its capital investment needs to ensure the System is maintain in a state of good repair, meet debt service requirements, fund required Act 44/Act 89 Payments and maintain internal liquidity. While the Commission's Fiscal Year 2024 Financial Plan is based on reasonable financial assumptions, it is important to recognize that there are inherent uncertainties in projecting resources and obligations over an extended period. Downside risks to the financial plan include, but are not limited to, lower than expected traffic and toll revenues, higher interest and inflation rates, variations in relevant econometrics, and/or greater than projected operating and/or capital costs.

The preceding paragraphs provide a brief overview of Act 44 and Act 89 and their requirements. Please refer to the commitments and contingencies section in the Notes to the Financial Statements (Note 10) for additional information regarding the Commission's commitments under the Amended Funding Agreement. Furthermore, legislation may be introduced that could affect the Commission and its obligations pursuant to Act 44 and Act 89. Also, the Commission cannot predict what other legislation may be considered by the General Assembly during the 2023-2024 or future legislative sessions or if any other proposals or initiatives may lead to the adoption of legislation that may affect the Commission.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Net Position – Business-type activities
May 31, 2023 and 2022
(in thousands)

	2023	2022 (RESTATED)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
Current assets		
Cash and cash equivalents	$ 294,551	$ 318,158
Investments	181,346	46,881
Accounts receivable - net of allowance of $546.6 million and $400.7 million as of May 31, 2023 and 2022, respectively	137,083	126,690
Accrued interest receivable	2,205	1,656
Inventories	23,147	20,408
Restricted current assets		
Cash and cash equivalents	883,150	917,325
Investments	687,991	786,877
Accounts receivable	13,908	13,420
Accrued interest receivable	16,162	3,575
Total current assets	2,239,543	2,234,990
Noncurrent assets		
Investments		
Investments	381,041	458,258
Investments restricted	656,586	840,476
Total investments	1,037,627	1,298,734
Capital assets not being depreciated		
Land and intangibles	475,462	460,908
Assets under construction	1,481,794	1,369,762
Capital assets being depreciated		
Buildings	1,099,651	1,034,358
Improvements other than buildings	190,080	189,597
Equipment	650,946	626,570
Infrastructure	10,613,104	10,107,010
Total capital assets before accumulated depreciation	14,511,037	13,788,205
Less: Accumulated depreciation	7,346,262	7,017,023
Total capital assets after accumulated depreciation	7,164,775	6,771,182
Other assets		
Prepaid bond insurance costs	4,626	5,198
Net OPEB asset	109,651	150,224
Other assets	64,554	66,579
Total other assets	178,831	222,001
Total noncurrent assets	8,381,233	8,291,917
Total assets	10,620,776	10,526,907
Deferred outflows of resources from hedging derivatives	25,860	38,424
Deferred outflows of resources from refunding bonds	239,751	254,237
Deferred outflows of resources from pensions	87,942	39,629
Deferred outflows of resources from OPEB	46,006	50,636
Total deferred outflows of resources	399,559	382,926
Total assets and deferred outflows of resources	$ 11,020,335	$ 10,909,833

The accompanying notes are an integral part of these financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Net Position – Business-type activities *(continued)*
May 31, 2023 and 2022
(in thousands)

	2023	2022 *(RESTATED)*
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES		
Current liabilities		
Accounts payable and accrued liabilities	$ 631,735	$ 570,726
Current portion of debt	527,900	313,740
Unearned income	122,463	117,892
Total current liabilities	1,282,098	1,002,358
Noncurrent liabilities		
Debt, less current portion, net of unamortized premium of $1,520.5 million and $1,544.7 million in 2023 and 2022, respectively	16,566,893	16,843,788
Net pension liability	331,574	219,303
Other noncurrent liabilities	105,509	149,314
Total noncurrent liabilities	17,003,976	17,212,405
Total liabilities	18,286,074	18,214,763
Deferred inflows of resources from hedging derivatives	76,625	53,070
Deferred inflows of resources from service concession arrangements	89,344	96,037
Deferred inflows of resources from refunding bonds	22,591	11,364
Deferred inflows of resources from pensions	38,230	109,329
Deferred inflows of resources from OPEB	53,646	122,950
Deferred inflows of resources from leases	38,440	39,274
Total deferred inflows of resources	318,876	432,024
Total liabilities and deferred inflows of resources	18,604,950	18,646,787
NET POSITION		
Net investment in capital assets	(1,476,501)	(1,422,146)
Restricted for construction purposes	320,558	311,045
Restricted for debt service	84,920	64,781
Unrestricted	(6,513,592)	(6,690,634)
Total net position	$ (7,584,615)	$ (7,736,954)

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

The accompanying notes are an integral part of these financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Revenues, Expenses, and Changes in Net Position – Business-type activities
Years Ended May 31, 2023 and 2022
(in thousands)

	2023	2022 (RESTATED)
Operating revenues		
Fares - net of discounts, adjustments and bad debt expense of $121.0 million and $109.1 million for the years ended May 31, 2023 and 2022, respectively	$ 1,540,705	$ 1,459,916
Other	55,942	47,283
Total operating revenues	1,596,647	1,507,199
Operating expenses		
Cost of services	536,313	438,923
Depreciation	408,785	431,195
Total operating expenses	945,098	870,118
Operating income	651,549	637,081
Nonoperating revenues (expenses)		
Investment (losses) earnings	55,950	(71,591)
Other nonoperating revenues	12,728	21,503
Act 44 and Act 89 payments to PennDOT	(50,000)	(450,000)
Capital assets transferred to the Commonwealth	(2,852)	(51,908)
Interest and bond expense	(685,346)	(716,212)
Nonoperating expenses, net	(669,520)	(1,268,208)
Loss before capital contributions	(17,971)	(631,127)
Capital contributions	170,310	169,141
Increase (decrease) in net position	152,339	(461,986)
Net position at beginning of year, as restated[1]	(7,736,954)	(7,274,968)
Net position at end of year, as restated[1]	$ (7,584,615)	$ (7,736,954)

[1] The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

The accompanying notes are an integral part of these financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Cash Flows – Business-type activities
Years Ended May 31, 2023 and 2022
(in thousands)

	2023	2022 (RESTATED)
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customer tolls and deposits	$ 1,579,233	$ 1,500,901
Cash payments for goods and services	(414,633)	(363,502)
Cash payments to employees	(144,767)	(140,139)
Cash received from other operating activities	11,312	9,960
Net cash provided by operating activities	1,031,145	1,007,220
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sales and maturities of investments	4,676,592	4,271,332
Interest received on investments	37,082	22,627
Purchase of investments	(4,437,514)	(4,774,434)
Net cash provided by (used in) investing activities	276,160	(480,475)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital grants received from other governments	5,212	6,501
Proceeds from Motor License Registration fees	28,000	28,000
Proceeds from Oil Company Franchise Tax	130,812	136,522
Construction and acquisition of capital assets	(756,833)	(595,008)
Proceeds from sale of capital assets	1,014	1,657
Payments for bond and swap expenses	(7,385)	(9,504)
Payments for debt refundings	(341,272)	(291,931)
Payments for bond maturities	(150,480)	(104,775)
Interest paid on debt	(389,112)	(352,301)
Interest subsidy from Build America Bonds	10,554	21,110
Upfront swap payments	-	3,590
Proceeds from debt issuances	601,826	1,456,590
Net cash (used in) provided by capital and related financing activities	(867,664)	300,451
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Cash payments to PennDOT	(50,000)	(450,000)
Payments for bond and swap expenses	(3,513)	(2,586)
Payments for cash defeasances	-	(17,730)
Payments for debt refundings	(386,473)	(291,850)
Payments for debt maturities	(113,260)	(113,330)
Interest paid on debt	(328,664)	(317,350)
Proceeds from debt issuances	384,487	773,965
Net cash used in noncapital financing activities	(497,423)	(418,881)
(Decrease) increase in cash and cash equivalents	(57,782)	408,315
Cash and cash equivalents at beginning of year	1,235,483	827,168
Cash and cash equivalents at end of year	$ 1,177,701	$ 1,235,483

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

The accompanying notes are an integral part of these financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Cash Flows – Business-type activities *(continued)*
Years Ended May 31, 2023 and 2022
(in thousands)

	2023	2022 (RESTATED)
Reconciliation of operating income to net cash provided by operating activities		
Operating income	$ 651,549	$ 637,081
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation	408,785	431,195
Change in operating assets and liabilities		
Accounts receivable	(12,576)	(6,515)
Inventories	(2,739)	(1,205)
Other assets	138	9
Net OPEB asset	40,573	(165,015)
Deferred outflows of resources from pensions	(48,313)	11,047
Deferred outflows of resources from OPEB	4,630	20,038
Accounts payable and accrued liabilities	19,327	5,686
Net pension liability	112,272	(69,169)
Other noncurrent liabilities	(1,263)	115
Deferred inflows of resources from pensions	(71,099)	25,766
Deferred inflows of resources from OPEB	(69,305)	118,666
Deferred inflows of resources from leases	(834)	(479)
Net cash provided by operating activities	$ 1,031,145	$ 1,007,220
Reconciliation of cash and cash equivalents to the statements of net position		
Cash and cash equivalents	$ 294,551	$ 318,158
Restricted cash and cash equivalents	883,150	917,325
Total cash and cash equivalents	$ 1,177,701	$ 1,235,483

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

Noncash Investing, Capital and Related Financing and Noncapital Financing Activities

The Commission recorded net increase of $13.4 million and a net decrease of $100.4 million in the fair value of its investments not reported as cash equivalents for the years ended May 31, 2023 and 2022, respectively.

The Commission recorded $75.6 million and $72.4 million for the amortization of bond premiums for the years ended May 31, 2023 and 2022, respectively.

As indicated in Note 8, the Commission refunded various bonds in both fiscal years 2023 and 2022. The fiscal year 2023 refundings resulted in a $34.9 million reclassification from bond premiums (discounts) to deferred inflows of resources from refundings and $7.6 million reclassification from bond premiums (discounts) to deferred outflows of resources from refundings. The fiscal year 2022 refundings and cash defeasances resulted in a $1.0 million reclassification from bond premiums (discounts) to deferred inflows of resources from refundings. Additionally, the Commission recorded $20.1 million and $57.5 million in expenses for amortization of deferred outflows/inflows of resources from refunding bonds for the years ended May 31, 2023 and 2022, respectively.

The accompanying notes are an integral part of these financial statements.

Noncash Investing, Capital and Related Financing and Noncapital Financing Activities *(continued)*

The Commission recorded $0.3 million in expenses for amortization of prepaid bond insurance costs for each of the years ended May 31, 2023 and 2022.

The Commission recorded an interest expense reduction of $6.7 million and $7.4 million for the years ended May 31, 2023 and 2022, respectively, related to terminated derivative instruments.

The Commission recognized total capital contributions of $170.3 million for the fiscal year ended May 31, 2023. Cash received of $164.0 million for the fiscal year ended May 31, 2023 is reported in the capital and related financing activities of this statement. The $6.3 million difference between capital contributions and cash received is the result of a $1.5 million increase in receivables related to these capital contributions and by a $4.8 million noncash capital contribution related to capital assets provided by service plaza operators. The Commission recognized total capital contributions of $169.1 million for the fiscal year ended May 31, 2022. Cash received of $171.0 million for the fiscal year ended May 31, 2022 is reported in the capital and related financing activities of this statement. The $1.9 million difference between capital contributions and cash received is the result of a $7.4 million decrease in receivables related to these capital contributions offset by a $5.5 million noncash capital contribution related to capital assets provided by service plaza operators. See Note 2 for further discussion on capital contributions and Note 6 for further discussion on the service plazas.

As discussed in Note 2 (*Capital Assets Transferred to the Commonwealth of Pennsylvania* section), during fiscal year 2023, the Commission transferred IT equipment and Dynamic Message System signs with a net book value of $2.9 million to PennDOT. The Commission made the following transfers during the fiscal year ended May 31, 2022: infrastructure assets with a net book value of $51.6 million to PennDOT, drones with a net book value of $0.1 million to the Pennsylvania State Police, and a traffic signal with a net book value of $0.2 million to Bristol Township (PA).

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Fiduciary Net Position – OPEB Trust Fund
May 31, 2023 and 2022

	2023	2022
	(in thousands)	
ASSETS		
Cash and cash equivalents	$ 6,900	$ 3,790
Interest and dividends receivable	590	429
Investments		
Equity – stocks	12,202	14,734
Equity – mutual funds	207,497	259,696
Fixed income – mutual funds	72,116	28,655
Fixed income – mortgages	208	-
Fixed income – U.S. Treasuries	43,130	51,228
Fixed income – U.S. Government agency securities	26,111	11,315
Corporate obligations	21,949	28,904
Limited partnerships		
Real estate	64,255	67,089
Commodities	32,994	29,556
Global tactical asset allocation	26,737	35,198
Private debt	16,439	10,399
Private equity	5,390	3,124
Total limited partnerships	145,815	145,366
Hedge fund of funds	23,600	29,412
Total investments	552,628	569,310
Total assets	560,118	573,529
LIABILITIES		
Benefits payable	277	652
Other liabilities	167	264
Total liabilities	444	916
Net position – restricted for OPEB	$ 559,674	$ 572,613

The accompanying notes are an integral part of these financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Statements of Changes in Fiduciary Net Position – OPEB Trust Fund
Years Ended May 31, 2023 and 2022

	2023	2022
	(in thousands)	
ADDITIONS		
Employer contributions	$ 14,652	$ 13,746
Net investment income (loss)		
Interest, dividends, and capital gains income	11,128	18,760
Change in fair value of investments	(16,346)	(38,889)
Investment fees	(928)	(960)
Total net investment loss	(6,146)	(21,089)
Total additions	8,506	(7,343)
DEDUCTIONS		
Benefit payments	21,431	21,344
Administrative expenses	14	2
Total deductions	21,445	21,346
Change in fiduciary net position	(12,939)	(28,689)
Net position – restricted for OPEB		
Beginning of year	572,613	601,302
End of year	$ 559,674	$ 572,613

The accompanying notes are an integral part of these financial statements.

NOTE 1 FINANCIAL REPORTING ENTITY

Accounting principles generally accepted in the United States (U.S. GAAP) require government financial statements to include the primary government and its component units. Component units of a governmental entity are legally separate entities for which the primary government is considered to be financially accountable and for which the nature and significance of their relationship with the primary government are such that exclusion would cause the combined financial statements to be misleading. The primary government is considered to be financially accountable if it appoints a majority of an organization's governing body and is able to impose its will on that organization or there is a potential for the organization to provide specific financial benefits to or impose specific financial burdens on the primary government.

The Pennsylvania Turnpike Commission (the Commission) was created as an instrumentality of the Commonwealth of Pennsylvania (the Commonwealth) on May 21, 1937, with powers to construct, operate, and maintain the Turnpike System and to issue Turnpike revenue bonds, repayable solely from tolls and other Commission revenues. The Commission is considered a discretely presented component unit of the Commonwealth.

The Commission is composed of five members, one of whom is the Secretary of Transportation. The others are appointed by the Governor with the approval of two-thirds of the Senate.

The Commission maintains an Other Postemployment Welfare Plan Program (the Plan), for the purpose of providing benefits to eligible retirees and their dependents. The Plan is a single-employer, defined benefit plan. The Commission established the Pennsylvania Turnpike Commission Retiree Medical Trust (the Trust) on May 30, 2008 as an irrevocable trust, tax-exempt under Section 115 of the Internal Revenue Code, to provide funding of the Plan's other postemployment benefits (OPEB). The Trust is administered by Trustees who are appointed by and serve at the pleasure of the Commission. The chairman and vice chairman of the Trust are appointed by the Trustees and serve two-year terms. In accordance with GASB Statement No. 84, *Fiduciary Activities*, the Plan is a fiduciary component unit of the Commission.

Based on the application of the criteria set forth by the Governmental Accounting Standards Board (GASB), the Commission has determined that it has no other component units.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Commission's business-type activities (enterprise fund) and fiduciary activities (fiduciary fund) have been prepared in conformity with U.S. GAAP as applied to government units. The GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The more significant of the Commission's accounting policies are described in the following paragraphs:

Basis of Accounting

The Commission's enterprise and fiduciary fund financial statements (the financial statements) are presented on the accrual basis of accounting.

Cash Equivalents

The Commission considers all highly liquid debt investment securities that mature within three months of acquisition to be cash equivalents.

Investments

Investments are stated at fair value, except for the following: money market investments are reported at cost which does not materially differ from fair value, certain nonparticipating contracts such as repurchase agreements and other agreements structured as repurchase agreements are reported at cost which does not materially differ from fair value and guaranteed investment contracts are stated at contract value. The Commission categorizes its fair value measurements within the fair value hierarchy established by U.S. GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. See Note 4 for further discussion.

Accounts Receivable

Accounts receivable consist primarily of toll revenue receivables from customers and other E-ZPass agencies, fee revenue receivables from customers and reimbursement receivables from other governments. An allowance for uncollectible accounts receivable is established based on specific identification and historical experience.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Capital Assets

Capital assets consist of land and intangible assets (right-of-way easements), assets under construction, buildings, improvements, equipment and infrastructure. Infrastructure assets are typically items that are immovable such as highways, bridges, and tunnels. Capital assets are stated at cost. Donated capital assets and capital assets received in a service concession arrangement are measured at acquisition value. Acquisitions of capital assets valued at $15,000 or greater are capitalized. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Intangible assets have an indefinite life and, thus, are not depreciated. The following lives are used:

Buildings	10 – 45 years
Improvements other than buildings	15 – 20 years
Equipment	3 – 40 years
Infrastructure	10 – 50 years

Inventories

Inventories are valued at average cost. The cost of inventory is expensed upon use (consumption method).

Leases

The Commission is the lessor for advertising, cell tower, gas royalty and other miscellaneous leases. The miscellaneous category includes, but is not limited to, leases such as commercial, residential, agricultural and license agreements. The Commission recognizes a lease receivable and deferred inflows of resources related to leases in the financial statements.

At the commencement of a lease, the Commission 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 inflows of resources is initially measured as the initial amount of the lease receivable, adjusted for lease payments received at or before the lease commencement date. Subsequently, the deferred inflows of resources is recognized as revenue over the life of the lease term.

Key estimates and judgments include how the Commission determines (1) the discount rate it uses to discount the expected lease receipts to present value, (2) lease term, and (3) lease receipts.

- The Commission uses its estimated incremental borrowing rate as the discount rate for leases.
- The lease term includes the noncancellable period of the lease. Lease receipts included in the measurement of the lease receivable is composed of fixed payments from the lessee.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Leases *(continued)*

The Commission monitors changes in circumstances that would require a remeasurement of its lease and will remeasure the lease receivable and deferred inflows of resources if certain changes occur that are expected to significantly affect the amount of the lease receivable.

Restricted Assets

In accordance with Trust Agreements and Trust Indentures, the Commission has established and maintains certain restricted accounts. Funds have been deposited in these accounts and are restricted for major capital replacements, improvements, betterments, enlargements, capital additions or the payment of debt service related to bonds.

Restricted assets as of May 31, 2023 were as follows:

	Restricted for:		
	Construction	**Debt Service**	**Total**
		(in thousands)	
Cash & cash equivalents	$ 318,228	$ 564,922	$ 883,150
Short-term investments	200,610	487,381	687,991
Accounts receivable	13,908	-	13,908
Interest receivable	1,351	14,811	16,162
Long-term investments	198,288	458,298	656,586
Total	$ 732,385	$ 1,525,412	$ 2,257,797

Restricted assets as of May 31, 2022 were as follows:

	Restricted for:		
	Construction	**Debt Service**	**Total**
		(in thousands)	
Cash & cash equivalents	$ 228,430	$ 688,895	$ 917,325
Short-term investments	578,804	208,073	786,877
Accounts receivable	13,420	-	13,420
Interest receivable	833	2,742	3,575
Long-term investments	242,312	598,164	840,476
Total	$ 1,063,799	$ 1,497,874	$ 2,561,673

Debt Premium/Discount and Prepaid Insurance Costs

Debt premium/discount is being amortized using the effective interest rate method over the varying terms of the bonds issued. Prepaid bond insurance costs (incurred through bond issuances) are being amortized using the straight-line method over the varying terms of the bonds issued.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Unearned Income

Unearned income is primarily related to E-ZPass customer deposits. E-ZPass customers of the Commission are required to deposit funds in advance of anticipated travel. Since this money is collected prior to the customers' travel and revenue recognition, it is recorded as unearned income. The Commission had $122.5 million and $117.9 million classified as unearned income for the fiscal years ended May 31, 2023 and 2022 (as restated), respectively. Additionally, the Commission had $5.2 million and $3.2 million classified as accounts payable and accrued liabilities for the fiscal years ended May 31, 2023 and 2022 (as restated), respectively.

Arbitrage Payable

The Tax Reform Act of 1986 instituted certain arbitrage restrictions with respect to the issuance of tax-exempt bonds after August 31, 1986. Arbitrage regulations deal with the investment of all tax-exempt bond proceeds at an interest yield greater than the interest yield paid to bondholders. Generally, all interest paid to bondholders can be retroactively rendered taxable if rebates are not reported and paid to the Internal Revenue Service (IRS) at least every five years. The Commission had a total arbitrage liability of $0.4 million and $45,800 for fiscal years ended May 31, 2023 and 2022, respectively. The arbitrage liability recorded as accounts payable and accrued liabilities was $0.2 million for May 31, 2023. The arbitrage liability recorded as other noncurrent liabilities was $0.2 million and $45,800 as of May 31, 2023 and 2022, respectively.

Accounting Estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual amounts may differ from those estimates.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Pennsylvania State Employees' Retirement System (SERS) and additions to/deductions from SERS's fiduciary net position have been determined on the same basis as they are reported by SERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Postemployment Benefits Other Than Pensions (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Pennsylvania Turnpike Commission's Other Postemployment Welfare Plan Program (the Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments, which are reported at cost.

Deferred Outflows/Inflows of Resources

The Statements of Net Position report separate sections for deferred outflows and deferred inflows of resources. Deferred outflows of resources represent a consumption of net assets that applies to future periods and so will not be recognized as an outflow of resources (expense) until then. Deferred inflows of resources represent an acquisition of net assets that applies to future periods and so will not be recognized as an inflow of resources (revenue) until then. The Commission has six items that qualify for reporting in these categories: deferred outflows/inflows from its hedging derivative instruments, deferred inflows from its service concession arrangements, deferred outflows/inflows from refunding bonds, deferred outflows/inflows related to pensions, deferred outflows/inflows related to other postemployment benefits and deferred inflows related to leases.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Deferred Outflows/Inflows of Resources *(continued)*

The deferred outflows/inflows of resources related to hedging derivative instruments represent the cumulative change in their fair values. Deferred inflows from the Commission's service concession arrangements represent unamortized capital contributions from service plaza operators and the present value of minimum guaranteed rent payments. Deferred outflows/inflows from refundings are the result of differences in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. Deferred outflows/inflows of resources related to pensions are described further in Note 8. The components of deferred outflows of resources and deferred inflows of resources, other than the difference between the projected and actual earnings on investments, are amortized into pension expense over a closed period, which reflects the weighted average remaining service life of all SERS members beginning the year in which the deferred amount occurs (current year). The annual difference between the projected and actual earnings on SERS investments is amortized over a five-year closed period, beginning the year in which the difference occurs (current year). Deferred outflows/inflows of resources related to OPEB are described further in Note 12. Investment (gains)/losses are recognized in OPEB expense over a period of five years; economic/demographic (gains)/losses and assumption changes or inputs are recognized over the average remaining service life for all active and inactive members. Deferred inflows of resources related to leases represent the unearned revenues for all leases in which the Commission is the lessor.

Net Position

U.S. GAAP requires the classification of net position into three components – net investment in capital assets; restricted; and unrestricted. These classifications are defined as follows:

Net Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Net Position *(continued)*

Restricted – This component of net position consists of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets. The restrictions would be imposed by:

- External parties such as creditors, grantors and contributors,
- Laws or regulations of other governments, or
- Restrictions imposed by law through constitutional provisions or enabling legislation.

Unrestricted – This component of net position consists of the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

Operating Revenues

Revenues associated with operations of the Turnpike System are considered operating revenues. The principal operating revenues of the Commission are fare revenues from customers, offset by discounts, toll-related bad debt and other adjustments. Other operating revenues include service station, restaurant, property and other rental income, as well as revenue from various sponsorship agreements. Also included are electronic toll collection fees related to E-ZPass and Toll By Plate (TBP) programs, as well as related bad debt expense.

Fare Revenues

Fare revenues are recognized when vehicles exit the Turnpike System.

The Commission has installed E-ZPass, a form of electronic toll collection, throughout the Turnpike System. As customers drive through a toll point with an E-ZPass transponder, toll equipment captures the trip information, calculates the toll, and deducts it from the customer's E-ZPass pre-paid account balance. Toll By Plate (TBP) is supplemental to E-ZPass toll collections and utilizes technology where cameras read the license plates of all non-E-ZPass customers, as they pass through each toll gantry. The registered owner of the vehicle is then invoiced for the assessed tolls. For fiscal years 2023 and 2022, approximately 16.0% and 16.5%, respectively, of the fare revenues were realized through TBP, which are included as a part of all-electronic tolling.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

<u>Operating Expenses</u>

Operating expenses relate directly to operating and maintaining the Turnpike System. The principal operating expenses of the Commission are cost of services and depreciation. Other expenses are considered nonoperating expenses.

Cost of Services

Cost of services includes wages and salaries, benefits, utilities, fuels, professional fees and services, PA State Police services, and purchased goods, including materials and supplies.

<u>Utilization of Resources</u>

When both restricted and unrestricted resources are available for use, the Commission's policy is to use restricted resources first and then unrestricted resources as needed.

<u>Nonoperating Revenues (Expenses)</u>

Nonoperating revenues include net investment earnings and other miscellaneous revenues not associated with the operations of the Turnpike System. Nonoperating expenses include: Act 44 and Act 89 payments to PennDOT, capital assets transferred to the Commonwealth, interest and bond expenses, and other miscellaneous expenses not associated with the operations of the Turnpike System.

Act 44 and Act 89 Payments to PennDOT

The Commission and PennDOT entered into a Lease and Funding Agreement, as amended, as required under the terms of Act 44 and Act 89. See Note 10 for more information regarding Act 44 and Act 89.

Capital Assets Transferred to the Commonwealth of Pennsylvania

During the fiscal year ended May 31, 2023, the Commission transferred IT equipment related to the I-95 project to PennDOT. The book value of the equipment was $1.3 million. The Commission also transferred Dynamic Message System signs to PennDOT during the fiscal year ended May 31, 2023. The book value of the signs was $1.6 million.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Nonoperating Revenues (Expenses) *(continued)*

Capital Assets Transferred to the Commonwealth of Pennsylvania (continued)

The Commission and PennDOT entered into an agreement regarding ownership of overhead bridges that carry state roads. Per the agreement, once the Commission replaces these overhead bridges, and after final inspections and supplemental agreements are signed by both parties, ownership and maintenance responsibilities of the bridges are transferred from the Commission to PennDOT. The Commission transferred assets with a net book value of $51.6 million to PennDOT during the fiscal year ended May 31, 2022.

Also, during the fiscal year ended May 31, 2022, the Commission transferred a traffic signal to Bristol Township (PA). The book value of the traffic signal transferred was $0.2 million. In addition, during the fiscal year ended May 31, 2022, the Commission transferred drones to the Pennsylvania State Police. The book value of the drones transferred was $0.1 million.

Capital Contributions

Capital contributions include: Oil Company Franchise Tax revenues, Motor License Registration Fee revenues, grants from other governments for reimbursement of capital costs for various highway construction projects, capital assets received from other third parties and amortization of deferred inflows of resources for service concession agreements.

Oil Company Franchise Tax Revenues

The Commission receives 14% of the additional 55 mills of the Commonwealth's Oil Company Franchise Tax revenues pursuant to Act 26 established in 1991. The revenues totaled $132.3 million and $133.3 million for the fiscal years ended May 31, 2023 and 2022, respectively. These revenues are kept in a separate fund as required by the applicable bond indenture.

Motor License Registration Fee Revenues

The Commission received $28.0 million in registration fee revenue during each of the fiscal years ended May 31, 2023 and 2022 from the Commonwealth's Motor License Fund. These revenues are kept in a separate fund as required by the applicable bond indenture.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Capital Contributions *(continued)*

Reimbursements from Other Governments

The Commission receives grants from other governments for reimbursement of costs for various highway construction projects. During the fiscal years ended May 31, 2023 and 2022, the Commission recognized $5.2 million and $2.3 million, respectively, as capital contributions from the other governments. During both fiscal years, all of the reimbursements were received from the Federal government.

Other Capital Contributions

The Commission entered into agreements with a food and a fuel provider to totally reconstruct the service plazas. The service plaza operators provided the capital for the reconstruction in exchange for lower rental rates. The Commission recognized capital contribution revenues of $4.8 million and $5.5 million related to these agreements for fiscal years ended May 31, 2023 and 2022, respectively. See Note 6 for further discussion on service plazas.

Adoption of Accounting Pronouncements

In June 2017, the GASB issued Statement No. 87, Leases, with the intention of improving accounting and financial reporting for leases by governments. This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Adoption of Accounting Pronouncements *(continued)*

The Commission adopted Statement No. 87 in these financial statements for its fiscal year ended May 31, 2023. The Commission recorded the cumulative effect of applying this Statement as of June 1, 2021 (the beginning of the previous financial statement period); there was no effect on beginning net position. The effect on beginning balances on the Statement of Net Position were as follows:

Description	May 31, 2021 as Previously Reported	Beginning Balance Restatement	June 1, 2021 as Restated
		(in thousands) *[Debits / (Credits)]*	
Statement of Net Position			
Accounts receivable (unrestricted)	$ 118,340	$ 749	$ 119,089
Other assets	27,084	39,704	66,788
Unearned income	(105,702)	90	(105,612)
Other noncurrent liabilities	(278,928)	384	(278,544)
Deferred inflows of resources from leases	-	(40,927)	(40,927)
Net position	7,274,968	-	7,274,968

The adjustment to accounts receivable and other assets are related to the current and noncurrent portions of the lease receivable, respectively. The adjustment to unearned income and other noncurrent liabilities were related to prepaid rent amounts that were reclassified to deferred inflows of resources from leases.

The effect of adopting GASB Statement No. 87 on the Statement of Net Position as of May 31, 2022, and on the Statement of Changes in Net Position for the year ended May 31, 2022, were as follows:

Description	May 31, 2022 as Previously Reported	Beginning Balance Restatement	FY22 Restatement Activity	May 31, 2022 as Restated
		(in thousands) *[Debits / (Credits)]*		
Statement of Net Position				
Accounts receivable (unrestricted)	$ 125,931	$ 749	$ 10	$ 126,690
Other assets	27,581	39,704	(706)	66,579
Unearned income	(117,989)	90	7	(117,892)
Other noncurrent liabilities	(149,588)	384	(110)	(149,314)
Deferred inflows of resources from leases	-	(40,927)	1,653	(39,274)
Net position	7,737,808	-	(854)	7,736,954
Statement of Changes in Net Position				
Other operating revenue	(47,603)	-	320	(47,283)
Investment (earnings) loss	72,757	-	(1,166)	71,591
Other nonoperating (revenues) expenses	(21,495)	-	(8)	(21,503)
Net position	7,737,808	-	(854)	7,736,954

See the additional disclosures in Note 7 as required by this Statement.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Adoption of Accounting Pronouncements *(continued)*

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. The Commission adopted Statement No. 91 for the fiscal year ending May 31, 2023. The adoption of this Statement had no impact on the Commission's financial statements for fiscal year ended May 31, 2023.

In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. The Commission adopted Statement No. 92 for the fiscal year ending May 31, 2023. Except for the effective date of GASB 87, the adoption of this Statement had no impact on the Commission's financial statements for fiscal year ended May 31, 2023.

In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. The Commission adopted Statement No. 93 for the fiscal year ending May 31, 2023, with the exception of paragraph 11b which was adopted for the fiscal year ending May 31, 2022. The adoption of this Statement had no impact on the Commission's financial statements for fiscal years ended May 31, 2023 and 2022.

In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The Commission adopted Statement No. 94 for the fiscal year ending May 31, 2023. The adoption of this Statement had no impact on the Commission's financial statements for fiscal years ended May 31, 2023. See Note 6 for disclosures required by this Statement.

In June 2020, the GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans – An Amendment of GASB Statements No. 14 and No. 84, and a Supersession of GASB Statement No. 32*. Paragraphs 4 and 5 of this Statement were effective immediately and were included with the other Statement No. 84 disclosures in the Commission's financial statements as of May 31, 2021. The Commission adopted the remainder of Statement No. 97 for the fiscal year ending May 31, 2023. The adoption of this Statement had no impact on the Commission's financial statements for fiscal year ended May 31, 2023.

In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. The Commission adopted required portions of Statement No. 99 for its fiscal year ended May 31, 2022. The adoption of the portions of this Statement had no impact on the Commission's financial statements for fiscal year ended May 31, 2022. The remaining portions of this Statement will be adopted in the required fiscal years.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Accounting Pronouncements Not Yet Adopted

In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. The Commission is required to adopt Statement No. 96 for the fiscal year ending May 31, 2024.

In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. The Commission is required to adopt the portions of Statement No. 99 related to leases, PPPs, and SBITAs for the fiscal year ending May 31, 2024. The Commission is required to adopt the portions of Statement No. 99 related to related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 for the fiscal year ending May 31, 2025.

In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections-an amendment of GASB Statement No. 62*. The Commission is required to adopt Statement No. 100 for the fiscal year ending May 31, 2025.

In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. The Commission is required to adopt Statement No. 101 for the fiscal year ending May 31, 2025.

The Commission has not yet completed the various analyses required to estimate the financial statement impact of these new pronouncements.

NOTE 3 INDENTURE REQUIREMENTS AND RESTRICTIONS

The Commission’s debt has been issued under the provisions of five separate Trust Indentures (collectively referred to as Indentures):

- A Senior Trust Indenture dated July 1, 1986, which was amended and restated as of March 1, 2001, as supplemented, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- An Oil Franchise Tax Trust Indenture, dated August 1, 1998, as supplemented, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- A Registration Fee Revenue Trust Indenture, dated August 1, 2005, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee;
- A Subordinate Trust Indenture, dated April 1, 2008 as supplemented, between the Commission and Computershare Trust Company, N.A., as successor Trustee; and

NOTE 3 INDENTURE REQUIREMENTS AND RESTRICTIONS *(continued)*

- A Special Obligation Trust Indenture, dated September 1, 2014, between the Commission and U.S. Bank Trust Company, N.A., as successor Trustee.

Accordingly, certain activities of the Commission are restricted by these Indentures.

NOTE 4 CASH AND INVESTMENTS

The following table is a summary of cash and cash equivalents and investments by type:

	May 31, 2023	May 31, 2022
	(In thousands)	
Cash and cash equivalent and investment types		
U.S. Treasuries	$ 1,589,975	$ 1,956,254
GNMA mortgages	458	580
Government agency securities	110,714	11,316
Municipal bonds	27,316	32,641
Corporate obligations	176,008	132,860
Total investment securities	1,904,471	2,133,651
Investment derivatives	2,493	(1,159)
Cash and cash equivalents	1,177,701	1,235,483
Total cash and cash equivalents and investments	$ 3,084,665	$ 3,367,975

Cash and Cash Equivalents

Cash and cash equivalents are held in various financial institutions. Cash and cash equivalents are comprised of demand deposits, money market funds and other highly liquid investments that mature within three months of acquisition. The demand deposits are secured under Pennsylvania Act 72 which secures public deposits in excess of the FDIC insurance limits. Cash equivalents consist of permitted investments in accordance with the Indentures as noted under cash equivalents and investment securities.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Cash and Cash Equivalents *(continued)*

The following table is a summary of the Commission's cash and cash equivalents:

	Bank Balance	Book Balance
	(In thousands)	
May 31, 2023		
Demand deposits	$ 30,863	$ 29,164
Money market funds	889,458	889,458
Cash equivalents	259,079	259,079
Total cash and cash equivalents	$ 1,179,400	$ 1,177,701
May 31, 2022		
Demand deposits	$ 36,044	$ 35,716
Money market funds	993,357	993,357
Cash equivalents	206,410	206,410
Total cash and cash equivalents	$ 1,235,811	$ 1,235,483

Cash Equivalents and Investment Securities

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

- As of May 31, 2023 and 2022, U.S. Treasuries of $1,590.0 million and $1,956.3 million, respectively, categorized as Level 1 are valued using quoted market prices.

- As of May 31, 2023 and 2022, GNMA mortgages of $0.5 million and $0.6 million, respectively, categorized as Level 2 are valued using models based on spreads of comparable securities.

- As of May 31, 2023 and 2022, government agency securities of $110.7 million and $11.3 million, respectively, categorized as Level 2 are valued using various market and industry inputs. Callable agency-issued debt securities are valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. The fair value of agency mortgage pass-through pool securities is model-driven based on spreads of a comparable security. Collateralized mortgage obligations are valued using quoted market prices and trade data adjusted by subsequent changes in related indices for identical or comparable securities.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Cash Equivalents and Investment Securities *(continued)*

- As of May 31, 2023 and 2022, municipal bonds of $27.3 million and $32.6 million, respectively, categorized as Level 2 are valued using recently executed transactions, market price quotations and pricing models that factor in, where applicable, interest rates, bond or credit default swap spreads and volatility.

- As of May 31, 2023 and 2022, total corporate obligations were $176.0 million and $132.9 million, respectively. Of the May 31, 2023 and 2022 amounts, $18.2 million is a guaranteed investment contract, which is valued at the contract value. The remaining $157.8 million and $114.7 million as of May 31, 2023 and 2022, respectively, categorized as Level 2 are valued using recently executed transactions, market price quotations (where observable), bond spreads, credit default swap spreads, at the money volatility and/or volatility skew obtained from independent external parties, such as vendors and brokers adjusted for any basis difference between cash and derivative instruments. The spread data used are for the same maturity as the bond.

- As of May 31, 2023 and 2022, investment derivative instruments of $2.5 million and $(1.2) million, respectively, categorized as Level 2 are valued using discounted future net cash flows, mid-market values, nonperformance risk and bid/offer spreads. See Note 10 for further discussion.

The Indentures (as listed in Note 3) permit investments in obligations of, or are guaranteed by, the United States of America, its agencies, and its instrumentalities (United States Government obligations); certificates of deposit issued by institutions insured by the FDIC or fully collateralized with United States Government obligations; investment agreements with certain financial institutions; commercial paper and asset-backed securities rated in the highest category by applicable rating agencies; money market funds and auction rate certificates rated in one of the two highest categories by applicable rating agencies; corporate bonds and medium-term notes with a minimum rating of ‘AA-’; investments in bonds or notes issued by any state or municipality which are rated by Moody’s Investors Service (Moody’s), Standard & Poor’s Ratings Group (S&P) and Fitch Investors Service (Fitch) in one of their two highest rating categories; and repurchase agreements with banks or primary government dealers reporting to the Federal Reserve Bank of New York collateralized with obligations of, or guaranteed by, the United States of America.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Cash Equivalents and Investment Securities *(continued)*

The Commission has an investment policy that defines guidelines and operational factors governing the investment of financial assets. The policy generally has the same restrictions regarding permitted investments as the Indentures. Permitted investments include:

- U.S. Treasury Bills, Notes, Bonds, Strips;
- Time Deposits issued by a banking association organized and doing business under the laws of the United States of America or of any state that may have a combined capital and surplus of at least $50.0 million;
- Certificates of Deposit that are fully collateralized and issued by a bank, savings and loan or trust company organized under the laws of the United States or any state thereof;
- Investment Agreements with a bank, a bank holding company or a financial institution that has outstanding unsecured obligations or uncollateralized long-term debt obligations rated in the ‘AA’ category or better by at least two of the three rating agencies (S&P, Moody’s and Fitch);
- Obligations of any federal agencies which obligations are backed by the full faith and credit of the United States of America;
- Senior debt obligations rated a minimum ‘AA’ by S&P and ‘Aa2’ by Moody’s issued by the following government-sponsored enterprises: Federal Home Loan Bank, Federal Farm Credit Bank, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association;
- Mortgage-backed securities issued by an approved federal agency and collateralized mortgage obligations, so long as such securities are rated a minimum of ‘Aa2’ by Moody’s and ‘AA’ by S&P;
- Debt obligations of any state or local government entity, whether for itself, or as a conduit issuer, provided that the securities are rated in the ‘Aa/AA’ category by at least two of S&P, Moody’s and Fitch and do not have a rating from any of S&P, Moody’s and Fitch below the ‘Aa/AA’ category (without regard to subcategories of ratings), and provided that if a short-term rating is provided for the securities that they are rated in the top tier by at least two of the three of S&P (‘A-1’ or better), Moody’s (‘VMIG1’ or ‘P1’), and Fitch (‘F1’) and do not have a rating from any of the three rating agencies below such levels;

NOTE 4 CASH AND INVESTMENTS *(continued)*

Cash Equivalents and Investment Securities *(continued)*

- Commercial paper rated by at least two of S&P, Moody's and Fitch and not less than 'A-1/P-1/F-1' by S&P, Moody's and Fitch, respectively;
- Corporate bonds rated 'Aa3/AA-' or better by Moody's and S&P;
- Asset-backed securities rated 'AAA' by Moody's and S&P;
- Repurchase agreements with banks or primary government dealers reporting to the Federal Reserve Bank of New York, collateralized by investments with a minimum 102% valuation in securities of U.S. Treasury bills, notes, bonds, strips, or obligations of any federal agencies or senior debt obligations described above; and
- Share or Certificates in any short-term investment fund that invests not less than 90% of its assets in obligations of U.S. Treasury bills, notes, bonds, strips or time deposits.

All investment ratings shall be based on security ratings at the time of purchase. The portfolio's average credit quality should be rated 'Aa3/AA-' or better by Moody's/S&P. Investments are generally purchased with the intent of holding to maturity, but the Portfolio Managers have the flexibility to restructure and rebalance portfolio holdings to manage risk and take advantage of market opportunities. The investment policy imposes the following diversification:

- No limitations are placed on investments carrying the full faith and credit of the U.S. Government, including repurchase agreements collateralized by such investments.
- Investments in any single federal agency, not carrying the full faith and credit of the U.S. Government, are limited to 35% of the portfolio.
- Investments in certificates of deposit and investment agreements in total are limited to 30% of the portfolio.
- Combined exposure to commercial paper, corporate bonds, and asset-backed securities is limited to 35% of the total portfolio.
- Investments in any single issuer (excluding U.S. Treasury and federal agencies) are limited to 5% of the portfolio.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Cash Equivalents and Investment Securities *(continued)*

The Commission's Investment Policy also states that at the time of purchase, the maturity of each security in the Portfolio may not exceed five (5) years, taking into account any call, put, prepayment, or other features that may impact maturity. Similarly, the weighted average life of mortgages and asset-backed securities may not be more than five years. As of May 31, 2023 and 2022, the Commission did not hold any securities that were not in compliance with the Investment Policy guidelines.

Credit Risk

The Commission's exposure to credit risk for investment securities is as follows:

	Quality Rating as of May 31, 2023					
Investment Type	**AAA**	**AA**	**A**	**A-1**	**Below A**	**Total**
			(In thousands)			
Government agency securities	$ 16,607	$ 94,107	$ -	$ -	$ -	$ 110,714
Municipal bonds	7,878	8 061	11,377	-	-	27,316
Corporate obligations	75,678	77 395	8,016	14,878	41	176,008
	$ 100,163	$ 179 563	$ 19,393	$ 14,878	$ 41	$ 314,038

	Quality Rating as of May 31, 2022					
Investment Type	**AAA**	**AA**	**A**	**A-1**	**Below A**	**Total**
			(In thousands)			
Government agency securities	$ 1,589	$ 9,727	$ -	$ -	$ -	$ 11,316
Municipal bonds	13,117	6 976	12,548	-	-	32,641
Corporate obligations	39,433	70 020	8,481	14,878	48	132,860
	$ 54,139	$ 86,723	$ 21,029	$ 14,878	$ 48	$ 176,817

Investments guaranteed by the full faith of the U.S. Government, such as U.S. Treasuries and GNMA mortgages, are not considered to have credit risk and do not require disclosure of credit quality.

Concentration of Credit Risk

As of May 31, 2023 and 2022, the Commission did not have any investments that violated the 5% limit for a single issuer or the other concentration of credit risk limitations in the Commission's investment policy noted above.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Interest Rate Risk

The effective duration of the Commission's investments, by type, was as follows:

	As of May 31, 2023	
Investment Type	**Fair Value**	**Effective Duration**
	(In thousands)	*(In years)*
U.S. Treasuries	$ 1,589,975	1.2825
GNMA mortgages	458	4.3989
Government agency securities	110,714	0.9176
Municipal bonds	27,316	1.4869
Corporate obligations	176,008	1.2794
Total investment securities	$ 1,904,471	

	As of May 31, 2022	
Investment Type	**Fair Value**	**Effective Duration**
	(In thousands)	*(In years)*
U.S. Treasuries	$ 1,956,254	1.6113
GNMA mortgages	580	4.0850
Government agency securities	11,316	1.2724
Municipal bonds	32,641	1.9012
Corporate obligations	132,860	2.0297
Total investment securities	$ 2,133,651	

Custodial Credit Risk

For deposits and investments, custodial credit risk is the risk that in the event of the failure of the counterparty, the Commission will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. As of May 31, 2023 and 2022, $30.4 million and $35.5 million, respectively, of the Commission's demand deposits were exposed to custodial credit risk, as they were uninsured and collateralized with securities held by an agent of the pledging financial institution but not in the Commission's name. None of the Commission's investments were exposed to custodial credit risk as of May 31, 2023 or 2022.

NOTE 4 CASH AND INVESTMENTS *(continued)*

Investment Derivative Instruments

The following table is a summary of the Commission's investment derivative instruments as of May 31, 2023:

**	Notional Amount *(thousands)*	Weighted Avg. Mat. *(years)*	Effective Date	Maturity Date	Terms*	Fair Value *(thousands)*	Counterparty	Credit Ratings Moody's/ S&P's/Fitch
	$ 112,000				Pay S FMA, receive 63% of 1-month L BOR + 20 bps	$ (2,204)	JPMorgan Chase Bank	Aa2/A+/AA
	48,000					(939)	Bank of New York Mellon	Aa2/AA-/AA
A	160 000	6.1	8/14/2003	12/1/2032		(3 143)		
	80,000				Pay 67% of 1-month LIBOR receive 60.15% of the 10 year maturity of the USD-ISDA Swap Rate	(657)	JPMorgan Chase Bank	Aa2/A+/AA
	80,000					(657)	Royal Bank of Canada	Aa1/AA-/AA-
B	160,000	6 0	9/19/2006	11/15/2032		(1,314)		
C	111,695	9 2	6/1/2010	6/1/2039	Pay S FMA, receive 99.68% of 3-month L BOR	6,950	Goldman Sachs MMDP	Aa2/AA-/NR
D	*Terminated on 06/30/21*					-		
						$ 2,493		

1-month LIBOR was 5.193% as of May 31, 2023.
3-month LIBOR was 5.51671% as of May 31, 2023.
10-year maturity of the USD-ISDA swap rate was 3.68% as of May 31, 2023.
SIFMA was 3.56% as of May 31, 2023.
* LIBOR was permanently discontinued on June 30, 2023. Therefore, LIBOR has been replaced subsequent to year-end for applicable swap agreements.
** Letters are used as references in Note 10 (Commitments and Contingencies).

The following table is a summary of the Commission's investment derivative instruments as of May 31, 2022:

**	Notional Amount *(thousands)*	Weighted Avg. Mat. *(years)*	Effective Date	Maturity Date	Terms	Fair Value *(thousands)*	Counterparty	Credit Ratings Moody's/ S&P's/Fitch
	$ 112,000				Pay S FMA, receive 63% of 1-month L BOR + 20 bps	$ (3,952)	JPMorgan Chase Bank	Aa2/A+/AA
	48,000					(1,693)	Bank of New York Mellon	Aa2/AA-/AA
A	160,000	7.1	8/14/2003	12/1/2032		(5,645)		
	80,000				Pay 67% of 1-month LIBOR receive 60.15% of the 10 year maturity of the USD-ISDA Swap Rate	545	JPMorgan Chase Bank	Aa2/A+/AA
	80,000					557	Royal Bank of Canada	Aa1/AA-/AA-
B	160 000	7.0	9/19/2006	11/15/2032		1 102		
C	115,810	9.8	6/1/2010	6/1/2039	Pay S FMA, receive 99.68% of 3-month L BOR	3,384	Goldman Sachs MMDP	Aa2/AA-/NR
D	*Terminated on 06/30/21*					-		
						$ (1,159)		

1-month LIBOR was 1.11986% as of May 31, 2022.
3-month LIBOR was 1,61071% as of May 31, 2022.
10-year maturity of the USD-ISDA swap rate was 2.951% as of May 31, 2022.
SIFMA was 0.79% as of May 31, 2022.
** Letters are used as references in Note 10 (Commitments and Contingencies).

See Note 10 for additional disclosures regarding derivative instruments, including a rollforward from the prior-year balances.

NOTE 5 CAPITAL ASSETS

Summaries of changes to capital assets for the years ended May 31, 2023 and 2022 are as follows:

	Balance May 31, 2022	Additions	Transfers (In thousands)	Reductions	Balance May 31, 2023
Capital assets not being depreciated (cost)					
Land and intangibles	$ 460,908	$ 14,554	$ -	$ -	$ 475,462
Assets under construction	1,369,762	777,092	(665,060)	-	1,481,794
Total capital assets not being depreciated	1,830,670	791,646	(665,060)	-	1,957,256
Capital assets being depreciated (cost)					
Buildings	1,034,358	-	65,293	-	1,099,651
Improvements other than buildings	189,597	-	483	-	190,080
Equipment	626,570	15,243	13,764	4,631	650,946
Infrastructure	10,107,010	-	585,520	79,426	10,613,104
Total capital assets being depreciated	11,957,535	15,243	665,060	84,057	12,553,781
Less accumulated depreciation for					
Buildings	506,685	25,177	-	-	531,862
Improvements other than buildings	104,547	8,516	-	-	113,063
Equipment	481,076	39,164	-	3,343	516,897
Infrastructure	5,924,715	335,928	-	76,203	6,184,440
Total accumulated depreciation	7,017,023	408,785	-	79,546	7,346,262
Total capital assets being depreciated, net	4,940,512	(393,542)	665,060	4,511	5,207,519
Total capital assets	$ 6,771,182	$ 398,104	$ -	$ 4,511	$ 7,164,775

	Balance May 31, 2021	Additions	Transfers (In thousands)	Reductions	Balance May 31, 2022
Capital assets not being depreciated (cost)					
Land and intang bles	$ 442,257	$ 18,651	$ -	$ -	$ 460,908
Assets under construction	2,288,309	547,051	(1,465,598)	-	1,369,762
Total capital assets not being depreciated	2,730,566	565,702	(1,465,598)	-	1,830,670
Capital assets being depreciated (cost)					
Buildings	987,325	-	47,033	-	1,034,358
Improvements other than buildings	160,973	-	28,662	38	189,597
Equipment	581,800	12,544	38,721	6,495	626,570
Infrastructure	8,964,668	-	1,351,182	208,840	10,107,010
Total capital assets being depreciated	10,694,766	12,544	1,465,598	215,373	11,957,535
Less accumulated depreciation for					
Buildings	482,206	24,479	-	-	506,685
Improvements other than buildings	96,473	8,112	-	38	104,547
Equipment	452,419	34,795	-	6,138	481,076
Infrastructure	5,718,188	363,809	-	157,282	5,924,715
Total accumulated depreciation	6,749,286	431,195	-	163,458	7,017,023
Total capital assets being depreciated, net	3,945,480	(418,651)	1,465,598	51,915	4,940,512
Total capital assets	$ 6,676,046	$ 147,051	$ -	$ 51,915	$ 6,771,182

NOTE 6 SERVICE CONCESSION ARRANGEMENTS

There are 17 service plazas along the Turnpike System providing gasoline and diesel fuel, other automotive supplies and services, and restaurant services. The Commission entered into long-term service plaza redevelopment agreements with HMSHost Family Restaurants, LLC (2006) and with Sunoco, Inc. (R&M) to design, reconstruct, finance, operate and maintain all the service plazas. These service concession arrangements do not fall within the scope of GASB Statement No. 87, *Leases*, which is discussed in Note 7. The Commission has no responsibility for maintaining the service plazas under the agreements. The Commission maintains the ability to approve and/or modify the services that the operators can provide and the rates that can be charged. The service plaza operators are compensated by the users of the services and share a portion of the revenue with the Commission as rental payments. Upon completion of construction, the reconstructed assets were recognized by the Commission.

In 2016, Sunoco, Inc. (R&M) assigned its lease to Sunoco Retail LLC, a wholly owned subsidiary of Sunoco, Inc. (R&M). During fiscal year 2018, the agreement with Sunoco Retail LLC was assigned to 7-Eleven, Inc. All terms of the agreement remained the same.

On July 13, 2021, the Commission approved and executed a Consent to Transfer of Lease Agreement with HMSHost Family Restaurants, LLC (with an effective date of July 23, 2021), whereby HMSHost transferred its leasehold to Applegreen USA Family Restaurants, LLC, a consortium of Applegreen Ltd. and Blackstone Infrastructure Partners. Upon closing of the transfer on July 23, 2021, the agreement with Applegreen USA Family Restaurants, LLC was then subsequently assigned to Applegreen PA Welcome Centres LLC, also effective as of July 23, 2021. This final step was finalized during fiscal year 2023 but is retroactive to July 23, 2021. This agreement expires on August 25, 2036.

The agreement with 7-Eleven, Inc. was set to expire on January 31, 2022. 7-Eleven Inc.'s agreement states it can be extended for three additional five-year periods. The first extension shall be at the discretion of 7-Eleven, Inc., and the second and third extensions shall be mutually agreed to by both parties. On September 21, 2021, the Commission approved an amendment to the agreement with 7-Eleven, Inc. to exercise its option to renew the service plaza agreement for an additional five years, with an expiration date of January 31, 2027. The amendment was approved by the PA Attorney General's office on October 6, 2021. Due to this extension, the guaranteed minimum rent net present value calculation was modified to include the additional future amounts expected.

NOTE 6 SERVICE CONCESSION ARRANGEMENTS *(continued)*

As of May 31, 2023, the Commission had capitalized $125.4 million in capital assets representing all 17 service plazas that had fully completed construction and recorded deferred inflows of resources of $63.7 million related to these assets. Also, as of May 31, 2023, the Commission recognized a receivable and deferred inflow of resources in the amount of $25.7 million for the present value of guaranteed minimum rent payments. The Commission also recognized $2.2 million of restaurant revenue and $2.6 million of service station revenue for the fiscal year ended May 31, 2023 related to these agreements.

As of May 31, 2022, the Commission had capitalized $125.4 million in capital assets representing all 17 service plazas that had fully completed construction and recorded deferred inflows of resources of $68.4 million related to these assets. Also, as of May 31, 2022, the Commission recognized a receivable and deferred inflow of resources in the amount of $27.6 million for the present value of guaranteed minimum rent payments. The Commission also recognized $2.2 million of restaurant revenue and $2.8 million of service station revenue for the fiscal year ended May 31, 2022 related to these agreements.

NOTE 7 LEASES

The Commission is the lessor for advertising, cell tower, gas royalty and other miscellaneous leases. The miscellaneous category includes, but is not limited to, leases such as commercial, residential, agricultural and license agreements. The lease terms range from one month to 70 years. The most common lease term is ten years. Most of the leases have fixed percentage rent increases but some are based on the Consumer Price Index. One cell tower lease has a variable sublease component. Two cell tower leases are currently in rent abatement status which is scheduled to end in 2027. Gas royalty revenues are variable based on the underlying oil and gas production. One gas royalty lease was executed during fiscal year 2023 that included an upfront payment. One miscellaneous lease has a variable supplementary rent component.

For the fiscal year ended May 31, 2023, the Commission recognized $6.3 million in lease revenue and $1.2 million in interest revenue related to these leases. For the fiscal year ended May 31, 2022, the Commission recognized $6.0 million in lease revenue and $1.2 million in interest revenue related to these leases. The Commission's total receivable for lease payments was $39.7 million as of May 31, 2023 of which $0.8 million is considered short term. The Commission's receivable for lease payments was $39.8 million as of May 31, 2022 of which $0.8 million is considered short term. The Commission also recorded deferred inflows of resources associated with these leases that will be recognized as revenue over the lease term. As of May 31, 2023 and 2022, the balance of the deferred inflows of resources was $38.4 million and $39.3 million, respectively.

NOTE 8 DEBT

The following table is a summary of debt outstanding:

	May 31, 2023	May 31, 2022
	(In Thousands)	
Mainline Senior Debt		
Mainline Senior Bonds		
2009 Series A Build America Bonds: Issued $275,000 in July 2009 at 6.105%, due in varying installments through June 1, 2039. Interest paid each June 1 and December 1.	$ 275,000	$ 275,000
2010 Series B Build America Bonds: Issued $600,000 in September 2010 at 5.5%, due in varying installments through December 1, 2049. Interest paid each June 1 and December 1.	600,000	600,000
2011 Series A: Issued $68,660 in April 2011 at 4.00% to 5.00% due in varying installments through December 1, 2023. Interest paid each June 1 and December 1. Partially defeased in May 2019 and November 2020. Partially refunded in November 2021.	10,000	27,565
2012 Series A: Issued $200,215 in July 2012 at 3.00% to 5.00%, due in varying installments through December 1, 2042. Interest paid each June 1 and December 1. Partially refunded in October 2017, December 2017 and January 2020. Partially defeased in May 2019 and November 2020.	10,670	15,420
2013 Series C: Issued $222,935 in August 2013 at 3.00% to 5.50%, due in varying installments through December 1, 2043. Interest paid each June 1 and December 1. Partially refunded in October 2017, December 2017, January 2020, and September 2022. Partially defeased in November 2020.	18,605	44,750
2014 Series A: Issued $236,115 in April 2014 at 4.00% to 5 00%, due in varying installments through December 1, 2044. Interest paid each June 1 and December 1. Partially refunded in October 2017 and September 2022. Partially defeased in November 2020.	213,955	230,575
2014 Series Refunding: Issued $239,620 in November 2014 at 5 00%, due in varying installments through December 1, 2034. Interest paid each June 1 and December 1. Partially refunded in September 2022.	98,790	239,620
2014 Series C: Issued $294,225 in December 2014 at 2.25% to 5 00%, due in varying installments through December 1, 2044. Interest paid each June 1 and December 1. Partially refunded in October 2017 and September 2022. Partially defeased in November 2020.	235,405	279,005
2015 Series A-1: Issued $385,095 in June 2015 at 4.00% to 5.00%, due in varying installments through December 1, 2045. Interest paid each June 1 and December 1. Partially defeased in November 2020. Partially refunded in September 2022.	338,450	383,585
2015 Series B: Issued $304,005 in December 2015 at 2.50% to 5 00%, due in varying installments through December 1, 2045. Interest paid each June 1 and December 1. Partially defeased in November 2020. Partially refunded in September 2022.	291,505	299,720
2016 Series A-1: Issued $447,850 in June 2016 at 3.00% to 5.00% due in varying installments through December 1, 2046. Interest is paid each June 1 and December 1. Partially defeased in November 2020.	444,310	446,160
2017 Series A-1: Issued $365,895 in October 2017 at 3.00% to 5 00% due in varying installments through December 1, 2047. Interest is paid each June 1 and December 1. Partially defeased in November 2020.	334,665	341,485
2017 Series A-2 Refunding: Issued $133,060 in October 2017 at 5 00% due in varying installments through December 1, 2030. Interest is paid each June 1 and December 1.	133,060	133,060
2018 Series A-1: Issued $182,455 in June 2018 at a variable rate (based on S FMA + 35% to 60%, reset weekly, paid the 1st of each month). Due in varying installments through December 1, 2023. Partially refunded in June 2020 and July 2021.	117,745	117,745
2018 Series A-2: Issued $307,935 in June 2018 at 5% due in varying installments through December 1, 2048. Interest is paid each June 1 and December 1.	307,110	307,935
2018 Series B: Issued $141,200 in November 2018 at a variable rate (based on S FMA + 50% to .70 %, reset weekly, paid the 1st of each month). Due in varying installments through December 1, 2023. Partially refunded in July 2021	71,200	71,200
2019 First Series: Issued $84,365 in February 2019 at 5% due in varying installments through December 1, 2033. Interest is paid each June 1 and December 1.	84,365	84,365
2019 Second Series: Issued $139,815 in June 2019 at a variable rate (determined by the Remarketing Agent in accordance with the procedures detailed in the Bond Official Statement, paid the 1st of each month). Due in one installment on December 1, 2038.	139,815	139,815
2019 Series A: Issued $341,325 in August 2019 at 2.00% to 5.00% due in varying installments through December 1, 2049. Interest is paid each June 1 and December 1. Partially defeased in November 2020.	324,290	330,245
2019 Forward Delivery Series: Issued $179,815 in September 2019 at 5 00% due in varying installments through December 1, 2025. Interest is paid each June 1 and December 1. Partially defeased in November 2020.	96,435	126,125
2020 First Series: Issued $234,320 in January 2020 at 1.81% to 3.44% due in varying installments through December 1, 2043. Interest is paid each June 1 and December 1. Partially refunded in September 2022.	210,775	233,040

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
Mainline Senior Debt (continued)	*(In Thousands)*	
Mainline Senior Bonds (continued)		
2020 Second Series: Issued $225,820 in June 2020 at a variable rate (determined by the Remarketing Agent in accordance with the procedures detailed in the Bond Official Statement, paid the 1st of each month). Due in one installment on December 1, 2039.	$ 225,820	$ 225,820
2020 Series A: Issued $100,500 in August 2020 at a variable rate (determined by the Remarketing Agent in accordance with the procedures detailed in the Bond Official Statement, paid the 1st of each month). Due in varying installments through December 1, 2050.	95,920	98,240
2020 Series B: Issued $241,625 in October 2020 at 5.00% due in varying installments through December 1, 2050. Interest is paid each June 1 and December 1.	241,625	241,625
2021 Series A: Issued $250,000 in April 2021 at 3.00% to 5.00% due in varying installments through December 1, 2051. Interest is paid each June 1 and December 1.	245,840	250,000
2021 Series B: Issued $385,800 in July 2021 at 4.00% to 5.00% due in varying installments through December 1, 2051. Interest is paid each June 1 and December 1.	381,150	385,800
2021 Series C: Issued $275,000 in November 2021 at 3.00% to 5.00% due in varying installments through December 1, 2051. Interest is paid each June 1 and December 1.	269,055	275,000
2022 Series A: Issued $254,730 in September 2022 at 4.125% to 5.00% due in varying installments through December 1, 2041. Interest is paid each June 1 and December 1.	254,730	-
2022 Series B: Issued $293,840 in December 2022 at 5.00% to 5.25% due in varying installments through December 1, 2052. Interest is paid each June 1 and December 1.	293,840	-
Total Mainline Senior Bonds	6,364,130	6,202,900
Mainline Senior Direct Placements & Direct Borrowings		
2018 EB-5 Loan (1st Tranche): Issued $50,000 in February 2018 at 2 00% due on February 20, 2023. Interest is paid each June 1 and December 1. Fully refunded in December 2022.	-	50,000
2018 EB-5 Loan (2nd Tranche): Issued $45,000 in November 2018 at 2.00% due on November 12, 2023. Interest is paid each June 1 and December 1.	45,000	45,000
2019 EB-5 Loan (3rd Tranche): Issued $52,000 in November 2019 at 2.00% due on November 5, 2024. Interest is paid each June 1 and December 1.	52,000	52,000
2020 EB-5 Loan (4th Tranche): Issued $36,500 in January 2020 at 2.00% due on January 21, 2025. Interest is paid each June 1 and December 1.	36,500	36,500
Total Mainline Senior Direct Placements & Direct Borrowings	133,500	183,500
Total Mainline Senior Debt	6,497,630	6,386,400
Mainline Subordinate Debt (consisting of Subordinate Revenue Debt and Motor License Fund-Enhanced Subordinate Special Revenue Debt)		
Mainline Subordinate Revenue Debt		
Mainline Subordinate Bonds		
2009 Series C Subordinate Revenue: Issued $99,998 in July 2009 at 6.25%, due in varying installments through June 1, 2033. Interest compounded semi-annually until June 1, 2016, thereafter paid each June 1 and December 1. Series C issued as Capital Appreciation Bonds (CABs). Compounded interest to be paid at maturity or earlier redemption. Partially refunded in March 2023.	126,080	152,355
2009 Series E Subordinate Revenue: Issued $200,005 in October 2009 at 6.00% to 6.375%, due in varying installments through December 1, 2038. Interest compounded semi-annually until December 1, 2017, thereafter paid each June 1 and December 1. Series E issued as CABs. The compounded interest to be paid at maturity or earlier redemption. Parially refunded in March 2023.	281,625	329,975
2010 Sub-Series C-1, C-2, C-3 Subordinate Revenue: Issued $138,916 in October 2010 at 4.25% to 5.45%. Sub-Series C-1 due in varying installments through December 1, 2040. Sub-Series C-2 issued as convertible CABs. Interest compounded semi-annually until December 1, 2015, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub Series C-3 issued as CABs with interest paid at maturity or earlier redemption. Sub-series C-2 partially refunded in June 2016, July 2017 and final refunding in November 2017. Sub-Series C-1 partially refunded in December 2017 and final refunding in November 2019. Sub-Series C-3 partially defeased in November 2020.	12,987	16,921

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
	(In Thousands)	
Mainline Subordinate Debt (consisting of Subordinate Revenue Debt and Motor License Fund-Enhanced Subordinate Special Revenue Debt) (continued)		
Mainline Subordinate Revenue Debt (continued)		
Mainline Subordinate Bonds (continued)		
2012 Series B Subordinate Revenue: Issued $121,065 in October 2012 at 2.00% to 5.00%, due in varying installments through December 1, 2042. Interest paid each June 1 and December 1. Partially refunded in December 2017, November 2019 and February 2020. Partially defeased in November 2020.	$ 43,950	$ 47,755
2013 Series A Subordinate Revenue: Issued $71,702 in April 2013 at 3.125% to 5.00%, due in varying installments through December 1, 2043. Sub-Series A-1 Serial bond interest paid each June 1 and December 1. Sub-Series A-1 Term bond interest paid each June 1 and December 1. Sub-Series A-2 issued as convertible CABs. Interest to be compounded semi-annually until December 1, 2018, thereafter paid each June 1 and December 1. Partially refunded February 2020. Partially defeased in November 2020.	48,400	50,105
2013 Sub-Series B-1, B-2, B-3 Subordinate Revenue: Issued $108,708 in October 2013 at 2.00% to 6.10%, due in varying installments through December 1, 2043. Sub-Series B-1 interest paid each June 1 and December 1. Sub-Series B-2 issued as convertible CABs. Interest to be compounded semi-annually until December 1, 2028, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub-Series B-3 interest paid each June 1 and December 1. Sub-Series B-3 partially refunded in December 2017, February 2020 and March 2023. Sub Series B-1 partially refunded in February 2020. Sub Series B-1 partially defeased in November 2020.	84,770	84,709
2014 Sub-Series A-1, A-2, A-3 Subordinate Revenue: Issued $148,300 in April 2014 at 2.00% to 5.44%, due in varying installments through December 1, 2043. Sub-Series A-1 interest paid each June 1 and December 1. Sub-Series A-2 issued as convertible CABs. Interest to be compounded semi-annually until June 1, 2024, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub-Series B-3 issued as CABs with interest paid at maturity or earlier redemption. Sub-Series A-1 partially defeased in November 2020. Sub-Series A-1 partially refunded in March 2023.	126,411	157,387
2014 Series B Subordinate Revenue: Issued $201,395 in October 2014 at 5.00% to 5.25% due in varying installments through December 1, 2044. Interest paid each June 1 and December 1. Partially refunded in March 2023.	136,215	201,395
2015 Series A-1 Subordinate Revenue: Issued $209,010 in April 2015 at 3.00% to 5.25% due in varying installments through December 1, 2045. Interest is paid each June 1 and December 1. Partially refunded in March 2023.	181,900	207,110
2015 Series B Subordinate Revenue: Issued $192,215 in October 2015 at 4.00% to 5.00% due in varying installments through December 1, 2045. Interest is paid each June 1 and December 1. Partially refunded in July 2017, November 2017 and December 2017. Partially defeased in November 2020. Partially refunded in March 2023.	105,660	129,920
2016 First Series Subordinate Revenue Refunding: Issued $360,990 in February 2016 at 3.00% to 5 00% due in varying installments through June 1, 2038. Interest is paid each June 1 and December 1. Partially defeased in May 2020. Partially refunded in March 2023.	202,100	269,140
2016 Series A-1 Subordinate Revenue: Issued $203,700 in April 2016 at 3.00% to 5.00% due in varying installments through December 1, 2046. Interest is paid each June 1 and December 1. Partially defeased in November 2020. Partially refunded in March 2023.	178,430	202,600
2016 Series A-2 Subordinate Revenue: Issued $185,455 in April 2016 at 5.00% due in varying installments through June 1, 2033. Interest is paid each June 1 and December 1.	185,455	185,455
2016 Second Series Subordinate Revenue Refunding: Issued $649,545 in June 2016 at 3.00% to 5 00% due in varying installments through June 1, 2039. Interest is paid each June 1 and December 1.	615,670	637,615
2016 Third Series Sub-Series A Subordinate Revenue Refunding: Issued $255,455 in October 2016 at 3 375% to 5.00% due in varying installments through December 1, 2041. Interest is paid each June 1 and December 1.	255,455	255,455
2016 Third Series Sub-Series B Subordinate Revenue Refunding (Federally Taxable): Issued $75,755 in October 2016 at 1.175% to 2.928% due in varying installments through December 1, 2025. Interest is paid each June 1 and December 1.	29,840	45,410
2017 Series A Subordinate Revenue: Issued $284,275 in January 2017 at 4.00% to 5 50% due in varying installments through December 1, 2046. Interest is paid each June 1 and December 1. Partially refunded in March 2023.	206,010	283,830
2017 Series B-1 Subordinate Revenue: Issued $379,115 in July 2017 at 5.00% To 5.25%. Due in varying installments through June 1, 2047. Interest paid each June 1 and December 1.	378,805	379,115
2017 Series B-2 Subordinate Revenue: Issued $371,395 in July 2017 at 4.00% to 5.00%. Due in varying installments through June 1, 2039. Interest paid each June 1 and December 1. Partially defeased in May 2020.	370,335	370,570
2017 Second Series Subordinate Revenue Refunding: Issued $150,425 in November 2017 at 5.00%. Due in varying installments through December 1, 2037. Interest paid each June 1 and December 1.	150,425	150,425
2017 Third Series Subordinate Revenue Refunding: Issued $143,585 in December 2017 at 4.00% to 5 00%. Due in varying installments through December 1, 2040. Interest paid each June 1 and December 1.	143,585	143,585

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
	(In Thousands)	
Mainline Subordinate Debt (consisting of Subordinate Revenue Debt and Motor License Fund-Enhanced Subordinate Special Revenue Debt) (continued)		
Mainline Subordinate Revenue Debt (continued)		
Mainline Subordinate Bonds (continued)		
2019 Series A Subordinate Revenue: Issued $722,970 in June 2019 at 4.00% to 5.00%. Due in varying installments through December 1, 2049. Interest paid each June 1 and December 1.	$ 722,970	$ 722,970
2019 First Series Subordinate Revenue Refunding (Federally Taxable): Issued $86,730 in November 2019 at 2.16% to 3.78%. Due in varying installments through December 1, 2042. Interest paid each June 1 and December 1. Partially defeased in November 2020. Partially refunded in March 2023.	79,125	86,110
2020 First Series Subordinate Revenue Refunding (Federally Taxable): Issued $134,310 in February 2020 at 1 81% to 3.45%. Due in varying installments through December 1, 2043. Interest paid each June 1 and December 1. Partially defeased in November 2020. Partially refunded in March 2023.	116,320	122,150
2021 Series A Subordinate Revenue: Issued $465,730 in January 2021 at 3.00% to 4.00%. Due in varying installments through December 1, 2050. Interest paid each June 1 and December 1.	465,730	465,730
2021 Series B Subordinate Revenue: Issued $393,790 in July 2021 at 3 00% to 5.00%. Due in varying installments through December 1, 2051. Interest paid each June 1 and December 1.	393,790	393,790
2023 First Series Subordinate Revenue Refunding: Issued $343,800 in March 2023 at 5.00%. Due in varying installments through December 1, 2043. Interest paid each June 1 and December 1.	343,800	-
Total Mainline Subordinate Bonds	5,985,843	6,091,582
Mainline Subordinate Direct Placements & Direct Borrowings		
2022 First Series Subordinate Revenue Refunding: Issued $291,850 in April 2022 at a variable rate (based on S FMA + .37% reset weekly, paid the 1st of each month commencing on June 1, 2022). Due in varying installments through December 1, 2041.	291,850	291,850
Total Mainline Subordinate Direct Placements & Direct Borrowings	291,850	291,850
Total Mainline Subordinate Debt	6,277,693	6,383,432

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
	(In Thousands)	
Motor License Fund-Enhanced Subordinate Special Revenue Debt		
2010 Sub-Series A-1, A-2, A-3 Motor License Fund-Enhanced Subordinate Special Revenue Issued $187,816 in July 2010 at 4.50% to 5.50%. Sub-Series A-1 due in varying installments through December 1, 2038. Interest paid each June 1 and December 1. Sub-Series A-2 issued as convertible CABs. Interest compounded semi-annually until December 1, 2015, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub-Series A-3 issued as CABs. Compounded interest to be paid at maturity or earlier redemption. Sub-Series A-2 was partially refunded in October 2016 and final refunding in November 2017. Sub-Series A-1 was partially refunded in November 2017 and final refunding in December 2017.	$ 50,884	$ 48,286
2010 Sub-Series B-1, B-2, B-3 Motor License Fund-Enhanced Subordinate Special Revenue Issued $105,299 in October 2010 at 3.95% to 5.125%, due in varying installments through December 1, 2040. Sub-Series B-1 interest paid each June 1 and December 1. Sub-Series B-2 issued as convertible CABs. Interest compounded semi-annually until December 1, 2015, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub-Series B-3 issued as CABs with interest paid at maturity or earlier redemption. Sub-Series B-2 was partially refunded in October 2016 and July 2017 and final refunding in November 2017. Sub-Series B-1 was partially refunded in December 2017, November 2019 and fully refunded in February 2020.	13,278	17,328
2012 Series B Motor License Fund-Enhanced Subordinate Special Revenue Issued $92,780 in October 2012 at 3 00% to 5.00%, due in varying installments through December 1, 2042. Interest paid each June 1 and December 1. Partially refunded in July 2017 and December 2017, November 2019 and February 2020.	13,795	15,365
2013 Series A Motor License Fund-Enhanced Subordinate Special Revenue Issued $92,465 in April 2013 at 3.00% to 5.00%, due in varying installments through December 1, 2043. Interest paid each June 1 and December 1. Partially refunded in July 2017, November 2017, December 2017, November 2019 and February 2020.	2,495	4,335
2013 Sub-Series B-1, B-2, B-3 Motor License Fund-Enhanced Subordinate Special Revenue Issued $101,731 in October 2013 at 2.00% to 5.875%, due in varying installments through December 1, 2043. Sub-Series B-1 interest paid each June 1 and December 1. Sub-Series B-2 issued as convertible CABs. Interest to be compounded semi-annually until December 1, 2028, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption. Sub-Series B-3 interest paid each June 1 and December 1. Partially refunded in July 2017, November 2017, December 2017 and February 2020.	46,768	46,726
2014 Series A Motor License Fund-Enhanced Subordinate Special Revenue Issued $59,740 in April 2014 at 4.50% to 4.90%, due in varying installments through December 1, 2044. Series A were issued as convertible CABs. Interest to be compounded semi-annually until December 1, 2021, thereafter paid each June 1 and December 1. Compound interest paid at maturity or earlier redemption.	84,940	84,940
2016 First Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding Issued $79,865 in October 2016 at 5.00% due in varying installments through December 1, 2036. Interest is paid each June 1 and December 1.	76,990	79,865
2017 First Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding Issued $45,390 in July 2017 at 5.00%, due in varying installments through June 1, 2028. Interest due each June 1	45,390	45,390
2017 Second Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding Issued $243,675 in November 2017 at 5 00%, due in varying installments through December 1, 2041. Interest due each June 1 and December 1.	243,675	243,675

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
	(In Thousands)	
Motor License Fund-Enhanced Subordinate Special Revenue Debt (continued)		
2017 Third Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding: Issued $164,240 in December 2017 at 4 00% to 5 00%, due in varying installments through December 1, 2040. Interest due each June 1 and December 1.	$ 164,240	$ 164,240
2019 First Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding (Federally Taxable): Issued $151,130 in November 2019 at 2.01% to 3.58%, due in varying installments through December 1, 2043. Interest due each June 1 and December 1.	149,595	150,235
2020 First Series Motor License Fund-Enhanced Subordinate Special Revenue Refunding (Federally Taxable): Issued $92,750 in February 2020 at 1.76% to 3.25%, due in varying installments through December 1, 2043. Interest due each June 1 and December 1.	90,930	91,325
Total Motor License Fund-Enhanced Subordinate Special Revenue Debt	982,980	991,710
Total Mainline Subordinate Debt (consisting of Subordinate Revenue Debt and Motor License Fund-Enhanced Subordinate Special Revenue Debt)	7,260,673	7,375,142
Total Mainline Senior and Subordinate Debt	13,758,303	13,761,542
Oil Franchise Tax Senior Debt		
2009 Series A, B, C Oil Franchise Tax Revenue: Issued $164,181 in October 2009. Series A issued at 2 00% to 5.85%, due in varying installments through December 1, 2023. Series B (Build America Bonds, Issuer Subsidy, Federally Taxable) issued at 5.85%, due in varying installments through December 1, 2037. Interest paid each June 1 and December 1. Series C issued as CABs at 5 30%. Interest on the CABs is deferred until maturity on December 1, 2039. Sub-Series A-2 partially refunded in September 2016. Sub Series A-1 fully refunded in September 2021.	158,716	157,108
2013 Series A Oil Franchise Tax Revenue Refunding: Issued $27,785 in October 2013 at 2.50% to 5 00%, due in varying installments through December 1, 2024. Interest paid each June 1 and December 1.	9,895	9,895
2016 Series A Oil Franchise Tax Revenue Refunding: Issued $198,595 in September 2016 at 4 00% to 5 00% due in varying installments through December 1, 2032. Interest paid each June 1 and December 1.	152,680	164,305
2018 Series A Oil Franchise Tax Revenue: Issued $231,385 in June 2018 at 5.00% to 5.25% due in varying installments through December 1, 2048. Interest paid each June 1 and December 1.	231,385	231,385
2021 Series A Oil Franchise Tax Revenue: Issued $327,520 in September 2021 at 3.00% to 5.00% due in varying installments through December 1, 2051. Interest paid each June 1 and December 1.	322,955	327,520
Total Oil Franchise Tax Senior Debt	875,631	890,213
Oil Franchise Tax Subordinate Debt		
2009 Series D, E Subordinate Oil Franchise Tax Revenue: Issued $134,065 in October 2009. Series D issued at 2.00% to 5 00%, due in varying installments through December 1, 2027. Series E (Build America Bonds, Issuer Subsidy, Federally Taxable) issued at 6.378%, due in varying installments through December 1, 2037. Sub-Series D-2 partially refunded in September 2016. Sub-Series D-1 and D-2 fully refunded in September 2021.	102,505	102,505
2013 Series B Subordinate Oil Franchise Tax Revenue: Issued $32,035 in October 2013 at 2.00% and 5 00%, due in varying installments through December 1, 2025. Interest paid each June 1 and December 1.	13,450	13,450
2016 Series B Subordinate Oil Franchise Tax Revenue Refunding: Issued $115,395 in September 2016 at 4.00% to 5.00% due in varying installments through December 1, 2032. Interest paid each June 1 and December 1.	84,605	92,930
2018 Series B Subordinate Oil Franchise Tax Revenue: Issued $210,480 in June 2018 at 5.00% to 5 25% due in varying installments through December 1, 2048. Interest paid each June 1 and December 1.	210,480	210,480

NOTE 8 DEBT *(continued)*

The following table is a summary of debt outstanding: *(continued)*

	May 31, 2023	May 31, 2022
	(In Thousands)	
Oil Franchise Tax Subordinate Debt (continued)		
2021 Series B Subordinate Oil Franchise Tax Revenue: Issued $201,480 in September 2021 at 3.00% to 5.00% due in varying installments through December 1, 2053. Interest paid each June 1 and December 1.	$ 199,610	$ 201,480
Total Oil Franchise Tax Subordinate Debt	610,650	620,845
Total Oil Franchise Tax Senior and Subordinate Debt	1,486,281	1,511,058
Motor License Registration Fee Debt		
Motor License Registration Fee Bonds		
2005 Series A: Issued $234,135 in August 2005 at 3.25% to 5.25%, due in varying installments through July 15, 2030. Interest paid each January 15 and July 15. Partially defeased in March 2019.	98,235	108,810
Total Motor License Registration Fee Bonds	98,235	108,810
Motor License Registration Fee Direct Placement & Direct Borrowings		
2005 Series B, C, D: Issued $231,425 in August 2005 and remarketed in October 2015 to a direct placement; modified interest rate in July 2018 and February 2019; current interest rate is a variable rate (based SIFMA +.875%, reset weeekly, paid 15th of each month), due in varying installments through July 15, 2041.	231,425	231,425
Total Motor License Registration Fee Direct Placement & Direct Borrowings	231,425	231,425
Total Motor License Registration Fee Debt Payable	329,660	340,235
Total Debt Payable	15,574,244	15,612,835
Unamortized premium/discount	1,520,549	1,544,693
Total debt, net of unamortized premium/discount	17,094,793	17,157,528
Less: Current portion	527,900	313,740
Debt, noncurrent portion	$ 16,566,893	$ 16,843,788

As of May 31, 2023, the Commission had $656,775 in outstanding Direct Placements and Direct Borrowings. SIFMA was 3.56% on May 31, 2023.

As of May 31, 2022, the Commission had $706,775 in outstanding Direct Placements and Direct Borrowings. SIFMA was 0.79% on May 31, 2022.

NOTE 8 DEBT *(continued)*

The tables below summarize the total additions and total reductions in debt during fiscal years 2023 and 2022. Additions are the result of new debt issuances and bond accretion related to capital appreciation bonds. Reductions are the result of principal payments and bond refundings/defeasances.

	Balance at May 31, 2022	Additions	Reductions *(In thousands)*	Balance at May 31, 2023	Due Within One Year
Mainline debt					
Mainline bonds *	$ 13,286,192	$ 904,726	$ 857,965	$ 13,332,953	$ 444,135
Mainline direct placements and borrowings	475,350	-	50,000	425,350	45,000
Total Mainline debt	13,761,542	904,726	907,965	13,758,303	489,135
Oil Franchise Tax debt					
Oil Franchise Tax bonds **	1,511,058	1,608	26,385	1,486,281	27,640
Total Oil Franchise Tax debt	1,511,058	1,608	26,385	1,486,281	27,640
Motor License Registration Fee debt					
Motor License Registration Fee bonds	108,810	-	10,575	98,235	11,125
Motor License Registration Fee direct placements and borrowings	231,425	-	-	231,425	-
Total Motor License Registration Fee debt	340,235	-	10,575	329,660	11,125
Total Debt Payable	15,612,835	906,334	944,925	15,574,244	527,900
Premium (discount), net	1,544,693	93,943	118,087	1,520,549	-
Total Debt Payable, net of premium (discount)	$ 17,157,528	$ 1,000,277	$ 1,063,012	$ 17,094,793	$ 527,900

* Mainline bonds FY23 additions related to bond issuances were $892,370 and FY23 additions related to bond accretions were $12,356.
** Oil Franchise Tax bonds FY23 additions related to bond accretions were $1,608.

	Balance at May 31, 2021	Additions	Reductions *(In thousands)*	Balance at May 31, 2022	Due Within One Year
Mainline debt					
Mainline bonds *	$ 12,693,813	$ 1,068,644	$ 476,265	$ 13,286,192	$ 226,780
Mainline direct placements and borrowings	475,350	291,850	291,850	475,350	50,000
Total Mainline debt	13,169,163	1,360,494	768,115	13,761,542	276,780
Oil Franchise Tax debt					
Oil Franchise Tax bonds **	1,021,176	530,527	40,645	1,511,058	26,385
Total Oil Franchise Tax debt	1,021,176	530,527	40,645	1,511,058	26,385
Motor License Registration Fee debt					
Motor License Registration Fee bonds	118,855	-	10,045	108,810	10,575
Motor License Registration Fee direct placements and borrowings	231,425	-	-	231,425	-
Total Motor License Registration Fee debt	350,280	-	10,045	340,235	10,575
Total Debt Payable	14,540,619	1,891,021	818,805	15,612,835	313,740
Premium (discount), net	1,262,911	355,115	73,333	1,544,693	-
Total Debt Payable, net of premium (discount)	$ 15,803,530	$ 2,246,136	$ 892,138	$ 17,157,528	$ 313,740

* Mainline bonds FY22 additions related to bond issuances were $1,054,590 and FY22 additions related to bond accretions were $14,054.
** Oil Franchise Tax bonds FY22 additions related to bond issuances were $529,000 and additions related to bond accretions were $1,527.

NOTE 8 DEBT *(continued)*

Debt service requirements subsequent to May 31, 2023 related to all sections of debt are as follows:

Year Ending May 31	Bonds Principal Maturities	Bonds Interest	Bonds Total	Direct Borrowings and Direct Placements Principal Maturities	Direct Borrowings and Direct Placements Interest	Direct Borrowings and Direct Placements Total	Total Debt Principal Maturities	Total Debt Interest	Total Debt Total
					(In thousands)				
2024	$ 482,900	$ 689,081	$ 1,171,981	$ 45,000	$ 25,232	$ 70,232	$ 527,900	$ 714,313	$ 1,242,213
2025	314,030	677,462	991,492	88,500	24,339	112,839	402,530	701,801	1,104,331
2026	344,286	665,773	1,010,059	-	22,559	22,559	344,286	688,332	1,032,618
2027	381,195	646,723	1,027,918	-	22,559	22,559	381,195	669,282	1,050,477
2028	364,680	629,436	994,116	-	22,607	22,607	364,680	652,043	1,016,723
2029 - 2033	2,305,013	2,894,949	5,199,962	34,265	110,762	145,027	2,339,278	3,005,711	5,344,989
2034 - 2038	3,169,857	2,225,414	5,395,271	137,230	90,433	227,663	3,307,087	2,315,847	5,622,934
2039 - 2043	3,616,078	1,505,543	5,121,621	351,780	32,601	384,381	3,967,858	1,538,144	5,506,002
2044 - 2048	2,758,165	621,625	3,379,790	-	-	-	2,758,165	621,625	3,379,790
2049 - 2053	1,153,215	115,321	1,268,536	-	-	-	1,153,215	115,321	1,268,536
2054 - 2058	28,050	1,122	29,172	-	-	-	28,050	1,122	29,172
	$ 14,917,469	$ 10,672,449	$ 25,589,918	$ 656,775	$ 351,092	$ 1,007,867	$ 15,574,244	$ 11,023,541	$ 26,597,785

The Commission's purpose for issuing debt is as follows:

- Mainline Senior Debt is issued for the purpose of financing the costs of various capital projects in the Commission's Ten-Year Capital Plan and for refunding outstanding Mainline Senior Debt.

  In fiscal year 2023, the Commission issued $548,570,000 of Mainline Senior Debt; $244,068,986 was issued to finance the costs of various capital projects and $304,501,014 was issued to refund and repay outstanding Mainline Senior Debt.

  In fiscal year 2022, the Commission issued $660,800,000 of Mainline Senior Debt; $433,890,000 was issued to finance the costs of various capital projects and $226,910,000 was issued to refund and repay outstanding Mainline Senior Debt.

- Mainline Subordinate Debt is issued for the purpose of financing a portion of the costs of making payments to the Pennsylvania Department of Transportation in accordance with Act 44 and Act 89 and for refunding outstanding Subordinate Debt. See Note 10 for additional information regarding Act 44 and Act 89.

  In fiscal year 2023, the Commission issued $343,800,000 of Mainline Subordinate Debt to refund and repay outstanding Mainline Subordinate Debt.

  In fiscal year 2022, the Commission issued $685,640,000 of Mainline Subordinate Debt; $393,790,000 was issued to finance the costs of Act 44 and Act 89 and $291,850,000 was issued as a Direct Placement to refund and repay outstanding Mainline Subordinate Debt.

NOTE 8 DEBT *(continued)*

- Oil Franchise Tax Debt and Motor License Registration Fee Debt are issued for the purpose of financing the costs of capital expenditures related to the Mon/Fayette and Southern Beltway expansion projects and to refund outstanding Oil Franchise Tax Debt and Motor License Registration Fee Debt.

  The Commission did not issue any Oil Franchise Tax Debt or Motor License Registration Fee Debt during the fiscal year ended May 31, 2023.

  In fiscal year 2022, the Commission issued $529,000,000 of Oil Franchise Tax Debt; $511,085,000 was issued to finance costs of capital expenditures related to the Mon/Fayette and Southern Beltway expansion projects and $17,915,000 was issued to refund and repay outstanding Oil Franchise Tax Debt. The Commission did not issue any Motor License Registration Fee Debt during the fiscal year ended May 31, 2022.

The issuance of new debt is conducted in accordance with the terms of the applicable Trust Indenture and approval of the Commissioners.

<u>Mainline Debt Requirements and Recent Activity</u>

The Amended and Restated Trust Indenture of 2001 requires that tolls be adequate to provide funds to cover current expenses and: (1) provide funds in an amount not less than the greater of 130% of the maximum principal and interest requirements for the succeeding year, or (2) 100% of the maximum principal and interest payments for the next fiscal year plus the amount required for maintenance of the Turnpike System as determined by the Commission's Consulting Engineer. If any deficiencies occur, the Commission is obligated to raise tolls accordingly.

As disclosed in Note 3, the Commission's Trust Indentures impose certain restrictions and requirements. The Commission's Trust Indenture for the Turnpike Subordinate Revenue Bonds requires that the Commission establish and maintain schedules of tolls for traffic over the Turnpike System as required by the Senior Indenture and, in addition, the amount paid into the General Reserve Fund of the Senior Indenture in each fiscal year and for each Commission Payment, will be at least sufficient to provide funds in an amount not less than: (1) 115% of the Annual Debt Service for each fiscal year on account of all outstanding Revenue Bonds and Revenue Bonds Parity Obligations; (2) 100% of the Annual Debt Service for such fiscal year on account of all Outstanding Guaranteed Bonds, Guaranteed Bonds Parity Obligations and Subordinated Indebtedness; and (3) any payment by the Commission required by the Subordinate Indenture for restoring a deficiency in the Debt Service Fund within an 18-month period.

The Commission's Mainline Senior Debt (including Direct Placements and Borrowings) contains a provision that in an unresolved event of default and following a vote of the bondholders, outstanding amounts become immediately due if the Commission is unable to make payment.

NOTE 8 DEBT *(continued)*

Mainline Debt Requirements and Recent Activity *(continued)*

In fiscal year 2017, the Commission entered into a loan agreement to borrow, over a possible eight-year period, up to $800.0 million in 16 tranches of up to $50.0 million each through the Immigrant Investor Program (known as the EB-5 visa program) administered by the U.S. Citizenship and Immigration Services. The Commission is borrowing this money to fund a portion of the costs of certain capital projects included in the Commission's current Ten-Year Capital Plan. Such debt, is issued under the Senior Indenture on parity with the Turnpike Revenue Bonds. The outstanding principal related to these EB-5 borrowings was $133.5 million and $183.5 million as of May 31, 2023 and 2022, respectively.

In June 2020, the Commission secured a $200.0 million revolving line of credit from PNC Bank, N. A. with a one-year term. The Commission was authorized to draw this money for general working capital purposes, funding/reimbursing necessary reserves and the payment of debt service on Bonds under the Senior Indenture. The Commission renewed the line of credit in fiscal year 2022 and again in fiscal year 2023, but did not draw on the line of credit in either of these fiscal years. As of May 31, 2023 and 2022, there was no outstanding principal related to this Line of Credit.

In December 2022, the Commission entered into, as a Direct Placement, a Bond Purchase Agreement of $233,015,000 Series of 2024 Forward Delivery Refunding Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2037. The Series of 2024 Forward Delivery Refunding Senior Revenue Bonds will be issued to refund a portion of the Series 2014 Refunding Senior Revenue Bonds ($98,790,000), 2014 Series A Senior Revenue Bonds ($59,535,000), and 2014 Series C Senior Revenue Bonds ($74,690,000) and paying the costs of issuing the Series of 2024 Forward Delivery Refunding Senior Revenue Bonds. The Series of 2024 Forward Delivery Refunding Senior Revenue Bonds will be delivered on October 23, 2024. As of May 31, 2023, the Commission does not have outstanding principal related to this transaction.

NOTE 8 DEBT *(continued)*

Mainline Debt Requirements and Recent Activity *(continued)*

Under the Commonwealth’s Act 44 of 2007, the Commission may issue up to $5.0 billion of Special Revenue Bonds guaranteed by the Commonwealth’s Motor License Fund. The Special Revenue Bonds authorized by Act 44 are subject to various limitations, including, among others, the following: the aggregate amount of such Special Revenue Bonds is limited to $5.0 billion; no more than $600.0 million of Special Revenue Bonds may be issued in any calendar year; debt service on the Special Revenue Bonds shall be payable from any available funds of the Commission, but are additionally secured by amounts payable from the Commonwealth’s Motor License Fund which is required to pay any debt service shortfall. All Special Revenue Bond debt service payments are subordinate obligations of the Commission payable solely from certain money in, or periodically released from, the General Reserve Fund after meeting all other Commission requirements pursuant to any financial documents, financial covenants, insurance policies, liquidity policies or agreements in effect at the Commission. Pursuant to the Commonwealth’s Act 89 of 2013, Special Revenue Bonds may not be issued by the Commission to fund any portion of its annual payment obligation to PennDOT after July 1, 2014, although Special Revenue Refunding Bonds may be issued. The outstanding principal related to these Special Revenue Bonds was $983.0 million and $991.7 million as of May 31, 2023 and 2022, respectively.

The commitment of the Commonwealth’s Motor License Fund to provide additional security to pay any Special Revenue Bond debt service shortfall shall continue until the retirement or defeasance of any Special Revenue Bonds or until October 13, 2057, whichever is sooner. To date, the Commission has made all required Special Revenue Bond debt service payments. No funds have been drawn or requested from the Commonwealth’s Motor License Fund for Special Revenue Bond debt service during the current reporting period or any prior reporting periods. In the event that the Commonwealth’s Motor License Fund would be required to make a Special Revenue Bond debt service payment, a provision of the Amended Lease and Funding Agreement, executed between the Commission and PennDOT, requires the Commission to reimburse the Motor License Fund for any Special Revenue Bond debt service payments plus interest accruing to the date of the Commission’s failure to pay the debt service. The obligation of the Commission to reimburse the Motor License Fund for any Special Revenue Bond debt service payment is a subordinate obligation of the Commission and is payable only from amounts, if any, in the Commission’s General Reserve Fund as permitted by any Commission financing documents, financial covenants, insurance policies, liquidity policies or agreements in effect at the Commission.

NOTE 8 DEBT *(continued)*

Mainline Debt Requirements and Recent Activity *(continued)*

In July 2021, the Commission issued $385,800,000 of 2021 Series B Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2051. The 2021 Series B Senior Revenue Bonds were issued to refund a portion of the 2014 Series B-1 Senior Revenue Bonds ($150,000,000), 2018 Series A-1 Senior Revenue Bonds ($39,710,000), 2018 Series B Senior Revenue Bonds ($70,000,000), to finance the cost of various capital expenditures set forth in the Commission's Ten-Year Capital Plan, including but not limited to the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or rehabilitation of certain interchanges and for paying the costs of issuing the 2021 Series B Senior Revenue Bonds.

In July 2021, the Commission issued $393,790,000 of 2021 Series B Subordinate Revenue Bonds at a fixed rate with a maturity date of December 1, 2051. The 2021 Series B Subordinate Revenue Bonds were issued primarily to finance a portion of the cost of making payments to PennDOT in accordance with Act 44 and Act 89 and paying the cost of issuing the 2021 Series B Subordinate Revenue Bonds.

In November 2021, the Commission issued $275,000,000 of 2021 Series C Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2051. The 2021 Series C Senior Revenue Bonds were primarily issued to refund a portion of the 2011 Series A Senior Revenue Bonds ($8,445,000), to finance the cost of various capital expenditures set forth in the Commission's Ten-Year Capital Plan, including but not limited to the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or rehabilitation of certain interchanges and for paying the costs of issuing the 2021 C Senior Revenue Bonds. The current refunding of the 2011 Series A Senior Revenue Bonds allowed the Commission to reduce its debt service by approximately $0.7 million. The transaction resulted in an economic gain of $0.6 million.

In November 2021, the Commission cash defeased the December 1, 2022 and December 1, 2023 maturities of the Commission's 2011 Series B Subordinate Revenue Bonds ($7,560,000) and 2012 Series A Subordinate Revenue Bonds ($5,620,000). This cash defeasance of the Subordinate Revenue Bonds allowed the Commission to reduce its debt service by approximately $14.2 million.

In November 2021, the Commission cash defeased the December 1, 2022 through December 1, 2024 maturities of the Commission's 2011 Series B Motor License Fund-Enhanced Subordinate Special Revenue Bonds ($1,845,000) and 2012 Series A Motor License Fund-Enhanced Subordinate Special Revenue Bonds ($2,340,000). This cash defeasance of the Motor License Fund-Enhanced Subordinate Special Revenue Bonds allowed the Commission to reduce its debt service by approximately $4.5 million.

NOTE 8 DEBT *(continued)*

Mainline Debt Requirements and Recent Activity *(continued)*

In April 2022, the Commission issued, as a Direct Placement, $291,850,000 of 2022 First Series Subordinate Revenue Refunding Bonds at a variable rate with a maturity of December 1, 2041. The 2022 First Series Subordinate Revenue Refunding Bonds were primarily issued to refund the 2017 First Series Subordinate Revenue Refunding Bonds and for paying the costs of issuing the 2022 First Series Subordinate Revenue Refunding Bonds.

In September 2022, the Commission issued $254,730,000 of 2022 Series A Senior Revenue Refunding Bonds at a fixed rate with a maturity date of December 1, 2041. The 2022 Series A Senior Revenue Refunding Bonds were issued pursuant to the Tender Offer to refund a portion of the 2013 Series C Senior Revenue Bonds ($23,875,000), 2014 Series A Senior Revenue Bonds ($15,295,000), 2014 Series C Senior Revenue Bonds ($43,055,000), 2014 Series Refunding Senior Revenue Bonds ($140,830,000), 2015 Series A-1 Senior Revenue Bonds ($23,475,00), 2015 Series B Senior Revenue Bonds ($5,885,000), and 2020 First Series Senior Revenue Refunding Bonds ($21,405,000) and paying for the costs of issuing the 2022 Series A Senior Revenue Refunding Bonds. The refunding of the 2013 Series C Senior Revenue Bonds, 2014 Series A Senior Revenue Bonds, 2014 Series C Senior Revenue Bonds, 2014 Series Refunding Senior Revenue Bonds, 2015 Series A-1 Senior Revenue Bonds, 2015 Series B Senior Revenue Bonds, and 2020 First Series Senior Revenue Refunding Bonds allowed the Commission to reduce its debt service by approximately $27.3 million. The transaction resulted in an economic gain $16.8 million.

In December 2022, the Commission issued $293,840,000 of 2022 Series B Senior Revenue Bonds at a fixed rate with a maturity date of December 1, 2052. The 2022 Series B Senior Revenue Bonds were issued to finance the costs of various capital expenditures set forth in the Commission's current ten-year capital plan, including any amendments thereto, or any prior capital plan including, but not limited to, the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or the rehabilitation of certain interchanges; to refund the 2018 EB-5 Loan 1st Tranche ($50,000,000) and the payment of the costs of issuing the 2022 Series B Senior Revenue Bonds.

NOTE 8 DEBT *(continued)*

Mainline Debt Requirements and Recent Activity *(continued)*

In March 2023, the Commission issued $343,800,000 of 2023 First Series Subordinate Revenue Refunding Bonds at a fixed rate with a maturity date of December 1, 2043. The 2023 First Series Subordinate Revenue Refunding Bonds were issued pursuant to the Tender Offer to refund a portion of the 2009 Series C Subordinate Revenue Bonds ($26,275,000), 2009 Series E Subordinate Revenue Bonds ($48,350,000), 2013 Series B-3 Subordinate Revenue Bonds ($295,000), 2014 Series A-1 Subordinate Revenue Bonds ($34,210,000), 2014 Series B Subordinate Revenue Bonds ($65,180,00), 2015 Series A-1 Subordinate Revenue Bonds ($23,485,000), 2015 Series B Subordinate Revenue Bonds ($23,145,000), 2016 Refunding Subordinate Revenue Bonds ($24,410,000), 2016 Series A-1 Subordinate Revenue Bonds ($23,090,000), 2017 Series A Subordinate Revenue Bonds ($76,870,000), 2019 First Series Subordinate Revenue Refunding Bonds ($6,555,000), and 2020 First Series Subordinate Revenue Refunding Bonds ($5,500,000) and paying for the costs of issuing the 2023 First Series Subordinate Revenue Refunding Bonds. The refunding of the 2009 Series C Subordinate Revenue Bonds, 2009 Series E Subordinate Revenue Bonds, 2013 Series B-3 Subordinate Revenue Bonds, 2014 Series A-1 Subordinate Revenue Bonds, 2014 Series B Subordinate Revenue Bonds, 2015 Series A-1 Subordinate Revenue Bonds, 2015 Series B Subordinate Revenue Bonds, 2016 Refunding Subordinate Revenue Bonds, 2016 A-1 Subordinate Revenue Bonds, 2017 Series A Subordinate Revenue Bonds, 2019 First Series Subordinate Revenue Refunding Bonds, and 2020 First Series Subordinate Revenue Refunding Bonds allowed the Commission to reduce its debt service by approximately $40.6 million. The transaction resulted in an economic gain $29.4 million.

Debt service requirements subsequent to May 31, 2023 related to the Mainline debt are as follows:

	Bonds			Direct Borrowings and Direct Placements			Total Debt		
Year Ending May 31	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total
					(In thousands)				
2024	$ 444,135	$ 612,409	$ 1,056,544	$ 45,000	$ 14,785	$ 59,785	$ 489,135	$ 627,194	$ 1,116,329
2025	273,295	602,733	876,028	88,500	13,921	102,421	361,795	616,654	978,449
2026	301,466	593,141	894,607	-	12,141	12,141	301,466	605,282	906,748
2027	336,160	576,301	912,461	-	12,141	12,141	336,160	588,442	924,602
2028	317,330	561,337	878,667	-	12,160	12,160	317,330	573,497	890,827
2029 - 2033	2,072,673	2,590,756	4,663,429	-	60,685	60,685	2,072,673	2,651,441	4,724,114
2034 - 2038	2,938,072	1,987,661	4,925,733	37,290	58,392	95,682	2,975,362	2,046,053	5,021,415
2039 - 2043	3,386,807	1,275,514	4,662,321	254,560	25,061	279,621	3,641,367	1,300,575	4,941,942
2044 - 2048	2,401,795	503,228	2,905,023	-	-	-	2,401,795	503,228	2,905,023
2049 - 2053	861,220	79,434	940,654	-	-	-	861,220	79,434	940,654
	$ 13,332,953	$ 9,382,514	$ 22,715,467	$ 425,350	$ 209,286	$ 634,636	$ 13,758,303	$ 9,591,800	$ 23,350,103

NOTE 8 DEBT *(continued)*

Oil Franchise Tax Debt Requirements and Recent Activity

The Oil Franchise Tax Revenue Bonds are secured by a pledge and assignment by the Commission to the Trustee of: (1) all proceeds from the Commission's allocation of the Commonwealth's Oil Company Franchise Tax; (2) the Commission's right to receive its allocation of the Oil Company Franchise Tax and any portion of the allocation actually received by the Commission; (3) all monies deposited into accounts or funds created by the 1998 Indenture, as supplemented; and, (4) all investment earnings on all monies held in accounts and funds established by the 1998 Indenture.

The 1998 Indenture requires the Commission to petition the General Assembly of the Commonwealth of Pennsylvania for additional funds in the event that the Commission's allocation of the Oil Company Franchise Tax is inadequate to pay maximum principal and interest payments for the succeeding year.

In September 2021, the Commission issued $327,520,000 2021 Series A Oil Franchise Tax Senior Revenue Bonds at a fixed rate with a maturity date of December 1, 2051. The 2021 Series A Oil Franchise Tax Senior Revenue Bonds were issued primarily to provide funds for the refunding of the Commission's 2009 Series A-1 Oil Franchise Tax Senior Revenue Bonds ($3,855,000), financing the 2021 Construction Project and paying the costs of issuing the 2021 Series A Oil Franchise Tax Senior Revenue Bonds. The refunding of the 2009 Series A-1 Oil Franchise Tax Senior Revenue Bonds allowed the Commission to reduce its debt service by approximately $0.2 million. The transaction resulted in an economic gain of approximately $0.2 million.

In September 2021, the Commission issued $201,480,000 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds at a fixed rate with a maturity date of December 1, 2053. The 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds were issued primarily to provide funds for the refunding of the Commission's 2009 Series D-1 Oil Franchise Tax Subordinate Revenue Bonds ($19,070,000), 2009 Series D-2 Oil Franchise Tax Subordinate Revenue Bonds ($405,000), financing the 2021 Construction Project, and paying the costs of issuing the 2021 Series B Oil Franchise Tax Subordinate Revenue Bonds. The refunding of the 2009 Series D-1 Oil Franchise Tax Subordinate Revenue Bonds and 2009 Series D-2 Oil Franchise Tax Subordinate Revenue Bonds allowed the Commission to reduce its debt service by approximately $3.4 million. The transaction resulted in an economic gain of approximately $3.1 million.

NOTE 8 DEBT *(continued)*

Oil Franchise Tax Debt Requirements and Recent Activity *(continued)*

The Commission's Oil Franchise Tax Debt contains a provision that in an unresolved event of default and following a vote of the bondholders, outstanding amounts become immediately due if the Commission is unable to make payment.

Debt service requirements subsequent to May 31, 2023 related to Oil Franchise Tax debt are as follows:

	Bonds			Direct Borrowings and Direct Placements			Total Debt		
Year Ending May 31	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total
					(In thousands)				
2024	$ 27,640	$ 71,807	$ 99,447	$ -	$ -	$ -	$ 27,640	$ 71,807	$ 99,447
2025	29,020	70,463	99,483	-	-	-	29,020	70,463	99,483
2026	30,490	68,997	99,487	-	-	-	30,490	68,997	99,487
2027	32,060	67,452	99,512	-	-	-	32,060	67,452	99,512
2028	33,690	65,828	99,518	-	-	-	33,690	65,828	99,518
2029 - 2033	195,910	301,715	497,625	-	-	-	195,910	301,715	497,625
2034 - 2038	231,785	237,753	469,538	-	-	-	231,785	237,753	469,538
2039 - 2043	229,271	230,029	459,300	-	-	-	229,271	230,029	459,300
2044 - 2048	356,370	118,397	474,767	-	-	-	356,370	118,397	474,767
2049 - 2053	291,995	35,887	327,882	-	-	-	291,995	35,887	327,882
2054 - 2058	28,050	1,122	29,172	-	-	-	28,050	1,122	29,172
	$ 1,486,281	$ 1,269,450	$ 2,755,731	$ -	$ -	$ -	$ 1,486,281	$ 1,269,450	$ 2,755,731

Motor License Registration Fee Debt Requirements and Recent Activity

Pursuant to Section 20 of Act 3, the Commonwealth appropriates $28.0 million of Act 3 revenues to the Commission annually. The $28.0 million is payable to the Commission in the amount of $2.3 million per month. The Motor License Registration Fee Revenue Bonds are secured by a pledge and assignment by the Commission to the Trustee of any receipts, revenues and other moneys received by the Trustee on or after the date of the Indenture from the Commission's allocation of Act 3 revenues and any income earned on any fund or account established pursuant to the Indenture.

The Commission's Motor License Registration Fee Debt (including Direct Placements and Borrowings) contains a provision that in an unresolved event of default and following a vote of the bondholders, outstanding amounts become immediately due if the Commission is unable to make payment.

NOTE 8 DEBT *(continued)*

Motor License Registration Fee Debt Requirements and Recent Activity *(continued)*

Debt service requirements subsequent to May 31, 2023 related to Motor License Registration Fee debt are as follows:

	Bonds			Direct Borrowings and Direct Placements			Total Debt		
Year Ending May 31	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total	Principal Maturities	Interest	Total
					(In thousands)				
2024	$ 11,125	$ 4,865	$ 15,990	$ -	$ 10,447	$ 10,447	$ 11,125	$ 15,312	$ 26,437
2025	11,715	4,266	15,981	-	10,418	10,418	11,715	14,684	26,399
2026	12,330	3,635	15,965	-	10,418	10,418	12,330	14,053	26,383
2027	12,975	2,970	15,945	-	10,418	10,418	12,975	13,388	26,363
2028	13,660	2,271	15,931	-	10,447	10,447	13,660	12,718	26,378
2029 - 2033	36,430	2,478	38,908	34,265	50,077	84,342	70,695	52,555	123,250
2034 - 2038	-	-	-	99,940	32,041	131,981	99,940	32,041	131,981
2039 - 2043	-	-	-	97,220	7,540	104,760	97,220	7,540	104,760
	$ 98,235	$ 20,485	$ 118,720	$ 231,425	$ 141,806	$ 373,231	$ 329,660	$ 162,291	$ 491,951

Defeased Bonds

In both the current and prior years, the Commission defeased certain revenue bonds by placing funds in irrevocable trusts to provide for all future debt service payments on the defeased bonds. Accordingly, the trust account assets and the liability for the defeased bonds were not included in the Commission's financial statements. As of May 31, 2023 and 2022, the Commission had $443.8 million and $818.6 million, respectively, of defeased bonds outstanding.

Arbitrage

The Tax Reform Act of 1986 instituted certain arbitrage restrictions with respect to the issuance of tax-exempt debt bonds after August 31, 1986. Arbitrage regulations deal with the investment of all tax-exempt bond proceeds at an interest yield greater than the interest yield paid to bondholders. Generally, all interest paid to bondholders can be retroactively rendered taxable if rebates are not reported and paid to the Internal Revenue Service (IRS) at least every five years. The Commission had a total arbitrage liability of $0.4 million and $45,800 for fiscal years ended May 31, 2023 and 2022, respectively. The arbitrage liability recorded as accounts payable and accrued liabilities was $0.2 million for May 31, 2023. The arbitrage liability recorded as other noncurrent liabilities was $0.2 million and $45,800 as of May 31, 2023 and 2022, respectively.

NOTE 8 DEBT *(continued)*

Swap Payments and Associated Debt

Net swap payments and related debt service requirements related to all sections subsequent to May 31, 2023, assuming current interest rates remain the same for the term of the agreements, are as follows:

	Bonds				Direct Borrowings and Direct Placements				Total Debt			
Year Ending May 31	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total
						(In thousands)						
2024	$ 191,325	$ 20,103	$ 3,890	$ 215,318	$ -	$ 22,607	$ (4,653)	$ 17,954	$ 191,325	$ 42,710	$ (763)	$ 233,272
2025	2,440	16,055	3,877	22,372	-	22,540	(4,592)	17,948	2,440	38,595	(715)	40,320
2026	2,505	15,987	3,662	22,154	-	22,559	(4,606)	17,953	2,505	38,546	(944)	40,107
2027	2,565	15,898	3,467	21,930	-	22,559	(4,607)	17,952	2,565	38,457	(1,140)	39,882
2028	2,635	15,828	3,144	21,607	-	22,607	(4,653)	17,954	2,635	38,435	(1,509)	39,561
2029 - 2033	14,230	77,564	9,601	101,395	34,265	110,762	(23,342)	121,685	48,495	188,326	(13,741)	223,080
2034 - 2038	16,160	74,920	1,469	92,549	137,230	90,432	(24,765)	202,897	153,390	165,352	(23,296)	295,446
2039 - 2043	383,975	22,075	(3,274)	402,776	351,780	32,601	(11,529)	372,852	735,755	54,676	(14,803)	775,628
2044 - 2048	20,835	4,292	(1,916)	23,211	-	-	-	-	20,835	4,292	(1,916)	23,211
2049 - 2053	13,830	736	(328)	14,238	-	-	-	-	13,830	736	(328)	14,238
	$ 650,500	$ 263,458	$ 23,592	$ 937,550	$ 523,275	$ 346,667	$ (82,747)	$ 787,195	$ 1,173,775	$ 610,125	$ (59,155)	$ 1,724,745

Mainline net swap payments and related debt service requirements subsequent to May 31, 2023 for the 2018 Series A-1 Senior Revenue Bonds, 2018 Series B Senior Revenue Bonds, 2019 Second Series Senior Revenue Bonds, 2020 Second Series Senior Revenue Bonds, 2020 Series A Senior Revenue Bonds and 2022 First Series Subordinate Revenue Refunding Bonds (Direct Placement) are as follows:

	Bonds				Direct Borrowings and Direct Placements				Total Debt			
Year Ending May 31	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total
						(In thousands)						
2024	$ 191,325	$ 20,103	$ 3,890	$ 215,318	$ -	$ 12,160	$ (6,123)	$ 6,037	$ 191,325	$ 32,263	$ (2,233)	$ 221,355
2025	2,440	16,055	3,877	22,372	-	12,122	(6,091)	6,031	2,440	28,177	(2,214)	28,403
2026	2,505	15,987	3,662	22,154	-	12,141	(6,091)	6,050	2,505	28,128	(2,429)	28,204
2027	2,565	15,898	3,467	21,930	-	12,141	(6,091)	6,050	2,565	28,039	(2,624)	27,980
2028	2,635	15,828	3,144	21,607	-	12,160	(6,123)	6,037	2,635	27,988	(2,979)	27,644
2029 - 2033	14,230	77,564	9,601	101,395	-	60,685	(30,487)	30,198	14,230	138,249	(20,886)	131,593
2034 - 2038	16,160	74,920	1,469	92,549	37,290	58,391	(29,326)	66,355	53,450	133,311	(27,857)	158,904
2039 - 2043	383,975	22,075	(3,274)	402,776	254,560	25,061	(12,600)	267,021	638,535	47,136	(15,874)	669,797
2044 - 2048	20,835	4,292	(1,916)	23,211	-	-	-	-	20,835	4,292	(1,916)	23,211
2049 - 2053	13,830	736	(328)	14,238	-	-	-	-	13,830	736	(328)	14,238
	$ 650,500	$ 263,458	$ 23,592	$ 937,550	$ 291,850	$ 204,861	$ (102,932)	$ 393,779	$ 942,350	$ 468,319	$ (79,340)	$ 1,331,329

Motor License net swap payments and related debt service requirements subsequent to May 31, 2023 for the 2005 Series B, C, and D Motor License Registration Fee Bonds (Direct Placement) are as follows:

	Bonds				Direct Borrowings and Direct Placements				Total Debt			
Year Ending May 31	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total	Principal Maturities	Interest	Hedging	Total
						(In thousands)						
2024	$ -	$ -	$ -	$ -	$ -	$ 10,447	$ 1,470	$ 11,917	$ -	$ 10,447	$ 1,470	$ 11,917
2025	-	-	-	-	-	10,418	1,499	11,917	-	10,418	1,499	11,917
2026	-	-	-	-	-	10,418	1,485	11,903	-	10,418	1,485	11,903
2027	-	-	-	-	-	10,418	1,484	11,902	-	10,418	1,484	11,902
2028	-	-	-	-	-	10,447	1,470	11,917	-	10,447	1,470	11,917
2029 - 2033	-	-	-	-	34,265	50,077	7,145	91,487	34,265	50,077	7,145	91,487
2034 - 2038	-	-	-	-	99,940	32,041	4,561	136,542	99,940	32,041	4,561	136,542
2039 - 2043	-	-	-	-	97,220	7,540	1,071	105,831	97,220	7,540	1,071	105,831
	$ -	$ -	$ -	$ -	$ 231,425	$ 141,806	$ 20,185	$ 393,416	$ 231,425	$ 141,806	$ 20,185	$ 393,416

As rates vary, variable rate bond interest payments and net swap payments will vary.

NOTE 9 RETIREMENT BENEFITS

<u>General Information about the Pension Plan</u>

Plan Description

Pennsylvania State Employees' Retirement System (SERS) is the administrator of the State Employees' Retirement Fund (Defined Benefit Plan), which is a cost-sharing multiple-employer defined benefit pension plan. SERS is also the administrator of the State Employees' Defined Contribution Plan (Defined Contribution Plan), which was established as part of Act 2017-5. The Defined Contribution Plan opened for enrollment on January 1, 2019. Both the Defined Benefit Plan and Defined Contribution Plan were established by the Commonwealth of Pennsylvania (Commonwealth) to provide retirement benefits for employees of state government and certain independent agencies. The Defined Benefit and Defined Contribution Plans operate under separate trusts. The assets of the Defined Benefit Plan are held in the State Employees' Retirement Fund (pension fund). Assets in the Defined Contribution Plan (investment plan) are held in individual member investment accounts.

Membership in SERS is mandatory for most Commission (and other state) employees. Act 2017-5 changed the benefit structure for most new employees effective January 1, 2019, which created a hybrid plan with two class of service options (defined benefit/defined contribution) as well as a defined contribution-only plan option. Article II of the Commonwealth's constitution assigns the authority to establish and amend the benefit provision of the plan to the General Assembly. Separately issued financial statements for SERS can be obtained at *www.sers.pa.gov*.

Benefits Provided

SERS provides retirement, death, and disability benefits. Member retirement benefits of the pension plan are determined by taking years of credited service multiplied by final average salary multiplied by years of service multiplied by the annual accrual rate. Commission employees participate in one of the following class of service categories: Class A, Class AA, Class A3, Class A4, Class A5 or Class A6. Class A5 and Class A6 became effective January 1, 2019. These classes are considered part of the Hybrid Plan as they include participation in both the pension fund and the investment plan. Employees are also eligible to elect participation solely in the investment plan, under the 401(a) DC class of service. According to the State Employees' Retirement Code (SERC), all obligations of SERS will be assumed by the Commonwealth should SERS terminate.

NOTE 9 RETIREMENT BENEFITS *(continued)*

General Information about the Pension Plan *(continued)*

Contributions

SERS retirement code (71 Pa. C.S.) requires that all SERS participating employers make contributions to the pension fund on behalf of all active members and annuitants necessary to fund the liabilities and provide the annuity reserves required to pay benefits. The SERS retirement code requires that all SERS-participating employers make contributions to the investment plan on behalf of all active participants. SERS funding policy, as set by the State Employees' Retirement Board (SERB), provides for periodic active member contributions at statutory rates for both the pension fund and investment plan. The Defined Benefit Plan funding policy also provides for periodic employer contributions at actuarially determined rates based on Defined Benefit Plan funding valuation, expressed as a percentage of annual retirement covered payroll, such that they, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay benefits when due. The Commission's retirement contribution, as a percentage of covered payroll, by class is as follows:

Year Ended June 30	Class A	Class AA	Class A3	Class A4	Class A5	Class A6	401(a) DC
2023	30.44%	38.82%	26.05%	26.05%	18.43%	18.43%	18.37%
2022	29.98%	37.46%	25.90%	25.90%	19.93%	19.93%	19.88%
2021	29.48%	36.84%	25.47%	25.47%	19.59%	19.59%	19.56%

Contributions to the pension fund from the Commission were $32.7 million and $31.3 million for the fiscal years ended May 31, 2023 and 2022, respectively. Contributions to the investment plan from the Commission were $205,200 and $116,900 for the fiscal years ended May 31, 2023 and 2022, respectively. With the passing of Act 2020-94, forfeitures after July 1, 2020 are used to offset future administrative costs of the investment plan.

NOTE 9 RETIREMENT BENEFITS *(continued)*

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

As of May 31, 2023, the Commission reported a liability of $331.6 million for its proportionate share of the net pension liability of the pension fund. The net pension liability was measured as of December 31, 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Commission's proportion of the net pension liability was based on a projected-contribution method. This methodology applies the most recently calculated contribution rates for Commonwealth fiscal year 2023-2024, from the December 31, 2022 funding valuation, to the expected funding payroll for the allocation of the 2022 amounts. As of December 31, 2022, the Commission's proportionate share of the net pension liability was 1.45%, which was a decrease of 0.06% from its proportion measured as of December 31, 2021.

For the fiscal year ended May 31, 2023, the Commission recognized pension expense of $25.5 million related to the pension fund. For the fiscal year ended May 31, 2023, the Commission recognized pension expense of $224,700 related to the investment plan.

As of May 31, 2023, the Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
	(In thousands)	
Differences between expected and actual experience	$ 4,818	$ 920
Net difference between projected and actual investment earnings on pension plan investments	45,038	-
Changes of assumptions	22,363	-
Differences between employer contributions and proportionate share of contributions	534	961
Changes in proportion	-	36,349
Commission contr butions subsequent to measurement date	15,189	-
	$ 87,942	$ 38,230

NOTE 9 RETIREMENT BENEFITS *(continued)*

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions *(continued)*

The $15.2 million reported as deferred outflows of resources related to pensions resulting from Commission contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ending May 31, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as net (decreases) increases in pension expense as follows:

Year Ending May 31	
	(In thousands)
2024	$ (5,141)
2025	4,394
2026	11,185
2027	23,973
2028	113
	$ 34,524

As of May 31, 2022, the Commission reported a liability of $219.3 million for its proportionate share of the net pension liability of the pension fund. The net pension liability was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Commission's proportion of the net pension liability was based on a projected-contribution method. This methodology applies the most recently calculated contribution rates for Commonwealth fiscal year 2022-2023, from the December 31, 2021 funding valuation, to the expected funding payroll for the allocation of the 2021 amounts. As of December 31, 2021, the Commission's proportionate share of the net pension liability was 1.51%, which was a decrease of 0.07% from its proportion measured as of December 31, 2020.

For the fiscal year ended May 31, 2022, the Commission recognized pension benefit (negative expense) of $1.1 million related to the pension fund. For the fiscal year ended May 31, 2022, the Commission recognized pension expense of $141,400 related to the investment plan.

NOTE 9 RETIREMENT BENEFITS *(continued)*

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions *(continued)*

As of May 31, 2022, the Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
	(In thousands)	
Differences between expected and actual experience	$ 1,448	$ 1,262
Net difference between projected and actual investment earnings on pension plan investments	-	63,450
Changes of assumptions	22,571	-
Differences between employer contributions and proportionate share of contr butions	834	1,271
Changes in proportion	-	43,346
Commission contributions subsequent to measurement date	14,776	-
	$ 39,629	$ 109,329

Actuarial Method and Assumptions

Every five years, SERS is required to conduct an actuarial experience study to determine whether the assumptions used in its annual actuarial valuations remain accurate based on current and anticipated demographic trends and economic conditions. The actuary, under oversight of the Pennsylvania State Employees' Retirement Board (SERB), reviewed economic assumptions (such as the assumed future investment returns and salary increases) as well as demographic assumptions (such as employee turnover, retirement, disability, and death rates). The *19th Investigation of Actuarial Experience* study for the period 2015 – 2019 was released and approved by the SERB in July 2020.

The study recommended decreasing the investment rate of return and inflation assumptions. The assumptions from this study were effective with the December 31, 2020 valuation going forward unless changed by the SERB. The study can be viewed at *www.SERS.pa.gov.*

The actuary and SERB review the investment rate of return annually, in addition to the normal five-year experience study cycle, in recognition of changing market environments to ensure this assumption remains reasonable with each actuarial valuation every year. In June 2022, the SERB approved a reduction in the Defined Benefit Plan investment rate of return to 6.875% for 2022 from 7.0% for 2021.

NOTE 9 RETIREMENT BENEFITS *(continued)*

Actuarial Methods and Assumptions *(continued)*

The following methods and assumptions were used in the actuarial valuation for the December 31, 2022 and 2021 measurement dates:

	December 31, 2022	**December 31, 2021**
Actuarial cost method	Entry age	Entry age
Amortization method	Straight-line amortization of investments over five years and amortization of assumption changes and non-investment gains/losses over the average expected remaining service lives of all employees that are provided benefits	Straight-line amortization of investments over five years and amortization of assumption changes and non-investment gains/losses over the average expected remaining service lives of all employees that are provided benefits
Investment rate of return	6.875% net of manager fees, including inflation	7.00% net of manager fees, including inflation
Projected salary increases	Average of 4.55% with range of 3.30% - 6.95%, including inflation	Average of 4.60% with range of 3.30% - 6.95%, including inflation
Asset valuation method	Fair (market) value	Fair (market) value
Inflation	2.50%	2.50%
Mortality rate	Projected PubG-2010 and PubNS-2010 Mortality Tables adjusted for actual plan experience and future improvement	Projected PubG-2010 and PubNS-2010 Mortality Tables adjusted for actual plan experience and future improvement
Cost-of-living adjustments (COLA)	Ad hoc	Ad hoc

NOTE 9 RETIREMENT BENEFITS *(continued)*

Actuarial Methods and Assumptions *(continued)*

The long-term expected real rate of return on pension plan investments is determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of manager fees 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 geometric real rates of return for each major asset class included in the pension plan's current and target asset allocation as of December 31, 2022 and 2021 are summarized in the following tables:

As of December 31, 2022:

Asset Class	Target Allocation	Long-term Expected Rate
Private Equity	16.00%	5.75%
Real Estate	7.00%	5.12%
U.S. Equity	31.00%	4.35%
International Developed Markets Equity	14.00%	4.25%
Emerging Markets Equity	5.00%	4.65%
Fixed Income	22.00%	-0.50%
Inflation Protection (TIPS)	3.00%	-1.00%
Cash	2.00%	-1.05%
Total	100.00%	

As of December 31, 2021:

Asset Class	Target Allocation	Long-term Expected Rate
Private Equity	12.00%	6.00%
Private Credit	4.00%	4.25%
Real Estate	7.00%	3.75%
U.S. Equity	31.00%	4.60%
International Developed Markets Equity	14.00%	4.50%
Emerging Markets Equity	5.00%	4.90%
Fixed Income - Core	22.00%	-0.25%
Inflation Protection (TIPS)	3.00%	-0.30%
Cash	2.00%	-1.00%
Total	100.00%	

NOTE 9 RETIREMENT BENEFITS *(continued)*

Discount Rate

The discount rate used to measure the total pension liability was reduced to 6.875% as of December 31, 2022 from 7.0% as of December 31, 2021. The projection of cash flows used to determine the discount rate assumed that employee contributions from pension plan members will be made at the current contribution rate and that contributions from participating employers will be made at actuarially determined rates as set by statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current pension plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Commission's Proportionate Share of the Net Pension Liability to Change in the Discount Rate

The following schedule presents the Commission's proportionate share of the 2022 and 2021 net pension liability calculated using the discount rate of 6.875% and 7.0%, respectively. It also shows what the Commission's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1.0% Decrease to 5.875%	Current Discount Rate of 6.875%	1.0% Increase to 7.875%
		(In thousands)	
Commission's share of the net pension liability as of the 12/31/22 measurement date	$ 425,028	$ 331,574	$ 252,646

	1.0% Decrease to 6.0%	Current Discount Rate of 7.0%	1.0% Increase to 8.0%
Commission's share of the net pension liability as of the 12/31/21 measurement date	$ 317,635	$ 219,303	$ 136,166

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued financial statements for SERS.

NOTE 9 RETIREMENT BENEFITS *(continued)*

Payables to the Pension Plan

As of May 31, 2023 and 2022, the Commission reported a $7.3 million and $7.0 million liability, respectively, within accounts payable and accrued liabilities on the Statement of Net Position for the Commission's share of contributions that had not yet been paid to SERS. As of May 31, 2023 and 2022, $0.02 million and $0.01 million, respectively, of the amount payable to SERS was allocated to the investment plan with the remainder allocated to the pension fund.

NOTE 10 COMMITMENTS AND CONTINGENCIES

The Commission is a defendant in a number of legal proceedings pertaining to matters normally incidental to routine operations. Such litigation includes, but is not limited to, claims asserted against the Commission arising from alleged torts, alleged breaches of contracts, and condemnation proceedings. Tort claims against the Commission are generally barred by sovereign immunity, except as waived by statute. Further, to the extent waived, damages for any loss are limited by sovereign immunity to $250,000 for each person and $1,000,000 for each accident. Based on the current status of these legal proceedings, it is the opinion of Commission management and counsel that they will not have a material effect on the Commission's financial position.

All-Electronic Tolling Layoff

Due to the adverse impacts of COVID-19, the Commission determined to move to AET (All-Electronic Tolling) toll collection on March 16, 2020; removing toll collectors from toll booths and relying solely on AET In-Place and E-ZPass tolling across the System. Initially intended to be a temporary response to the COVID-19 pandemic, the Commissioners, on June 2, 2020, unanimously approved the permanent transition to AET toll collection operations. As part of the permanent transition to all-electronic toll collection operations, the Commission also approved the layoff of 492 Fare Collection Department and Ticket Systems Audit Department employees. The resulting layoff of approximately 492 bargaining unit employees was implemented, effective as of June 18, 2020. The Commission so informed representatives of Teamsters Local Union Nos. 77 and 250 (collectively the *Union*) on June 2, 2020. In accordance with terms negotiated with the Union, the laid off employees may receive severance based on their years of seniority upon execution of a release of claims.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

All-Electronic Tolling Layoff *(continued)*

Laid off employees were eligible to apply for severance within 24 months of their layoff date. These laid off employees were also eligible to continue health benefit coverage in the Commission's group medical insurance plan for up to 24 months after their layoff date. The liabilities related to termination benefits recorded as accounts payable and accrued liabilities were $1.3 million as of May 31, 2022, respectively. As of May 31, 2022, this amount was comprised of $0.5 million for severance for employees pending termination and $0.8 million in medical benefits. No balances remain for termination benefits as of May 31, 2023. The effect on pension benefits were reflected in the SERS actuarial valuation as of December 31, 2021 through the change in allocation percentage, portion of the Commission's net pension liability and projected employer contributions, see Note 9. The effect on other postemployment benefits was included in the full actuarial valuation performed as of May 31, 2021.

Act 44 and Act 89

On July 18, 2007, Act 44 was enacted, creating a "public-public partnership" between the Commission and PennDOT to provide funding for roads, bridges and transit throughout the Commonwealth. Subsequently, in order to, among other things, effectuate the provisions of Act 44 requiring the Commission to make substantial annual payments to PennDOT, as described in the following paragraphs, the Commission and PennDOT entered into a Lease and Funding Agreement (the Act 44 Funding Agreement), incorporating many of the terms of Act 44.

The Act 44 Funding Agreement also granted the Commission the option to lease the portion of Interstate 80 (I-80) located in the Commonwealth from PennDOT upon, among other things, the approval of the Federal Highway Administration (FHWA) of the conversion of such portion into a toll road (the Conversion). The Conversion was not approved by FHWA, and neither the Commission nor PennDOT appealed the decision. The Commission did not exercise its option to lease such portion of I-80, and the period during which the Commission could exercise its option under the Act 44 Funding Agreement lapsed on October 14, 2010 without the Commission effectuating the Conversion or having the ability to do so in the future, leaving all legal, financial and operational responsibility for I-80 solely with PennDOT.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Act 44 and Act 89 *(continued)*

Pursuant to Act 44 and the Act 44 Funding Agreement, the Commission is obligated to make scheduled annual payments to PennDOT (*Act 44/Act 89 Payments*). Previously, payments in the amount of $450.0 million were due through 2057, payable in equal quarterly installments, with $200.0 million of the scheduled annual payments supporting road and bridge projects and $250.0 million supporting transit projects throughout the Commonwealth. However, the Commission's current annual Act 44/Act 89 Payment obligation is now $50.0 million. See the following paragraphs for more information on the total amount paid by the Commission under the Amended Funding Agreement.

On November 25, 2013, Act 89 was enacted to provide (i) substantial revenue enhancements to support investment in the Commonwealth's aging transportation infrastructure, and (ii) substantial reductions in the Commission's obligations with respect to the Act 44/Act 89 Payments. The revenue enhancements providing additional funds each year for investment in the Commonwealth's transportation infrastructure were fully implemented in fiscal year 2018.

Revisions to the Commission's Act 44/Act 89 Payment obligations enacted under Act 89 were implemented by Amendment Number One to Lease and Funding Agreement (the *Act 89 Amendment* and together with the Act 44 Funding Agreement, the *Original Amended Funding Agreement*) executed by the Commission and PennDOT on April 4, 2014.

In accordance with Act 89 and the Original Amended Funding Agreement, the Commission's aggregate annual Act 44/Act 89 Payment to PennDOT for fiscal year 2014 through fiscal year 2022 is $450.0 million, with at least $30.0 million of such annual amount required to be paid from current revenues and the remainder expected to be funded by the proceeds of bonds issued under the Subordinate Revenue Indenture.

The Original Amended Funding Agreement was subsequently further amended, on July 31, 2018, by Amendment Number Two to Lease and Funding Agreement (the *Amendment Two)* and on June 11, 2020, by Amendment Number Three to the Lease and Funding Agreement (the *Amendment Three*, and together with the Original Amended Funding Agreement and Amendment Two, the *Amended Funding Agreement*) both of which were executed by all parties to provide current year adjustments for certain due dates for Act 44/Act 89 Payments in fiscal years 2019 through 2021.

Act 89 relieved the Commission from over $15.0 billion in future Act 44/Act 89 Payments to PennDOT during fiscal years 2023 through 2057 (the term of the Amended Funding Agreement), by reducing the Commission's aggregate annual Act 44/Act 89 Payments to PennDOT to $50.0 million, which amount shall be paid from then-current revenues of the Commission.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Act 44 and Act 89 *(continued)*

The Commission is required by the terms of the Amended Funding Agreement and Act 44 to fix and adjust tolls at levels that will generate revenues (together with other available moneys) sufficient to pay, among other things, amounts to PennDOT pursuant to the Amended Funding Agreement when due and other obligations of the Commission, and the Commission has covenanted in the Subordinate Revenue Indenture to set tolls at a level sufficient to meet its coverage obligations taking into account any additional debt incurred in order to make such payments.

Act 44 and Act 89 provide that all Act 44/Act 89 Payments shall be subordinate obligations of the Commission payable solely from the General Reserve Fund after meeting all other Commission requirements pursuant to any financial documents, financial covenants, liquidity policies or agreements in effect at the Commission.

Open Purchase Order Commitments

The Commission had open purchase order commitments of approximately $2.6 billion and $1.7 billion as of May 31, 2023 and 2022, respectively.

Interest Rate Swaps

The fair value and notional amounts of derivative instruments outstanding as of May 31, 2023 and 2022, classified by type and the changes in fair value of such derivative instruments for the years then ended as reported in the fiscal year 2023 and 2022 financial statements are as follows:

		Changes in Fair Value		Fair Value at May 31, 2023		
	May 31, 2023	Classification	Amount	Classification	Amount	Notional
Cash flow hedges						
Pay-fixed interest rate swap	$ 14,646	Deferred (outflows)/inflows	$ 36,119	Noncurrent liabilities	$ 50,765	$ 1,073,223
Investment derivative instruments						
Basis swaps	(1,159)	Investment earnings/(losses)	3,652	Noncurrent investments	2,493	431,695
Total PTC	$ 13,487		$ 39,771		$ 53,258	

		Changes in Fair Value		Fair Value at May 31, 2022		
	May 31, 2022	Classification	Amount	Classification	Amount	Notional
			(In thousands)			
Cash flow hedges						
Pay-fixed interest rate swap	$ (111,370)	Deferred (outflows)/inflows	$ 126,016	Noncurrent liabilities	$ 14,646	$ 1,075,543
Investment derivative instruments						
Basis swaps	15,890	Investment earnings/(losses)	(17,049)	Noncurrent investments	(1,159)	435,810
Total PTC	$ (95,480)		$ 108,967		$ 13,487	

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

Fair Values

As of May 31, 2023 and 2022, the fair values of the Commission's derivative instruments were estimated beginning with the mid-market valuation. The mid-market valuation of the Commission's derivative instruments was estimated using the zero-coupon discounting method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve are the market's best estimate of future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for a hypothetical zero-coupon rate bonds due on the date of each future net settlement payments on the swaps.

The fair value is then incorporated into the previously described mid-market valuation: 1) the credit risk of either the Commission or its counterparty (for a liability position or asset position, respectively) i.e. nonperformance risk; and 2) the bid/offer spread that would be charged to the Commission in order to transact. As the valuations are based on discounting future net cash flows to a single current amount, the approach being utilized is the income approach. The fair values rely primarily on Level 2 Inputs (observable inputs) – such as LIBOR rates to build the yield curve.

Recent Activity – Cash Flow Hedges

On July 14, 2021, the Commission refunded the remaining entirety of the 2014 Series B-1 Senior Revenue Bonds with its 2021 Series B Senior Revenue Bonds. As a result, portions of PTC's Mainline SIFMA Fixed Payer swaps assigned to the 2014 Series B-1 Senior Revenue Bonds ($150.0 million notional amount) were deemed terminated and reassigned to the 2018 Series A-1 Senior Revenue Bonds ($6.3 million notional amount), 2nd Series of 2019 Senior Revenue Bonds ($100.7 million notional amount), and Series of 2020 Bonds ($43.0 million notional amount). The fair values at the time of deemed termination were as follows (in thousands):

	Total	Goldman Sachs	Merrill Lynch	Morgan Stanley
2018 A-1	$ (1,213)	$ (404)	$ (405)	$ (404)
2nd Series of 2019	(19,241)	(6,413)	(6,416)	(6,412)
Series of 2020	(8,217)	(2,739)	(2,740)	(2,738)
	$ (28,671)	$ (9,556)	$ (9,561)	$ (9,554)

These amounts are being amortized until December 1, 2038, which is the final maturity of the swaps.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

<u>Interest Rate Swaps</u> *(continued)*

Recent Activity – Cash Flow Hedges (continued)

On July 14, 2021, the Commission refunded a portion of the 2018 Series B Senior Revenue Bonds with its 2021 Series B Senior Revenue Bonds. As a result, portions of PTC's Mainline LIBOR Fixed Payer swaps were deemed terminated and reassigned to the Series of 2020 Senior Revenue Bonds. The fair values at the time of deemed termination were negative $0.3 million with respect to the Bank of America swap, negative $0.3 million with respect to the Bank of New York Mellon swap and negative $0.7 million with respect to the JP Morgan Chase swap. These amounts are being amortized until December 1, 2030, which is the final maturity of the swaps.

On April 28, 2022, the 2017 1st Series Subordinate Revenue Bonds were refunded by the Commission's 2022 1st Series Subordinate Revenue Bonds. The RBC swap previously associated with the 2017 1st Series Subordinate Revenue Bonds was deemed terminated and reassigned to the 2022 1st Series Subordinate Revenue Bonds. The fair value at the time of deemed termination was $25.9 million with the amount being amortized until December 1, 2041, which is the final maturity of the swap.

On February 28, 2023, the Mainline and Motor License Registration Fee SIFMA Fixed Payer swaps previously assigned to Merrill Lynch were novated to Bank of America. The Bank of America ISDA was amended to remove the guarantee of Merrill Lynch Derivatives Products (MLDP). Going forward, Bank of America is the swap counterparty under both Mainline and Motor License Registration Fee ISDAs. These novations were not considered termination events. The notional amount of the Mainline SIFMA Fixed Payer is $100.0 million. The notional amount of the Motor License Registration Fee SIFMA Fixed Payer is $57.9 million.

Recent Activity – Investment Derivative Instruments

On June 30, 2021, the Commission executed an unwind of the Mainline SIFMA/LIBOR Basis Swap with Deutsche Bank in exchange for receiving a termination amount of $3.6 million. The notional amount of the Deutsche Bank swap at the time of termination was $115.8 million.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

Following is a summary of the hedging derivative instruments in place as of May 31, 2023 and 2022. All items are fixed interest rate swap types. These hedging derivative instruments contain risks and collateral requirements as described below (in thousands).

As of May 31, 2023:

Objective	Notional Amount	Effective Date	Maturity Date	Terms*	Counterparty	Moody's/ S&P/Fitch	Book Fair Value
1. Hedge of changes of cash flows on the 2005 Series B, C, D, Bonds	$ 57,860	12/20/2013	7/15/2041	Pay 4 2015%, receive S FMA	Bank of New York Mellon	Aa2/AA-/AA	$ (2,740)
	57,845	8/17/2005	7/15/2041		JPMorgan Chase Bank	Aa2/A+/AA	(7,706)
	57,860	8/17/2005	7/15/2041		Bank of America	Aa1/A+/AA	(7,706)
	57,860	8/17/2005	7/15/2041		Morgan Stanley CS ^	Aa3/A+/NR	(7,708)
	231,425						(25,860)
2. *Reassigned July 14, 2021 as noted under Recent Activity*							
3. Hedge of changes of cash flows of First Series of 2022 Bonds (formerly 2017 Series A Sub Bonds)	291,850	4/28/2022	12/1/2041	Pay 2.5125% to 06/01/22, 1.8265% thereafter; receive 70.00% of 3-month LIBOR	Royal Bank of Canada	Aa1/AA-/AA	14,286
4. Hedge of changes of cash flows of 2018 Series A-1 Bonds (formerly 2014 Series B-1, 2008 Series B-1 & 2011 Series C Bonds)	5,732	6/28/2018	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	469
	5,732	6/28/2018	12/1/2038		Bank of America	Aa1/A+/AA	468
	5 731	6/28/2018	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	474
	17 195						1 411
5. Hedge of changes of cash flows of 2018 Series B Bonds (formerly 2017 Series B-2, 2016 Series A-2, 2014 Series B-2 & 2012 Series B Bonds)	17,806	11/6/2018	12/1/2030	Pay 4.403%, receive 67.00% of 1-month L BOR	Bank of America	Aa1/A+/AA	285
	17,806	11/6/2018	12/1/2030		Bank of New York Mellon	Aa2/AA-/AA	285
	35,588	11/6/2018	12/1/2030		JPMorgan Chase Bank	Aa2/A+/AA	572
	71,200						1,142
6. Hedge of changes of cash flow on the 2nd Series of 2019 (formerly 2014 B-1, formerly 2008 B-1 & 2011 C Bonds)	46,605	6/4/2019	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	6,037
	46,605	6/4/2019	12/1/2038		Bank of America	Aa1/A+/AA	6,031
	46,605	6/4/2019	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	6,100
	139,815						18,168
7. Hedge of changes of cash flows on the Series of 2020 Bonds (formerly 2013 Series B, 2009 Series C & 2011 Series D	20,714	6/23/2020	12/1/2030	Pay 4.403%, receive 67.00% of 1-month L BOR	Bank of America	Aa1/A+/AA	1,879
	20,714	6/23/2020	12/1/2030		Bank of New York Mellon	Aa2/AA-/AA	1,888
	41,402	6/23/2020	12/1/2030		JPMorgan Chase Bank	Aa2/A+/AA	3,616
	82,830						7,383
8. Hedge of changes of cash flow on the Series of 2020 (formerly 2014 B-1, formerly 2008 B-1 & 2011 C Bonds)	47,663	6/23/2020	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	7,917
	47,663	6/23/2020	12/1/2038		Bank of America	Aa1/A+/AA	7,907
	47,664	6/23/2020	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	7,999
	142,990						23,823
9. Hedge of changes of cash flows on the 2020 Series A Bonds (new money)	95,918	8/20/2020	12/1/2050	Pay 1.995%, receive S FMA	Barclay's	A1/A/A+	10,412
Total	$ 1,073,223						$ 50,765

1-month LIBOR was 5.193% as of May 31, 2023.
3-month LIBOR was 5.51671% as of May 31, 2023.
SIFMA was 3.56% as of May 31, 2023.

* LIBOR was permanently discontinued on June 30, 2023. Therefore, LIBOR has been replaced subsequent to year-end for applicable swap agreements.

^ Guaranteed by Morgan Stanley & Co. whose credit ratings at May 31, 2023 were ‘A1/A-/A’ (Moody's/S&P/Fitch).

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

As of May 31, 2022:

Objective	Notional Amount	Effective Date	Maturity Date	Terms	Counterparty	Moody's/ S&P/Fitch	Book Fair Value
1. Hedge of changes of cash flows on the 2005 Series B, C, D, Bonds	$ 57,860	12/20/2013	7/15/2041	Pay 4 2015%, receive S FMA	Bank of New York Mellon	Aa2/AA-/AA	$ (4,731)
	57,845	8/17/2005	7/15/2041		JPMorgan Chase Bank	Aa2/A+/AA	(9,987)
	57,860	8/17/2005	7/15/2041		Merrill Lynch CS*	A2/A-/AA-	(9,996)
	57 860	8/17/2005	7/15/2041		Morgan Stanley CS ^	Aa3/A+/NR	(9 996)
	231 425						(34 710)
2. *Reassigned July 14, 2021 as noted under Recent Activity*							
3. Hedge of changes of cash flows of First Series of 2022 Bonds (formerly 2017 Series A Sub Bonds)	291,850	4/28/2022	12/1/2041	Pay 2.5125% to 06/01/22, 1.8265% thereafter; receive 70.00% of 3-month LIBOR	Royal Bank of Canada	Aa2/AA-/AA	(2,634)
4. Hedge of changes of cash flows of 2018 Series A-1 Bonds (formerly 2014 Series B-1, 2008 Series B-1 & 2011 Series C Bonds)	5,732	6/28/2018	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	340
	5,732	6/28/2018	12/1/2038		Merrill Lynch CS*	A2/A-/AA-	344
	5 731	6/28/2018	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	341
	17 195						1 025
5. Hedge of changes of cash flows of 2018 Series B Bonds (formerly 2017 Series B-2, 2016 Series A-2, 2014 Series B-2 & 2012 Series B Bonds)	17,806	11/6/2018	12/1/2030	Pay 4.403%, receive 67.00% of 1-month L BOR	Bank of America*	Aa2/A+/AA	(270)
	17,806	11/6/2018	12/1/2030		Bank of New York Mellon	Aa2/AA-/AA	(269)
	35 588	11/6/2018	12/1/2030		JPMorgan Chase Bank	Aa2/A+/AA	(540)
	71 200						(1 079)
6. Hedge of changes of cash flow on the 2nd Series of 2019 (formerly 2014 B-1, formerly 2008 B-1 & 2011 C Bonds)	46,605	6/4/2019	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	5,204
	46,605	6/4/2019	12/1/2038		Merrill Lynch CS*	A2/A-/AA-	5,268
	46,605	6/4/2019	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	5,222
	139,815						15,694
7. Hedge of changes of cash flows on the Series of 2020 Bonds (formerly 2013 Series B, 2009 Series C & 2011 Series D	20,714	6/23/2020	12/1/2030	Pay 4.403%, receive 67.00% of 1-month L BOR	Bank of America*	Aa2/A+/AA	1,471
	20,714	6/23/2020	12/1/2030		Bank of New York Mellon	Aa2/AA-/AA	1,485
	41,402	6/23/2020	12/1/2030		JPMorgan Chase Bank	Aa2/A+/AA	2,945
	82,830						5,901
8. Hedge of changes of cash flow on the Series of 2020 (formerly 2014 B-1, formerly 2008 B-1 & 2011 C Bonds)	47,663	6/23/2020	12/1/2038	Pay 4.887%, receive S FMA	Goldman Sachs MMDP	Aa2/AA-/NR	7,234
	47,663	6/23/2020	12/1/2038		Merrill Lynch CS*	A2/A-/AA-	7,319
	47,664	6/23/2020	12/1/2038		Morgan Stanley CS ^	Aa3/A+/NR	7,258
	142,990						21,811
9. Hedge of changes of cash flows on the 2020 Series A Bonds (new money)	98 238	8/20/2020	12/1/2050	Pay 1.995%, receive S FMA	Barclay's	A1/A/A+	8 638
Total	$ 1,075,543						$ 14,646

1-month LIBOR was 1.11986% as of May 31, 2022.
3-month LIBOR was 1.61071% as of May 31, 2022.
SIFMA was 0.79% as of May 31, 2022.

* On November 15, 2012, the Commission executed an amendment to the swap agreements to include Merrill Lynch Derivative Products as guarantor. Merrill Lynch Derivative Products credit ratings were Aa3/AA/NR (Moody's/S&P/Fitch) as of May 31, 2022.

^ Guaranteed by Morgan Stanley & Co. whose credit ratings at May 31, 2022 were ‘A1/A-/A’ (Moody's/S&P/Fitch).

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

- ***Credit Risk*** – The Commission is at risk that a counterparty will not fulfill their obligations under the agreement. Specifically, the Commission is exposed to credit risk for hedging derivative instruments that have positive full values from the counterparty and investment derivative instruments (see Note 4) that have positive fair values. As of May 31, 2023, the Commission has credit risk exposure with respect to the (3) and (9) hedging derivative instruments listed in Note 10 and with respect to the (C) investment derivative instrument listed in Note 4. However, should interest rates change and the fair values of the other swaps become positive, the Commission would have additional credit risk exposure.

  To mitigate the exposure to credit risk, the swap agreements include collateral provisions in the event of downgrades to the swap counterparties' credit ratings along with the values of the swaps exceeding certain thresholds specified in the swap agreement. The Commission's derivative instrument agreements contain netting provisions, under which transactions executed with a single counterparty within a credit are netted to determine collateral amounts. Collateral would be posted with a bank custodian and would be in the form of cash, U.S. Treasury Obligations, or U.S. Government Agency Securities. As of May 31, 2023, the Commission had net credit risk exposure to two counterparties pursuant to the provisions of the respective derivative instrument agreements. One counterparty has posted collateral in the amount of $13.3 million. The other counterparty was not required to post collateral either due to its credit ratings or because the swap value at year end was below the collateral threshold levels.

- ***Interest Rate Risk*** – The Commission will be exposed to variable interest rates if the swap provider for a variable-to-fixed swap agreement defaults or if a variable-to-fixed swap is terminated.

- ***Market-access Risk*** – The Commission will be exposed to market-access risk for the hedging derivative instruments 4 and 5 in the May 31, 2023 summary of hedging derivative instruments table because the maturity date of these derivative instruments is longer than the maturity date of the related debt.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

- ***Basis Risk*** – The Commission is exposed to basis risk on its basis swaps because the variable-rate payments received by the Commission on these derivative instruments are based on rates other than the interest rates the Commission pays on these derivative instruments. See the investment derivative instrument schedule in Note 4 for the terms of the interest rate swap agreements. The Commission's exposure to basis risk for the swaps listed in Note 4 is as follows:

  (A) – To the extent SIFMA exceeds 63% of 1-month LIBOR + 20 basis points

  (B) – To the extent 67% of 1-month LIBOR exceeds 60.15% of the 10-year maturity of the USD-ISDA Swap Rate

  (C) – To the extent SIFMA exceeds 99.68% of 3-month LIBOR

- ***Termination Risk*** – The swap agreements may be terminated due to a number of circumstances and the Commission retains the option to terminate the swaps at any time. If a swap agreement is terminated (by either party), the respective variable-rate bond would no longer carry a synthetic fixed interest rate. Also, if at the time of termination, the swap had a negative fair value, the Commission would be liable to the swap counterparty for a liability equal to the swap's full value. It is generally the Commission's intent at the time of swap execution to maintain the swap transactions for the life of the financing.

- ***Collateral Requirements*** – The Commission's derivative instruments related to its Mainline Turnpike Revenue Bonds require the Commission to post collateral in the form of eligible securities or cash if its senior credit rating falls below specified thresholds. These thresholds vary from agreement to agreement, with most in the 'A3' (Moody's) and 'A-' (S&P and Fitch) levels. The Commission's Mainline Senior Bond rating was 'A1' from Moody's, 'AA-' from S&P and 'AA-' from Fitch as of May 31, 2023. The Commission's Mainline Subordinate Bond rating was 'A3' from Moody's, 'A+' from S&P and 'A' from Fitch as of May 31, 2023. Based on May 31, 2023 full values, the Commission could be required to post $58.6 million in collateral for its derivate instruments if its ratings fall below the agreement thresholds.

NOTE 10 COMMITMENTS AND CONTINGENCIES *(continued)*

Interest Rate Swaps *(continued)*

The Commission's derivative instruments related to its Oil Franchise Tax Revenue Bonds require the Commission to post collateral in the form of eligible securities or cash if its credit rating falls below specified thresholds. These thresholds vary from agreement to agreement, with most in the 'A3' (Moody's) and 'A-' (S&P and Fitch) levels. The Commission's Oil Franchise Tax Senior Bond rating was 'Aa3' from Moody's, 'AA-' from S&P and 'AA-' from Fitch as of May 31, 2023. Based on May 31, 2023 full values, the Commission could be required to post $4.6 million in collateral for its derivative instruments if its ratings fall below the agreements thresholds.

The Commission's derivative instruments related to its Motor License Registration Fee Revenue Bonds require the Commission to post collateral in the form of eligible securities or cash if its credit rating falls below specified thresholds and/or in the event of certain uncured insurer events of default. These thresholds vary from agreement to agreement. The Commission's Motor License Registration Fee Revenue Bond rating was 'A1' from Moody's, 'AA-' from S&P and 'AA-' from Fitch as of May 31, 2023. Based on May 31, 2023 full values, the Commission could be required to post $32.3 million in collateral for its derivative instruments if its ratings fall below the agreement thresholds.

NOTE 11 RELATED-PARTY TRANSACTIONS

The Commission incurred charges, from the Commonwealth's State Police, of $65.8 million and $58.5 million, respectively, for the fiscal years ended May 31, 2023 and 2022. These charges are primarily related to patrolling of the Turnpike System.

During fiscal year ended May 31, 2022, as part of the Scranton Beltway project, the Commission contributed $8.1 million for construction costs to a PennDOT project for reconstructing the bridge at Suscon Road. PennDOT will maintain ownership of this bridge throughout the project.

During fiscal year ended May 31, 2022, the Commission contributed $1.2 million to PennDOT for construction projects related to pollutant reduction plan obligations in selected Pennsylvania watersheds.

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS

<u>Plan Description</u>

The Commission maintains an Other Postemployment Welfare Plan Program (the Plan), for the purpose of providing benefits to eligible retirees and their dependents. The Plan is a single employer, defined benefit plan. The Commission established the Pennsylvania Turnpike Commission Retiree Medical Trust (the Trust) on May 30, 2008 as an irrevocable trust, tax-exempt under Section 115 of the Internal Revenue Code, to provide funding of the Plan's other postemployment benefits (OPEB).

The Trust is administered by Trustees who are appointed by and serve at the pleasure of the Commission. The chairman and vice chairman of the Trust are appointed by the Trustees and serve two-year terms. PNC Bank serves as custodian of the assets of the Plan. Disbursement of Plan assets are made by the custodian at the direction of the Trustees. The Plan's financial statements are not included in the financial statements of a public employee retirement system. The Plan issues a stand-alone financial report, which can be obtained by contacting the Commission's Accounting & Financial Reporting Department.

Plan benefit provisions and retiree and dependent contribution rates are established and may be amended by the Commission.

Management and Supervisory Union Employees/Retirees

The benefits funded by the Trust include certain postemployment medical, prescription drug, dental and vision benefits to management and supervisory union employees based upon their age, date of hire and Pennsylvania State Employees' Retirement System (SERS) credited service. Credited Service is defined as one year of service earned when an employee works 1,650 hours or more in a calendar year and includes Pennsylvania Public School Employees' Retirement System (PSERS) and military service. Eligibility categories include:

- Employees hired before March 1, 2016, who have reached 20 years of service and are under age 60; benefit eligibility changes from 20 to 10 years for retirees 60 years of age or older. The last five years of service must be with the Commission.

- Employees hired on or after March 1, 2016, who have reached 30 years of service and are under age 60; benefit eligibility changes from 30 to 25 years for retirees 60 years of age or older. The last 10 years of service must be with the Commission. (Some current and previous Commonwealth employees hired on or after this date would be grandfathered under the first eligibility category.)

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Plan Description *(continued)*

Management and Supervisory Union Employees/Retirees (continued)

Prior to May 20, 2020, the same coverage and cost was provided to surviving spouses or domestic partners and dependents of management and supervisory union retirees who retired after March 1, 2001. Surviving spouses or domestic partners of retirees who retired on or prior to March 1, 2001, may purchase medical, prescription, dental and/or vision coverage at the group rate and dependents are offered coverage under COBRA. Medicare Part B premiums are paid by the retiree, spouse or dependent if age 65 or over, or under age 65 and disabled. Effective May 20, 2020, domestic partners are no longer eligible to enroll.

Non-Supervisory Union Employees/Retirees

The benefits also include certain postemployment medical and prescription drug benefits to non-supervisory union employees who have satisfied the age and years of SERS Credited Service eligibility requirements in the applicable collective bargaining agreement. Credited Service is defined as one year of service earned when an employee works 1,650 hours or more in a calendar year and includes PSERS and military service. Eligibility categories include:

- For Local 30 Professionals who were hired prior to January 1, 2011, and retired after February 1, 2005, and for Local 250 and 77 employees who were hired prior to January 27, 2016, and retired after February 1, 2005, the earlier of completion of 20 years of Credited Service or the later of attainment of age 60 and completion of 10 years of Credited Service. The last five years of Credited Service must be with the Commission.

- For Local 30 professionals who were hired on or after January 1, 2011, and for Local 250 and 77 employees who were hired on or after January 27, 2016, the earlier of completion of 30 years of Credited Service or the later of attainment of age 60 and completion of 25 years of Credited Service. The last 10 years of Credited Service must be with the Commission. (Some current and previous Commonwealth employees hired on or after this date for Local 30 professionals would be grandfathered under the first eligibility category.)

The same coverage is provided to spouses or domestic partners and dependents of eligible non-supervisory union retirees until the death of the retiree. Surviving spouses or domestic partners are required to contribute the full cost of medical and prescription coverage and dependents are offered coverage under COBRA.

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Employees Covered by Benefit Terms

As of May 31 (the measurement date), the following employees were covered by the benefit terms.

	2022	**2021**
Inactive plan members or beneficiaries currently receiving benefit payments	1,897	1,816
Inactive plan members entitled to but not yet receiving benefit payments	120	92
Active plan members	1,179	1,256
Total	3,196	3,164

Contributions

The Commission adopted a Retiree Medical Trust Funding Policy, effective September 2008, whereby the Commission anticipated approving an annual contribution to the Trust in the amount of the Annual Required Contribution (ARC) as determined by the Commission's actuary in accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, during the approval of its annual operating budget. With the implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, the Commission revised the policy in June 2020 to refer to the Actuarially Determined Contribution (ADC) instead of the ARC.

A second revision to the policy was approved in April 2023. Under the new revision, the Commission anticipates approving an annual operating budget that includes annual contributions to the Trust. The Commission may take into consideration the following factors when determining the annual contribution: funded status of the Trust, estimated actuarially determined contribution, estimated service cost, current market conditions, OPEB expense projections, projected cash balances and other pertinent factors.

Retiree and spouse contribution rates as of May 31, 2022 and 2021 are as follows:

- Management and supervisory union employees who retired prior to July 1, 1998, and union employees who retired prior to October 1, 1997 – the retiree/spouse contributes the full cost of coverage less the Commission's monthly subsidy of $19.28 once the retiree reaches age 65.

- Management and supervisory union employees who retired on July 1, 1998 or later – the retiree/spouse has no contribution once the retiree reaches age 65.

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Contributions *(continued)*

- Union employees who retired on October 1, 1997 or later – the retiree/spouse contributes the full cost of coverage less the Commission's monthly subsidy of $73.50 when the retiree or spouse reaches age 65.

- Beginning September 1, 2020, all management and supervisory union, Local 250, Local 77 and Local 30 professional retirees less than age 65 must contribute $38.68 monthly towards medical and prescription coverage.

- Surviving spouses and domestic partners are paying 100% of the premiums, except for surviving spouses of management and supervisory union employees who retired after March 1, 2001.

Net OPEB Asset/Liability

The Commission recorded a net OPEB asset of $109.7 million and $150.2 million as of May 31, 2023 and 2022, respectively.

Actuarial Assumptions and Discount Rate

The total OPEB liability reported as of May 31, 2023 was determined by an actuarial valuation as of the valuation date (May 31, 2021), calculated based on the discount rate and actuarial assumptions below, and was them projected forward, using update procedures, to the measurement date (May 31, 2022). The total OPEB liability reported as of May 31, 2022 was determined by an actuarial valuation as of May 31, 2021 which was calculated based on the discount rate and actuarial assumptions below. There have been no significant changes between the valuation dates and the fiscal year ends.

	May 31, 2022	May 31, 2021
Discount rate	5.5%	5.5%
Long-term expected rate of return, net of investment expense	5.5%	5.5%

The Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the long-term expected rate of return.

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Net OPEB Asset/Liability *(continued)*

Actuarial Assumptions and Discount Rate (continued)

The Plan has not had a formal actuarial experience study performed.

Measurement date	May 31, 2022	May 31, 2021
Actuarial cost method	Entry Age Normal	Entry Age Normal
Inflation	2.5%	2.5%
Salary increases for union members	3.0%	3.0%
Salary increases for management members	3.3%	3.3%
Amortization method	Level dollar amortization over a period of 10 years	
Asset valuation method	Market value plus receivable contributions made attributable to a prior fiscal year	

The healthcare cost trend assumption is based on the Society of Actuaries Long-Run Medical Cost Trend, utilizing the baseline assumptions included in the model for medical and prescription drug benefits.

The health cost trend assumption for benefits at sample years is as follows:

Valuation Year	Rate
2021 – 2023	5.50%
2024 – 2025	5.40
2026 – 2027	5.30
2028 – 2050	5.20
2051	5.10
2052 – 2054	5.00
2055 – 2059	4.90
2060 – 2065	4.80
2066	4.70
2067	4.60
2068 – 2069	4.50
2070	4.40
2071	4.30
2072 – 2073	4.20
2074	4.10
2075+	4.00

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Net OPEB Asset/Liability *(continued)*

Actuarial Assumptions and Discount Rate (continued)

Mortality rates were based on the PubG-2010 mortality table adjusted to reflect Mortality Improvement Scale MP-2020 and projected forward on a generational basis (based on recommendation of Society of Actuaries' Retirement Plans Experience Committee), with employee rates before benefit commencement and healthy annuitant rates after benefit commencement and reflecting mortality improvements both before and after the valuation date.

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. Best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	27%	4.81%
International equity	18	5.97
Rates/credit	25	1.82
Real assets	19	3.67
Multi-asset	10	2.14
Cash	1	0.20

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Changes in the Net OPEB Asset/Liability

	Increases (Decreases)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (Asset) (a) – (b)**
		(In thousands)	
Balances as of May 31, 2021	$ 451,078	$ 601,302	$ (150,224)
Changes for the year			
Service cost	8,583	-	8,583
Interest on OPEB liability	24,645	-	24,645
Benefit payments	(21,344)	(21,344)	-
Employer contributions	-	13,746	(13,746)
Net investment income	-	(21,089)	21,089
Administrative expenses	-	(2)	2
Balances as of May 31, 2022	$ 462,962	$ 572,613	$ (109,651)

	Increases (Decreases)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a) – (b)**
		(In thousands)	
Balances as of May 31, 2020	$ 480,215	$ 465,424	$ 14,791
Changes for the year			
Service cost	11,492	-	11,492
Interest on OPEB liability	28,834	-	28,834
Changes Benefit terms	(3,563)	-	(3,563)
Differences between expected and actual experience	(86,127)	-	(86,127)
Changes of assumptions	40,809	-	40,809
Benefit payments	(20,582)	(20,582)	-
Employer contributions	-	47,250	(47,250)
Net investment income	-	109,214	(109,214)
Administrative expenses	-	(4)	4
Balances as of May 31, 2021	$ 451,078	$ 601,302	$ (150,224)

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Changes in the Net OPEB Liability *(continued)*

Sensitivity Analysis

The following presents the net OPEB (asset) liability of the Commission, calculated using the current discount rate of the respective fiscal year, as well as what the Commission's net OPEB (asset) liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current discount rate.

	1% Decrease (4.5%)	**Current Discount Rate (5.5%)**	**1% Increase (6.5%)**
		(In thousands)	
Net OPEB (asset) liability as of May 31, 2022	$ (53,008)	$ (109,651)	$ (156,370)

	1% Decrease (4.5%)	**Current Discount Rate (5.5%)**	**1% Increase (6.5%)**
		(In thousands)	
Net OPEB (asset) liability as of May 31, 2021	$ (94,085)	$ (150,224)	$ (196,519)

The following presents the net OPEB (asset) liability of the Commission, calculated using the current healthcare cost trend rates as well as what the net OPEB (asset) liability would be if it were calculated using trend rates that are one percentage point lower or one percentage point higher than the current trend rates.

	1% Decrease	**Current Trend Rate**	**1% Increase**
		(In thousands)	
Net OPEB (asset) liability as of May 31, 2022	$ (163,604)	$ (109,651)	$ (43,059)
Net OPEB (asset) liability as of May 31, 2021	$ (199,807)	$ (150,224)	$ (89,178)

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

Changes in the Net OPEB Liability *(continued)*

OPEB Plan Fiduciary Net Position

The Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position as of and for the fiscal year ended May 31, 2023 are presented in the Basic Financial Statements section of this report. Further detailed information about the OPEB plan's fiduciary net position is available in the separately issued Pennsylvania Turnpike Commission Other Postemployment Welfare Plan Program financial statements. The stand-alone Plan financial statements can be obtained by contacting the Commission's Accounting & Financial Reporting Department.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended May 31, 2023, the Commission recognized an OPEB benefit (negative expense) of $9.4 million. As of May 31, 2023, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
	(In thousands)	
Differences between expected and actual experience	$ 2,829	$ 52,193
Changes of assumptions	24,486	1,453
Net difference between projected and actual earnings on OPEB plan investments	4,039	-
Contributions subsequent to measurement date	14,652	-
	$ 46,006	$ 53,646

NOTE 12 OTHER POSTEMPLOYMENT BENEFITS *(continued)*

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB *(continued)*

The $14.7 million reported as deferred outflows of resources related to OPEB, resulting from Commission contributions subsequent to the measurement date, will be recognized as a reduction of the net OPEB liability during the fiscal year ending May 31, 2024. Other amounts reported as deferred outflows/(inflows) of resources related to OPEB will be recognized as net increases/(decreases) in OPEB expense as follows:

Year Ending May 31	*(In thousands)*
2024	$ (7,572)
2025	(11,139)
2026	(14,371)
2027	10,790
Thereafter	-
	$ (22,292)

For the year ended May 31, 2022, the Commission recognized an OPEB benefit (negative expense) of $12.6 million. As of May 31, 2022, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	**Deferred Inflows of Resources**
	(In thousands)	
Differences between expected and actual experience	$ 4,243	$ 69,849
Changes of assumptions	32,647	2,179
Net difference between projected and actual earnings on OPEB plan investments	-	50,922
Contributions subsequent to measurement date	13,746	-
	$ 50,636	$ 122,950

The $13.7 million reported as deferred outflows of resources related to OPEB, resulting from Commission contributions subsequent to the measurement date, was recognized as a reduction of the net OPEB liability during the fiscal year ending May 31, 2023.

NOTE 13 SELF-INSURANCE

The Commission is exposed to various risks of losses such as theft of, damage to, and destruction of assets, errors and omissions, torts, injuries to employees and natural disasters. The Commission has purchased commercial all risk property insurance and stop loss insurance for employee medical and prescription benefits coverage. The Commission remains self-insured for dental and vision benefits, torts and injuries to employees as well as medical and prescription benefits up to stop loss coverages. No settlements exceeded insurance coverage for each of the past three years.

The Commission recorded a liability of $37.6 million and $38.8 million for loss and loss adjustment expenses for claims relating to workers' compensation, motor vehicle and tort self-insurance that have been incurred and for claims incurred but not reported as of May 31, 2023 and 2022, respectively. The workers' compensation, motor vehicle and tort self-insurance liabilities recorded as accounts payable and accrued liabilities are $3.8 million and $4.0 million as of May 31, 2023 and 2022, respectively. The workers' compensation, motor vehicle and tort self-insurance liabilities recorded as other noncurrent liabilities are $33.8 million and $34.8 million as of May 31, 2023 and 2022, respectively. This liability is based on GASB Statement No. 10, *Accounting and Financial Reporting for Risk Financing and Related Insurance Issues*, which requires that a liability for claims be recorded if information prior to the issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of the loss can be reasonably estimated. The liability is calculated based on the Commission's past loss experience. The liability for vehicle and general tort was not discounted. The liability for workers' compensation was discounted using a rate of 1.5% for both fiscal years ended May 31, 2023 and 2022. The liability includes amounts for claims adjustment expense and is net of any recoveries and subrogation. Recoveries and subrogation were not material for the years ended May 31, 2023 and 2022. The Commission believes the liability established is reasonable and appropriate to provide for settlement of losses and related loss adjustment expenses.

Management believes that its reserve for claims incurred but not reported is determined in accordance with generally accepted actuarial principles and practices. However, estimating the ultimate liability is a complex and judgmental process since the amounts are based on management's informed estimates and judgments using data currently available. As additional experience and data become available regarding claim payments and reporting patterns, legislative developments and economic conditions, the estimates are revised accordingly, and the impact is reflected currently in the Commission's financial statements.

NOTE 13 SELF-INSURANCE *(continued)*

The following tables provide aggregated information on self-insurance liabilities:

	May 31, 2022 Liability	Effects of Discount as of June 1, 2022	Incurred Claims		Paid Claims		Effects of Discount as of May 31, 2023	May 31, 2023 Liability
			Current Year	Prior Years	Current Year	Prior Years		
Year ended May 31, 2023								
Workers' compensa ion	$ 8,839	$ 643	$ 930	$ 752	$ (406)	$ (1,642)	$ (585)	$ 8,531
Motor vehicle/general tort	29,932	-	850	(900)	(84)	(707)	-	29,091
	$ 38,771	$ 643	$ 1,780	$ (148)	$ (490)	$ (2,349)	$ (585)	$ 37,622

	May 31, 2021 Liability	Effects of Discount as of June 1, 2021	Incurred Claims		Paid Claims		Effects of Discount as of May 31, 2022	May 31, 2022 Liability
			Current Year	Prior Years	Current Year	Prior Years		
Year ended May 31, 2022				*(In thousands)*				
Workers' compensation	$ 8,621	$ 654	$ 647	$ 1,985	$ (385)	$ (2,040)	$ (643)	$ 8,839
Motor vehicle/general tort	29,936	-	39	661	(26)	(678)	-	29,932
	$ 38,557	$ 654	$ 686	$ 2,646	$ (411)	$ (2,718)	$ (643)	$ 38,771

The foregoing reflects an adjustment for a decrease of $0.1 million and an increase of $2.6 million for the fiscal years ended May 31, 2023 and 2022, respectively, in the provision for events of prior fiscal years (Incurred Claims – Prior Years) that resulted from a change in estimate as more information became available.

NOTE 14 COMPENSATED ABSENCES

Sick leave is earned at a rate of 3.08 hours every two weeks, or 10 days per year. Unused sick leave may be carried over from year to year, up to a maximum of 18 days. In November of each year, active employees are reimbursed for all accumulated unused sick leave above the maximum. Sick leave payouts to active employees were $1.7 million during each of the fiscal years ended May 31, 2023 and 2022.

Vacation leave is earned at varying rates, depending on years of service. Management and supervisory union employees earn between 4.62 and 8.93 hours every two weeks. Non-supervisory union employees earn between 3.08 and 8.93 hours every two weeks.

NOTE 14 COMPENSATED ABSENCES *(continued)*

Upon termination of employment, all unused sick and vacation leave is paid to the employee. The compensated absences liabilities were $17.5 million and $17.8 million for each of the fiscal years ended May 31, 2023 and 2022, respectively. The compensated absences liabilities recorded as accounts payable and accrued liabilities were $9.6 million and $9.8 million as of May 31, 2023 and 2022 respectively. The compensated absences liabilities recorded as other noncurrent liabilities were $7.9 million and $8.0 million as of May 31, 2023 and 2022, respectively.

A summary of changes to compensated absences for the years ended May 31, 2023 and 2022 is as follows:

Fiscal Year Ended May 31	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
			(In thousands)		
2023	$ 17,831	$ 10,962	$ 11,282	$ 17,511	$ 9,631
2022	17,832	11,205	11,206	17,831	9,807

NOTE 15 LETTERS OF CREDIT

Pennsylvania insurance law requires a letter of credit, surety bond, or escrow from entities that self-insure their Workers' Compensation. As of May 31, 2023, the Commission has two standby letters of credit to satisfy the PA Turnpike's collateral requirement under the expired Owner Controlled Insurance Program (OCIP); there have been no draws against the letters of credit. The first Letter of Credit is $200,000 with Wells Fargo Bank, N.A. for beneficiary Zurich American Insurance for the Uniontown to Brownsville Phase II OCIP. In March 2023, the Commission entered into a second Letter of Credit for $7.0 million with PNC Bank, N.A. for beneficiary The Travelers Indemnity Co for the Mon-Fayette Expressway OCIP.

In May 2017, in lieu of a letter of credit, the Commission placed $2.0 million into an escrow account with Wells Fargo, now held by ComputerShare as trustee, (naming Liberty Mutual as beneficiary) for the new OCIP on the U.S. 22 to I-79 portion of the Southern Beltway, which opened on October 15, 2021.

Supplemental Trust Indenture No. 50 dated as of June 1, 2019, amendment and restatement of the Amended and Restated Indenture of Trust dated as of March 1, 2001, between the Commission and U.S. Bank National Association required a Letter of Credit to be established for the 2019 Second Series Senior Revenue Bonds. The Commission entered into a Letter of Credit with TD Bank, N.A. in the amount of up to $142.2 million for purposes of paying debt service obligations on the bonds. There were no outstanding draws against the Letter of Credit as of May 31, 2023 and 2022.

NOTE 15 LETTERS OF CREDIT *(continued)*

Supplemental Trust Indenture No. 55 dated as of June 1, 2020, amendment and restatement of the Amended and Restated Indenture of Trust dated as of March 1, 2001, between the Commission and U.S. Bank National Association required a Letter of Credit to be established for the 2020 Series Senior Revenue Bonds. The Commission entered into a Letter of Credit with TD Bank, N.A in the amount of up to $229.7 million for purposes of paying debt service obligations on the bonds. There were no outstanding draws against the Letter of Credit as of May 31, 2023 and 2022.

Supplemental Trust Indenture No. 56 dated as of August 1, 2020, amendment and restatement of the Amended and Restated Indenture of Trust dated as of March 1, 2001, between the Commission and U.S. Bank National Association required a Letter of Credit to be established for the 2020 Series A Senior Revenue Bonds. The Commission entered into a Letter of Credit with Barclays Bank PLC in the amount of up to $102.2 million for purposes of paying debt service obligations on the bonds. There were no outstanding draws against the Letter of Credit as of May 31, 2023 and 2022.

NOTE 16 SUBSEQUENT EVENTS

On June 12, 2023, the Commission entered into an extension of the Indenture No. 56 regarding the 2020 Series A Senior Letter of Credit with a new termination date of June 12, 2026.

On June 20, 2023, the Commission executed a new $200.0 million line of credit with PNC Bank, N.A. The Commission secured this line of credit as a continuing liquidity safeguard and because the 2022 Line of Credit expired on June 13, 2023.

On September 6, 2023, the Commission issued $231,425,000 of 2023 Series Motor License Registration Fee Revenue Refunding Bonds at a variable rate with a maturity date of July 15, 2041. The 2023 Motor License Registration Fee Revenue Refunding Bonds were issued to refund the 2005 Series B Motor License Registration Fee Revenue Bonds ($77,140,000), 2005 Series C Motor License Registration Fee Revenue Bonds ($77,140,000), and 2005 Series D Motor License Registration Fee Revenue Bonds ($77,145,000) and paying for the costs of issuing the 2023 Series Motor License Registration Fee Revenue Refunding Bonds.

NOTE 16 SUBSEQUENT EVENTS *(continued)*

On September 7, 2023, the Commission issued $400,000,000 of 2023 Series A Senior Revenue Bonds at a fixed rate with a maturity of December 1, 2053. The 2023 Series A Senior Revenue Bonds were primarily issued to finance the cost of various capital expenditures set forth in the Commission's Ten-Year Capital Plan, including but not limited to the reconstruction of roadbed and roadway, the widening, replacing and redecking of certain bridges and/or rehabilitation of certain interchanges, to refund a portion of the 2013 Series C Senior Revenue Bonds ($15,895,000) and the 2018 EB-5 Loan 2nd Tranche ($45,000,000), and for paying the costs of issuing the 2023 Series A Senior Revenue Bonds.

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Revenue Bonds in an aggregate principal amount not to exceed $600,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the refunding of all or a portion of certain outstanding fixed rate and/or variable rate Turnpike Revenue Refunding Bonds, funding of any necessary reserves, funding of the costs of issuance of such Turnpike Revenue Bonds.

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Revenue Bonds in an aggregate principal amount not to exceed $600,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the costs of various capital expenditures for the Pennsylvania Turnpike system set forth in the Commission's current Ten Year Capital Plan, the refunding of all or a portion of certain outstanding fixed rate and/or variable rate Turnpike Revenue Refunding Bonds, funding of any necessary reserves, funding of the costs of issuance of such Turnpike Revenue Bonds.

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Revenue Bonds in an aggregate principal amount not to exceed $500,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the costs of various capital expenditures for the Pennsylvania Turnpike system set forth in the Commission's current Ten Year Capital Plan, the refunding of all or a portion of certain outstanding fixed rate and/or variable rate Turnpike Revenue Refunding Bonds, funding of any necessary reserves and funding of the costs of issuance of such Turnpike Revenue Bonds.

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Subordinate Revenue Bonds in an aggregate principal amount not to exceed $250,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the refunding of all or a portion of certain outstanding fixed rate and/or variable rate Turnpike Subordinate Revenue Refunding Bonds, funding of any necessary reserves and funding of the costs of issuance of such Turnpike Subordinate Revenue Bonds.

NOTE 16 SUBSEQUENT EVENTS *(continued)*

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Revenue Bonds in an aggregate principal amount not to exceed $170,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the current refunding of all or a portion of certain outstanding fixed rate and/or variable rate Turnpike Revenue Refunding Bonds, funding of any necessary reserves, the obtaining of one or more credit facilities to provide credit enhancement or liquidity support in connection with the issuance of the bonds and funding of the costs of issuance of such Turnpike Revenue Bonds.

On October 3, 2023, the Commission authorized the approval of the issuance of the Pennsylvania Turnpike Commission's variable and/or fixed rate Turnpike Revenue Bonds in an aggregate principal amount not to exceed $100,000,000 in one or more series or sub-series, taxable or tax-exempt, for the purpose of financing the costs of various capital expenditures for the Pennsylvania Turnpike system set forth in the Commission's current Ten Year Capital Plan, funding of any necessary reserves, funding interest and funding of the costs of issuance of such Turnpike Revenue Bonds.

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REQUIRED SUPPLEMENTARY INFORMATION

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Schedule of Commission's Proportionate Share of the Net Pension Liability –
Pennsylvania State Employees' Retirement System – Pension Fund (Unaudited)

Last 10 Fiscal Years*
(Dollar Amounts in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016
Commission's proportion of the net pension liability	1.45120227%	1.50512333%	1.57665712%	1.81091910%	1.85214667%	1.90329134%	1.96867410%	1.90799267%
Commission's proportionate share of the net pension liability	$ 331,574	$ 219,303	$ 288,472	$ 329,189	$ 385,821	$ 329,112	$ 379,173	$ 346,946
Commission's covered payroll	99,939	102,582	108,555	121,643	121,127	120,641	123,365	121,085
Commission's proportionate share of the net pension liability as a percentage of its covered payroll	331.78%	213.78%	265.74%	270.62%	318.53%	272.80%	307.36%	286.53%
Plan fiduciary net position as a percentage of the total pension liability	61.5%	76.0%	67.0%	63.1%	56.4%	63.0%	57.8%	58.9%

* The amounts presented for each fiscal year were determined as of the measurement date (12/31) that occurred within the Commission's fiscal year. The Commission adopted GASB Statement No. 68 on a prospective basis in fiscal year 2015; therefore, only the available years are presented in the above schedule.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Schedule of Commission's Contributions –
Pennsylvania State Employees' Retirement System – Pension Fund (Unaudited)

Last 10 Fiscal Years*
(Dollar Amounts in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016
Contractually required contribution	$ 32,654	$ 31,250	$ 30,785	$ 37,699	$ 37,771	$ 38,073	$ 33,303	$ 27,864
Contributions in relation to the contractually required contribution	(32,654)	(31,250)	(30,785)	(37,699)	(37,771)	(38,073)	(33,303)	(27,864)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Commission's covered payroll^	$ 101,311	$ 96,882	$ 97,446	$ 120,107	$ 122,145	$ 122,654	$ 121,778	$ 121,060
Contributions as a percentage of covered payroll	32.23%	32.26%	31.59%	31.39%	30.92%	31.04%	27.35%	23.02%

* The amounts presented for each fiscal year were determined as of the measurement date (12/31) that occurred within the Commission's fiscal year. The Commission adopted GASB Statement No. 68 on a prospective basis in fiscal year 2015; therefore, only the available years are presented in the above schedule.

^ Classes A5 and A6 became effective on January 1, 2020 and are now included in covered payroll due to the Hybrid plan including a pension fund contribution component.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Schedule of Changes in the Commission's Net OPEB Liability and Related Ratios (Unaudited)

Last 10 Fiscal Years*
(Dollar Amounts in Thousands)

Fiscal Year Ended / *Measurement Date*	**05/31/23** / **05/31/22**	**05/31/22** / **05/31/21**	**05/31/21** / **05/31/20**	**05/31/20** / **05/31/19**	**05/31/19** / **05/31/18**
Total OPEB Liability					
Service cost	$ 8,583	$ 11,492	$ 11,141	$ 11,254	$ 10,926
Interest on total OPEB liability	24,645	28,834	27,723	26,371	25,431
Changes of benefit terms	-	(3,563)	-	-	-
Effect of assumptions changes or inputs	-	40,809	-	(4,358)	-
Effect of differences between expected and actual experience	-	(86,127)	-	8,487	(2,671)
Benefit payments	(21,344)	(20,582)	(20,848)	(17,032)	(17,984)
Net change in total OPEB liability	11,884	(29,137)	18,016	24,722	15,702
Total OPEB liability, beginning	451,078	480,215	462,199	437,477	421,775
Total OPEB liability, ending (a)	462,962	451,078	480,215	462,199	437,477
Plan fiduciary net position					
Employer contributions	13,746	47,250	11,730	46,056	28,171
Net investment income	(21,089)	109,214	14,196	6,789	34,322
Benefit payments	(21,344)	(20,582)	(20,848)	(17,032)	(17,984)
Administrative expenses	(2)	(4)	(8)	(2)	(11)
Net change in plan fiduciary net position	(28,689)	135,878	5,070	35,811	44,498
Plan fiduciary net position, beginning	601,302	465,424	460,354	424,543	380,045
Plan fiduciary net position, ending (b)	572,613	601,302	465,424	460,354	424,543
Commission's net OPEB (asset) liability, ending = (a) – (b)	$ (109,651)	$ (150,224)	$ 14,791	$ 1,845	$ 12,934
Plan fiduciary net position as a % of total OPEB liability	123.7%	133.3%	96.9%	99.6%	97.0%
Covered-employee payroll	$ 97,486	$ 100,154	$ 118,560	$ 119,730	$ 119,391
Commission's net OPEB liability as a % of covered payroll	(112.5)%	(150.0)%	12.5%	1.5%	10.8%

* The Commission adopted GASB Statement No. 75 in fiscal year 2019; therefore, only the available years are presented in the above schedule.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Schedule of Commission Contributions to the Other Postemployment
Welfare Plan Program (Unaudited)

Last 10 Fiscal Years
(Dollar Amounts in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ -	$ -	$ 14,012	$ 11,729	$ 13,970	$ 8,384	$ 11,121	$ 11,368	$ 12,683	$ 18,353
Contributions in relation to the actuarially determined contribution	14,652	13,746	47,250	11,730	46,056	28,171	28,176	28,143	46,180	44,228
Contribution deficiency (excess)	$ (14,652)	$ (13,746)	$ (33,238)	$ (1)	$ (32,086)	$ (19,787)	$ (17,055)	$ (16,775)	$ (33,497)	$ (25,875)
Covered-employee payroll	$ 102,207	$ 97,486	$ 100,154	$ 118,560	$ 119,730	$ 119,391	$ 117,818	$ 117,391	$ 116,829	$ 118,507
Contributions as a % of covered-employee payroll	14.3%	14.1%	47.2%	9.9%	38.5%	23.6%	23.9%	24.0%	39.5%	37.3%

Notes to Schedule

Full actuarial valuations are performed every other year.

The Actuarially Determined Contribution for the fiscal year ended May 31, 2023 was calculated based on a May 31, 2021 full valuation and then projected forward to the May 31, 2022 measurement date. See Note 12 to the financial statements for more information.

The Actuarially Determined Contribution for the fiscal year ended May 31, 2022 was calculated based on a May 31, 2021 full valuation. See Note 12 to the financial statements for more information.

The Actuarially Determined Contribution for the fiscal year ended May 31, 2021 was calculated based on a May 31, 2019 full valuation and then projected forward to the May 31, 2020 measurement date.

The Actuarially Determined Contribution for the fiscal year ended May 31, 2020 was calculated based on a May 31, 2019 full valuation.

The Actuarially Determined Contribution for the fiscal year ended May 31, 2019 was calculated based on a June 1, 2017 full valuation and then projected forward to the May 31, 2018 measurement date.

The Actuarially Determined Contribution (formerly Annual Required Contribution) for the fiscal year ended May 31, 2018 was calculated based on a January 1, 2017 interim valuation that was rolled forward from the January 1, 2016 full valuation.

The Actuarially Determined Contribution (formerly Annual Required Contribution) for the fiscal year ended May 31, 2017 was calculated based on a January 1, 2016 full valuation.

Notes to Schedule *(continued)*

A summary of the actuarial methods and assumptions used in the full valuations are as follows:

	May 31, 2021 Full Valuation	**May 31, 2019 Full Valuation**	**June 1, 2017 Full Valuation**	**January 1, 2016 Full Valuation**
Actuarial cost method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Projected-unit credit
Discount rate	5.5%	6.0%	6.0%	6.5%
Rate of return on assets	5.5%	6.0%	6.0%	6.5%
Inflation rate	2.5%	2.5%	2.3%	2.5%
Amortization method	Level dollar amortization over a period of 10 years	Level dollar amortization over a period of 10 years	Level dollar amortization over a period of 10 years	Level dollar
Amortization period				
- UAAL as of March 1, 2012	N/A	N/A	N/A	10 years (closed)
- Subsequent changes	N/A	N/A	N/A	10 years (open)
Asset valuation method	Market value plus receivable contributions made attributable to a prior fiscal year	Market value plus receivable contributions made attributable to a prior fiscal year	Market value plus receivable contributions made attributable to a prior fiscal year	Fair value
Health cost trend rates	Varying rates between 4.0% and 5.5% for Plan benefits.	Varying rates between 4.3% and 5.6% for Plan benefits.	Varying rates between 4.3% and 6.3% for medical and pharmacy benefits. 4.0% for dental and vision benefits.	Varying rates between 4.6% and 6.2% for medical and pharmacy benefits. 4.0% for dental and vision benefits.
Salary increases	Union – 3.0%, Management – 3.3%	Union – 3.0%, Management – 3.3%	Union – 3.0%, Management – 3.3%	Not considered as OPEB benefits are not based upon pay.
Mortality	PubG-2010 mortality table adjusted to reflect Mortality Improvement Scale MP-2020 and projected forward on a generational basis, with employee rates before benefit commencement and healthy annuitant rates after benefit commencement, and reflecting mortality improvements both before and after the valuation date.	RPH-2014 total Dataset Mortality Tables adjusted to reflect Mortality Improvement Scale MP-2018 and projected forward on a generational basis, with employee rates before benefit commencement and healthy annuitant rates after benefit commencement, and reflecting mortality improvements both before and after the valuation date.	RPH-2014 total Dataset Mortality Tables adjusted to reflect Mortality Improvement Scale MP-2017 from 2006 base year and projected forward on a generational basis, with employee rates before benefit commencement and healthy annuitant rates after benefit commencement, and reflecting mortality improvements both before and after the valuation date.	RP-2000 Healthy Annuitant Mortality Table projected on a generational basis using Scale AA to allow for past and future improvements in mortality. The Employee table is used for pre-retirement. Rates vary by age and gender.

Other Significant Changes

The January 1, 2015 interim valuation used a discount rate of 6.5%. The January 1, 2014 and March 1, 2012 full valuations used a discount rate of 7.0%. The March 1, 2010 and 2008 full valuations used a discount rate of 8.0%. The discount rate and rate of return on assets were equal for all years noted.

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OTHER SUPPLEMENTARY INFORMATION

For accounting purposes, the Commission maintains its records in three sections: Mainline, Oil Franchise, and Motor License. These sections are based on the types of revenues and the associated bond issues.

The Mainline section consists of income and expenses directly associated with the operations of the Turnpike System. In addition, all bonds pledged against this revenue source are included in this section.

The Oil Franchise section consists of revenues received from the Commission's allocation of the Commonwealth's Oil Company Franchise Tax. This revenue is pledged against the Oil Franchise Tax Debt as listed in Note 8 to the financial statements.

The Motor License section consists of an annual income of $28.0 million, which has been provided to the Commission pursuant to Section 20 of Act 3 of the Commonwealth of Pennsylvania. This income is pledged against the Motor License Registration Fee Debt as listed in Note 8 to the financial statements.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Net Position – Business-type activities

	May 31, 2023			
	Mainline	Oil Franchise	Motor License	Total
	(In thousands)			
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES				
Current assets:				
Cash and cash equivalents	$ 294,551	$ -	$ -	$ 294,551
Investments	181,346	-	-	181,346
Accounts receivable	137,083	-	-	137,083
Accrued interest receivable	2,205	-	-	2,205
Inventories	23,147	-	-	23,147
Restricted current assets				
Cash and cash equivalents	576,708	279,965	26,477	883,150
Investments	473,008	208,039	6,944	687,991
Accounts receivable	2,403	11,505	-	13,908
Accrued interest receivable	12,682	3,503	(23)	16,162
Total current assets	1,703,133	503,012	33,398	2,239,543
Noncurrent assets				
Investments				
Investments	381,041	-	-	381,041
Investments restricted	466,465	160,154	29,967	656,586
Total investments	847,506	160,154	29,967	1,037,627
Capital assets not being depreciated				
Land and intangibles	475,462	-	-	475,462
Assets under construction	1,481,794	-	-	1,481,794
Capital assets being depreciated				
Buildings	1,099,651	-	-	1,099,651
Improvements other than buildings	190,080	-	-	190,080
Equipment	650,946	-	-	650,946
Infrastructure	10,613,104	-	-	10,613,104
Total capital assets before accumulated depreciation	14,511,037	-	-	14,511,037
Less: Accumulated depreciation	7,346,262			7,346,262
Total capital assets after accumulated depreciation	7,164,775	-	-	7,164,775
Other assets				
Prepaid bond insurance costs	3,742	-	884	4,626
Net OPEB asset	109,651	-	-	109,651
Other assets	64,554	-	-	64,554
Total other assets	177,947	-	884	178,831
Total noncurrent assets	8,190,228	160,154	30,851	8,381,233
Total assets	9,893,361	663,166	64,249	10,620,776
Deferred outflows of resources from hedging derivatives	-	-	25,860	25,860
Deferred outflows of resources from refunding bonds	220,812	7,920	11,019	239,751
Deferred outflows of resources from pensions	87,942	-	-	87,942
Deferred outflows of resources from OPEB	46,006	-	-	46,006
Total deferred outflows of resources	354,760	7,920	36,879	399,559
Total assets and deferred outflows of resources	$ 10,248,121	$ 671,086	$ 101,128	$ 11,020,335

Schedule of Net Position – Business-type activities *(continued)*

	May 31, 2023			
	Mainline	Oil Franchise	Motor License	Total
		(In thousands)		
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES				
Current liabilities				
Accounts payable and accrued liabilities	$ 587,158	$ 42,203	$ 2,374	$ 631,735
Current portion of debt	489,135	27,640	11,125	527,900
Unearned income	122,463	-	-	122,463
Total current liabilities	1,198,756	69,843	13,499	1,282,098
Noncurrent liabilities				
Debt, less current portion, net of unamortized premium	14,584,746	1,656,644	325,503	16,566,893
Net pension liability	331,574	-	-	331,574
Other noncurrent liabilities	73,684	-	31,825	105,509
Total noncurrent liabilities	14,990,004	1,656,644	357,328	17,003,976
Total liabilities	16,188,760	1,726,487	370,827	18,286,074
Deferred inflows of resources from hedging derivatives	76,625	-	-	76,625
Deferred inflows of resources from service concession arrangements	89,344	-	-	89,344
Deferred inflows of resources from refunding bonds	22,102	489	-	22,591
Deferred inflows of resources from pensions	38,230	-	-	38,230
Deferred inflows of resources from OPEB	53,646	-	-	53,646
Deferred inflows of resources from leases	38,440	-	-	38,440
Total deferred inflows of resources	318,387	489	-	318,876
Total liabilities and deferred inflows of resources	16,507,147	1,726,976	370,827	18,604,950
NET POSITION				
Net investment in capital assets	186,278	(1,332,089)	(330,690)	(1,476,501)
Restricted for construction purposes	-	259,567	60,991	320,558
Restricted for debt service	68,288	16,632	-	84,920
Unrestricted	(6,513,592)	-	-	(6,513,592)
Total net position	$ (6,259,026)	$ (1,055,890)	$ (269,699)	$ (7,584,615)

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Revenues, Expenses, and Changes in Net Position – Business-type activities

	May 31, 2023			
	Mainline	**Oil Franchise**	**Motor License**	**Total**
		(In thousands)		
Operating revenue				
Net fares	$ 1,540,705	$ -	$ -	$ 1,540,705
Other	55,942	-	-	55,942
Total operating revenue	1,596,647	-	-	1,596,647
Operating expenses				
Cost of services	531,542	4,771	-	536,313
Depreciation	408,785	-	-	408,785
Total operating expenses	940,327	4,771	-	945,098
Operating income (loss)	656,320	(4,771)	-	651,549
Nonoperating revenue (expenses)				
Investment losses	41,160	14,106	684	55,950
Other nonoperating revenue	8,112	4,616	-	12,728
Act 44 and Act 89 payments to PennDOT	(50,000)	-	-	(50,000)
Capital assets transferred to the Commonwealth	(2,852)	-	-	(2,852)
Interest and bond expense	(605,078)	(63,371)	(16,897)	(685,346)
Nonoperating expenses, net	(608,658)	(44,649)	(16,213)	(669,520)
Income (loss) before capital contributions	47,662	(49,420)	(16,213)	(17,971)
Capital contributions	10,000	132,310	28,000	170,310
Increase in net position	57,662	82,890	11,787	152,339
Net position, at beginning of year, as restated[1]	(6,454,520)	(1,000,944)	(281,490)	(7,736,954)
Intersection transfers	137,832	(137,836)	4	-
Net position, at end of year	$ (6,259,026)	$ (1,055,890)	$ (269,699)	$ (7,584,615)

[1] The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Cash Flows – Business-type activities

	May 31, 2023			
	Mainline	Oil Franchise	Motor License	Total
	(In thousands)			
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash received from customer tolls and deposits	$ 1,579,233	$ -	$ -	$ 1,579,233
Cash payments for goods and services	(410,701)	(3,932)	-	(414,633)
Cash payments to employees	(143,952)	(815)	-	(144,767)
Cash received from other operating activities	11,312	-	-	11,312
Net cash provided by (used in) operating activities	1,035,892	(4,747)	-	1,031,145
CASH FLOWS FROM INVESTING ACTIVITIES				
Proceeds from sales and maturities of investments	3,070,441	1,546,108	60,043	4,676,592
Interest received on investments	29,704	6,526	852	37,082
Purchases of investments	(3,062,943)	(1,315,592)	(58,979)	(4,437,514)
Net cash provided by investing activities	37,202	237,042	1,916	276,160
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Capital grants received from other governments	5,212	-	-	5,212
Proceeds from Motor License Registration fees	-	-	28,000	28,000
Proceeds from Oil Company Franchise Tax	-	130,812	-	130,812
Construction and acquisition of capital assets	(620,156)	(136,677)	-	(756,833)
Proceeds from sale of capital assets	1,014	-	-	1,014
Payments for bond and swap expenses	(7,345)	(40)	-	(7,385)
Payments for debt refundings	(341,272)	-	-	(341,272)
Payments for bond maturities	(113,520)	(26,385)	(10,575)	(150,480)
Interest paid on debt	(298,928)	(72,910)	(17,274)	(389,112)
Interest subsidy from Build America Bonds	8,249	2,305	-	10,554
Proceeds from debt issuances	601,826	-	-	601,826
Net cash (used in) provided by capital and related financing activities	(764,920)	(102,895)	151	(867,664)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES				
Cash payments to PennDOT	(50,000)	-	-	(50,000)
Payments for bond and swap expenses	(3,513)	-	-	(3,513)
Payments for debt refundings	(386,473)	-	-	(386,473)
Payments for debt maturities	(113,260)	-	-	(113,260)
Interest paid on debt	(328,664)	-	-	(328,664)
Proceeds from debt issuances	384,487	-	-	384,487
Net cash used in noncapital financing activities	(497,423)	-	-	(497,423)
(Decrease) increase in cash and cash equivalents	(189,249)	129,400	2,067	(57,782)
Cash and cash equivalents at beginning of year	1,060,508	150,565	24,410	1,235,483
Cash and cash equivalents at end of year	$ 871,259	$ 279,965	$ 26,477	$ 1,177,701

	May 31, 2023			
	Mainline	Oil Franchise	Motor License	Total
		(In thousands)		
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities				
Opera ing income (loss)	$ 656,320	$ (4,771)	$ -	$ 651,549
Adjustments to reconcile operating income to net cash provided by operating activities				
Depreciation	408,785	-	-	408,785
Change in operating assets and liabilities				
Accounts receivable	(12,576)	-	-	(12,576)
Inventories	(2,739)	-	-	(2,739)
O her assets	138	-	-	138
Net OPEB asset	40,573	-	-	40,573
Deferred outflows of resources from pensions	(48,313)	-	-	(48,313)
Deferred outflows of resources from OPEB	4,630	-	-	4,630
Accounts payable and accrued liabilities	19,303	24	-	19,327
Net pension liability	112,272	-	-	112,272
O her noncurrent liabilities	(1,263)	-	-	(1,263)
Deferred inflows of resources from pensions	(71,099)	-	-	(71,099)
Deferred inflows of resources from OPEB	(69,305)	-	-	(69,305)
Deferred inflows of resources from leases	(834)	-	-	(834)
Net cash provided by (used in) operating activities	$ 1,035,892	$ (4,747)	$ -	$ 1,031,145
Reconciliation of cash and cash equivalents to the statements of net position				
Cash and cash equivalents	$ 294,551	$ -	$ -	$ 294,551
Restricted cash and cash equivalents	576,708	279,965	26,477	883,150
Total cash and cash equivalents	$ 871,259	$ 279,965	$ 26,477	$ 1,177,701

Noncash Investing, Capital and Related Financing and Noncapital Financing Activities

The Commission recorded a net increase of $13.4 million in the fair value of its investments not reported as cash equivalents for the year ended May 31, 2023. Increases (decreases) by section were: Mainline, $6.5 million; Oil Franchise, $7.1 million; and Motor License, $(0.2) million.

The Commission recorded $75.6 million for the amortization of bond premium for the year ended May 31, 2023. Amortization by section was: Mainline, $63.6 million; Oil Franchise, $11.0 million; and Motor License, $1.0 million.

As indicated in Note 8, the Commission refunded various bonds in fiscal year 2023. The fiscal year 2023 refundings resulted in a $34.9 million reclassification from Mainline bond premiums (discounts) to deferred inflows of resources from refundings and $7.6 million reclassification from Mainline bond premiums (discounts) to deferred outflows of resources from refundings. Additionally, the Commission recorded $20.1 million for the amortization of deferred outflows/inflows of resources from refunding bonds for the year ended May 31, 2023. Amortization by section was: Mainline, $18.8 million; Oil Franchise, $0.4 million; and Motor License, $0.9 million.

The Commission recorded $0.3 million for the amortization of prepaid bond insurance costs for the year ended May 31, 2023. Amortization by section was: Mainline, $0.2 million; and Motor License, $0.1 million.

Noncash Investing, Capital and Related Financing and Noncapital Financing Activities *(continued)*

The Commission recorded an interest expense reduction of $6.5 million in the Mainline section and $0.2 million in the Motor License section for the year ended May 31, 2023 related to terminated derivative instruments.

The Commission recognized total capital contributions of $170.3 million for fiscal year ended May 31, 2023. Cash received of $164.0 million for fiscal year ended May 31, 2023 is reported in the capital and related financing activities of this schedule. The $6.3 million difference between capital contributions and cash received is the result of a $1.5 million increase in Oil Franchise receivables related to these capital contributions and a $4.8 million Mainline noncash capital contribution related to capital assets provided by service plaza operators. The Commission entered into agreements with a food and fuel provider to totally reconstruct the service plazas; the service plaza operators provided the capital for the reconstruction in exchange for lower rental rates. See Note 2 to the financial statements for further discussion on capital contributions and Note 6 to the financial statements for further discussion on the service plazas.

As discussed in Note 2 (*Capital Assets Transferred to the Commonwealth of Pennsylvania* section), during fiscal year 2023, the Commission transferred from its Mainline section IT equipment and Dynamic Message System signs with a net book value of $2.9 million to PennDOT.

The Commission records intersection activity related to revenue, expense, asset and liability transfers between its sections. Some of the intersection entries are related to cash transfers; others are noncash transfers as required. Net intersection transfers for the year ended May 31, 2023 were: to Mainline, $137.8 million and from Oil Franchise, $137.8 million.

Schedule of Net Position – Business-type activities

	May 31, 2022 *(RESTATED)*			
	Mainline	Oil Franchise	Motor License	Total
	(In thousands)			
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES				
Current assets:				
Cash and cash equivalents	$ 318,158	$ -	$ -	$ 318,158
Investments	46,881	-	-	46,881
Accounts receivable	126,690	-	-	126,690
Accrued interest receivable	1,656	-	-	1,656
Inventories	20,408	-	-	20,408
Restricted current assets				
Cash and cash equivalents	742,350	150,565	24,410	917,325
Investments	404,825	377,614	4,438	786,877
Accounts receivable	238	13,182	-	13,420
Accrued interest receivable	2,627	890	58	3,575
Total current assets	1,663,833	542,251	28,906	2,234,990
Noncurrent assets				
Investments				
Investments	458,258	-	-	458,258
Investments restricted	595,970	210,790	33,716	840,476
Total investments	1,054,228	210,790	33,716	1,298,734
Capital assets not being depreciated				
Land and intangibles	460,908	-	-	460,908
Assets under construction	1,369,762	-	-	1,369,762
Capital assets being depreciated				
Buildings	1,034,358	-	-	1,034,358
Improvements other than buildings	189,597	-	-	189,597
Equipment	626,570	-	-	626,570
Infrastructure	10,107,010	-	-	10,107,010
Total capital assets before accumulated depreciation	13,788,205	-	-	13,788,205
Less: Accumulated depreciation	7,017,023	-	-	7,017,023
Total capital assets after accumulated depreciation	6,771,182	-	-	6,771,182
Other assets				
Prepaid bond insurance costs	4,244	-	954	5,198
Net OPEB Asset	150,224	-	-	150,224
Other assets	66,579	-	-	66,579
Total other assets	221,047	-	954	222,001
Total noncurrent assets	8,046,457	210,790	34,670	8,291,917
Total assets	9,710,290	753,041	63,576	10,526,907
Deferred outflows of resources from hedging derivatives	3,714	-	34,710	38,424
Deferred outflows of resources from refunding bonds	233,497	8,789	11,951	254,237
Deferred outflows of resources from pensions	39,629	-	-	39,629
Deferred outflows of resources from OPEB	50,636	-	-	50,636
Total deferred outflows of resources	327,476	8,789	46,661	382,926
Total assets and deferred outflows of resources	$ 10,037,766	$ 761,830	$ 110,237	$ 10,909,833

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

PENNSYLVANIA TURNPIKE COMMISSION

A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Net Position – Business-type activities *(continued)*

	May 31, 2022 *(RESTATED)*			
	Mainline	Oil Franchise	Motor License	Total
		(In thousands)		
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES				
Current liabilities				
Accounts payable and accrued liabilities	$ 526,405	$ 41,675	$ 2,646	$ 570,726
Current portion of debt	276,780	26,385	10,575	313,740
Unearned income	117,892	-	-	117,892
Total current liabilities	921,077	68,060	13,221	1,002,358
Noncurrent liabilities				
Debt, less current portion, net of unamortized premium	14,812,476	1,693,712	337,600	16,843,788
Net pension liability	219,303	-	-	219,303
Other noncurrent liabilities	108,408	-	40,906	149,314
Total noncurrent liabilities	15,140,187	1,693,712	378,506	17,212,405
Total liabilities	16,061,264	1,761,772	391,727	18,214,763
Deferred inflows of resources from hedging derivatives	53,070	-	-	53,070
Deferred inflows of resources from service concession arrangements	96,037	-	-	96,037
Deferred inflows of resources from refunding bonds	10,362	1,002	-	11,364
Deferred inflows of resources from pensions	109,329	-	-	109,329
Deferred inflows of resources from OPEB	122,950	-	-	122,950
Deferred inflows of resources from leases	39,274	-	-	39,274
Total deferred inflows of resources	431,022	1,002	-	432,024
Total liabilities and deferred inflows of resources	16,492,286	1,762,774	391,727	18,646,787
NET POSITION				
Net investment in capital assets	186,985	(1,267,666)	(341,465)	(1,422,146)
Restricted for construction purposes	-	251,070	59,975	311,045
Restricted for debt service	49,129	15,652	-	64,781
Unrestricted	(6,690,634)	-	-	(6,690,634)
Total net position	$ (6,454,520)	$ (1,000,944)	$ (281,490)	$ (7,736,954)

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Revenues, Expenses, and Changes in Net Position – Business-type activities

	May 31, 2022 *(RESTATED)*			
	Mainline	**Oil Franchise**	**Motor License**	**Total**
		(In thousands)		
Operating revenue				
Net fares	$ 1,459,916	$ -	$ -	$ 1,459,916
Other	47,283	-	-	47,283
Total operating revenue	1,507,199	-	-	1,507,199
Operating expenses				
Cost of services	435,263	3,660	-	438,923
Depreciation	431,195	-	-	431,195
Total operating expenses	866,458	3,660	-	870,118
Operating income (loss)	640,741	(3,660)	-	637,081
Nonoperating revenue (expenses)				
Investment losses	(51,752)	(17,879)	(1,960)	(71,591)
Other nonoperating revenue	16,891	4,612	-	21,503
Act 44 and Act 89 payments to PennDOT	(450,000)	-	-	(450,000)
Capital assets transferred to the Commonwealth	(51,908)	-	-	(51,908)
Interest and bond expense	(635,985)	(62,852)	(17,375)	(716,212)
Nonoperating expenses, net	(1,172,754)	(76,119)	(19,335)	(1,268,208)
Loss before capital contributions	(532,013)	(79,779)	(19,335)	(631,127)
Capital contributions	7,795	133,346	28,000	169,141
(Decrease) increase in net position	(524,218)	53,567	8,665	(461,986)
Net position, at beginning of year	(6,080,588)	(904,221)	(290,159)	(7,274,968)
Intersection transfers	150,286	(150,290)	4	-
Net position, at end of year, as restated[1]	$ (6,454,520)	$ (1,000,944)	$ (281,490)	$ (7,736,954)

[1] The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedule of Cash Flows – Business-type activities

	May 31, 2022 *(RESTATED)*			
	Mainline	**Oil Franchise**	**Motor License**	**Total**
		(In Thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash received from customer tolls and deposits	$ 1,500,901	$ -	$ -	$ 1,500,901
Cash payments for goods and services	(360,791)	(2,711)	-	(363,502)
Cash payments to employees	(138,908)	(1,231)	-	(140,139)
Cash received from other operating activities	9,960	-	-	9,960
Net cash provided by (used in) operating activities	1,011,162	(3,942)	-	1,007,220
CASH FLOWS FROM INVESTING ACTIVITIES				
Proceeds from sales and maturities of investments	3,037,522	1,200,984	32,826	4,271,332
Interest received on investments	18,747	3,411	469	22,627
Purchases of investments	(3,101,244)	(1,649,651)	(23,539)	(4,774,434)
Net cash (used in) provided by investing activities	(44,975)	(445,256)	9,756	(480,475)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Capital grants received from other governments	6,501	-	-	6,501
Proceeds from Motor License Registration fees	-	-	28,000	28,000
Proceeds from Oil Company Franchise Tax	-	136,522	-	136,522
Construction and acquisition of capital assets	(416,110)	(178,898)	-	(595,008)
Proceeds from sale of capital assets	1,657	-	-	1,657
Payments for bond and swap expenses	(6,623)	(2,881)	-	(9,504)
Payments for debt refundings	(268,324)	(23,607)	-	(291,931)
Payments for bond maturities	(77,415)	(17,315)	(10,045)	(104,775)
Interest paid on debt	(278,767)	(55,784)	(17,750)	(352,301)
Interest subsidy from Build America Bonds	16,498	4,612	-	21,110
Upfront swap payments	3,590	-	-	3,590
Proceeds from debt issuances	820,071	636,519	-	1,456,590
Net cash (used in) provided by capital and related financing activities	(198,922)	499,168	205	300,451
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES				
Cash payments to PennDOT	(450,000)	-	-	(450,000)
Payments for bond and swap expenses	(2,586)	-	-	(2,586)
Payments for cash defeasances	(17,730)	-	-	(17,730)
Payments for debt refundings	(291,850)	-	-	(291,850)
Payments for debt maturities	(113,330)	-	-	(113,330)
Interest paid on debt	(317,350)	-	-	(317,350)
Proceeds from debt issuances	773,965	-	-	773,965
Net cash used in noncapital financing activities	(418,881)	-	-	(418,881)
Increase in cash and cash equivalents	348,384	49,970	9,961	408,315
Cash and cash equivalents at beginning of year	712,124	100,595	14,449	827,168
Cash and cash equivalents at end of year	$ 1,060,508	$ 150,565	$ 24,410	$ 1,235,483

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

	May 31, 2022 *(RESTATED)*			
	Mainline	Oil Franchise	Motor License	Total
	(In Thousands)			
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities				
Operating income (loss)	$ 640,741	$ (3,660)	$ -	$ 637,081
Adjustments to reconcile operating income to net cash provided by operating activities				
Depreciation	431,195	-	-	431,195
Change in operating assets and liabilities				
Accounts receivable	(6,515)	-	-	(6,515)
Inventories	(1,205)	-	-	(1,205)
Other assets	9	-	-	9
Net OPEB asset	(165,015)	-	-	(165,015)
Deferred outflows of resources from pensions	11,047	-	-	11,047
Deferred outflows of resources from OPEB	20,038	-	-	20,038
Accounts payable and accrued liabilities	5,967	(281)	-	5,686
Net pension liability	(69,169)	-	-	(69,169)
Other noncurrent liabilities	116	(1)	-	115
Deferred inflows of resources from pensions	25,766	-	-	25,766
Deferred inflows of resources from OPEB	118,666	-	-	118,666
Deferred inflows of resources from leases	(479)	-	-	(479)
Net cash provided by (used in) operating activities	$ 1,011,162	$ (3,942)	$ -	$ 1,007,220
Reconciliation of cash and cash equivalents to the statements of net position				
Cash and cash equivalents	$ 318,158	$ -	$ -	$ 318,158
Restricted cash and cash equivalents	742,350	150,565	24,410	917,325
Total cash and cash equivalents	$ 1,060,508	$ 150,565	$ 24,410	$ 1,235,483

Note: The Commission adopted GASB Statement No. 87 for its fiscal year ended May 31, 2023. See Note 2 for the further discussion on fiscal year 2022 balances that were restated.

<u>Noncash Investing, Capital and Related Financing and Noncapital Financing Activities</u>

The Commission recorded a net decrease of $100.4 million in the fair value of its investments not reported as cash equivalents for the year ended May 31, 2022. Decreases by section were: Mainline, $74.9 million; Oil Franchise, $23.1 million; and Motor License, $2.4 million.

The Commission recorded $72.4 million for the amortization of bond premium for the year ended May 31, 2022. Amortization by section was: Mainline, $61.3 million; Oil Franchise, $10.1 million; and Motor License, $1.0 million.

As indicated in Note 8 to the financial statements (Debt), the Commission refunded and cash defeased various bonds in fiscal year 2022. The fiscal year 2022 refundings and cash defeasances resulted in a $1.0 million reclassification from bond premiums (discounts) to deferred inflows of resources from refundings. The reclassifications by section were: Mainline, $0.7 million and Oil Franchise, $0.3 million. Additionally, the Commission recorded $57.5 million for the amortization of deferred outflows/inflows of resources from refunding bonds for the year ended May 31, 2022. Amortization by section was: Mainline, $56.2 million; Oil Franchise, $0.4 million; and Motor License, $0.9 million.

Noncash Investing, Capital and Related Financing and Noncapital Financing Activities *(continued)*

The Commission recorded $0.3 million for the amortization of prepaid bond insurance costs for the year ended May 31, 2022. Amortization by section was: Mainline, $0.2 million; and Motor License, $0.1 million.

The Commission recorded an interest expense reduction of $7.2 million in the Mainline section and $0.2 million in the Motor License section for the year ended May 31, 2022 related to terminated derivative instruments.

The Commission recognized total capital contributions of $169.1 million for fiscal year ended May 31, 2022. Cash received of $171.0 million for fiscal year ended May 31, 2022 is reported in the capital and related financing activities of this schedule. The $1.9 million difference between capital contributions and cash received is the result of a $4.2 million decrease in Mainline receivables and a $3.2 million decrease in Oil Franchise receivables related to these capital contributions offset by a $5.5 million Mainline noncash capital contribution related to capital assets provided by service plaza operators. The Commission entered into agreements with a food and fuel provider to totally reconstruct the service plazas; the service plaza operators provided the capital for the reconstruction in exchange for lower rental rates. See Note 2 to the financial statements for further discussion on capital contributions and Note 6 to the financial statements for further discussion on the service plazas.

As discussed in Note 2 (*Capital Assets Transferred to the Commonwealth of Pennsylvania* section), the Commission made the following transfers from its Mainline section during the fiscal year ended May 31, 2022: infrastructure assets with a net book value of $51.6 million to PennDOT, drones with a net book value of $0.1 million to the Pennsylvania State Police, and a traffic signal with a net book value of $0.2 million to Bristol Township (PA).

The Commission records intersection activity related to revenue, expense, asset and liability transfers between its sections. Some of the intersection entries are related to cash transfers; others are noncash transfers as required. Net intersection transfers for the year ended May 31, 2022 were: to Mainline, $150.3 million and from Oil Franchise, $150.3 million.

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Section Information *(continued)*
Schedules of Cost of Services Detail

The following tables provide additional detail for the costs of services reported in the Statements of Revenues, Expenses, and Changes in Net Position.

Fiscal Year Ended May 31, 2023	Mainline Operating	Mainline Capital	Total Mainline	Oil Franchise	Motor License	Total
			(In Thousands)			
General and administrative	$ 68,162	$ 139,180	$ 207,342	$ 4,161	$ -	$ 211,503
Traffic engineering and operations	3,454	3,326	6,780	-	-	6,780
Service centers	70,033	-	70,033	-	-	70,033
Employee benefits	47,092	12,306	59,398	610	-	60,008
Toll collection	26,453	2,842	29,295	-	-	29,295
Normal maintenance	78,379	1,035	79,414	-	-	79,414
Facilities and energy mgmt. operations	12,402	6,374	18,776	-	-	18,776
Turnpike patrol	60,504	-	60,504	-	-	60,504
Total cost of services	$ 366,479	$ 165,063	$ 531,542	$ 4,771	$ -	$ 536,313

Fiscal Year Ended May 31, 2022	Mainline Operating	Mainline Capital	Total Mainline	Oil Franchise	Motor License	Total
			(In Thousands)			
General and administrative	$ 63,196	$ 102,183	$ 165,379	$ 2,994	$ -	$ 168,373
Traffic engineering and operations	3,471	3,807	7,278	-	-	7,278
Service centers	59,688	-	59,688	-	-	59,688
Employee benefits	16,100	9,051	25,151	666	-	25,817
Toll collection	26,236	1,210	27,446	-	-	27,446
Normal maintenance	78,068	1,581	79,649	-	-	79,649
Facilities and energy mgmt. operations	11,761	5,173	16,934	-	-	16,934
Turnpike patrol	53,738	-	53,738	-	-	53,738
Total cost of services	$ 312,258	$ 123,005	$ 435,263	$ 3,660	$ -	$ 438,923

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STATISTICAL SECTION

This part of the Commission's Annual Comprehensive Financial Report presents detailed information as a context for understanding the information in the financial statements, note disclosures, required supplementary information and the Commission's overall financial health.

Financial Trends Pages 139-140
These schedules contain trend information to help the reader understand how the Commission's financial performance and viability have changed over time.

Debt Capacity Pages 141-142
These schedules present information to help the reader assess the affordability of the Commission's current levels of outstanding debt and the Commission's ability to issue additional debt.

Revenue Capacity Pages 143-144
These schedules contain information to help the reader assess the Commission's most significant revenue source, fare revenues.

Demographic and Economic Information Pages 145-147
These schedules offer demographic and economic indicators to help the reader understand the environment within which the Commission's financial activities take place.

Operating Information Pages 148-158
These schedules contain service and infrastructure data to help the reader understand how the information in the Commission's financial report relates to the services it provides and the activities it performs.

PENNSYLVANIA TURNPIKE COMMISSION

A Component Unit of the Commonwealth of Pennsylvania

Summary of Revenues and Expenses

(000s Omitted)

Fiscal Years Ended May 31

	2014	2015	2016	2017	2018	2019	2020 *	2021	2022 (RESTATED)	2023
Operating revenues										
Net fares	$ 861,846	$ 932,146	$ 1,030,115	$ 1,111,061	$ 1,196,606	$ 1,327,031	$ 1,247,779	$ 1,190,419	$ 1,459,916	$ 1,540,705
Other	18,909	17,589	22,576	23,335	4,668	9,574	36,004	41,130	47,283	55,942
Total opera ing revenues	880,755	949,735	1,052,691	1,134,396	1,201,274	1,336,605	1,283,783	1,231,549	1,507,199	1,596,647
Operating expenses										
Cost of services	438,981	459,780	471,132	517,103	494,742	509,753	533,931	509,381	438,923	536,313
Depreciation	324,010	337,664	332,941	354,343	379,401	384,104	382,088	373,924	431,195	408,785
Total opera ing expenses	762,991	797,444	804,073	871,446	874,143	893,857	916,019	883,305	870,118	945,098
Operating income	117,764	152,291	248,618	262,950	327,131	442,748	367,764	348,244	637,081	651,549
Nonoperating revenues (expenses)										
Investment earnings (loss)	27,570	17,502	29,069	14,225	18,809	83,072	90,345	15,336	(71,591)	55,950
Other nonoperating revenues	23,161	55,992	21,651	21,532	22,303	22,572	22,693	12,996	21,503	12,728
Act 44 and Act 89 payments to PennDOT	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(50,000)
Capital assets transferred to Commonwealth	(13,531)	(4,499)	(40,937)	(54,724)	-	(162,982)	(294)	(2,769)	(51,908)	(2,852)
Interest and bond expense	(427,047)	(465,869)	(521,021)	(560,660)	(566,137)	(620,584)	(652,901)	(671,774)	(716,212)	(685,346)
Nonoperating expenses, net	(839,847)	(846,874)	(961,238)	(1,029,627)	(975,025)	(1,127,922)	(990,157)	(1,096,211)	(1,268,208)	(669,520)
Loss before capital contributions	(722,083)	(694,583)	(712,620)	(766,677)	(647,894)	(685,174)	(622,393)	(747,967)	(631,127)	(17,971)
Capital contributions	110,036	146,472	180,906	214,664	207,804	229,386	173,486	164,147	169,141	170,310
(Decrease) increase in net position	$ (612,047)	$ (548,111)	$ (531,714)	$ (552,013)	$ (440,090)	$ (455,788)	$ (448,907)	$ (583,820)	$ (461,986)	$ 152,339

* Approximately $32.0 million of toll-related bad debt was reclassified from other operating revenues to fare revenues to conform to the fiscal year ended May 31, 2021, financial statement presentation amounts.

Note: The Commission implemented GASB 68 & 71 in 2015 and GASB 75 in 2019; prior years have not been adjusted to reflect the implementation of these standards. As discussed in Note 2, balances for fiscal year 2022 were restated for the implementation of GASB Statement No. 87, Leases.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Schedule of Net Position
(000s Omitted)
Fiscal Years Ended May 31

	Net Investment in Capital Assets	Restricted	Unrestricted	Total Net Position
2014	$ 372,750	$ 273,843	$ (3,947,048)	$ (3,300,455)
2015	271,187	311,924	(4,698,056)	(4,114,945)
2016	(24,520)	361,798	(4,983,937)	(4,646,659)
2017	(258,038)	374,775	(5,315,409)	(5,198,672)
2018	(250,112)	304,478	(5,693,128)	(5,638,762)
2019	(623,209)	382,601	(6,001,633)	(6,242,241)
2020	(903,089)	453,932	(6,241,991)	(6,691,148)
2021	(1,115,845)	322,760	(6,481,883)	(7,274,968)
2022*	(1,422,146)	375,826	(6,690,634)	(7,736,954)
2023	(1,476,501)	405,478	(6,513,592)	(7,584,615)

* As discussed in Note 2, balances for fiscal year 2022 were restated for the implementation of GASB Statement No. 87, Leases.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Debt Coverage – All Sections
(000s Omitted)
Fiscal Years Ended May 31

	2014	2015	2016	2017	2018 *	2019	2020	2021	2022 (RESTATED)	2023
Revenues and capital contributions										
Operating revenues	$ 880,755	$ 949,735	$ 1,052,691	$ 1,134,396	$ 1,201,274	$ 1,336,605	$ 1,283,783	$ 1,231,549	$ 1,507,199	$ 1,596,647
Investment earnings**	19,030	17,356	24,527	23,693	25,569	39,019	39,670	25,473	28,807	42,599
Other nonoperating revenues	23,161	55,992	21,651	21,532	22,303	22,572	22,693	12,996	21,503	12,728
Capital contributions	110,036	146,472	180,906	214,664	207,804	229,386	173,486	164,147	169,141	170,310
Total revenues and capital contributions	1,032,982	1,169,555	1,279,775	1,394,285	1,456,950	1,627,582	1,519,632	1,434,165	1,726,650	1,822,284
Direct expenses										
Cost of services	438,981	459,780	471,132	517,103	494,742	509,753	533,931	509,381	438,923	536,313
Bond and swap expenses	12,526	10,620	14,258	16,990	11,002	8,180	12,223	10,308	12,140	11,585
Total direct expenses	451,507	470,400	485,390	534,093	505,744	517,933	546,154	519,689	451,063	547,898
Net revenues available for debt service payments	$ 581,475	$ 699,155	$ 794,385	$ 860,192	$ 951,206	$ 1,109,649	$ 973,478	$ 914,476	$ 1,275,587	$ 1,274,386
Debt service payments										
Debt maturity payments	$ 124,700	$ 115,150	$ 138,630	$ 122,630	$ 251,375	$ 224,365	$ 186,055	$ 41,775	$ 218,105	$ 263,740
Interest payments	368,582	395,223	436,073	494,301	519,173	591,837	616,570	629,587	669,651	717,776
Total debt service payments	$ 493,282	$ 510,373	$ 574,703	$ 616,931	$ 770,548	$ 816,202	$ 802,625	$ 671,362	$ 887,756	$ 981,516
Coverage	1.18	1.37	1.38	1.39	1.23	1.36	1.21	1.36	1.44	1.30

Revenues and capital contributions, direct expenses, principal payments and interest payments listed on this schedule include all sections (Mainline, Oil Franchise, and Motor License) of the Pennsylvania Turnpike Commission. Amounts listed for the principal and interest payments are for all sections and include both senior and subordinate debt. BAB Interest Subsidy is included in other nonoperating revenues.

* During FY18, the Commission retired $100.0 million of the 2013 Series A Senior debt that was scheduled to mature on December 1, 2017. This debt was originally expected to be refunded but the Commission chose to retire this debt due to its cash position. Had the Commission chose to refund this debt as originally planned, total debt service payments for FY18 would have been $670,548 and the FY18 coverage would have been 1.42.

** Excludes change in fair value of investments.

Note: The Commission implemented GASB 68 and 71 in 2015 and GASB 75 in 2019; prior years have not been adjusted to reflect the implementation of these standards. The Commission implemented GASB 87 in 2023; 2022 was restated accordingly. Years prior to 2022 have not been adjusted to reflect the implementation of the standard.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Ratios of Mainline Outstanding Debt* and Debt Service Payments
(000s Omitted)
Fiscal Years Ended May 31

	Number of Vehicles ***	Mainline Outstanding Debt*	Oil Franchise Outstanding Debt*	Motor License Outstanding Debt*	Total Outstanding Debt*	Mainline Debt Service Payments	Oil Franchise Debt Service Payments	Motor License Debt Service Payments	Total Debt Service Payments	Mainline Outstanding Debt Per Vehicle**	Mainline Debt Service Payments Per Vehicle**
2014	193,116	$ 8,502,700	$ 768,732	$ 436,473	$ 9,707,905	$ 411,019	$ 55,748	$ 26,515	$ 493,282	$ 44.03	$ 2.13
2015	197,501	9,254,750	751,955	428,703	10,435,408	430,138	53,888	26,347	510,373	46.86	2.18
2016	204,783	10,540,019	733,956	420,574	11,694,549	492,380	54,578	27,745	574,703	51.47	2.40
2017	207,142	11,436,677	720,245	412,080	12,569,002	534,190	54,885	27,856	616,931	55.21	2.58
2018	209,110	12,210,090	699,006	403,175	13,312,271	691,471	50,624	28,453	770,548	58.39	3.31
2019	213,292	12,354,555	1,182,302	379,752	13,916,609	725,630	61,372	29,200	816,202	57.92	3.40
2020	189,340	13,429,674	1,157,517	369,709	14,956,900	700,962	73,787	27,876	802,625	70.93	3.70
2021	169,601	14,311,272	1,133,066	359,192	15,803,530	572,429	71,104	27,829	671,362	84.38	3.38
2022	200,103	15,089,256	1,720,097	348,175	17,157,528	786,862	73,099	27,795	887,756	75.41	3.93
2023	206,253	15,073,881	1,684,284	336,628	17,094,793	854,372	99,295	27,849	981,516	73.08	4.14

* Outstanding debt is reported net of unamortized premium/discount.

** Oil Franchise and Motor License debt outstanding and debt service payments are not included in the ratios as the related debt service payments are not associated with traffic volumes.

*** The number of vehicle transactions presented for fiscal years 2013 through 2020 are slightly less than originally presented. The slight decrease is the result of a change in methodology for reporting transactions that could not be correlated due to a missing entry or exit record for the transaction. The Commission implemented this change as part of a reporting enhancement project in fiscal year 2021. Prior years were restated; therefore, counts are consistent with the current methodology.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Traffic Statistics
(000s Omitted)
Fiscal Years Ended May 31

	Number of Vehicle Transactions*	Gross Fare Revenue	Gross Fare Revenue Per Vehicle Transaction
Passenger			
2014	167,387	$ 497,671	$ 2.97
2015	170,371	533,054	3.13
2016	176,369	588,295	3.34
2017	178,244	638,787	3.58
2018	179,125	678,720	3.79
2019	181,946	740,205	4.07
2020	158,738	683,511	4.31
2021	137,714	610,353	4.43
2022	165,128	819,784	4.96
2023	170,355	868,352	5.10
Commercial			
2014	25,729	$ 368,395	$ 14.32
2015	27,130	401,198	14.79
2016	28,414	443,325	15.60
2017	28,898	476,189	16.48
2018	29,985	524,438	17.49
2019	31,346	595,180	18.99
2020	30,602	606,050	19.80
2021	31,887	648,458	20.34
2022	34,975	749,243	21.42
2023	35,898	793,355	22.10
Total			
2014	193,116	$ 866,066	$ 4.48
2015	197,501	934,252	4.73
2016	204,783	1,031,620	5.04
2017	207,142	1,114,976	5.38
2018	209,110	1,203,158	5.75
2019	213,292	1,335,385	6.26
2020	189,340	1,289,561	6.81
2021	169,601	1,258,811	7.42
2022	200,103	1,569,027	7.84
2023	206,253	1,661,707	8.06

* The number of vehicle transactions presented for fiscal years 2013 through 2020 are slightly less than originally presented. The slight decrease is the result of a change in methodology for reporting transactions that could not be correlated due to a missing entry or exit record for the transaction. The Commission implemented this change as part of a reporting enhancement project in fiscal year 2021. Prior years were restated; therefore, counts are consistent with the current methodology.

Refer to page 149 for vehicle class definitions.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Traffic Statistics
Fiscal Years Ended May 31

Revenue Composition as a Percentage of Total Revenue

				Electronic Toll Collection			
	Passenger	**Commercial**	**Total**	**EZPass/VES**	**Toll By Plate**	**Non-ETC**	**Total**
2014	57.46%	42.54%	100.00%	69.99%	0.00%	30.01%	100.00%
2015	57.06	42.94	100.00	71.48	0.00	28.52	100.00
2016	57.03	42.97	100.00	74.28	0.26	25.46	100.00
2017	57.29	42.71	100.00	76.55	0.59	22.86	100.00
2018	56.41	43.59	100.00	78.86	0.81	20.33	100.00
2019	55.43	44.57	100.00	81.38	1.10	17.52	100.00
2020	53.00	47.00	100.00	84.00	2.80	13.20	100.00
2021	48.49	51.51	100.00	84.94	15.04	0.02	100.00
2022	52.25	47.75	100.00	83.47	16.53	0.00	100.00
2023	52.26	47.74	100.00	83.98	16.02	0.00	100.00

Traffic Composition as a Percentage of Total Vehicles

				Electronic Toll Collection (ETC)			
	Passenger	**Commercial**	**Total**	**EZPass/VES**	**Toll By Plate**	**Non-ETC**	**Total**
2014	86.68%	13.32%	100.00%	72.36%	0.00%	27.64%	100.00%
2015	86.26	13.74	100.00	74.95	0.00	25.05	100.00
2016	86.12	13.88	100.00	76.96	0.30	22.74	100.00
2017	86.05	13.95	100.00	79.00	0.76	20.24	100.00
2018	85.66	14.34	100.00	81.12	1.87	17.01	100.00
2019	85.30	14.70	100.00	82.58	3.03	14.39	100.00
2020	83.84	16.16	100.00	83.51	5.36	11.13	100.00
2021	81.20	18.80	100.00	77.28	22.68	0.04	100.00
2022	82.52	17.48	100.00	77.21	22.79	0.00	100.00
2023	82.60	17.40	100.00	77.40	22.60	0.00	100.00

Note: The number of vehicle transactions presented for fiscal years 2013 through 2020 are slightly less than originally presented. The slight decrease is the result of a change in methodology for reporting transactions that could not be correlated due to a missing entry or exit record for the transaction. The Commission implemented this change as part of a reporting enhancement project in fiscal year 2021. Prior years were restated; therefore, counts are consistent with the current methodology.

Refer to page 149 for vehicle class definitions.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Ten Largest Commercial Customers
(000s Omitted)
Fiscal Years Ended May 31

	2023		2014	
	Annual Fares	Rank	Annual Fares	Rank
Best Pass, Inc.	$ 217,290	1	$ 42,271	2
Heavy Vehicle Electronic License Plate, Inc.	166,414	2	51,410	1
ECM Transport LLC	3,111	3		
Acme Markets, Inc.	2,011	4		
Food Haulers, Inc.	1,123	5		
New Bern Transport Corp.	786	6		
Central Transport LLC	773	7		
Giant Eagle/OK Grocery	763	8		
Sheetz Distribution Services LLC	500	9		
Pepsi Bottling Group	490	10		
FedEx Ground			3,862	3
J. B. Hunt Transport, Inc.			3,452	4
United Parcel Service, Inc.			3,230	5
Pitt-Ohio Express, Inc.			2,257	6
ABF Freight System, Inc.			2,039	7
New Century Transportation, Inc.			1,977	8
Estes Express Lines			1,809	9
U.S. Xpress Leasing			1,488	10
	$ 393,261		$ 113,795	

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Percentage of PA Turnpike ETC Traffic by IAG Agency
Fiscal Years Ended May 31

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pennsylvania ^	**71.89%**	**71.95%**	**71.58%**	**71.53%**	**71.01%**	**71.48%**	**71.98%**	**75.84%**	**75.22%**	**75.32%**
New Jersey Agencies*	14.02	13.67	13.49	13.33	11.87	12.95	12.75	10.93	10.97	10.27
MTA Bridges & Tunnels	2.06	1.97	2.25	2.33	2.21	2.51	2.47	2.28	2.55	2.54
New York State Thruway	2.86	2.92	2.98	2.87	2.59	2.40	2.33	1.86	1.98	2.31
Port Authority NY & NJ	2.06	2.04	1.96	2.07	2.15	2.19	2.25	1.96	2.17	2.17
Ohio Turnpike	0.84	0.83	1.03	1.13	1.12	1.31	1.34	1.24	1.30	1.40
Massachusetts Turnpike Authority	0.43	0.46	0.48	0.49	0.56	0.50	0.58	1.27	1.03	1.29
Maryland Transportation Authority	1.16	1.15	1.15	1.16	1.15	1.21	1.23	1.13	1.16	1.09
Illinois State Toll Highway Authority	1.08	1.11	1.11	1.12	1.09	1.30	1.34	1.25	1.13	1.06
Virginia DOT	0.74	0.79	0.90	0.93	0.86	0.97	0.97	0.87	0.97	0.94
Delaware DOT	0.97	0.94	0.98	0.97	0.85	0.89	0.88	0.79	0.80	0.77
Florida Turnpike	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.21
West Virginia Parkways Authority	0.17	0.19	0.17	0.17	1.23	0.16	0.17	0.15	0.13	0.17
Indiana DOT	0.10	0.11	0.11	0.11	0.14	0.10	0.09	0.08	0.08	0.07
Delaware River Joint Toll Bridge Commission	1.03	0.98	0.82	0.72	0.57	0.44	0.12	0.09	0.07	0.04
Rhode Island Toll & Bridge Authority	0.02	0.03	0.03	0.03	0.13	0.04	0.03	0.03	0.03	0.03
Delaware River & Bay Authority	0.12	0.08	0.06	0.06	0.06	0.04	0.02	0.02	0.01	0.01
Delaware River Port Authority	0.31	0.04	0.03	0.01	0.20	0.00	0.00	0.00	0.00	0.00
Other	0.14	0.74	0.87	0.97	2.21	1.51	1.45	0.21	0.29	0.31
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

* Includes: New Jersey Highway Authority, New Jersey Turnpike Authority, South Jersey Transportation Authority, and Burlington County Bridge Commission.

^ In FY21, amounts were updated to include TBP for 2016 and forward.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Employment by Nonfarm Related Industries – Demographic and Economic(1)
Fiscal Years Ended May 31(2)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Employment by nonfarm related industries										
Private sector										
Goods producing										
Mining and logging	36,000	37,800	34,000	25,000	26,700	28,700	28,900	23,200	21,700	21,700
Construction	224,000	229,100	235,500	239,200	249,200	255,900	261,200	241,600	254,800	255,300
Manufacturing	565,900	568,900	569,300	561,200	563,200	571,300	575,300	537,900	544,300	545,600
Total goods producing	825,900	835,800	838,800	825,400	839,100	855,900	865,400	802,700	820,800	822,600
Service providing										
Trade, transportation and utilities	1,092,500	1,102,900	1,114,000	1,118,500	1,117,800	1,123,800	1,123,400	1,059,000	1,101,900	1,105,100
Information	88,300	85,900	85,500	85,000	84,800	86,700	87,900	83,900	86,400	87,000
Financial activities	313,800	315,900	316,800	317,900	321,700	326,500	331,600	327,100	328,800	329,200
Professional and business services	751,500	764,900	783,100	797,200	802,400	806,300	815,200	770,300	802,500	806,200
Education and health services	1,163,300	1,180,800	1,192,400	1,218,900	1,245,800	1,274,800	1,295,800	1,228,800	1,228,900	1,230,700
Leisure and hospitality	532,300	537,700	545,400	557,500	566,800	571,900	578,000	424,400	478,400	486,000
Other services	252,400	253,300	254,700	259,300	259,700	261,000	262,400	223,800	236,200	237,600
Total service providing	4,194,100	4,241,400	4,291,900	4,354,300	4,399,000	4,451,000	4,494,300	4,117,300	4,263,100	4,281,800
Total private sector	5,020,000	5,077,200	5,130,700	5,179,700	5,238,100	5,306,900	5,359,700	4,920,000	5,083,900	5,104,400
Government	720,700	711,400	704,700	703,300	703,200	703,000	706,300	684,800	676,400	676,900
Total employment by nonfarm related industries	5,740,700	5,788,600	5,835,400	5,883,000	5,941,300	6,009,900	6,066,000	5,604,800	5,760,300	5,781,300

Notes: (1) Due to statutory requirements (confidentiality provisions), the Commonwealth of Pennsylvania cannot disclose the number employed by the ten largest employers. As an alternative comparison, this schedule presents the number employed by nonfarm related industries. The ten largest employers are nonfarm related; therefore, the number employed by those employers could be expected to fall within this schedule. Farming related employment is not included on this schedule because most farms are not large enough to be required to provide the necessary data to the Pennsylvania Department of Labor and Industry.

(2) Annual data provided by the Pennsylvania Department of Labor and Industry's Center for Workforce Information & Analysis website is on a calendar year basis. Therefore, the amounts presented for each fiscal year were determined for the calendar year ended (12/31) that occurred within the Commission's fiscal year. In addition, various calendar years may differ from the totals presented in the same table in the May 31, 2022, ACFR because of revised data provided on the website.

Source: Information obtained from the Pennsylvania Department of Labor and Industry's Center for Workforce Information & Analysis website (*https://www.workstats.dli.pa.gov/Research/Pages/default.aspx*).

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Number of Employees
Fiscal Years Ended May 31

Number of Employees - Union and Management

	Management	Union	Total
2014	449	1,640	2,089
2015	435	1,626	2,061
2016	436	1,632	2,068
2017	440	1,589	2,029
2018	429	1,539	1,968
2019	432	1,492	1,924
2020	424	1,453	1,877
2021	387	967	1,354
2022	390	979	1,369
2023	426	959	1,385

Bargaining Unit Affiliation: International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America

Number of Employees - Functional Area

	Toll Collection - Fares	Maintenance	Other	Total
2014	763	748	578	2,089
2015	740	724	597	2,061
2016	747	728	593	2,068
2017	715	723	591	2,029
2018	671	714	583	1,968
2019	637	701	586	1,924
2020	601	706	570	1,877
2021	91	723	540	1,354
2022	94	740	535	1,369
2023	92	737	556	1,385

Note: Refer to Note 10 for discussion of the reduction in Toll Collection – Fares employees.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Vehicle Class Definitions
(Class Determines Fare)

E-ZPASS / TOLL BY PLATE ^

Class	*Weight Classification*
1	Passenger vehicles
2*	7,001 - 15,000 lbs.
3	15,001 - 19,000 lbs.
4	19,001 - 30,000 lbs.
5	30,001 - 45,000 lbs.
6	45,001 - 62,000 lbs.
7	62,001 - 80,000 lbs.
8	80,001 - 100,000 lbs.
9	100,001 lbs. and over or over dimensional

* Also includes any vehicle combination with more than two axles but weighing less than 7,000 lbs., except motorcycles with sidecar and/or trailer.

^ Axle height definitions are used on the Southern Beltway, and at the Clarks Summit and Keyser Ave tolling points. All other TBP/AET In Place tolling points use classes listed above.

TOLL BY PLATE ^

L is vehicle height of 7'6" or lower
H is vehicle height of higher than 7'6"

2L	2 axle, low profile
3L	3 axle, low profile
4L	4 axle, low profile
5L	5 axle, low profile
6L	6+ axle, low profile
2H	2 axle, high profile
3H	3 axle, high profile
4H	4 axle, high profile
5H	5 axle, high profile
6H	6 axle, high profile
7H	7+ axle, high profile

Permits may be required. Permits are required if the vehicle exceeds any of the following:

Length: 85 feet
Weight: 100,000 lbs.
Axle weight: 22,400 lbs.
Height: 13 feet 6 inches
Width: Over 10 feet to a maximum of 11 feet 6 inches
Bumper Overhang: Over 5 ft. front or over 15 ft. rear

Note: Some exceptions may apply. For additional information regarding these exceptions, visit our website at *www.paturnpike.com* or call our Customer Assistance Center.

Cash/E-ZPass classes 2 through 9 and Toll By Plate classes 3L through 7H may also be referred to as commercial vehicles.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Miscellaneous Statistics
Fiscal Years Ended May 31

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LENGTH OF HIGHWAY										
Delaware River to Ohio Line	359	359	359	359	359	359	359	359	359	359
Nor heast Extension	110	110	110	110	110	110	110	110	110	110
Southwestern Expansion	83	83	83	83	83	83	83	83	96	96
NUMBER OF TOLL INTERCHANGES [1,2]										
Mainline										
Staffed interchanges/barriers	30	30	28	27	27	25	-	-	-	-
Cashless Tolling/Ramps	2	2	3	5	5	7	32	32	36	36
Total	32	32	31	32	32	32	32	32	36	36
Northeast Extension										
Staffed interchanges/barriers	10	10	10	10	8	8	-	-	-	-
Cashless Tolling/Ramps	-	1	1	1	3	3	11	11	11	11
Total	10	11	11	11	11	11	11	11	11	11
Western Expansions										
Staffed interchanges/barriers	25	25	25	20	-	-	-	-	-	-
Cashless Tolling/Ramps	-	-	-	5	25	25	25	25	26	26
Total	25	25	25	25	25	25	25	25	26	26
NUMBER OF SERVICE PLAZAS										
Delaware River to Ohio Line	15	15	15	15	15	15	15	15	15	15
Northeast Extension	2	2	2	2	2	2	2	2	2	2
NUMBER OF MAINTENANCE FACILITIES	22	22	22	22	22	22	22	22	23	23

[1] Staffed interchanges/barriers include staffed interchanges, staffed barriers and staffed ramp locations. Cashless Tolling/Ramps include slip ramps, barriers and ramp locations that are not staffed. These cashless locations only collect tolls using automated money machines, E-ZPass, Toll By Plate or a combination of these methods.
[2] Effective March 16, 2020, due to the COVID-19 pandemic, the Commission implemented all-electronic tolling across the system.

Source: Pennsylvania Turnpike Commission

Right-of-way width	Minimum	200 feet
Turnpike width	Delaware River to Ohio Line (4 lanes)	78 feet
	Northeastern Extension Junction to Philadelphia Interchange (6 lanes)	106 feet
	Northeastern Extension (4 lanes)	72 feet
	Southwestern Expansion	132 feet
	Totally Reconstructed Areas (various locations)	122 feet
Lane width	Standard	12 feet
	Northeastern Extension Junction to Philadelphia Interchange	12 feet
	Width of double lanes	24 feet
	Width of triple lanes	36 feet
Curves	Maximum (approximately 955 feet minimum radius) on Allegheny Mountain climbing lanes only	6 degrees
	Western Extension (Irwin - Ohio Line)	4 degrees
	Remainder of Turnpike	3 degrees
Grades	Mainline	3 percent
	Ramps	6 percent
	Extensions	5 percent
Tunnels	Allegheny	6,070 feet
	Tuscarora	5,326 feet
	Kittatinny	4,727 feet
	Lehigh	4,379 feet
	Blue Mountain	4,339 feet
Major bridges	Delaware River Bridge	6,571 feet
	Susquehanna River Bridges (EB/WB)*	5,918 feet
	Monongahela River Bridge	3,078 feet
	Joe Montana Bridges (NB/SB)*	2,516 feet
	Allegheny River Bridges (EB/WB)*	2,350 feet
	Park Avenue Bridges (NB/SB)*	1,788 feet
	Mahoning River Bridges (NB/SB)*	1,700 feet
	SR 51/SR 119 Interchange Bridges*	1,697 feet
	Dunlap Creek Bridges (NB/SB)*	1,675 feet
	Clarks Summit Bridge	1,627 feet
Highest elevation	Milepost 100.45	2,603 ft. above sea level

* When bridges are separated for directional purposes, the longer bridge length is reported.

The technical data presented does not change from year to year; therefore, a ten-year trend schedule is not presented.

Source: Pennsylvania Turnpike Commission

PENNSYLVANIA TURNPIKE COMMISSION
A Component Unit of the Commonwealth of Pennsylvania
Chronology, Turnpike Construction

Turnpike Section	Length (Miles)	Construction Cost (Millions)	Bill Signed	Ground-breaking	Open to Traffic
Original Turnpike					
Carlisle - Irwin	159	$ 76	May 21, 1937	Oct. 27, 1938	Oct. 1, 1940
Philadelphia Extension					
Carlisle - Valley Forge	100	87	May 16, 1940	Sept. 28, 1948	Nov. 20, 1950
Western Extension:					
Irwin - Ohio Line	67	77.5	June 11, 1941	Oct. 24, 1949	Dec. 26, 1951
Delware River Extension:					
Valley Forge - Delaware River	33	65	May 23, 1951	Nov. 20, 1952	Nov. 17, 1954
Delware River Bridge	1.5	Not available	May 23, 1951	June 22, 1954	May 23, 1956
Northeastern Extension:					
East/West Turnp ke to Scranton	110	233	Sept. 27, 1951	Mar. 25, 1954	Nov. 7, 1957
Mon/Fayette Expressway -					
California Interchange	6	7	Sept. 1985	June 9, 1988	Oct. 12, 1990
Beaver Valley Expressway	16	240	Sept. 1985	Oct. 20, 1989	Nov. 20, 1992
Mid-County Interchange	-	80	Sept. 1985	Dec. 20, 1989	Dec. 15, 1992
Amos K. Hutchinson Bypass	13	271	Sept. 1985	Aug. 20, 1990	Dec. 9, 1993
Keyser Avenue Interchange	-	47	Sept. 1985	Not available	Feb. 1, 1995
Mon/Fayette Expressway -					
Mason-Dixon Link	8	132	Sept. 1985	Nov. 1, 1994	Mar. 1, 2000
Mon/Fayette Expressway - I-70					
to Coyle Curtain Road	4	90	Sept. 1985	June 19, 1997	May 11, 2001
Mon/Fayette Expressway - Coyle					
Curtain Road to SR 51	13	604	Sept. 1985	Sept. 1997	Apr. 12, 2002
Southern Beltway Findlay					
Connector	6	234	Aug. 1991	Nov. 12, 2003	Oct. 11, 2006
Mon/Fayette Expressway -					
Uniontown to Brownsville		859	Sept. 1985		
Phase 1	8			April 1, 2006	Oct. 23, 2008
Phase 2	9			April 24, 2008	July 16, 2012
Southern Beltway -					
US 22 to I-79	13	800	Aug. 1991	December 2016	October 15, 2021

Source: Pennsylvania Turnpike Commission

Date	Improvement
September 6, 1962	Groundbreaking on Laurel Hill Bypass and boring of second Allegheny Tunnel
October 30, 1964	Laurel Hill Bypass (3.1 miles) opened, eliminating two-lane, 4,541-foot-long Laurel Hill tunnel
March 15, 1965	Second Allegheny Tunnel opened; original tunnel closed for refurbishing
December 1965	Median barriers completed on entire east-west turnpike
April 1966	Work begins at second tunnels at Blue, Kittatinny, and Tuscarora Mountains
August 25, 1966	Original Allegheny Tunnel reopened
November 26, 1968	Sideling Hill Bypass (13.3 miles) opened, eliminating two two-lane tunnels: Ray's Hill (3,532 feet) and Sideling Hill (6,782 feet)
November 26, 1968	Second Blue, Kittatinny, and Tuscarora Tunnels opened
August 14, 1969	Median barrier completed on entire Turnpike
December 2, 1981	Completion of three climbing lane projects (Allegheny, Indian Creek, and Jacob's Creek)
May 20, 1982	Computerization and renovation of toll collection system begins
March 10, 1986	Six-lane widening project begins (junction of Northeastern Extension to Bensalem Interchange)
July 22, 1987	Computerized toll collection system placed into service
November 27, 1987	Opening of six-lane section near Philadelphia
June 9, 1988	Groundbreaking on the Mon/Fayette, six-mile link between I-70 and U.S. 40
February 14, 1989	Groundbreaking for second Lehigh Tunnel
October 20, 1989	Groundbreaking for Mahoning River Bridge
December 19, 1989	Groundbreaking for Mid-County Interchange
June 14, 1990	Groundbreaking for Beaver Valley Expressway
August 15, 1990	Groundbreaking for Amos K. Hutchingson Bypass
October 12, 1990	Opening of the first six-mile section of the Mon-Valley/Fayette Expressway linking I-70 and U.S. 40 in Washington County
November 22, 1991	Complete installation of call boxes along the Turnpike System
November 22, 1991	Opening of the second Lehigh Tunnel
November 20, 1992	Opening of the Beaver Valley Expressway (Toll 60, James E. Ross Highway), the world's first weigh barrier toll system
December 15, 1992	Opening of the new Mid-County Interchange
December 9, 1993	Opening of Amos K. Hutchinson Bypass
November 1, 1994	Groundbreaking on first section of the Mon/Fayette Expressway, at Fairchance
February 1, 1995	Opening of the Keyser Avenue Interchange
May 26, 1995	Opening of the Allentown and Sideling Hill Farmers' Markets
June 2, 1995	Groundbreaking on the Mon/Fayette I-70 to Route 51 Transportation project
November 1, 1996	Northeast Extension designated I-476
March 1, 2000	Opening of Mon/Fayette Expressway - Mason-Dixon Link
August 25, 2000	Completion of total reconstruction MP 94 - 99
December 2, 2000	Implementation of E-ZPass (electronic toll collection system) for passenger vehicles in southeastern and south central PA (interchanges 242-359)

Date	Improvement
May 7, 2001	Reopening of the newly renovated and expanded central office administration building in Highspire, PA
May 11, 2001	Opening of I-70 to Coyle Curtain Road section of the Mon/Fayette Expressway
May 19, 2001	Expansion of E-ZPass system to six additional interchanges, 226, 236, and 74 (Mahoning Valley) to 115 (Wyoming Valley) Toll Plaza on the Northeast Extension
August 17, 2001	Completion of total reconstruction MP 186 - 199
November 2001	Interchange dual-numbering system installation completed
December 15, 2001	E-ZPass lanes for passenger vehicles available at all of the Turnpike's Mainline Interchanges
April 12, 2002	Opening of Coyle Curtain Road to SR 51 section of the Mon/Fayette Expressway
June 1, 2002	Implementation of a Wide Area Network (WAN)
August 23, 2002	Completion of total reconstruction MP 75 - 85
December 15, 2002	E-ZPass lanes for commerical vehicles available at all of the Turnpike's Mainline Interchanges
June 1, 2003	Opening of the new Warrendale Interchange
November 12, 2003	Groundbreaking for Southern Beltway Findlay Connector (PA-60 to US 22)
June 2, 2004	Opening of the first express E-ZPass lane at Warrendale Interchange (eastbound)
June 26, 2004	Opening of the second express E-ZPass lane at Warrendale Interchange (westbound)
November 23, 2004	Expansion of E-ZPass system to two additional interchanges, 122-Keyser Avenue and 131-Clarks Summit on the Northeast extension
December 9, 2004	Electronic bar code scanners installed at all interchanges
January 19, 2005	Implementation of the Tag Teller program
April 1, 2005	Completion of total reconstruction MP 109 - 121
October 12, 2005	Express E-ZPass lanes opened at Mid County Interchange
November 28, 2005	Fog warning system between Breezewood Interchange and Sideling Hill Service Plaza installed
November 2005	Total Reconstruction of MP 38 - MP 40
December 2005	Total Reconstruction of MP 85 - MP 94
January 2, 2006	One way tolling (eastbound) at Gateway Interchange (free westbound)
April 1, 2006	Groundbreaking for Mon/Fayette Uniontown to Brownsville project
June 2, 2006	Expansion of E-ZPass system to the AKH Mainline interchange
June 2006	Total Reconstruction of MP 331 - MP 333 and addition of third travel lane
October 2006	Opening of Southern Beltway Findlay Connector
January 2007	Reconstruction of Norristown Interchange, MP 333.28
February 2007	Amos K. Hutchinson and Beaver Valley Expressway completely equipped with E-ZPass
May 2007	Opening of reconstructed Oakmont Service Plaza
June 2007	Opening of newly reconstructed Susquehanna River Bridge
June 2007	Gateway Express E-ZPass opened
August 2007	Reconstruction of Lebanon-Lancaster Interchange, MP 266.45
September 2007	Reconstruction of Gettysburg Interchange, MP 236.22
October 2007	Reconstruction of Harrisburg East Interchange, MP 247.38

Date	Improvement
May 2008	Opening of reconstructed Allentown, Sideling Hill and North Somerset Service Plazas
June 2008	Total Reconstruction of MP 245 - MP 247 and addition of third travel lane
October 2008	Completion of Phase I of Uniontown to Brownsville portion of Mon/Fayette
November 2008	Total Reconstruction of MP 326 - MP 331 and addition of third travel lane
November 2008	Total Reconstruction of MP 124 - MP 128 and addition of third lane westbound only
May 2009	Opening of reconstructed New Stanton Service Plaza
June 2009	Total Reconstruction of MP 0 - MP 10, and MP 210 - MP 215 and addition of third travel lane
November 2009	Total Reconstruction of MP 67 - MP 75 and addition of third travel lane
May 2010	Opening of reconstructed King of Prussia Service Plaza
October 2010	Opening of reconstructed Trevose Maintenance Facility
November 2010	Total Reconstruction of MP 48 - MP 50 and addition of third travel lane
November 2010	Opening of reconstructed Hickory Run Service Plaza
November 2010	Opening of newly reconstructed Allegheny River Bridge
November 2010	Opening of all-electronic E-ZPass Only Street Road Interchange, MP 352
May 2011	Opening of reconstructed Bowmansville and Lawn Service Plazas
May 2012	Opening of newly constructed South Somerset Service Plaza
May 2012	Opening of reconstructed Cumberland Valley and Blue Mountain Service Plazas
July 2012	Completion of Phase 2 of Uniontown to Brownsville portion of Mon/Fayette (including Monongahela River Bridge)
November 2012	Opening of newly constructed Lehigh River & Pohopoco Creek Bridges
November 2012	Total Reconstution of MP A73 - MP A75 and addition of third travel lane
December 2012	Opening of all-electronic E-ZPass Only SR29 Interchange, MP 320
December 2012	Total Reconstruction of MP 31 - MP 38, MP 319 - MP 320, MP 215 - MP 220 and addition of third travel lane
May 2013	Opening of reconstructed Highspire and South Midway Service Plazas
July 2013	Groundbreaking for Stage 1 of the Turnpike/I-95 Interchange project
August 2013	Total Reconstruction of MP 199 - MP 202 and addition of third travel lane
April 2014	Electric vehicle charging stations installed at Bowmansville and King of Prussia Service Plazas
May 2014	Opening of reconstructed Peter J. Camiel Service Plaza
October 2014	Total Reconstruction of MP A20-A26 and addition of third travel lane
November 2014	Compressed Natural Gas fueling dispensers installed at the New Stanton Service Plaza
December 2014	Total Reconstruction of MP 206 - 210 and addition of third travel lane
February 2015	Opening of reconstructed Somerset Maintenance and PSP Facilities
May 2015	Opening of reconstructed North Midway Service Plaza
June 2015	Opening of reconstructed Plymouth Meeting Maintenance Facility
July 2015	Opening of E-ZPass Only SR903 Interchange, MP 87 on the Northeast Extension
August 2015	Opening of reconstructed Valley Forge Service Plaza
November 2015	Total Reconstruction of MP 99 - 102 and addition of third travel lane

Date	Improvement
January 2016	Neshaminy Falls Toll Plaza, the new eastern-most start and end point of the ticket system opens and the Delaware Valley interchange and the Delaware River Bridge toll plazas are decommissioned
January 2016	Toll By Plate, a new westbound highway speed automatic cashless tolling location, opens near the Delaware River Bridge
April 2016	Total Reconstruction of MP 44 - 48 and addition of third travel lane
September 2016	Pavement Rehabilitation of MP A101 - A104
October 2016	Opening of newly reconstructed Swatara Creek Bridge
October 2016	Total Reconstruction of MP 250 - 252
December 2016	Groundbreaking for the US 22 to I-79 Section of the Southern Beltway
April 2017	Total Reconstruction of MP 220 - 227 and addition of third travel lane
April 2017	Opening of Toll By Plate cashless tolling along Beaver Valley Expressway
May 2017	Remediation of New Baltimore Slide, MP 128
November 2017	Total Reconstruction of MP A26 - A31 and addition of third travel lane
April 2018	Opening of Toll By Plate cashless tolling at Keyser Avenue/Clarks Summit
May 2018	Total Reconstruction of MP 242 - 245 and addition of third travel lane
June 2018	Total Reconstruction of MP 202 - 206 and addition of third travel lane
June 2018	Opening of Toll By Plate cashless tolling at Findlay Connector
September 2018	Opening of Stage 1 of I-95 Interchange Project connecting the Turnpike Mainline with I-95
January 2019	Conversion of Fort Littleton and Blue Mountain to cashless interchanges
July 2019	Construction starts on first major rehabilitation of the Tuscarora Tunnel
October 2019	Design and Construction starts on the installation of a Fiber Optic Network from MP 247 - H43 and from MP A20 - A131
October 2019	Total Reconstruction of MP 40 - 44 and addition of third travel lane
March 2020	Emergency conversion to All-Electronic Tolling interchanges systemwide
June 2020	Permanent conversion to All-Electronic Tolling interchanges systemwide
October 2021	Partial opening of Southern Beltway (US 22 to I-79)

Source: Pennsylvania Turnpike Commission

Chronology, Speed Limits

Date	Speed Limit
October 1, 1940	No speed limit established by law
April 15, 1941	70 MPH; various lower commerical speeds depending on vehicle weight
December 1941	Wartime restriction of 35 MPH for all traffic
August 1945	Wartime restriction lifted. Speed limits revert to those of April 15, 1941
July 9, 1951	70 MPH for cars, buses, motorcycles
	50 MPH for all other traffic
January 15, 1953	*Gateway to Breezewood*
	60 MPH for cars, buses
	45 MPH for trucks
May 7, 1956	*Breezewood to Valley Forge*
	70 MPH for cars, buses
	50 MPH for trucks
	Bridges
	45 MPH for all traffic
July 24, 1966	65 MPH for cars, buses, motorcycles
	55 MPH for commercial vehicles
November 1973	55 MPH restriction nationwide, enforced on Turnpike beginning December 2, 1973
July 13, 1995	65 MPH for cars, buses, motorcycles, and commercial vehicles, except in urban areas where speed limit is 55 MPH
April 3, 2001	55 MPH from milepost 75 to milepost 130 for all vehicles
April 11, 2005	65 MPH for all vehicles, except tunnels, MP 122-130, and approaches to mainline toll plazas will remain at 55 MPH
July 2014	70 MPH for all vehicles between MP 201 - 298
May 2016	70 MPH for all vehicles in all areas that were previously 65 MPH

Source: Pennsylvania Turnpike Commission

	Statewide Average Rate Increase (All Classes)		Total Cross-State Toll (Class 1)		Total Miles (East-West Mainline)	Average Cents Per Mile	
	Cash / TBP ^	E-ZPass	Cash / TBP ^	E-ZPass	Miles	Cash / TBP ^	E-ZPass
1956*	0%	0%	$ 3.90	$ 0.00	359	1.1₵	0.0₵
1969	82	0	7.10	0.00	359	2.0	0.0
1978	23	0	8.70	0.00	359	2.4	0.0
1987	30	0	11.30	0.00	359	3.1	0.0
1991	30	0	14.70	0.00	359	4.1	0.0
2004	42	0	21.25	21.25	359	5.9	5.9
2009**	25	25	28.45	28.45	359	7.9	7.9
2010**	3	3	29.35	29.35	359	8.1	8.1
2011**	10	3	32.30	30.17	359	9.0	8.4
2012**	10	0	35.55	30.17	359	9.9	8.4
2013**	10	2	39.15	30.77	359	10.9	8.6
2014**	12	2	43.90	31.38	359	12.3	8.7
2015**	5	5	46.10	32.95	359	12.8	9.2
2016**	6	6	48.90	34.93	359	13.6	9.7
2017**	6	6	51.85	37.03	359	14.4	10.3
2018**	6	6	55.00	39.25	359	15.3	10.9
2019**	6	6	58.30	41.70	359	16.2	11.6
2020**	6	6	65.70	44.30	359	18.3	12.3
2021** #	6	6	95.30	47.00	359	26.5	13.1
2022**	5	5	100.20	49.50	359	27.9	13.8
2023**	5	5	105.30	52.10	359	29.3	14.5

Total Cross-State Toll represents Eastbound Mainline Toll for Class 1 (Passenger) from Gateway (Exit #2) to Delaware River Bridge (Exit #43 [old #359]).

* Cross-State Toll Clarification: Although the PA Turnpike opened to traffic October 1, 1940, at the time it ran just 160 miles from Irwin, PA, to Middlesex, PA; therefore, the 1956 toll rate is used for comparison purposes as it represents the earliest, cross-state Turnpike toll.

** Eastbound cross-state motorists pay a “one-way” toll at the Gateway Toll Plaza (Exit #2) near the Ohio border implemented in 2006. Beginning in 2016, westbound cross-state motorists pay a “one-way” toll at the Delaware River Bridge (Exit #43 [old #359]). The ticket toll system begins at Warrendale (Exit # 30) and ends at Neshaminy Falls (Exit #353).

^ Effective March 16, 2020, due to the COVID-19 pandemic, the Commission implemented all-electronic tolling across the system. Tolls are collected via the Toll By Plate system at the cash rates.

An additional 45% increase over the 2020 cash rate for Toll By Plate motorists was implemented at most interchanges which reflects the higher cost of collections for this method.

Source: Pennsylvania Turnpike Commission.

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APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE

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APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR INDENTURE

The following sets forth the definitions of certain terms used in the Senior Indenture and a summary of certain provisions of the Senior Indenture. Certain other provisions of the Senior Indenture relating to the First Series Bonds are summarized in the Official Statement under the sections captioned "DESCRIPTION OF THE FIRST SERIES BONDS" and "SECURITY FOR THE FIRST SERIES BONDS." Reference should be made to the Senior Indenture for a complete statement of all of these provisions and other provisions which are not summarized in this Official Statement. A copy of the Senior Indenture may be obtained from the Trustee.

DEFINITIONS OF CERTAIN TERMS

In addition to words and terms elsewhere defined in this Official Statement or the Senior Indenture, the following words and terms as used in this Appendix C and the Senior Indenture shall have the following meanings unless the context clearly indicates otherwise:

"Additional Bonds" — Bonds of any Series authorized to be issued under the Senior Indenture.

"Alternate Construction Fund" — a fund as described under "The Senior Indenture— Alternate Construction Fund" in this Appendix C.

"Annual Capital Budget" — the budget adopted by the Commission pursuant to the provisions described under the heading "The Senior Indenture—Covenants of Commission— Annual Operating Budget; Capital Budget" in this Appendix C.

"Annual Debt Service" — (i) the amount of principal and interest paid or payable with respect to Bonds in a Fiscal Year plus (ii) Reimbursement Obligations paid or payable by the Commission in such Fiscal Year (but only to the extent they are not duplicative of such principal and interest), plus (iii) the amounts, if any, paid or payable by the Commission in such Fiscal Year with respect to Approved Swap Agreements, minus (iv) the amounts, if any, paid or payable to the Commission in such Fiscal Year with respect to Approved Swap Agreements, provided that the difference between the amounts described in clauses (iii) and (iv) shall be included only to the extent that such difference would not be recognized as a result of the application of the assumptions set forth below. The following assumptions shall be used to determine the Annual Debt Service becoming due in any Fiscal Year: (a) in determining the principal amount paid or payable with respect to Bonds or Reimbursement Obligations in each Fiscal Year, payment shall be assumed to be made in accordance with any amortization schedule established for such Indebtedness, including amounts paid or payable pursuant to any mandatory redemption schedule for such Indebtedness; (b) if any of the Indebtedness or proposed Indebtedness constitutes Balloon Indebtedness, then such amounts thereof as constitute Balloon Indebtedness shall be treated as if such Indebtedness is to be amortized in substantially equal annual installments of principal and interest over a term of 25 years from the date of issuance of such Indebtedness; anything to the contrary in the Senior Indenture notwithstanding, during the year preceding the final maturity date of such Indebtedness, all of the principal thereof shall be considered to be due on such maturity date unless the Commission provides to the Trustee a certificate of a Financial Consultant certifying that, in its judgment, the Commission will be able to refinance such Balloon Indebtedness, in which event the Balloon Indebtedness shall be amortized over the term of the Indebtedness expected to refinance such Balloon Indebtedness and shall bear the interest rate specified in the certificate of the Financial Consultant; (c) if any of the Indebtedness or proposed Indebtedness constitutes Variable Rate Indebtedness, then interest in future periods shall be based on the Assumed Variable Rate; (d) termination or similar payments under an Approved Swap Agreement shall not be taken into account in any calculation of Annual Debt Service; and (e) if any cash subsidy payments (the "Subsidy Payments") from the United States Treasury pursuant to Section 54AA or 6431 of the Code (as such Sections were added by Section 1531 of the American Recovery and Reinvestment Act of 2009 (Pub.L. 111-5) pertaining to "Build America Bonds") are scheduled to be received by the Commission with respect to any Bonds which are eligible for such Subsidy Payments, each of the Subsidy Payments may be deducted from the interest payable on such Bonds in the period in which such Subsidy Payment is scheduled to be received.

"Annual Operating Budget" — the budget adopted by the Commission pursuant to the provisions described under the heading "The Senior Indenture-Covenants of the Commission-Annual Operating Budget; Capital Budget" in this Appendix C.

"Applicable Long-Term Indebtedness" — includes Bonds, Additional Bonds, Reimbursement Obligations and obligations of the Commission under Approved Swap Agreements, to the extent the same constitute Long-Term Indebtedness and excludes Subordinated Indebtedness.

"Approved Swap Agreement" — shall have the meaning set forth below under the heading "The Senior Indenture—Approved and Parity Swap Obligations" in this Appendix C.

"Assumed Variable Rate" — in the case of (a) Outstanding Variable Rate Indebtedness, the average interest rate on such Indebtedness for the most recently completed 12-month period; and (b) proposed Variable Rate Indebtedness, (1) which will, in the opinion of Bond Counsel delivered at the time of the issuance thereof be excluded from gross income for federal income tax purposes, the average of the Bond Market Association Swap Index ("BMA Index") for the 12 months ending 7 days preceding the date of calculation plus 100 basis points, or (2) in the case of Bonds not described in clause (1), the London Interbank Offered Rate ("LIBOR") most closely resembling the reset period for the Variable Rate Indebtedness plus 100 basis points; provided that if the BMA Index or LIBOR shall cease to be published, the index to be used in its place shall be that index which the Commission in consultation with the Financial Consultant determines most closely replicates such index, as set forth in a certificate of a Commission Official filed with the Trustee.

"Authenticating Agent" — that Person designated and authorized to authenticate any series of Bonds, or such Person designated by the Authenticating Agent to serve such function, and shall initially be the Trustee.

"Balloon Indebtedness" — Long-Term Indebtedness of which 25% or more of the principal matures in the same Fiscal Year and is not required by the documents pursuant to which such Indebtedness was issued to be amortized by payment or redemption prior to that Fiscal Year, provided that such Indebtedness will not constitute Balloon Indebtedness if the Trustee is provided a certificate of a Commission Official certifying that such Indebtedness is not to be treated as Balloon Indebtedness (because, by way of example, such Indebtedness is intended to serve as "wrap around" Indebtedness).

"Bank" — as to any particular Series of Bonds, each Person (other than a Bond Insurer) providing a letter of credit, a line of credit, a guaranty or another credit or liquidity enhancement facility as designated in the Supplemental Indenture providing for the issuance of such Bonds.

"Bankruptcy Law" — Title 9 of the United States Code, as amended from time to time, and any successor to or replacement of such Title and any other applicable federal or state bankruptcy, insolvency or similar law.

"Bond" or "Bonds" — Bonds outstanding under the Prior Indenture and indebtedness of any kind or class, including bonds, notes, bond anticipation notes, commercial paper and other obligations, issued as Additional Bonds under the applicable provisions of the Senior Indenture, other than Additional Bonds issued as Subordinated Indebtedness. Bonds are also referred to as "Turnpike Revenue Bonds" in the forepart of this Official Statement.

"Bond Buyer Index" - shall mean the Bond Buyer 20-Bond Index as published weekly in "The Bond Buyer". If such Index shall cease to be published, the Financial Consultant shall select another index which shall be reflective of the Commission's fixed borrowing cost.

"Bond Counsel" — any attorney or firm of attorneys whose experience in matters relating to the issuance of obligations by states and their political subdivisions is nationally recognized.

"Bond Documents" — means the Supplemental Indenture, the First Series Bonds, and any and all future renewals and extensions or restatements of, or amendments or supplements to, any of the foregoing.

"Bond Insurer" — as to any particular maturity or any particular Series of Bonds, the Person undertaking to insure such Bonds as designated in a Supplemental Indenture providing for the issuance of such Bonds.

"Bond Owner," "Bondholder," "Holder," "Owner" or "Registered Owner" (or the lower case version of the same) — the Person in whose name any Bond or Bonds are registered on the books maintained by the Registrar.

"Bond Register" — the register maintained pursuant to the applicable provisions of the Senior Indenture.

"Bond Registrar" — with respect to any series of Bonds, that Person which maintains the bond register, or such other entity designated by the Bond Registrar to serve such function and initially shall be the Trustee.

"Book-Entry-Only System" — a system similar to the system described in the Senior Indenture and in the forepart of this Official Statement under "DESCRIPTION OF THE FIRST SERIES BONDS — Book-Entry Only System" pursuant to which Bonds are registered in book-entry form.

"Chief Engineer" — the employee of the Commission designated its "Chief Engineer" or any successor title.

"Code" — the Internal Revenue Code of 1986, as amended, and the regulations proposed or in effect with respect thereto.

"Commonwealth" — the Commonwealth of Pennsylvania.

"Commission Official" — any commissioner, director, officer or employee of the Commission authorized to perform specific acts or duties by resolution duly adopted by the Commission.

"Construction Fund" — the fund so designated and created by the Senior Indenture.

"Consultant" — a Person who shall be independent, appointed by the Commission as needed, qualified and having a nationwide and favorable reputation for skill and experience in such work for which the Consultant was appointed. In those situations in which a Consultant is appointed to survey risks and to recommend insurance coverage, such Consultant may be a broker or agent with whom the Commission transacts business.

"Consulting Engineers" — the engineer or engineering firm or corporation at the time employed by the Commission under the Senior Indenture.

"Cost" — all or any part of: (a) the cost of construction, reconstruction, restoration, repair and rehabilitation of a Project or portion thereof (including, but not limited to, indemnity and surety bonds, permits, taxes or other municipal or governmental charges lawfully levied or assessed during construction); (b) the cost of acquisition of all real or personal property, rights, rights-of-way, franchises, easements and interests acquired or used for such Project or portion thereof; (c) the cost of demolishing or removing any structures on land so acquired, including the cost of acquiring any land to which the structures may be removed; (d) any cost of borings and other preliminary investigations necessary or incident to determining the feasibility or practicability of constructing such Project and any cost necessary or desirable to satisfy conditions associated with the issuance of any permit for the construction thereof (including the costs of environmental mitigation required in connection therewith); (e) the cost of all machinery and equipment, vehicles, materials and rolling stock; (f) Issuance Costs; (g) interest on Bonds and on any Reimbursement Obligation for the period prior to, during and for a period of up to one year after completion of construction as determined by the Commission, provisions for working capital, reserves for principal and interest and for extensions, enlargements, additions, replacements, renovations and improvements; (h) the cost of architectural, engineering, environmental feasibility, financial and legal services; (i) plans, specifications, estimates and administrative and other expenses which are necessary or incidental to the determination of the feasibility of constructing such Project or portion thereof or incidental to the obtaining of construction contracts or to the construction (including construction administration and inspection), acquisition or financing thereof and which constitute capital costs; (j) Current Expenses, provided that, if applicable, the Trustee has received an opinion of Bond Counsel (which opinion may address either specific Current Expenses or categories of Current Expenses) to the effect that the treatment of such Current Expenses as a Cost will not adversely affect the exclusion of interest on the Bonds from gross income for federal income tax purposes; (k) the repayment of any loan or advance for any of the foregoing; and (1) with respect to the use of Bond proceeds, such other costs and expenses as are permitted by the Enabling Acts at the time such Bonds are issued.

"Counsel" — an attorney or law firm (who may be counsel for the Commission) not unsatisfactory to the Trustee.

"Credit Facility" — any letter of credit, line of credit, standby letter of credit, indemnity or surety insurance policy or agreement to purchase a debt obligation or any similar extension of credit, credit enhancement or liquidity support obtained by the Commission from a responsible financial or insurance institution, to provide for or to secure payment of principal and purchase price of, and/or interest on Bonds pursuant to the provisions of a Supplemental Indenture under which such Bonds are issued. The use of such definition is not intended to preclude the Commission from providing the credit or liquidity support with respect to one or more series of Bonds directly rather than through a financial or insurance institution.

"Current Expenses" — the Commission's reasonable and necessary current expenses of maintenance, repair and operation of the System, including, without limiting the generality of the foregoing, all premiums for insurance and payments into any self-insurance reserve fund, all administrative and engineering expenses relating to maintenance, repair and operation of the System, fees and expenses of the Trustee and of the Paying Agents, Policy Costs, legal expenses and any other expenses required to be paid by the Commission as shown in the Annual Operating Budget for the System.

"Debt Service Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture — Debt Service Fund" in this Appendix C.

"Debt Service Reserve Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture—Debt Service Reserve Fund" in this Appendix C.

"Debt Service Reserve Fund Bonds" — shall mean the Long-Term Indebtedness specified by the Commission that is secured by the Debt Service Reserve Fund as described under "The Senior Indenture—Debt Service Reserve Fund" in this Appendix C.

"Debt Service Reserve Requirement" — the amount equal to the Maximum Annual Debt Service on account of all the Debt Service Reserve Fund Bonds.

"Defeasance Obligations" or "Defeasance Securities" — Cash, Government Obligations, Government Obligations which have been stripped by the U.S. Treasury and CATS, TIGRS and similar securities, Resolution Funding Corp, strips which have been stripped by the Federal Reserve Bank of New York, pre-refunded obligations of a state or municipality rated in the highest rating category by the Rating Agency, and Obligations issued by the following agencies which are backed by the full faith and credit of the U.S.: Farmers Home Administration (Certificates of beneficial ownership), Federal Financing Bank, General Services Administration (Participation certificates), U.S. Maritime Administration (Guaranteed Title XI financing), U.S. Department of Housing and Urban Development (Project Notes, Local Authority Bonds and New Communities Debentures - U.S. government guaranteed debentures) and U.S. Public Housing Notes and Bonds (U.S. government guaranteed public housing notes and bonds).

"Depositary" — a bank or trust company designated as such by the Commission to receive moneys under the provisions of the Senior Indenture and approved by the Trustee and shall include the Trustee.

"DSRF Security" — shall have the meaning set forth under "The Senior Indenture—Debt Service Reserve Fund" in this Appendix C.

"DTC" — The Depository Trust Company, New York, New York.

"Event of Bankruptcy" — the filing of a petition in bankruptcy (or other commencement of a bankruptcy or similar proceedings) by or against the Commission as debtor, under Bankruptcy Law.

"Event of Default" — those events specified under "The Senior Indenture - Events of Default" in this Appendix C and such other events specified in any Supplemental Indenture.

“Financial Consultant” — any financial advisor or firm of financial advisors of favorable national reputation for skill and experience in performing the duties for which a Financial Consultant is required to be employed pursuant to the provisions of the Senior Indenture and who is retained by the Commission as a Financial Consultant for the purposes of the Senior Indenture.

“Fiscal Year” — the period commencing on the first day of June and ending on the last day of May of the following year.

“Fitch” — Fitch, Inc., its successors and assigns, and, if such corporation shall for any reason no longer perform the functions of a securities rating agency, “Fitch” shall be deemed to refer to any other nationally recognized rating agency designated by the Commission.

“General Reserve Fund” — the fund created by the Senior Indenture and described under “The Senior Indenture—General Reserve Fund in this Appendix C.

“Government Obligations” — (a) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed as to full and timely payment by, the United States of America, (b) obligations issued by a Person controlled or supervised by and acting as an instrumentality of the United States of America, the payment of the principal of and interest on which is fully and unconditionally guaranteed as a full faith and credit obligation of the United States of America (including any securities described in clause (a) above issued or held in book-entry form in the name of the Trustee only on the books of the Department of Treasury of the United States of America), (c) any certificates or any other evidences of an ownership interest in obligations or specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in clause (a) or (b) above, which obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian, (d) stripped obligations of interest issued by the Resolution Funding Corporation pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (“FIRREA”), the interest on which, to the extent not paid from other specified sources, is payable when due by the Secretary of the Treasury pursuant to FIRREA, and (e) obligations of any state or political subdivision thereof or any agency or instrumentality of such a state or political subdivision, provided that cash, obligations described in clause (a), (b), (c) or (d) above, or a combination thereof have been irrevocably pledged to and deposited into a segregated escrow account for the payment when due of the principal or redemption price of and interest on such obligations, and provided further that, at the time of purchase, such obligations are rated by the Rating Service in its highest rating category.

“Historical Debt Service Coverage Ratio” — for any period of time, the ratio determined by dividing Net Revenues for such period by the Annual Debt Service for all Applicable Long-Term Indebtedness which is Outstanding during such period.

“Historical Pro Forma Debt Service Coverage Ratio” — for any period of time, the ratio determined by dividing Net Revenues for such period by the Maximum Annual Debt Service for all Applicable Long-Term Indebtedness then Outstanding and the Applicable Long-Term Indebtedness proposed to be issued pursuant to the Senior Indenture pursuant to the provisions described under the section in the forepart of this Official Statement captioned “SECURITY FOR THE FIRST SERIES BONDS — Additional Bonds Test.”

"Immediate Notice" — notice transmitted by electronic means, in writing, by telecopier or other electronic means or by telephone (promptly confirmed in writing) and received by the Person to whom it was addressed.

"Indebtedness" — any obligation or debt incurred for money borrowed.

"Interest Payment Date" — for the First Series Bonds is described in the forepart of this Official Statement. If the Interest Payment Date is not a Business Day, then the Interest Payment Date shall be the Business Day next succeeding the date specified above.

"Issuance Cost" — costs incurred by or on behalf of the Commission in connection with the issuance of Additional Bonds including, without limitation, the following: payment of financial, legal, accounting and appraisal fees and expenses, the Commission's fees and expenses attributable to the issuance of the Bonds, the cost of printing, engraving and reproduction services, fees and expenses incurred in connection with any Credit Facility and any Approved Swap Obligation, legal fees and expenses for Bond Counsel, Commission's counsel, Trustee's counsel and Underwriter's counsel relating to the issuance of the Bonds, the initial or acceptance fee of the Trustee, and all other fees, charges and expenses incurred in connection with the issuance of the Bonds and the preparation of the Senior Indenture.

"Letter of Representations" — the letter of representations or similar document executed by the Commission and delivered to the Securities Depository (and any amendments thereto or successor agreements) for one or more Series of Book Entry Bonds.

"Long-Term Indebtedness" — all Indebtedness, which is not (a) Short-Term Indebtedness or (b) Subordinated Indebtedness.

"Maximum Annual Debt Service" — at any point in time the maximum amount of Annual Debt Service on all Applicable Long-Term Indebtedness, as required by the context (e.g., whether relating to all such Applicable Long-Term Indebtedness or only specified Applicable Long-Term Indebtedness) paid or payable in the then current or any future Fiscal Year.

"Moody's" — Moody's Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and their assigns, and, if such corporation shall for any reason no longer perform the functions of a securities rating agency, "Moody's" shall be deemed to refer to any other nationally recognized rating agency designated by the Commission.

"Net Revenues" — the amount by which total Revenues exceed Current Expenses for any particular period.

"Other Revenues" — any funds received or payable to the Commission, other than Revenues, which the Commission chooses to include as security for Parity Obligations and/or Subordinated Indebtedness pursuant to a Supplemental Indenture.

"Original Indenture" — the Indenture of Trust dated as of July 1, 1986, between the Commission and First Union National Bank, as successor trustee to Fidelity Bank, National Association.

"Outstanding" or "outstanding" in connection with Bonds — all Bonds which have been authenticated and delivered under the Senior Indenture, except: (a) Bonds theretofore cancelled or delivered to the Trustee for cancellation under the Senior Indenture; (b) Bonds which are deemed to be no longer

Outstanding in accordance with the provisions described under "The Senior Indenture—Defeasance" in this Appendix C; and (c) Bonds in substitution for which other Bonds have been authenticated and delivered pursuant to the Senior Indenture. In determining whether the owners of a requisite aggregate principal amount of Bonds Outstanding have concurred in any request, demand, authorization, direction, notice, consent or waiver under the provisions of the Senior Indenture, Bonds which are held by or on behalf of the Commission (unless all of the Outstanding Bonds are then owned by the Commission) shall be disregarded for the purpose of any such determination.

"Parity Obligations" — includes Bonds and other obligations of the Commission owed to Secured Owners and excludes Subordinated Indebtedness.

"Parity Swap Agreement" — shall have the meaning set forth under the heading "The Senior Indenture—Approved and Parity Swap Obligations" in this Appendix C.

"Parity Swap Agreement Counterparty" — the counterparty to a Parity Swap Agreement with the Commission or with the Trustee.

"Paying Agent" — with respect to any series of Bonds, that Person appointed pursuant to the Senior Indenture to make payments to Bondholders of interest and/or principal pursuant to the terms of the Senior Indenture, which initially shall be the Trustee.

"Permitted Investments" — (to the extent permitted by law): (a) Government Obligations; (b) obligations issued or guaranteed as to full and timely payment of principal and interest by any agency or Person controlled or supervised by and acting as an instrumentality of the U.S., pursuant to authority granted by the U.S. Congress; (c) obligations of the Governmental National Mortgage Association, Farmers Home Administration, Federal Financing Bank, Federal Housing Administration, Maritime Administration and Public Housing Authorities, provided that the full and timely payment of the principal and interest on such obligations shall be unconditionally guaranteed by the U.S.; (d) obligations of the Federal Intermediate Credit Corporation and of the Federal National Mortgage Association; (e) obligations of the Federal Banks for Cooperation; (f) obligations of Federal Land Banks; (g) obligations of Federal Home Loan Banks; provided that the obligations described in clauses (c) through (g) above shall constitute Permitted Investments only to the extent that the Rating Agency has assigned a rating to such obligations which is not lower than the highest rating assigned by such Rating Agency to any series of comparable Bonds then Outstanding; (h) certificates of deposit of any bank, savings and loan or trust company organized under the laws of the U.S. or any state thereof, including the Trustee or any holder of the Bonds, provided that such certificates of deposit shall be fully collateralized (with a prior perfected security interest), to the extent they are not insured by the Federal Deposit Insurance Corporation, by Permitted Investments described in (a), (b), (c), (d), (e), (f) or (g) above having a market value at all times equal to the uninsured amount of such deposit; (i) money market funds registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933, including funds for which the Trustee, its parent, its affiliates or its subsidiaries provide investment advisory or other management services, and which are rated by S&P, Moody's and Fitch in one of their two highest rating categories; (j) investment agreements (which term, for purposes of this clause, shall not include repurchase agreements) with a Qualified Financial Institution; (k) repurchase agreements with banks or primary government dealers reporting to the Federal Reserve Bank of New York ("Repurchasers"), including but not limited to the Trustee and any of its affiliates, provided that each such repurchase agreement results in transfer to the Trustee of legal and equitable title to, or the granting to the Trustee of a prior perfected security interest in, identified Permitted Investments described in (a), (b), (c), (d), (e), (f) nor trust account held either by the Trustee or by a third party (other than the Repurchaser) as the agent solely of, or in trust solely for the benefit of, the Trustee, provided that Government Obligations acquired pursuant to such repurchase agreements shall be valued at the lower of the then current market value of such Government Obligations or the repurchase price thereof set forth in the applicable repurchase agreement; (1) bonds or notes issued by any state or municipality which are rated by S&P, Moody's and Fitch in one of their two highest rating categories; (m) commercial paper rated in the highest short-term, note or commercial paper Rating Category by S&P, Moody's and Fitch; (n) any auction rate certificates which are rated by S&P, Moody's and Fitch in one of their two highest rating categories; (o) corporate bonds and medium term notes rated at least "AA-" by Moody's and S&P; (p) asset-backed securities rated in the highest rating category by Moody's and S&P; and (q) any other investment approved by the Commission for which confirmation is received from the Rating Agency that such investment will not adversely affect such Rating Agency's rating on such Bonds.

"Person" — an individual, public body, a corporation, a partnership, an association, a joint stock company, a trust and any unincorporated organization.

"Policy Costs" — a periodic fee or charge required to be paid to maintain a DSRF Security.

"Principal Office" — with respect to any entity performing functions under any Bond Document, the principal office of that entity or its affiliate at which those functions are performed, or the office specifically designated for such functions with respect to the applicable Bond Documents.

"Prior Indenture" — the Original Indenture as supplemented and amended.

"Project" — any improvements to the system or refundings which are authorized by the Enabling Acts, or which may be hereafter authorized by law.

"Projected Annual Debt Service" — for any future period of time, shall equal the amount of Maximum Annual Debt Service on all Applicable Long-Term Indebtedness then Outstanding and on any Applicable Long-Term Indebtedness proposed to be issued.

"Projected Debt Service Coverage Ratio" — for the two Fiscal Years following the end of any period during which interest was fully capitalized on the Applicable Long-Term Indebtedness proposed to be issued, the ratio determined by dividing Projected Net Revenues for such period by the Projected Annual Debt Service for such period.

"Projected Net Revenues" — projected Net Revenues for the period in question, taking into account any revisions of the Tolls which have been approved by the Commission and which will be effective during such period and any additional Tolls which the Commission or the Consultant, as appropriate, estimates will be received by the Commission following the completion of any Project then being constructed or proposed to be constructed.

"Purchase Price" — the purchase price payment described in paragraph (a) of the definition of Tender Indebtedness.

"Qualified Financial Institution" — (a) any U.S. domestic institution which is a bank, trust company, national banking association or a corporation, including the Trustee and any of its affiliates, subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956, or a member of the National Association of Securities Dealers, Inc. whose unsecured obligations or uncollateralized long-term debt obligations have been assigned a rating within the two highest rating categories by the Rating Agency or which has issued a letter of credit, contract, agreement or surety bond in support of debt obligations which have been so rated; (b) an insurance company with a claims-paying ability or a corporation whose obligations are guaranteed by an insurance company (in the form of an insurance policy) or by an insurance holding company rated in the highest rating category by the Rating Agency or whose unsecured obligations or uncollateralized long-term debt obligations have been assigned a rating within the highest rating category by the Rating Agency; or (c) any banking institution whose unsecured obligations or uncollateralized long-term debt obligations have been assigned a rating within one of the two highest rating categories by the Rating Agency.

"Rate Covenant" — the requirement to establish and maintain a schedule of Tolls sufficient to provide the funds required pursuant to the Senior Indenture provisions described under "The Senior Indenture—Rate Covenant" in this Appendix C.

"Rating Agency" — Fitch, Moody's, S&P or such other nationally recognized securities rating agency as may be so designated in writing to the Trustee by a Commission Official.

"Rating Category" — each major rating classification established by the Rating Agency, determined without regard to gradations such as "1," "2" and "3" or "plus" and "minus."

"Rebate Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture—Rebate Fund in this Appendix C.

"Rebate Regulations" — the Treasury Regulations issued under Section 148(f) of the Code.

"Record Date" — for the First Series Bonds is described in the forepart of this Official Statement.

"Reimbursement Agreement" — an agreement between the Commission and one or more Banks pursuant to which, among other things, such Bank or Banks issue a Credit Facility with respect to Bonds of one or more series and the Commission agrees to reimburse such Bank or Banks for any drawings made thereunder.

"Reimbursement Obligation" — an obligation of the Commission pursuant to a Reimbursement Agreement to repay any amounts drawn under a Credit Facility and to pay interest on such drawn amounts pursuant to such Reimbursement Agreement.

"Reserve Maintenance Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture—Reserve Maintenance Fund" in this Appendix C.

"Reserve Maintenance Fund Requirement" — the amount to be deposited to the credit of the Reserve Maintenance Fund from the Revenues of the Commission pursuant to the provisions described under "The Senior Indenture - Reserve Maintenance Fund" in this Appendix C.

"Revenue Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture—Revenue Fund; Agreements with Other Turnpikes" in this Appendix C.

"Revenues" — (a) all Tolls received by or on behalf of the Commission from the System, (b) any other sources of revenues or funds of the Commission which the Commission chooses to include in the Trust Estate pursuant to a Supplemental Indenture, and (c) the interest and income earned on any fund or account where said interest or income is required to be credited to the Revenue Fund pursuant to the Senior Indenture. As more fully provided in the Senior Indenture, in the event the Commission receives advances or prepayments or otherwise operates or participates in a system in which funds are collected prior to the actual usage of the System, such funds shall not be deemed to be Revenues until the usage occurs or the funds are earned pursuant to the agreement under which the Commission receives such funds.

"S&P" — Standard & Poor's, a division of McGraw-Hill, Inc., a corporation organized and existing under the laws of the State of New York, its successors and their assigns, and, if such corporation shall for any reason no longer perform the functions of a securities rating agency, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the Commission.

"Secured Owner" — each Person who is a Bondholder of any Bonds, each Parity Swap Agreement Counterparty providing a Parity Swap Agreement, each Bank providing a Credit Facility and each Bond Insurer providing a bond insurance policy with respect to a Parity Obligation.

"Securities Depository" — a Person that is registered as a clearing agency under Section 17A of the Securities Exchange Act of 1934 or whose business is confined to the performance of the functions of a clearing agency with respect to exempted securities, as defined in Section 3(a)(12) of such Act for the purposes of Section 17A thereof.

"Series" — one or more Bonds issued at the same time, or sharing some other common term or characteristic, and designated as a separate series of Bonds.

"Series Issue Date" means, with respect to the First Series Bonds, the date of original issuance and delivery of the First Series Bonds.

"Short-Term Indebtedness" — all Indebtedness which matures in less than 365 days and is designated as Short-Term Indebtedness pursuant to the provisions referred to under "The Senior Indenture-Covenants of the Commission-Limitation on Issuance of Additional Bonds and Execution of Swap Agreements" in this Appendix C. In the event a Bank has extended a line of credit or the Commission has undertaken a commercial paper or similar program, only amounts actually borrowed under such line of credit or program and repayable in less than 365 days shall be considered Short-Term Indebtedness and the full amount of such commitment or program shall not be treated as Short-Term Indebtedness to the extent that such facility remains undrawn.

"Special Record Date" — for the First Series Bonds is described under "The Senior Indenture — Defaulted Interest" in this Appendix C.

"Supplemental Capital Fund" — the fund created by the Senior Indenture and described under "The Senior Indenture-Supplemental Capital Fund" in this Appendix C.

"Subordinated Indebtedness" — Indebtedness incurred pursuant to paragraph (c) of the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Additional Bonds Test".

"Supplemental Indenture" — any Supplemental Indenture to (a) the Senior Indenture, now or hereafter duly authorized and entered into in accordance with the provisions of the Senior Indenture and (b) the Prior Indenture, including any Supplemental Indenture pursuant to which (and only for so long as) Bonds are outstanding thereunder.

"Swap Agreement" — shall have the meaning set forth under the heading "The Senior Indenture— Approved and Parity Swap Obligations" in this Appendix C.

"System" — is described in the forepart of this Official Statement under "PENNSYLVANIA TURNPIKE SYSTEM."

"Tender Indebtedness" — any Indebtedness or portion thereof: (a) the terms of which include (i) an option or an obligation on the part of the Secured Owner to tender all or a portion of such Indebtedness to the Commission, the Trustee, the Paying Agent or another fiduciary or agent for payment or purchase and (ii) a requirement on the part of the Commission to purchase or cause to be purchased such Indebtedness or portion thereof if properly presented; and (b) which is rated in either (i) one of the two highest long-term Rating Categories by the Rating Agency or (ii) the highest short-term, note or commercial paper Rating Category by the Rating Agency.

"Tolls" — all rates, rents, fees, charges, fines or other income derived by the Commission from vehicular usage of the System, and all rights to receive the same.

"Trust Estate" — (i) all Revenues, (ii) all monies deposited into accounts or funds created by the Senior Indenture and held by or on behalf of the Trustee (other than the Rebate Fund), (iii) any insurance proceeds and other moneys required to be deposited in the Senior Indenture, (iv) all payments received by the Commission pursuant to Parity Swap Agreements, and (v) all investment earnings on all moneys held in accounts and funds established by the Senior Indenture, other than the Rebate Fund.

"Trustee" — the Trustee at the time in question, whether the initial Trustee or a successor.

"U.S." — United States of America.

"Variable Rate Indebtedness" — any Indebtedness the interest rate on which fluctuates from time to time subsequent to the time of incurrence. Variable Rate Indebtedness may include, without limitation, (a) auction rate Indebtedness, (b) Tender Indebtedness, (c) commercial paper Indebtedness which is intended to be reissued and refinanced periodically, or (d) other forms of Indebtedness on which the interest fluctuates or is subject to being set or reset from time to time.

THE SENIOR INDENTURE

LIMITED OBLIGATIONS

The Bonds shall be limited obligations of the Commission, payable solely from the Trust Estate. The Bonds shall constitute a valid claim of the respective owners thereof against the Trust Estate, which is pledged to secure the payment of the principal of, redemption premium, if any, and interest on the Bonds, and which shall be utilized for no other purpose, except as expressly authorized in the Senior Indenture. The Bonds shall not constitute general obligations of the Commission and under no circumstances shall the Bonds be payable from, nor shall the holders thereof have any rightful claim to, any income, revenues, funds or assets of the Commission other than those pledged under the Senior Indenture as security for the payment of the Bonds.

ADDITIONAL BONDS

The Commission agrees in the Senior Indenture that it will not issue or incur any other Indebtedness having a parity lien on the Trust Estate except for Additional Bonds issued pursuant to the provisions described below and other Parity Obligations. Additional Bonds may be issued and the Trustee shall authenticate and deliver such Additional Bonds when there have been filed with the Trustee the following:

(a) A copy certified by a Commission Official of the resolution or resolutions of the Commission authorizing (1) the execution and delivery of a Supplemental Indenture providing for, among other things, the date, rate or rates of interest on, interest payment dates, maturity dates and redemption provisions of such Additional Bonds, and (2) the issuance, sale, execution and delivery of the Additional Bonds;

(b) An original executed counterpart of the Supplemental Indenture;

(c) An opinion or opinions of Bond Counsel, addressed to the Commission and the Trustee, to the effect that (1) issuance of the Additional Bonds is permitted under the Senior Indenture, (2) each of the Supplemental Indenture and the Additional Bonds has been duly authorized, executed and delivered and is a valid, binding and enforceable obligation of the Commission, subject to bankruptcy, equitable principles and other standard legal opinion exceptions and (3) subject to the paragraph below, interest on the Additional Bonds i s not included in gross income for federal income tax purposes under the Code;

(d) A request and authorization of the Commission, signed by a Commission Official, to the Trustee to authenticate and deliver the Additional Bonds to such Person or persons named therein after confirmation of payment to the Trustee for the account of the Commission of a specified sum (which may include directions as to the disposition of such sum);

(e) A certificate of the Commission, signed by a Commission Official, that the Commission is not in default under the Senior Indenture and evidence satisfactory to the Trustee that, upon issuance of the Additional Bonds, amounts will be deposited in the Funds under the Senior Indenture adequate for the necessary balances therein after issuance of the Additional Bonds (including an amount sufficient to satisfy the Debt Service Reserve Requirement if the Additional Bonds constitute Debt Service Reserve Fund Bonds);

(f) A certificate of the Commission, signed by a Commission Official, identifying the Additional Bonds as Short-Term Indebtedness, Long-Term Indebtedness or Subordinated Indebtedness and demonstrating with reasonable detail that the applicable Senior Indenture provisions described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Additional Bonds Test" have been met for the issuance of such Additional Bonds; and

(g) Such further documents, moneys and securities as are required by the provisions of the Supplemental Indenture.

Anything in the Senior Indenture to the contrary notwithstanding, Additional Bonds, such as the First Series Bonds, may bear interest which is included in gross income for federal income tax purposes under the Code, in which event provisions in the Senior Indenture requiring or referencing the exclusion of interest on Bonds of gross income for federal income tax purposes may be ignored or modified, as appropriate, as set forth in an opinion of Bond Counsel.

DEFAULTED INTEREST

Defaulted Interest (as defined in the forepart of this Official Statement) with respect to any First Series Bond shall cease to be payable to the Owner of such First Series Bond on the relevant Record Date and shall be payable to the Owner in whose name such First Series Bond is registered at the close of business on the Special Record Date for the payment of such Defaulted Interest, which Special Record Date shall be fixed in the following manner the Commission shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each First Series Bond and the date of the proposed payment (which date shall be such as will enable the Trustee to comply with the next sentence hereof), and shall deposit with the Trustee at the time of such notice an amount of money equal to the aggregate amount proposed to be paid in respect of such

Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment; money deposited with the Trustee shall be held in trust for the benefit of the Owners of the First Series Bonds entitled to such Defaulted Interest. Following receipt of such funds the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 nor less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Commission of such Special Record Date and, in the name and at the expense of the Commission, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Owner of a First Series Bond entitled to such notice at the address of such owner as it appears on the Bond Register not less than 10 days prior to such Special Record Date.

APPROVED AND PARITY SWAP OBLIGATIONS

The Commission may enter into one or more contracts having an interest rate, currency, cash-flow, or other basis desired by the Commission (a "Swap Agreement"), including, without limitation, interest rate swap agreements, currency swap agreements, forward payment conversion agreements, futures contracts, contracts providing for payments based on levels of or changes in interest rates, currency exchange rates, stock or other indices, or contracts to exchange cash flows or a series of payments, and contracts including, without limitation, interest rate floors or caps, options, puts or calls to hedge payment, currency rate, spread or similar exposure. In the event the Commission wishes the payments to be made and received by the Commission under the Swap Agreement to be taken into account in any calculation of Annual Debt Service under the Senior Indenture, the Commission shall file with the Trustee the following on or before entering into the Swap Agreement (in which event such Swap Agreement shall constitute an "Approved Swap Agreement"):

(a) A copy certified by a Commission Official of the resolution or resolutions of the Commission authorizing the execution and delivery of the Swap Agreement (no Supplemental Indenture being required unless the Commission determines it to be necessary or appropriate);

(b) An original executed counterpart of the Swap Agreement;

(c) An opinion of Bond Counsel addressed to the Commission and to the Trustee, to the effect that execution of the Swap Agreement is permitted under the laws of the Commonwealth and will not adversely affect the exclusion from gross income from interest on any Bonds for federal income tax purposes; provided that if the Swap Agreement relates to Bonds being issued and the Swap Agreement is entered into prior to the issuance of such Bonds, the portion of the opinion of Bond Counsel referring to tax-exempt status of the Bonds need not be delivered until such Bonds are issued;

(d) A certificate of the Commission, signed by a Commission Official, that the Commission is not under default under the Senior Indenture;

(e) Evidence that the execution of the Swap Agreement will not result in a reduction or withdrawal of the rating then assigned to any Bonds by the Rating Agency;

(f) Evidence that the provisions with respect to Approved Swap Agreements described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Additional Bonds Test" have been met; and

(g) Such further documents as are required by the Swap Agreement or Bond Counsel.

In the event the Commission wishes to enter into an Approved Swap Agreement and to have its obligations thereunder be on parity with all Bonds and other Parity Obligations, it shall file with the Trustee the items set forth above, together with a Supplemental Indenture granting such parity position (in which event, such Swap Agreement shall constitute a "Parity Swap Agreement"). Upon entering into a Parity Swap Agreement, unless otherwise provided in the Supplemental Indenture, the Commission shall pay to the Trustee for deposit into the Interest Account the net amount payable, if any, to the Parity Swap Agreement Counterparty as if such amounts were additional amounts of interest due; and the Trustee shall pay on behalf of the Commission to the Parity Swap Agreement Counterparty, to the extent required under the Parity Swap Agreement, amounts deposited in the Interest Account. Net amounts received by the Commission or the Trustee from the counterparty pursuant to a Parity Swap Agreement shall be deposited to the credit of the Interest Account or to such other account as designated by a Commission Official.

Amounts paid by or to the Commission pursuant to Approved Swap Agreements which do not constitute Parity Swap Agreements shall not be required to be made through the Trustee as described in the preceding paragraph (but shall be taken into account in calculation of Annual Debt Service as provided in the definition of such term).

CONVERSIONS OF VARIABLE RATE INDEBTEDNESS TO FIXED RATE INDEBTEDNESS

The Senior Indenture provides that the Commission may convert Variable Rate Indebtedness to a fixed rate if permitted pursuant to the terms thereof and if the Commission was in compliance with the Rate Covenant for the most recently completed Fiscal Year. If the Commission did not meet the Rate Covenant for such Fiscal Year, the Commission must treat the proposed conversion as if it constituted the issuance of Additional Bonds by meeting the requirements set forth in the Senior Indenture (computing the Annual Debt Service with respect to such Variable Rate Indebtedness proposed to be converted as bearing interest at the Bond Buyer Index or such other rate as identified by a Financial Consultant as being more appropriate under the circumstances).

REDEMPTION OF BONDS

The Bonds of any Series issued under the provisions of the Senior Indenture shall be subject to redemption, in whole or in part, and at such times and prices as may be provided in the Supplemental Indenture pursuant to which such Bonds are issued. The provisions for redemption of the First Series Bonds are described in the forepart of this Official Statement under "DESCRIPTION OF THE FIRST SERIES BONDS — Redemption of First Series Bonds."

NOTICE OF REDEMPTION

The provisions for notice of redemption for the First Series Bonds are further described in the forepart of this Official Statement under "DESCRIPTION OF THE FIRST SERIES BONDS — Redemption of First Series Bonds."

On or before the date fixed for redemption, subject to the provisions described above, moneys shall be deposited with the Trustee to pay the principal of, redemption premium, if any, and interest accrued to the redemption date on the Bonds called for redemption. Upon the deposit of such moneys, unless the Commission has given notice of rescission as described herein, the Bonds shall cease to bear interest on the redemption date and shall no longer be entitled to the benefits of the Senior Indenture (other than for payment and transfer and exchange) and shall no longer be considered Outstanding.

CONSTRUCTION FUND

The Senior Indenture creates a special fund known as the "Construction Fund", which shall be held in trust by the Trustee. Money shall be deposited to the Construction Fund pursuant to the provisions of the Senior Indenture and from any other sources identified by the Commission. Payment of the costs of the construction portion of any Project shall be made from the Construction Fund. A special account shall be created and identified for each such construction project, although funds, at the written direction of the Commission, may be transferred from one such account in the Construction Fund to another account in such Fund. Moneys in the Construction Fund may be disbursed by the Trustee to the Commission upon the filing by the Commission of a requisition, signed by the Chief Engineer (or his designee) and a Commission Official meeting the requirements of the Senior Indenture.

If at any time a Commission Official shall file with the Trustee a certificate stating that the cost of a Project has been finally determined and that the funds remaining in the account established for such Project exceed the remaining costs of the Project, then an amount equal to such excess shall be transferred to such fund or account as directed in the certificate, provided the same is accompanied by an opinion of Bond Counsel to the effect that such transfer and/or application will not adversely affect the tax-exempt status of the interest of the applicable Bonds.

RATE COVENANT

The Senior Indenture contains the Rate Covenant which is described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Rate Covenant."

COVENANTS AS TO TOLLS

The Commission covenants with respect to Tolls as described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS —Rate Covenant."

COVENANTS OF THE COMMISSION

In addition to the Rate Covenant and covenants as to Tolls described above, in the Senior Indenture the Commission also makes various other covenants, including the following covenants:

Payment of Principal, Interest and Premium. The Commission covenants in the Senior Indenture that it will promptly pay the principal of, premium, if any, and the interest on every Bond issued under the provisions of the Senior Indenture at the places, on the dates and in the manner provided in the Senior Indenture and in said Bonds. Except as otherwise provided in the Senior Indenture, the principal, interest and premium are payable solely from Revenues, which Revenues are pledged pursuant to the Senior Indenture to the payment thereof in the manner and to the extent provided in the Senior Indenture. Neither the general credit of the Commission nor the general credit nor the taxing power of the Commonwealth or any political subdivision, agency or instrumentality thereof is pledged for the payment of the Bonds.

Annual Operating Budget; Capital Budget. The Commission covenants in the Senior Indenture that on or before the 31st day of May (or such other date as is consistent with the Commission's policies then in effect) in each Fiscal Year it will adopt a budget for the ensuing Fiscal Year (the "Annual Operating Budget"). Copies of each Annual Operating Budget shall be provided to the Trustee. Prior to adopting the Operating Budget, the Commission shall provide a draft of such budget to the Consulting Engineer sufficiently in advance of the adoption of such Annual Operating Budget in order for the Consulting Engineer to provide comments before such adoption. The Commission further covenants in the Senior Indenture that it will prepare each such Annual Operating Budget on the basis of monthly requirements, so that it will be possible to determine the Current Expenses for each month during the Fiscal Year.

If for any reason the Commission shall not have adopted the Annual Operating Budget before the first day of any Fiscal Year, the budget for the preceding Fiscal Year, shall, until the adoption of the Annual Operating Budget, be deemed to be in force and shall be treated as the Annual Operating Budget.

The Commission may adopt an amended or supplemental Annual Operating Budget at any time for the remainder of the then current Fiscal Year. Copies of any such amended or supplemental Annual Operating Budget shall be provided to the Trustee.

The Commission further covenants in the Senior Indenture that it will adopt a capital budget (the "Annual Capital Budget") on or before May 31st of each Fiscal Year. The Annual Capital Budget will detail the Commission's planned capital expenditures over a period of up to 10 years and the portion of capital expenditures expected to be funded from the Reserve Maintenance Fund. The Annual Capital Budget shall include the expected beginning balance in the Reserve Maintenance Fund, the amounts to be transferred by the Trustee to the Reserve Maintenance Fund from the General Reserve Fund, the amount of bond proceeds expected to become available during the Fiscal Year, the amounts expected to be transferred monthly by the Trustee from the Revenue Fund, and the desired year-end balance in the Reserve Maintenance Fund. Prior to adopting the Annual Capital Budget, the Commission shall provide a draft of the capital budget to the Consulting Engineer a sufficient time in advance of the Commission's adoption of the Annual Capital Budget in order for the Consulting Engineer to provide comments before the date of such adoption. The Commission may adopt amendments or supplements to the Annual Capital Budget at any time. Copies of the Annual Capital Budget shall be made provided to the Trustee.

Limitations on Issuance of Additional Bonds and Execution of Approved Swaps. The Commission has covenanted in the Senior Indenture with respect to issuance of Additional Bonds and execution of Approved Swap Agreements as described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS —Additional Bonds Test."

Use and Operation of the System. The Commission covenants in the Senior Indenture that it will: (a) maintain and operate the System in an efficient and economical manner, (b) maintain the System in good repair and will make all necessary repairs, renewals and replacements, to the extent funds are available therefor under the Senior Indenture, and (c) comply with laws and all rules, regulations, orders and directions of any legislative, executive, administrative or judicial body applicable to such System, subject to the right of the Commission to contest the same in good faith and by appropriate legal proceedings.

Inspection of the System. The Commission shall make arrangements for the System to be inspected at least once every three years by engaging one or more Consultants to conduct the actual inspections and to prepare a report. Such report shall state (a) whether the System has been maintained in good repair, working order and condition since the last inspection report pursuant to this Section and (b) any recommendations which such Consultants may have as to revisions or additions to the Commission's Annual Capital Budget. Copies of such reports shall be filed with the Trustee.

Construction of Projects. The Commission covenants in the Senior Indenture that it will proceed with diligence to construct any Projects in conformity with law and all requirements of all governmental authorities having jurisdiction thereover. Before entering into any construction contract it will secure the approval of the plans and specifications for such contract by a certified engineer or architect, who may be an employee of the Commission, and that it will require each Person, firm or corporation with whom it may contract in connection with the construction of any Project to furnish (1) a performance bond for 100% of the contract amount, and (2) a payment bond for 100% of the contract amount. Each of such bonds shall be executed by one or more responsible surety companies authorized to do business in the Commonwealth. Any proceeds received from such bonds first shall be applied toward the completion of the applicable Project and second shall be deposited in the General Reserve Fund. Construction contracts for labor and/or materials also shall provide that payments thereunder shall not be made by the Commission in excess of 95% of current estimates except that (i) once the work is at least 50% complete, (ii) where waiver of retainage is necessary in the opinion of the Chief Engineer, based on the advice of the Chief Counsel, to comply with or facilitate compliance with state or federal law in order to receive state or federal funds, such retainage may be reduced by the Chief Engineer or another Commission Official to the extent such officer deems such reduction to be necessary or appropriate.

The Commission shall involve the Consulting Engineer or another Consultant to assist in quality assurance matters in connection with design and/or construction of any Project or portion thereof to the extent the Commission determines necessary or appropriate. For purposes of this subsection, "quality assurance" shall be defined to mean those activities, from inception to completion of a Project, which are necessary to ensure that the processes are in place to produce a quality product.

Employment of Consulting Engineers. The Commission covenants in the Senior Indenture to employ an independent engineer or engineering firm or corporation having a national reputation for skill and experience in such work to perform any functions of the Consulting Engineer under the Senior Indenture.

Insurance. The Commission covenants in the Senior Indenture that it will keep the System and its use and operation thereof insured (including through self-insurance) at all times in such amounts, subject to such exceptions and deductibles and against such risks, as are customary for similar organizations. All insurance policies shall be carried with a responsible insurance company or companies authorized to do business in the Commonwealth or shall be provided under a self-insurance program; any self-insurance program shall be actuarially sound in the written opinion of an accredited actuary, which opinion shall be filed with the Trustee at least annually. At any time and from time to time, the Commission may elect to terminate self-insurance of a given type. Upon making such election, the Commission shall, to the extent then deemed necessary by a Consultant, obtain and maintain comparable commercial insurance.

On July 1, 2003, and every three years thereafter (except with respect to self-insurance, which shall be annually), the Commission shall cause a Consultant to certify to the Trustee that (a) it has reviewed the adequacy of the Commission's insurance, listing the types and amounts of insurance, and (b) it finds such coverage to be reasonable and customary for similar organizations. If the Consultant concludes that coverage other than that which is currently carried by the Commission should be carried, the Commission shall obtain such insurance coverage unless it determines in good faith that it is unreasonable or uneconomical to obtain such coverage and certifies the same in writing to the Trustee.

All insurance policies maintained by the Commission shall be available at reasonable times for inspection by the Trustee, its agents and representatives.

The Commission covenants that it will take such actions as it deems necessary to demand, collect and sue for any proceeds that may become due and payable to it under any policy.

Damage or Destruction. Immediately after any damage to or destruction of any part of the System which materially adversely affects the Revenues of the Commission, the Commission will promptly take action to repair, reconstruct or replace the damaged or destroyed property or to otherwise ameliorate the adverse impact on Revenues.

Annual Audit. The Commission covenants in the Senior Indenture that it will cause an annual audit to be made of its books and accounts of each Fiscal Year by an independent certified public accountant. A copy of such audit shall be filed with the Trustee promptly after the receipt by the Commission for such purpose.

Encumbrance of Revenues; Sale, Lease or Other Disposition of Property. The Commission covenants in the Senior Indenture that so long as any Bonds are Outstanding under the Senior Indenture:

(a) (1) It will not create or suffer to be created any lien or charge upon any Revenues, except the lien and charge of the Bonds secured by the Senior Indenture and any Subordinated Indebtedness permitted pursuant to the provisions of the Senior Indenture; and (2) from such Revenues or other funds available under the Senior Indenture, it will pay or cause to be discharged, or will make adequate provision to pay or discharge, within ninety (90) days after the same shall accrue, all lawful claims and demands for labor, materials or supplies which, if unpaid, might by law become a lien upon any Revenues; provided, however, that the Commission shall not be required to pay or discharge, or make provision for such payment or discharge of, any such lien or charge so long as the validity thereof shall be contested in good faith and by appropriate legal proceedings.

(b) The Commission will not sell or otherwise dispose of any real estate or personal property comprising a portion of the System unless the Commission determines (1) such property (i) has become obsolete or worn out or is reasonably expected to become so within one year after the date of such disposition, (ii) is no longer used or useful in the operation of the System or in the generation of Revenues or (hi) is to be or has been replaced by other property; or (2) by resolution that such action will not materially adversely affect the Net Revenues of the Commission.

The Commission shall have the discretion to deposit the proceeds of such sale or disposition in a fund or account held under the Senior Indenture or a Commission account held outside the Senior Indenture, as it deems appropriate. In the event the Commission did not meet the Rate Covenant during the preceding Fiscal Year, however, the Commission shall notify the Trustee of the sale or disposition of any property which generated Net Revenues in excess of one percent of the Commission's Net Revenues during the prior Fiscal Year and all proceeds from such sale or disposition shall be deposited in the Revenue Fund.

(c) The Commission will not lease any real estate or personal property comprising a portion of the System unless the Commission determines by resolution that such action will not materially adversely affect the Net Revenues of the Commission. The rental and other proceeds from any lease shall not be required to be deposited in the Revenue Fund unless the effect of such lease is to reduce Tolls.

Without intending to limit the foregoing, the Commission also may enter into contracts or other forms of agreement for the use of any real estate comprising a portion of the System including, but not limited to, rights of way for telephone, telegraph, optic fiber and other forms of communication, electric, gas transmission and other lines or facilities for utilities, and other uses which do not materially adversely affect the operation of the System and the payments received in connection with the same shall be deposited in such accounts (which may be outside the Senior Indenture) as the Commission shall determine.

CREATION OF FUNDS

In addition to the Construction Fund and the Alternate Construction Fund, and any other funds created by Supplemental Indentures, the Senior Indenture creates the following funds: Operating Account; Revenue Fund; Debt Service Fund; Debt Service Reserve Fund; Reserve Maintenance Fund; General Reserve Fund; and Rebate Fund. Amounts deposited therein shall be held in trust by the Trustee until applied as directed in the Senior Indenture.

REVENUE FUND; AGREEMENTS WITH OTHER TURNPIKES

The Commission covenants in the Senior Indenture that all Revenues will be deposited daily, as far as practicable, with the Trustee or in the name of the Trustee with a Depositary or Depositaries, to the credit of the Revenue Fund.

The Senior Indenture provides that, to the extent now or hereafter authorized by law, the Commission may enter into agreements with any commission, authority or other similar legal body operating a turnpike, whether or not connected to the System, (1) with respect to the establishment of combined schedules of Tolls and/or (2) for the collection and application of Tolls charged for trips over all or a portion of both turnpikes combined, which on the basis of the Revenues to be received by any such agreement will result in the receipt by the Commission of its allocable portion of such Tolls (less fees and expenses associated with such arrangement). To the extent now or hereafter authorized by law, the Commission also may enter into agreements with other Persons with respect to the collection of Tolls or advances or prepayment of Tolls charged for trips over all or a portion of the System, which on the basis of the Revenues to be received by any such agreement will result in the receipt by the Commission of the appropriate Tolls for such trips. Unless approved by a Consultant, no agreement establishing a combined schedule of Tolls shall restrict the ability of the Commission to implement an increase in its Tolls at least annually.

Amounts received by the Commission from such other commission, authority or other similar legal body or Person, in accordance with such agreements, shall be deposited in the Revenue Fund when they constitute Revenues. Such amounts may be held with a Depository or Depositories until they constitute Revenues. Amounts received by the Commission and deposited in the Revenue Fund which are payable by the Commission to such other commission, authority or other similar legal body or Person, in accordance with any such agreements, shall be withdrawn by the Trustee from the Revenue Fund upon delivery to the Trustee of a certificate of a Commission Official that such withdrawal is required pursuant to the terms of an agreement entered into pursuant to this Section and shall be paid by the Trustee in accordance with directions contained in such certificate. Any agreement entered into pursuant to this Section shall be made available for the Trustee upon its request.

Except as otherwise provided in the provisions described above, transfers from the Revenue Fund shall be made to the following funds and in the following order of priority: (1) Rebate Fund; (2) Operating Account; (3) Debt Service Fund; (4) Reserve Maintenance Fund; (5) Debt Service Reserve Fund; and (6) General Reserve Fund (after retaining such funds in the Revenue Fund as are identified in the certificate described below under "General Reserve Fund").

OPERATING ACCOUNT

The Senior Indenture provides that the Commission shall establish an account known as the "Operating Account" which is described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Operating Account."

DEBT SERVICE FUND

The Senior Indenture creates two separate accounts in the Debt Service Fund to be known as the "Interest Account" and the "Principal Account."

The Trustee and the Commission may create such additional accounts in the Debt Service Fund pursuant to a Supplemental Indenture as they deem necessary or appropriate, including, but not limited to, (a) an account into which drawings on a Credit Facility are to be deposited and from which principal (including redemption price) and Purchase Price of and interest on the Series of Bonds secured by such Credit Facility are to be paid (and upon such payment, amounts on deposit in the Principal and Interest Accounts for such Bonds shall be used to repay the provider of the Credit Facility for such payments), and (b) an account into which payments to the Commission to any Parity Swap Counterparty are to be deposited and from which payments to such Parity Swap Counterparty are to be paid.

The Trustee shall make deposits into the Debt Service Fund as described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — Debt Service Fund."

The moneys in the Interest and Principal Accounts shall be held by the Trustee in trust for the benefit of the Bonds, to the extent the foregoing are payable from such accounts, and, to said extent and pending application, shall be subject to a lien and charge in favor of the Owners of the Bonds until paid out or transferred as provided in the Senior Indenture. There shall be withdrawn from the Interest Account (and any available capitalized interest) and the Principal Account from time to time and set aside or deposited with the Trustee sufficient money for paying the interest on and the principal of and premium on the Bonds as the same shall become due, except to the extent such interest, principal or other amounts are payable from a fund or account other than the Debt Service Fund as provided in any Supplemental Indenture.

If at the time the Trustee is required to make a withdrawal from the Debt Service Fund the moneys therein shall not be sufficient for such purpose, the Trustee shall withdraw the amount of such deficiency from the moneys on deposit in the following funds or accounts and transfer the same to the Debt Service

Fund in the following order: the Debt Service Reserve Fund, the General Reserve Fund, and the Reserve Maintenance Fund.

With respect to any Bonds for which Subsidy Payments are scheduled to be received by the Commission, the Commission shall deposit or cause to be deposited all such Subsidy Payments, as and when received, into a separate account of the Debt Service Fund held for each such Series of Bonds, and such Subsidy Payments shall be applied to pay debt service on the corresponding Series of Bonds with respect to which such Subsidy Payments are received.

RESERVE MAINTENANCE FUND

In each Fiscal Year, after first having made the deposits to the Revenue Fund, Operating Account and Debt Service Fund provided by the provisions described above, the Trustee shall transfer from the Revenue Fund on or before the last Business Day of each month to the credit of the Reserve Maintenance Fund the amount shown in the Annual Capital Budget for the ensuing month. The provisions regarding the Reserve Maintenance Fund are further described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS —Reserve Maintenance Fund."

DEBT SERVICE RESERVE FUND

The Senior Indenture establishes a Debt Service Reserve Fund and provides that a special account within the Debt Service Reserve Fund may be created with respect to each series of Debt Service Reserve Fund Bonds issued under the Senior Indenture and any Supplemental Indenture.

In each Fiscal Year, after first having made the deposits to the Operating Account, Debt Service Fund and Reserve Maintenance Fund described above, the Trustee shall transfer from the Revenue Fund on or before the last day of each month to the credit of the Debt Service Reserve Fund (a) the amount, if any, required to make the amount on deposit in the Debt Service Reserve Fund equal to the Debt Service Reserve Requirement which restoration, as implied by the Rate Covenant, is intended to occur within eighteen (18) months; and (b) the amount set forth in a Supplemental Indenture if an amount different from the Debt Service Reserve Requirement is required.

To the extent accounts are created in the Debt Service Reserve Fund for Debt Service Reserve Fund Bonds, the funds and DSRF Security, as hereinafter defined, held therein shall be available to make payments required under the Senior Indenture for the benefit of all Debt Service Reserve Fund Bonds.

Moneys held in the Debt Service Reserve Fund shall be used for the purpose of paying interest on, maturing principal and mandatory sinking fund redemption price of Debt Service Reserve Fund Bonds whenever and to the extent that the moneys held for the credit of the Debt Service Fund shall be insufficient for such purpose. If at any time the moneys and the principal amount of any DSRF Security held in the Debt Service Reserve Fund shall exceed the Debt Service Reserve Requirement, the Commission shall direct whether such excess moneys shall be transferred by the Trustee to the credit of the General Reserve Fund or used to reduce the principal amount of any DSRF Security.

In the event the Trustee shall be required to withdraw funds from the Debt Service Reserve Fund to restore a deficiency in the Debt Service Fund arising with respect to Debt Service Reserve Fund Bonds, the amount of such deficiency shall be allocated pro rata among such Bonds except as provided in the last sentence of the next paragraph.

In lieu of the deposit of moneys into the Debt Service Reserve Fund, the Commission may cause to be provided a surety bond, an insurance policy, a letter of credit or similar financial instrument satisfactory to the Rating Agency (as evidenced by a letter from the Rating Agency confirming that the DSRF Security will not result in the rating on any outstanding Bonds being downgraded) (each, a "DSRF Security") payable to the Trustee for the benefit of the Bondholders in an amount equal to the difference between the Debt Service Reserve Requirement and the amounts then on deposit in the Debt Service Reserve Fund. The DSRF Security shall be payable (upon the giving of notice as required thereunder) on any Interest Payment Date on which moneys will be required to be withdrawn from the Debt Service Reserve Fund and applied to the payment of the principal of or interest on any Bonds to the extent that such withdrawals cannot be made by amounts on deposit in the Debt Service Reserve Fund.

If a disbursement is made pursuant to a DSRF Security, the Commission shall be obligated either (a) to reinstate the maximum limits of such DSRF Security or (b) to deposit into the Debt Service Reserve Fund, funds in the amount of the disbursement made under such DSRF Security, or a combination of such alternatives, as shall provide that the amount credited to the Debt Service Reserve Fund equals the Debt Service Reserve Requirement within a time period of eighteen (18) months.

If the DSRF Security shall cease to have a rating described in the second preceding paragraph, the Commission shall use reasonable efforts to replace such DSRF Security with one having the required rating, but shall not be obligated to pay, or commit to pay, increased fees, expenses or interest in connection with such replacement or to deposit Revenues in the Debt Service Reserve Fund in lieu of replacing such DSRF Security with another.

GENERAL RESERVE FUND

After first having made the deposits to the Operating Account, Debt Service Fund, Reserve Maintenance Fund and Debt Service Reserve Fund described above, the Trustee shall transfer from the Revenue Fund on or before the last Business Day of each year (or more frequently if requested by a Commission Official) to the credit of the General Reserve Fund any funds which a Commission Official determines to be in excess of the amount required to be reserved therein for future transfers to the Debt Service Fund. The provisions regarding the General Reserve Fund are further described in the section in the forepart of this Official Statement captioned "SECURITY FOR THE FIRST SERIES BONDS — General Reserve Fund; Supplemental Capital Fund."

SUPPLEMENTAL CAPITAL FUND

The Senior Indenture authorizes the creation of the Supplemental Capital Fund. The Supplemental Capital Fund is for deposit and disbursement of certain funds, together with interest earnings on amounts held in such Supplemental Capital Fund, to be applied by the Commission to the payment of the Cost, on a pay-as-you-go basis from the Commission's generally available Revenues, of improvements, extensions and replacements to the System, or otherwise for any Project which may be identified by the Commission, and not otherwise funded, as set forth in the Commission's ten year capital plan (or other capital plan), including any amendments thereto, or any prior capital plan (collectively, the "Additional Capital Projects").

Monies to be deposited in the Supplemental Capital Fund shall consist of available funds transferred from the General Reserve Fund in accordance with the Senior Indenture in such amounts, and from time to time, as the Commission, in its sole and absolute discretion, shall determine. Proceeds of

Bonds, other Parity Obligations and Subordinated Indebtedness shall not be deposited to the Supplemental Capital Fund. Provided that no deficiency exists in any fund or account under the Senior Indenture, monies in the Supplemental Capital Fund may be requisitioned, in accordance with the requisition requirements set forth in the Senior Indenture, in such amounts, and from time to time, as the Commission in its sole and absolute discretion shall determine, to be applied to pay Costs of the Additional Capital Projects.

REBATE FUND

The Senior Indenture authorizes the creation of a Rebate Fund. The Commission covenants in the Senior Indenture to calculate and to pay directly to the government of the United States of America all amounts due for payment of "arbitrage rebate" under Section 148(f) of the Code with respect to any Bonds. Nevertheless, the Commission in the future may deposit with the Trustee or direct the Trustee to deposit in the Rebate Fund amounts held in any Fund under the Senior Indenture for any or all Series of Bonds (which direction shall specify the procedures for collection and payment of amounts due in respect of arbitrage rebate) if (a) required under any amendments to Section 148(f) of the Code or (b) the Commission otherwise determines that the funding of the Rebate Fund is necessary or appropriate. The Rebate Fund is a trust fund, but the amounts therein do not constitute part of the Trust Estate. Amounts on deposit in the Rebate Fund may be used solely to make payments to the United States of America under Section 148 of the Code and to pay costs related to the calculation of the amounts due. Upon satisfaction of the Commission's covenants described above, any amounts remaining in the Rebate Fund shall be deposited in the General Reserve Fund.

ALTERNATE CONSTRUCTION FUND

In connection with any Supplemental Indenture executed on or after December 18, 2014 for capital projects where the Commission expects to receive monies from the federal government for reimbursement of costs associated with such capital projects, the Commission shall create a separate Alternate Construction Fund for such Additional Bonds for deposit and disbursement of certain funds which shall not include proceeds of Bonds issued or outstanding under the Senior Indenture. Monies to be deposited in the Alternate Construction Fund shall consist of monies received and identified for deposit thereto by the Commission from the federal government for reimbursement of costs associated with the various capital expenditures to be financed by such Additional Bonds. Monies in an Alternate Construction Fund may only be requisitioned after all the proceeds of such Additional Bonds have been requisitioned from the applicable Account of the Construction Fund.

If at any time a Commission Official shall file with the Trustee a certificate stating that the cost of the applicable capital expenditure has been finally determined and that the funds remaining in the Alternate Construction Fund exceed the remaining costs thereof, then an amount equal to such excess shall be transferred to a fund described in such certificate, provided the same is accompanied by an opinion of Bond Counsel to the effect that such transfer and/or application will not adversely affect the tax-exempt status of the interest of such Additional Bonds.

ADDITIONAL SECURITY; PARITY WITH OTHER PARITY OBLIGATIONS

Except as otherwise provided or permitted in the Senior Indenture, the Trust Estate securing all Bonds issued under the terms of the Senior Indenture shall be shared on a parity with other Parity Obligations on an equal and ratable basis. The Commission may, however, in its discretion, provide additional security or credit enhancement for specified Parity Obligations with no obligation to provide such additional security or credit enhancement to other Parity Obligations, except that no additional security or credit enhancement shall be provided unless there shall have been first delivered to the Trustee an opinion of Bond Counsel that the exclusion from gross income of interest on any Bonds for federal income tax purposes will not be adversely affected thereby. Moreover, the Commission may provide in a Supplemental Indenture that Bonds issued thereunder are not secured, or are secured only in part or only under certain circumstances, by the Trust Estate.

DEPOSITARIES; INVESTMENT OF MONEYS

Except as otherwise provided in the Senior Indenture, all moneys received by the Commission under the provisions of the Senior Indenture shall be deposited with the Trustee or with one or more Depositaries. All moneys deposited under the provisions of the Senior Indenture with the Trustee or any other Depositary shall be held in trust, credited to the particular fund or account to which such moneys belong and applied only in accordance with the provisions of the Senior Indenture. No moneys shall be deposited with any Depositary, other than the Trustee, in an amount exceeding fifty per centum (50%) of the amount which an officer of such Depositary shall certify to the Commission as the combined capital and surplus of such Depositary. All moneys deposited with the Trustee or any other Depositary under the Senior Indenture shall, to the extent not insured, be secured in the manner required or permitted by applicable law.

Moneys held in any of the funds or accounts under the Senior Indenture may be retained uninvested, if deemed necessary by the Commission, as trust funds and secured as provided above or may be invested in Permitted Investments. All investments made pursuant to the Senior Indenture shall be subject to withdrawal or shall mature or be subject to repurchase or redemption by the holder, not later than the earlier of (a) the date or dates set forth for similar investments in the applicable Supplemental Indenture or (b) the date on which the moneys may reasonably be expected to be needed for the purpose of the Senior Indenture.

Investments acquired with the moneys in any fund or account shall be a part of such fund or account and, for the purposes of determining the amount in such fund or account, shall be valued at their then fair market value. The interest or income received on an investment shall remain in the fund or account to which the investment is credited except to the extent otherwise provided in the applicable Supplemental Indenture.

The Trustee shall withdraw, redeem or sell all or a portion of any investment upon receipt of the written direction from the Commission or upon a determination by the Trustee that moneys in such fund or account are to be applied or paid by the Trustee pursuant to the provisions of the Senior Indenture, and the proceeds thereof shall be deposited by the Trustee in the appropriate fund or account. Neither the Trustee nor the Commission shall be liable or responsible for any depreciation in the value of the Permitted Investments or for any losses incurred upon any unauthorized disposition thereof.

Each fund held under the Senior Indenture shall be valued by the Trustee at least once annually within thirty days after the end of each Fiscal Year.

EVENTS OF DEFAULT

Each of the following is an "Event of Default" under the Senior Indenture:

(a) Default in the payment of any installment of principal, redemption premium, if any, interest or other amount due on any Bond when the same becomes due and payable;

(b) Default in the payment by the Commission of a, other Parity Obligation;

(c) Subject to the provisions relating to notice and opportunity to cure certain defaults, default in the performance or breach of any covenant, warranty or representation of the Commission contained in the Senior Indenture (other than a default under (a) and (b) above);

(d) The occurrence of any Event of Default under any Supplemental Indenture; or

(e) (1) The occurrence of an Event of Bankruptcy of the Commission; (2) the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator or other similar official of the Commission or of any substantial portion of its property, which appointment shall not have been rescinded or stayed within ninety (90) days after taking effect; or (3) the ordering of the winding up or liquidation of the affairs of the Commission.

No default under paragraph (c) above under "Events of Default" shall constitute an Event of Default until written notice of such default shall have been given to the Commission by the Trustee or by the holders of at least 25% in aggregate principal amount of the Bonds Outstanding, and the Commission shall have had thirty (30) days after receipt of such notice to correct such default or cause such default to be corrected, and shall have failed to do so. In the event, however, that the default is such that it cannot be corrected within such thirty (30) day period, it shall not constitute an Event of Default if corrective action is instituted by the Commission within such period and diligently pursued (as determined by the Trustee) until the default is corrected.

REMEDIES UPON DEFAULT

If an Event of Default occurs and is continuing, the Trustee may, and upon the written request to the Trustee by the holder or holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding shall, subject to the requirement that the Trustee be provided with indemnity satisfactory to it, by written notice to the Commission, declare the principal and interest on of the Bonds to the date of acceleration to be immediately due and payable.

At any time after such a declaration of acceleration has been made and before the entry of a judgment or decree for payment of the money due, the Trustee may, or the holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding, may by written notice to the Commission and the Trustee, and subject to the provision to the Trustee of satisfactory indemnity, direct the Trustee to rescind and annul such declaration and its consequences if: (1) there has been paid to or deposited with the Trustee by or for the account of the Commission, or provision satisfactory to the Trustee has been made for the payment of a sum sufficient to pay: (i) all overdue installments of interest on the Bonds; (ii) the principal of and redemption premium, if any, on any Bonds which have become due other than by such declaration of acceleration and interest thereon; (iii) all amounts due on other Parity Obligations; (iv) to the extent lawful, interest upon overdue installments of interest and redemption premium, if any; and (v) all sums paid or advanced by the Trustee under the Senior Indenture, together with the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel prior to the date of notice of rescission; and (2) all Events of Default, other than those described in paragraphs (a) and (b) above under "Events of Default", if any, which have occasioned such acceleration, have been cured or waived.

No such rescission and annulment shall affect any subsequent default or impair any consequent right.

ADDITIONAL REMEDIES

The Trustee, upon the occurrence of an Event of Default may, and upon the written request of the holders of not less than a majority in aggregate principal amount of the Bonds Outstanding and subject to the requirement that the Trustee be provided with satisfactory indemnity, shall proceed to protect and enforce its rights and the rights of the holders of the Bonds under the Senior Indenture by a suit or suits in equity or at law, either for the specific performance of any covenant or agreement contained in the Senior Indenture or in aid of the execution of any power in the Senior Indenture granted, or for the enforcement of any other appropriate legal or equitable remedy, and the Trustee in reliance upon the advice of counsel may deem most effective to protect and enforce any of the rights or interests of the Bondholders under the Bonds or the Senior Indenture.

Without limiting the generality of the foregoing, the Trustee shall at all times have the power to institute and maintain such proceedings as it may deem expedient: (1) to prevent any impairment of the Trust Estate by any acts which may be unlawful or in violation of the Senior Indenture, and (2) to protect its interests and the interests of the Bondholders in the Trust Estate and in the issues, profits, revenues and other income arising therefrom, including the power to maintain proceedings to restrain the enforcement of or compliance with any governmental enactment, rule or order which may be unconstitutional or otherwise invalid, if the enforcement of, or compliance with, such enactment, rule or order would impair the Trust Estate or be prejudicial to the interests of the Bondholders or the Trustee.

TRUSTEE MAY FILE PROOFS OF CLAIM

In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding under the Bankruptcy Law relating to the Commission, any other obligor upon the Bonds or any property of the Commission, the Trustee (whether or not the principal of the Bonds shall then be due and payable by acceleration or otherwise, and whether or not the Trustee shall have made any demand upon the Commission for the payment of overdue principal, redemption premium, if any, and interest) shall be entitled and empowered, by intervention in such proceeding or other means: (1) to file and prove a claim for the whole amount of the principal, redemption premium, if any, and interest owing and unpaid in respect of the Bonds then Outstanding or for breach of the Senior Indenture and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the holders allowed in such proceeding; and (2) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same; and any receiver, assignee, trustee, liquidator, sequestrator or similar official in any such judicial proceeding is authorized pursuant to the Senior Indenture by each holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under the Senior Indenture. No provision of the Senior Indenture empowers the Trustee to authorize or consent to or accept or adopt on behalf of any Bondholders any plan of reorganization, arrangement, adjustment or composition affecting any of the Bonds or the rights of any holder thereof, or to authorize the Trustee to vote in respect of the claim of any holder in any proceeding described in the preceding sentence.

PRIORITY OF PAYMENT FOLLOWING EVENT OF DEFAULT

Any portion of the Trust Estate held or received by the Trustee, by any receiver or by any Bond Owner pursuant to any right given or action taken under the provisions of the Senior Indenture, after payment of the costs and expenses of the proceedings resulting in the collection of such moneys and of the fees, expenses and liabilities incurred by the Trustee and the transfer to Secured Owners (other than Owners of the Bonds) of amounts to which they are entitled by virtue of their parity position, shall be deposited and applied as follows:

(a) If the principal of all the Bonds then Outstanding and the interest accrued thereon has been declared to be due and payable immediately pursuant to the acceleration provisions described above (or, but for any legal prohibition on such declaration of acceleration, such principal and interest would have been declared to be due and payable immediately pursuant to such Section or the provisions of any applicable Reimbursement Agreement) and such declaration has not been rescinded and annulled, there shall be deposited into the Debt Service Fund moneys sufficient to pay the amounts described in clauses (i), (ii) and (iii) below, and all such moneys shall be applied, as promptly as practicable (but subject to the provisions of the last paragraph of this Section), proportionately to: (i) the payment to the persons entitled thereto of all payments of interest then due on the Bonds with interest on overdue installments, if lawful, at their respective rates from the respective dates upon which they became due, in the order of maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment of interest, then to the payment ratably, according to the amounts due on such installment; (ii) the payment to the persons entitled thereto of the unpaid principal of any of the Bonds which shall have become due (or which but for any legal prohibition on such declaration of acceleration would have become due) with interest on such Bonds at their respective rates from the respective dates upon which they became due and, if the amount available shall not be sufficient to pay in full the Bonds due on any particular date, together with such interest, then to the payment ratably, according to the amount of principal and interest due on such date, in each case to the persons entitled thereto, without any discrimination or privilege; and (iii) the payment of any other amounts then owing under the Senior Indenture; and, after said deposit into the Debt Service Fund, there shall be paid the Subordinated Indebtedness issued or incurred by the Commission pursuant to the Senior Indenture.

(b) If the principal of and interest on all Bonds then Outstanding has not been declared to be due and payable immediately pursuant to the acceleration provisions described above (or deemed to be due and payable as contemplated in paragraph (a) above) or if such a declaration has been rescinded and annulled, then there shall be deposited into the Debt Service Fund moneys sufficient to pay the amounts described in clauses (i), (ii) and (iii) below, and all such moneys shall be applied, as promptly as practicable (but subject to the provisions of the last paragraph of this Section), (i) first, to the payment to the persons entitled thereto of all installments of interest then due on the Bonds, with interest on overdue installments, if lawful, at their respective rates from the respective dates upon which they became due, in the order of maturity and, if the amount available shall not be sufficient to pay in full any particular installment of interest, then to the payment ratably, according to the amounts due on such installment; (ii) second, to the payment to the persons entitled thereto of the unpaid principal of any of the Bonds which shall have become due with interest on such Bonds at their respective rates from the respective dates upon which they became due and, if the amount available shall not be sufficient to pay in full the Bonds due on any particular date, together with such interest, then to the payment ratably, according to the amount of principal and interest due on such date, in each case to the persons entitled thereto, without any discrimination or privilege; and (iii) third, to the payment of any other amounts then owing under the Senior Indenture, and, after said deposit into the Debt Service Fund, there shall be paid the Subordinated Indebtedness issued or incurred by the Commission pursuant to the Senior Indenture.

Whenever moneys are to be applied pursuant to the above provisions, such moneys shall be applied at such times, and from time to time, as the Trustee shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such funds, it shall fix the date (which shall be an Interest Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal and interest to be paid on such date shall cease to accrue. The Trustee shall give notice of the deposit with it of any such moneys and of the fixing of any such date by mail to all Owners of Bonds with respect to which the Event of Default occurred and shall not be required to make payment to any Bond Owner until such Bonds shall be presented to the Trustee for appropriate endorsement or for cancellation if frilly paid.

BONDHOLDERS MAY DIRECT PROCEEDINGS

The owners of a majority in aggregate principal amount of the Bonds Outstanding shall, subject to the requirement that the Trustee be provided with satisfactory indemnity, have the right, by an instrument or instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings by the Trustee under the Senior Indenture, provided that such direction shall not be in conflict with any rule of law or the Senior Indenture and that the Trustee shall have the right to decline to follow any such direction which in the opinion of the Trustee would be unduly prejudicial to the rights of Bondholders not parties to such direction or would subject the Trustee to personal liability or expense. Notwithstanding the foregoing, the Trustee shall have the right to select and retain counsel of its choosing to represent it in any such proceedings. The Trustee may take any other action which is not inconsistent with any direction under this paragraph.

LIMITATIONS ON RIGHTS OF BONDHOLDERS

No Bondholder shall have any right to pursue any other remedy under the Senior Indenture or the Bonds unless: (1) an Event of Default shall have occurred and is continuing; (2) the owners of not less than a majority in aggregate principal amount of all Bonds then Outstanding have requested the Trustee, in writing, to exercise the powers hereinabove granted or to pursue such remedy in its or their name or names; (3) the Trustee has been offered indemnity satisfactory to it against costs, expenses and liabilities reasonably anticipated to be incurred; (4) the Trustee has declined to comply with such request, or has failed to do so, within sixty (60) days after its receipt of such written request and offer of indemnity; and (5) no direction inconsistent with such request has been given to the Trustee during such 60-day period by the holders of a majority in aggregate principal amount of the Bonds Outstanding.

The provisions of the preceding paragraph are conditions precedent to the exercise by any Bondholder of any remedy under the Senior Indenture. The exercise of such rights is further subject to the provisions described under “Bondholders May Direct Proceedings”, “Unconditional Right of Bondholder to Receive Payment” and “Delay or Omission Not Waiver” and certain other provisions of the Senior

Indenture. No one or more Bondholders shall have any right in any manner whatever to enforce any right under the Senior Indenture, except in the manner provided in the Senior Indenture. All proceedings at law or in equity with respect to an Event of Default shall be instituted and maintained in the manner provided in the Senior Indenture for the equal and ratable benefit of the Bondholders of all Bonds Outstanding.

RIGHTS AND REMEDIES CUMULATIVE

No right or remedy in the Senior Indenture conferred upon or reserved to the Trustee is intended to be exclusive of any other right or remedy, but each such right or remedy shall, to the extent permitted by law, be cumulative of and in addition to every other right or remedy given under the Senior Indenture or now or hereafter existing at law, in equity or otherwise. The assertion or employment of any right or remedy under the Senior Indenture shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

DELAY OR OMISSION NOT WAIVER

No delay or omission by the Trustee or any Bondholder to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of such Event of Default. Every right and remedy given by the Senior Indenture or by law to the Trustee or the Bondholders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or the Bondholders, as the case may be.

WAIVER OF DEFAULTS

The holders of a majority in aggregate principal amount of the Outstanding Bonds may, by written notice to the Trustee and subject to the requirement that the Trustee be provided with satisfactory indemnity, waive any existing default or Event of Default and its consequences, except an Event of Default under paragraph (a) or (b) under "Events of Default." Upon any such waiver, the default or Event of Default shall be deemed cured and shall cease to exist for all purposes. No waiver of any default or Event of Default shall extend to or effect any subsequent default or Event of Default or shall impair any right or remedy consequent thereto.

Notwithstanding any provision of the Senior Indenture, in no event shall any Person, other than all of the affected Bondholders, have the ability to waive any Event of Default under the Senior Indenture if such event results or may result, in the opinion of Bond Counsel, in interest on any of the Bonds becoming includable in gross income for federal income tax purposes if the interest on such Bonds was not includable in gross income for federal income tax purposes prior to such event.

NOTICE OF EVENTS OF DEFAULT

If an Event of Default occurs of which the Trustee has or is deemed to have notice under the Senior Indenture, the Trustee shall give Immediate Notice thereof to the Commission. Within 90 days thereafter (unless such Event of Default has been cured or waived), the Trustee shall give notice of such Event of Default to each Bondholder then Outstanding, provided, however, that except in the instance of an Event of Default described in paragraph (a) or (b) above under "Events of Default," the Trustee may withhold such notice if and so long as the Trustee in good faith determines that the withholding of such notice does not materially adversely affect the interests of Bondholders, and provided, further, that notice to Bondholders of any Event of Default under paragraph (c) under "Events of Default" shall be subject to the provisions described above relating to cure of such defaults and shall not be given until the grace period has expired.

THE TRUSTEE; QUALIFICATIONS OF TRUSTEE

The Senior Indenture contains provisions relating to the appointment and duties of the Trustee. The Trustee under the Senior Indenture shall be a corporation or banking association organized and doing business under the laws of the United States of America or of any state, authorized under such laws to exercise corporate trust powers, which has a combined capital and surplus of at least $50,000,000, or is an affiliate of, or has a contractual relationship with, a corporation or banking association meeting such capital and surplus requirement which guarantees the obligations and liabilities of the proposed trustee, and which is subject to supervision or examination by federal or state banking authority. If at any time the Trustee shall cease to be eligible in accordance with the provision described above, it shall resign promptly in the manner and with the effect specified in the Senior Indenture.

RESIGNATION OR REMOVAL OF TRUSTEE; APPOINTMENT OF SUCCESSOR TRUSTEE

No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to the Senior Indenture shall become effective until the acceptance of appointment by the successor Trustee under the Senior Indenture.

The Trustee may resign at any time by giving written notice to the Commission. Upon receiving such notice of resignation, the Commission shall promptly appoint a successor Trustee by an instrument in writing. If an instrument of acceptance has not been delivered to the resigning Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee or any Bondholder may petition a court of competent jurisdiction for the appointment of a successor Trustee.

Prior to the occurrence and continuance of an Event of Default under the Senior Indenture, or after the curing or waiver of any such Event of Default, the Commission or the holders of a majority in aggregate principal amount of the Outstanding Bonds, may remove the Trustee and shall appoint a successor Trustee. In the event there shall have occurred and be continuing an Event of Default under the Senior Indenture, the holders of a majority in aggregate principal amount of the Outstanding Bonds may remove the Trustee and shall appoint a successor Trustee. In each instance, such removal and appointment shall be accomplished by an instrument or concurrent instruments in writing signed by the Commission or such holders, as the case may be, and delivered to the Trustee, the Commission, the holders of the Outstanding Bonds and the Successor Trustee.

If at any time: (1) the Trustee shall cease to be eligible and qualified under the Senior Indenture and shall fail or refuse to resign after written request to do so by the Commission or the holder of any Bond, or (2) the Trustee shall become incapable of acting or shall be adjudged insolvent, or a receiver of the Trustee or its property shall be appointed, or any public officer shall take charge or control of the Trustee, its property or affairs for the purpose of rehabilitation, conservation or liquidation, then in either such case (i) the Commission may remove the Trustee and appoint a successor Trustee in accordance with the provisions of the immediately preceding paragraph; or (ii) any holder of a Bond then Outstanding may, on behalf of the holders of all Outstanding Bonds, petition a court of competent jurisdiction for removal of the Trustee and appointment of a successor Trustee.

The Commission shall give written notice of each resignation or removal of the Trustee and each appointment of a successor Trustee to each holder of Bonds then Outstanding as listed in the Bond Register. Each such notice shall include the name and address of the applicable corporate trust office of the successor Trustee.

SUPPLEMENTAL INDENTURES WITHOUT BONDHOLDERS' CONSENT

The Senior Indenture provides that the Commission and the Trustee may from time to time and at any time enter into Supplemental Indentures, without the consent of or notice to any Bondholder, to effect any one or more of the following: (a) cure any ambiguity, defect or omission or correct or supplement any provision in the Senior Indenture or in any Supplemental Indenture; (b) grant to or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, authority or security that may lawfully be granted to or conferred upon the Bondholders or the Trustee which are not contrary to or inconsistent with the Senior Indenture as then in effect or to subject to the pledge and lien of the Senior Indenture additional revenues, properties or collateral including Defeasance Obligations; (c) add to the covenants and agreements of the Commission in the Senior Indenture other covenants and agreements thereafter to be observed by the Commission or to surrender any right or power in the Senior Indenture reserved to or conferred upon the Commission which are not contrary to or inconsistent with the Senior Indenture as then in effect; (d) permit the appointment of a co-trustee under the Senior Indenture; (e) modify, alter, supplement or amend the Senior Indenture in such manner as shall permit the qualification of the Senior Indenture, if required, under the Trust Indenture Act of 1939, the Securities Act of 1933 or any similar federal statute hereafter in effect; (f) make any other change in the Senior Indenture that is determined by the Trustee not to be materially adverse to the interests of the Bondholders; (g) implement the issuance of Additional Bonds permitted under the Senior Indenture; or (h) if all Bonds in a series are Book Entry Bonds, amend, modify, alter or replace any Letter of Representations or other provisions relating to Book Entry Bonds. The Trustee shall not be obligated to enter into any such Supplemental Indenture which adversely affects the Trustee's own rights, duties or immunities under the Senior Indenture.

SUPPLEMENTAL INDENTURES REQUIRING BONDHOLDERS' CONSENT

The Commission and the Trustee, at any time and from time to time, may execute and deliver a Supplemental Indenture for the purpose of making any modification or amendment to the Senior Indenture, but only with the written consent, given as provided in the Senior Indenture, of the holders of at least a majority in aggregate principal amount of the Bonds Outstanding at the time such consent is given, and in case less than all of the Bonds then Outstanding are affected by the modification or amendment, of the holders of at least a majority in aggregate principal amount of the Bonds 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 so affected remain Outstanding, the consent of the holders 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 under these provisions. Notwithstanding the foregoing, no modification or amendment contained in any such Supplemental Indenture shall permit any of the following, without the consent of each Bondholder whose rights are affected thereby: (a) a change in the terms of stated maturity or redemption of any Bond or of any installment of interest thereon; (b) a reduction in the principal amount of or redemption premium on any Bond or in the rate of interest thereon or a change in the coin or currency in which such Bond is payable; (c) the creation of a lien on or a pledge of any part of the Trust Estate which has priority over or parity with (to the extent not permitted under the Senior Indenture) the lien or pledge granted to the Bondholders under the Senior Indenture (but this provision shall not apply to the release of any part of the Trust Estate as opposed to the creation of a prior or parity lien or pledge); (d) the granting of a preference or priority of any Bond or Bonds over any other Bond or Bonds, except to the extent permitted in the Senior Indenture; (e) a reduction in the aggregate principal amount of Bonds of which the consent of the Bondholders is required to effect any such modification or amendment; or (f) a change in the provisions of the Senior Indenture provisions relating to amendments and supplements. Notwithstanding the foregoing, the holder of any Bond may extend the time for payment of the principal of or interest on such Bond; provided, however, that upon the occurrence of an Event of Default, funds available under the Senior Indenture for the payment of the principal of and interest on the Bonds shall not be applied to any payment so extended until all principal and interest payments which have not been extended have first been paid in full. Notice of any Supplemental Indenture executed pursuant to the provisions described above shall be given to the Bondholders promptly following the execution thereof.

CONSENTS OF BONDHOLDERS AND OPINIONS

Each Supplemental Indenture executed and delivered pursuant to the provisions described under "Supplemental Indentures Requiring Bondholders' Consent" shall take effect only when and as provided below. A copy of such Supplemental Indenture (or brief summary thereof or reference thereto in form approved by the Trustee), together with a request to Bondholders for their consent thereto in form satisfactory to the Trustee, shall be sent by the Trustee to Bondholders, at the expense of the Commission, by first class mail, postage prepaid, provided that a failure to mail such request shall not affect the validity of the Supplemental Indenture when consented to as provided in the Senior Indenture. Such Supplemental Indenture shall not be effective unless and until there shall have been filed with the Trustee (a) the written consents of Bondholders of the percentage of Bonds specified above under "Supplemental Indentures Requiring Bondholders' Consent" given as provided in the Senior Indenture, and (b) an opinion of counsel acceptable to the Trustee stating that (1) the execution of such Supplemental Indenture is authorized or permitted by the Senior Indenture and (2) all conditions precedent to the execution and delivery of such Supplemental Indenture have been complied with, and an opinion of Bond Counsel that the execution and performance of such Supplemental Indenture shall not, in and of itself, adversely affect the federal income tax status of any Bonds, the interest on which is not included in gross income for federal income tax purposes. Any such consent shall be binding upon the Bondholder giving such consent and upon any subsequent holder of such Bonds and of any Bonds issued in exchange therefor or in lieu thereof (whether or not such subsequent Bondholder has notice thereof), unless such consent is revoked in writing by the Bondholder giving such consent or a subsequent holder of such Bonds by filing such revocation with the Trustee prior to the date the Trustee receives the material required in clauses (a) and (b) above.

Notwithstanding anything else in the Senior Indenture, if a Supplemental Indenture is to become effective on the same date as the date of issuance of Additional Bonds, the consents of the underwriters or purchasers of such Additional Bonds shall be counted for purposes of the Senior Indenture.

The Senior Indenture provides that Bonds which are to be disregarded under the last sentence of the definition of "Outstanding" shall not be deemed Outstanding for the purpose of consent or other action or any calculation of Outstanding Bonds provided for in Article X of the Senior Indenture. At the time of any consent or other action taken under Article X of the Senior Indenture or elsewhere in the Senior Indenture, the Commission shall furnish the Trustee a certificate of a Commission Official, upon which the Trustee may rely, describing all Bonds so to be excluded.

DISCHARGE OF BONDS

If (a) the principal of any Bonds and the interest due or to become due thereon, together with any redemption premium required by redemption of any of the Bonds prior to maturity, shall be paid, or is caused to be paid, or is provided for as described below under "Defeasance," at the times and in the manner to which reference is made in the Bonds, according to the true intent and meaning thereof, or the outstanding Bonds shall have been paid and discharged in accordance with the Senior Indenture, and (b) all of the covenants, agreements, obligations, terms and conditions of the Commission under the Senior Indenture shall have been kept, performed and observed and there shall have been paid to the Trustee, the Bond Registrar and the Paying Agents all sums of money due or to become due to them in accordance with the terms and provisions of the Senior Indenture, then the right, title and interest of the Trustee in the Trust Estate shall thereupon cease and the Trustee, on request of the Commission and at the expense of the Commission, shall release the Senior Indenture and the Trust Estate and shall execute such documents to evidence such release as may be reasonably required by the Commission and shall turn over to the Commission, or to such other Person as may be entitled to receive the same, all balances remaining in any Funds under the Senior Indenture except for amounts required to pay such Bonds or subject to the provisions of the Senior Indenture, held unclaimed in respect of Bonds which have matured or been redeemed pursuant to the Senior Indenture.

If payment or provision therefor is made with respect to less than all of the First Series Bonds of a maturity, the particular First Series Bonds within such maturity for which provision for payment shall have been made shall be selected as provided for a partial redemption.

DEFEASANCE

Provision for the payment of First Series Bonds shall be deemed to have been made when the Trustee holds in the Debt Service Fund or in a separate escrow account (1) cash in an amount sufficient to make all payments (including principal, premium, if any, and interest) specified above with respect to such First Series Bonds, or (2) direct non-callable obligations of the United States of America and securities fully and unconditionally guaranteed as to the timely payment of principal and interest by the United States of America, to which direct obligation or guarantee the full faith and credit of the United States of America has been pledged, Refcorp interest strips, CATS, TIGRS, STRPS, or defeased municipal bonds rated "AAA" by S&P or "Aaa" by Moody's (or any combination of the foregoing), or (3) any combination of cash and obligations described in clause (2) above the amounts of which and interest thereon, when due, are or will be, in the aggregate, sufficient (together with any earnings thereon) to make all such payments.

Neither the moneys nor the obligations deposited with the Trustee as provided above shall be withdrawn or used for any purpose other than, and such obligations and moneys shall be segregated and held in trust for, the payment of the principal or redemption price of, premium, if any, on and interest on, the First Series Bonds (or portions thereof) to be no longer entitled to the lien of the Senior Indenture; provided that such moneys, if not then needed for such purpose, shall, to the extent practicable, be invested and reinvested in Government Obligations maturing on or prior to the Interest Payment Date next succeeding the date of investment or reinvestment.

Whenever moneys or obligations shall be deposited with the Trustee for the payment or redemption of First Series Bonds more than 90 days prior to the date that such First Series Bonds are to mature or be redeemed, the Trustee shall mail a notice to the Owners of First Series Bonds for the payment of which such moneys or obligations are being held at their registered addresses stating that such moneys or obligations have been deposited. Such notice shall also be sent by the Trustee to each Rating Agency then rating the First Series Bonds at the request of the Commission. Notwithstanding the foregoing, no provision for payment shall be deemed to have been made with respect to any First Series Bonds which are to be redeemed prior to their stated maturity until such First Series Bonds shall have been irrevocably called or designated for redemption on a date thereafter on which such First Series Bonds may be redeemed and proper notice of such redemption shall have been given or the Commission shall have given the Trustee, in form satisfactory to the Trustee, irrevocable instructions to give proper notice of such redemption.

In the event of a deposit of moneys or obligations for the payment or redemption of the First Series Bonds described above, the Commission shall cause to be delivered a verification report of a firm of nationally recognized independent certified public accountant confirming that the above-described requirements have been satisfied. If a forward supply contract is empty ed in connection with the advance refunding, (i) such verification report shall expressly state that the adequacy of the escrow to accomplish the refunding relies solely on the initial escrowed investments and the maturing principal thereof and interest income thereon and does not assume performance under or compliance with the forward supply contract, and (ii) the applicable escrow agreement shall provide that in the event of any discrepancy or difference between the terms of the forward supply contract and the escrow agreement (or the authorizing document, if no separate escrow agreement is utilized), the terms of the escrow agreement or authorizing document, if applicable, shall be controlling.

At such times as a First Series Bond shall be deemed to be paid under the Senior Indenture, as aforesaid, it shall no longer be secured by or entitled to the benefits of the Senior Indenture, except for the purposes of any such payment from such money or obligations.

APPENDIX D

FORM OF OPINION OF CO-BOND COUNSEL

__________, 2024

PENNSYLVANIA TURNPIKE COMMISSION
$280,495,000 Turnpike Revenue Refunding Bonds, First Series of 2024

To the Purchasers of the Bonds:

We have acted as Co-Bond Counsel to the Pennsylvania Turnpike Commission (the "Commission") in connection with the issuance by the Commission of its $280,495,000 Turnpike Revenue Refunding Bonds, First Series of 2024 (the "Bonds") on the date hereof.

The Bonds are issued under and pursuant to an Act of the General Assembly of Pennsylvania (the "General Assembly") approved July 18, 2007, P.L. 169, No. 44 ("Act 44"), as amended and supplemented by an Act of the General Assembly approved November 25, 2013, P.L. 974, No. 89 ("Act 89"); various Acts of the General Assembly approved on several dates, including the Act of May 21, 1937, P.L. 774; the Act of May 24, 1945, P.L. 972; the Act of February 26, 1947, P.L. 17; the Act of May 23, 1951, P.L. 335; the Act of August 14, 1951, P.L. 1232; and the Act of September 30, 1985, P.L. 240 to the extent not repealed by Act 44 (collectively with Act 44 and Act 89, the "Enabling Acts"), the resolutions of the Commission adopted on October 3, 2023, as amended on March 5, 2024 (the "Resolution"), and pursuant to and under an Amended and Restated Trust Indenture dated as of March 1, 2001, between the Commission and U.S. Bank Trust Company, National Association (successor trustee to First Union National Bank), as trustee, as amended and supplemented (as previously amended and supplemented, the "Restated Indenture"), including as supplemented by Supplemental Trust Indenture No. 76 dated as of September 1, 2024 (the "Supplemental Indenture," and together with the Restated Indenture, the "Indenture"). Capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Indenture.

The Bonds will bear interest at the fixed rates and mature in the amounts and on the dates set forth in the Official Statement of the Commission related to the Bonds. The Bonds will be issued only as fully registered bonds, in denominations of $5,000 and integral multiples of $5,000 in excess thereof. The Bonds are subject to mandatory and optional redemption prior to maturity as more fully described in the Indenture.

The proceeds of the Bonds, together with other available funds, will be used to finance the costs of: (i) the current refunding of all or a portion of the Commission's outstanding Turnpike Revenue Bonds, Series A of 2012, Turnpike Revenue Bonds, Series A of 2014 and Turnpike Revenue Bonds, Series C of 2014; and (ii) paying the costs of issuing the Bonds.

We have examined the proceedings relating to the authorization and issuance of the Bonds, including, among other things: (a) the Enabling Acts; (b) a certified copy of the Resolution; (c) executed copies of the Restated Indenture and the Supplemental Indenture; (d) various certificates executed by the Commission and/or the Trustee including certificates as to the authentication and delivery of the Bonds and a certificate with regard to Sections 103 and 141 through 150 of the Internal Revenue Code of 1986, as amended (the "Code"); (e) the opinion of Doreen A. McCall, Esquire, Chief Counsel to the Commission, on which we have relied; (f) the Form 8038-G of the Commission with respect to the Bonds; (g) an executed counterpart of the certificate relating to federal tax matters; (h) other documents, certificates and instruments listed in the Closing Memorandum in respect of the Bonds filed with the Trustee on the date of original delivery of the Bonds; and (i) such constitutional and statutory provisions and such other resolutions, certificates, instruments and documents as we have deemed necessary or appropriate in order to enable us to render an informed opinion as to matters set forth herein. We have also examined a fully executed and authenticated Bond and we assume all other Bonds are in such form and are similarly executed and authenticated.

In rendering our opinion, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as copies and the authenticity of certificates of public officials. As to any facts material to our opinion, we have assumed the validity of and have not undertaken any investigation to verify the factual matters set forth in such agreements, certificates and other documents, and we have relied on the covenants, warranties and representations made by the Commission and the Trustee in such certificates and in the Indenture. We have also assumed that the documents referred to herein have been duly authorized by all parties thereto other than the Commission and are, where appropriate, legally binding obligations of, and enforceable in accordance with their terms against, all such other parties, except the Commission, and that the actions required to be taken and consent required to be obtained by such parties, have been taken or obtained. We do not render any opinion with respect to the adequacy of security for the Bonds or the sources of payment in respect of the Bonds.

Based upon and subject to the foregoing and the additional assumptions, qualifications and limitations set forth below, we are of the opinion that:

1. The Commission is a body corporate and politic, is validly existing under the laws of the Commonwealth of Pennsylvania (the "Commonwealth") and has the corporate power to enter into the transactions contemplated by the Supplemental Indenture and to carry out its obligations thereunder and to issue and deliver the Bonds.

2. The Bonds have been duly and validly authorized and issued by the Commission and constitute the valid and binding limited obligations of the Commission, enforceable against the Commission in accordance with their terms, payable from the sources provided therefor in the Indenture, except as such enforcement may be limited by laws relating to bankruptcy, insolvency, reorganization, receivership, arrangement, moratorium and other laws affecting creditors' rights, by equitable principles, whether considered at law or in equity, and by the exercise of judicial discretion in appropriate cases.

3. The Supplemental Indenture has been duly authorized, executed and delivered by the Commission and constitutes the valid and binding obligation of the Commission in accordance with its terms, except as such enforcement may be limited by laws relating to bankruptcy, insolvency, reorganization, receivership, arrangement, moratorium and other laws affecting creditors' rights, by equitable principles, whether considered at law or in equity, and by the exercise of judicial discretion in appropriate cases.

4. Under the laws of the Commonwealth, as enacted and construed on the date hereof, interest on the Bonds is free from taxation for state and local purposes within the Commonwealth of Pennsylvania, but such exemption does not extend to gift, estate, succession or inheritance taxes or any other taxes not levied or assessed directly on the Bonds or the interest thereon. Specifically, the interest on the Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax.

5. Interest on the Bonds is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions. The opinion set forth in the preceding sentence is subject to the condition that the Commission complies with all applicable federal income tax law requirements that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon continues to be excluded from gross income for purpose of federal income taxation. Failure to comply with certain of such requirements could cause the interest on the Bonds to be includable in gross income retroactive to the date of issuance of the Bonds. The Commission has covenanted to comply with all such requirements. Interest on the Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax; however, such interest is taken into account in determining the annual adjusted financial statement income of applicable corporations (as defined in Section 59(k) of the Code) for the purpose of computing the alternative minimum tax imposed on corporations.

We express no opinion regarding any other federal, state or local tax consequences relating to the Bonds or the receipt of interest thereon.

We express no opinion herein on the adequacy, completeness or accuracy of any official statement, placement memorandum or other disclosure document pertaining to the offering of the Bonds. We express no opinion as to the availability of specific performance or other equitable relief.

This opinion is rendered on the basis of, and limited to, federal law and the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof, and we express no opinion with respect to the laws of any other state or jurisdiction. In particular, we call to your attention that the Bonds are not in any way a debt or liability of the Commonwealth of Pennsylvania or any instrumentality, agency or political subdivision thereof other than the Commission, nor do the Bonds or the Indenture pledge the general credit or taxing power of the Commonwealth of Pennsylvania or any instrumentality, agency or political subdivision thereof. The Commission has no taxing power.

This opinion is limited to the matters expressly stated herein. No implied opinions are to be inferred to extend this opinion beyond the matters expressly stated herein. This opinion is given as of the date hereof, and we express no opinion as to any matter not set forth in the numbered paragraphs herein. We assume no obligation to update or supplement this opinion to reflect, or to otherwise advise you of, any facts or circumstances which may hereafter come to our attention or any changes in facts, circumstances or law which may hereafter occur.

This opinion is rendered solely for your benefit, may be relied upon by you solely in connection with the transactions contemplated hereby, and may not be relied upon by you for any other purpose, or by any other person for any purpose, in each case without our written consent.

Very truly yours,

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APPENDIX E

DEBT SERVICE REQUIREMENTS OF THE TURNPIKE SENIOR, SUBORDINATE AND SPECIAL REVENUE BONDS

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APPENDIX E - DEBT SERVICE REQUIREMENTS OF THE TURNPIKE SENIOR, SUBORDINATE AND SPECIAL REVENUE BONDS

Fiscal Year	Existing Debt Service from Turnpike Senior Revenue Bonds (Excluding EB-5 Loans)[1,2,3,4,5,6,7]	EB-5 Loans[4,8]	Existing Debt Service from Turnpike Senior Revenue Bonds (Including EB-5 Loans)[1,2,3,4,5,6,7,8]	Turnpike Revenue Refunding Bonds, First Series of 2024			Total Debt Service from Turnpike Senior Revenue Bonds (Including EB-5 Loans)[1,2,3,4,5,6,7,8]	Total Debt Service from Subordinate Revenue Bonds[1,4,5,9]	Total Debt Service from Special Revenue Bonds[4,5,9]	Aggregate Debt Service[1,2,3,4,5,6,7,8,9]
				Principal	Interest	Total				
2025	$ 316,198,313	$ 1,069,769	$ 317,268,082	$ -	$ 3,389,315	$ 3,389,315	$ 320,657,397	$ 182,240,948	$ 31,244,202	$ 534,142,547
2026	481,976,139	3,504,250	485,480,389	-	14,024,750	14,024,750	499,505,139	410,739,830	58,442,798	968,687,767
2027	456,365,362	3,715,500	460,080,862	1,905,000	14,024,750	15,929,750	476,010,612	430,785,311	75,939,497	982,735,420
2028	460,927,162	3,715,500	464,642,662	-	13,929,500	13,929,500	478,572,162	435,236,738	77,469,773	991,278,672
2029	453,001,559	3,715,500	456,717,059	12,910,000	13,929,500	26,839,500	483,556,559	445,230,688	79,247,302	1,008,034,549
2030	488,118,270	3,715,500	491,833,770	-	13,284,000	13,284,000	505,117,770	446,361,719	77,619,343	1,029,098,832
2031	488,736,308	3,715,500	492,451,808	4,240,000	13,284,000	17,524,000	509,975,808	450,295,124	79,175,802	1,039,446,734
2032	494,526,530	3,715,500	498,242,030	-	13,072,000	13,072,000	511,314,030	451,603,886	81,284,519	1,044,202,435
2033	496,843,902	3,715,500	500,559,402	-	13,072,000	13,072,000	513,631,402	453,181,110	83,575,935	1,050,388,446
2034	492,716,930	3,715,500	496,432,430	-	13,072,000	13,072,000	509,504,430	458,910,486	85,834,455	1,054,249,370
2035	498,640,990	3,715,500	502,356,490	-	13,072,000	13,072,000	515,428,490	466,086,201	87,504,466	1,069,019,157
2036	498,600,284	3,715,500	502,315,784	-	13,072,000	13,072,000	515,387,784	470,055,190	92,891,562	1,078,334,536
2037	498,535,189	3,715,500	502,250,689	-	13,072,000	13,072,000	515,322,689	475,803,163	96,006,802	1,087,132,654
2038	498,482,544	3,715,500	502,198,044	-	13,072,000	13,072,000	515,270,044	479,866,428	98,415,271	1,093,551,743
2039	465,667,158	3,715,500	469,382,658	31,105,000	13,072,000	44,177,000	513,559,658	481,767,065	83,156,011	1,078,482,734
2040	427,748,010	3,715,500	431,463,510	34,215,000	11,516,750	45,731,750	477,195,260	413,733,179	59,066,856	949,995,294
2041	427,265,625	3,715,500	430,981,125	37,565,000	9,806,000	47,371,000	478,352,125	470,435,331	60,008,620	1,008,796,076
2042	419,030,849	3,715,500	422,746,349	41,095,000	7,927,750	49,022,750	471,769,099	467,239,683	53,099,583	992,108,365
2043	423,713,176	3,715,500	427,428,676	44,860,000	5,873,000	50,733,000	478,161,676	347,739,068	38,842,231	864,742,975
2044	422,830,074	3,715,500	426,545,574	48,870,000	3,630,000	52,500,000	479,045,574	323,159,804	24,654,434	826,859,811
2045	427,404,315	3,715,500	431,119,815	23,730,000	1,186,500	24,916,500	456,036,315	271,068,731	5,176,815	732,281,861
2046	380,176,292	3,715,500	383,891,792	-	-	-	383,891,792	254,724,756	-	638,616,549
2047	351,242,409	3,715,500	354,957,909	-	-	-	354,957,909	201,541,681	-	556,499,590
2048	291,845,771	3,715,500	295,561,271	-	-	-	295,561,271	163,053,669	-	458,614,939
2049	268,974,953	3,715,500	272,690,453	-	-	-	272,690,453	159,947,600	-	432,638,053
2050	239,624,005	11,660,500	251,284,505	-	-	-	251,284,505	96,251,200	-	347,535,705
2051	144,793,900	17,163,250	161,957,150	-	-	-	161,957,150	86,631,600	-	248,588,750
2052	144,970,175	17,161,000	162,131,175	-	-	-	162,131,175	24,048,400	-	186,179,575
2053	100,794,500	17,164,250	117,958,750	-	-	-	117,958,750	-	-	117,958,750
2054	78,172,713	17,166,000	95,338,713	-	-	-	95,338,713	-	-	95,338,713
2055	44,512,188	7,024,500	51,536,688	-	-	-	51,536,688	-	-	51,536,688
TOTAL	**$ 11,682,435,592**	**$ 177,370,019**	**$ 11,859,805,612**	**$ 280,495,000**	**$ 230,381,815**	**$ 510,876,815**	**$ 12,370,682,427**	**$ 9,817,738,587**	**$ 1,428,656,275**	**$ 23,617,077,289**

(1) Swapped variable rate debt is assumed to pay at the associated fixed swap rate plus an additional fixed spread. Swap assignments are subject to adjustment by the Commission. As only a portion of principal on the Series B of 2023 Bonds is swapped, the interest rate is calculated as a weighted average between a) an assumed rate of 4.0% plus a fixed spread for the unswapped portion and b) the swap rate plus a fixed spread for the swapped portion, based on the outstanding principal amounts of unhedged and hedged bonds.

(2) Interest reflects anticipated receipt of federal subsidy with respect to Build America Bonds, subject to applying the 5.7% sequestration reduction through maturity. For information regarding the effects of sequestration on the federal subsidy payable with respect to the Commission's outstanding Build America Bonds, see "INVESTMENT CONSIDERATIONS - Reductions in federal subsidy payable to the Commission for its outstanding Build America Bonds due to sequestration" in this Official Statement.

(3) Reflects planned amortization of Second Series of 2019 Bonds, Series of 2020 Bonds, Series A of 2020 Bonds, and Series B of 2023 Bonds. To realize this planned amortization, the Commission expects that it will refinance such bonds prior to the expiry of associated Letters of Credit. Future refinancings are subject to market conditions and may be changed by the Commission. See APPENDIX A - "THE PENNSYLVANIA TURNPIKE COMMISSION - COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS."

(4) Total may not add due to rounding.

(5) All fixed rate debt is shown at the actual interest rate.

(6) Does not reflect the Line of Credit which has not been drawn or the October 2024 issuance of the Forward Delivery Bonds. See APPENDIX A - "THE PENNSYLVANIA TURNPIKE COMMISSION - COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS."

(7) Excludes debt service payments of bonds to be refunded by the First Series Bonds. See "PLAN OF FINANCE" in this Official Statement.

(8) Includes two tranches of EB-5 Loans (the tranche issued on November 6, 2019 and the tranche issued on January 22, 2020). Debt service shown assumes conversion to additional bonds under the Turnpike Senior Revenue Bond Indenture at the maturity dates of the EB-5 Loans consistent with the terms of the original EB-5 loan agreement. The debt structure remains subject to additional adjustment at the Commission's discretion. See APPENDIX A - "THE PENNSYLVANIA TURNPIKE COMMISSION - COMMISSION INDEBTEDNESS AND OTHER OBLIGATIONS."

(9) Amounts are inclusive of compounded interest on the convertible capital appreciation bonds and capital appreciation bonds.

APPENDIX F

TRAFFIC STUDY

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Pennsylvania Turnpike 2023 Traffic and Revenue Forecast Study

PENNA TURN-PIKE

Pennsylvania Turnpike Commission

May 2023

CDM Smith

Table of Contents

List of Figures

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Chapter 1
Introduction

This report summarizes the analyses conducted by CDM Smith in developing a new detailed investment grade traffic and toll revenue estimates for the various toll facilities operated by the Pennsylvania Turnpike Commission (PTC). CDM Smith forecasts have been used by PTC for more than 25 years in support of the issuance of bond financing and for internal financial planning, with regular periodic updates to have up-to-date traffic and revenue forecasts based on the most current information available.

CDM Smith last developed a detailed investment grade traffic and toll revenue study in April 2018. Since that time additional "bring down" letters have also been developed to update forecasts developed in the 2018 Study. Bring down letters were developed in April 2019, May 2020, December 2020, May 2021, and July 2022. The purpose of a bring down letter is to update actual traffic and revenue experience since the last study and to adjust short-term (2- to 5-year) forecasts based on recent trends. Because CDM Smith does not conduct detailed economic analyses as part of a bring down letter, the longer-term forecasts set forth in the bring down letters were not adjusted from those originally developed as part of the 2018 investment grade study. Based on the advice of CDM Smith, the full investment grade study was delayed to 2023 to capture long-term implications from the COVID-19 pandemic and socio-economic changes that may occur and impact traffic trends in the long term.

This current study includes a comprehensive evaluation of the most currently available long-term socioeconomic forecasts and is therefore meant to be an update of the April 2018 investment grade study. This forecast is benchmarked to current traffic and revenue of the various PTC toll facilities, including average toll rates, payment types, and collection rates and includes updated long-term traffic and revenue forecasts through FY 2052-53 (the "forecast period"). PTC's most recent assumptions regarding future toll rate increases, discount levels for the Commercial Volume Discount Program, and future committed capital improvements have been incorporated into this study. CDM Smith also developed and incorporated estimates of future year E-ZPass penetration for passenger cars (PCs) and commercial vehicles (CVs) on PTC's toll facilities. In addition, CDM Smith has included estimated short-term traffic and revenue impacts that would be consistent with the possibility of a mild recession beginning later this year, consistent with the Federal Reserve's forecast assumption.

1.1 Report Structure

This report is comprised of four chapters, as follows:

Chapter 1: Introduction

Chapter 2: Turnpike Characteristics

Chapter 3: Socioeconomic Trends and Forecasts

Chapter 4: Transaction and Toll Revenue Forecasts

The following is a brief description of each chapter following this introduction.

Chapter 2 (Turnpike Characteristics) provides a review of monthly and annual transaction and toll revenue trends. Data are provided for passenger cars and commercial vehicles separately. Information is provided for the entire Turnpike System as well as for each of the individual toll facilities (Ticket System, Turnpike 43, etc.) that make up the Turnpike System. E-ZPass market share trends, historical toll rate adjustments, and changes to the Commercial Volume Discount Program are also summarized in Chapter 2.

Chapter 3 (Socioeconomic Trends and Forecasts) summarizes trends and forecasts in key socioeconomic variables, including population, employment, retail sales, and gross regional product. This data is broken down (at a county level) to reflect the actual market share for the various interchanges on the Turnpike System. Pennsylvania statewide data, as well as data for surrounding states and the United States, are also provided for each of these variables. Trends and forecasts in motor fuel prices are also covered in this chapter. The methodology used to estimate future traffic growth is described in detail. The ultimate product of Chapter 3 is a table showing the assumed normal growth rates used to develop traffic and toll revenue estimates for passenger cars and commercial vehicles for each Turnpike toll facility.

Chapter 4 (Transaction and Toll Revenue Forecasts) begins with a review of the assumed roadway improvement program for the Pennsylvania Turnpike. Planned toll rate adjustments throughout the 30-year forecast period are identified. Because of the toll differential that exists between Toll By Plate (TBP) and E-ZPass transactions, assumptions regarding future E-ZPass market share are important. All assumptions regarding E-ZPass market share throughout the forecast period are discussed in this chapter. Finally, estimates of traffic and gross toll revenue are provided through FY 2052-53. Forecasts are provided for passenger cars and commercial vehicles for both the Ticket System and the total Barrier System, as well as for the total Turnpike System. Lastly, adjustments are made to the toll revenue forecasts to account for TBP bad debt expenses. TBP “bad debt expense” is the term PTC uses to describe the portion of TBP invoices that are not paid. Bad debt expense can occur for a number of reasons, such as customer behaviors (including both confusion and theft) or system/data issues.

Chapter 2

Turnpike Characteristics

This chapter presents historical transaction and gross toll revenue trends on Turnpike facilities. **Section 2.1** describes Turnpike facilities, **Section 2.2** discusses historical toll rates and the Commercial Volume Discount Program, **Section 2.3** summarizes annual transaction trends, **Section 2.4** examines monthly transactions and gross toll revenue trends, **Section 2.5** compares measures of commercial activity against transaction trends, **Section 2.6** summarizes annual transaction and gross toll revenue trends, and **Section 2.7** discusses E-ZPass market share.

2.1 The Pennsylvania Turnpike Facilities

Figure 2-1 provides an overview of the Turnpike System, identifying each of its six toll facilities:

- Mainline I-76/I-276/I-95 from Ohio to New Jersey (359 miles) – This includes the barrier plazas at Gateway and Delaware River Bridge. I-80, which is toll-free and follows a similar east-west route across the state is a major competing route to the Mainline.
- Northeast Extension I-476 (110 miles) – This includes the Clarks Summit and Keyser Avenue barrier plazas.
- Turnpike 43 – Mon/Fayette Expressway (48 miles)
- Turnpike 66 – Amos K. Hutchinson Bypass (13 miles)
- Turnpike I-376 – Beaver Valley Expressway (16 miles)
- Turnpike I-576 – Southern Beltway (19 miles)

There are two toll collection systems on the Turnpike System: a Ticket System and a Barrier System. On the Ticket System, the motorist's toll rate varies depending on vehicle class, trip length, and payment type. At Barrier plazas, a defined toll amount is charged for each vehicle class and payment type passing through that point.

The Ticket System is comprised of the majority of Mainline I-76/I-276/I-95 (from Interchange 30 [Warrendale] in western Pennsylvania to Interchange 353 [Neshaminy Falls] near the New Jersey border) and the majority of the Northeast Extension (from Interchange 20 [Mid-County] to Interchange 131 [Wyoming Valley]). The Barrier System is comprised of Turnpike I-376 (Beaver Valley Expressway), Turnpike 66 (Amos K. Hutchinson Bypass), Turnpike 43 (Mon/Fayette Expressway), and Turnpike I-576 (Southern Beltway). There are also two barrier plazas on the Mainline I-76/I-276/I-95: Gateway (plaza 2) and the Delaware River Bridge (DRB) (plaza 359). Both Gateway and DRB have been converted from Ticket System plazas to Barrier System plazas, with conversions occurring in June 2003 for Gateway and January 2016 for DRB.

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Note: I-80 is not part of the Pennsylvania Turnpike System and is shown for comparative purposes only.

Figure 2-1
Pennsylvania Turnpike Commission Toll Road Facilities

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The Ticket System is by far the largest component of the Turnpike System. As seen in **Figure 2-2**, the Ticket System accounted for 83.8% of the Turnpike System's total gross toll revenue, and 71.3% of the total transactions in calendar year 2022. Fixed barrier locations accounted for only 16.2% of gross toll revenue and 28.7% of transactions.

2.2 Toll Rates and Commercial Volume Discount Program

2.2.1 Payment Options

The PTC began converting its facilities to all-electronic tolling starting with the Delaware River Bridge in 2016. The last two systems to convert to AET were the Ticket System, which converted in March 2020, and the Mon/Fayette Expressway, which converted in June 2020. All PTC facilities accept payment by electronic toll collection (ETC) via an E-ZPass transponder or Toll By Plate (TBP) video tolling, where an invoice is sent to registered owners of vehicles that pass through a tolling point without an E-ZPass transponder.

2.2.2 Historical Toll Rate Increases and E-ZPass vs. Cash/TBP Toll Differential

Since 2009, PTC has implemented annual toll rate increases on or close to January 1. Prior to 2009, toll rates were increased at irregular intervals. **Table 2-1** shows the toll rate changes since 1987. The rate increases were generally systemwide, with a few exceptions as noted.

Table 2-1 Historical Toll Rate Increases

	Percent Increase		
Date	Cash/TBP (1)	E-ZPass	Comment
1/2/1987	40.0	NA	E-ZPass was not yet implemented on the Turnpike
6/1/1991	32.0	NA	E-ZPass was not yet implemented on the Turnpike
8/1/2004	42.5	42.5	
1/4/2009	25.0	25.0	No increase on Findlay Connector or MFE between Uniontown and Brownsville
1/3/2010	3.0	3.0	No increase on Findlay Connector
1/2/2011	10.0	3.0	No increase on Findlay Connector
1/1/2012	10.0	0.0	No increase on Findlay Connector
1/6/2013	10.0	2.0	
1/5/2014	12.0	2.0	No increase on Findlay Connector
1/4/2015	5.0	5.0	No increase on Findlay Connector
1/3/2016	6.0	6.0	No increase on Findlay Connector; DRB converted from ticket system to barrier system and rate changes implemented
1/8/2017	6.0	6.0	No increase on Findlay Connector or DRB
1/7/2018	6.0	6.0	No increase on Findlay Connector, DRB, or the Northeast Extension barrier facilities
4/29/2018	6.0	6.0	Northeast Extension barrier facilities only (2)
6/3/2018	6.0	6.0	Findlay Connector only (2)
1/6/2019	6.0	6.0	
10/27/2019	6.0	6.0	BVE, AKH, and Gateway only; additional 45% surcharge over cash rate added to TBP rate at these locations
1/5/2020	6.0	6.0	No increase on BVE, AKH, or Gateway
1/3/2021	6.0	6.0	Additional 45% surcharge over cash rate added to TBP rate for Ticket System and MFE
1/2/2022	5.0	5.0	No increase on Southern Beltway
1/8/2023	5.0	5.0	

(1) Beginning in 2016, all cash toll rate increases also reflect TBP toll rate increases.

(2) Toll rate increase coincided with vehicle classification changes from a weight-based to an axle-based system.

CDM Smith

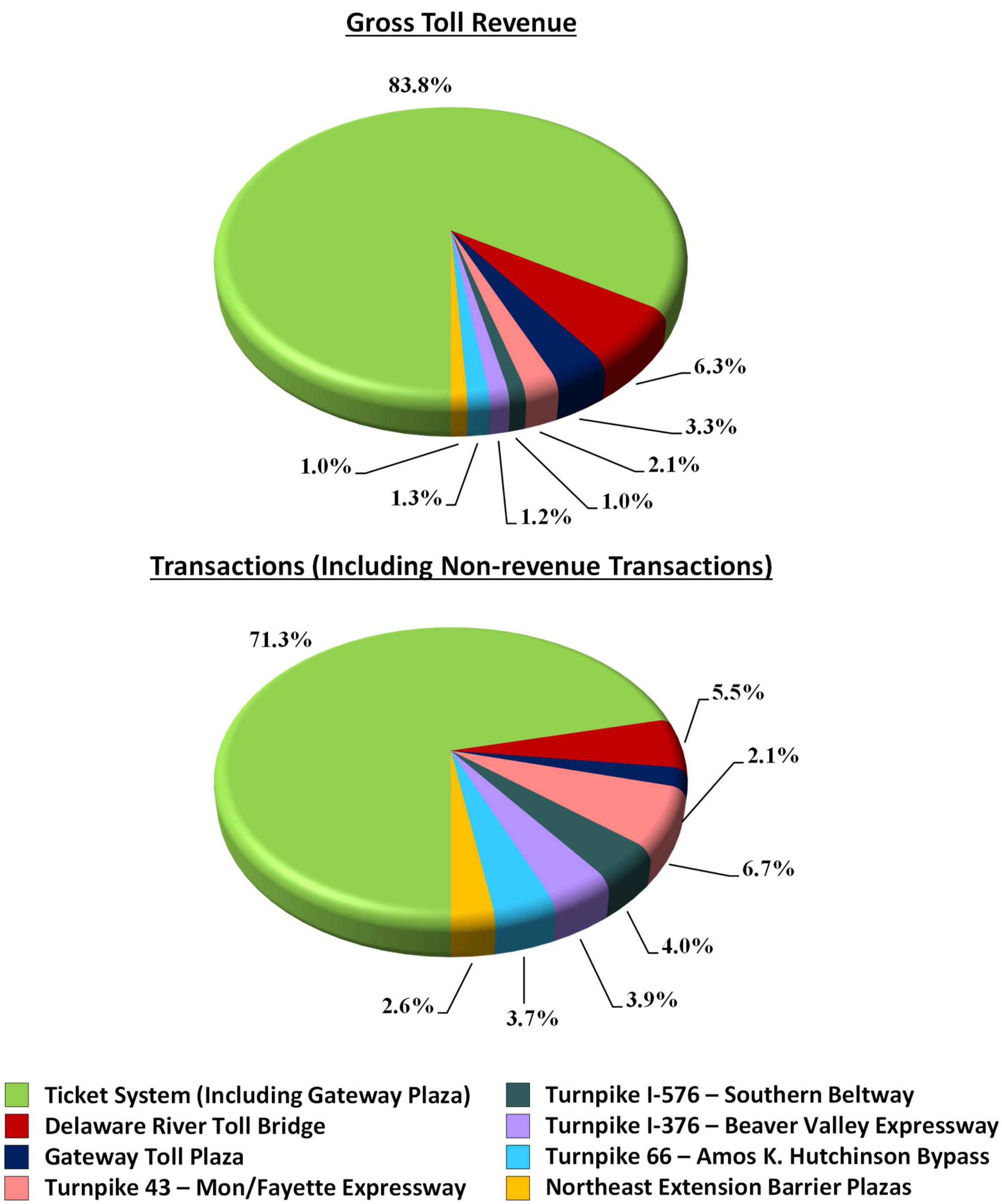

Figure 2-2
Percent of Calendar Year 2022 Transactions and Gross Toll Revenue by Facility

E-ZPass was phased in beginning in 2001. Initially, E-ZPass tolls and cash tolls were identical, but in 2011, cash tolls were increased by 10.0% over 2010 while E-ZPass tolls were increased by 3.0%, creating a toll differential between the two methods of payment. In 2011, cash tolls were about 7% greater than E-ZPass tolls. The toll differential was increased through 2014, when the cash toll was about 40% more than the E-ZPass toll. As AET was introduced to the PTC system, an additional 45% surcharge was imposed to offset leakage associated with TBP transactions while remaining revenue neutral and incentivizing E-ZPass participation. The resulting toll imposed on TBP transactions is now about double the E-ZPass rate. The Ticket System and Mon/Fayette Expressway were the last systems where this 45% surcharge was implemented, which occurred on January 3, 2021.

PTC plans to continue annual toll rate increases through the forecast period, and the toll rate increases are expected to be the same for E-ZPass and TBP. The planned annual rate increases are shown in **Table 4-2**.

2.2.3 Per-Mile Toll Rates

In 2023, a passenger car using E-ZPass pays $0.15 per-mile to travel the length of the Mainline, from the Gateway Toll Plaza to the Delaware River Bridge compared to $0.29 per mile for the same trip using TBP. **Figure 2-3** compares 2023 passenger-car per-mile toll rates for a through trip on 47 sample U.S. toll facilities. The per-mile rates are provided for ETC and TBP/video/cash payments. If the facility is AET, the license plate or TBP/video per-mile toll is represented in the TBP/video/cash column. The data is sorted from low to high by the ETC per-mile toll rates. When sorted this way, the Turnpike Mainline is situated 24th, exactly in the middle, of these 47 facilities in terms of per-mile costs for passenger cars using ETC. However, due to the nearly 100% per-mile toll differential between ETC and TBP transactions, the Turnpike Mainline is the 15th most expensive of these facilities for passenger cars paying via TBP/video or cash. This 100% per-mile toll differential is similar to that of other legacy toll road facilities that have converted to AET in recent years, including facilities operated by the Illinois Tollway and Maryland Transportation Authority (MDTA). Compared to the two connecting turnpike systems, the passenger car per-mile E-ZPass rate is very similar to the $0.16 rate of the New Jersey Turnpike at the eastern end of the state but about two and half times the $0.06 rate of the Ohio Turnpike at the western end of the state.

Figure 2-4 presents a similar comparison of five-axle commercial vehicle per-mile toll rates for through trips on the same 47 sample U.S. toll facilities. A trip on the Mainline from the Gateway Toll Plaza to the Delaware River Bridge costs $1.08 per mile for TBP customers as compared to $0.55 per mile for E-ZPass customers in 2023. Per-mile rates for five-axle commercial vehicles are relatively more expensive on the Turnpike Mainline compared to this sample of facilities, with ETC trips ranking as the 19th most expensive and TBP/video/cash rates ranking as the 16th most expensive. As with passenger car rates, the per-mile E-ZPass rate for commercial vehicles is very similar to the $0.54 per-mile E-ZPass rate for the New Jersey Turnpike, but almost three times the $0.19 per-mile of the Ohio Turnpike.

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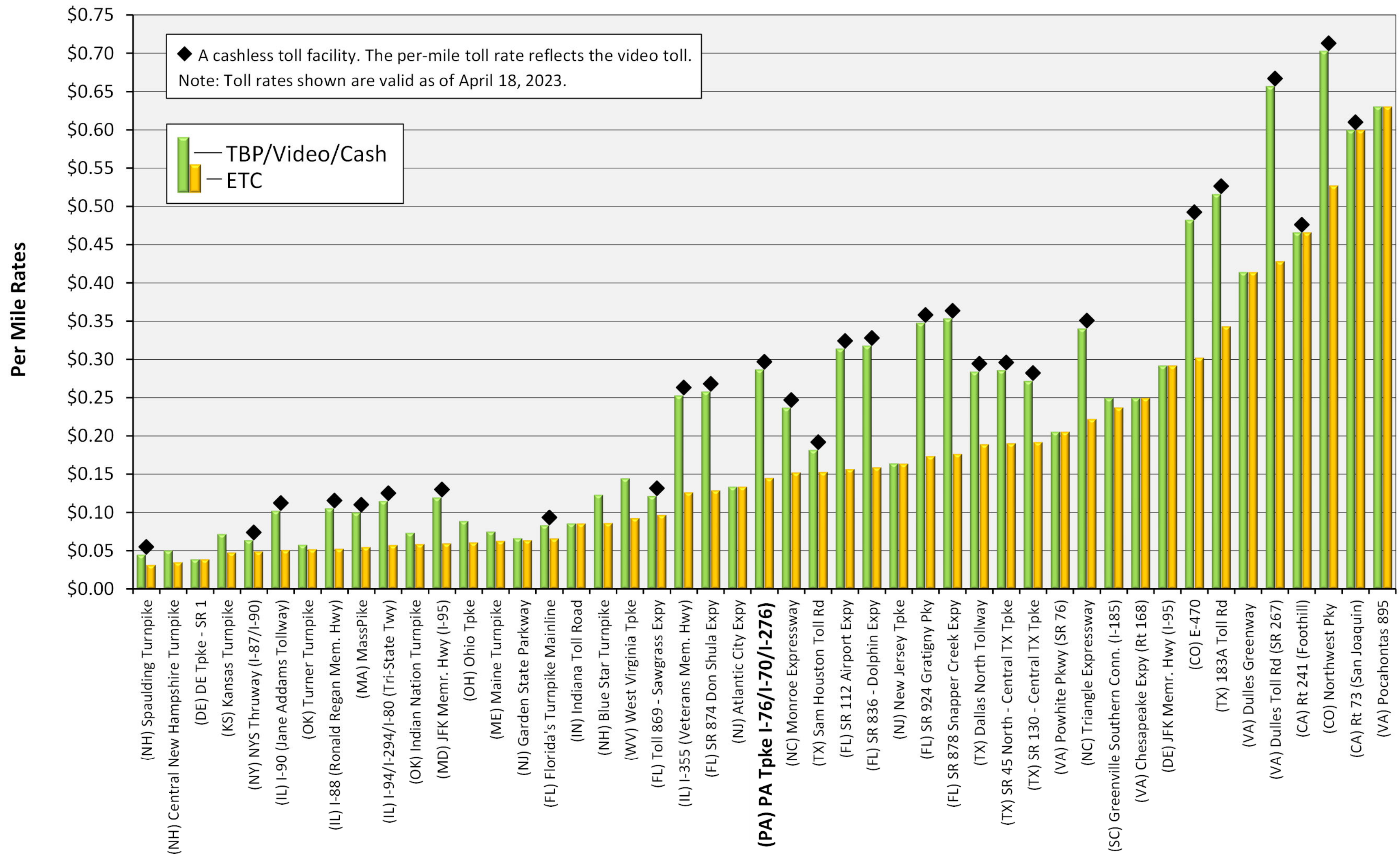

Figure 2-3
Comparison of 2023 Passenger Car Per-Mile Through Trip Toll Rates (Data Sorted by ETC Toll Rates)

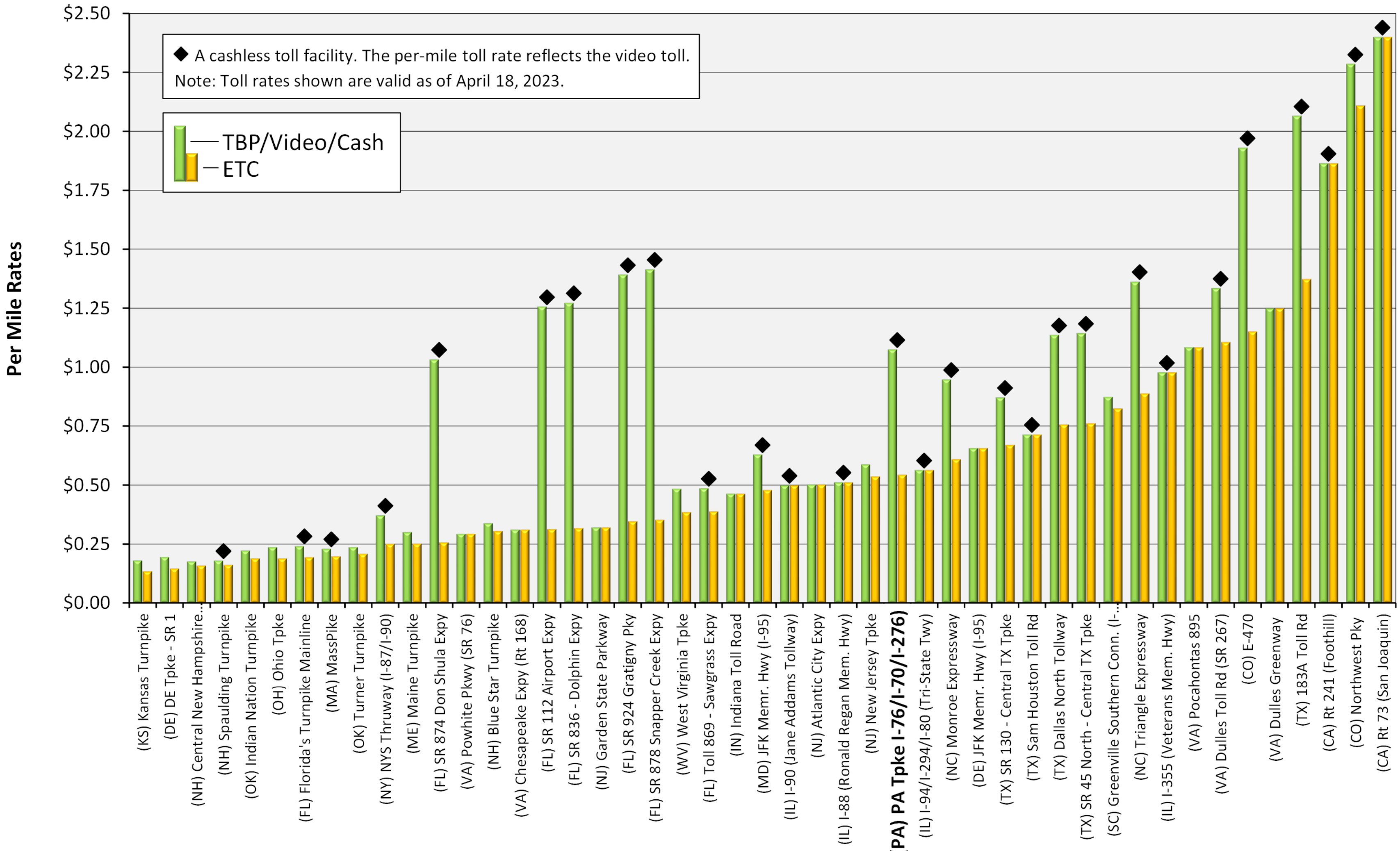

Figure 2-4
Comparison of 2023 Five-Axle Vehicle Per-Mile Through Trip Toll Rates (Data Sorted by ETC Toll Rates)

2.2.4 Commercial Volume Discount Program

The PTC operates a Commercial Volume Discount Program. Prior to the implementation of system-wide toll rates favorable to E-ZPass customers, a post-paid, commercial volume-discount program was established for high-volume, commercial E-ZPass accounts. Post-paid commercial E-ZPass customers could receive the varying levels of discounts based on the amount of their monthly tolls. With the implementation of E-ZPass and the large toll savings offered to E-ZPass customers, the Commercial Volume Discount Program was modified over the years. Currently,

commercial accounts that accrue greater than $20,000 per month on tolls receive a 3.0% discount.

2.3 Annual Daily Transaction Trends by Plaza

This section presents long-term annual transaction trends on the Ticket and Barrier Systems by toll plaza. Data is provided from 2007 through 2022 for Ticket and Barrier System toll plazas.

2.3.1 Ticket System Transaction Trends

Average annual daily transactions at the Ticket System's exiting toll plazas are shown in **Table 2-2**, **Table 2-3**, and **Table 2-4** for passenger cars, commercial vehicles, and total vehicles, respectively. The transactions include both revenue and non-revenue vehicles. Transactions at the Gateway and Delaware River Bridge (DRB) barrier plazas are not included in this table.

Some important changes occurred on the Ticket System that are reflected in the tables. In January 2016, the eastern terminus of the Ticket System was changed from the DRB (plaza 359) to a new plaza at Neshaminy Falls (plaza 353), where tolls are collected in the eastbound direction exiting and reported as part of the Ticket System. At this time, the DRB was converted from the Ticket System to a barrier plaza with toll collection in the westbound direction leaving New Jersey and entering Pennsylvania. Concurrently, toll collection was ended at Delaware Valley (plaza 358).

Additionally, the DRB (plaza 359) was closed from January 20 through March 9, 2017 due to a fracture in one of the structural support beams. Although the DRB is on the Barrier System, the closure also negatively affected Ticket System traffic and revenue in January, February, and March 2017.

In the past 20 years four new interchanges opened on the Ticket System: Virginia Drive (milepost 340) in 2002, Street Road (milepost 352) in 2010, SR 29 (milepost 320) in 2012, and Route 903 (milepost 87) in 2015. These were opened as E-ZPass-only interchanges where no cash was accepted even prior to the entire Ticket System's conversion to AET.

In Tables 2-2 through 2-4 transaction trends are summarized by average annual percent change (AAPC) into the following four periods:

1. The 12-year period prior to the COVID-19 pandemic from 2007-2019;
2. The one-year change to 2020 from 2019 coinciding with a drastic decline in transactions due to the COVID-19 pandemic;

3. The two-year period subsequent to the onset of the COVID-19 pandemic from 2020-2022; and

4. The entire 15-year period from 2007-2022.

As shown in Table 2-2, passenger car transactions on the Ticket System grew an average of 0.1% annually from 2007 to 2019 before declining 30.3% in 2020 during the height of the pandemic. In 2021 and 2022, transactions experienced 12.0% AAPC. These growth patterns have resulted in fewer average daily passenger car transactions in 2022 than in 2007. The only interchanges to show growth over this period are 339, 340, and 31, all of which are located in Montgomery County in the eastern portion of the state.

Table 2-3 shows the same information for Ticket System commercial vehicles. While commercial vehicle transactions declined in 2008 and 2009 during the Great Recession, growth has consistently outpaced that of passenger cars since 2010. For the pre-pandemic period from 2007 to 2019, commercial vehicle transactions grew an average of 0.6% annually. Commercial vehicle transactions declined 4.5% between 2019 and 2020 but recovered with 6.6% AAPC from 2020 to 2022. As a result, over the last 15 years commercial vehicle transactions grew an average of 1.0% annually, with 2022 having recorded the most commercial vehicle transactions of any year for the entire Ticket System as well as most interchanges. Growth has been stronger in the eastern part of the state than the western part, as most interchanges east of the Tuscarora Mountain Tunnel (interchanges 189 and above and the Northeast Extension) have met or exceeded 1.5% AAPC from 2007 to 2022, while none of the interchanges to the west (interchanges 180 and below) have done so.

Total transaction trends are shown in Table 2-4. Because passenger cars comprise a significant majority of total Ticket System traffic, the trends largely follow those of passenger cars, with 0.2% AAPC from 2007 to 2019, a 26.4% decline in 2020, and 10.9% AAPC from 2020 to 2022 resulting in fewer daily transactions in 2022 than in 2007. Within this period, passenger car transactions declined less sharply than did commercial vehicle transactions in 2008 and 2009 but since 2010 average daily transactions for commercial vehicles has consistently been stronger than for passenger cars. As a result, the share of total transactions belonging to commercial vehicle transactions has also grown over the last 15 years, growing from about one of every seven transactions on the Ticket System in 2007 to more than one in six transactions in 2022.

Table 2-2 Passenger Cars – Average Daily Transactions on the Pennsylvania Turnpike Ticket System at Exiting Toll Plazas

Includes Revenue and Non-Revenue Vehicles

Interchange	Calendar Year																Average Annual Percent Change			
(Milepost)[1]	2007	2008	2009[2]	2010[2]	2011[2]	2012[2]	2013[2]	2014[2]	2015[2]	2016[2]	2017[2]	2018[2]	2019[2]	2020[2]	2021[2]	2022[2]	2007-19	2019-20	2020-22	2007-2022
30	11,940	12,056	12,232	12,118	12,023	11,939	12,413	12,339	12,542	12,704	12,844	12,805	12,357	8,547	10,342	10,448	0.3	(30.8)	10.6	(0.9)
39	5,613	5,627	5,495	5,527	5,333	5,416	5,832	5,855	5,540	5,821	5,699	5,606	5,509	4,067	4,807	4,935	(0.2)	(26.2)	10.1	(0.9)
48	9,406	9,226	9,087	8,879	8,576	8,734	9,171	9,147	8,882	9,101	8,889	8,756	8,533	6,055	6,941	7,094	(0.8)	(29.0)	8.2	(1.9)
57	18,198	18,305	18,083	17,452	17,172	17,130	17,399	17,336	17,792	17,660	17,576	17,169	16,660	11,752	13,662	13,854	(0.7)	(29.5)	8.6	(1.8)
67	9,614	9,068	8,674	8,776	8,718	8,955	8,870	8,783	9,037	8,807	8,675	8,606	8,380	6,205	7,098	7,230	(1.1)	(25.9)	7.9	(1.9)
75	8,806	8,522	8,433	8,550	8,246	8,539	8,556	8,701	8,861	8,545	8,405	8,299	8,095	5,971	7,127	7,111	(0.7)	(26.2)	9.1	(1.4)
91	2,478	2,395	2,351	2,371	2,279	2,352	2,393	2,344	2,403	2,385	2,447	2,391	2,355	1,965	2,289	2,223	(0.4)	(16.5)	6.4	(0.7)
110	2,067	2,119	2,104	2,136	2,159	2,156	2,048	2,027	2,101	2,048	2,065	2,052	2,095	1,534	1,975	1,950	0.1	(26.8)	12.8	(0.4)
146	3,059	2,994	2,972	2,945	2,848	2,779	2,715	2,773	2,803	2,746	2,707	2,430	2,453	1,662	2,182	2,294	(1.8)	(32.3)	17.5	(1.9)
161	6,216	6,005	6,356	6,262	6,064	6,023	6,057	6,000	6,087	5,916	5,777	5,418	5,289	3,615	4,729	4,582	(1.3)	(31.7)	12.6	(2.0)
180	711	675	655	658	645	610	593	586	608	608	627	594	596	509	549	542	(1.5)	(14.7)	3.2	(1.8)
189	440	426	409	418	409	391	378	385	406	421	442	405	425	349	412	406	(0.3)	(17.7)	7.7	(0.5)
201	662	614	603	642	634	628	625	594	605	650	669	624	603	456	539	536	(0.8)	(24.3)	8.4	(1.4)
226	4,973	4,736	4,628	4,899	4,705	4,541	4,637	4,667	4,813	4,541	4,642	4,477	4,429	2,854	3,580	3,654	(1.0)	(35.5)	13.1	(2.0)
236	4,661	4,507	4,470	5,074	4,883	4,689	4,762	4,846	5,181	5,128	5,207	5,088	5,198	3,121	3,897	4,182	0.9	(39.9)	15.8	(0.7)
242	5,265	6,068	5,894	5,476	5,371	5,159	5,295	5,530	5,823	5,615	5,656	5,546	5,721	3,525	4,163	4,506	0.7	(38.4)	13.1	(1.0)
247	9,902	10,073	9,952	10,478	10,155	9,948	10,074	10,175	10,598	10,521	10,535	10,271	9,986	6,320	8,120	8,752	0.1	(36.7)	17.7	(0.8)
266	3,740	3,577	3,484	3,571	3,442	3,519	3,621	3,640	3,815	3,940	4,066	4,067	4,251	2,828	3,646	3,685	1.1	(33.5)	14.2	(0.1)
286	7,397	7,060	6,910	6,937	6,766	6,736	6,886	7,026	7,393	7,545	7,713	7,679	7,307	5,197	6,469	6,530	(0.1)	(28.9)	12.1	(0.8)
298	7,446	7,448	7,176	7,018	6,789	6,588	6,737	7,022	7,383	7,501	7,564	7,576	7,426	5,119	6,036	6,155	(0.0)	(31.1)	9.7	(1.3)
312	11,011	10,635	10,234	10,353	10,315	10,347	10,444	10,692	10,522	10,186	9,963	9,677	9,518	5,933	6,933	6,935	(1.2)	(37.7)	8.1	(3.0)
320 [3]							3,539	4,667	5,223	5,292	5,453	5,420	5,522	3,032	3,685	3,829	-	(45.1)	12.4	-
326	27,069	26,975	27,783	29,284	28,965	28,780	28,066	28,423	29,777	30,197	30,737	31,199	31,328	19,805	25,155	26,162	1.2	(36.8)	14.9	(0.2)
333	11,312	11,848	11,904	12,166	12,093	11,860	11,811	11,598	11,235	11,319	11,313	11,245	11,092	7,054	8,325	9,189	(0.2)	(36.4)	14.1	(1.4)
20	36,659	35,518	34,961	35,236	35,478	36,231	36,441	36,305	37,726	38,010	37,978	37,442	37,505	28,248	34,787	35,889	0.2	(24.7)	12.7	(0.1)
339	21,203	20,312	20,989	22,973	23,265	23,582	23,852	23,849	24,711	24,709	24,910	24,528	24,642	17,616	21,171	21,934	1.3	(28.5)	11.6	0.2
340	1,537	1,521	1,370	1,422	1,447	1,409	1,484	1,627	1,721	1,842	1,913	1,904	1,948	1,144	1,438	1,624	2.0	(41.3)	19.1	0.4
343	26,054	25,277	25,165	26,569	26,178	25,858	25,323	24,896	25,105	25,628	25,447	25,239	25,608	18,679	22,373	22,992	(0.1)	(27.1)	10.9	(0.8)
351	29,917	29,315	29,196	29,690	28,170	27,512	27,316	26,689	27,226	27,475	27,137	26,289	25,334	16,985	19,914	20,735	(1.4)	(33.0)	10.5	(2.4)
352 [4]					1,805	2,146	2,384	2,676	2,949	3,111	3,826	3,802	3,913	2,587	3,803	3,938	-	(33.9)	23.4	-
353 [5]										20,067	18,835	20,782	20,218	13,201	17,300	18,109	-	(34.7)	17.1	-
358 [5]	5,917	5,964	5,767	5,716	5,538	5,386	5,090	4,950	4,951								-	-	-	-
359 [6]	17,727	17,274	16,943	17,255	16,846	16,164	16,333	16,608	17,943								-	-	-	-
31	13,304	13,389	13,431	13,432	12,950	12,742	12,669	12,472	12,853	13,033	13,741	14,501	15,100	11,105	13,101	13,955	1.1	(26.5)	12.1	0.3
44	8,235	8,313	8,399	8,478	8,157	8,040	8,021	7,953	8,091	8,248	8,090	8,242	8,538	6,102	7,273	7,645	0.3	(28.5)	11.9	(0.5)
56	15,581	14,950	15,339	16,008	15,365	15,028	15,012	14,785	15,013	15,093	15,218	15,493	15,777	11,932	14,513	14,243	0.1	(24.4)	9.3	(0.6)
74	4,796	4,811	4,723	4,722	4,580	4,490	4,459	4,385	4,354	4,179	4,256	4,270	4,295	3,648	4,140	4,083	(0.9)	(15.1)	5.8	(1.1)
87 [7]									1,389	1,564	1,779	1,814	1,931	1,918	2,424	2,447	-	(0.7)	13.0	-
95	4,761	4,709	5,021	5,200	4,859	4,640	4,639	4,633	4,693	4,511	4,432	4,483	4,365	3,232	3,918	3,720	(0.7)	(26.0)	7.3	(1.6)
105	3,188	3,062	3,232	3,337	3,234	3,152	3,099	3,102	3,248	3,195	3,291	3,317	3,153	2,406	2,937	2,889	(0.1)	(23.7)	9.6	(0.7)
115	4,043	4,128	4,289	4,067	3,948	3,856	3,890	3,861	4,036	3,904	3,992	4,054	4,065	2,755	3,679	3,708	0.0	(32.2)	16.0	(0.6)
Total	364,906	359,503	358,712	366,095	360,410	358,056	362,938	363,947	375,438	373,763	374,518	373,561	371,521	259,034	315,430	324,693	0.1	(30.3)	12.0	(0.8)
Percent Change over Prior Year		(1.5)	(0.2)	2.1	(1.6)	(0.7)	1.4	0.3	3.2	(0.4)	0.2	(0.3)	(0.5)	(30.3)	21.8	2.9				

(1) Interchanges 2 through 359 reflect those for the Mainline 1-76/I-276. Interchanges 31 through 115 correspond to those on the Northeast Extension I-476.
(2) A toll increase occurred during this year. Refer to table 2-1.
(3) Interchange 320 (Route 29) Opened in December 2012 as an E-ZPass only interchange.
(4) Interchange 352 (Street Road) opened in November 2010 as an eastbound only, E-ZPass only interchange.
(5) On January 3, 2016 the Delaware Valley Toll Plaza (358) was decommissioned and replaced by the Neshaminy Falls Toll Plaza (353).
(6) On January 3, 2016 the Delaware River Toll Plaza was replaced by the Delaware River Bridge ORT Toll Plaza. Average daily transactions for the new toll plaza are reported in Table 2-5.
(7) On June 29, 2015 Interchange 87 (Route 903) opened as an E-ZPass only interchange.

Table 2-3 Commercial Vehicles – Average Daily Transactions on the Pennsylvania Turnpike Ticket System at Exiting Toll Plazas

Includes Revenue and Non-Revenue Vehicles

Interchange	Calendar Year																Average Annual Percent Change			
(Milepost)(1)	2007	2008	2009(2)	2010(2)	2011(2)	2012(2)	2013(2)	2014(2)	2015(2)	2016(2)	2017(2)	2018(2)	2019(2)	2020(2)	2021(2)	2022(2)	2007-19	2019-20	2020-22	2007-2022
30	3,505	3,412	2,994	3,060	3,116	3,192	3,276	3,428	3,582	3,666	3,805	3,982	3,992	3,761	4,216	4,294	1.1	(5.8)	6.8	1.4
39	575	571	544	565	552	560	596	579	586	606	609	598	581	540	589	621	0.1	(7.2)	7.2	0.5
48	1,177	1,185	1,104	1,153	1,058	1,073	1,092	1,132	1,223	1,237	1,229	1,338	1,301	1,096	1,166	1,214	0.8	(15.7)	5.2	0.2
57	1,735	1,636	1,498	1,590	1,606	1,623	1,652	1,694	1,730	1,805	1,838	1,890	1,917	1,826	1,972	1,983	0.8	(4.8)	4.2	0.9
67	894	895	869	847	816	857	866	883	912	931	926	954	938	841	922	914	0.4	(10.4)	4.3	0.1
75	4,478	4,389	3,902	3,854	3,828	3,830	3,857	3,977	4,123	4,096	4,189	4,336	4,362	4,233	4,648	4,702	(0.2)	(2.9)	5.4	0.3
91	306	287	314	334	323	313	311	326	324	317	339	348	360	332	368	380	1.4	(7.8)	7.0	1.4
110	743	738	652	669	690	690	701	723	728	695	719	730	758	716	803	858	0.2	(5.6)	9.4	1.0
146	1,327	1,151	1,009	1,077	1,056	1,035	1,024	1,030	1,087	1,105	1,135	1,175	1,197	1,121	1,253	1,276	(0.9)	(6.3)	6.7	(0.3)
161	2,910	2,616	2,261	2,440	2,431	2,381	2,338	2,361	2,378	2,416	2,417	2,512	2,477	2,401	2,750	2,737	(1.3)	(3.1)	6.8	(0.4)
180	230	203	169	207	215	210	216	225	239	243	275	271	291	240	251	257	2.0	(17.5)	3.4	0.7
189	108	96	85	100	101	109	105	103	106	116	131	129	140	129	141	157	2.2	(7.8)	10.4	2.5
201	229	219	193	212	265	291	286	251	258	295	350	313	325	305	306	332	2.9	(6.2)	4.3	2.5
226	3,548	3,350	2,893	2,886	2,889	2,826	2,871	2,990	3,135	3,130	3,200	3,276	3,367	3,323	3,610	3,722	(0.4)	(1.3)	5.8	0.3
236	774	690	646	751	774	756	792	811	877	925	974	992	1,011	917	1,094	1,124	2.3	(9.3)	10.7	2.5
242	1,194	1,243	1,146	1,105	1,100	1,003	1,114	1,170	1,237	1,303	1,338	1,369	1,455	1,339	1,455	1,605	1.7	(8.0)	9.5	2.0
247	1,863	1,817	1,653	1,749	1,743	1,706	1,792	1,885	2,018	2,140	2,178	2,201	2,177	2,007	2,233	2,352	1.3	(7.8)	8.2	1.6
266	549	523	469	486	482	481	494	534	537	581	598	648	719	636	707	744	2.3	(11.5)	8.1	2.0
286	1,572	1,491	1,325	1,354	1,364	1,350	1,415	1,496	1,593	1,696	1,697	1,791	1,735	1,708	1,851	1,843	0.8	(1.5)	3.9	1.1
298	1,188	1,084	936	963	995	1,005	1,023	1,137	1,253	1,330	1,336	1,412	1,491	1,366	1,476	1,456	1.9	(8.4)	3.2	1.4
312	1,058	908	806	904	929	948	990	1,068	1,119	1,171	1,141	1,153	1,217	1,085	1,152	1,088	1.2	(10.9)	0.1	0.2
320 (3)							286	334	356	446	495	494	545	460	565	528	-	(15.6)	7.2	-
326	3,446	3,190	2,902	3,118	3,105	2,993	2,984	3,069	3,249	3,443	3,467	3,449	3,556	3,425	3,846	3,878	0.3	(3.7)	6.4	0.8
333	636	663	597	644	629	630	633	660	645	687	678	682	726	653	725	798	1.1	(10.1)	10.6	1.5
20	4,433	4,114	3,751	3,883	3,961	4,037	4,150	4,309	4,554	4,798	4,765	4,806	4,942	4,941	5,549	5,701	0.9	(0.0)	7.4	1.7
339	1,403	1,343	1,260	1,329	1,417	1,437	1,518	1,564	1,678	1,802	1,746	1,723	1,751	1,686	1,921	1,933	1.9	(3.7)	7.1	2.2
340	20	19	18	20	24	24	30	48	61	63	61	65	75	67	90	97	11.5	(10.5)	19.9	10.9
343	2,210	2,109	1,999	2,109	2,116	2,102	2,130	2,205	2,255	2,396	2,330	2,380	2,477	2,476	2,709	2,650	1.0	(0.0)	3.4	1.2
351	3,397	3,384	3,111	3,178	3,151	3,105	3,146	3,174	3,323	3,457	3,601	3,442	3,293	3,058	3,352	3,417	(0.3)	(7.1)	5.7	0.0
352 (4)					54	68	84	117	130	143	174	268	442	449	578	585	-	1.6	14.1	-
353 (5)										3,763	3,499	4,109	4,177	4,043	4,631	4,828	-	(3.2)	9.3	-
358 (5)	1,812	1,529	1,410	1,654	1,571	1,442	1,458	1,514	1,553								-	-	-	-
359 (6)	3,949	4,137	3,768	3,474	3,389	3,231	3,330	3,491	3,740								-	-	-	-
31	1,505	1,495	1,453	1,498	1,450	1,431	1,436	1,562	1,672	1,742	1,660	1,668	1,786	1,773	1,903	1,950	1.4	(0.7)	4.9	1.7
44	990	958	929	965	943	958	998	1,048	1,094	1,120	1,129	1,206	1,321	1,257	1,384	1,427	2.4	(4.9)	6.6	2.5
56	3,139	3,118	3,039	3,147	3,114	3,136	3,211	3,309	3,496	3,647	3,644	3,796	4,015	4,020	4,454	4,479	2.1	0.1	5.6	2.4
74	596	484	480	527	536	523	530	547	551	582	559	575	514	487	552	597	(1.2)	(5.4)	10.8	0.0
87 (7)									98	133	155	188	223	203	267	283	-	(9.0)	18.0	-
95	1,336	1,264	1,226	1,337	1,329	1,336	1,385	1,424	1,497	1,547	1,485	1,538	1,626	1,535	1,759	1,845	1.7	(5.6)	9.7	2.2
105	218	400	396	200	209	205	207	209	238	244	235	249	252	234	265	273	1.2	(7.1)	8.1	1.5
115	1,358	1,204	1,167	1,268	1,266	1,258	1,287	1,300	1,420	1,391	1,412	1,481	1,529	1,471	1,623	1,715	1.0	(3.8)	8.0	1.6
Total	60,413	57,914	52,971	54,657	54,597	54,152	55,615	57,686	60,657	61,210	61,517	63,537	65,063	62,160	69,135	70,641	0.6	(4.5)	6.6	1.0
Percent Change Over Prior Year		(4.1)	(8.5)	3.2	(0.1)	(0.8)	2.7	3.7	5.1	0.9	0.5	3.3	2.4	(4.5)	11.2	2.2				

(1) Interchanges 2 through 359 reflect those for the Mainline 1-76/I-276. Interchanges 31 through 115 correspond to those on the Northeast Extension I-476.
(2) A toll increase occurred during this year. Refer to table 2-1.
(3) Interchange 320 (Route 29) Opened in December 2012 as an E-ZPass only interchange.
(4) Interchange 352 (Street Road) opened in November 2010 as an eastbound only, E-ZPass only interchange.
(5) On January 3, 2016 the Delaware Valley Toll Plaza (358) was decommissioned and replaced by the Neshaminy Falls Toll Plaza (353).
(6) On January 3, 2016 the Delaware River Toll Plaza was replaced by the Delaware River Bridge ORT Toll Plaza. Average daily transactions for the new toll plaza are reported in Table 2-5.
(7) On June 29, 2015 Interchange 87 (Route 903) opened as an E-ZPass only interchange.

Table 2-4 Total Vehicles – Average Daily Transactions on the Pennsylvania Turnpike Ticket System at Exiting Toll Plazas

Includes Revenue and Non-Revenue Vehicles

Interchange	Calendar Year																Average Annual Percent Change			
(Milepost)[1]	2007	2008	2009[2]	2010[2]	2011[2]	2012[2]	2013[2]	2014[2]	2015[2]	2016[2]	2017[2]	2018[2]	2019[2]	2020[2]	2021[2]	2022[2]	2007-19	2019-20	2020-22	2007-2022
30	15,445	15,468	15,226	15,178	15,140	15,131	15,689	15,767	16,124	16,370	16,649	16,787	16,349	12,307	14,558	14,741	0.5	(24.7)	9.4	(0.3)
39	6,188	6,198	6,039	6,092	5,885	5,976	6,428	6,434	6,126	6,426	6,309	6,203	6,091	4,607	5,395	5,555	(0.1)	(24.4)	9.8	(0.7)
48	10,583	10,411	10,191	10,032	9,634	9,806	10,263	10,278	10,106	10,338	10,119	10,094	9,833	7,151	8,107	8,308	(0.6)	(27.3)	7.8	(1.6)
57	19,933	19,941	19,581	19,042	18,778	18,753	19,051	19,030	19,522	19,465	19,415	19,060	18,578	13,578	15,634	15,837	(0.6)	(26.9)	8.0	(1.5)
67	10,507	9,963	9,543	9,623	9,534	9,813	9,737	9,667	9,949	9,738	9,601	9,560	9,318	7,046	8,020	8,144	(1.0)	(24.4)	7.5	(1.7)
75	13,284	12,912	12,334	12,404	12,074	12,369	12,413	12,678	12,984	12,641	12,594	12,635	12,457	10,204	11,775	11,813	(0.5)	(18.1)	7.6	(0.8)
91	2,784	2,681	2,665	2,705	2,602	2,665	2,705	2,670	2,726	2,702	2,786	2,739	2,714	2,297	2,657	2,602	(0.2)	(15.4)	6.4	(0.4)
110	2,810	2,857	2,755	2,805	2,849	2,847	2,750	2,750	2,829	2,743	2,784	2,782	2,854	2,250	2,778	2,808	0.1	(21.2)	11.7	(0.0)
146	4,386	4,146	3,981	4,022	3,904	3,814	3,739	3,802	3,890	3,851	3,842	3,605	3,650	2,783	3,435	3,570	(1.5)	(23.8)	13.3	(1.4)
161	9,126	8,621	8,617	8,702	8,495	8,404	8,396	8,361	8,465	8,333	8,194	7,930	7,766	6,016	7,479	7,319	(1.3)	(22.5)	10.3	(1.5)
180	941	878	824	865	860	820	809	811	847	851	902	865	888	749	799	799	(0.5)	(15.6)	3.3	(1.1)
189	548	522	494	518	510	500	484	488	512	537	573	534	564	478	553	562	0.2	(15.3)	8.5	0.2
201	891	832	796	854	899	919	911	844	863	945	1,019	938	928	761	845	868	0.3	(18.0)	6.8	(0.2)
226	8,521	8,085	7,521	7,785	7,594	7,367	7,508	7,656	7,948	7,671	7,842	7,753	7,795	6,177	7,190	7,376	(0.7)	(20.8)	9.3	(1.0)
236	5,435	5,197	5,116	5,825	5,657	5,445	5,554	5,657	6,057	6,054	6,181	6,080	6,209	4,038	4,990	5,306	1.1	(35.0)	14.6	(0.2)
242	6,459	7,311	7,040	6,581	6,471	6,162	6,409	6,700	7,060	6,918	6,994	6,915	7,176	4,864	5,618	6,111	0.9	(32.2)	12.1	(0.4)
247	11,765	11,890	11,604	12,227	11,898	11,654	11,866	12,060	12,616	12,661	12,713	12,473	12,162	8,328	10,353	11,104	0.3	(31.5)	15.5	(0.4)
266	4,289	4,100	3,954	4,057	3,924	4,000	4,116	4,173	4,352	4,521	4,664	4,715	4,970	3,464	4,353	4,429	1.2	(30.3)	13.1	0.2
286	8,969	8,551	8,235	8,291	8,130	8,086	8,301	8,522	8,986	9,241	9,409	9,470	9,043	6,906	8,321	8,373	0.1	(23.6)	10.1	(0.5)
298	8,634	8,532	8,112	7,981	7,784	7,593	7,760	8,159	8,636	8,830	8,901	8,987	8,917	6,485	7,511	7,612	0.3	(27.3)	8.3	(0.8)
312	12,069	11,543	11,039	11,257	11,244	11,295	11,434	11,760	11,641	11,357	11,103	10,831	10,735	7,018	8,085	8,023	(1.0)	(34.6)	6.9	(2.7)
320 [3]							3,825	5,001	5,579	5,738	5,948	5,914	6,067	3,492	4,250	4,357	-	(42.4)	11.7	-
326	30,515	30,165	30,685	32,402	32,070	31,773	31,050	31,492	33,026	33,640	34,203	34,648	34,884	23,229	29,001	30,040	1.1	(33.4)	13.7	(0.1)
333	11,948	12,511	12,501	12,810	12,722	12,490	12,445	12,258	11,881	12,006	11,991	11,927	11,818	7,707	9,050	9,987	(0.1)	(34.8)	13.8	(1.2)
20	41,091	39,631	38,712	39,119	39,439	40,268	40,590	40,614	42,280	42,808	42,743	42,249	42,447	33,190	40,336	41,589	0.3	(21.8)	11.9	0.1
339	22,606	21,655	22,249	24,302	24,683	25,019	25,371	25,413	26,389	26,511	26,657	26,251	26,394	19,302	23,092	23,867	1.3	(26.9)	11.2	0.4
340	1,558	1,540	1,388	1,442	1,471	1,433	1,513	1,676	1,782	1,905	1,974	1,969	2,023	1,212	1,529	1,721	2.2	(40.1)	19.2	0.7
343	28,264	27,385	27,163	28,678	28,294	27,960	27,453	27,102	27,360	28,024	27,777	27,618	28,085	21,155	25,082	25,642	(0.1)	(24.7)	10.1	(0.6)
351	33,315	32,700	32,307	32,868	31,321	30,616	30,462	29,863	30,549	30,932	30,738	29,731	28,626	20,043	23,266	24,152	(1.3)	(30.0)	9.8	(2.1)
352 [4]					1,859	2,214	2,467	2,792	3,079	3,254	4,000	4,070	4,355	3,036	4,382	4,523	-	(30.3)	22.1	-
353 [5]										23,830	22,333	24,891	24,396	17,244	21,930	22,938	-	(29.3)	15.3	-
358 [5]	7,728	7,494	7,177	7,370	7,109	6,828	6,548	6,464	6,504								-	-	-	-
359 [6]	21,676	21,411	20,712	20,729	20,235	19,395	19,662	20,100	21,683								-	-	-	-
31	14,809	14,885	14,884	14,930	14,400	14,172	14,105	14,034	14,525	14,776	15,401	16,168	16,885	12,878	15,004	15,905	1.1	(23.7)	11.1	0.5
44	9,225	9,271	9,328	9,443	9,100	8,998	9,019	9,001	9,185	9,368	9,219	9,448	9,858	7,358	8,658	9,072	0.6	(25.4)	11.0	(0.1)
56	18,720	18,068	18,378	19,155	18,480	18,164	18,224	18,094	18,508	18,740	18,862	19,289	19,793	15,952	18,966	18,722	0.5	(19.4)	8.3	0.0
74	5,393	5,295	5,204	5,249	5,116	5,014	4,989	4,932	4,905	4,761	4,815	4,845	4,809	4,135	4,691	4,680	(0.9)	(14.0)	6.4	(0.9)
87 [7]									1,487	1,696	1,934	2,002	2,154	2,121	2,691	2,730	-	(1.5)	13.4	-
95	6,097	5,973	6,247	6,537	6,188	5,976	6,025	6,057	6,190	6,057	5,918	6,021	5,991	4,766	5,678	5,565	(0.1)	(20.4)	8.1	(0.6)
105	3,406	3,463	3,627	3,537	3,443	3,357	3,306	3,311	3,486	3,440	3,526	3,566	3,405	2,640	3,203	3,162	(0.0)	(22.5)	9.4	(0.5)
115	5,401	5,332	5,456	5,335	5,214	5,114	5,178	5,161	5,456	5,296	5,405	5,535	5,594	4,226	5,301	5,423	0.3	(24.5)	13.3	0.0
Total	425,319	417,417	411,683	420,752	415,008	412,208	418,553	421,633	436,095	434,973	436,036	437,098	436,583	321,194	384,565	395,334	0.2	(26.4)	10.9	(0.5)
Percent Change Over Prior Year		(1.9)	(1.4)	2.2	(1.4)	(0.7)	1.5	0.7	3.4	(0.3)	0.2	0.2	(0.1)	(26.4)	19.7	2.8				

(1) Interchanges 2 through 359 reflect those for the Mainline 1-76/I-276. Interchanges 31 through 115 correspond to those on the Northeast Extension I-476.
(2) A toll increase occurred during this year. Refer to table 2-1.
(3) Interchange 320 (Route 29) Opened in December 2012 as an E-ZPass only interchange.
(4) Interchange 352 (Street Road) opened in November 2010 as an eastbound only, E-ZPass only interchange.
(5) On January 3, 2016 the Delaware Valley Toll Plaza (358) was decommissioned and replaced by the Neshaminy Falls Toll Plaza (353).
(6) On January 3, 2016 the Delaware River Toll Plaza was replaced by the Delaware River Bridge ORT Toll Plaza. Average daily transactions for the new toll plaza are reported in Table 2-5.
(7) On June 29, 2015 Interchange 87 (Route 903) opened as an E-ZPass only interchange.

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2.3.2 Barrier System Transaction Trends

Average annual daily traffic trends at the Barrier System's toll plazas are shown in **Table 2-5**, **Table 2-6**, and **Table 2-7** for passenger cars, commercial vehicles, and total vehicles, respectively. Note that the Delaware River Bridge (Plaza 359) transactions are counted as part of the Barrier System beginning in 2016.

Transactions on the Barrier System have generally been increasing at a faster rate than on the Ticket System. Passenger car transactions experienced 3.1% AAPC from 2007-2019, although some of this growth can be attributed to DRB switching from the Ticket System to the Barrier System in 2016. In 2020, passenger car transactions declined by 24.7% before growing at an average annual rate of 17.4% in 2021 and 2022. Over the entire 15-year period, passenger car transactions grew at an average of 2.8% annually.

While growth on the Barrier System was also impacted by the Great Recession, slow economic recovery, annual toll rate increases, the temporary closure of the DRB in 2017, and the COVID-19 pandemic, there are a number of reasons why transaction growth rates on the Barrier System exceeded those of the Ticket System. The barrier facilities tend to be on the fringes of urban areas and have benefited from increasing suburban and exurban development in their corridors. Relatedly, the Mon/Fayette Expressway (MFE) and Southern Beltway have undergone significant expansions during this 15-year period, with MFE adding five ramps and a significant feeder road in West Virginia between 2010 and 2013 and the Southern Beltway adding a 13.2-mile extension and two toll plazas in 2021. Lastly, the Southern Beltway was exempt from scheduled toll increases in 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, and 2022. The DRB was exempt from scheduled toll increases in 2017 and 2018.

Despite the overall growth of the Barrier System, there were significant differences in growth rates between barrier facilities. The Northeast Extension Barrier Facilities and Beaver Valley Expressway (BVE) both had declining rates of passenger car transactions prior to the pandemic, while the Amos K. Hutchinson Bypass (AKH) experienced modest annual growth from 2007 to 2019 but has failed to return to 2007 transaction levels in the post-pandemic period. Gateway and MFE each experienced consistent growth prior to the pandemic but have yet to return to 2019 transaction levels. The Southern Beltway, however, thanks to its aforementioned 13.2-mile expansion in 2021, had nearly quadruple the number of passenger car transactions in 2022 as in 2019.

Commercial vehicle average daily transaction trends are shown in Table 2-6, and like on the Ticket System, commercial vehicle transactions grew more quickly than did passenger car transactions. These trends also show stronger annual growth than the Ticket System. Commercial vehicle transactions experienced 5.3% AAPC from 2007-2019, a 4.5% decline in 2020, and 14.4% AAPC in 2021 and 2022. Overall AAPC from 2007 to 2022 was 5.8%.

Total Barrier System transactions increased annually by 3.4% from 2007-2019, fell by 21.7% in 2020, and grew an average of 16.8% annually in 2021 and 2022, for a total AAPC of 3.2% from 2007 to 2022.

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Table 2-5 Passenger Cars – Average Daily Transactions on the Pennsylvania Turnpike Barrier System

Includes Revenue and Non-Revenue Vehicles

	Calendar Year(1)																Average Annual Percent Change			
Toll Location	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2007-19	2019-20	2020-22	2007-2022
Northeast Extension Barrier Plazas																				
Keyser Ave.	6,736	6,782	7,012	6,935	6,970	6,960	7,156	7,017	7,037	6,653	6,575	6,367	6,722	4,212	5,359	5,571	(0.0)	(37.3)	15.0	(1.3)
Clarks Summit	6,740	6,790	6,850	6,670	6,673	6,702	7,270	7,135	6,842	6,337	6,104	6,015	6,445	4,054	5,090	5,280	(0.4)	(37.1)	14.1	(1.6)
Subtotal	13,476	13,572	13,862	13,605	13,643	13,662	14,426	14,152	13,879	12,990	12,679	12,381	13,167	8,266	10,448	10,851	(0.2)	(37.2)	14.6	(1.4)
Turnpike I-376 - Beaver Valley Expressway																				
East Toll 376	10,334	10,288	9,897	9,884	9,940	9,685	9,235	8,971	8,918	8,477	8,386	9,038	9,333	6,746	7,887	8,178	(0.8)	(27.7)	10.1	(1.5)
Beaver Falls Rte. 551	434	458	430	455	430	437	425	387	410	391	414	448	475	450	456	440	0.7	(5.4)	(1.1)	0.1
Moravia Rte. 168	756	808	706	674	778	775	728	712	700	667	656	666	708	599	656	648	(0.5)	(15.4)	4.0	(1.0)
West Toll 376	7,524	7,633	7,617	7,738	7,632	7,430	7,178	7,292	7,333	7,239	7,434	8,117	8,489	6,149	7,207	7,235	1.0	(27.6)	8.5	(0.3)
Mt. Jackson Rte. 108	1,277	1,557	1,390	1,236	1,173	1,094	1,019	953	981	982	1,021	1,117	1,147	931	980	962	(0.9)	(18.9)	1.7	(1.9)
Subtotal	20,326	20,744	20,040	19,987	19,953	19,419	18,587	18,315	18,342	17,756	17,912	19,386	20,153	14,874	17,186	17,462	(0.1)	(26.2)	8.4	(1.0)
Turnpike 66 - Amos K. Hutchinson Bypass																				
Rte. 136	597	806	727	742	731	738	708	749	786	754	755	775	791	700	952	985	2.4	(11.5)	18.6	3.4
AKH Mainline	12,308	12,327	12,114	12,276	11,947	11,843	11,721	11,728	11,623	11,102	11,203	11,304	11,020	8,853	10,161	10,116	(0.9)	(19.7)	6.9	(1.3)
Route 30	2,889	4,617	4,645	4,921	4,809	4,686	4,625	4,625	4,599	4,544	4,496	4,469	4,297	3,741	4,289	4,182	3.4	(12.9)	5.7	2.5
Route 130	1,260	1,370	1,370	1,397	1,459	1,336	1,326	1,377	1,335	1,325	1,323	1,372	1,381	1,069	1,307	1,262	0.8	(22.6)	8.6	0.0
Route 66	580	762	738	752	774	754	753	834	815	850	827	829	768	601	722	751	2.4	(21.7)	11.8	1.7
Subtotal	17,633	19,883	19,594	20,088	19,719	19,356	19,133	19,313	19,158	18,576	18,605	18,749	18,257	14,963	17,430	17,296	0.3	(18.0)	7.5	(0.1)
Turnpike 43 - Mon/Fayette Expressway(2)																				
Ramp M4	39	32	22	22	147	299	315	308	313	295	292	270	278	252	295	302	17.9	(9.2)	9.4	14.7
M5	2,151	2,257	2,301	2,477	3,467	4,933	5,224	5,663	6,042	6,055	6,073	6,157	6,180	5,316	6,185	6,173	9.2	(14.0)	7.8	7.3
Ramp M15				13	109	86	81	77	88	81	82	77	77	76	91	101	-	(1.5)	15.2	-
Ramp M18				114	228	281	290	284	327	317	296	281	286	257	282	283	-	(10.1)	4.9	-
M19				275	3,543	4,537	4,896	5,079	5,587	5,744	5,564	5,865	5,784	4,678	5,413	5,646	-	(19.1)	9.9	-
Ramp M22							186	160	170	151	149	139	152	128	134	132	-	(15.9)	1.5	-
Ramp M26							740	769	842	796	836	831	844	739	770	767	-	(12.4)	1.9	-
M35 California	10,224	10,530	10,318	10,515	10,407	10,605	10,587	10,649	11,074	10,635	10,265	10,337	10,266	7,901	9,058	9,759	0.0	(23.0)	11.1	(0.3)
Ramp M39	1,030	1,052	1,050	1,067	1,073	1,056	1,046	1,006	1,015	1,026	988	966	921	755	871	860	(0.9)	(18.0)	6.7	(1.2)
Ramp M44	745	749	703	692	665	651	641	647	685	670	704	715	668	507	592	596	(0.9)	(24.1)	8.3	(1.5)
Ramp M48	3,213	3,301	3,356	3,471	3,478	3,537	3,511	3,579	4,054	3,812	3,830	3,987	4,016	3,518	3,570	3,550	1.9	(12.4)	0.4	0.7
M52	7,179	7,351	7,181	7,161	7,149	7,464	7,233	7,033	6,906	6,740	6,802	7,117	7,144	5,353	6,159	6,106	(0.0)	(25.1)	6.8	(1.1)
Subtotal	24,581	25,273	24,931	25,807	30,266	33,450	34,751	35,255	37,104	36,325	35,881	36,741	36,617	29,482	33,422	34,275	3.4	(19.5)	7.8	2.2
I-576 - Southern Beltway(3)																				
SB Rte. 30	166	223	262	298	364	555	303	311	305	278	390	285					-	-	-	-
SB Westport Rd.	125	130	153	160	163	190	191	249	348	340	339	340					-	-	-	-
Rte. 22	2,914	3,320	3,727	3,897	4,135	4,209	4,005	4,154	4,232	4,290	4,363	4,179					-	-	-	-
S3												4,349	4,451	3,241	4,256	6,682	-	(27.2)	43.6	-
S7															4,235	5,332	-	-	-	-
S14															4,130	5,485	-	-	-	-
Subtotal	3,204	3,673	4,142	4,355	4,662	4,954	4,498	4,714	4,885	4,909	5,093	4,539	4,451	3,241	12,621	17,500	2.8	(27.2)	132.4	12.0
Gateway Toll Plaza(4)																				
Gateway	8,183	8,074	8,441	8,716	8,743	8,819	8,967	8,942	9,209	9,469	9,494	9,416	9,283	6,529	8,271	8,381	1.1	(29.7)	13.3	0.2
Delaware River Bridge(5)																				
DRB										18,551	16,234	20,099	24,713	18,065	23,910	25,655	-	(26.9)	19.2	-
All Barrier Facilities																				
Total	87,403	91,220	91,011	92,558	96,987	99,660	100,361	100,691	102,576	118,575	115,898	121,311	126,639	95,420	123,289	131,419	3.1	(24.7)	17.4	2.8
Percent Change Over Prior Year		4.4	(0.2)	1.7	4.8	2.8	0.7	0.3	1.9	15.6	(2.3)	4.7	4.4	(24.7)	29.2	6.6				

(1) Toll rate increases were implemented annually from 2009 through 2022. Some barrier facilities, especially I-576 were exempted from programmed toll increases in some years. Refer to Table 2-1 for details.

(2) On July 11, 2011, the West Virginia section of Turnpike 43 was opened.

(3) The Southern Beltway configuration was changed from three ramp tolls to one mainline toll in June 2018. A 13.2-mile extension with an additional two mainline tolls opened on October 15, 2021.

(4) In CDM Smith's last Investment Grade Traffic and Revenue Study in 2018, Gateway Toll Plaza transactions were reported with the Ticket System. On June 1, 2003 the Gateway Toll Plaza was converted from the western terminus of the ticket system to a barrier plaza and toll classifications were switched from weight-based to axle-based. On January 2, 2006, toll collection was converted from two-way to one-way collection.

(5) On January 3, 2016 the Delaware River Bridge was converted to ORT and separated from the Ticket System.

Table 2-6 Commercial Vehicles – Average Daily Transactions on the Pennsylvania Turnpike Barrier System

Includes Revenue and Non-Revenue Vehicles

Toll Location	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2007-19	2019-20	2020-22	2007-2022
	Calendar Year[1]																Average Annual Percent Change			
Northeast Extension Barrier Plazas																				
Keyser Ave.	1,408	1,363	1,306	1,365	1,492	1,532	1,606	1,643	1,687	1,690	1,751	1,842	1,923	1,835	2,000	2,099	2.6	(4.6)	7.0	2.7
Clarks Summit	1,162	1,096	1,047	1,082	1,149	1,228	1,369	1,436	1,404	1,391	1,429	1,446	1,568	1,530	1,594	1,625	2.5	(2.4)	3.1	2.3
Subtotal	2,570	2,459	2,353	2,447	2,641	2,759	2,975	3,079	3,091	3,081	3,180	3,288	3,491	3,365	3,595	3,725	2.6	(3.6)	5.2	2.5
Turnpike I-376 - Beaver Valley Expressway																				
East Toll 376	1,490	1,548	1,342	1,506	1,621	1,693	1,729	1,830	1,859	1,826	1,871	2,114	2,126	1,926	2,152	2,375	3.0	(9.4)	11.0	3.2
Beaver Falls Rte. 551	36	39	31	48	59	59	50	48	51	43	54	59	62	75	66	63	4.6	19.6	(8.2)	3.7
Moravia Rte. 168	96	145	60	73	92	86	73	97	82	61	76	99	96	136	139	157	(0.0)	41.3	7.6	3.3
West Toll 376	1,133	1,170	1,034	1,196	1,211	1,226	1,202	1,279	1,272	1,244	1,299	1,383	1,405	1,304	1,399	1,424	1.8	(7.2)	4.5	1.5
Mt. Jackson Rte. 108	98	108	113	98	133	164	135	148	154	152	163	189	158	150	163	148	4.1	(4.8)	(0.7)	2.8
Subtotal	2,854	3,010	2,580	2,921	3,116	3,228	3,190	3,402	3,418	3,326	3,463	3,843	3,848	3,591	3,920	4,167	2.5	(6.7)	7.7	2.6
Turnpike 66 - Amos K. Hutchinson Bypass																				
Rte. 136	211	183	146	165	183	178	177	749	197	171	168	190	187	157	199	242	(1.0)	(15.9)	24.1	0.9
AKH Mainline	2,070	2,146	2,010	2,261	2,333	2,348	2,372	2,603	2,514	2,397	2,495	2,643	2,580	2,389	2,694	2,820	1.9	(7.4)	8.7	2.1
Route 30	290	282	265	300	292	315	313	306	283	279	298	307	307	270	288	300	0.5	(11.9)	5.4	0.2
Route 130	38	29	30	26	26	26	28	32	27	29	30	31	32	31	31	31	(1.4)	(4.2)	1.2	(1.2)
Route 66	15	16	17	18	19	22	19	21	18	18	19	18	17	16	15	17	0.7	(7.4)	5.6	0.8
Subtotal	2,623	2,656	2,468	2,770	2,853	2,890	2,908	3,710	3,040	2,893	3,009	3,189	3,122	2,863	3,227	3,411	1.5	(8.3)	9.2	1.8
Turnpike 43 - Mon/Fayette Expressway[2]																				
Ramp M4	1	2	1	1	4	7	8	8	8	7	8	7	10	10	10	10	18.5	(0.5)	2.7	14.9
M5	140	196	240	275	366	529	665	819	838	742	777	780	812	726	842	907	15.8	(10.7)	11.8	13.3
Ramp M15				0	6	7	9	13	14	8	9	8	8	8	9	10	-	(5.7)	13.0	-
Ramp M18				6	16	19	20	17	36	16	15	19	17	12	13	15	-	(28.1)	11.4	-
M19				182	302	437	605	679	751	661	705	790	815	637	586	681	-	(21.9)	3.4	-
Ramp M22							29	24	40	15	14	14	19	12	12	12	-	(34.9)	1.0	-
Ramp M26							18	22	27	21	23	30	79	56	40	90	-	(28.1)	26.0	-
M35 California	384	478	532	573	574	694	827	1,002	974	871	934	1,004	1,078	854	801	937	9.0	(20.8)	4.8	6.1
Ramp M39	32	34	35	40	45	44	55	61	74	64	85	77	56	54	64	63	4.8	(4.3)	8.4	4.6
Ramp M44	46	68	33	29	53	47	53	56	107	100	96	89	68	56	45	41	3.2	(17.3)	(14.5)	(0.8)
Ramp M48	65	66	60	73	85	97	102	128	165	125	132	125	130	132	124	132	6.0	1.0	0.2	4.9
M52	111	127	125	143	156	173	183	197	210	212	224	235	240	199	223	226	6.7	(17.0)	6.6	4.9
Subtotal	779	971	1,025	1,322	1,607	2,053	2,573	3,026	3,244	2,842	3,022	3,179	3,331	2,754	2,769	3,124	12.9	(17.3)	6.5	9.7
I-576 - Southern Beltway[3]																				
SB Rte. 30	18	27	31	36	29	38	26	31	37	29	37	46					-	-	-	-
SB Westport Rd.	6	14	56	58	33	37	45	84	146	183	183	194					-	-	-	-
Rte. 22	210	249	287	311	312	322	356	391	470	426	444	455					-	-	-	-
S3												821	1,065	1,044	1,346	1,947	-	(1.9)	36.6	-
S7															866	1,241	-	-	-	-
S14															850	1,278	-	-	-	-
Subtotal	234	290	375	405	375	397	427	506	653	637	664	768	1,065	1,044	3,062	4,466	13.5	(1.9)	106.8	21.7
Gateway Toll Plaza[4]																				
Gateway	2,702	2,614	2,259	2,432	2,515	2,457	2,539	2,650	2,731	2,720	2,779	2,916	2,919	2,979	3,325	3,398	0.6	2.1	6.8	1.5
Delaware River Bridge[5]																				
DRB										3,127	2,836	3,601	4,118	4,304	4,805	5,057	-	4.5	8.4	-
All Barrier Facilities																				
Total	11,762	11,999	11,060	12,297	13,107	13,784	14,611	16,372	16,177	18,627	18,953	20,784	21,893	20,900	24,701	27,347	5.3	(4.5)	14.4	5.8
Percent Change Over Prior Year		2.0	(7.8)	11.2	6.6	5.2	6.0	12.0	(1.2)	15.1	1.8	9.7	5.3	(4.5)	18.2	10.7				

(1) Toll rate increases were implemented annually from 2009 through 2022. Some barrier facilities, especially I-576 were exempted from programmed toll increases in some years. Refer to Table 2-1 for details.
(2) On July 11, 2011, the West Virginia section of Turnpike 43 was opened.
(3) The Southern Beltway configuration was changed from three ramp tolls to one mainline toll in June 2018. A 13.2-mile extension with an additional two mainline tolls opened on October 15, 2021.
(4) In CDM Smith's last Investment Grade Traffic and Revenue Study in 2018, Gateway Toll Plaza transactions were reported with the Ticket System. On June 1, 2003 the Gateway Toll Plaza was converted from the western terminus of the ticket system to a barrier plaza and toll classifications were switched from weight-based to axle-based. On January 2, 2006, toll collection was converted from two-way to one-way collection.
(5) On January 3, 2016 the Delaware River Bridge was converted to ORT and separated from the Ticket System.

Table 2-7 Total Vehicles – Average Daily Transactions on the Pennsylvania Turnpike Barrier System

Includes Revenue and Non-Revenue Vehicles

	Calendar Year																Average Annual Percent Change			
Toll Location	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2007-19	2019-20	2020-22	2007-2022
Northeast Extension Barrier Plazas																				
Keyser Ave.	8,144	8,144	8,318	8,300	8,462	8,492	8,761	8,660	8,724	8,343	8,326	8,209	8,645	6,046	7,359	7,670	0.5	(30.1)	12.6	(0.4)
Clarks Summit	7,903	7,887	7,897	7,752	7,822	7,930	8,639	8,571	8,246	7,728	7,533	7,460	8,013	5,584	6,684	6,905	0.1	(30.3)	11.2	(0.9)
Subtotal	16,047	16,031	16,215	16,052	16,284	16,422	17,401	17,231	16,970	16,071	15,859	15,669	16,658	11,631	14,043	14,576	0.3	(30.2)	11.9	(0.6)
Turnpike I-376 - Beaver Valley Expressway																				
East Toll 376	11,824	11,836	11,239	11,390	11,561	11,377	10,965	10,801	10,777	10,303	10,257	11,152	11,459	8,673	10,039	10,552	(0.3)	(24.3)	10.3	(0.8)
Beaver Falls Rte. 551	471	497	461	503	490	496	476	435	461	434	469	507	538	524	523	503	1.1	(2.5)	(2.1)	0.4
Moravia Rte. 168	853	953	766	747	869	861	801	809	782	728	732	765	804	735	796	805	(0.5)	(8.6)	4.6	(0.4)
West Toll 376	8,658	8,803	8,651	8,934	8,844	8,655	8,381	8,572	8,605	8,483	8,733	9,500	9,894	7,452	8,606	8,659	1.1	(24.7)	7.8	0.0
Mt. Jackson Rte. 108	1,375	1,665	1,503	1,334	1,306	1,258	1,154	1,101	1,135	1,134	1,184	1,305	1,305	1,081	1,143	1,110	(0.4)	(17.2)	1.3	(1.4)
Subtotal	23,180	23,754	22,620	22,908	23,070	22,648	21,776	21,717	21,760	21,082	21,375	23,229	24,000	18,465	21,106	21,629	0.3	(23.1)	8.2	(0.5)
Turnpike 66 - Amos K. Hutchinson Bypass																				
Rte. 136	808	989	873	907	914	916	885	1,497	982	926	923	965	977	857	1,151	1,226	1.6	(12.4)	19.7	2.8
AKH Mainline	14,378	14,473	14,124	14,537	14,280	14,191	14,093	14,331	14,137	13,499	13,697	13,947	13,600	11,242	12,854	12,937	(0.5)	(17.3)	7.3	(0.7)
Route 30	3,178	4,899	4,910	5,221	5,101	5,001	4,938	4,930	4,883	4,823	4,795	4,776	4,604	4,012	4,577	4,483	3.1	(12.9)	5.7	2.3
Route 130	1,298	1,399	1,400	1,423	1,485	1,362	1,354	1,409	1,362	1,354	1,354	1,402	1,413	1,100	1,338	1,293	0.7	(22.2)	8.4	(0.0)
Route 66	595	778	754	770	793	776	771	855	833	868	846	847	784	616	737	768	2.3	(21.4)	11.6	1.7
Subtotal	20,256	22,539	22,062	22,858	22,572	22,245	22,041	23,022	22,198	21,469	21,614	21,938	21,379	17,826	20,657	20,707	0.5	(16.6)	7.8	0.1
Turnpike 43 - Mon/Fayette Expressway																				
Ramp M4	40	34	23	23	151	306	323	316	321	303	300	277	288	262	305	312	17.9	(8.9)	9.1	14.7
M5	2,292	2,453	2,541	2,752	3,833	5,462	5,889	6,482	6,879	6,797	6,850	6,937	6,992	6,041	7,027	7,080	9.7	(13.6)	8.3	7.8
Ramp M15				13	115	93	90	91	102	89	91	85	85	83	101	110	-	(1.9)	15.0	-
Ramp M18				120	244	300	310	301	363	333	311	300	303	269	295	298	-	(11.1)	5.2	-
M19				457	3,845	4,974	5,501	5,758	6,338	6,406	6,269	6,655	6,599	5,315	5,999	6,327	-	(19.5)	9.1	-
Ramp M22							215	184	210	166	163	153	171	140	146	144	-	(18.0)	1.5	-
Ramp M26							758	791	869	817	858	861	923	796	810	857	-	(13.8)	3.8	-
M35 California	10,608	11,008	10,849	11,088	10,981	11,298	11,414	11,651	12,047	11,506	11,199	11,341	11,344	8,755	9,859	10,696	0.6	(22.8)	10.5	0.1
Ramp M39	1,062	1,087	1,085	1,107	1,118	1,101	1,101	1,067	1,089	1,090	1,073	1,042	977	809	935	923	(0.7)	(17.2)	6.8	(0.9)
Ramp M44	792	817	736	721	718	698	694	703	793	770	800	804	736	564	637	637	(0.6)	(23.4)	6.3	(1.4)
Ramp M48	3,277	3,368	3,416	3,544	3,563	3,634	3,613	3,707	4,219	3,937	3,962	4,112	4,146	3,650	3,694	3,682	2.0	(12.0)	0.4	0.8
M52	7,289	7,478	7,306	7,304	7,305	7,637	7,415	7,230	7,116	6,952	7,027	7,352	7,384	5,552	6,382	6,332	0.1	(24.8)	6.8	(0.9)
Subtotal	25,360	26,245	25,956	27,129	31,873	35,503	37,324	38,281	40,348	39,167	38,903	39,920	39,947	32,236	36,191	37,398	3.9	(19.3)	7.7	2.6
I-576 -Southern Beltway																				
SB Rte. 30	184	250	293	334	394	593	328	342	342	307	427	331					-	-	-	-
SB Westport Rd.	131	144	209	218	196	227	236	333	494	523	522	534					-	-	-	-
Rte. 22	3,124	3,569	4,014	4,208	4,447	4,531	4,361	4,546	4,702	4,716	4,807	4,634					-	-	-	-
S3												5,170	5,515	4,285	5,602	8,630	-	(22.3)	41.9	-
S7															5,102	6,573	-	-	-	-
S14															4,980	6,763	-	-	-	-
Subtotal	3,438	3,963	4,517	4,760	5,037	5,351	4,925	5,220	5,538	5,546	5,756	5,307	5,515	4,285	15,683	21,966	4.0	(22.3)	126.4	13.2
Gateway Toll Plaza(4)																				
Gateway	10,884	10,688	10,700	11,148	11,258	11,276	11,506	11,592	11,939	12,189	12,273	12,331	12,202	9,508	11,596	11,779	1.0	(22.1)	11.3	0.5
Delaware River Bridge(5)																				
DRB										21,678	19,070	23,700	28,831	22,368	28,715	30,712	-	(22.4)	17.2	-
All Barrier Facilities																				
Total	99,165	103,219	102,070	104,855	110,094	113,445	114,973	117,063	118,753	137,202	134,851	142,095	148,533	116,320	147,991	158,766	3.4	(21.7)	16.8	3.2
Percent Change Over Prior Year		4.1	(1.1)	2.7	5.0	3.0	1.3	1.8	1.4	15.5	(1.7)	5.4	4.5	(21.7)	27.2	7.3				

(1) Toll rate increases were implemented annually from 2009 through 2022. Some barrier facilities, especially I-576 were exempted from programmed toll increases in some years. Refer to Table 2-1 for details.

(2) On July 11, 2011, the West Virginia section of Turnpike 43 was opened.

(3) The Southern Beltway configuration was changed from three ramp tolls to one mainline toll in June 2018. A 13.2-mile extension with an additional two mainline tolls opened on October 15, 2021.

(4) In CDM Smith's last Investment Grade Traffic and Revenue Study in 2018, Gateway Toll Plaza transactions were reported with the Ticket System. On June 1, 2003 the Gateway Toll Plaza was converted from the western terminus of the ticket system to a barrier plaza and toll classifications were switched from weight-based to axle-based. On January 2, 2006, toll collection was converted from two-way to one-way collection.

(5) On January 3, 2016 the Delaware River Bridge was converted to ORT and separated from the Ticket System.

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2.4 Monthly Transactions and Gross Toll Revenue Trends

This section discusses monthly transactions and toll revenue trends by fiscal year (FY) from FY 2018-19 through FY 2022-23 for the Ticket System, Barrier System, and the total Turnpike System. The last actual data point is March 2023. Trend data is provided separately for passenger cars and commercial vehicles. The transaction data includes only toll transactions at exiting toll plazas and includes non-revenue transactions. These tables present the relationship between the transactions and toll revenue, highlight differences in seasonal variation, and isolate shorter-term impacts that may not be apparent in annual trends.

2.4.1 Ticket System Monthly Trends

Monthly transaction and toll revenue trends for the Ticket System are presented in **Table 2-8** from FY 2018-19 through March of FY 2022-23. Passenger car transactions decreased by 13.8% in FY 2019-20 and decreased a further 14.7% in FY 2020-21 compared to the previous year. The decline is a result of the COVID-19 pandemic, which began impacting Turnpike traffic in March 2020 due to school and business closures and stay-at-home orders being implemented across the nation. While the impacts were confined to the last three months of the fiscal year, these three months (March, April, and May of 2020) were also the most heavily impacted as passenger car traffic was 38-70% lower than the equivalent month in 2019. While monthly impacts lessened throughout FY 2020-21, transactions still declined more than 22% each month through February 2021 before experiencing significant increases in March, April, and May as monthly transactions began to be compared against the first months of the pandemic. As the pandemic moved into its second year, traffic recovered significantly, with FY 2021-22 transactions outpacing FY 2020-21 transactions by 19.0%.

Through the first 10 months of FY 2022-23, passenger car transactions have grown 0.9% over the same period in the previous fiscal year. However, that overall growth level has been bifurcated, with six consecutive months of negative growth from June through December, followed by four consecutive months of positive growth from December through March. January 2023 had particularly high growth of 16.3% because of depressed transaction levels in January 2022 that resulted from numerous heavy snowfalls and a surge in COVID-19 cases due to the Omicron variant.

Passenger car toll revenue performed better than transactions due to annual toll rate increases. Passenger car toll revenue declined 8.8% in FY 2019-20 and a further 12.8% in FY 2020-21. Revenue was somewhat bolstered in FY 2020-21 by the implementation of a 45% surcharge for TBP transactions in January 2021. Revenue had a strong recovery in FY 2021-22, growing 34.9% over the previous fiscal year and exceeding revenue in the last full fiscal year prior to the pandemic. In the current fiscal year, passenger car toll revenue on the Ticket System increased by 4.4% through March 2023 compared to the same period in the previous year. Although this is 3.5% higher in absolute terms than transactions growth over the same period, it is less than the 5% toll rate increase that was instituted in this period, indicating that average trips lengths are decreasing even as the total number of transactions rise.

During this same period, commercial vehicle transactions and revenue did not decline as severely as and recovered more quickly and strongly than did passenger car transactions and revenue. Transactions declined only 2.8% in FY 2019-20 and grew 4.6% in FY 2020-21 and a further 7.9% in FY 2021-22. However, year-to-date in FY 2022-23, CV transactions have experienced very slight negative growth of 0.1%, with transaction levels remaining within plus-or-minus 5% of the previous year for each of the 10 months completed thus far in the fiscal year. Furthermore, six of the past seven months have experienced negative transactions growth, indicating a softening of the strong demand for CV traffic that lasted throughout 2021 and 2022. Annual toll revenue increased 1.0% in FY 2019-20, 6.5% in FY 2020-21, and 15.2% in FY 2021-22. Through March 2023, FY 2022-23 revenue has grown 5.7% compared to the same period in the previous fiscal year. Conversely to what was experienced by PCs, this represents more growth than what would be expected by the 5% toll rate increase alone, indicating that CV revenues are a result of a higher increase in TBP revenue compared to CV E-ZPass revenue, longer trips, and/or larger vehicles compared to the prior year.

Total Ticket System transactions decreased by 12.2% in FY 2019-20 and a further 11.6% in FY 2020-21. In FY 2021-22 transactions grew 16.9% percent. Through March 2023, FY 2022-23 transactions have increased 0.7% compared to the same period in the prior fiscal year. Total Ticket System toll revenue decreased by 4.3% in FY 2019-20 and by 3.5% in FY 2020-21 before increasing 24.5% in FY 2021-22. Year-to-date toll revenue through March in FY 2022-23 has increased by 5.0% compared to the same period in the prior fiscal year.

Table 2-8 Ticket System – Monthly Transaction and Revenue Trends

Toll Transactions (in 1,000s, including both tolled and non-revenue transactions)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	12,180	(2.9)	11,829	(36.1)	7,560	39.8	10,569	(1.0)	10,458
July	12,218	(0.9)	12,103	(27.1)	8,817	26.1	11,115	(4.2)	10,650
August	12,665	(1.7)	12,447	(25.8)	9,241	18.6	10,964	(0.9)	10,867
September	11,420	(0.5)	11,368	(22.4)	8,824	16.7	10,295	(0.3)	10,261
October	12,090	(0.8)	11,999	(22.8)	9,269	17.2	10,867	(2.2)	10,623
November	11,171	(0.3)	11,141	(29.3)	7,872	27.8	10,063	(0.8)	9,984
December	11,007	(0.8)	10,920	(33.0)	7,314	33.5	9,762	0.5	9,806
January	9,973	1.8	10,157	(27.7)	7,341	6.4	7,808	16.3	9,085
February	9,433	4.7	9,876	(35.2)	6,398	29.8	8,307	3.4	8,586
March	11,057	(37.6)	6,901	24.9	8,622	10.0	9,483	3.7	9,837
April	11,325	(69.7)	3,437	165.4	9,122	8.9	9,934		
May	12,010	(53.9)	5,540	80.7	10,014	3.2	10,332		
Total Year	136,551	(13.8)	117,716	(14.7)	100,394	19.0	119,499		
June - Mar	113,215	(4.0)	108,739	(25.3)	81,258	22.1	99,233	0.9	100,157

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	2,059	(1.5)	2,029	(0.2)	2,024	11.3	2,253	3.6	2,334
July	2,036	4.8	2,133	(2.6)	2,077	7.6	2,235	(2.2)	2,185
August	2,173	(0.4)	2,163	(5.1)	2,053	10.8	2,276	4.5	2,379
September	1,910	5.3	2,010	2.1	2,052	9.3	2,243	(0.3)	2,237
October	2,162	0.8	2,179	(2.4)	2,126	6.8	2,270	(2.6)	2,211
November	1,906	(0.3)	1,902	(0.5)	1,892	11.3	2,106	(1.1)	2,083
December	1,761	2.9	1,812	4.4	1,892	8.7	2,057	(3.4)	1,987
January	1,817	2.7	1,866	(2.4)	1,821	3.2	1,879	4.6	1,965
February	1,661	4.0	1,727	(5.8)	1,626	14.9	1,869	(1.6)	1,840
March	1,888	(5.4)	1,786	18.7	2,121	5.0	2,228	(2.7)	2,168
April	2,017	(25.6)	1,501	41.3	2,120	1.6	2,154		
May	2,137	(17.9)	1,755	20.0	2,106	6.3	2,238		
Total Year	23,527	(2.8)	22,863	4.6	23,910	7.9	25,807		
June - Mar	19,373	1.2	19,607	0.4	19,684	8.8	21,415	(0.1)	21,389

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	14,239	(2.7)	13,857	(30.8)	9,584	33.8	12,822	(0.2)	12,793
July	14,255	(0.1)	14,236	(23.5)	10,894	22.5	13,350	(3.9)	12,835
August	14,838	(1.5)	14,610	(22.7)	11,294	17.2	13,240	0.0	13,246
September	13,329	0.4	13,378	(18.7)	10,876	15.3	12,538	(0.3)	12,498
October	14,252	(0.5)	14,178	(19.6)	11,395	15.3	13,137	(2.3)	12,834
November	13,078	(0.3)	13,042	(25.1)	9,764	24.6	12,169	(0.8)	12,067
December	12,768	(0.3)	12,732	(27.7)	9,205	28.4	11,819	(0.2)	11,793
January	11,790	2.0	12,022	(23.8)	9,162	5.7	9,687	14.1	11,049
February	11,094	4.6	11,602	(30.8)	8,024	26.8	10,177	2.4	10,426
March	12,945	(32.9)	8,687	23.7	10,743	9.0	11,710	2.5	12,005
April	13,342	(63.0)	4,938	127.7	11,243	7.5	12,088		
May	14,147	(48.4)	7,295	66.1	12,119	3.7	12,569		
Total Year	160,078	(12.2)	140,579	(11.6)	124,304	16.9	145,306		
June - Mar	132,589	(3.2)	128,346	(21.4)	100,942	19.5	120,648	0.7	121,546

Toll Revenue (in $1,000s)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$56,349	7.6	$60,635	(41.8)	$35,319	62.5	$57,377	7.3	$61,561
July	59,123	8.5	64,149	(33.4)	42,697	60.3	68,423	(1.6)	67,357
August	60,200	8.8	65,501	(28.3)	46,956	38.1	64,828	4.2	67,533
September	51,234	7.0	54,814	(24.3)	41,486	29.3	53,642	12.7	60,460
October	51,943	9.7	57,006	(21.0)	45,050	44.2	64,959	(7.8)	59,891
November	49,943	7.6	53,745	(32.5)	36,273	32.8	48,187	18.1	56,911
December	48,312	10.0	53,142	(35.4)	34,329	72.9	59,349	(8.0)	54,612
January	42,828	10.1	47,167	(23.0)	36,314	26.5	45,926	9.2	50,149
February	41,868	10.5	46,274	(33.2)	30,899	40.9	43,533	5.5	45,943
March	51,714	(40.2)	30,904	39.5	43,127	17.6	50,734	12.0	56,814
April	53,860	(75.2)	13,360	265.6	48,848	14.9	56,151		
May	59,310	(57.6)	25,131	128.4	57,404	3.8	59,559		
Total Year	$626,685	(8.8)	$571,829	(12.8)	$498,703	34.9	$672,668		
June - Mar	513,514	3.9	533,337	(26.4)	392,450	41.9	556,958	4.4	$581,231

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$43,898	5.1	$46,135	(2.0)	$45,213	18.6	$53,638	11.7	$59,916
July	43,294	10.4	47,784	(4.3)	45,733	17.3	53,654	7.4	57,631
August	46,144	5.5	48,699	(4.5)	46,518	17.4	54,595	13.3	61,836
September	41,775	7.7	45,003	0.1	45,044	14.7	51,683	11.4	57,574
October	45,892	5.4	48,375	(0.2)	48,290	18.7	57,319	(0.5)	57,051
November	41,520	1.1	41,991	1.6	42,656	13.9	48,605	11.7	54,268
December	38,457	7.1	41,206	8.0	44,492	20.5	53,632	(3.6)	51,699
January	42,586	7.4	45,721	(1.1)	45,231	14.1	51,605	3.1	53,183
February	39,811	8.3	43,112	(2.3)	42,135	18.8	50,044	2.1	51,084
March	45,684	(6.7)	42,610	25.4	53,427	11.3	59,456	1.9	60,613
April	46,431	(21.4)	36,517	42.4	51,990	7.4	55,817		
May	48,818	(12.8)	42,565	25.3	53,338	12.5	60,013		
Total Year	$524,309	1.0	$529,717	6.5	$564,067	15.2	$650,063		
June - Mar	429,060	5.0	450,635	1.8	458,739	16.5	534,233	5.7	$564,853

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$100,247	6.5	$106,770	(24.6)	$80,532	37.9	$111,015	9.4	$121,477
July	102,417	9.3	111,932	(21.0)	88,430	38.0	122,077	2.4	124,988
August	106,344	7.4	114,200	(18.1)	93,474	27.8	119,423	8.3	129,369
September	93,009	7.3	99,817	(13.3)	86,530	21.7	105,325	12.1	118,034
October	97,835	7.7	105,381	(11.4)	93,340	31.0	122,279	(4.4)	116,941
November	91,463	4.7	95,736	(17.6)	78,929	22.6	96,792	14.9	111,179
December	86,769	8.7	94,348	(16.5)	78,821	43.3	112,981	(5.9)	106,311
January	85,414	8.8	92,888	(12.2)	81,545	19.6	97,532	5.9	103,331
February	81,679	9.4	89,386	(18.3)	73,034	28.1	93,578	3.7	97,027
March	97,398	(24.5)	73,515	31.3	96,553	14.1	110,190	6.6	117,427
April	100,291	(50.3)	49,878	102.2	100,838	11.0	111,968		
May	108,128	(37.4)	67,696	63.6	110,743	8.0	119,573		
Total Year	$1,150,994	(4.3)	$1,101,546	(3.5)	$1,062,770	24.5	$1,322,732		
June - Mar	942,575	4.4	983,972	(13.5)	851,189	28.2	1,091,191	5.0	$1,146,084

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 2-1 for details.

(2) Ramps connecting I-95 to I-276 opened to traffic in September 2018.

(3) Leap year occurred in 2020, resulting in exaggerated traffic and toll revenue impacts in February 2020 compared to February 2019.

(4) In response to the COVID-19 pandemic, schools were closed state-wide on March 16, 2020 and stay-at-home orders for some counties began to effect on March 23, 2020. A state-wide stay-at-home order was issued April 1, 2020 and lifted on June 5, 2020.

(5) AET conversion occurred in June 2020.

(6) Totals may not equal the sum of all parts due to rounding.

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2.4.2 Barrier System Monthly Trends

Table 2-9 presents monthly transaction and toll revenue trends for the Barrier System. Traffic and revenue trends for both passenger car and commercial vehicles were largely similar to those experienced on the Ticket System. Passenger car transactions decreased by 9.6% in FY 2019-20 and 9.0% in FY 2020-21 before growing by 22.3% in FY 2021-22. The opening of a 13.2-mile extension of the Southern Beltway in October 2021 provided additional transaction and revenue growth beyond continued recovery from the COVID-19 pandemic. Passenger car transactions through March have increased by 8.8% in FY 2022-23 year-to-date compared to the previous fiscal year.

Passenger car toll revenue decreased by 1.6% in FY 2019-20 and by less than 0.1% in FY 2020-21. In FY 2021-22 passenger car toll revenue increased by 31.8%. Thus far in FY 2022-23, passenger car revenue has increased by 12.4% compared to the same period in the prior fiscal year. Revenue declines in FY 2019-20 and 2020-21 were much smaller than declines for transactions or Ticket System revenues, primarily due to the implementation of a 45% TBP toll surcharge on BVE, AKH, and Gateway in October 2019 and MFE in January 2021.

Commercial vehicle transactions decreased by 1.0% in FY 2019-20 and grew by 3.1% in FY 2020-21 and 14.9% in FY 2021-22. Year-to-date, FY 2022-23 commercial vehicle transactions have increased 12.3% over the same period in the prior year. Toll revenue on the Barrier System has increased each of the past three fiscal years, including during the pandemic. Commercial vehicle toll revenue grew 7.7% in FY 2019-20, 10.6% in FY 2020-21, and 17.5% in FY 2021-22. Thus far in FY 2022-23, commercial vehicle toll revenue has increased by 11.7% through March 2023. These increases in toll revenue are driven by the strong performance of commercial vehicle traffic through the pandemic, annual toll increases, and the imposition of a 45% TBP toll surcharge on BVE, AKH, and Gateway during this period.

Total Barrier System transactions decreased by 8.4% in FY 2019-20 and by 7.1% in FY 2020-21. In FY 2021-22, transactions increased by 21.0%. Through March, transactions in FY 2022-23 have increased by 9.4% over the same time period in the prior fiscal year. Total Barrier System toll revenue increased by 2.0% in FY 2019-20, 4.3% in FY 2020-21, and 25.6% in FY 2021-22. Toll revenue year-to-date in FY 2022-23 has increased by 12.1% compared to the same period in the prior fiscal year.

2.4.3 Total Turnpike System Monthly Trends

Table 2-10 presents the monthly transaction and toll revenue trends for the total Turnpike System. Passenger car transactions declined 12.8% in FY 2019-20 and 13.2% in FY 2020-21 before increasing 19.9% in FY 2021-22. Passenger car transactions have increased 3.1% in FY 2022-23 year-to-date compared to the prior year. Passenger car toll revenue performed more strongly than did transactions due to toll rate increases that were implemented each year and TBP surcharges implemented on some toll systems in 2019, 2020, and 2021. Passenger car toll revenue decreased 7.7% in FY 2019-20 and 10.7% in FY 2020-21 before increasing 34.3% in FY 2021-22. Through March 2023, passenger car toll revenue in FY 2022-23 has increased 5.8% compared to the same period in the prior fiscal year.

Commercial vehicle transactions decreased 2.4% in FY 2019-20 and increased by 4.2% in FY 2020-21 and 9.7% in FY 2021-22. Through March, FY 2022-23 transactions have grown 3.1% compared to the same period in the prior fiscal year. Toll revenue increased 1.8% in FY 2019-20, 7.0% in FY 2020-21, 15.5% in FY 2021-22, and 6.5% in FY 2022-23 through March 2023.

Total transactions decreased 11.2% in FY 2019-20 and 10.4% in FY 2020-21 before increasing 18.0% in FY 2021-22 and 3.1% through March 2023 in FY 2023-23 compared to the same period in the prior year. Total toll revenue decreased by 3.4% in FY 2019-20 and 2.4% in FY 2020-21 but increased by 24.6% in FY 2021-22 and 6.1% in FY 2022-23 through March 2023.

Table 2-9 Combined Barrier Facilities – Monthly Transaction and Revenue Trends

Toll Transactions (in 1,000s, including both tolled and non-revenue transactions)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	3,907	5.9	4,137	(27.6)	2,997	26.5	3,791	11.0	4,207
July	4,099	6.4	4,362	(21.8)	3,410	18.9	4,056	10.2	4,470
August	4,247	4.2	4,424	(20.4)	3,521	15.1	4,053	12.5	4,560
September	3,791	4.1	3,946	(14.6)	3,369	11.8	3,765	13.6	4,278
October	4,046	1.2	4,096	(16.2)	3,433	19.3	4,097	6.9	4,378
November	3,737	(0.9)	3,705	(22.9)	2,858	37.6	3,932	2.3	4,024
December	3,666	(0.4)	3,651	(27.8)	2,635	44.5	3,809	3.0	3,924
January	3,171	3.6	3,284	(20.9)	2,597	18.2	3,069	16.1	3,562
February	3,108	2.3	3,180	(24.9)	2,387	32.6	3,165	7.4	3,400
March	3,668	(32.1)	2,489	26.7	3,155	18.2	3,730	6.2	3,960
April	3,825	(62.2)	1,445	129.8	3,322	19.6	3,972		
May	4,131	(44.3)	2,303	57.9	3,637	15.2	4,191		
Total Year	45,395	(9.6)	41,022	(9.0)	37,320	22.3	45,629		
June - Mar	37,439	(0.4)	37,274	(18.5)	30,361	23.4	37,466	8.8	40,763

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	675	2.2	690	0.3	692	8.3	749	20.8	905
July	680	6.7	725	(1.9)	711	3.5	736	17.3	863
August	735	0.1	736	(6.0)	692	8.5	751	25.7	944
September	645	6.8	689	2.4	706	4.8	739	21.2	896
October	727	3.1	749	(4.6)	715	10.1	787	13.0	889
November	623	2.9	641	(3.8)	617	24.5	768	7.7	827
December	565	4.7	592	1.4	600	24.8	749	2.6	768
January	589	4.5	615	(4.3)	589	16.6	686	10.5	758
February	542	5.7	573	(4.3)	549	24.8	685	4.6	716
March	626	(3.8)	603	15.3	695	20.4	837	0.9	844
April	686	(25.0)	515	38.5	713	13.8	811		
May	726	(15.7)	611	14.4	699	24.5	871		
Total Year	7,819	(1.0)	7,739	3.1	7,977	14.9	9,169		
June - Mar	6,408	3.2	6,612	(0.7)	6,564	14.0	7,486	12.3	8,410

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	4,581	5.4	4,827	(23.6)	3,689	23.1	4,541	12.6	5,112
July	4,779	6.4	5,087	(19.0)	4,121	16.3	4,792	11.3	5,332
August	4,982	3.6	5,160	(18.4)	4,212	14.0	4,804	14.6	5,504
September	4,436	4.5	4,635	(12.1)	4,074	10.6	4,504	14.9	5,174
October	4,773	1.5	4,845	(14.4)	4,148	17.7	4,884	7.9	5,268
November	4,360	(0.3)	4,346	(20.1)	3,474	35.3	4,700	3.2	4,851
December	4,231	0.3	4,243	(23.8)	3,235	40.9	4,557	3.0	4,692
January	3,760	3.7	3,899	(18.3)	3,186	17.9	3,755	15.0	4,320
February	3,650	2.8	3,753	(21.8)	2,935	31.1	3,849	6.9	4,116
March	4,294	(28.0)	3,092	24.5	3,849	18.6	4,567	5.2	4,804
April	4,511	(56.5)	1,960	105.8	4,035	18.5	4,783		
May	4,857	(40.0)	2,914	48.8	4,336	16.7	5,062		
Total Year	53,214	(8.4)	48,761	(7.1)	45,296	21.0	54,798		
June - Mar	43,847	0.1	43,886	(15.9)	36,925	21.7	44,952	9.4	49,173

Toll Revenue (in $1,000s)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$9,506	16.4	$11,069	(21.7)	$8,667	40.4	$12,165	13.7	$13,826
July	10,022	17.7	11,799	(18.8)	9,577	43.0	13,699	10.9	15,191
August	10,308	14.5	11,807	(10.7)	10,540	23.0	12,969	14.7	14,872
September	9,083	13.8	10,333	(8.3)	9,477	24.1	11,765	18.9	13,988
October	9,634	9.7	10,569	(1.9)	10,366	30.2	13,492	6.2	14,332
November	9,185	12.0	10,291	(24.6)	7,756	53.6	11,913	10.1	13,120
December	9,040	15.0	10,392	(22.8)	8,018	48.3	11,890	7.1	12,733
January	8,114	18.7	9,627	(16.8)	8,010	26.9	10,163	18.9	12,088
February	7,950	14.2	9,083	(24.0)	6,905	50.9	10,423	10.2	11,483
March	9,682	(31.4)	6,642	47.8	9,815	21.0	11,875	15.1	13,668
April	10,047	(62.4)	3,774	182.4	10,658	22.1	13,009		
May	10,950	(42.5)	6,295	88.4	11,862	15.9	13,753		
Total Year	$113,521	(1.6)	$111,681	(0.0)	$111,651	31.8	$147,115		
June - Mar	92,524	9.8	101,612	(12.3)	89,131	35.0	120,354	12.4	$135,301

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$5,890	8.1	$6,367	9.8	$6,989	14.6	$8,010	18.7	$9,504
July	5,808	14.2	6,633	5.5	6,997	13.3	7,928	15.3	9,142
August	6,262	8.4	6,791	3.3	7,012	14.1	8,002	22.5	9,803
September	5,566	14.3	6,363	9.9	6,995	12.2	7,851	19.2	9,357
October	6,326	10.4	6,983	6.1	7,406	15.8	8,573	8.4	9,291
November	5,595	12.5	6,296	1.4	6,383	23.7	7,895	11.6	8,807
December	5,198	16.6	6,061	8.6	6,580	23.3	8,109	1.7	8,247
January	5,702	13.7	6,482	3.1	6,685	15.3	7,705	11.2	8,568
February	5,311	13.7	6,038	0.0	6,040	28.0	7,731	5.3	8,141
March	6,075	4.4	6,345	23.3	7,821	18.1	9,237	4.4	9,639
April	6,395	(11.9)	5,632	37.7	7,757	13.8	8,830		
May	6,741	(5.9)	6,343	21.8	7,727	20.5	9,309		
Total Year	$70,871	7.7	$76,334	10.6	$84,391	17.5	$99,180		
June - Mar	57,734	11.5	64,358	7.1	68,908	17.6	81,041	11.7	$90,498

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$15,396	13.2	$17,436	(10.2)	$15,656	28.9	$20,175	15.6	$23,330
July	15,830	16.4	18,433	(10.1)	16,574	30.5	21,627	12.5	24,333
August	16,570	12.2	18,598	(5.6)	17,552	19.5	20,971	17.7	24,674
September	14,649	14.0	16,696	(1.3)	16,472	19.1	19,616	19.0	23,345
October	15,961	10.0	17,552	1.3	17,772	24.2	22,065	7.1	23,623
November	14,780	12.2	16,587	(14.8)	14,140	40.1	19,808	10.7	21,927
December	14,238	15.6	16,452	(11.3)	14,597	37.0	19,999	4.9	20,980
January	13,816	16.6	16,109	(8.8)	14,695	21.6	17,868	15.6	20,656
February	13,261	14.0	15,121	(14.4)	12,945	40.2	18,154	8.1	19,624
March	15,757	(17.6)	12,987	35.8	17,636	19.7	21,112	10.4	23,307
April	16,443	(42.8)	9,406	95.8	18,414	18.6	21,839		
May	17,691	(28.6)	12,638	55.0	19,589	17.7	23,062		
Total Year	$184,392	2.0	$188,015	4.3	$196,042	25.6	$246,295		
June - Mar	150,258	10.5	165,971	(4.8)	158,038	27.4	201,394	12.1	$225,799

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 2-1 for details.

(2) Leap year occurred in 2020, resulting in exaggerated traffic and toll revenue impacts in February 2020 compared to February 2019.

(3) In response to the COVID-19 pandemic, schools were closed state-wide on March 16, 2020 and stay-at-home orders for some counties began to effect on March 23, 2020. A state-wide stay-at-home order was issued April 1, 2020 and lifted on June 5, 2020.

(4) AET conversions at Southern Beltway, Amos K Hutchinson Bypass, Gateway Toll Plaza, and Mon/Fayette Expressway occurred in June 2018, October 2019, October 2019, and June 2020, respectively .

(5) A 13.2-mile extension of the Southern Beltway opened on October 15, 2021.

(6) Totals may not equal the sum of all parts due to rounding.

Table 2-10 Total Turnpike System – Monthly Transaction and Revenue Trends

Toll Transactions (in 1,000s, including both tolled and non-revenue transactions)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	16,087	(0.8)	15,966	(33.9)	10,557	36.0	14,360	2.1	14,665
July	16,318	0.9	16,464	(25.7)	12,228	24.1	15,171	(0.3)	15,120
August	16,912	(0.2)	16,871	(24.4)	12,762	17.7	15,017	2.7	15,427
September	15,211	0.7	15,314	(20.4)	12,193	15.3	14,060	3.4	14,539
October	16,136	(0.3)	16,095	(21.1)	12,702	17.8	14,963	0.3	15,002
November	14,909	(0.4)	14,846	(27.7)	10,730	30.4	13,995	0.1	14,008
December	14,673	(0.7)	14,571	(31.7)	9,949	36.4	13,570	1.2	13,730
January	13,144	2.3	13,441	(26.1)	9,939	9.4	10,877	16.3	12,646
February	12,541	4.1	13,055	(32.7)	8,785	30.6	11,472	4.5	11,986
March	14,725	(36.2)	9,390	25.4	11,777	12.2	13,213	4.4	13,797
April	15,150	(67.8)	4,882	154.9	12,444	11.7	13,906		
May	16,141	(51.4)	7,843	74.0	13,650	6.4	14,523		
Total Year	181,946	(12.8)	158,738	(13.2)	137,714	19.9	165,128		
June - Mar	150,654	(3.1)	146,013	(23.6)	111,619	22.5	136,699	3.1	140,920

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	2,734	(0.6)	2,719	(0.1)	2,716	10.6	3,002	7.9	3,239
July	2,716	5.2	2,858	(2.5)	2,788	6.5	2,970	2.6	3,047
August	2,908	(0.3)	2,899	(5.3)	2,745	10.3	3,026	9.8	3,323
September	2,554	5.7	2,699	2.2	2,758	8.2	2,983	5.0	3,133
October	2,889	1.4	2,928	(3.0)	2,841	7.6	3,057	1.4	3,100
November	2,530	0.5	2,543	(1.3)	2,509	14.6	2,874	1.3	2,910
December	2,327	3.3	2,404	3.6	2,492	12.6	2,806	(1.8)	2,756
January	2,406	3.1	2,481	(2.9)	2,410	6.4	2,565	6.2	2,723
February	2,203	4.4	2,300	(5.4)	2,175	17.4	2,554	0.1	2,556
March	2,515	(5.0)	2,389	17.9	2,816	8.8	3,064	(1.7)	3,012
April	2,703	(25.4)	2,016	40.6	2,833	4.7	2,965		
May	2,863	(17.3)	2,366	18.6	2,805	10.8	3,109		
Total Year	31,347	(2.4)	30,602	4.2	31,887	9.7	34,976		
June - Mar	25,781	1.7	26,220	0.1	26,248	10.1	28,902	3.1	29,800

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	18,821	(0.7)	18,685	(29.0)	13,273	30.8	17,363	3.1	17,904
July	19,033	1.5	19,323	(22.3)	15,016	20.8	18,141	0.1	18,167
August	19,820	(0.3)	19,770	(21.6)	15,507	16.4	18,044	3.9	18,750
September	17,765	1.4	18,013	(17.0)	14,951	14.0	17,042	3.7	17,672
October	19,025	(0.0)	19,023	(18.3)	15,543	15.9	18,021	0.5	18,102
November	17,438	(0.3)	17,388	(23.9)	13,238	27.4	16,869	0.3	16,918
December	17,000	(0.1)	16,975	(26.7)	12,441	31.6	16,376	0.7	16,485
January	15,550	2.4	15,922	(22.4)	12,348	8.9	13,442	14.3	15,369
February	14,745	4.1	15,355	(28.6)	10,960	28.0	14,026	3.7	14,542
March	17,239	(31.7)	11,779	23.9	14,593	11.5	16,277	3.3	16,810
April	17,853	(61.4)	6,898	121.5	15,277	10.4	16,871		
May	19,004	(46.3)	10,209	61.2	16,456	7.1	17,632		
Total Year	213,292	(11.2)	189,340	(10.4)	169,601	18.0	200,103		
June - Mar	176,435	(2.4)	172,233	(20.0)	137,868	20.1	165,601	3.1	170,719

Toll Revenue (in $1,000s)

Passenger Cars

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$65,855	8.9	$71,705	(38.7)	$43,987	58.1	$69,542	8.4	$75,387
July	69,145	9.8	75,948	(31.2)	52,274	57.1	82,121	0.5	82,549
August	70,508	9.6	77,308	(25.6)	57,496	35.3	77,797	5.9	82,405
September	60,317	8.0	65,147	(21.8)	50,963	28.3	65,407	13.8	74,449
October	61,577	9.7	67,575	(18.0)	55,416	41.6	78,451	(5.4)	74,223
November	59,128	8.3	64,036	(31.2)	44,030	36.5	60,100	16.5	70,031
December	57,352	10.8	63,533	(33.3)	42,347	68.2	71,239	(5.5)	67,345
January	50,941	11.5	56,794	(22.0)	44,324	26.5	56,090	11.0	62,236
February	49,819	11.1	55,357	(31.7)	37,804	42.7	53,956	6.4	57,427
March	61,396	(38.8)	37,546	41.0	52,941	18.3	62,609	12.6	70,482
April	63,907	(73.2)	17,134	247.3	59,506	16.2	69,160		
May	70,260	(55.3)	31,426	120.4	69,267	5.8	73,312		
Total Year	$740,205	(7.7)	$683,511	(10.7)	$610,353	34.3	$819,784		
June - Mar	606,038	4.8	634,950	(24.2)	481,581	40.6	677,312	5.8	$716,533

Commercial Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$49,788	5.5	$52,502	(0.6)	$52,201	18.1	$61,648	12.6	$69,420
July	49,102	10.8	54,417	(3.1)	52,730	16.8	61,582	8.4	66,772
August	52,406	5.9	55,490	(3.5)	53,529	16.9	62,598	14.4	71,638
September	47,341	8.5	51,366	1.3	52,040	14.4	59,534	12.4	66,931
October	52,218	6.0	55,358	0.6	55,697	18.3	65,892	0.7	66,341
November	47,115	2.5	48,287	1.6	49,039	15.2	56,500	11.6	63,075
December	43,656	8.3	47,267	8.1	51,072	20.9	61,742	(2.9)	59,946
January	48,288	8.1	52,202	(0.5)	51,916	14.2	59,310	4.1	61,751
February	45,122	8.9	49,150	(2.0)	48,175	19.9	57,775	2.5	59,224
March	51,759	(5.4)	48,955	25.1	61,248	12.2	68,693	2.3	70,252
April	52,826	(20.2)	42,149	41.8	59,747	8.2	64,647		
May	55,560	(12.0)	48,909	24.9	61,065	13.5	69,323		
Total Year	$595,180	1.8	$606,050	7.0	$648,458	15.5	$749,243		
June - Mar	486,795	5.8	514,993	2.5	527,646	16.6	615,273	6.5	$655,351

Total Vehicles

Month	2018-19	% Chg	2019-20	% Chg	2020-21	% Chg	2021-22	% Chg	2022-23
June	$115,643	7.4	$124,206	(22.6)	$96,188	36.4	$131,190	10.4	$144,807
July	118,247	10.2	130,365	(19.5)	105,004	36.9	143,703	3.9	149,321
August	122,914	8.0	132,798	(16.4)	111,025	26.5	140,394	9.7	154,043
September	107,658	8.2	116,512	(11.6)	103,003	21.3	124,941	13.2	141,379
October	113,795	8.0	122,933	(9.6)	111,112	29.9	144,344	(2.6)	140,564
November	106,243	5.7	112,323	(17.1)	93,069	25.3	116,600	14.2	133,106
December	101,007	9.7	110,800	(15.7)	93,418	42.3	132,981	(4.3)	127,291
January	99,230	9.8	108,997	(11.7)	96,240	19.9	115,400	7.4	123,987
February	94,940	10.1	104,507	(17.7)	85,979	30.0	111,731	4.4	116,651
March	113,155	(23.6)	86,502	32.0	114,189	15.0	131,302	7.2	140,733
April	116,733	(49.2)	59,283	101.2	119,253	12.2	133,806		
May	125,820	(36.2)	80,335	62.2	130,332	9.4	142,635		
Total Year	$1,335,385	(3.4)	$1,289,561	(2.4)	$1,258,812	24.6	$1,569,027		
June - Mar	1,092,833	5.2	1,149,943	(12.2)	1,009,227	28.1	1,292,585	6.1	$1,371,883

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 2-1 for details.

(2) Ramps connecting I-95 to I-276 opened to traffic in September 2018.

(3) Leap year occurred in 2020, resulting in exaggerated traffic and toll revenue impacts in February 2020 compared to February 2019.

(4) In response to the COVID-19 pandemic, schools were closed state-wide on March 16, 2020 and stay-at-home orders for some counties began to effect on March 23, 2020. A state-wide stay-at-home order was issued April 1, 2020 and lifted on June 5, 2020.

(5) AET conversions at Southern Beltway, Amos K Hutchinson Bypass, Gateway Toll Plaza, Mon/Fayette Expressway, and the Ticket System occurred in June 2018, October 2019, October 2019, June 2020, and June 2020, respectively .

(6) A 13.2-mile extension of the Southern Beltway opened on October 15, 2021.

(7) Totals may not equal the sum of all parts due to rounding.

2.5 Comparison of Commercial Activity and Total Turnpike Toll Transactions

Table 2-11 presents a comparison between three measures of economic growth, and transaction growth on the Turnpike System from 2015 through 2022. Annual percent changes in Turnpike System transactions over the prior year are compared to annual percent changes in the U.S. gross domestic product (GDP); the gross regional product (GRP) for Pennsylvania, New York, and New Jersey combined; and the Pennsylvania gross state product (GSP). U.S. GDP is actual through 2022, while the GRP and GSP are actual through 2021 and estimated for 2022.

Over this period, U.S. GDP generally performed equal to or better than did GRP or GSP, with the one exception coming in 2022 where GSP and GDP both grew 2.1% and GRP grew 2.9%. This indicates that in 2022 Pennsylvania's economic growth was on par with the United States as a whole, while New York and New Jersey combined had even stronger growth, which aligns with the strong performance of the Mid-Atlantic GRP. As discussed previously, commercial vehicle transactions growth has generally been stronger than passenger car transactions growth, with the exception coming in 2021 due to passenger car transactions rebounding from the steep decline experienced in 2020 because of the COVID-19 pandemic.

In general, transactions growth of commercial vehicles has tended to parallel regional economic growth, with both having steady growth in 2015 and 2016, before slowing in 2017. Transactions were additionally negatively impacted beyond economic conditions due to the temporary closure of the DRB from January 20, 2017 through March 9, 2017. Both GRP and commercial vehicle transactions experienced stronger growth in 2018 and 2019, declined significantly in 2020 due to the COVID-19 pandemic, and had a strong recovery in 2021 before slowing, while still exhibiting strong growth, in 2022. Passenger cars have exhibited a similar pattern, but with a wider variation, especially in the post-COVID era.

Table 2-11 Near-Term Measures of Commercial Activity and Growth in Total Turnpike System Transactions – Percent Change over Prior Year

Calendar Year	Gross Domestic Product Growth (U.S.) (1) (2)	Gross Regional Product Growth (NJ, NY, PA) (1) (3)	Gross State Product Growth (PA) (1) (3)	PA Turnpike System Percent Transaction Growth (4)		
				Passenger Cars	Commercial Vehicles	All Vehicles
2015	2.7 %	1.6 %	1.9 %	2.6 %	4.4 %	2.9 %
2016	1.7	1.6	0.9	3.4	4.3	3.5
2017 (5)	2.2	0.9	0.9	(0.6)	0.5	(0.5)
2018	2.9	2.3	1.3	1.5	5.4	2.0
2019	2.3	2.3	1.6	0.7	3.1	1.0
2020	(2.8)	(4.6)	(4.8)	(28.7)	(4.2)	(25.0)
2021	5.9	5.4	4.4	21.6	11.0	19.6
2022	2.1	2.9	2.1	5.5	5.9	5.6

(1) The percent changes in U.S. GDP, GRP, and GSP are based on chained 2012 dollars.

(2) U.S. GDP is actual through 2022. Data was obtained from the U.S. Bureau of Economic Analysis.

(3) GRP and GSP are actual through 2021. Data was obtained from the U.S. Bureau of Economic Analysis. 2022 is estimated by Moody's Analytics

(4) Turnpike system growth rates are actual through 2022.

(5) Transaction growth was negatively impacted by DRB closure from January 20 to March 9, 2017.

2.6 Annual Transaction and Gross Toll Revenue Trends

Table 2-12 provides a summary of annual total Turnpike System transactions and gross toll revenue trends from FY 1998-99 through FY 2021-22. Note that transactions and gross toll revenue in Table 2-12 reflect final audited Turnpike System totals prior to adjustments and discounts available from the Commercial Volume Discount Program described earlier in this chapter.

Throughout this period, the Turnpike System has experienced greater growth in toll revenue than transactions. This has been especially true since 2009, during which period transaction growth was negatively impacted by both annual rate increases and a slow recovery from the Great Recession. Over the decade from FY 1998-99 to FY 2008-09, total transactions and revenue grew 1.8% and 5.8% annually, respectively. Over the next decade, from FY 2008-09 to FY 2018-19, annual total transactions growth slowed to 1.4%, while annual total revenue growth accelerated to 8.0%

As a result of the COVID-19 pandemic, total transactions decreased 10.8% annually between FY 2018-19 and FY 2020-21. However, passenger cars and commercial vehicles were impacted very differently, with passenger car transactions declining by 13.0% and commercial vehicle transactions growing 0.9% annually. Total transactions grew 18.0% in FY 2021-22, with passenger car transactions growing 19.9% as pandemic-related restrictions were lifted and many employees resumed commuting to their workplaces. Commercial vehicle traffic continued to perform strongly, with transactions growing 9.7%. Despite this growth, total transactions in FY 2021-22 were fewer than in FY 2018-19. While total revenue declined 2.9% annually from FY 18-19 to FY20-21, it grew 24.6% in FY 2021-22. As a result, PTC collected more total toll revenue in FY 2021-22 than in any year prior.

This same data is represented in **Figure 2-5**, which clearly illustrates the greater growth rate of toll revenue compared to the relatively flat growth of toll transactions since 2009. Toll rate increases are represented by a black diamond over the fiscal year in which the increase was implemented.

Table 2-12 Annual Systemwide Traffic and Gross Toll Revenue Trends

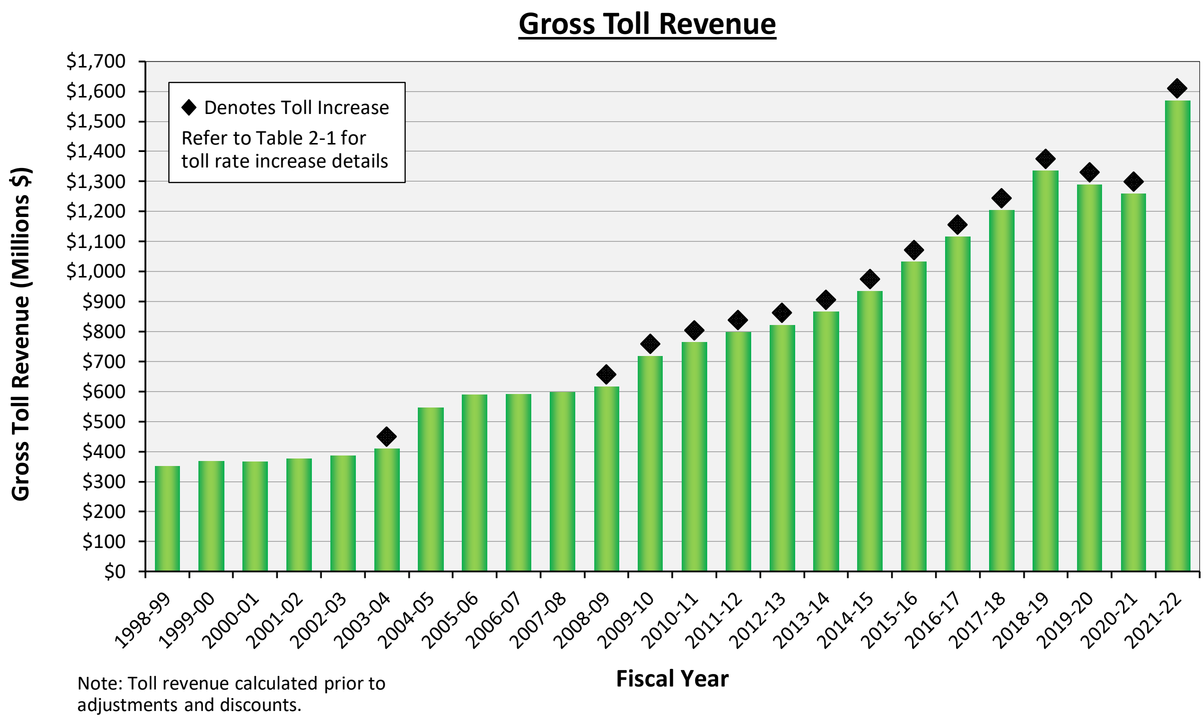
	Transactions (values in thousands)						Gross Toll Revenue (values in thousands)					
Fiscal Year (1)	Cars	Percent Change Over Prior Year	Trucks	Percent Change Over Prior Year	Total	Percent Change Over Prior Year	Cars	Percent Change Over Prior Year	Trucks	Percent Change Over Prior Year	Total	Percent Change Over Prior Year
1998-99	136,399	3.0	19,833	6.5	156,232	3.4	$ 191,804	3.0	$ 158,761	6.5	$ 350,565	4.5
1999-00	138,762	1.7	21,341	7.6	160,103	2.5	195,301	1.8	172,035	8.4	367,336	4.8
2000-01	141,033	1.6	21,278	(0.3)	162,311	1.4	193,563	(0.9)	172,337	0.2	365,900	(0.4)
2001-02	150,496	6.7	22,298	4.8	172,794	6.5	212,650	9.9	163,101	(5.4)	375,751	2.7
2002-03	156,220	3.8	23,179	4.0	179,399	3.8	219,201	3.1	168,021	3.0	387,222	3.1
2003-04	163,612	4.7	24,407	5.3	188,019	4.8	228,515	4.2	180,229	7.3	408,744	5.6
2004-05 (2)	163,316	(0.2)	25,109	2.9	188,425	0.2	309,032	35.2	236,126	31.0	545,158	33.4
2005-06	160,590	(1.7)	25,311	0.8	185,901	(1.3)	321,268	4.0	267,369	13.2	588,637	8.0
2006-07	160,107	(0.3)	25,316	0.0	185,423	(0.3)	322,781	0.5	269,861	0.9	592,642	0.7
2007-08	164,097	2.5	25,455	0.5	189,552	2.2	332,035	2.9	265,637	(1.6)	597,672	0.8
2008-09 (2)	162,638	(0.9)	23,583	(7.4)	186,220	(1.8)	356,345	7.3	260,047	(2.1)	616,392	3.1
2009-10 (2)	166,497	2.4	23,705	0.5	190,201	2.1	415,981	16.7	302,057	16.2	718,038	16.5
2010-11 (2)(3)	167,761	0.8	24,529	3.5	192,290	1.1	435,752	4.8	328,105	8.6	763,856	6.4
2011-12 (2)(3)	167,971	0.1	24,860	1.3	192,831	0.3	455,133	4.4	342,646	4.4	797,779	4.4
2012-13 (2)(3)	166,961	(0.6)	24,985	0.5	191,945	(0.5)	471,514	3.6	350,226	2.2	821,740	3.0
2013-14 (2)(3)	167,387	0.3	25,729	3.0	193,116	0.6	497,671	5.5	368,395	5.2	866,066	5.4
2014-15 (2)(3)	170,371	1.8	27,130	5.4	197,501	2.3	533,054	7.1	401,197	8.9	934,252	7.9
2015-16 (2)(3)	176,369	3.5	28,414	4.7	204,783	3.7	588,295	10.4	443,325	10.5	1,031,620	10.4
2016-17 (2)(3)	178,244	1.1	28,898	1.7	207,142	1.2	638,787	8.6	476,188	7.4	1,114,975	8.1
2017-18 (2)(3)	179,125	0.5	29,985	3.8	209,110	1.0	678,720	6.3	524,438	10.1	1,203,158	7.9
2018-19 (2)(3)	181,946	1.6	31,347	4.5	213,292	2.0	740,205	9.1	595,180	13.5	1,335,385	11.0
2019-20 (2)(3)	158,738	(12.8)	30,602	(2.4)	189,340	(11.2)	683,511	(7.7)	606,050	1.8	1,289,561	(3.4)
2020-21 (2)(3)	137,714	(13.2)	31,887	4.2	169,601	(10.4)	610,353	(10.7)	648,458	7.0	1,258,812	(2.4)
2021-22 (2)(3)	165,128	19.9	34,976	9.7	200,103	18.0	819,784	34.3	749,243	15.5	1,569,027	24.6

	Average Annual Percent Change					
	Transactions			Gross Toll Revenue		
Fiscal Year	Cars	Trucks	Total	Cars	Trucks	Total
FY 1998-99 - FY 2008-09	1.8	1.7	1.8	6.4	5.1	5.8
FY 2008-09 - FY 2018-19	1.1	2.9	1.4	7.6	8.6	8.0
FY 2018-19 - FY 2020-21	(13.0)	0.9	(10.8)	(9.2)	4.4	(2.9)
FY 2020-21 - FY 2021-22	19.9	9.7	18.0	34.3	15.5	24.6
FY 1998-99 - FY 2021-22	0.8	2.5	1.1	6.5	7.0	6.7

(1) PTC Fiscal Years begin June 1 and end May 31.

(2) A toll increase occurred during this fiscal year. Refer to table 2-1.

(3) Transaction counts are from PTC's "restated" figures and include non-revenue transactions.



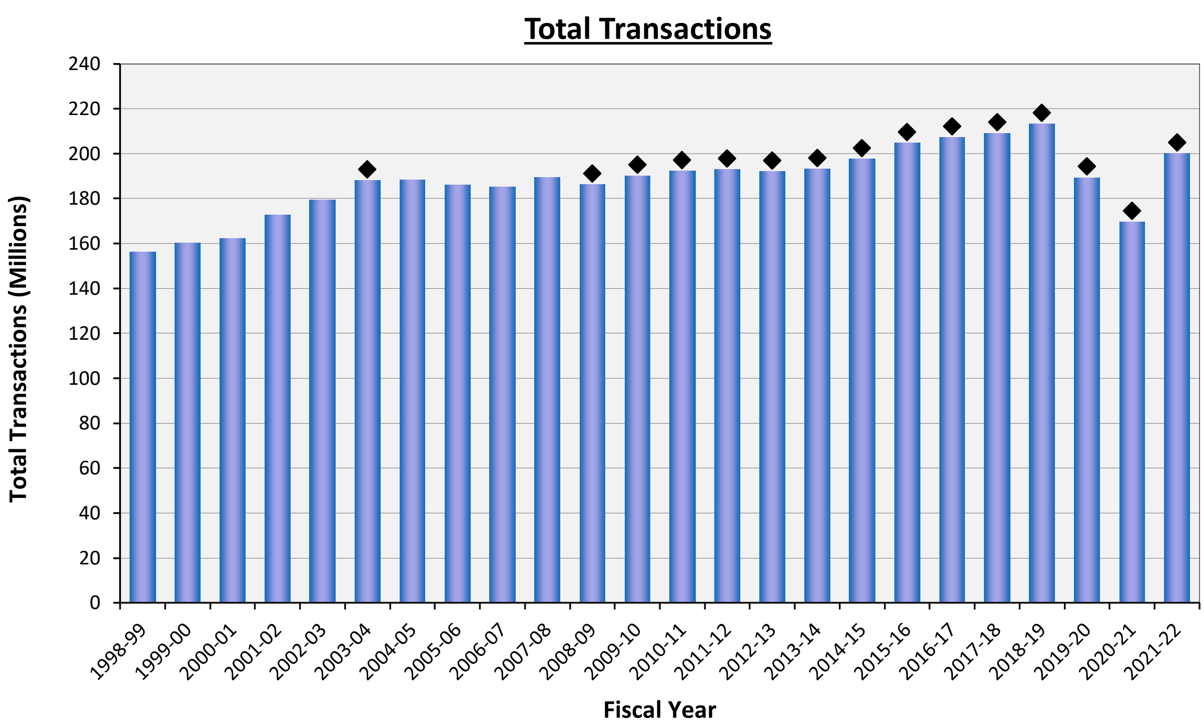


Figure 2-5 Pennsylvania Turnpike System Historical Transactions and Adjusted Gross Toll Revenue

2.7 E-ZPass Market Share

Table 2-13 shows the historical growth in E-ZPass transactions as a percent of total toll transactions on the Turnpike System. The E-ZPass market share includes both successful transponder transactions as well as vTolls, which are transactions that are not initially picked up by a transponder but are later charged to an E-ZPass account after image review. Over the nine years from FY 2010-11 to FY 2019-20, passenger-car E-ZPass market share increased by 25.9 percentage points, from 57.9% to 83.8% of total toll transactions. Commercial vehicle market share started as a much higher base but also grew significantly, increasing by 13.3 percentage points from 77.5% in FY 2010-11 to 92.3% in FY 2019-20. Over the same period, total Turnpike System E-ZPass usage grew from 60.4% to 85.2%. In FY 2020-21 and 2021-22 the E-ZPass market share continued to grow for passenger cars but declined slightly for commercial vehicles as PTC introduced the Toll by Plate (TBP) option.

Table 2-13 Annual E-ZPass Market Share: Turnpike System Based on Toll Transactions

	Annual Percent E-ZPass Market Share By Vehicle Class (1)		
Fiscal Year (2)	Passenger Cars	Commercial Vehicles	Total
2010-11(3,4)	57.9 %	77.5 %	60.4 %
2011-12(3,4)	62.2	79.7	64.5
2012-13(3,4)	66.5	82.4	68.6
2013-14(3,4)	70.5	84.7	72.4
2014-15(3)	73.2	86.2	75.0
2015-16(3)	75.3	87.8	77.1
2016-17(3)	77.6	89.2	79.2
2017-18(3)	80.2	90.4	81.7
2018-19(3)	82.2	91.5	83.6
2019-20(3,5)	83.8	92.3	85.2
2020-21(3,6)	84.6	91.0	85.8
2021-22(3)	86.6	90.8	87.4

(1) E-ZPass market share includes vTolls.
(2) PTC Fiscal Years begin June 1 and end May 31.
(3) A toll increase occurred during this year. Refer to table 2-1.
(4) The toll differential increased between E-ZPass and cash.
(5) A 45% surcharge over the cash rate was added to the TBP rate on I-376 BVE, PA 66 AKH, and Gateway Toll Plaza.
(6) A 45% surcharge over the cash rate was added to the TBP rate on the Ticket System and Mon/Fayette Expressway.

Table 2-14 presents monthly E-ZPass market share trends on the Ticket System for FY 2021-22, the most recently completed fiscal year. As in Table 2-13, the market shares presented in this table include vToll transactions. It is apparent from a comparison of Tables 2-13 and 2-14 that E-ZPass participation was slightly higher on the Ticket System than on the Turnpike System as a whole. Ticket System E-ZPass penetration averaged 87.7% for passenger cars, 91.3% for commercial vehicles, and 88.4% for all vehicles. Monthly trend data shows that E-ZPass penetration was lowest in the summer months and November as non-regular vacation and Thanksgiving travelers comprise a larger share of transactions, and peaks in the winter and spring months from December to May when there are fewer leisure travelers. There is less month-to-month variation in commercial vehicles' E-ZPass market share, as all but three months had E-ZPass market share of between 90.3% and 92.2%, with market share falling below that range in September and November and rising above it in December.

Table 2-14 Monthly E-ZPass Market Share: Ticket System Based on Toll Transactions

	FY 2021-22 Percent E-Zpass Market Share By Vehicle Class (1) (2)		
Month	**Passenger Cars**	**Commercial Vehicles**	**Total Vehicles**
June 2021	85.0 %	90.8 %	86.1 %
July	86.2	90.5	86.9
August	86.1	90.3	86.8
September	85.3	89.1	86.0
October	90.3	92.9	90.7
November	84.5	88.7	85.3
December	92.3	94.2	92.6
January 2022	90.0	92.2	90.4
February	89.2	92.0	89.8
March	89.0	92.0	89.5
April	88.1	91.3	88.7
May	88.0	91.5	88.6
FY Total	87.7 %	91.3 %	88.4 %

(1) PTC Fiscal Years begin June 1 and end May 31.

(2) E-ZPass market share includes vTolls.

Chapter 3

Socioeconomic Trends and Growth Forecasts

Historical and forecast socioeconomic data were collected and evaluated to understand state and regional trends. Discussions with local Metropolitan Planning Organization (MPO) representatives were also conducted to confirm and substantiate the socioeconomic data and trends. This information was then used in an econometric analysis to estimate long-term baseline travel demand on the Pennsylvania Turnpike.

3.1 Socioeconomic Trends and Forecasts

Evaluating long-term socioeconomic trends and forecasts for areas along and surrounding the Pennsylvania Turnpike provides context and inputs for the traffic growth analysis. The following tables and figures summarize the reviewed socioeconomic data, including population, employment, unemployment rates, real retail sales, real gross regional product, and retail gasoline prices.

An economic growth analysis identified any potential explanatory factors that may have influenced historical toll transaction growth. Such explanatory factors were tested and applied within a regression-based econometric analysis to derive traffic growth forecasts.

In the subsequent tables, socioeconomic trends are presented as compound average annual percent change (AAPC), mostly in decade increments from 1980 through 2050. Year 2022 (or 2021) was the last year in which full-year historical data were available. Geographically, the United States is presented along with the Commonwealth of Pennsylvania and the surrounding states of Maryland, New Jersey, New York, Ohio, and West Virginia. Additionally, the Pennsylvania counties along the Turnpike are presented in **Figure 3-1** and grouped for ease of presentation into four aggregations:

- **Pittsburgh Area:** Allegheny, Armstrong, Beaver, Butler, Indiana, Lawrence, Washington, and Westmoreland;
- **Interurban Area:** Adams, Bedford, Blair, Cambria, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, Somerset, and York;
- **Philadelphia Area:** Berks, Bucks, Chester, Delaware, Montgomery, and Philadelphia; and,
- **Northeastern Corridor:** Carbon, Lackawanna, Lehigh, Luzerne, Northampton, and Wyoming.

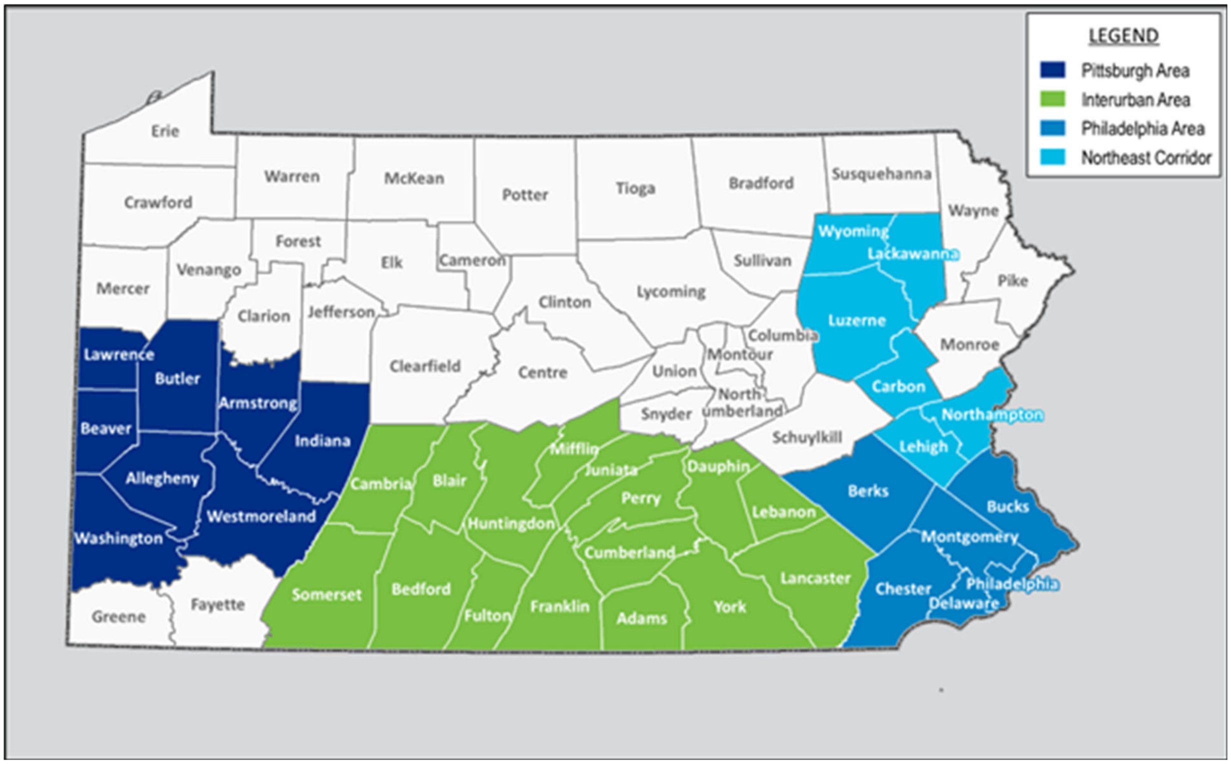


Figure 3-1
Pennsylvania County Groupings

3.1.1 Population

Historical population growth trends and forecasts are presented in **Table 3-1** and **Figure 3-2**. Historically available data were from the United States Census Bureau (census years and intercensal estimates), while forecasts through 2050 are from the Woods & Poole, Inc. 2022 Complete Economic and Demographic Data Source (CEDDS)[1].

Historic population growth along the Pennsylvania Turnpike and the surrounding states has generally been considerably lower relative to the United States as a whole. Pennsylvania's population has increased slowly since 1980, with no growth in that decade, followed by 0.3% annually from 1990 through 2010. Since 2010, growth decelerated to 0.2% per year through 2021. In contrast, the national growth has been at least three times that in Pennsylvania during all time periods.

Population growth along the Pennsylvania Turnpike corridor was similar to statewide growth. This is reasonable considering that the counties in the four aggregations referenced constitute more than 80% of the statewide total. Within the Pennsylvania Turnpike corridor counties, the Pittsburgh Area has experienced a continuous population decline since the 1980s, whereas the other areas to the east of Pittsburgh have experienced modest growth.

[1] Woods & Poole Economics, Inc. Washington, D.C. Copyright 2022. 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.

Population is forecast to generally continue along historical trends, with relatively modest growth in Pennsylvania, the surrounding states, and the counties along and surrounding the Turnpike. Pennsylvania population growth is forecast to average 0.2% annually through 2030, and thereafter decelerate to 0.1% through 2050. Within the Commonwealth, Pittsburgh is forecast to continue contracting while the other areas are forecast to exhibit growth similar to Pennsylvania as a whole, with relatively faster growth in the Interurban counties between Pittsburgh and Philadelphia.

Table 3-1 Population Trends and Forecasts

Geography	History				Forecast		
	1980-'90	1990-'00	2000-'10	2010-'21	2021-'30	2030-'40	2040-'50
Pittsburgh Area	(0.7%)	(0.2%)	(0.3%)	(0.0%)	(0.1%)	(0.2%)	(0.3%)
Interurban Area	0.5%	0.7%	0.8%	0.4%	0.5%	0.4%	0.3%
Philadelphia Area	0.2%	0.4%	0.5%	0.4%	0.3%	0.2%	0.1%
Northeast Corridor	0.2%	0.2%	0.6%	0.3%	0.3%	0.3%	0.3%
Subtotal PA	0.0%	0.3%	0.4%	0.3%	0.3%	0.2%	0.1%
Maryland	1.3%	1.0%	0.9%	0.6%	0.6%	0.4%	0.4%
New Jersey	0.5%	0.8%	0.4%	0.5%	0.3%	0.2%	0.1%
New York	0.2%	0.5%	0.2%	0.2%	0.2%	0.1%	0.0%
Ohio	0.0%	0.5%	0.2%	0.2%	0.2%	0.1%	0.1%
Pennsylvania	0.0%	0.3%	0.3%	0.2%	0.2%	0.1%	0.1%
West Virginia	(0.8%)	0.1%	0.2%	(0.3%)	0.2%	0.1%	0.1%
Subtotal States	0.2%	0.5%	0.3%	0.3%	0.3%	0.2%	0.1%
United States	0.9%	1.2%	0.9%	0.7%	0.7%	0.6%	0.5%

Source: United States Census Bureau and Woods & Poole Economics, Inc. 2022

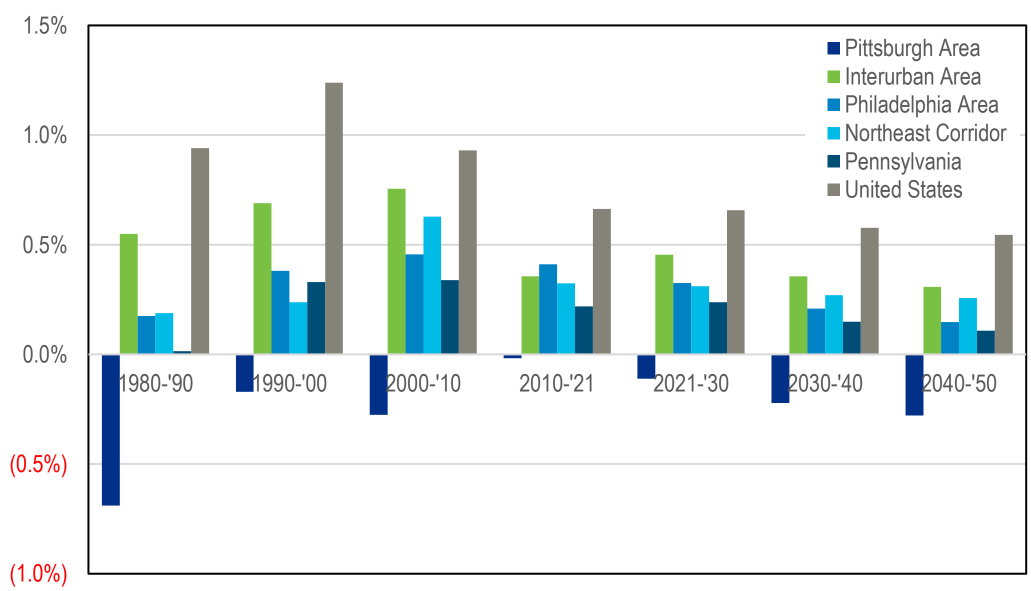


Figure 3-2
Population Trends and Forecasts

3.1.2 Employment and Unemployment

Historical employment data were obtained from the United States Department of Commerce (Bureau of Economic Analysis from 1980 through 2022), while future growth is forecast by Woods & Poole. Additional historical Bureau of Labor Statistics (BLS) unemployment data for the three major metro areas (which differ from the four Pennsylvania Turnpike socioeconomic groupings) are also compared and contrasted to state and national unemployment levels.

Employment

Historical employment growth generally decelerated from 1980 through 2010, with the most pronounced slowdown occurring during the 2000-2010 decade, reflective of the official recession from December 2007 through June 2009 ("Great Recession"). Since 2010, employment growth has mostly rebounded to longer-term historical averages, with Pennsylvania exhibiting 0.8% average growth in that time, which is similar relative growth to the 1990s. As with population, employment growth within Pennsylvania was historically slower than the nation (about half the rate). The Pittsburgh Area experienced the slowest relative historical employment growth, while the Interurban, Philadelphia, and Northeastern Corridor Areas experienced growth closely paralleling the Commonwealth. Historical employment growth and forecasts are presented in **Table 3-2** and **Figure 3-3**.

Although employment since 2010 (e.g., the Great Recession) rebounded to longer-term historical patterns, the forecast is for decelerating growth. Average growth for Pennsylvania and the United States is at 1.5% and 1.8%, respectively, through 2030, then decelerating to 0.8% and 1.1%, respectively, between 2030 and 2040, then to 0.6% and 1.0% through 2050.

Table 3-2 Employment Trends and Forecasts

Geography	History				Forecast		
	1980-'90	1990-'00	2000-'10	2010-'22	2022-'30	2030-'40	2040-'50
Pittsburgh Area	0.4%	0.9%	0.1%	0.5%	1.2%	0.5%	0.3%
Interurban Area	1.8%	1.2%	0.4%	0.8%	1.6%	0.9%	0.8%
Philadelphia Area	1.3%	0.7%	0.4%	1.2%	1.6%	0.8%	0.6%
Northeast Corridor	1.1%	0.9%	0.5%	1.0%	1.7%	1.1%	1.0%
Subtotal PA	1.1%	0.9%	0.4%	0.9%	1.5%	0.8%	0.7%
Maryland	2.8%	1.2%	0.8%	1.1%	1.7%	1.0%	0.8%
New Jersey	1.8%	1.0%	0.4%	1.2%	1.7%	0.9%	0.7%
New York	1.2%	0.7%	0.6%	1.1%	1.9%	0.9%	0.7%
Ohio	1.2%	1.5%	(0.6%)	0.9%	1.2%	0.6%	0.5%
Pennsylvania	1.1%	0.9%	0.3%	0.8%	1.5%	0.8%	0.6%
West Virginia	(0.1%)	1.2%	0.3%	(0.2%)	1.0%	0.5%	0.4%
Subtotal States	1.4%	1.0%	0.3%	1.0%	1.6%	0.8%	0.7%
United States	2.0%	1.8%	0.5%	1.5%	1.8%	1.1%	1.0%

Source: United States Bureau of Economic Analysis and Woods & Poole Economics, Inc. 2022

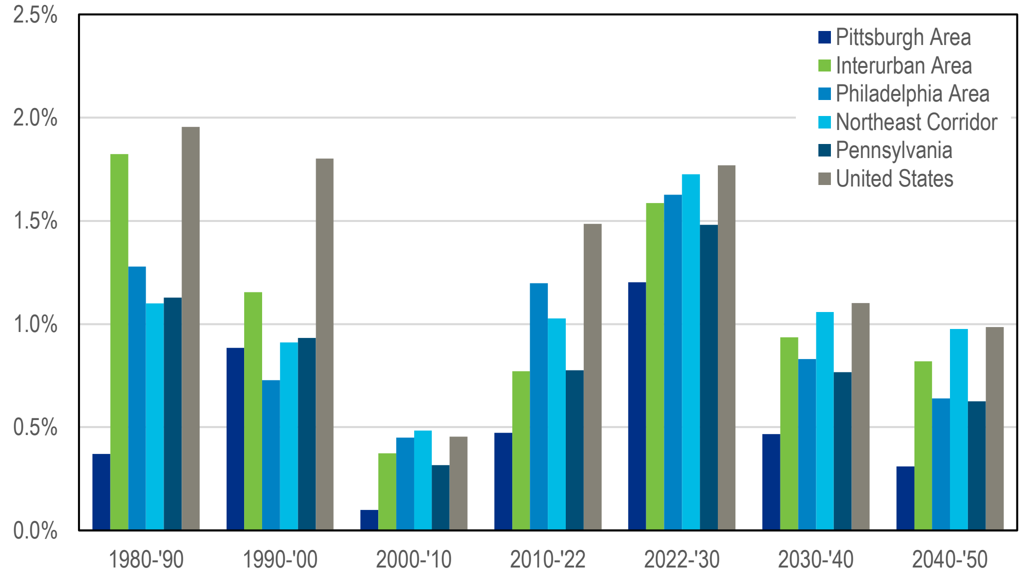


Figure 3-3
Employment Trends and Forecasts

Unemployment Rates

Seasonally unadjusted monthly unemployment rates in the preceding decade (January 2013 through February/March 2023) are presented in **Figure 3-4** for the three major Metropolitan Statistical Areas (MSA) in Pennsylvania located along the Turnpike Mainline. These are the Philadelphia-Camden-Wilmington MSA, the Harrisburg-Carlisle MSA, and the Pittsburgh MSA. Additionally, unemployment data for the Commonwealth of Pennsylvania and the United States are also presented for compatibility. As the data are seasonally unadjusted, the graph depicts both the seasonal cyclicality and the longer-term trends.

Unemployment rates for the Commonwealth and MSAs generally parallel the nation. After a steep increase in 2008 and 2009 due to the Great Recession, unemployment rates exhibited a decade of steady decline to around 4.0% at the end of 2019. Unemployment rates spiked in the early months of the COVID-19 pandemic (2020 Q2), but after a few years of pandemic-induced labor market shock adjustments, unemployment rates declined again to aground 4.0% by late 2022/early 2023. Although the trends parallel, Pennsylvania's unemployment has been above that of the United States since 2016. Harrisburg-Carlisle generally exhibited the lowest relative unemployment rates, reflective of the more stable government employment in the State Capitol (compared to more volatile private-sector employment). Pittsburgh exhibited slightly higher unemployment rates.

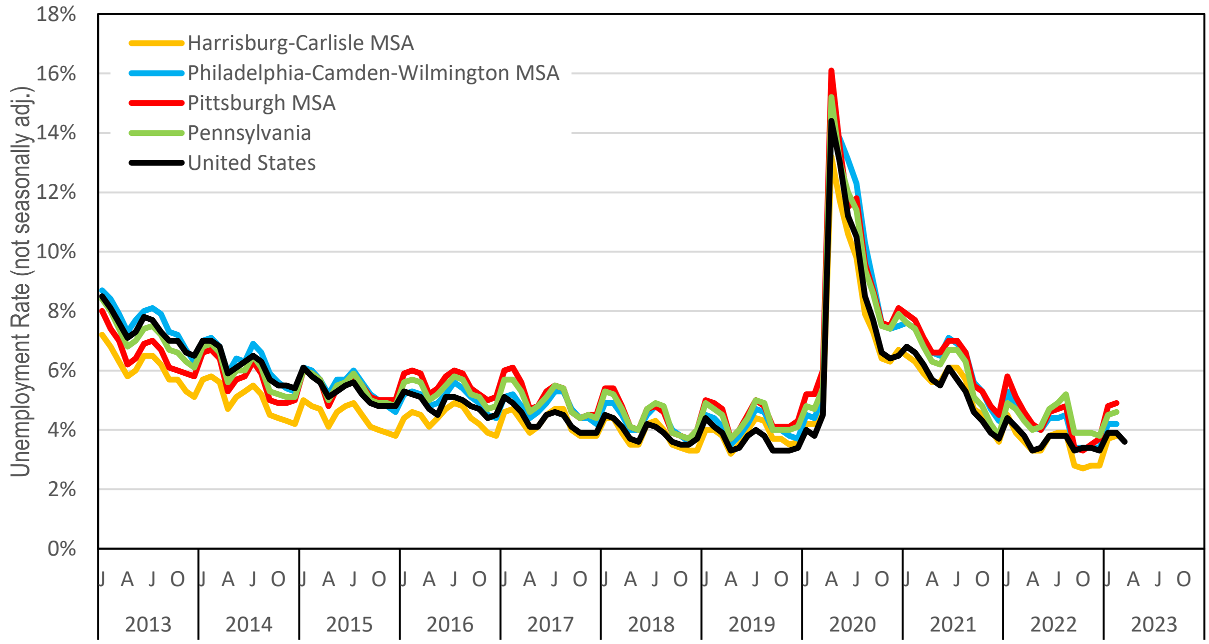


Figure 3-4
Unemployment Rate Trends

3.1.3 Real Retail Sales

Retail sales, in real or constant dollar terms (excluding inflation), trends and forecasts are presented in **Table 3-3** and **Figure 3-5** with data from Woods & Poole. Nationally, real retail sales grew 2.0% in the 1980s, accelerated to 3.3% in the 1990s, and was a tepid 0.5% in the decade from 2000 to 2010 (due to recession in 2008/09). Since 2010, national growth has rebounded to 3.0%. Pennsylvania trends paralleled the nation, albeit at a relatively slower pace before the Great Recession and 3.6% since. Within the Commonwealth, the Pittsburgh Area appears to have experienced the fastest post-recession relative growth (7.2%), however, this is entirely attributable to a pronounced increase from 2013 through 2015 in Allegheny County in W&P database updates not depicted in previous v2017 W&P, per last analysis timeframe, but is in the v2021 and v2022 series releases and is likely a reporting error. Such aberrant patterns are not observed in older W&P versions, or for other counties in proximity to Alleghany.

Real retail sales growth is forecast to decelerate from the rebound since the Great Recession. Nationally, Woods & Poole forecasts annual growth of about 1.4% through 2050. Pennsylvania is forecast to grow at a slower relative pace of about 1.0%. Within the Commonwealth, growth within the Interurban Area is forecast slightly higher than the other three clustered areas, of which the Pittsburgh Area is forecast to grow at the slowest relative average rate (reinforcing that pronounced historical growth in Allegheny County during the mid-2010s is likely a reporting error).

Table 3-3 Real Retail Sales Trends and Forecasts

Geography	History				Forecast		
	1980-'90	1990-'00	2000-'10	2010-'22	2022-'30	2030-'40	2040-'50
Pittsburgh Area	0.3%	2.4%	0.1%	7.2% (1)	0.3%	0.7%	0.8%
Interurban Area	2.2%	2.7%	(0.0%)	2.7%	0.9%	1.4%	1.4%
Philadelphia Area	2.1%	2.6%	0.3%	2.5%	0.8%	1.3%	1.3%
Northeast Corridor	1.6%	2.5%	1.7%	2.0%	0.8%	1.3%	1.4%
Subtotal PA	1.6%	2.5%	0.4%	3.8%	0.7%	1.1%	1.2%
Maryland	2.4%	2.7%	0.2%	2.3%	1.0%	1.4%	1.4%
New Jersey	2.2%	2.7%	0.1%	2.4%	0.7%	1.1%	1.2%
New York	1.5%	2.4%	0.9%	2.8%	0.6%	1.0%	1.1%
Ohio	1.2%	3.0%	(0.6%)	2.5%	0.6%	1.1%	1.2%
Pennsylvania	1.6%	2.5%	0.3%	3.6%	0.7%	1.1%	1.2%
West Virginia	(0.2%)	2.8%	0.1%	1.5%	0.6%	1.1%	1.2%
Subtotal States	1.6%	2.6%	0.3%	2.8%	0.7%	1.1%	1.2%
United States	2.0%	3.3%	0.5%	3.0%	1.1%	1.5%	1.6%

(1) Pittsburgh Area growth from 2010-2022 is likely a reporting error.

Source: Woods & Poole Economics, Inc. 2022

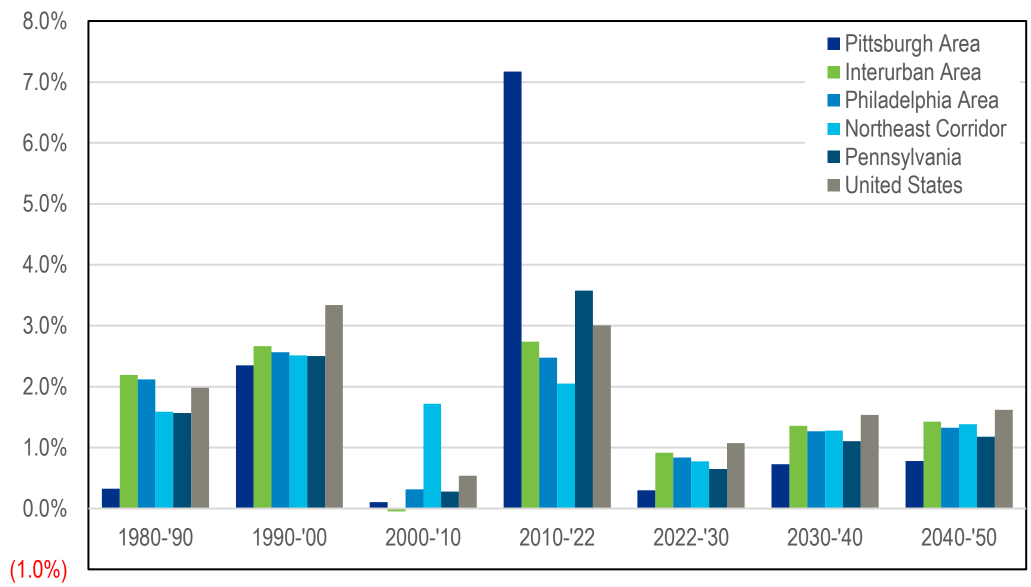


Figure 3-5
Real Retail Sales Trends and Forecasts

3.1.4 Real Gross Regional Product (GRP)

Real gross regional product (GRP) (or gross state product/gross domestic product, depending on the geographic focus) is the inflation-adjusted standard metric for total economic activity. Real GRP trends and forecasts are presented in **Table 3-4** and **Figure 3-6** and are sourced to Woods & Poole, based on Bureau of Economic Analysis data.

National real gross domestic product (GDP) decelerated from an annual 3.6% in the 1990s to about half that (1.8%) between 2000 to 2010 (reflective of the Great Recession). Since that recession, national real GDP has increased 2.1% annually. Prior to the Great Recession, Pennsylvania's real gross state product (GSP) grew 2.6% annually in the 1990s and decelerated to 1.9% from 2000 to 2010. After 2010, growth decelerated further to 1.4% through 2022. Within the Commonwealth, Philadelphia historically outpaced the other MSAs.

Real GRP forecasts are for 2.1% per annum for the United States through 2030 and 1.9% for Pennsylvania. As with the forecasts for other socioeconomics, a general deceleration is forecast for GRP. In the corridor counties, like the entire Commonwealth, real GRP growth is projected to average 2.0% through 2030, with a general deceleration thereafter. Within the Pennsylvania Turnpike corridor, the Pittsburgh and Philadelphia Areas are forecast to have the slowest relative growth.

Table 3-4 Real Gross Regional Product Trends and Forecasts

Geography	History				Forecast		
	1980-'90	1990-'00	2000-'10	2010-'22	2022-'30	2030-'40	2040-'50
Pittsburgh Area	0.4%	2.5%	2.1%	1.5%	1.8%	1.5%	1.4%
Interurban Area	2.9%	2.6%	1.9%	1.3%	2.0%	1.8%	1.7%
Philadelphia Area	3.4%	2.7%	2.2%	1.5%	2.0%	1.7%	1.5%
Northeast Corridor	2.4%	2.9%	(0.2%)	1.5%	2.1%	1.9%	1.8%
Subtotal PA	2.4%	2.7%	1.8%	1.5%	2.0%	1.7%	1.5%
Maryland	4.5%	3.0%	2.9%	1.4%	2.0%	1.8%	1.6%
New Jersey	4.7%	2.7%	1.1%	1.2%	1.9%	1.6%	1.4%
New York	3.1%	2.4%	1.8%	2.3%	2.1%	1.7%	1.4%
Ohio	2.0%	3.0%	0.4%	1.7%	1.6%	1.4%	1.3%
Pennsylvania	2.3%	2.6%	1.9%	1.4%	1.9%	1.7%	1.5%
West Virginia	(0.2%)	2.1%	2.4%	0.4%	1.3%	1.1%	1.1%
Subtotal States	3.0%	2.6%	1.6%	1.8%	1.9%	1.6%	1.4%
United States	3.1%	3.6%	1.8%	2.1%	2.1%	1.9%	1.8%

Source: Woods & Poole Economics, Inc. 2022

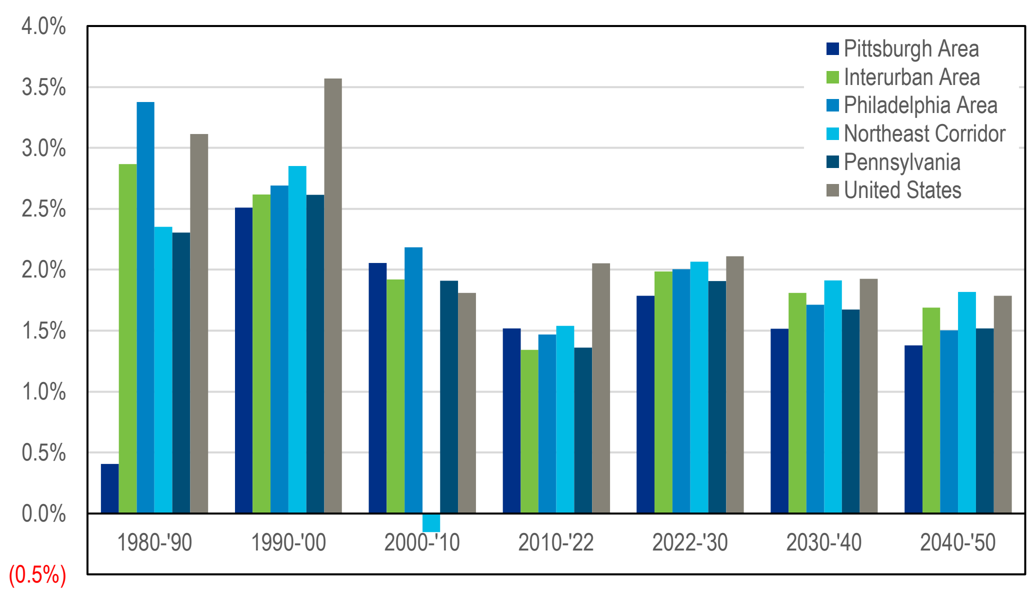
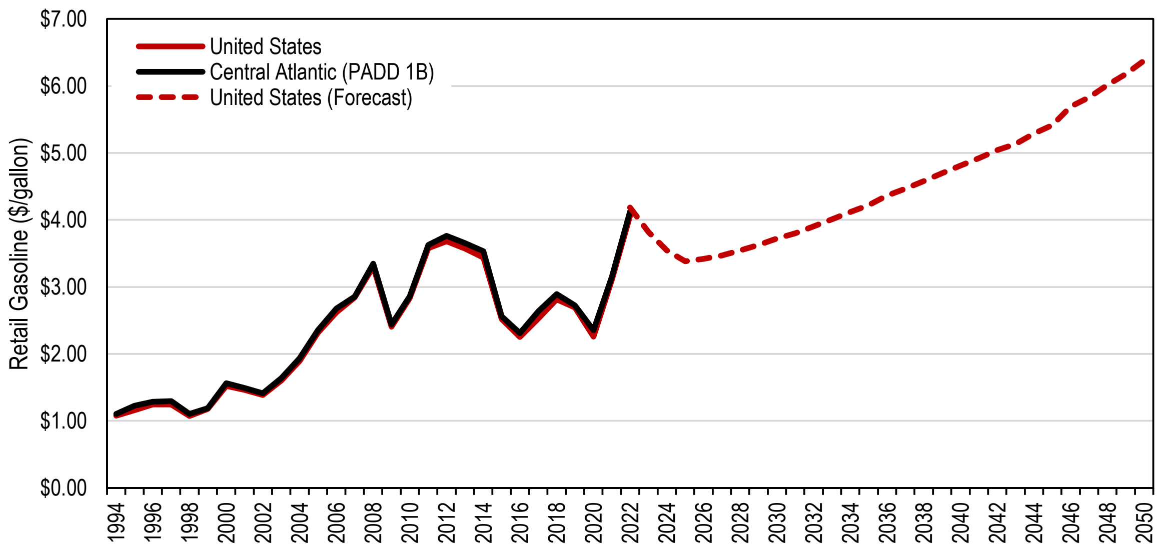


Figure 3-6
Real Gross Regional Product Trends and Forecasts

3.1.5 Motor Fuel Prices

Historical gasoline prices (in current dollars/gallon for all grades, all formulations) for the Central Atlantic region (NY, NJ, PA, DE, and DC) and the United States are presented in **Figure 3-7**, from the U.S. Energy Information Administration (EIA). Average annual gasoline prices for the United States and the Central Atlantic region were nearly identical historically, with the Central Atlantic region between $0.01 and $0.11 per gallon above the national price. Prices peaked at close to $3.70 per gallon in 2012, declined through 2016, then fluctuated slightly higher until 2020, which was almost the same as 2016. Prices increased in 2021 and again in 2022 to over $4.00 per gallon, stemming mostly from the Russia-Ukraine conflict. According to the EIA Annual Energy Outlook, future average national gasoline prices are forecast to decline through 2025 ($3.38) and then steadily increase to almost $6.50/gallon by 2050 in current dollars.



Source: Energy Information Administration

Figure 3-7
Gasoline Prices

3.2 MPO Outreach and Regional Economic Conditions

To supplement the socioeconomic data analysis, additional qualitative inputs were collected for the geographic areas represented by four of the five major metropolitan planning organizations (MPO) containing Pennsylvania Turnpike corridors. The inputs were collected via discussions with representatives from the MPOs. These discussions were used to add context, when possible, to socioeconomic datasets to ensure that the data analysis did not miss any known local dynamics that could impact traffic growth during the forecast period. In the end, the local perspective gained from these conversations supplemented the socioeconomic datasets but did not result in any changes to the econometric forecast.

As shown in **Figure 3-8**, the geographic areas covered by these five MPOs partially overlap with the four Pennsylvania Turnpike areas analyzed in the previous subsection. While characteristics reviewed and discussed varied by MPO, they generally included housing and residential, employment and industry, and freight and shipping. The five MPOs include:

- Southwestern Pennsylvania Commission (SPC)
- Delaware Valley Regional Planning Commission (DVRPC)
- Tri-County Regional Planning Commission (TCRPC)
- Lackawanna-Luzerne Metropolitan Planning Organization (LLMPO)
- Lehigh Valley Planning Commission (LVPC)

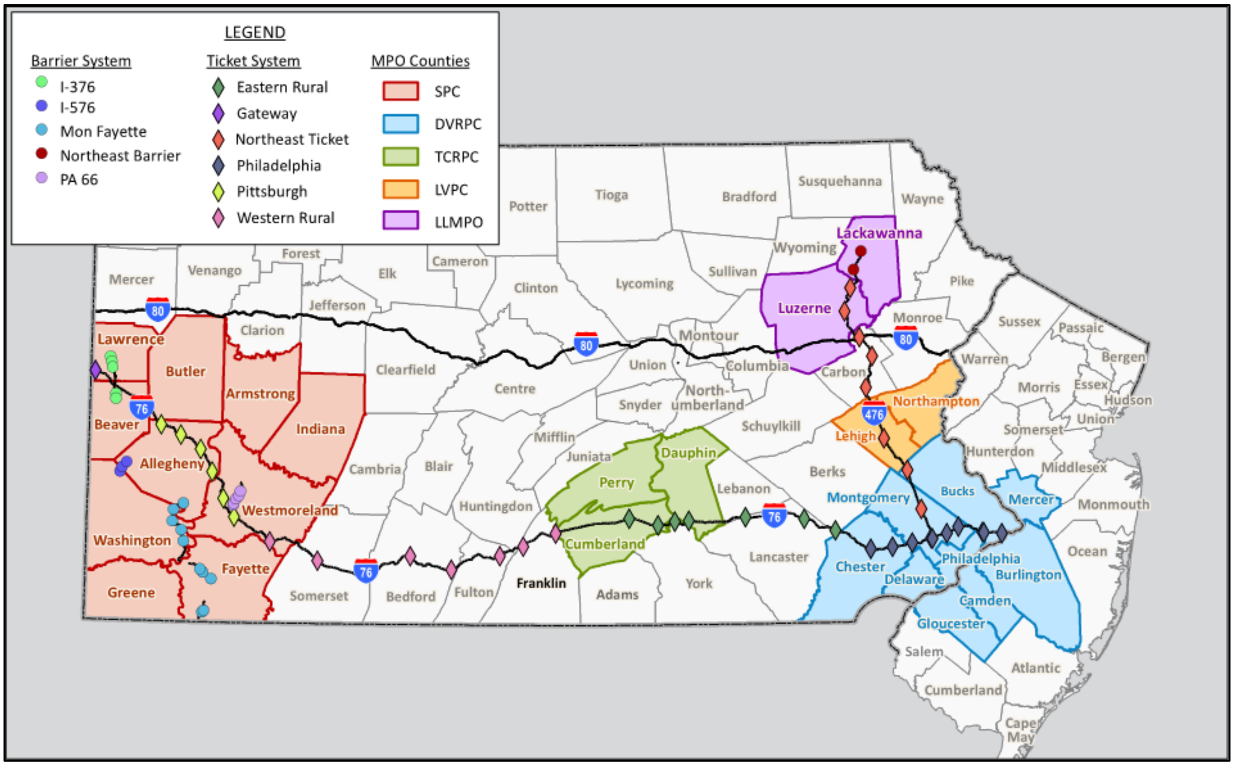


Figure 3-8
Pennsylvania MPOs

3.2.1 Southwestern Pennsylvania Commission

The Southwestern Pennsylvania Commission includes the eight Pittsburgh Area counties as well as the two counties bordering West Virginia (Fayette and Greene).

Housing and Residential

Although regional population growth has been stagnant over the last decade, average household sizes have decreased, which has resulted in the number of households growing. Washington County and Butler County, especially the southwest portion of it, have seen the most growth in the region. Additionally, a number of office buildings in downtown Pittsburgh have been converted to condos and apartments. Although this shift was occurring prior to the pandemic, increased prevalence of telecommuting in the past three years has accelerated this trend.

Employment and Industry

The Southpointe business park in Cecil Township, Washington County, 17 miles south of Pittsburg, accommodates over 300 businesses and is mostly built out. The lack of availability within Southpointe combined with the recent extension of the Southern Beltway to I-79 have resulted in proposals for additional residential and warehouse development, including the proposed Cool Valley development, a proposed 900-acre mixed use development. While coal output and associated employment continue to decline, the warehousing, life sciences, medical, technology, and robotics industries continue to grow. An ethylene cracker plant developed by Shell Oil in Beaver County opened in November and is expected to drive new supporting and spinoff local development.

Freight and Shipping

Local distribution facilities, including Amazon, continue to expand throughout the area, especially along the Southern Beltway corridor. MPO planners expect to see PennDOT's regional truck reliability target for the region increase, which would make freight shipments more predictable and reliable. MPO planners indicated that they see some evidence of through traffic finding alternate toll-free routes in the area and expressed concern that toll rate increases may negatively impact future growth. Due to the decline of the coal industry, freight traffic on the Monongahela River is down and has nearly dried up on the Allegheny River, although it remains strong on the Ohio River.

3.2.2 Delaware Valley Regional Planning Commission

The Delaware Valley Regional Planning Commission includes five of the six Philadelphia-area Pennsylvania Turnpike counties, excluding Berks, and four neighboring New Jersey counties (Burlington, Camden, Gloucester, and Mercer).

Housing and Residential

The population of the urban core of Philadelphia and the suburban counties are all growing. In the 2010s, population growth shifted from exurban and greenfield development towards urban and inner ring suburbs, with the DVRPC region accounting for about three quarters of the state's total population growth during the decade. While Philadelphia County had the largest absolute increase in population, including a number of office-to-residential conversion in Center City, Chester County had the greatest percentage growth. Notable regional projects include the redevelopment of the Philadelphia Navy Yard (located in South Philadelphia adjacent to the Delaware and Schuylkill Rivers, I-95, and Philadelphia International Airport) and Naval Air Station (NAS) Willow Grove (located near I-476 and I-276 in Montgomery County). DVRPC staff indicated that Philadelphia Navy Yard will take about 10 to 15 years to fully build out, while the NAS Willow Grove redevelopment will take about the same amount of time to get underway.

Employment and Industry

While employment growth continues in both the Philadelphia core and the suburban area, telecommuting trends have resulted in residential displacement of office space in downtown Philadelphia. In the suburbs, the largest employment center is in and surrounding King of Prussia, Upper Merion Township, and Lower Merion Township in Montgomery County. This area contains a number of office parks as well as the King of Prussia Mall, one of the largest in the country, and the Villages at Valley Forge, a 122-acre mixed-use town center development adjacent to the mall.

Although brick-and-mortar retail has struggled in many locations, the mall has many upscale retailers that continue to attract customers. Given such growth in this area, the Southeastern Pennsylvania Transportation Authority (SEPTA) has explored extending high-speed rail to King of Prussia, although as of March 2023 the project is paused because of rising project costs due to inflation and high interest rates. Additionally, now that the Turnpike has converted to AET and thus eliminated the need for toll plazas, Montgomery County is exploring making more slip ramps and interchanges with the Turnpike in order to increase highway accessibility.

Two additional developments in the planning stages aim to grow the region's life sciences industry. The first is the Bellwether District in South Philadelphia, which plans to convert a 1,300-acre site from a former refinery into a life sciences campus. The second is the proposed Schuylkill Yards in Philadelphia's University City neighborhood and adjacent to the University of Pennsylvania, Drexel University, and 30th Street Station, which serves Amtrak as well as subway and commuter rail lines operated by SEPTA. The project would cap the rail yards at 30th Street Station and then create commercial, residential, retail, office, and life science laboratory spaces.

Freight and Shipping

With a major international port and commercial service airport along the eastern seaboard, the region accommodates a large volume of directional freight (inbound, outbound, internal, and through) by all four modes (truck, rail, port, and air). Furthermore, the Keystone Trade Center in Falls Township, Bucks County, is an underway development of a former U.S. Steel factory into a distribution and logistics hub with millions of square feet of space. As the region's freight capacity builds out, freight center growth has moved northward along the Pennsylvania Turnpike's Northeast Extension into the Leigh Valley area, discussed further in the next section.

3.2.3 Lehigh Valley Planning Commission

The Lehigh Valley Planning Commission is the Metropolitan Planning Organization for Lehigh and Northampton Counties, which include the cities of Allentown (Lehigh County), Easton, and Bethlehem (Northampton County). Both counties are among the six counties aggregated into the Northeastern Corridor counties for econometric analysis.

Housing and Residential

Housing demand has been strong in recent years, with the number of new residential units permitted in 2021 being the highest since 2007. Much of this demand reflects migration from New York and New Jersey. Some of the growth has come in downtown Allentown, which is undergoing a revitalization.

Employment and Industry

Fogelsville, along I-78 and just west of I-476, is the region's main industrial area. Healthcare and education continue to be leading industries in the region, with the Hecktown Oaks Hospital opening in Lower Nazareth Township in Northampton County in 2021 and a smaller hospital recently proposed for Macungie in Lehigh County. In 2020, Lehigh University opened a new School of Health that will likely grow in coming years. Other developments include recent expansion of the Wind Creek Bethlehem casino and a redevelopment of the long-vacant Lehigh Valley Dairy in Whitehall Township.

Freight and Shipping

Freight and logistics has been a growth area for the region due to its proximity to highways and major metropolitan areas and land availability. There are a number of underway or planned warehousing developments including the Route 309 Commerce Center in Upper Saucon Township, the former headquarters site of Air Products in Upper Macungie Township (both near I-476 and I-78), and the River Pointe Logistics Park in Upper Mount Bethel Township. Additionally, Lehigh Valley International Airport has seen growth in both passenger and freight flights in recent years, with freight having particularly strong growth as the airport has served as a relief valve for New York City area airports and FedEx Ground has increased operations. Development around the airport is likely to continue, although no specific large-scale plans are underway as the area undergoes rezoning to align with the airport's master plan.

Although freight and shipping developments have moved northwards along the Northeast Extension into the Lehigh Valley from the Philadelphia area, appropriate developable parcels have begun to dry up. As a result, warehousing development has continued to move further north into the Wilkes-Barre and Scranton areas.

3.2.4 Lackawanna-Luzerne Metropolitan Planning Organization

The Lackawanna-Luzerne MPO is the MPO for Lackawanna and Luzerne Counties, which include the cities of Scranton and Wilkes-Barre, respectively. Both counties are among the six counties aggregated into the Northeastern Corridor counties for econometric analysis.

Housing and Residential

Population remains stable with residential in-migration into downtown Scranton induced by the Medical College enrollment and reverse suburbanization trends of older residents seeking more-urbanized access to retail, entertainment, medical, etc. Downtown Scranton population growth has been further enabled by conversion of old manufacturing facilities into residential units.

Employment and Industry

In addition to the strong growth exhibited by the freight distribution and shipping industries (see below), the finance and insurance industries and tourism generated by the Steamtown National Historic Site, Mohegan Sun casino, and Montage Mountain resort facilitate modest economic growth in the region. Montage Mountain, in particular, is poised to grow in coming years as the resort has proposed a large hotel to support its plans to develop year-round programming, which includes a summer concert series and water park. Conversely, some businesses have left downtown Wilkes-Barre due to the increased prevalence of telecommuting, which has left businesses in the area without a customer base during working hours. Wilkes-Barre/Scranton International Airport has also lost some passenger service in recent years as customers seem to be increasingly opting to utilize the airports in Allentown (to the south) and Binghamton (to the north) instead.

Freight and Shipping

As is the case in the Lehigh Valley region, freight and shipping continue to be a strong and growing sector of the regional economy. The most significant warehousing centers in the region are Hazleton and White Haven along PA 424, with additional freight warehousing along I-81 and U.S. 6. MPO planners believe that demand for warehousing will continue to move north, as there have recently been rezoning requests for multi-million square foot warehouses along rural parts of I-84 in Lackawanna County. Of note, planners do not have any indications that truck traffic is avoiding I-476 despite the presence of toll-free I-81 as the more direct and congestion-free route it offers is more valuable than toll savings.

3.2.5 Tri-County Regional Planning Commission

Within the sixteen-county Interurban Area, the Tri-County Regional Planning Commission (TCRPC) comprises the three central counties of Cumberland, Dauphin, and Perry around the state capitol of Harrisburg. CDM Smith reached out to the MPO several times but were unable to engage. Located to the west of the DVRPC region and east of the rural central portion of the state, the region is the fourth-largest metropolitan area in the state (after Philadelphia, Pittsburgh, and Allentown). With nearly 8% population growth during the 2010s, it is the fastest growing region of the state.

CDM Smith did speak to TCRPC planners as part of the 2018 study, and many of the points discussed then still hold true. Dauphin and Cumberland Counties continue to be the region's population centers, while rural Perry County's population remained flat during the 2010s. Like much of Pennsylvania, the regional economy has shifted away from manufacturing and towards services, with the state government in Harrisburg, the Penn State Hershey Medical Center, Giant Food Stores corporate headquarters, Hershey Company Resort and Factory, and various military installations being significant employers. Additionally, the region's location along multiple interstate highways, proximity to major population centers of the east coast, and a major intermodal rail facility continue to drive freight traffic in the region.

3.2.6 Conclusion

After receiving and reviewing information provided by MPO staff and comparing it against socioeconomic data received from other sources, CDM Smith determined that 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 no developments or conditions that were not captured in socioeconomic data that would alter the quantitative forecasting process. Therefore, no econometric equations were modified. Rather, the outreach corroborated and substantiated the socioeconomic trends with local depictions of where residential and/or business growth was (or was not) occurring and why.

3.3 Economic Growth Analysis

An econometric analysis was conducted to estimate long-term baseline travel demand on the Pennsylvania Turnpike. Historical travel demand was econometrically estimated via regression equations for toll plazas groupings (explained in **Section 3.3.1.2**). Regional socioeconomics and other variables were tested as explanatory factors (see **Section 3.3.1.3**). With statistically significant historical equations, independent variable forecasts were applied to equation coefficients to estimate future demand through 2060. Twenty equations were tested for either individual plazas or groups of proximate plazas for both passenger cars (PCs) and commercial vehicles (CVs). A majority of the twenty plaza-vehicle grouping equations yielded statistically significant, defensibly logical results.

An econometric analysis as such was conducted in 2018 and revisited in 2023 to determine the current reasonableness of previously estimated equations and update, as necessary. Factors differing from the 2018 estimations include the following, which are elaborated upon in subsequent subsections:

- additional historical timeframe (2017 through 2022, inclusive)
- 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$)
- additional toll index detail (nuanced between facility groupings)
- consideration of a COVID-19 explanatory variable

Subsequent toll modeling analyses conditionally incorporates these econometrically derived baseline travel demand forecasts, which consider a range of future toll policies and rate structures in estimating future revenue potential.

3.3.1 Econometric Modeling

Multivariate regression analysis establishes a mathematical equation for a dependent variable (e.g., annual transactions) as a function of other independent variables (e.g., annual socioeconomic data), with associated statistics explaining the equation robustness. Generally, a linear regression equation is expressed as follows:

$$y_t = \alpha + (\beta_1 * x_{1,t}) + (\beta_2 * x_{2,t}) + \cdots + \varepsilon$$

- y_t is the dependent variable in timeframe t
- α is the intercept coefficient
- $x_{1,t}$ and $x_{2,t}$ etc. are the respective independent variables in timeframe t
- β_1 and β_2 etc. are the slope coefficients for the respective independent variables
- ε is the residual error

In addition to linear relationships and coefficients, multivariate regression variables can be transformed (e.g., natural ln), lagged (e.g., t-1), and/or combined in other mathematical ways to identify more logical and improved statistical relationships. Linear and logarithmic linear (ln-linear) regressions were tested for all twenty plaza-vehicle groupings.

In each regression equation, an analysis of variation (ANOVA) output table explains the statistical parameters, such as adjusted R^2 (coefficient of determination) and t-statistics/p-values for each independent variable, 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 forecasts of independent variables are credibly available.

Growth rates developed from econometric analysis are used within the forecasting model to develop traffic and revenue projections, with some adjustments made to consider additional factors. However, some of the Barrier System facilities have relatively weak correlations, and therefore the econometric models may be dismissed and supplanted with alternative growth assumptions derived from recent trend extrapolations or other non-econometric means.

3.3.1.1 Regression Testing

Individual highway travel occurs for myriad 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 tested include population, employment, real gross regional product, and real retail sales, compiled at various geographic levels.

In addition to regional socioeconomics, average fuel prices and indexed toll variables were tested as explanatory factors. In 2018, only a generalized historical toll rate increase schedule representing the aggregate mainline facilities was available, but in 2023, additional details were available for the non-mainline historical increases. Such detailed toll indexes were tested against the respective groupings.

With an extended historical timeframe since the 2018 analysis (2017 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 PCs and CVs. Prior to COVID-19 (2019 and previously) the index is 1.0 (e.g., "normal" full-demand behavior). For PCs, it declines to 0.75 in 2020, 0.85 in 2021, and is held at a constant 0.90 from 2022 through the end of the forecast period. This reflects a 10% permanent adjustment that effectively reanchors now-institutionalized increased work-from-home proportions. CVs did not decline as precipitously in 2020, with the index falling to only 0.95, and then rebounded beyond pre-COVID levels to a relative 1.05 index in 2021 and held at a constant 1.10 from 2022 through the end of the forecast period. These index levels reflect supply chain patterns stemming from COVID-19's further behavior shift from in-store to online purchasing for both personal and business spending. 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 GRP declined 2.8% in 2020, while national traffic contracted by a much larger proportion).

Multiple regression equations were tested and evaluated for each toll plaza-vehicle grouping to account for the numerous possible combinations of relevant geographies (county clusters) for each possible socioeconomic variable and combinations with fuel, toll index, 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.

3.3.1.2 Toll Plaza Groupings (Dependent Variables)

In order to reduce regression testing to a reasonably manageable data universe, toll plazas were clustered into the ten groupings (from 69 individual plazas) based-on similarities in historical travel demand patterns, proximity, data availability, and other characteristics such as operating history. These groupings are identified in **Table 3-5** and mapped in **Figure 3-9**. Some individual plazas were excluded from the groupings due to data gaps (e.g., I-376 and PA 66), staggered plaza openings and closings (e.g., Mon/Fayette), or too short annual timeseries data (e.g., I-576), as inclusion would artificially distort the historical demand trends. For a long-term 30-year forecast such as the one provided in this study, any toll plazas with a relatively shorter operating history may have trends that are artificially distorted by short-term ramp ups or other factors. Therefore, of the 69 individual toll plazas, 39 were included in the groupings. The 30 excluded mostly pertain to the smaller Barrier System facilities.

Note that the Delaware River Bridge (DRB) and the Southern Beltway (I-576) were not econometrically tested similarly to other groupings. The DRB changed operations recently, therefore the historical trend may not appropriately correspond with current and future conditions. The Southern Beltway opened as the Findlay Connector between the Pittsburgh Airport and U.S. 22 in 2006 and was extended to I-79 in October 2021. The relatively short historical data includes a ramp-up trend that does not statistically correspond to any regional socioeconomic characteristics.

Where available, historical traffic data were used as continuous annual time series from 1987 through 2022. Annualized data were available for most of the Ticket System facilities, exempting a few plazas opening after 1987 (and thus excluded). However, Barrier System data were more limited: available only since 1994 with data gaps, or toll plazas that were opened too recently to provide a statistically defensible trend (insufficient number of data points). Many of the 30 excluded plazas are barrier toll plazas with shorter historical operating timeframes than since 1994.

Table 3-5 Toll Plaza Groupings

	Plaza Grouping	Type	Included	Excluded
1	Gateway	Ticket	1	0
2	Pittsburgh	Ticket	5	1
3	Western Rural	Ticket	7	0
4	Eastern Rural	Ticket	7	0
5	Philadelphia	Ticket	6	5
6	Northeast Ticket	Ticket	7	2
7	Northeast Barrier	Barrier	2	0
8	I-376	Barrier	2	3
9	PA 66	Barrier	1	4
10	Mon Fayette	Barrier	1	11
*	DRB	Ticket	1	0
*	I-576	Barrier	3	0

Source: CDM Smith

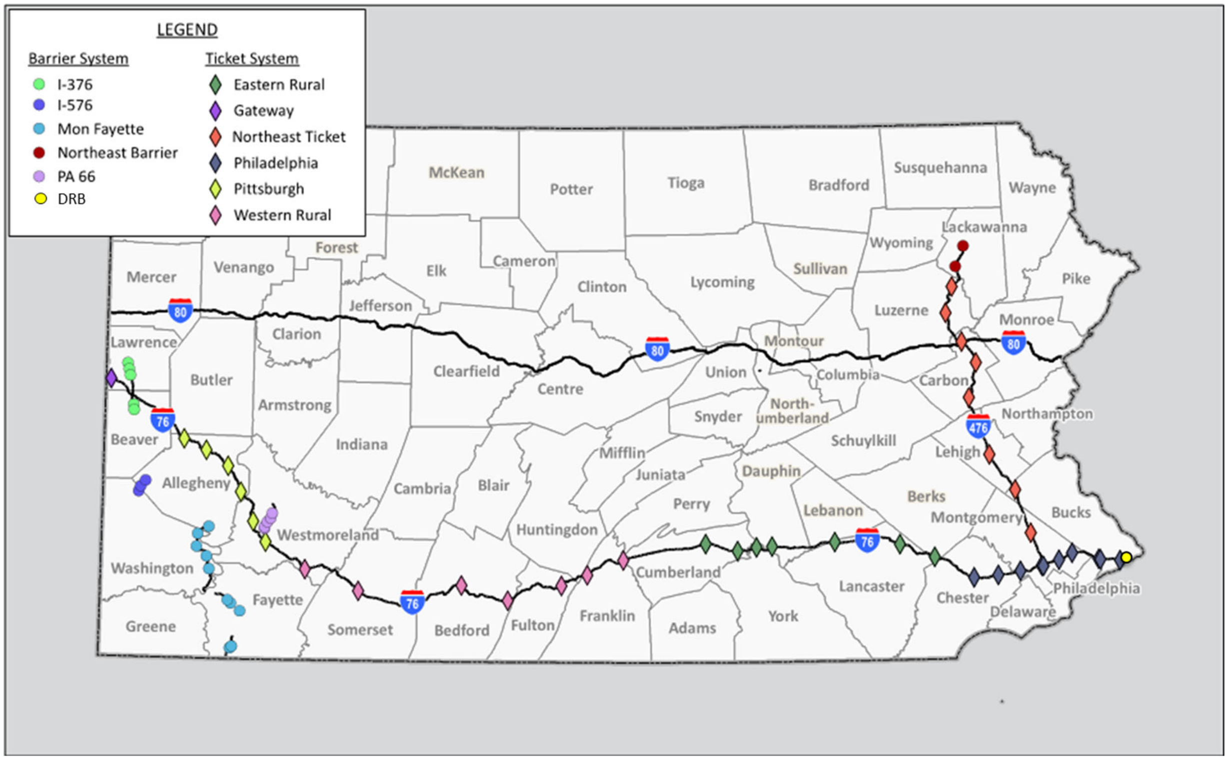


Figure 3-9
Toll Plaza Groupings

3.3.1.3 Socioeconomic Data (Independent Variables)

Data inputs include historical and forecast data for the possible explanatory independent variables, which comprise socioeconomics for geographies surrounding the Turnpike (i.e., Pennsylvania and surrounding states' counties). Data compiled for regression testing included:

- Pennsylvania Turnpike Commission – historical transactions and toll rate schedules
- 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
- Moody's Analytics – historical and forecast real gross regional product (GRP)

Socioeconomic data were tested as explanatory variables at various combinations of counties surrounding the toll plazas groupings. Data was compiled for all counties in Pennsylvania, New York, New Jersey, Delaware, Maryland, Virginia, West Virginia, and Ohio.

3.3.1.4 Regression Caveats

Econometrically derived long-term demand forecasts serve as a basis for further transaction and toll revenues estimates. Growth forecasts from the regressions do not explicitly consider route choice assumptions, the 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 long-term growth rates are conditionally incorporated into further traffic and revenue 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 future 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.

3.3.1.5 Regression Equations and Forecasting

A final regression equation was estimated for each toll plaza-vehicle grouping, relating historical annual travel demand with a regionalized socioeconomic variable, and sometimes with a toll index and/or COVID-19 index as additional explanatory factors. A regression summary for the 20 toll plaza-vehicle groupings is provided in **Table 3-6**. After testing socioeconomics at various regional county clusters, it was determined that real GRP was the best-suited explanatory variable for most equations, with population being best-suited for a few more. Explanatory socioeconomic variables identified in the 2018 analysis were unchanged in this 2023 update. However, the geographic catchments (county clusters) were adjusted and the COVID-19 variable was newly necessary, especially for PCs.

Geographically, regional combinations of contiguous counties in Pennsylvania, New Jersey, Delaware, Maryland, West Virginia, and Ohio served as logical and statistically acceptable catchment areas. 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 Pennsylvania Turnpike system. 2018 equations were updated with county catchment adjustments, mostly removing some peripheral counties bordering Pennsylvania, resulting in slightly narrower areas surrounding the respective plazas groupings. Catchment areas regionalize socioeconomic variables as related to travel demand. However, the catchment areas should not imply that travel demand is only from those geographies, but rather that the catchments' socioeconomic data are a relatively logical, statistically valid relationship for the aggregate demand.

Most of the twenty equations exhibited sensible relationships with acceptable statistics, however, despite concerted diligence, a few equations could not be improved upon while yielding relatively poor statistics, questionable relationships, and/or unusual forecasts (especially compared to history). In such instances, the historical travel demand patterns did not trend overly well with any regional socioeconomics and/or the toll rate factors, and are instead probably more influenced by localized, sub-county factors such as toll plaza operating characteristics, diversion potentials, construction closures, etc. Such historical transaction volatility disjointed from regional socioeconomic trends was encountered for single toll plaza equations (i.e., Gateway CV) and the smaller Barrier System facilities (i.e., Northeast Barrier PC and CV). Contrastingly, the Ticket System groupings with multiple major toll plazas that contribute to a significant majority of the total Pennsylvania Turnpike transactions and revenues exhibited statistically significant equations and coefficients, with consistent relationships across adjacent groupings and logical results.

Table 3-6 Regression Summary

Grouping/Vehicles	Start Yr	Adj. R2	Independent Variables			PA	Non-PA	Counties
Gateway PV	1987	91.5%	GDP	COVID-19		3	4	7
Pittsburgh PV	1987	94.7%	GDP	Toll Index	COVID-19	18	9	27
Western Rural PV	1987	90.1%	GDP	Toll Index	COVID-19	14	6	20
Eastern Rural PV	1987	97.7%	GDP	Toll Index	COVID-19	10	4	14
Philadelphia PV	1987	93.2%	GDP	Toll Index	COVID-19	13	7	20
Northeast Ticket PV	1987	98.0%	Population	Toll Index	COVID-19	8	4	12
Northeast Barrier PV	1994	79.8%	Population	COVID-19		2		2
I-376 PV	1994	91.1%	GDP	Toll Index	COVID-19	3		3
PA 66 PV	1994	96.4%	GDP	Toll Index		7	3	10
Mon Fayette PV	1994	93.4%	GDP	Toll Index	COVID-19	4	1	5
Gateway CV	1987	90.3%	Retail Sales			2		2
Pittsburgh CV	1987	95.9%	GDP	Toll Index	COVID-19	2	1	3
Western Rural CV	1987	92.3%	GDP	Toll Index	COVID-19	15	9	24
Eastern Rural CV	1987	96.5%	GDP			9	5	14
Philadelphia CV	1987	92.7%	GDP			6	4	10
Northeast Ticket CV	1987	99.4%	GDP	COVID-19		12	2	14
Northeast Barrier CV	1994	73.9%	GDP			3		3
I-376 CV	1994	96.7%	GDP			8	2	10
PA 66 CV	1994	95.1%	GDP			4		4
Mon Fayette CV	1994	92.5%	GDP			3	5	8

Source: CDM Smith

Aside from the few equations at single- and small Barrier System groupings with relatively poor statistical fits, the remaining equations that correspond to a significant majority of Pennsylvania Turnpike toll transactions and revenues exhibit robust adjusted R^2 statistics, ranging between 90.1% and 99.4%. Such relatively high statistical fits indicate good relationships. Similar results occurred in the 2018 analysis, with the same vehicle-grouping equation outliers (e.g., the same general statistical relativity between equations mostly held). Compared to the 2018 adjusted R^2, about half the equations (9 out of 20) improved, and about half (11 out of 20) declined, mostly with relatively minor (+/-1%) differences, although some barrier PCs' adjusted R^2 increased more. Effectively, the identified equations in 2018 generally held (logically and statistically) with some adjustments to the counties included per socioeconomic variables and the necessary inclusion of COVID-19 indexing. In three CVs equations, the previous generalized toll increase index was an included explanatory variable but has now dropped.

With the final equations, socioeconomic and toll index forecasts were applied to the regression coefficients to estimate future long-term travel demand. (Although the COVID-19 index variables

CDM Smith

explained recent historical variations, they are assumed to hold constant in forecasts at observed 2022 levels and thus have no further effect on growth estimates). Socioeconomic forecasts were obtained from both Woods & Poole Economics, Inc. at a detailed county level and Moody's Analytics at a more macroscopic statewide and metropolitan statistical area (MSA) level. Both sources forecast almost identical long-term annual real GRP trends for comparable statewide and MSA geographies, with very minor average growth rate differentials only marginally noticeable after 2035. Given the availability of Woods & Poole forecasts at a granular county level, it was applied to equations to forecast baseline travel demand. The toll index forecast assumes a 5.0% annually recurring increase through 2025, 4.0% in 2026, 3.5% in 2027, and a deceleration to 3% in 2028 and thereafter.

In further traffic and revenue modeling, it was decided that econometric-derived forecast growth estimates for some of the identified sub-par equations fits not be applied. Instead, it was decided that alternative growth forecasts from a simpler, non-econometric based extrapolation of most recent historical trends be employed. A similar recommendation to consider simpler, alternative forecasts for the remaining barrier-system forecasts was also made because of the more localized characteristics of such facilities. Given the acceptable logic and statistical significance of the ticket-system equations, it was recommended that the econometric-based growth forecasts be applied in further traffic and revenue modeling for those major facilities.

3.3.2 Demand Growth Results

Econometrically derived travel demand forecasts for the Pennsylvania Turnpike are summarized in **Table 3-7**, based on applied W&P forecasts for the regional socioeconomics and future toll index growth assumptions to the respective regression coefficients. Compound average growth rates (CAGR) for the plaza groupings are shown for three historical timeframes as comparative context, and generally in ten-year future increments through year 2060. The last column in Table 3-7 presents the average growth over the entire 2023 through 2060 forecast period.

Average annual growth rates vary by toll plaza grouping, vehicle category, and period (hence, subcategorizing the facilities as conducted). Consequently, it is challenging to concisely summarize. However, generally, passenger car growth was historically slower than commercial vehicle growth. Barrier System facilities' transactions generally grew relatively faster than the older Ticket System facilities, although less so in more recent years than an entire historical timeframe. Also, for the major Ticket System groupings, the western portions (Gateway, Pittsburgh, and Western Rural) grew relatively slower than the eastern portions (Eastern Rural, Philadelphia, and the Northeast Extension). All three generalized relativities are expected to mostly continue through the econometric-based growth forecasts. Additionally, the future growth in transactions is universally forecast to decelerate relative to historical trends. Compared with 2018 econometric growth estimates (through 2050 rather than 2060), the PCs exhibit mostly similar long-term trends, albeit with slightly decelerated expectations (with the Northeast equations, as population-driven, not real GRP, effectively flatline). CVs are mostly similar to the 2018 estimates, especially the mainline groupings, but the barrier facilities exhibit some relative acceleration or deceleration. At the tail end of the forecast, PC transactions on both the Northeast Ticket System and PA 66 are expected to have a continued decline due to socioeconomic projections of slow growth combined with a compounding effect of annual toll rate increases. In all, the revised forecasts based on updated 2018 equations mostly yield similar results, with differences attributable to the minor refinements noted (plus the re-anchored PCs equations' current base at still-below COVID-19 levels).

Table 3-7 Transaction Growth Summary

Grouping/Vehicles	'87-'22	'94-'22	'12-'22	'23-'30	'30-'40	'40-'50	'50-'60	'23-'60
Gateway PV	1.1%	0.6%	-0.5%	1.2%	1.0%	0.9%	0.8%	1.0%
Pittsburgh PV	0.1%	-0.2%	-1.9%	0.4%	0.5%	0.4%	0.3%	0.4%
Western Rural PV	0.3%	0.0%	-1.8%	0.4%	0.4%	0.3%	0.2%	0.3%
Eastern Rural PV	1.3%	0.8%	-1.0%	1.5%	1.4%	1.2%	1.1%	1.3%
Philadelphia PV	1.2%	0.4%	-1.7%	0.9%	0.8%	0.2%	-0.4%	0.3%
Northeast Ticket PV	2.3%	1.5%	-0.4%	0.1%	-0.1%	-0.7%	-1.3%	-0.6%
Northeast Barrier PV	#N/A	-0.4%	-2.3%	0.2%	-0.2%	-0.5%	-0.1%	-0.2%
I-376 PV	#N/A	1.3%	-1.1%	1.4%	1.2%	0.8%	0.5%	0.9%
PA 66 PV	#N/A	2.0%	-1.6%	1.1%	0.7%	-0.4%	-1.7%	-0.2%
Mon Fayette PV	#N/A	2.1%	-0.9%	1.8%	1.6%	1.3%	1.1%	1.4%
Gateway CV	1.1%	1.3%	3.3%	0.9%	1.1%	1.2%	1.3%	1.1%
Pittsburgh CV	1.4%	1.4%	1.7%	0.9%	0.8%	0.4%	0.0%	0.5%
Western Rural CV	1.5%	1.7%	1.7%	1.2%	1.1%	0.9%	0.8%	1.0%
Eastern Rural CV	2.6%	2.6%	3.4%	2.1%	1.9%	1.7%	1.6%	1.8%
Philadelphia CV	1.7%	2.0%	2.0%	1.5%	1.3%	1.2%	1.1%	1.3%
Northeast Ticket CV	3.9%	3.5%	3.3%	2.6%	2.3%	2.0%	1.8%	2.1%
Northeast Barrier CV	#N/A	1.9%	3.0%	1.5%	1.3%	1.2%	1.1%	1.3%
I-376 CV	#N/A	4.4%	2.6%	2.5%	2.1%	1.8%	1.7%	2.0%
PA 66 CV	#N/A	4.1%	1.8%	2.1%	1.7%	1.4%	1.2%	1.6%
Mon Fayette CV	#N/A	5.2%	3.0%	2.4%	2.1%	1.9%	1.8%	2.0%

Source: CDM Smith

A refined traffic and revenue analysis is the last component of the forecasting analysis. Growth rates developed from this econometric analysis are conditionally considered and applied to further traffic and revenue modeling. Some post-processing adjustments to the econometric forecasts prior to further modeling that consider additional factors such as long-term roadway capacities are expected. Also, some of the econometrically based forecasts for smaller Barrier System facilities may be dismissed due to relatively weak descriptor statistics and supplanted with alternative growth assumptions via recent trend extrapolations or other non-econometric means.

Chapter 4

Transaction and Toll Revenue Forecasts

Traffic and gross toll revenue forecasts are presented in this chapter for the Ticket System, the Barrier System, and the total Turnpike System. Forecasts are presented by fiscal year from 2022-23 through 2052-53. Also presented in this chapter are important inputs to the forecasts, including committed roadway projects, assumed future toll rate increases and assumed future E-ZPass market shares.

4.1 Committed Turnpike System Roadway Improvements

Through discussions with PTC personnel and by reviewing both the PTC Construction website and the State Transportation Improvement Plan (STIP) and Twelve-Year Program (TYP), CDM Smith identified the major committed roadway improvements that would potentially impact traffic and toll revenue on the Turnpike System. Projects were identified on the Mainline I-76/276/95 and the Northeast Extension. **Table 4-1** lists the identified projects and **Figure 4-1** presents the locations of the projects. All listed projects reflect information included in PTC's FY 2023-24 Capital Plan approved at the May 2, 2023 Commission meeting. In total, there are 26 projects identified.

A majority of these, 15 in all, are part of PTC's Total Reconstruction Initiative, which aims to rebuild and widen much of the Mainline Turnpike and Northeast Extension in order to provide a safer and more efficient travel experience. More than 150 miles have already been completed and more than 60 additional miles are under construction or funded. While these projects will improve the travel experience, they are not expected to affect transactions or revenue figures.

An additional six projects are related to PTC's planned conversion to segment-based, or open road tolling (ORT) on the Ticket System and associated changes to vehicle classification. The ORT conversion is the final phase of AET implementation and will allow vehicles to drive at highway speeds beneath overhead gantries without slowing down at toll plazas and while entering and exiting the Turnpike. The eastern portion of the Mainline Turnpike will include 19 gantries — with small utility buildings to house the required equipment — east of the Reading Interchange (Exit 286) to the New Jersey line and along the entire Northeast Extension (I-476). The eastern ORT system is expected to go live in 2025. The ORT system for the central and western Mainline Turnpike roadway is expected to begin construction in 2025, with an anticipated go-live date of 2027. Vehicle classification changes will alter the classification system of vehicles to be based on both height and number of axles, as is currently done on both the Southern Beltway and Northeast Extension barrier plazas. On the Mainline and Northeast Extension portions of the Ticket System, this will be done in conjunction with conversion to ORT. On the Beaver Valley Expressway and A.K. Hutchinson Bypass, this is expected to occur in January 2025.

Four projects include construction of new roadways and/or interchanges. Two new Mainline interchanges are planned: one with SR 130 at milepost 63 in Penn Township, Westmoreland

County, and one with Lafayette Street at milepost 331 in Plymouth Township, Montgomery County. These interchanges are planned to open in 2035 and 2030, respectively.

Table 4-1 Major Committed Roadway Improvements on the Pennsylvania Turnpike System

Milepost	Counties	Description (1)	Actual or Assumed Start Date	Assumed Completion Date
Mainline I-76/I-276/I-95				
Gateway Toll Plaza	Lawrence	Relocate toll plaza to MP 5.2	Spring 2024	January 2027
12-14	Beaver	Reconstruct and widen to 3 lanes in each direction	Fall 2022	September 2027
53-57	Alleghany	Reconstruct and widen to 3 lanes in each direction	2029	2032
57-68	Alleghany and Westmoreland	Reconstruct and widen to 3 lanes in each direction	2029	2033
63	Westmoreland	Construct a new interchange at SR 130	2031	2035
102-109	Somerset County	Reconstruct and widen to 3 lanes in each direction	January 2021	August 2024
126-131	Somerset and Bedford	Reconstruct and widen to 3 lanes in each direction	June 2022	Fall 2026
149-155	Bedford	Reconstruct and widen to 3 lanes in each direction	2032	2033
312-316	Chester	Reconstruct and widen to 3 lanes in each direction	Spring 2023	2027
324-326	Chester and Montgomery	Reconstruct and widen to 3 lanes in each direction	Fall 2021	Summer 2025
331	Montgomery	Construct a new interchange at Lafayette Street	2027	2030
350-352	Bucks	Reconstruct and widen to 3 lanes in each direction	2032	2033
352-355	Bucks	Reconstruct and widen to 3 lanes in each direction	2027	2030
355-356	Bucks	Reconstruct and widen to 3 lanes in each direction	2024	2027
System-wide		Convert from entry-exit tolling to segment-based (open road) tolling	Spring 2023	2028
System-wide		Convert vehicle classification to axle- and height-based system	2025	2028
Northeast Extension I-476				
A38-A44	Montgomery and Bucks	Reconstruct and widen to 3 lanes in each direction	April 2022	November 2024
A44-A48	Bucks and Lehigh	Reconstruct and widen to 3 lanes in each direction	2031	2033
A48-A53	Lehigh	Reconstruct and widen to 3 lanes in each direction	2027	2032
A53-A57	Lehigh	Reconstruct and widen to 3 lanes in each direction	2031	2033
Scranton Beltway	Lackawanna and Luzerne	Link I-476 to I-81 with two interchanges to create a Scranton Beltway	2029	2032
System-wide		Convert from entry-exit tolling to segment-based (open road) tolling	Spring 2023	2025
System-wide		Convert vehicle classification to axle- and height-based system	Spring 2023	2025
Mon/Fayette Expressway Turnpike 43				
PA 51 to SR 2043	Allegheny	Construct an extension of the existing Turnpike 43 including one new interchange	March 2023	Spring 2027
Beaver Valley Expressway I-376				
System-wide	Lawrence and Beaver	Convert vehicle classification to axle- and height-based system	2024	January 2025
A.K. Hutchinson Bypass PA 66				
System-wide	Westmoreland	Convert vehicle classification to axle- and height-based system	2024	January 2025

(1) The major committed roadway improvement projects listed here are a small subset of all projects listed in PTC's FY 2024 Ten Year Capital Plan.

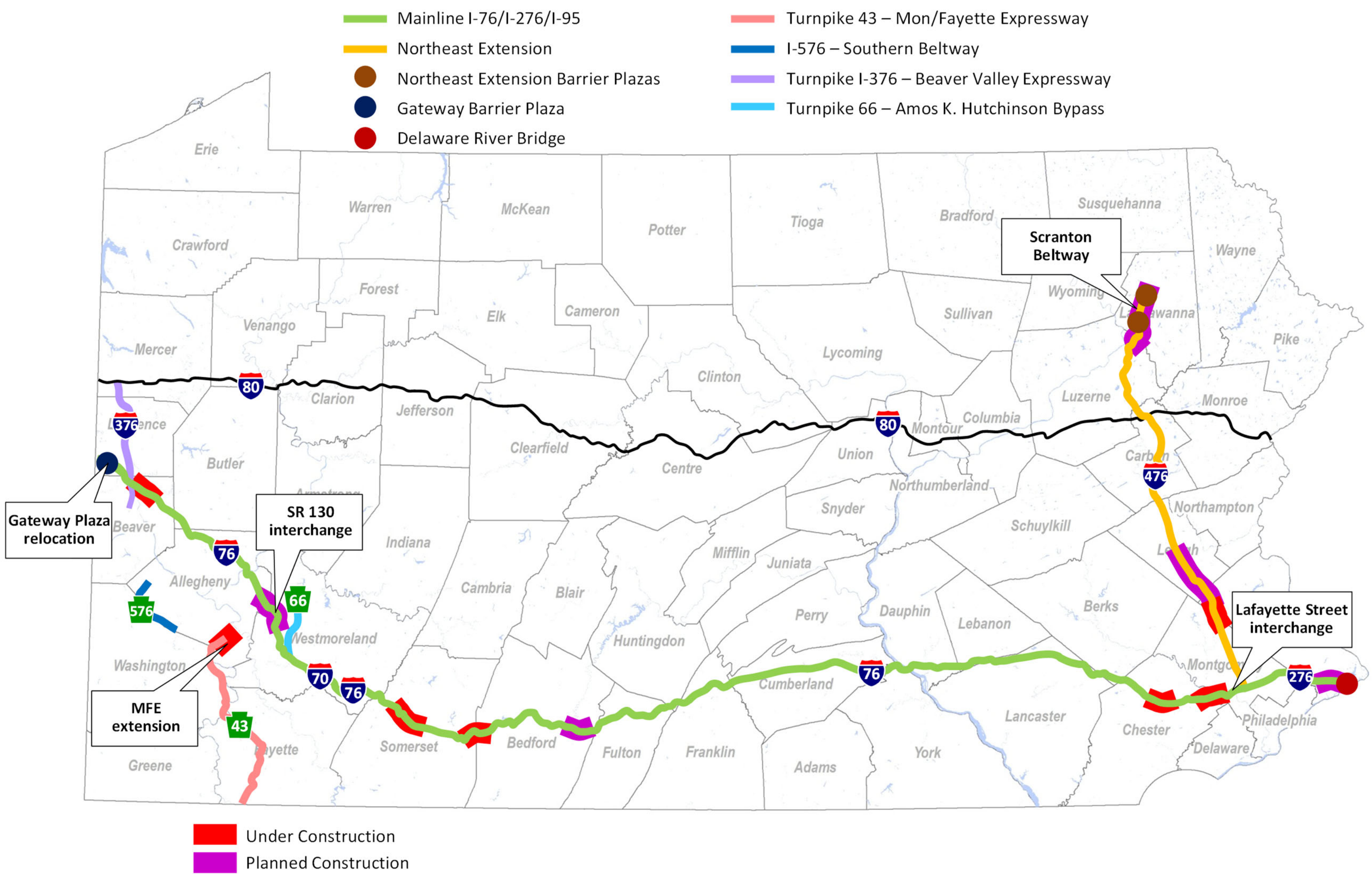


Figure 4-1
Pennsylvania Turnpike Commission Major Roadway Improvement Projects

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The Scranton Beltway project will link the Northeast Extension to I-81 with highway-speed connections that will enable motorists to seamlessly drive from interstate to interstate in northbound and southbound directions. There will be two separate connections between the I-476 and I-81 near the current Northeast Extension interchanges at Wyoming Valley (MP A115) and Clarks Summit (MP 131). Construction is expected to occur between 2029 and 2032.

An extension of the Mon/Fayette Expressway (MFE) is currently underway. The original construction of MFE was divided into four separate projects, three of which have been constructed. The last project will extend MFE from PA 51 to I-376 and is divided into two sections, one south of the Monongahela River and one to the north. The southern section from MFE's current terminus at PA 51 to the Monongahela River is the first to be constructed and is itself divided into seven construction sections. The first two of these sections, 53A1 and 53A2 are the only ones currently funded and will extend MFE three miles northwards to an interchange with Camp Hollow Road (SR 2043). Construction began in March 2023 and is expected to be complete in spring 2027.

The final project is the relocation of the Gateway Toll Plaza from its current location at MP 1.4 to MP 5.2. Construction is expected to occur from spring 2024 to January 2027. No other operational changes are planned with this relocation.

4.2 Construction Related Impacts on Turnpike System Traffic

Ongoing construction-related impacts stemming from roadway widening and reconstruction projects on the Turnpike System are expected to be minimal. Construction projects on the Turnpike System are planned to minimize lane closures or any restrictions to the Turnpike. When such measures are necessary, they are conducted overnight to avoid interfering with heavier daytime traffic volumes. Generally, preference is given to Turnpike Mainline traffic and construction-related disruptions are more likely to affect cross streets and Turnpike access points. Two travel lanes are maintained in both directions during construction activities.

For purposes of conservatism, each of these projects are assumed to have no net effect on Turnpike revenue figures. Conversion of the Ticket System to open road tolling (ORT) has been analyzed and is assumed to be revenue neutral on a system-wide basis. Axle- and height-based vehicle classification on the Ticket System has been separately analyzed and is also assumed to be revenue neutral. PTC will decide what these revenue-neutral toll rates will be prior to system conversion.

Conversion to axle- and height-based vehicle classification on barrier systems that have not yet been converted has not yet been analyzed but is expected to have no or minimal revenue impacts. While the extension of MFE and construction of new interchanges with SR 130, Lafayette Street, and I-81 are expected to bring more transactions, and possibly more revenue, to the Turnpike System, construction of these projects is not expected to be completed until after ORT conversion. Therefore, traffic and revenue impacts of these projects has not yet been analyzed or accounted for in this forecast.

4.3 Assumed Toll Rate Increases on the Turnpike

At the direction of the PTC, annual toll rate increases are assumed to occur on the entire Turnpike System. The toll rate increases are assumed to occur within several days of January 1 of each year. **Table 4-2** presents actual and assumed percent increases in toll rates for each calendar year from 2023 through 2053.

Table 4-2 Actual and Assumed Future Toll Rate Increases

Calendar Year		Percent Increase (1)	Sample Toll Rates		
			$1.00 Toll	$2.50 Toll	$10.00 Toll
2023	(2)(3)	5.0	$1.00	$2.50	$10.00
2024	(3)	5.0	1.10	2.70	10.50
2025	(4)	5.0	1.16	2.84	11.03
2026		4.0	1.21	2.95	11.47
2027		3.5	1.25	3.05	11.87
2028		3.0	1.29	3.14	12.23
2029		3.0	1.33	3.23	12.60
2030		3.0	1.37	3.33	12.98
2031		3.0	1.41	3.43	13.37
2032		3.0	1.45	3.53	13.77
2033		3.0	1.49	3.64	14.18
2034		3.0	1.53	3.75	14.61
2035		3.0	1.58	3.86	15.05
2036		3.0	1.63	3.98	15.50
2037		3.0	1.68	4.10	15.97
2038		3.0	1.73	4.22	16.45
2039		3.0	1.78	4.35	16.94
2040		3.0	1.83	4.48	17.45
2041		3.0	1.88	4.61	17.97
2042		3.0	1.94	4.75	18.51
2043		3.0	2.00	4.89	19.07
2044		3.0	2.06	5.04	19.64
2045		3.0	2.12	5.19	20.23
2046		3.0	2.18	5.35	20.84
2047		3.0	2.25	5.51	21.47
2048		3.0	2.32	5.68	22.11
2049		3.0	2.39	5.85	22.77
2050		3.0	2.46	6.03	23.45
2051		3.0	2.53	6.21	24.15
2052		3.0	2.61	6.40	24.87
2053		3.0	2.69	6.59	25.62

(1) Future toll rate increases are assumed to be implemented within several days of January 1.
(2) Reflects actual toll rate increases on the Turnpike System.
(3) By PTC Policy, all rates are rounded up to the nearest dime.
(4) Beginning in 2025, tolls are rounded to the nearest penny due to undetermined policies after conversion to ORT.

Assumed percent increases in toll rates through the end of the forecast period are identical for cars and trucks and for E-ZPass and TBP transactions. Annual toll rate increases will remain at 5.0% through 2025 before tapering down to 3.0% in 2028 through 2053. Consistent with PTC's current tolling policy, in 2024 all toll rates will be rounded up to the nearest dime. After 2024, the sample rates shown in this table assume rounding to the nearest penny, which is reflected in the projections included in this report.

At the direction of PTC, the toll rate increases shown in Table 4-2 were used in the development of the traffic and toll revenue forecasts, including the assumption that the percent toll rate increases are the same for both E-ZPass and TBP transactions. PTC reserves the right to implement varying toll rate increases for E-ZPass and TBP in future years.

4.4 Estimated E-ZPass Market Share in Future Years

Because a price differential has been established between TBP and E-ZPass toll rates, it is important to estimate future year E-ZPass market shares in order to forecast gross toll revenues. Historically, cash and E-ZPass toll rates were virtually identical until 2011, differing only because cash rates were rounded up to the nearest nickel while E-ZPass rates were rounded up to the nearest cent. There was no reason for a customer to choose E-ZPass over cash based solely on the toll rate.

In 2011, 2012, 2013, and 2014, differential toll rate increases were implemented. As a result of these differential rate increases, theoretical cash toll rates became 39.5% greater than E-ZPass rates, with the actual differential being greater for lower price tolls due to the effect of rounding up to the nearest nickel for cash rates. With the advent of all-electronic tolling, TBP rates were assessed an additional 45% surcharge over cash rates to cover the costs of non-payment associated with TBP transactions and to incentivize E-ZPass participation. As a result, TBP rates are now approximately double E-ZPass rates. This differential creates incentives for TBP customers to shift to E-ZPass, and for new accounts to favor E-ZPass over TBP.

All image-based transactions are checked against E-ZPass customer license plates on file and if matches are found, then they are identified as vToll transactions. These vToll transactions are charged at the lower E-ZPass rate, which is approximately half the TBP rate. Because vTolls also receive the lower E-ZPass rate, they must also be accounted for in E-ZPass market share. As seen in **Figure 4-2**, the share of transactions conducted via vToll has been increasing since 2016, which is when PTC's first AET system was implemented on the Delaware River Bridge (DRB). As PTC converted more of its systems to AET, the share of vToll transactions has increased as E-ZPass customers traveling without a transponder on a given day are now captured via TBP tolling and cannot stop to pay cash instead. In 2015, prior to the first AET implementation, vTolls accounted for only 1.5% of system-wide transactions. By 2021, which was the first full calendar year with system-wide AET, vTolls had grown to 9.6% of all transactions. vToll market share is forecast to continue growing over the next few years, eventually reaching 12.8% of all transactions in 2027.

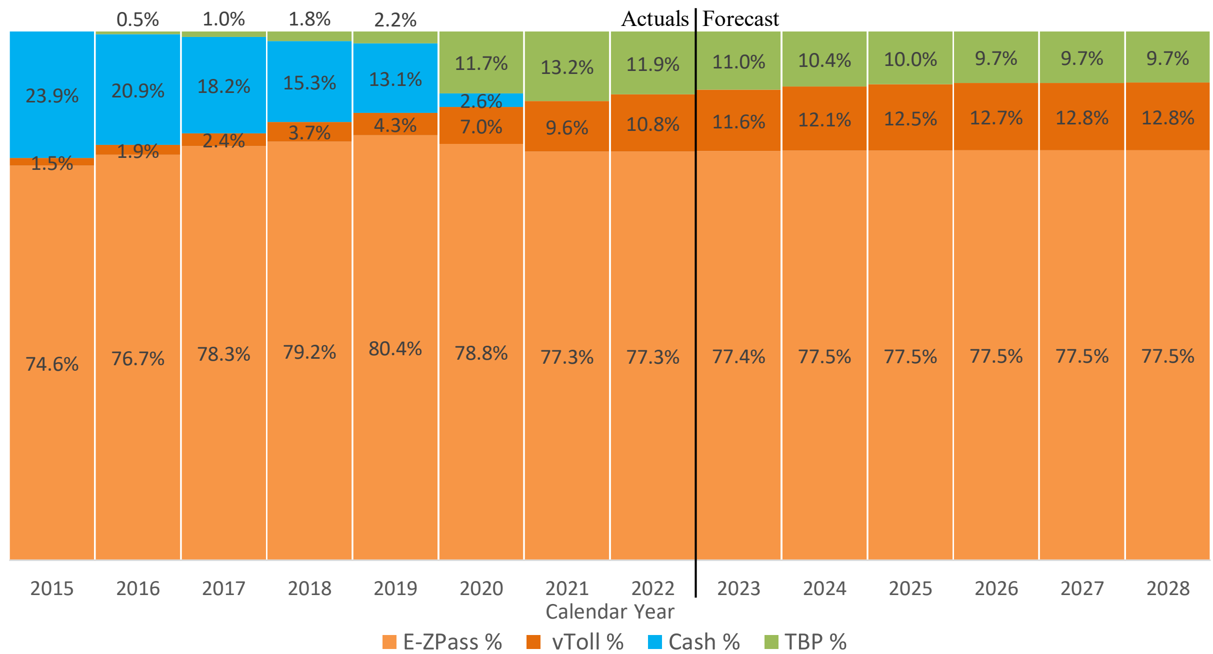

Figure 4-2 Historical and Forecast Market Shares of Total System-wide Transactions

Future year E-ZPass market shares (transponder read plus vToll transactions) were developed based on the assumed future toll rate increases shown in Table 4-2, and the historic trends in E-ZPass market share. **Table 4-3** presents the actual percent E-ZPass market shares of transactions from calendar years 2016 through 2022, the estimated percent E-ZPass market shares from 2023 through 2053, and the percentage point increase in E-ZPass market share over the prior year.

In 2016, the E-ZPass market share totaled 76.9% for passenger cars and 88.8% for commercial vehicles. By 2019, those values increased to 83.3% for passenger cars and 92.3% for commercial vehicles. However, with the conversion of the Ticket System and Mon/Fayette Expressway to all-electronic tolling (AET) in 2020, the E-ZPass market share for commercial vehicles declined in both 2020 and 2021. E-ZPass market share grew for both passenger cars and commercial vehicles in 2022, but the rate of growth is expected to slow until 2028. By this point, the market is expected to essentially be saturated with E-ZPass market shares of 89.8% for passenger cars, 92.9% for commercial vehicles, and 90.5% total. Market shares are expected to then increase only fractionally for the remainder of the forecast period as there will likely always be customers who choose not to use E-ZPass. Under AET, TBP offers relatively more convenient billing as opposed to the onerous process of conducting a cash transaction at the tolling point prior to AET implementation.

Table 4-3 Actual and Estimated E-ZPass Market Share

Calendar Year		Passenger Cars (1) Percent Market Share	Passenger Cars (1) Percent Increase in Market Share	Commercial Vehicles (1) Percent Market Share	Commercial Vehicles (1) Percent Increase in Market Share	Total Vehicles (1) Percent Market Share	Total Vehicles (1) Percent Increase in Market Share
2015	(2)	74.3		87.2		76.1	
2016	(2)	76.9	2.6	88.8	1.6	78.5	2.4
2017	(2)	79.3	2.4	89.9	1.1	80.8	2.3
2018	(2)	81.5	2.2	91.0	1.1	82.9	2.1
2019	(2)	83.3	1.8	92.3	1.3	84.6	1.7
2020	(2)	84.4	1.1	91.5	(0.8)	85.7	1.1
2021	(2)	86.0	1.6	90.8	(0.7)	86.8	1.1
2022	(2)	87.4	1.4	91.4	0.6	88.1	1.3
2023	(3)	88.4	1.0	91.9	0.5	89.0	0.9
2024	(3)	89.1	0.7	92.2	0.3	89.6	0.6
2025	(3)	89.5	0.4	92.5	0.3	90.0	0.4
2026	(3)	89.7	0.2	92.7	0.2	90.3	0.3
2027	(3)	89.8	0.1	92.8	0.1	90.3	0.0
2028	(3)	89.8	0.0	92.9	0.1	90.3	0.0
2029	(3)	89.8	0.0	92.9	0.0	90.3	0.0
2030	(3)	89.8	0.0	92.9	0.0	90.3	0.0
2031	(3)	89.8	0.0	92.9	0.0	90.3	0.0
2032	(3)	89.8	0.0	92.9	0.0	90.4	0.1
2033	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2034	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2035	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2036	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2037	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2038	(3)	89.8	0.0	92.9	0.0	90.4	0.0
2039	(3)	89.9	0.1	92.9	0.0	90.4	0.0
2040	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2041	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2042	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2043	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2044	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2045	(3)	89.9	0.0	92.9	0.0	90.4	0.0
2046	(3)	89.9	0.0	92.9	0.0	90.5	0.1
2047	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2048	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2049	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2050	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2051	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2052	(3)	89.9	0.0	92.9	0.0	90.5	0.0
2053	(3)	89.9	0.0	92.9	0.0	90.5	0.0

(1) E-ZPass market share includes both successful transponder transactions and vTolls.

(2) Actual E-ZPass market shares.

(3) Estimated E-ZPass market shares.

4.5 COVID-19 Impacts

Since March 2020, traffic and revenue on the Pennsylvania Turnpike System 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 forecast passenger and commercial vehicle traffic to account for additional normalization expected to occur.

Passenger car traffic on the Pennsylvania Turnpike 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 3.5% growth in baseline passenger car traffic over the next two years, 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 3.5% decline in baseline commercial vehicle traffic over the next two years, which will still keep it above 2019 levels.

4.6 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 March Federal Open Market Committee (FOMC). According to the meeting minutes, the staff expects "a mild recession starting later this year, with a recovery over the subsequent two years". In addition, the median projection for 2023 change in real GDP is +0.4%.

This forecast accounts for the latest recession probability forecasts by including a 50% 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 (through the second quarter of 2025) but have no impact on transactions and revenue in the long-term.

4.7 Transaction and Gross Toll Revenue Forecasts

This section summarizes the forecasts of toll transactions and gross toll revenue based on the information provided in the preceding sections of this report. All previously discussed information regarding future transaction growth rates in the various Turnpike corridors (Chapter 3) as well as assumed toll rates, E-ZPass market share, etc. are all brought together to develop the following forecasts.

A more detailed approach was taken in developing the short term forecast over the next two calendar years (2023 and 2024). Forecasts were developed on monthly basis during these two years for passenger cars and commercial vehicles and for each Turnpike toll facility (Ticket System, Beaver Valley, Mon/Fayette Expressway, etc.). This accomplished two things. First, it accounted for the most recent growth trends on all facilities. Second, it allowed for the creation of a "normal" calendar year by 2024, correcting for such things as adverse weather, the number of weekdays and weekend days in a month, and unique impacts such as the mid-year opening of the Southern Beltway. Once a normalized 2024 was developed, the longer-term growth rates established through the socioeconomic analysis described in Chapter 3 were applied to it and all future years throughout the forecast period.

Table 4-4 shows estimated Ticket System transactions and gross toll revenue through FY 2052-53. Actual data is shown for FY 2021-22 and for the first ten months of FY 2022-23 (through March 2023). As shown, total vehicle transactions are estimated to increase from about 145.3 million in FY 2021-22 (the latest full year of actual experience) to 171.6 million by FY 2052-53, which represents a total increase over this period of 18.1% or an average annual growth rate of 0.5%. Annual gross toll revenue is estimated to increase from $1.3 billion in FY 2021-22 to $4.3 billion by FY 2052-53. This represents an average annual increase of about 3.9% and includes the impacts of normal growth and annual toll rate increases.

Table 4-5 identifies the same transaction and gross toll revenue information for the Barrier System. As shown, total vehicle transactions are estimated to increase from about 54.8 million in FY 2021-22 to 67.0 million by FY 2052-53, which represents a total increase over this period of 22.3% or an average annual increase of about 0.7%. Estimated annual toll revenue is expected to increase from about $246.3 million in FY 2021-22 to $857.3 million by the end of the forecast period. This represents a 4.1% annual rate of increase. Again, this is influenced by normal growth and toll increases.

Table 4-6 identifies total combined transactions and gross toll revenue while also factoring in estimated toll discounts and adjustments. The vast majority of the discounts and adjustments results from commercial account toll adjustments due to the Turnpike's Commercial Volume Discount Program. The volume discount program allows for a 3.0% discount to be provided to accounts that accrue $20,000 or more in monthly tolls. Discounts and adjustments shown in Table 4-6 assume no further changes to the post-paid Commercial Volume Discount Program during the forecast period. As commercial traffic is expected to grow more quickly than passenger car traffic throughout the forecast period, a higher number of commercial accounts and/or vehicles are expected to qualify for the discount. Therefore, the negative adjustment applied for the discount grows from 1.9% of the commercial vehicle gross toll revenue in 2022-23 to 2.2% in FY 2052-53.

Total transactions increase from 200.1 million in FY 2021-22 to 238.6 million by FY 2052-53, which represents a total increase of about 19.2%, or an average annual increase of 0.6% over the forecast period. Total net revenue, after discounts and adjustments, is estimated to grow from approximately $1.6 billion in FY 2021-22 to $5.1 billion by FY 2052-53, representing a 3.9% average annual rate of growth. This includes normal growth, toll increase impacts, and toll discounts and adjustments.

Table 4-4 Ticket System Estimated Annual Transactions and Gross Toll Revenue

		Annual Traffic (in thousands) (1)			Annual Gross Toll Revenue (in thousands) (1)		
Fiscal Year	(2)	Passenger Cars	Commercial Vehicles	Total Vehicles	Passenger Cars	Commercial Vehicles	Total Vehicles
2021-22	(3)	119,499	25,807	145,306	$672,668	$650,063	$1,322,732
2022-23	(4)	120,741	25,771	146,512	705,048	685,729	1,390,778
2023-24		120,706	25,021	145,727	730,375	696,007	1,426,382
2024-25		121,903	25,105	147,008	769,161	728,270	1,497,431
2025-26		123,364	25,455	148,819	809,714	770,553	1,580,267
2026-27		124,437	25,737	150,174	846,103	806,775	1,652,878
2027-28		125,386	26,027	151,413	880,739	841,751	1,722,490
2028-29		126,348	26,318	152,666	914,127	876,232	1,790,359
2029-30		127,253	26,600	153,853	948,297	912,167	1,860,464
2030-31		128,122	26,877	154,999	983,417	949,321	1,932,738
2031-32		128,956	27,155	156,111	1,019,517	987,900	2,007,417
2032-33		129,795	27,441	157,236	1,056,931	1,028,266	2,085,197
2033-34		130,659	27,739	158,398	1,095,889	1,070,645	2,166,534
2034-35		131,482	28,040	159,522	1,135,876	1,114,699	2,250,575
2035-36		132,262	28,342	160,604	1,176,898	1,160,500	2,337,398
2036-37		132,998	28,645	161,643	1,218,952	1,208,120	2,427,072
2037-38		133,688	28,951	162,639	1,262,040	1,257,627	2,519,667
2038-39		134,332	29,258	163,590	1,306,171	1,309,098	2,615,269
2039-40		134,932	29,567	164,499	1,351,360	1,362,620	2,713,980
2040-41		135,484	29,876	165,360	1,397,608	1,418,181	2,815,789
2041-42		135,989	30,183	166,172	1,444,902	1,475,706	2,920,608
2042-43		136,441	30,479	166,920	1,493,199	1,534,894	3,028,093
2043-44		136,838	30,762	167,600	1,542,476	1,595,622	3,138,098
2044-45		137,190	31,043	168,233	1,592,838	1,658,495	3,251,333
2045-46		137,497	31,322	168,819	1,644,295	1,723,595	3,367,890
2046-47		137,758	31,599	169,357	1,696,844	1,791,001	3,487,845
2047-48		137,974	31,875	169,849	1,750,492	1,860,800	3,611,292
2048-49		138,144	32,148	170,292	1,805,236	1,933,079	3,738,315
2049-50		138,268	32,421	170,689	1,861,068	2,007,929	3,868,997
2050-51		138,346	32,692	171,038	1,917,983	2,085,448	4,003,431
2051-52		138,376	32,961	171,337	1,975,963	2,165,731	4,141,694
2052-53		138,358	33,230	171,588	2,034,985	2,248,878	4,283,863

(1) Annual toll rate increases are implemented on or about January 1st of each year.

(2) PTC fiscal year ends May 31.

(3) Reflects actual traffic and revenue experience.

(4) Reflects actual experience through March 2023.

Table 4-5 Barrier System Estimated Annual Transactions and Gross Toll Revenue

Fiscal Year	(2)	Annual Traffic (in thousands) (1) Passenger Cars	Commercial Vehicles	Total Vehicles	Annual Gross Toll Revenue (in thousands) (1) Passenger Cars	Commercial Vehicles	Total Vehicles
2021-22	(3,4)	45,629	9,169	54,798	$147,115	$99,180	$246,295
2022-23	(5,6)	49,206	10,147	59,353	164,634	109,525	274,159
2023-24		49,787	10,099	59,886	176,647	112,846	289,493
2024-25		50,278	10,271	60,549	188,862	119,582	308,444
2025-26		50,790	10,503	61,293	199,318	127,013	326,331
2026-27		51,080	10,649	61,729	208,250	133,149	341,399
2027-28		51,285	10,792	62,077	216,377	139,008	355,385
2028-29		51,473	10,927	62,400	224,126	144,705	368,831
2029-30		51,635	11,059	62,694	232,035	150,565	382,600
2030-31		51,782	11,189	62,971	240,152	156,620	396,772
2031-32		51,919	11,319	63,238	248,496	162,897	411,393
2032-33		52,086	11,459	63,545	257,239	169,524	426,763
2033-34		52,303	11,618	63,921	266,484	176,590	443,074
2034-35		52,503	11,776	64,279	275,974	183,933	459,907
2035-36		52,691	11,916	64,607	285,721	191,433	477,154
2036-37		52,867	12,023	64,890	295,731	199,015	494,746
2037-38		53,026	12,132	65,158	305,994	206,894	512,888
2038-39		53,169	12,241	65,410	316,514	215,081	531,595
2039-40		53,296	12,350	65,646	327,297	223,591	550,888
2040-41		53,406	12,461	65,867	338,339	232,434	570,773
2041-42		53,496	12,571	66,067	349,628	241,605	591,233
2042-43		53,565	12,678	66,243	361,150	251,063	612,213
2043-44		53,612	12,781	66,393	372,894	260,792	633,686
2044-45		53,642	12,884	66,526	384,899	270,887	655,786
2045-46		53,655	12,988	66,643	397,167	281,359	678,526
2046-47		53,651	13,091	66,742	409,700	292,223	701,923
2047-48		53,631	13,194	66,825	422,502	303,495	725,997
2048-49		53,593	13,298	66,891	435,575	315,195	750,770
2049-50		53,540	13,402	66,942	448,919	327,347	776,266
2050-51		53,471	13,507	66,978	462,538	339,965	802,503
2051-52		53,387	13,612	66,999	476,432	353,068	829,500
2052-53		53,288	13,718	67,006	490,602	366,675	857,277

(1) Annual toll rate increases are implemented on or about January 1st of each year.

(2) PTC fiscal year ends May 31.

(3) Reflects actual traffic and revenue experience.

(4) The Southern Beltway between US 22 and I-79 opened in October 2021.

(5) Reflects actual experience through March 2023.

(6) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.

Table 4-6 Total System Estimated Annual Transactions and Gross Toll Revenue

Traffic and Toll Revenue in Thousands

		Annual Traffic (2)			Annual Gross Toll Revenue (2)			Discounts	
Fiscal Year	(1)	Passenger Cars	Commercial Vehicles	Total Vehicles	Passenger Cars	Commercial Vehicles	Total Vehicles	and Adjustments (3)	Net Toll Revenue
2021-22	(4,5)	165,128	34,976	200,103	$819,784	$749,243	$1,569,027	($12,997)	$1,556,030
2022-23	(6,7)	169,947	35,918	205,865	869,682	795,255	1,664,937	(15,299)	1,649,638
2023-24		170,493	35,120	205,613	907,022	808,853	1,715,875	(15,965)	1,699,910
2024-25		172,181	35,376	207,557	958,023	847,852	1,805,875	(17,159)	1,788,716
2025-26		174,154	35,958	210,112	1,009,032	897,566	1,906,598	(18,614)	1,887,984
2026-27		175,517	36,386	211,903	1,054,353	939,924	1,994,277	(19,727)	1,974,550
2027-28		176,671	36,819	213,490	1,097,116	980,759	2,077,875	(20,829)	2,057,046
2028-29		177,821	37,245	215,066	1,138,253	1,020,937	2,159,190	(21,938)	2,137,252
2029-30		178,888	37,659	216,547	1,180,332	1,062,732	2,243,064	(22,995)	2,220,069
2030-31		179,904	38,066	217,970	1,223,569	1,105,941	2,329,510	(24,096)	2,305,414
2031-32		180,875	38,474	219,349	1,268,013	1,150,797	2,418,810	(25,246)	2,393,564
2032-33		181,881	38,900	220,781	1,314,170	1,197,790	2,511,960	(26,277)	2,485,683
2033-34		182,962	39,357	222,319	1,362,373	1,247,235	2,609,608	(27,362)	2,582,246
2034-35		183,985	39,816	223,801	1,411,850	1,298,632	2,710,482	(28,489)	2,681,993
2035-36		184,953	40,258	225,211	1,462,619	1,351,933	2,814,552	(29,659)	2,784,893
2036-37		185,865	40,668	226,533	1,514,683	1,407,135	2,921,818	(30,870)	2,890,948
2037-38		186,714	41,083	227,797	1,568,034	1,464,521	3,032,555	(32,129)	3,000,426
2038-39		187,501	41,499	229,000	1,622,685	1,524,179	3,146,864	(33,438)	3,113,426
2039-40		188,228	41,917	230,145	1,678,657	1,586,211	3,264,868	(34,798)	3,230,070
2040-41		188,890	42,337	231,227	1,735,947	1,650,615	3,386,562	(36,211)	3,350,351
2041-42		189,485	42,754	232,239	1,794,530	1,717,311	3,511,841	(37,675)	3,474,166
2042-43		190,006	43,157	233,163	1,854,349	1,785,957	3,640,306	(39,180)	3,601,126
2043-44		190,450	43,543	233,993	1,915,370	1,856,414	3,771,784	(40,726)	3,731,058
2044-45		190,832	43,927	234,759	1,977,737	1,929,382	3,907,119	(42,327)	3,864,792
2045-46		191,152	44,310	235,462	2,041,462	2,004,954	4,046,416	(43,985)	4,002,431
2046-47		191,409	44,690	236,099	2,106,544	2,083,224	4,189,768	(45,702)	4,144,066
2047-48		191,605	45,069	236,674	2,172,994	2,164,295	4,337,289	(47,480)	4,289,809
2048-49		191,737	45,446	237,183	2,240,811	2,248,274	4,489,085	(49,323)	4,439,762
2049-50		191,808	45,823	237,631	2,309,987	2,335,276	4,645,263	(51,231)	4,594,032
2050-51		191,817	46,199	238,016	2,380,521	2,425,413	4,805,934	(53,209)	4,752,725
2051-52		191,763	46,573	238,336	2,452,395	2,518,799	4,971,194	(55,258)	4,915,936
2052-53		191,646	46,948	238,594	2,525,587	2,615,553	5,141,140	(57,380)	5,083,760

(1) PTC fiscal year ends May 31.

(2) Annual toll rate increases are implemented on or about January 1st of each year.

(3) Reflects the Commercial Vehicle Discount Program, discount for Registered TBP Accounts, and other adjustments.

(4) Reflects actual traffic and revenue experience.

(5) The Southern Beltway between US 22 and I-79 opened in October 2021.

(6) Reflects actual experience through March 2023.

(7) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.

Finally, **Table 4-7** provides a summary of total Turnpike System net toll revenue after accounting for TBP bad debt expenses. TBP bad debt expenses is the term PTC uses to describe the portion of Toll By Plate (TBP) invoices that are not paid. The gross toll revenue PTC initially recognizes includes all TBP invoiceable transactions and toll revenue, thus, it is necessary to remove the estimated portion of that TBP toll revenue that is not expected to be paid. In FY 2021-22, 38.2% of TBP revenue was categorized as bad debt expense. Based on 10 months of actuals (through March 2023), bad debt expense in FY 2022-23 is expected to increase to 40.9% of TBP revenue. Analyses conducted by CDM Smith indicate that the bad debt expense proportion of TBP revenue will grow further, reaching 46.0% of TBP invoices that will not be paid by FY 2028-29 and stabilizing at that level for the remainder of the forecast period.

As shown in Table 4-7, TBP bad debt expenses from are estimated to increase from a loss of $99.0 million in FY 2021-22 to $109.2 million in FY 2022-23, eventually reaching $301.4 million by FY 2052-53. Although the dollar value of TBP bad debt expense continues to grow each year, FY 2022-23 represents its peak value in relation to net toll revenue. In FY 2022-23, TBP bad debt expense is forecast to equal 6.6% of net toll revenue. This figure is expected to gradually decline throughout the forecast period, reaching 5.9% of net toll revenue by FY 2052-53. The growth in annual TBP bad debt expense from $109.2 million to $301.4 million over the forecast period is mostly due to increasing traffic and toll rates, thereby resulting in both more gross revenue and more unpaid revenue, and the slight increase in the proportion of TBP bad debt expense discussed above.

It should be noted that PTC is, and will be, seeking to aggressively pursue TBP violators. In response to unpaid invoices, PTC attempts to collect outstanding amounts via various options where practical and permitted by law. These include, but are not limited to, working with two collection agencies to go after unpaid tolls, suspending vehicle registrations, and filing criminal and civil complaints against toll scofflaws. The Commission is also pursuing reciprocity agreements with other states to enhance cross state collections and is pursuing legislative changes to strengthen enforcement measures for toll violators, including recently enacted legislation that reduces the minimum value of unpaid tolls needed to incur vehicle registration suspension from $500 to $250. PTC has also established new cash payment channels for unbanked customers through a partnership with Kubra. Thus, over time, it may be that CDM Smith's assumptions of up to 46% of TBP revenue ending up as bad debt expense assumptions overstate the actual revenue losses.

Table 4-7 Total System Net Gross Toll Revenue After TBP Revenue Bad Debt Expense

Toll Revenue in Thousands

Fiscal Year	(1)	Net Toll Revenue (2)	Estimated TBP Revenue Bad Debt Expense	Net Toll Revenue Minus TBP Bad Debt Expense	Bad Debt Expense Percentage of Net Toll Revenue
2021-22	(3,4)	$1,556,030	($99,014)	$1,457,016	6.4
2022-23	(5,6)	1,649,638	(109,237)	1,540,401	6.6
2023-24		1,699,910	(109,903)	1,590,007	6.5
2024-25		1,788,716	(113,962)	1,674,754	6.4
2025-26		1,887,984	(116,447)	1,771,537	6.2
2026-27		1,974,550	(120,583)	1,853,967	6.1
2027-28		2,057,046	(125,694)	1,931,352	6.1
2028-29		2,137,252	(130,626)	2,006,626	6.1
2029-30		2,220,069	(135,571)	2,084,498	6.1
2030-31		2,305,414	(140,662)	2,164,752	6.1
2031-32		2,393,564	(145,909)	2,247,655	6.1
2032-33		2,485,683	(151,377)	2,334,306	6.1
2033-34		2,582,246	(157,105)	2,425,141	6.1
2034-35		2,681,993	(163,006)	2,518,987	6.1
2035-36		2,784,893	(169,081)	2,615,812	6.1
2036-37		2,890,948	(175,330)	2,715,618	6.1
2037-38		3,000,426	(181,762)	2,818,664	6.1
2038-39		3,113,426	(188,381)	2,925,045	6.1
2039-40		3,230,070	(195,193)	3,034,877	6.0
2040-41		3,350,351	(202,197)	3,148,154	6.0
2041-42		3,474,166	(209,389)	3,264,777	6.0
2042-43		3,601,126	(216,751)	3,384,375	6.0
2043-44		3,731,058	(224,276)	3,506,782	6.0
2044-45		3,864,792	(232,000)	3,632,792	6.0
2045-46		4,002,431	(239,928)	3,762,503	6.0
2046-47		4,144,066	(248,063)	3,896,003	6.0
2047-48		4,289,809	(256,409)	4,033,400	6.0
2048-49		4,439,762	(264,971)	4,174,791	6.0
2049-50		4,594,032	(273,751)	4,320,281	6.0
2050-51		4,752,725	(282,754)	4,469,971	5.9
2051-52		4,915,936	(291,982)	4,623,954	5.9
2052-53		5,083,760	(301,439)	4,782,321	5.9

(1) PTC fiscal year ends May 31.
(2) Annual toll rate increases are implemented on or about January 1st of each year.
(3) Reflects actual traffic and revenue experience.
(4) The Southern Beltway between US 22 and I-79 opened in October 2021.
(5) Reflects actual experience through March 2023.
(6) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.

4.8 Fiduciary 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 the Pennsylvania Turnpike Commission (PTC). 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 PTC. 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 PTC and designated parties approved by PTC 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 PTC and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to PTC with respect to the information and material contained in this report. CDM Smith is not recommending and has not recommended any action to PTC. PTC 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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March 22, 2024

Mr. Richard Dreher
Chief Financial Officer
Pennsylvania Turnpike Commission
700 South Eisenhower Boulevard
Middletown, PA 17057

Subject: Pennsylvania Turnpike Commission 2024 Traffic and Toll Revenue Bring Down Letter

Dear Mr. Dreher:

The Pennsylvania Turnpike Commission (PTC or Commission) asked CDM Smith to prepare this *2024 Traffic and Toll Revenue Bring Down Letter* (2024 Bring Down Letter) to be used in support of the Commission's financial planning, ongoing capital improvement program, and other funding requirements. This letter provides an update to the *2023 Traffic and Revenue Forecast Study* (2023 IG Study) dated May 2023.

The 2023 IG Study included actual data through March 2023 and presented traffic and gross toll revenue forecasts from fiscal year (FY) 2022-23 through FY 2052-53. A fiscal year runs from June 1 through May 31. An additional 10 months of actual data (through January 2024) were available for this 2024 Bring Down Letter. The forecast period for this study is one additional year into the future, now extending through FY 2053-54.

This report will provide a summary of differences between the current traffic and revenue forecast and the one provided in the 2023 IG Study.

The updated forecasts reflect the following changes from the 2023 IG Study:

- E-ZPass + v-toll market share estimates over the forecast period were reviewed and updated as needed.
- Actual traffic and toll revenue data were updated to include an additional 10 months of data, from April 2023 through January 2024.
- Additional adjustments to account for continuing recovery of passenger car (PC) transactions from the COVID-19 pandemic have been removed from the forecast.

- A review of scheduled major roadway improvements was conducted to determine if there have been any changes since completion of the 2023 IG Study. Six new projects have been added or split off from existing projects, and the timing of others has been adjusted. This will be discussed in the Committed Roadway Improvements section of this report.
- The underlying econometric model that was developed as part of the 2023 IG Study was maintained. However, model inputs were adjusted to reflect the revised socioeconomic forecasts.
- The modest downward adjustment to transactions and gross toll revenue to account for a 50-percent probability of a recession beginning in late 2023 has been removed due to economic forecasters' decreasing confidence of a recession occurring.
- The forecast for discounts and adjustments was updated. The discounts given in the 10 months since the 2023 IG Study have been slightly lower than expected, resulting in a positive impact on net revenue.
- Based on recent experience and trends, the percentage of Toll By Plate (TBP) Bad Debt Expense has been revised upwards.

These differences are described in more detail in the sections that follow below.

The intent of this 2024 Bring Down Letter is to review and revise, if warranted, the forecasts developed as part of the 2023 IG Study. Any adjustments would be made based on the 10 months of new actual traffic and toll revenue experience since the 2023 IG Study was completed, as well as revised assumptions summarized in the bullet points above.

Historical Toll Rate Increases and Current Toll Rates

Table 1 provides a summary of historical toll rate increases on the Turnpike System from 1987 to the most recent increase implemented on January 7, 2024. Rate increases are presented as a percent increase over the prior toll rate for cash/video and E-ZPass. Note that toll rate increases are generally applied systemwide, although occasional exemptions occur, as indicated in Table 1.

Table 1
Historical Toll Rate Increases
Pennsylvania Turnpike

Date	Percent Increase Cash/Video	Percent Increase E-ZPass	Comment
1/2/1987	40.0	NA	E-ZPass was not yet implemented on the Turnpike
6/1/1991	32.0	NA	E-ZPass was not yet implemented on the Turnpike
8/1/2004	42.5	42.5	
1/4/2009	25.0	25.0	No increase on Findlay Connector or MFE between Uniontown and Brownsville
1/3/2010	3.0	3.0	No increase on Findlay Connector
1/2/2011	10.0	3.0	No increase on Findlay Connector
1/1/2012	10.0	0.0	No increase on Findlay Connector
1/6/2013	10.0	2.0	
1/5/2014	12.0	2.0	No increase on Findlay Connector
1/4/2015	5.0	5.0	No increase on Findlay Connector
1/3/2016	6.0	6.0	No increase on Findlay Connector; DRB converted from ticket system to barrier system and rate changes implemented
1/8/2017	6.0	6.0	No increase on Findlay Connector or DRB
1/7/2018	6.0	6.0	No increase on Findlay Connector, DRB, or the Northeast Extension barrier facilities
4/29/2018	6.0	6.0	Northeast Extension barrier facilities only (1)
6/3/2018	6.0	6.0	Findlay Connector only (1)
1/6/2019	6.0	6.0	
10/27/2019	6.0	6.0	BVE, AKH, and Gateway only; additional 45% surcharge over cash rate added to video rate at these locations
1/5/2020	6.0	6.0	No increase on BVE, AKH, or Gateway
1/3/2021	6.0	6.0	Additional 45% surcharge over cash rate added to video rate for Ticket System and MFE
1/2/2022	5.0	5.0	No increase on Southern Beltway
1/8/2023	5.0	5.0	
1/7/2024	5.0	5.0	

Note: Beginning in 2016, all cash toll rate increases also reflect video toll rate increases.

(1) Toll rate increase coincided with vehicle classification changes from a weight-based to an axle-based system.

Periodic toll rate increases were implemented on the Turnpike System in 1987, 1991, and 2004. Beginning in 2009, annual toll increases have been implemented. During the 2000s decade, E-ZPass was phased into the Turnpike System. Until 2011, cash and E-ZPass toll rates always increased by the same percent. The toll rate schedule implemented on January 2, 2011 created a differential between cash and E-ZPass, as E-ZPass rates were increased by 3.0 percent and cash toll were increased by 10.0 percent. Rate increases differed between cash and E-ZPass in 2012, 2013, and 2014 further increasing the differential between cash and E-ZPass toll rates. After 2014, rate increases have been applied equally to both cash/video and E-ZPass.

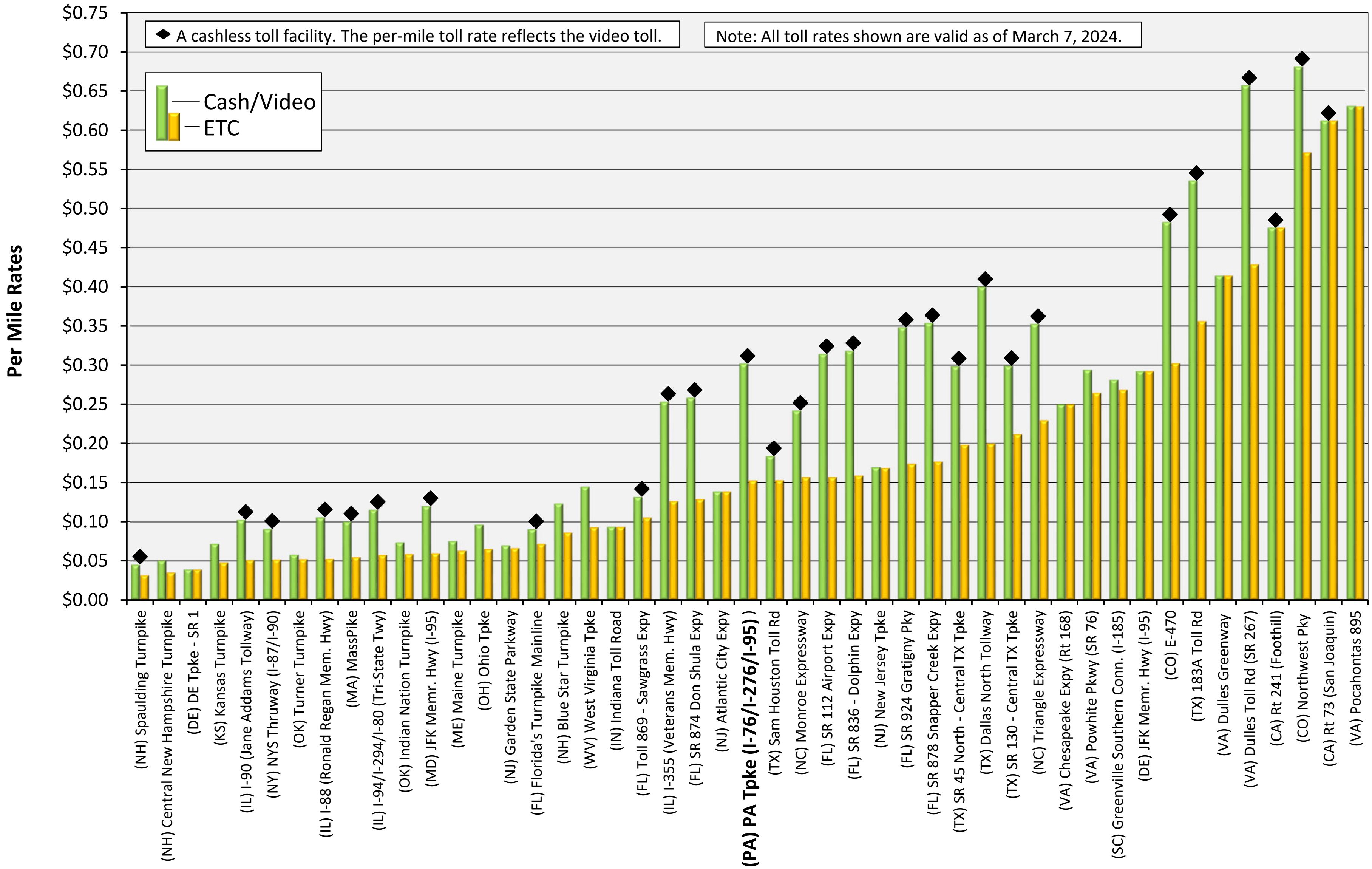
In 2015 toll rates increased by 5.0 percent. Both cash/video and E-ZPass toll rates increased by 6.0 percent annually from 2016 to 2021 and by 5.0 percent from 2022 to 2024. As of June 2020, the entire Pennsylvania Turnpike System is an all-electronic tolling (AET) system; cash is no longer accepted, with all payments being conducted via E-ZPass or video tolling.

PTC policy has also been to implement a video toll surcharge upon conversion to AET; this has generally amounted to an additional 45-percent increase, making video rates about double E-ZPass rates. This 45-percent video surcharge was implemented on the last two components of the Pennsylvania Turnpike System that had previously lacked it, the Ticket System and Mon/Fayette Expressway, in conjunction with the system-wide toll increase that was implemented on January 3, 2021. It is assumed that annual toll rate increases will occur throughout the forecast period, as described in the section Actual and Assumed Toll Rate Increases and shown in Table 8.

Figures 1 and 2 show the 2024 per-mile toll rates for a through-trip on 47 U.S. toll facilities, for PCs and 5-axle commercial vehicles (CVs), respectively. Per-mile rates are shown for both cash/video and electronic toll collection (ETC) transactions in each figure, although the vast majority of both PC and CV trips are made using the more cost-effective E-ZPass payment method. If a facility uses AET, i.e., it does not accept cash payments, the video toll rate is shown as the equivalent of a cash toll rate. All AET facilities are marked with a diamond in Figures 1 and 2.

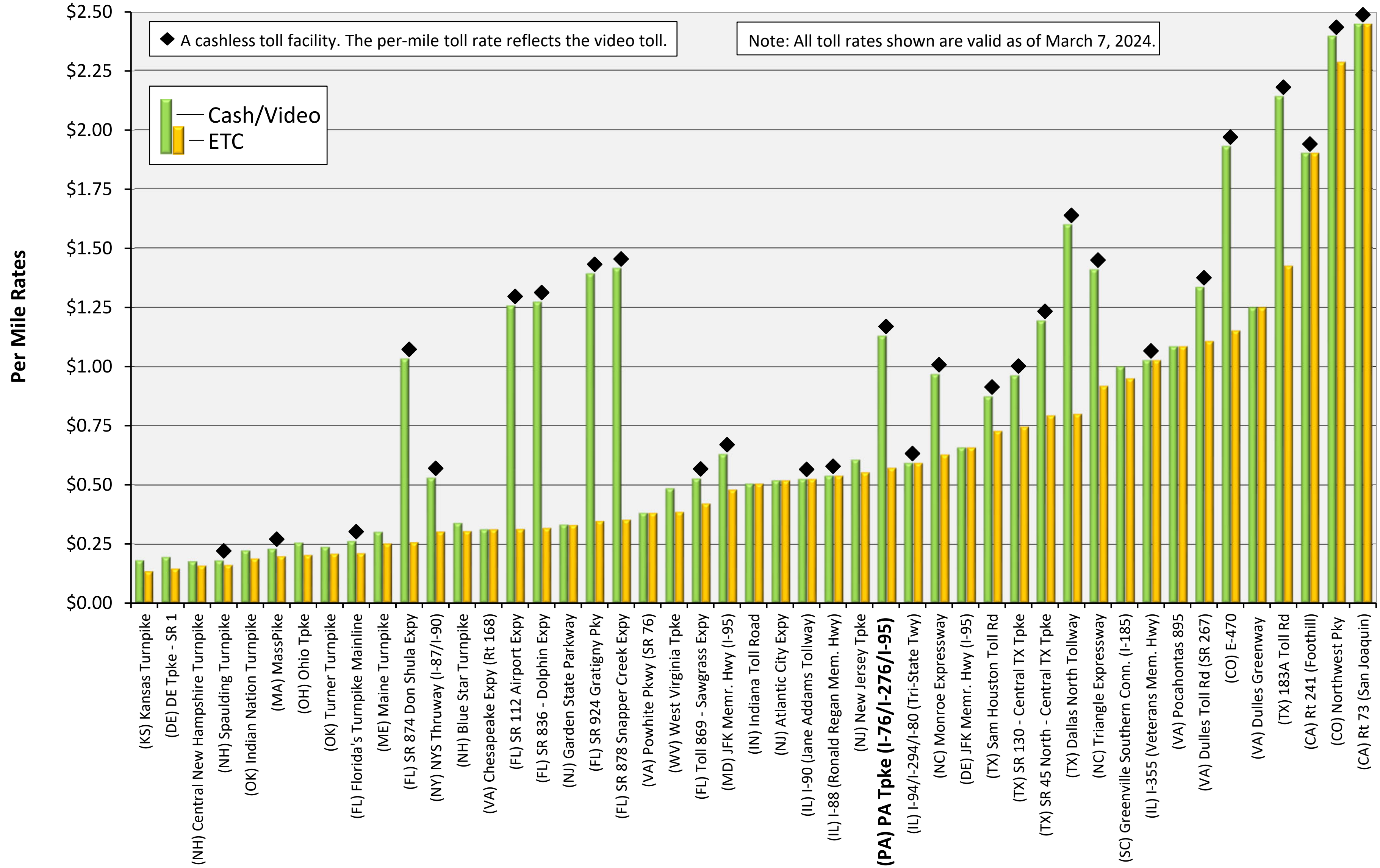
The per-mile through-trip toll rate is shown for the Pennsylvania Turnpike Mainline, which represents a trip on I-76/I-276/I-95 between Ohio and New Jersey. Figure 1 shows that despite 16 consecutive annual toll increases beginning in 2009, the Pennsylvania Turnpike Mainline PC per-mile toll rates of 15 cents per mile for E-ZPass customers and 30 cents per mile for video customers are still reasonably priced compared to other U.S. toll facilities. This ranks exactly in the middle of the 47 surveyed facilities.

Through-trip toll rates on the Pennsylvania Turnpike Mainline for 5-axle CVs (represented by weight class 6) are 57 cents per mile for E-ZPass and $1.13 per mile for video transactions, which puts the Mainline's ETC per-mile rates as the 19th most expensive facility of the 47 that are tracked.



COMPARISON OF 2024 PASSENGER CAR PER-MILE THROUGH TRIP TOLL RATES (DATA SORTED BY ETC TOLL RATES)

FIGURE 1



COMPARISON OF 2024 FIVE-AXLE VEHICLE PER-MILE THROUGH TRIP TOLL RATES (DATA SORTED BY ETC TOLL RATES)

FIGURE 2

Annual Transaction and Gross Toll Revenue Trends

Table 2 provides a summary of annual systemwide transactions and gross toll revenue trends from FY 1994-95 through FY 2022-23. The Pennsylvania Turnpike System is a large, mature system that has demonstrated long-term growth in transactions and toll revenue. Between FY 1994-95 and FY 2007-08 there was only one toll rate increase (in 2004) and Turnpike transactions and gross toll revenue grew by an average annual rate of 3.0 percent and 5.5 percent, respectively. Conversely, in the 11 years from FY 2007-08 through FY 2018-19, which was the last fiscal year to be completed before the onset of the COVID-19 pandemic, there were toll rate increases every year. During this period Turnpike transactions grew more slowly, by 1.1 percent annually, but due to the annual toll rate increases, Turnpike revenue grew more quickly, by 7.6 percent annually. In the four fiscal years that have been completed since the start of the pandemic, from the close of FY 2018-19 to the close of FY 2022-23, total transactions fell by a total of 3.3 percent compared to FY 2018-19, an average decline of 0.8 percent per year. However, due to toll rate increases, total revenue was able to grow over the same period by a total of 24.4 percent, or 5.6 percent per year.

Table 2
Annual Systemwide Traffic and Gross Toll Revenue Trends
Pennsylvania Turnpike System
(in thousands)

	Transactions						Gross Toll Revenue					
Fiscal Year (1)	Cars	Percent Change over Prior Year	Trucks	Percent Change over Prior Year	Total	Percent Change over Prior Year	Cars	Percent Change over Prior Year	Trucks	Percent Change over Prior Year	Total	Percent Change over Prior Year
1994-95	114,033	6.9	15,620	9.5	129,653	7.2	$165,850	4.9	$131,749	7.2	$297,599	5.9
1995-96	121,911	6.9	16,719	7.0	138,630	6.9	172,339	3.9	136,269	3.4	308,608	3.7
1996-97	126,654	3.9	17,479	4.5	144,133	4.0	179,303	4.0	140,837	3.4	320,140	3.7
1997-98	132,472	4.6	18,627	6.6	151,099	4.8	186,290	3.9	149,036	5.8	335,326	4.7
1998-99	136,399	3.0	19,833	6.5	156,232	3.4	191,804	3.0	158,761	6.5	350,565	4.5
1999-00	138,762	1.7	21,341	7.6	160,103	2.5	195,301	1.8	172,035	8.4	367,336	4.8
2000-01	141,033	1.6	21,278	(0.3)	162,311	1.4	193,563	(0.9)	172,337	0.2	365,900	(0.4)
2001-02	150,496	6.7	22,298	4.8	172,794	6.5	212,650	9.9	163,101	(5.4)	375,751	2.7
2002-03	156,220	3.8	23,179	4.0	179,399	3.8	219,201	3.1	168,021	3.0	387,222	3.1
2003-04	163,612	4.7	24,407	5.3	188,019	4.8	228,515	4.2	180,229	7.3	408,744	5.6
2004-05	163,316	(0.2)	25,109	2.9	188,425	0.2	309,032	35.2	236,126	31.0	545,158	33.4
2005-06	160,590	(1.7)	25,311	0.8	185,901	(1.3)	321,268	4.0	267,369	13.2	588,637	8.0
2006-07	160,107	(0.3)	25,316	0.0	185,423	(0.3)	322,781	0.5	269,861	0.9	592,642	0.7
2007-08	164,097	2.5	25,455	0.5	189,552	2.2	327,761	1.5	271,165	0.5	598,926	1.1
2008-09	162,638	(0.9)	23,583	(7.4)	186,220	(1.8)	356,345	8.7	259,259	(4.4)	615,605	2.8
2009-10	166,497	2.4	23,705	0.5	190,201	2.1	415,981	16.7	302,057	16.5	718,038	16.6
2010-11	167,761	0.8	24,529	3.5	192,290	1.1	435,752	4.8	328,105	8.6	763,856	6.4
2011-12	167,971	0.1	24,860	1.3	192,831	0.3	455,133	4.4	342,646	4.4	797,779	4.4
2012-13	166,961	(0.6)	24,985	0.5	191,945	(0.5)	471,514	3.6	350,226	2.2	821,740	3.0
2013-14	167,387	0.3	25,729	3.0	193,116	0.6	497,671	5.5	368,395	5.2	866,066	5.4
2014-15	170,371	1.8	27,130	5.4	197,501	2.3	533,054	7.1	401,197	8.9	934,252	7.9
2015-16 (2)	176,369	3.5	28,414	4.7	204,783	3.7	588,295	10.4	443,325	10.5	1,031,620	10.4
2016-17 (3,4)	178,244	1.1	28,898	1.7	207,142	1.2	638,787	8.6	476,188	7.4	1,114,975	8.1
2017-18 (5)	179,125	0.5	29,985	3.8	209,110	1.0	678,720	6.3	524,438	10.1	1,203,158	7.9
2018-19	181,946	1.6	31,347	4.5	213,292	2.0	740,205	9.1	595,180	13.5	1,335,385	11.0
2019-20 (6,7,8)	158,738	(12.8)	30,602	(2.4)	189,340	(11.2)	683,511	(7.7)	606,050	1.8	1,289,561	(3.4)
2020-21 (9)	137,714	(13.2)	31,887	4.2	169,601	(10.4)	610,353	(10.7)	648,458	7.0	1,258,812	(2.4)
2021-22 (10)	165,128	19.9	34,976	9.7	200,103	18.0	819,784	34.3	749,243	15.5	1,569,027	24.6
2022-23	170,355	3.2	35,898	2.6	206,253	3.1	868,352	5.9	793,355	5.9	1,661,707	5.9

Average Annual Percent Change

	Transactions			Gross Toll Revenue		
Fiscal Year	Cars	Trucks	Total	Cars	Trucks	Total
FY 1994-95 - FY 2007-08	2.8	3.8	3.0	5.4	5.7	5.5
FY 2007-08 - FY 2018-19	0.9	1.9	1.1	7.7	7.4	7.6
FY 2018-19 - FY 2022-23	(1.6)	3.4	(0.8)	4.1	7.4	5.6
FY 1994-95 - FY 2022-23	1.4	3.0	1.7	6.1	6.6	6.3

(1) Fiscal year beginning June 1.
(2) The Delaware River Bridge toll plaza was converted from part of the Ticket System to a one-way barrier AET facility in January 2016.
(3) The Delaware River Bridge was closed due to structural integrity concerns from January 20, 2017 to March 9, 2017.
(4) AET conversion was implemented on Turnpike I-376 Beaver Valley Expressway in May 2017.
(5) AET conversion and vehicle classification changes were implemented on the Northeast Extension Barrier Facilities in April 2018.
(6) Toll by Plate surcharge for I-376 Beaver Valley Expressway was increased in October 2019.
(7) AET conversion was implemented at Gateway Toll Plaza and Turnpike 66 in October 2019.
(8) AET conversion with no surcharge for Toll by Plate was implemented on the Ticket System on March 16, 2020.
(9) AET conversion with no surcharge for Toll by Plate was implemented on the Mon/Fayette Expressway on June 16, 2020.
(10) A 13.2 mile extension of the Southern Beltway opened on October 15, 2021.

Note: Refer to Table 1 for toll rate increase information.

Monthly Transactions and Gross Toll Revenue Trends

Tables 3 through 5 present recent monthly transaction and gross toll revenue trends from FY 2020-21 through the first eight months of FY 2023-24 (January 2024) for all PTC facilities. The information is provided for PCs, CVs, and total vehicles. The facilities are summarized in the following order:

- Table 3 – the total Turnpike System (combined total of the Ticket System and Barrier System);
- Table 4 – the Ticket System (comprised of I-76/I-276 and I-476);
- Table 5 – the combined Barrier System (comprised of all facilities listed below);
    - Turnpike 43 (Mon/Fayette Expressway) (MFE);
    - Turnpike 66 (Amos K. Hutchinson Bypass) (AKH);
    - Northeast Extension (I-476) barrier plazas;
    - Turnpike I-376 (Beaver Valley Expressway) (BVE);
    - Turnpike I-576 (Southern Beltway – Findlay Connector);
    - Delaware River Bridge (DRB); and
    - Gateway Toll Plaza.

In each of these tables, the first fiscal year shown, FY 2020-21, experienced suppressed transactions and revenues due to the COVID-19 pandemic. During the early months of this fiscal year, there were still extant stay-at-home orders, limitations on public gatherings, and school closures. Over the course of the year, these were generally eased and eventually removed. By the start of FY 2021-22, almost all formal restrictions had been lifted, but many workers continued to telecommute.

As shown in Table 3, total systemwide transactions increased by 18.0 percent in FY 2021-22 as traffic rebounded from the effects of the pandemic. Although PC transaction growth of 19.9 percent was much higher than CV revenue growth of 9.7 percent, PCs were more significantly impacted by the pandemic and experienced steep declines during FY 2020-21, while CV transactions were impacted less severely and had returned to growth by September 2020. Total systemwide gross toll revenue experienced a similar trajectory, with 24.6 percent growth in FY 2021-22, with PC revenue growth of 34.3 and CV revenue growth of 15.5 percent.

In FY 2022-23, transactions continued their recovery, albeit at a slower rate, with PC transactions growing by 3.2 percent, CV transactions growing by 2.6 percent, and total transactions growing by 3.1 percent. PC, CV, and total vehicle revenue all grew by 5.9 percent. Despite these similar growth numbers for PCs and CVs, there were noticeable differences in their growth throughout the year. PC transactions and revenue growth varied from month-to-month but were generally positive due to continued recovery from the COVID-19 pandemic. January 2023 experienced abnormally high growth of 16.3 percent for transactions and 11.0 percent for revenue due to multiple winter storms in January 2022 suppressing traffic during that month. CV traffic however, performed strongly through the summer, with transaction growth at or greater than 5.0% percent in June, August, and September of 2022. Throughout the rest of the fiscal year, however, growth stalled, with transactions growth only twice exceeding 2.0 percent and negative transactions growth in December 2022, March 2023, and April 2023. This coincided with rising inflation rates and gasoline prices and a general slowdown in freight shipping across the U.S. economy.

These divergent trends of PC and CV growth have continued thus far in FY 2023-24. PC transactions have grown 1.9 percent over the first eight months of the fiscal year, from June 2023 through January 2024, with positive growth in all months except January. CV transactions have declined a total of 0.9 percent over the same period, with negative growth in all months except October 2023 and January 2024. When combined, total transactions have increased 1.4 percent during this period. Revenue has experienced similar trends, although growth rates have been higher due to a toll rate increase of five percent. PC gross revenue has grown 6.7 percent between June 2023 and January 2024, while CV revenue has grown 3.5 percent. Total vehicle revenue has grown 5.2 percent over this eight-month period.

As previously mentioned, the Ticket System is by far the largest component of both traffic and toll revenue on the Turnpike System. As such, its overall growth patterns generally resemble those for the total system. As shown in Table 4, in FY 2021-22 total transactions increased 16.9 percent from the prior year, while toll revenue increased by 24.5 percent. PC transactions increased by 19.0 percent, while toll revenue grew 34.9 percent. CV transactions grew by 7.9 percent and toll revenue grew 15.2 percent compared to FY 2020-21.

As with the overall system, overall transactions continued to grow in FY 2022-23, but at a slower pace of 1.0 percent. Due to toll rate increases, total revenue grew at a faster rate of 4.9 percent. PC transactions exhibited stronger growth of 1.3 percent, while CV transactions declined 0.3 percent. These trends continued through the first eight months of FY 2023-24, with total revenue growth (4.8 percent) outpacing total transactions growth (1.0 percent) and PC transactions continuing to grow (1.5 percent) while CV transactions continued to decline (1.2). Despite these divergent trends of PC and CV growth over the past two years, PC transactions remain below 2019 levels while CV transactions continue to exceed 2019 levels due to the above normal growth of CV traffic during the pandemic and the resiliency of the work from home phenomenon,

Table 5 provides the same information for all barrier toll facilities combined. Barrier facility toll revenue comprises about 17 percent of total systemwide toll revenue, although this has grown from less than 15 percent prior to the pandemic as some barrier facilities have expanded and grown faster than the Ticket System over the past few fiscal years.

In FY 2021-22, Barrier System total transactions grew 21.0 percent, even stronger than the 16.9 percent growth experienced on the Ticket System. PC growth (22.3 percent) outpaced CV growth (14.9 percent), although the difference was smaller than on the Ticket System. Due to toll rate increases, revenue growth was even stronger, with 31.8 percent growth for PCs, 17.5 percent growth for CVs, and total vehicle growth of 25.6 percent. Part of these faster growth rates for the barrier system in FY 2021-22 can be attributable to a 13.2-mile extension of the Southern Beltway that opened on October 15, 2021.

While growth slowed in FY 2022-23, the slowdown was less significant than on the Ticket System. Unlike the Ticket System, CV transactions experienced positive year-over-year growth in every month of the fiscal year and grew 10.9 percent overall, higher than PC growth of 8.1 percent. Total vehicle transaction growth was 8.5 percent, and total vehicle revenue growth was 11.4 percent. Once again, these figures were positively impacted by the opening of the Southern Beltway extension, as traffic continued to ramp up in its second year of operation.

Growth slowed in the first eight months of FY 2023-24, with total vehicle transactions growing by 2.3 percent and total vehicle revenue growing by 7.2 percent compared to the same eight-month period in the prior fiscal year, although both these figures are higher than the growth exhibited by the Ticket System. Like the Ticket System, CV transaction growth underperformed PC transaction growth in most months.

Table 3

Total Turnpike System - Monthly Transaction and Revenue Trends

Transactions Include Revenue and Non-Revenue Vehicles

Toll Transactions (in 1,000s)

Passenger Cars

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	10,557	36.0	14,360	2.1	14,665	5.9	15,529
July	12,228	24.1	15,171	(0.3)	15,120	3.2	15,602
August	12,762	17.7	15,017	2.7	15,427	3.1	15,908
September	12,193	15.3	14,060	3.4	14,539	0.7	14,647
October	12,702	17.8	14,963	0.3	15,002	1.6	15,243
November	10,730	30.4	13,995	0.1	14,008	2.2	14,321
December	9,949	36.4	13,570	1.2	13,730	1.6	13,952
January	9,939	9.4	10,877	16.3	12,646	(4.5)	12,079
February	8,785	30.6	11,472	4.5	11,986		
March	11,777	12.2	13,213	4.4	13,797		
April	12,444	11.7	13,906	1.3	14,093		
May	13,650	6.4	14,523	5.6	15,343		
Total Year	137,714	19.9	165,128	3.2	170,355		
Subtotal Jun-Jan	91,058	23.0	112,014	2.8	115,137	1.9	117,281

Commercial Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	2,716	10.6	3,002	7.9	3,239	(0.7)	3,217
July	2,788	6.5	2,970	2.6	3,047	(1.5)	3,003
August	2,745	10.3	3,026	9.8	3,323	(0.3)	3,311
September	2,758	8.2	2,983	5.0	3,133	(4.4)	2,997
October	2,841	7.6	3,057	1.4	3,100	2.5	3,179
November	2,509	14.6	2,874	1.3	2,910	(0.5)	2,895
December	2,492	12.6	2,806	(1.8)	2,756	(3.0)	2,672
January	2,410	6.4	2,565	6.2	2,723	0.4	2,735
February	2,175	17.4	2,554	0.1	2,556		
March	2,816	8.8	3,064	(1.7)	3,012		
April	2,833	4.7	2,965	(3.1)	2,874		
May	2,805	10.8	3,109	3.7	3,224		
Total Year	31,887	9.7	34,976	2.6	35,898		
Subtotal Jun-Jan	21,257	9.5	23,284	4.1	24,231	(0.9)	24,008

Total Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	13,273	30.8	17,363	3.1	17,904	4.7	18,746
July	15,016	20.8	18,141	0.1	18,167	2.4	18,605
August	15,507	16.4	18,044	3.9	18,750	2.5	19,220
September	14,951	14.0	17,042	3.7	17,672	(0.2)	17,644
October	15,543	15.9	18,021	0.5	18,102	1.8	18,421
November	13,238	27.4	16,869	0.3	16,918	1.8	17,216
December	12,441	31.6	16,376	0.7	16,485	0.8	16,624
January	12,348	8.9	13,442	14.3	15,369	(3.6)	14,814
February	10,960	28.0	14,026	3.7	14,542		
March	14,593	11.5	16,277	3.3	16,810		
April	15,277	10.4	16,871	0.6	16,967		
May	16,456	7.1	17,632	5.3	18,567		
Total Year	169,601	18.0	200,103	3.1	206,253		
Subtotal Jun-Jan	112,315	20.5	135,298	3.0	139,368	1.4	141,289

Toll Revenue (in $1,000s)

Passenger Cars

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$43,987	58.1	$69,542	8.4	$75,387	11.2	$83,857
July	52,274	57.1	82,121	0.5	82,549	3.4	85,370
August	57,496	35.3	77,797	5.9	82,405	(1.3)	81,364
September	50,963	28.3	65,407	13.8	74,449	10.9	82,542
October	55,416	41.6	78,451	(5.4)	74,223	5.5	78,285
November	44,030	36.5	60,100	16.5	70,031	6.2	74,404
December	42,347	68.2	71,239	(5.5)	67,345	16.0	78,125
January	44,324	26.5	56,090	11.0	62,236	2.8	63,988
February	37,804	42.7	53,956	6.4	57,427		
March	52,941	18.3	62,609	12.6	70,482		
April	59,506	16.2	69,160	5.5	72,986		
May	69,267	5.8	73,312	7.5	78,833		
Total Year	$610,353	34.3	$819,784	5.9	$868,352		
Subtotal Jun-Jan	390,836	43.5	560,747	5.0	588,624	6.7	$627,935

Commercial Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$52,201	18.1	$61,648	12.6	$69,420	3.1	$71,598
July	52,730	16.8	61,582	8.4	66,772	1.3	67,654
August	53,529	16.9	62,598	14.4	71,638	(1.4)	70,647
September	52,040	14.4	59,534	12.4	66,931	1.1	67,692
October	55,697	18.3	65,892	0.7	66,341	6.9	70,906
November	49,039	15.2	56,500	11.6	63,075	2.0	64,352
December	51,072	20.9	61,742	(2.9)	59,946	9.2	65,461
January	51,916	14.2	59,310	4.1	61,751	6.9	65,981
February	48,175	19.9	57,775	2.5	59,224		
March	61,248	12.2	68,693	2.3	70,252		
April	59,747	8.2	64,647	2.3	66,146		
May	61,065	13.5	69,323	3.7	71,858		
Total Year	$648,458	15.5	$749,243	5.9	$793,355		
Subtotal Jun-Jan	418,224	16.9	488,805	7.6	525,875	3.5	$544,292

Total Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$96,188	36.4	$131,190	10.4	$144,807	7.4	$155,455
July	105,004	36.9	143,703	3.9	149,321	2.5	153,024
August	111,025	26.5	140,394	9.7	154,043	(1.3)	152,011
September	103,003	21.3	124,941	13.2	141,379	6.3	150,234
October	111,112	29.9	144,344	(2.6)	140,564	6.1	149,191
November	93,069	25.3	116,600	14.2	133,106	4.2	138,756
December	93,418	42.3	132,981	(4.3)	127,291	12.8	143,586
January	96,240	19.9	115,400	7.4	123,987	4.8	129,969
February	85,979	30.0	111,731	4.4	116,651		
March	114,189	15.0	131,302	7.2	140,733		
April	119,253	12.2	133,806	4.0	139,132		
May	130,332	9.4	142,635	5.6	150,692		
Total Year	$1,258,812	24.6	$1,569,027	5.9	$1,661,707		
Subtotal Jun-Jan	809,059	29.7	1,049,552	6.2	1,114,499	5.2	$1,172,227

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 1 for details.

(2) AET conversion was implemented on the Ticket System and Mon/Fayette Expressway in June 2020.

(3) A 13.2 mile extension of the Southern Beltway opened on October 15, 2021.

Table 4

Ticket System - Monthly Transaction and Revenue Trends

Transactions Include Revenue and Non-Revenue Vehicles

Toll Transactions (in 1,000s)

Passenger Cars

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	7,560	39.8	10,569	(1.0)	10,458	5.2	10,997
July	8,817	26.1	11,115	(4.2)	10,650	2.5	10,913
August	9,241	18.6	10,964	(0.9)	10,867	2.7	11,159
September	8,824	16.7	10,295	(0.3)	10,261	0.3	10,288
October	9,269	17.2	10,867	(2.2)	10,623	1.5	10,782
November	7,872	27.8	10,063	(0.8)	9,984	2.1	10,193
December	7,314	33.5	9,762	0.5	9,806	1.6	9,965
January	7,341	6.4	7,808	16.3	9,085	(4.7)	8,658
February	6,398	29.8	8,307	3.4	8,586		
March	8,622	10.0	9,483	3.7	9,837		
April	9,122	8.9	9,934	0.7	10,007		
May	10,014	3.2	10,332	5.3	10,883		
Total Year	100,394	19.0	119,499	1.3	121,046		
Subtotal Jun-Jan	66,238	23.0	81,443	0.4	81,734	1.5	82,955

Commercial Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	2,024	11.3	2,253	3.6	2,334	(2.2)	2,283
July	2,077	7.6	2,235	(2.2)	2,185	(2.2)	2,137
August	2,053	10.8	2,276	4.5	2,379	(0.9)	2,359
September	2,052	9.3	2,243	(0.3)	2,237	(4.4)	2,139
October	2,126	6.8	2,270	(2.6)	2,211	3.0	2,278
November	1,892	11.3	2,106	(1.1)	2,083	(0.2)	2,080
December	1,892	8.7	2,057	(3.4)	1,987	(3.2)	1,923
January	1,821	3.2	1,879	4.6	1,965	0.3	1,970
February	1,626	14.9	1,869	(1.6)	1,840		
March	2,121	5.0	2,228	(2.7)	2,168		
April	2,120	1.6	2,154	(4.5)	2,056		
May	2,106	6.3	2,238	2.2	2,288		
Total Year	23,910	7.9	25,807	(0.3)	25,733		
Subtotal Jun-Jan	15,937	8.7	17,318	0.4	17,381	(1.2)	17,168

Total Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	9,584	33.8	12,822	(0.2)	12,793	3.8	13,280
July	10,894	22.5	13,350	(3.9)	12,835	1.7	13,050
August	11,294	17.2	13,240	0.0	13,246	2.0	13,517
September	10,876	15.3	12,538	(0.3)	12,498	(0.6)	12,427
October	11,395	15.3	13,137	(2.3)	12,834	1.8	13,059
November	9,764	24.6	12,169	(0.8)	12,067	1.7	12,273
December	9,205	28.4	11,819	(0.2)	11,793	0.8	11,888
January	9,162	5.7	9,687	14.1	11,049	(3.8)	10,628
February	8,024	26.8	10,177	2.4	10,426		
March	10,743	9.0	11,710	2.5	12,005		
April	11,243	7.5	12,088	(0.2)	12,063		
May	12,119	3.7	12,569	4.8	13,170		
Total Year	124,304	16.9	145,306	1.0	146,779		
Subtotal Jun-Jan	82,175	20.2	98,761	0.4	99,115	1.0	100,123

Toll Revenue (in $1,000s)

Passenger Cars

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$35,319	62.5	$57,377	7.3	$61,561	10.8	$68,213
July	42,697	60.3	68,423	(1.6)	67,357	2.6	69,078
August	46,956	38.1	64,828	4.2	67,533	(2.6)	65,746
September	41,486	29.3	53,642	12.7	60,460	10.5	66,784
October	45,050	44.2	64,959	(7.8)	59,891	5.1	62,919
November	36,273	32.8	48,187	18.1	56,911	5.8	60,228
December	34,329	72.9	59,349	(8.0)	54,612	15.8	63,219
January	36,314	26.5	45,926	9.2	50,149	3.0	51,656
February	30,899	40.9	43,533	5.5	45,943		
March	43,127	17.6	50,734	12.0	56,814		
April	48,848	14.9	56,151	4.8	58,847		
May	57,404	3.8	59,559	6.9	63,650		
Total Year	$498,703	34.9	$672,668	4.6	$703,728		
Subtotal Jun-Jan	318,425	45.3	462,691	3.4	478,474	6.1	$507,842

Commercial Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$45,213	18.6	$53,638	11.7	$59,916	2.7	$61,524
July	45,733	17.3	53,654	7.4	57,631	1.1	58,250
August	46,518	17.4	54,595	13.3	61,836	(1.8)	60,716
September	45,044	14.7	51,683	11.4	57,574	1.0	58,142
October	48,290	18.7	57,319	(0.5)	57,051	6.8	60,909
November	42,656	13.9	48,605	11.7	54,268	1.9	55,300
December	44,492	20.5	53,632	(3.6)	51,699	9.4	56,568
January	45,231	14.1	51,605	3.1	53,183	7.0	56,890
February	42,135	18.8	50,044	2.1	51,084		
March	53,427	11.3	59,456	1.9	60,613		
April	51,990	7.4	55,817	2.2	57,046		
May	53,338	12.5	60,013	2.7	61,657		
Total Year	$564,067	15.2	$650,063	5.2	$683,556		
Subtotal Jun-Jan	363,177	16.9	424,732	6.7	453,156	3.3	$468,299

Total Vehicles

Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$80,532	37.9	$111,015	9.4	$121,477	6.8	$129,737
July	88,430	38.0	122,077	2.4	124,988	1.9	127,328
August	93,474	27.8	119,423	8.3	129,369	(2.2)	126,462
September	86,530	21.7	105,325	12.1	118,034	5.8	124,926
October	93,340	31.0	122,279	(4.4)	116,941	5.9	123,828
November	78,929	22.6	96,792	14.9	111,179	3.9	115,528
December	78,821	43.3	112,981	(5.9)	106,311	12.7	119,787
January	81,545	19.6	97,532	5.9	103,331	5.0	108,546
February	73,034	28.1	93,578	3.7	97,027		
March	96,553	14.1	110,190	6.6	117,427		
April	100,838	11.0	111,968	3.5	115,892		
May	110,743	8.0	119,573	4.8	125,307		
Total Year	$1,062,770	24.5	$1,322,732	4.9	$1,387,284		
Subtotal Jun-Jan	681,602	30.2	887,423	5.0	931,630	4.8	$976,141

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 1 for details.

(2) AET conversion occurred in June 2020.

(3) Ticket System includes the Mainline (I-76/I-276) and Northeast Extension (I-476).

Table 5

Combined Barrier Facilities - Monthly Transaction and Revenue Trends

Transactions Include Revenue and Non-Revenue Vehicles

Toll Transactions (in 1,000s)

	Passenger Cars						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	2,997	26.5	3,791	11.0	4,207	7.7	4,532
July	3,410	18.9	4,056	10.2	4,470	4.9	4,689
August	3,521	15.1	4,053	12.5	4,560	4.1	4,749
September	3,369	11.8	3,765	13.6	4,278	1.9	4,359
October	3,433	19.3	4,097	6.9	4,378	1.9	4,461
November	2,858	37.6	3,932	2.3	4,024	2.6	4,127
December	2,635	44.5	3,809	3.0	3,924	1.6	3,987
January	2,597	18.2	3,069	16.1	3,562	(4.0)	3,421
February	2,387	32.6	3,165	7.4	3,400		
March	3,155	18.2	3,730	6.2	3,960		
April	3,322	19.6	3,972	2.9	4,086		
May	3,637	15.2	4,191	6.4	4,460		
Total Year	37,320	22.3	45,629	8.1	49,309		
Subtotal Jun-Jan	24,820	23.2	30,571	9.3	33,403	2.8	34,326

	Commercial Vehicles						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	692	8.3	749	20.8	905	3.2	934
July	711	3.5	736	17.3	863	0.3	865
August	692	8.5	751	25.7	944	1.0	953
September	706	4.8	739	21.2	896	(4.2)	858
October	715	10.1	787	13.0	889	1.3	901
November	617	24.5	768	7.7	827	(1.4)	815
December	600	24.8	749	2.6	768	(2.5)	749
January	589	16.6	686	10.5	758	0.9	765
February	549	24.8	685	4.6	716		
March	695	20.4	837	0.9	844		
April	713	13.8	811	0.8	818		
May	699	24.5	871	7.5	937		
Total Year	7,977	14.9	9,169	10.9	10,165		
Subtotal Jun-Jan	5,321	12.1	5,965	14.8	6,850	(0.1)	6,841

	Total Vehicles						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	3,689	23.1	4,541	12.6	5,112	6.9	5,466
July	4,121	16.3	4,792	11.3	5,332	4.2	5,554
August	4,212	14.0	4,804	14.6	5,504	3.6	5,702
September	4,074	10.6	4,504	14.9	5,174	0.8	5,217
October	4,148	17.7	4,884	7.9	5,268	1.8	5,362
November	3,474	35.3	4,700	3.2	4,851	1.9	4,943
December	3,235	40.9	4,557	3.0	4,692	0.9	4,737
January	3,186	17.9	3,755	15.0	4,320	(3.1)	4,186
February	2,935	31.1	3,849	6.9	4,116		
March	3,849	18.6	4,567	5.2	4,804		
April	4,035	18.5	4,783	2.5	4,904		
May	4,336	16.7	5,062	6.6	5,397		
Total Year	45,296	21.0	54,798	8.5	59,474		
Subtotal Jun-Jan	30,141	21.2	36,537	10.2	40,253	2.3	41,166

Toll Revenue (in $1,000s)

	Passenger Cars						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$8,667	40.4	$12,165	13.7	$13,826	13.1	$15,644
July	9,577	43.0	13,699	10.9	15,191	7.2	16,292
August	10,540	23.0	12,969	14.7	14,872	5.0	15,618
September	9,477	24.1	11,765	18.9	13,988	12.7	15,758
October	10,366	30.2	13,492	6.2	14,332	7.2	15,367
November	7,756	53.6	11,913	10.1	13,120	8.0	14,176
December	8,018	48.3	11,890	7.1	12,733	17.1	14,906
January	8,010	26.9	10,163	18.9	12,088	2.0	12,332
February	6,905	50.9	10,423	10.2	11,483		
March	9,815	21.0	11,875	15.1	13,668		
April	10,658	22.1	13,009	8.7	14,139		
May	11,862	15.9	13,753	10.4	15,183		
Total Year	$111,651	31.8	$147,115	11.9	$164,624		
Subtotal Jun-Jan	72,411	35.4	98,056	12.3	110,151	9.0	$120,093

	Commercial Vehicles						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$6,989	14.6	$8,010	18.7	$9,504	6.0	$10,075
July	6,997	13.3	7,928	15.3	9,142	2.9	9,404
August	7,012	14.1	8,002	22.5	9,803	1.3	9,932
September	6,995	12.2	7,851	19.2	9,357	2.1	9,550
October	7,406	15.8	8,573	8.4	9,291	7.6	9,997
November	6,383	23.7	7,895	11.6	8,807	2.8	9,052
December	6,580	23.3	8,109	1.7	8,247	7.8	8,893
January	6,685	15.3	7,705	11.2	8,568	6.1	9,091
February	6,040	28.0	7,731	5.3	8,141		
March	7,821	18.1	9,237	4.4	9,639		
April	7,757	13.8	8,830	3.1	9,101		
May	7,727	20.5	9,309	9.6	10,201		
Total Year	$84,391	17.5	$99,180	10.7	$109,800		
Subtotal Jun-Jan	55,046	16.4	64,073	13.5	72,718	4.5	$75,993

	Total Vehicles						
Month	2020-21	% Chg	2021-22	% Chg	2022-23	% Chg	2023-24
June	$15,656	28.9	$20,175	15.6	$23,330	10.2	$25,718
July	16,574	30.5	21,627	12.5	24,333	5.6	25,696
August	17,552	19.5	20,971	17.7	24,674	3.5	25,549
September	16,472	19.1	19,616	19.0	23,345	8.4	25,308
October	17,772	24.2	22,065	7.1	23,623	7.4	25,364
November	14,140	40.1	19,808	10.7	21,927	5.9	23,229
December	14,597	37.0	19,999	4.9	20,980	13.4	23,799
January	14,695	21.6	17,868	15.6	20,656	3.7	21,423
February	12,945	40.2	18,154	8.1	19,624		
March	17,636	19.7	21,112	10.4	23,307		
April	18,414	18.6	21,839	6.4	23,240		
May	19,589	17.7	23,062	10.1	25,384		
Total Year	$196,042	25.6	$246,295	11.4	$274,423		
Subtotal Jun-Jan	127,457	27.2	162,129	12.8	182,869	7.2	$196,086

NOTES:

(1) Toll increases occur every year with exceptions. Refer to Table 1 for details.

(2) AET Conversion of Mon/Fayette Expressway occurred in June 2020.

(3) A 13.2 mile extension of the Southern Beltway opened on October 15, 2021.

(4) Barrier System includes Mon/Fayette Expressway (PA 43), Amos K. Hutchinson Bypass (PA 66), Northeast barriers (Clarks and Keyser), Beaver Valley Expressway (I-376), Southern Beltway (PA 576), Delaware River Bridge (New Jersey border), and Gateway Toll Plaza (Ohio border).

Committed Roadway Improvements

Table 6 lists major capacity-enhancing roadway improvements with dedicated funding on the Pennsylvania Turnpike System. The locations of these projects are illustrated in **Figure 3**. Most of these projects are part of PTC's statewide Total Reconstruction Initiative, which is a multi-year project to widen the mainline and the Northeast Extension to six lanes (three in each direction). On the Mainline I-76/I-276 this includes work throughout the Pittsburgh, Somerset, and Philadelphia areas. Since the 2023 IG Study Bring Down letter, funding has been designated for the construction of a bypass around the Allegheny Mountain Tunnel and three mainline widening projects (from mileposts 131 to 134, 316 to 319, and 320 to 324) and the widening projects for miles 57-67 on the Mainline and 38-44 on the Northeast Extension have each been split into two separate phases. Table 6 has been updated to reflect these changes. No projects have been completed since the 2023 IG Study, so no projects have been removed from the list. Furthermore, some dates and mileposts were updated to reflect the latest information available from PTC.

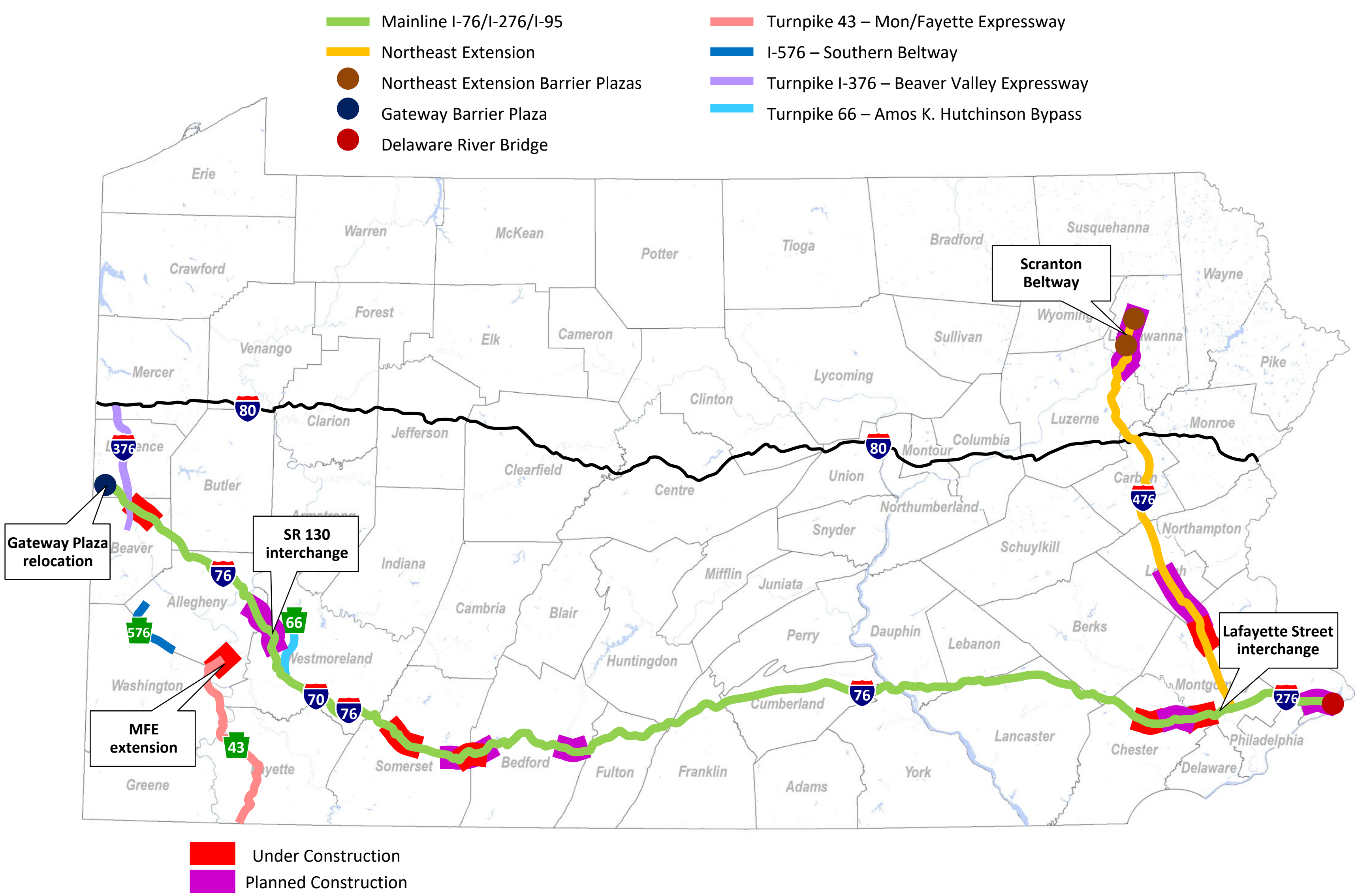
Table 6 also highlights eight non-widening projects:

- The relocation of the Gateway Toll Plaza to milepost 5.4 and conversion of vehicle classifications;
- A new cashless tolling interchange between I-76 and SR 130 in Westmoreland County;
- The construction of a realignment of the Mainline Turnpike to bypass the Allegheny Mountain Tunnel in Somerset County;
- A new cashless tolling interchange between I-276 and Lafayette Street in Montgomery County;
- The construction of two interchanges between I-476 and I-81 to create a Scranton Beltway;
- An eight-mile extension of MFE to from PA 51 to PA 2043 in Allegheny County;
- The conversion of the entire Ticket System from entry-exit tolling to segment-based tolling; and
- The conversion of vehicle classification from weight-based to axle- and height-based on all Turnpike Systems.

Table 6
Major Committed Roadway Improvements on the Pennsylvania Turnpike System (1)

Milepost	Counties	Description	Actual or Assumed Start Date	Assumed Completion Date
Mainline I-76/I-276/I-95				
Gateway Toll Plaza	Lawrence	Relocate toll plaza to MP 5.4 and convert vehicle classification	2024	2027
12-14	Beaver	Replacement of bridge over Beaver River and widen to 3 lanes in	December 2022	September 2027
49-53	Alleghany	Reconstruct and widen to 3 lanes in each direction	2033	2036
53-57	Alleghany	Reconstruct and widen to 3 lanes in each direction	2029	2033
57-62	Alleghany and Westmoreland	Reconstruct and widen to 3 lanes in each direction	2033	2037
62-67	Westmoreland	Reconstruct and widen to 3 lanes in each direction	2029	2033
63	Westmoreland	Construct a new cashless tolling interchange at SR 130	2032	2035
102-109	Somerset County	Reconstruct and widen to 3 lanes in each direction	January 2021	August 2024
121-125	Somerset County	Construct new stretch of mainline roadway to realign Turnpike around existing Allegheny Mountain Tunnel	2034	2040
126-131	Somerset and Bedford	Reconstruct and widen to 3 lanes in each direction	June 2022	Fall 2026
131-134	Bedford	Reconstruct and widen to 3 lanes in each direction	2032	2036
149-155	Bedford	Reconstruct and widen to 3 lanes in each direction	2032	2036
312-316	Chester	Reconstruct and widen to 3 lanes in each direction	Spring 2023	2027
316-319	Chester	Reconstruct and widen to 3 lanes in each direction	2029	2033
320-324	Chester	Reconstruct and widen to 3 lanes in each direction	2026	2031
324-326	Chester and Montgomery	Reconstruct and widen to 3 lanes in each direction	Fall 2021	May 2025
331	Montgomery	Construct a new cashless tolling interchange at Lafayette Street	2027	2030
350-352	Bucks	Reconstruct and widen to 3 lanes in each direction	2032	2035
352-355	Bucks	Reconstruct and widen to 3 lanes in each direction	2027	2031
355-356	Bucks	Reconstruct and widen to 3 lanes in each direction	2024	2027
Northeast Extension I-476				
A38-A43	Montgomery and Bucks	Reconstruct and widen to 3 lanes in each direction	April 2022	Summer 2025
A43-A44	Bucks	Reconstruct and widen to 3 lanes in each direction	2028	2031
A44-A48	Bucks and Lehigh	Reconstruct and widen to 3 lanes in each direction	2031	2036
A48-A53	Lehigh	Reconstruct and widen to 3 lanes in each direction	2027	2032
A53-A57	Lehigh	Reconstruct and widen to 3 lanes in each direction	2031	2035
Scranton Beltway	Lackawanna and Luzerne	Link I-476 to I-81 with two interchanges to create a Scranton Beltway	2029	2032
Mon/Fayette Expressway Turnpike 43				
PA 51 to PA 2043	Allegheny	Construct an extension of the existing Turnpike 43 including one new interchange	March 2023	Winter 2028
System-wide				
System-wide		Convert from entry-exit tolling to segment-based (open road) tolling	2025	2027
System-wide		Convert vehicle classification from from weight-based to axle- and height-based	2025	2027

(1) The major committed roadway improvement projects listed here are a small subset of all projects listed in PTC's FY 2024 Ten Year Capital Plan.



PENNSYLVANIA TURNPIKE COMMISSION (PTC) MAJOR ROADWAY IMPROVEMENT PROJECTS

FIGURE 3

For purposes of conservatism, each of the listed projects are assumed to have no net effect on Turnpike revenue figures.

Ongoing construction-related impacts stemming from roadway widening and reconstruction projects on the Turnpike System are expected to be minimal. Construction projects on the Turnpike System are planned to minimize lane closures or any restrictions to the Turnpike. When such measures are necessary, they are conducted overnight to avoid interfering with heavier daytime traffic volumes. Generally, preference is given to Turnpike Mainline traffic and construction-related disruptions are more likely to affect cross streets and Turnpike access points. Two travel lanes are maintained in both directions during construction activities.

Conversion of the Ticket System from an entry-exit system to segment-based tolling, also known as open road tolling (ORT), will begin on the Northeast Extension and the eastern part of the state (east of Reading) in 2025, while ORT will roll out in the western part of the state beginning in late 2026, with completion in 2027. Although the conversion will significantly alter the way in which tolls are charged, there is expected to be no net revenue impact to the Turnpike System. Under the segment-based system there will be a toll gantry in between each set of interchanges, and drivers will be charged a given rate at each gantry they pass through rather than one rate based on entry and exit points. As a result, the number of transactions on the Ticket System will increase significantly once ORT is implemented although gross revenue is intended to remain unchanged on a system-wide basis. The segment-based system will result in a simpler toll rate structure with each segment having a set price and no need for a complex matrix of entry-exit combinations. Additionally, the toll overhead toll gantries on the Mainline will eliminate the need for toll plazas on entrance and exit ramps, which will be removed and allow for free-flowing traffic on the ramps.

Axle- and height-based vehicle classification on the Ticket System will occur concurrently with ORT conversion and has been separately analyzed and assumed to have no net effect on either transactions or revenue. Planned vehicle classification changes are summarized in **Table 7**, although the toll rates for the new classifications have not yet been decided. PTC will decide what these revenue-neutral toll rates will be prior to system conversion.

Conversion to axle- and height-based vehicle classification on barrier systems that have not yet been converted has not yet been analyzed but is expected to have no or minimal revenue impacts. While the extension of MFE and construction of new interchanges with SR 130, Lafayette Street, and I-81 are expected to bring more transactions, and possibly more revenue, to the Turnpike System, construction of these projects is not expected to be completed until after ORT conversion. Therefore, traffic and revenue impacts of these projects has not yet been analyzed or accounted for in this forecast.

Table 7
Planned Vehicle Classification Changes on the Pennsylvania Turnpike System

Roadway	Current Classification	Current Number of Classes	2025 Classification	2025 Number of Classes
Mainline and Northeast Extension	Weight and Axles (1-9)	9	Axle and Height (2L-7H)	11
Warrendale	Axle only (2-6+)	5		
Clarks Summit and Keyser Avenue(1)	Axle and height (2L-7H)	11		
Findlay and Southern Beltway(1)	Axle and height (2L-7H)	11		
Mid-County(2)	Axle only (2-6+)	5	N/A	N/A
DRB and Gateway(1)	Axle only (2-6+)	5	Axle only (2-6+)	5
BVE and AKH (Mainline)(1)	Weight and Axles (1-9)	9		
BVE and AKH (Ramps)	Axle only (2-6+)	2		
Mon/Fayette(1)	Axle only (2-6+)	5		

(1) No change in 2025
(2) Eliminated with ORT

In addition to PTC-funded projects, the Pennsylvania Department of Transportation's (PennDOT's) Transportation Improvement Program (TIP) was reviewed. This review found no projects on competing or complementary routes that are expected to have an impact on Pennsylvania Turnpike System traffic and revenue.

Actual and Assumed Toll Rate Increases

Annual toll rate increases are assumed to occur on the entire Turnpike System. The toll rate increases are assumed to occur at 12:01 AM on the first Sunday after January 1 of each year unless otherwise noted. **Table 8** presents the annual actual and planned percent increases in toll rates for each calendar year from 2023 through 2054.

Rate increase assumptions are unchanged since the 2023 IG Study. Toll adjustment assumptions for the years 2025 and beyond are proposed and have not yet been formally approved by the PTC Board.

As discussed previously, PTC is in process of converting the entirety of the Ticket System from an entry-exit system to a segment-based system. Although these changes will result in an entirely new toll rate structure and toll rate tables, annual toll rate increases will continue according to the schedule displayed in Table 8.

Table 8
Actual and Assumed Future Toll Rate Increases (1)

Calendar Year		Percent Increase (1)	Sample Toll Rates $1.00 Toll	$2.50 Toll	$10.00 Toll
2023	(2)(3)	5.0	$1.00	$2.50	$10.00
2024	(2)(3)	5.0	1.10	2.70	10.50
2025	(4)	5.0	1.16	2.84	11.03
2026		4.0	1.21	2.95	11.47
2027		3.5	1.25	3.05	11.87
2028		3.0	1.29	3.14	12.23
2029		3.0	1.33	3.23	12.60
2030		3.0	1.37	3.33	12.98
2031		3.0	1.41	3.43	13.37
2032		3.0	1.45	3.53	13.77
2033		3.0	1.49	3.64	14.18
2034		3.0	1.53	3.75	14.61
2035		3.0	1.58	3.86	15.05
2036		3.0	1.63	3.98	15.50
2037		3.0	1.68	4.10	15.97
2038		3.0	1.73	4.22	16.45
2039		3.0	1.78	4.35	16.94
2040		3.0	1.83	4.48	17.45
2041		3.0	1.88	4.61	17.97
2042		3.0	1.94	4.75	18.51
2043		3.0	2.00	4.89	19.07
2044		3.0	2.06	5.04	19.64
2045		3.0	2.12	5.19	20.23
2046		3.0	2.18	5.35	20.84
2047		3.0	2.25	5.51	21.47
2048		3.0	2.32	5.68	22.11
2049		3.0	2.39	5.85	22.77
2050		3.0	2.46	6.03	23.45
2051		3.0	2.53	6.21	24.15
2052		3.0	2.61	6.40	24.87
2053		3.0	2.69	6.59	25.62
2054		3.0	2.77	6.79	26.39

(1) Future toll rate increases are assumed to be implemented within several days of January 1.
(2) Reflects actual toll rate increases on the Turnpike System.
(3) By PTC Policy, all rates are rounded up to the nearest dime.
(4) Beginning in 2025, tolls are rounded to the nearest penny due to undetermined policies after conversion to ORT.

Actual and Assumed E-ZPass Penetration Rates

Table 9 presents the actual and assumed annual E-ZPass penetration rates from calendar year 2023 through 2053. The rates shown include both E-ZPass and v-toll transactions, which are image-based transactions where the license plate is matched to an existing E-ZPass customer account. Because v-toll transactions are charged the E-ZPass rate, these transactions are aggregated with E-ZPass transactions when considering penetration rates. This E-ZPass + v-toll penetration rate reflects the true customer base that has an E-ZPass transponder, as by definition all v-toll transactions must be conducted by an E-ZPass customer.

Since the beginning of the pandemic and the implementation of system-wide AET in the spring of 2020, the system-wide share of v-toll transactions has increased notably, as illustrated in **Figure 4**. In this figure the yellow line represents the monthly share of system-wide E-ZPass transactions, the blue line represents the system-wide share of combined E-ZPass and v-toll transactions, and the difference between the two lines represents v-toll transactions. E-ZPass usage declined sharply between April and July of 2020 and has yet to recover. After the decline experienced in 2020, E-ZPass market share remained very consistent from 2021 to 2023, peaking at about 77 percent every winter and falling to about 74 percent every summer as vacation travelers that are less likely to have an E-ZPass account comprise a larger portion of users.

Conversely, as seen in **Figure 5**, the share of transactions conducted via v-toll has been increasing since 2015, which is the year prior to PTC's first AET system implementation on the Delaware River Bridge (DRB). As PTC converted more of its systems to AET, the share of v-toll transactions has increased as E-ZPass customers traveling without a transponder on a given day are now captured via Toll By Plate (TBP) tolling and cannot stop to pay cash instead. In 2015, the year prior to AET implementation on the DRB, v-tolls accounted for only 1.5 percent of system-wide transactions. By 2021, which was the first full calendar year with system-wide AET, v-tolls had grown to 9.6 percent of all transactions. V-toll usage grew to 11.7 percent of all transactions in calendar year 2023 and is expected to continue growing until reaching 12.9 percent of transactions in 2028.

In Table 9, the first three columns show the E-ZPass + v-toll market share assumptions for the 2024 Bring Down Letter. These were adjusted slightly on a facility-by-facility basis, by the amount shown in the three rightmost columns, over assumptions used in the 2023 IG Study. These adjustments were made considering the trends of stable E-ZPass usage and rising v-toll usage discussed in the preceding paragraphs.

Assumed E-ZPass + v-toll market shares for PCs have only minor differences from those assumed in the 2023 IG Study. However, E-ZPass + v-toll market share for CV traffic was 0.3 percent higher than expected in 2023 and future year market shares have accordingly been revised upwards between 0.5 and 0.7 percent. The resulting impact to total E-ZPass + v-toll market share is an upwards revision of between 0.0 and 0.1 percent annually as compared to the 2023 IG Study.

Table 9
Actual and Assumed Percent E-ZPass + v-Toll Penetration
Pennsylvania Turnpike System

	E-ZPass Penetration Rates					
Calendar	2024 Bring Down Letter			Difference from 2023 IG Study		
Year	Cars	Trucks	Total	Cars	Trucks	Total
2023 (1)	88.3	92.2	89.0	-0.1	0.3	0.0
2024	89.0	92.7	89.7	-0.1	0.5	0.1
2025	89.5	93.2	90.1	0.0	0.7	0.1
2026	89.7	93.4	90.4	0.0	0.7	0.1
2027	89.8	93.5	90.4	0.0	0.7	0.1
2028	89.8	93.5	90.4	0.0	0.6	0.1
2029	89.8	93.5	90.4	0.0	0.6	0.1
2030	89.8	93.5	90.4	0.0	0.6	0.1
2031	89.8	93.5	90.4	0.0	0.6	0.1
2032	89.8	93.5	90.4	0.0	0.6	0.0
2033	89.8	93.5	90.4	0.0	0.6	0.0
2034	89.8	93.5	90.4	0.0	0.6	0.0
2035	89.8	93.5	90.5	0.0	0.6	0.1
2036	89.8	93.5	90.5	0.0	0.6	0.1
2037	89.8	93.5	90.5	0.0	0.6	0.1
2038	89.8	93.5	90.5	0.0	0.6	0.1
2039	89.8	93.5	90.5	-0.1	0.6	0.1
2040	89.8	93.5	90.5	-0.1	0.6	0.1
2041	89.8	93.5	90.5	-0.1	0.6	0.1
2042	89.8	93.5	90.5	-0.1	0.6	0.1
2043	89.8	93.5	90.5	-0.1	0.6	0.1
2044	89.8	93.5	90.5	-0.1	0.6	0.1
2045	89.8	93.5	90.5	-0.1	0.6	0.1
2046	89.8	93.5	90.5	-0.1	0.6	0.0
2047	89.8	93.5	90.5	-0.1	0.6	0.0
2048	89.9	93.5	90.5	0.0	0.6	0.0
2049	89.9	93.5	90.5	0.0	0.6	0.0
2050	89.9	93.5	90.5	0.0	0.6	0.0
2051	89.9	93.5	90.6	0.0	0.6	0.1
2052	89.9	93.5	90.6	0.0	0.6	0.1
2053	89.9	93.5	90.6	0.0	0.6	0.1

(1) 2023 E-ZPass penetration rates are actual for the 2024 Bring Down Letter only.

Figure 4
Historical E-ZPass and V-toll Transactions, Total Vehicles, Total Turnpike System

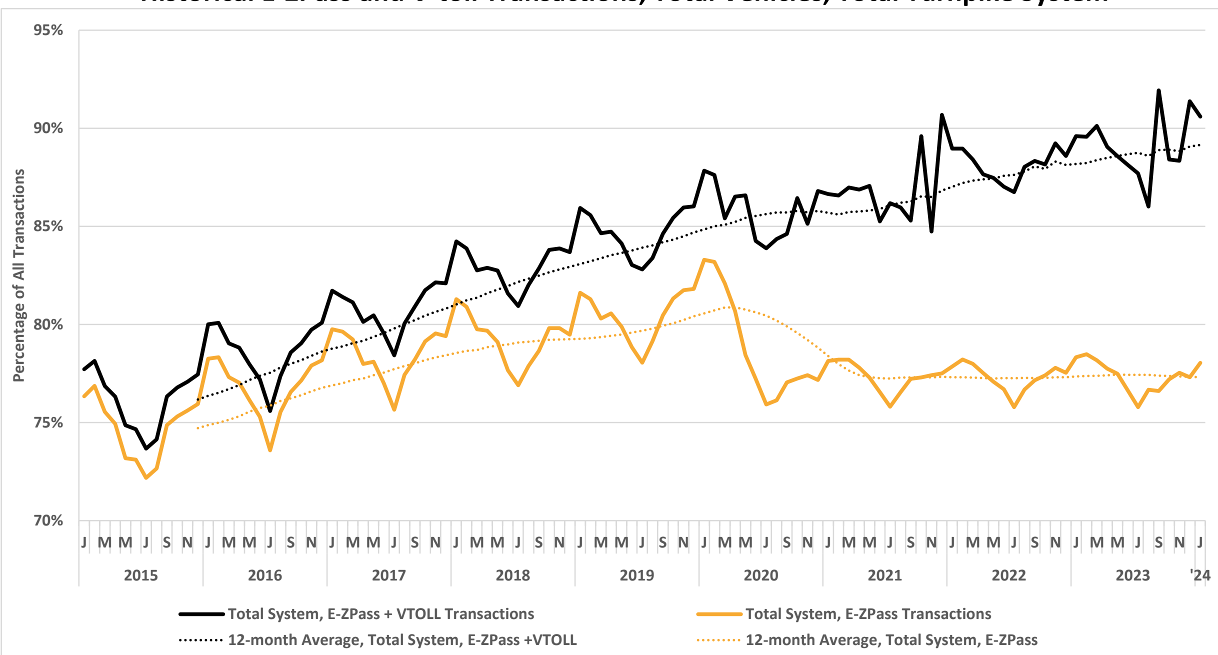
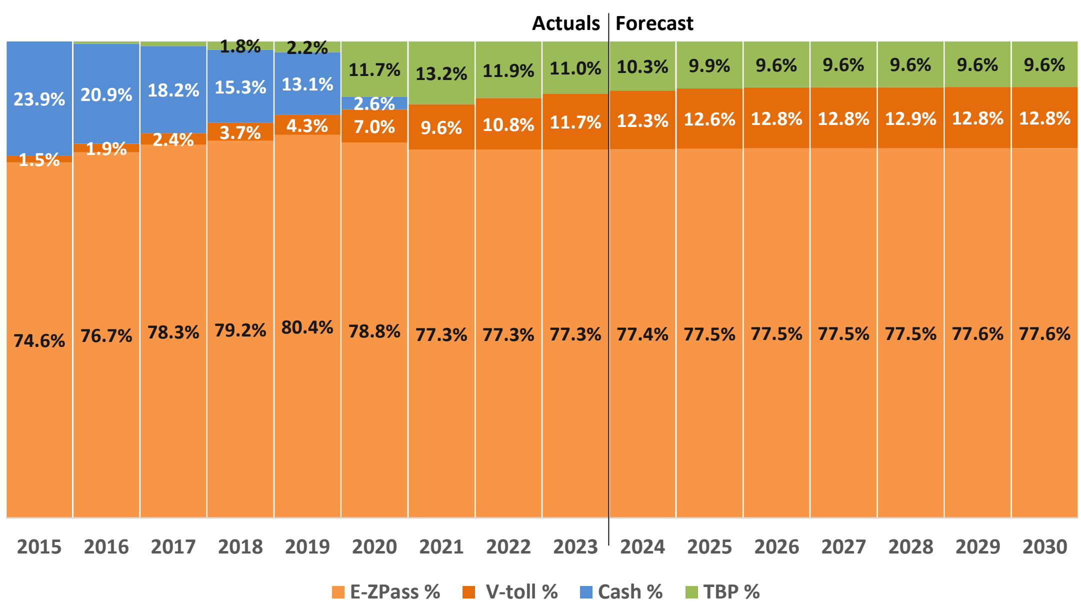


Figure 5
Historical and Forecast Market Shares of Total System-wide Transactions



Estimated COVID-19 Traffic and Toll Revenue Impacts

Since March 2020, traffic and revenue on the Pennsylvania Turnpike System and all other highways have been impacted by the COVID-19 pandemic. Generally speaking, PC 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, CV 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 forecast PC and CV traffic to account for additional normalization expected to occur.

PC traffic on the Pennsylvania Turnpike 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. Conversely, the high levels of growth experienced by CV traffic since 2020 due to the pandemic and increased demand for consumer goods has resulted in monthly CV traffic exceeding 2019 levels in most months since the fall of 2020.

The 2023 IG Study accounted for continued normalization of both PC and CV traffic by assuming an additional 3.5-percent growth in baseline PC traffic and an additional 1.8-percent to 3.5-percent decline in CV traffic over the following years. Even after these adjustments were built into the forecast, PC traffic would remain below 2019 levels while CV traffic would remain above 2019 levels. CDM Smith believes that PC traffic has mostly stabilized from any COVID-19 impacts and no further adjustments for PC traffic are included in this forecast.

It is also expected that CV traffic will continue to decline from its height in 2022. This forecast modifies the assumptions used in the 2023 IG Study so to reflect a continued decline in CV transactions in 2024, reduced growth in 2025, and return to normal growth in 2026.

Short-term Economic Outlook

CDM Smith reviewed the Wall Street Journal Economic Forecasting Survey (WSJ EFS), which is a quarterly survey of more than 75 economic forecasters, to inform any potential adjustments for the short-term economic outlook. The forecast developed as part of the 2023 IG Study included a small adjustment to account for a 50-percent probability of a mild recession in 2023. At the time of that study, the aggregated forecast of respondents indicated that there was more than a 60-percent probability of a recession occurring in 2023. However, in the most recent iteration of the WSJ EFS, only 30 percent of economists surveyed expected negative gross domestic product (GDP) growth in the second quarter of 2024. Therefore, all recessionary impacts have been removed from this forecast.

Summary of Changes in Future Year Estimates for U.S. Gross Domestic Product and Pennsylvania Gross State Product

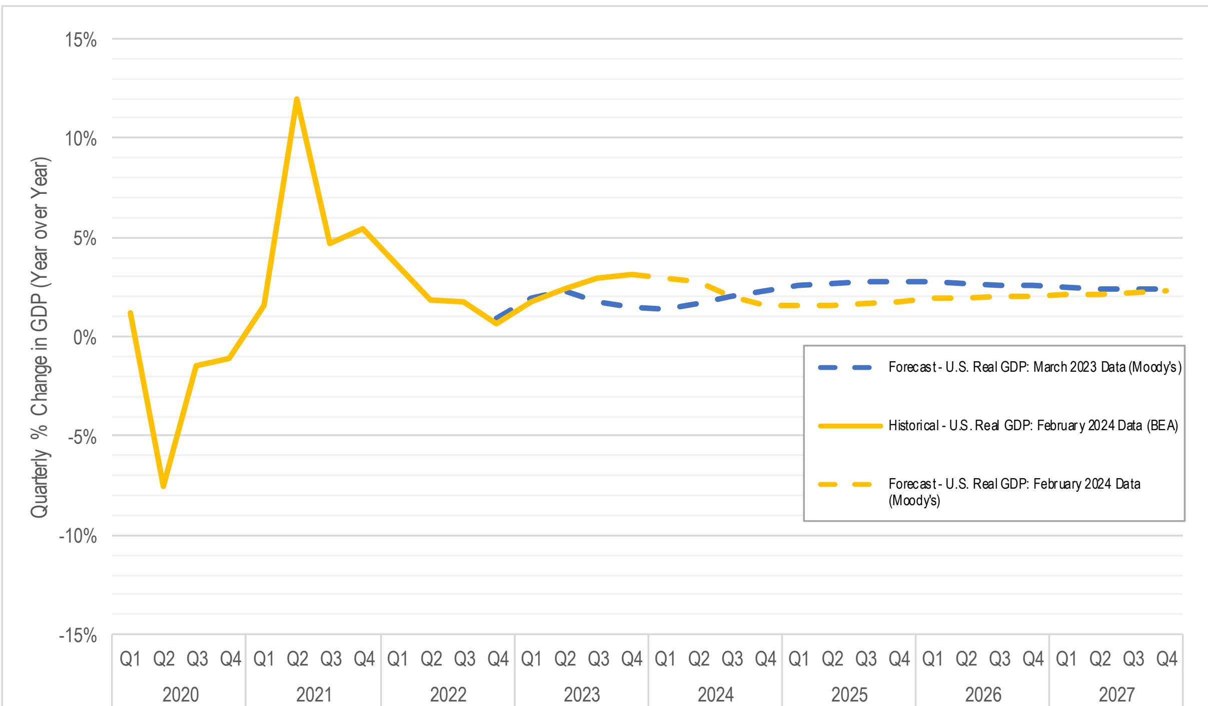
This section presents a comparison of the GDP and Pennsylvania gross state product (GSP) information available for the 2024 Bring Down Letter with updated forecasts for both measures from Moody's Analytics. This information was a key input in developing estimated growth forecasts for the Turnpike System. All GDP and GSP figures in this section refer to year-over-year comparisons. For example, the fourth quarter 2023 percent change would reflect the fourth quarter of 2023 versus the fourth quarter of 2022.

Figure 6 shows actual and estimated GDP at the time of the 2023 IG Study as well as the revised figures based on updated Moody's Analytics' forecasts as of February 2024. At the time of the 2023 IG Study, the most recent actual GDP figure available was for quarter four (Q4) of 2022. Economic forecasters generally expected a recession in the second half of 2023 and/or early 2024, as reflected in the 2023 IG Study.

Since then, actual GDP growth figures have been released for each of the four quarters of 2023. During the first two quarters of 2023, actual GDP growth was close to the forecast GDP for those periods, growing 0.2 percent less than estimated in Q1 and 0.1 percent more than estimated in Q2. In the second half of the year, however, GDP growth was much stronger than expected, with 2.9 percent growth in Q3 and 3.1 percent growth in Q4. This is 1.1 percent higher than the 1.8 percent estimated growth in Q3 and 1.6 percent higher than the 1.5 percent estimated growth in Q4. This is due to the lack of a recession or economic slowdown during this period as was predicted.

Accordingly, GDP growth through the first half of 2024 is now expected to be higher than previously forecast, as a recession is no longer predicted. However, beginning in 2024 Q4, growth is now expected to be lower than previously predicted, largely because GDP growth continued to occur throughout 2023 and there is no longer an expected "recovery" period in late 2024 and 2025. Longer term, in the latest February 2024 forecast, year-over-year GDP is expected to grow at a steady rate of between 1.9 and 2.3 percent throughout 2026 and 2027. Although this rate of growth is below the 2.4 to 2.8 percent growth that was predicted during these years in the last forecast, the actual GDP is projected to be higher in the latest forecast because of continued growth throughout 2023 and 2024.

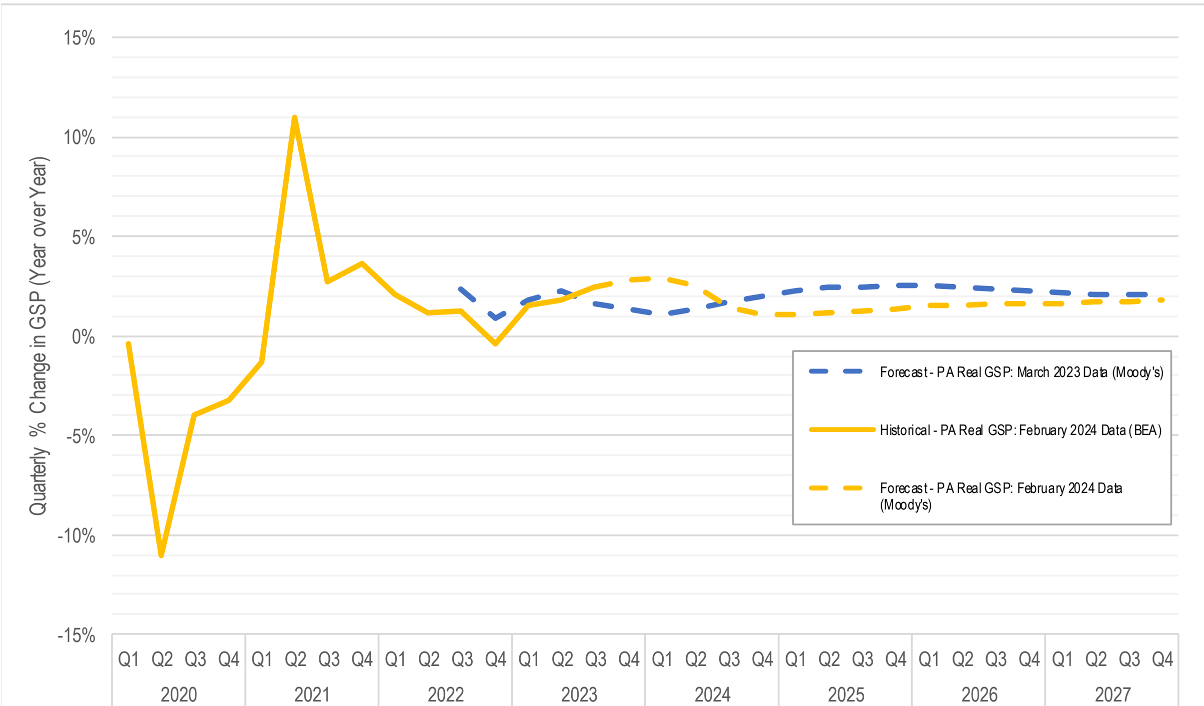
Figure 6
Comparison of March 2023 to February 2024 Quarterly Growth Estimates of U.S. Gross Domestic Product



Sources: Historical estimates are from the BEA, and the forecasts are from Moody's Analytics (March 2023 and February 2024 Releases)

Figure 7 shows GSP trend and forecast data for Pennsylvania. However, because GSP data lags GDP data, GSP is actual through only the third quarter of 2023. Similarly, at the time of the 2023 IG Study, GSP was only actual through 2022 Q3, and even that historical datapoint has been revised downward in the latest dataset, and actual GSP growth continued to be lower than forecast from 2022 Q4 through 2023 Q2. However, like GDP, actual GSP growth in 2023 Q3 was much stronger than forecast, growing 2.5 percent year-over-year as compared to the 1.5 percent growth that was predicted. GSP growth from 2023 Q4 to 2024 Q2 is now projected to be between 2.6 and 2.9 percent each quarter, as opposed to the 1.0 to 1.4 percent growth that was predicted at the time of the 2023 IG Study. Similar to GDP, year-over-year growth from 2024 Q4 through 2027 is projected to be slower than previously forecast, largely due to unexpectedly strong growth in 2023 and 2024.

Figure 7
Comparison of March 2023 and February 2024 Quarterly Growth Estimates of Pennsylvania Gross State Product



Sources: Historical estimates are from the BEA, and the forecasts are from Moody's Analytics (March 2023 and February 2024 Releases)

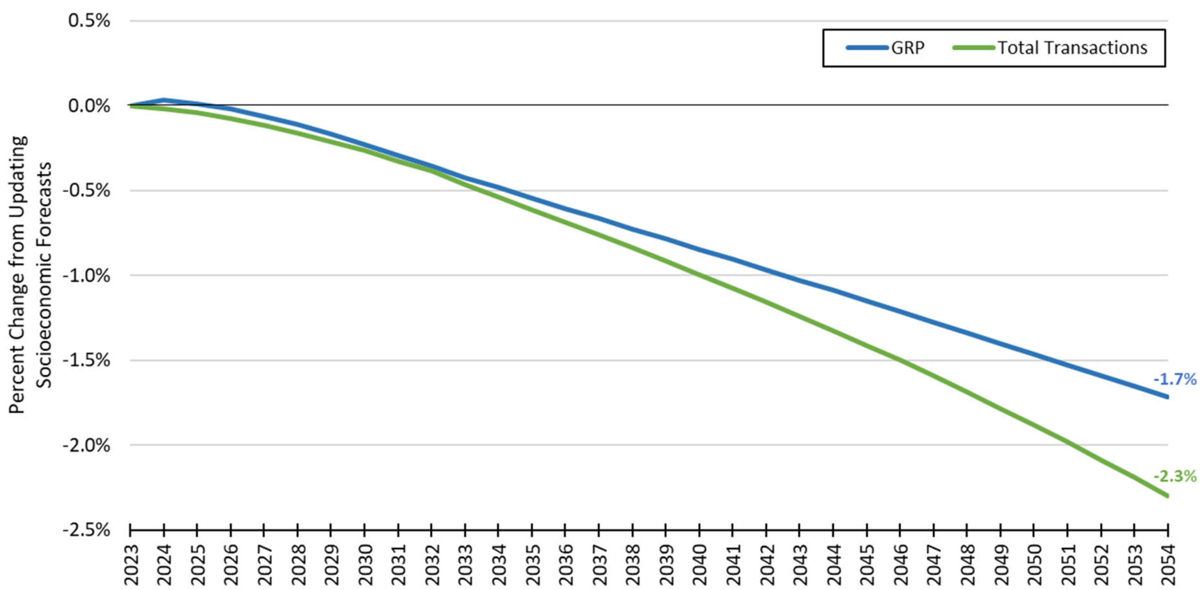
Econometric Forecasting Update

In the 2023 IG Study, historical and forecast socioeconomic data were collected and evaluated to understand state and regional trends. Econometric analysis was performed to estimate long-term baseline travel demand on the Pennsylvania Turnpike system. Those growth rates were utilized to estimate long-term transactions growth (2025 onwards). A Bring Down Letter typically utilizes the same demand growth projections from the previous underlying investment grade study, which in this case was the 2023 IG Study. To ensure that these demand growth projections are still valid and reasonable given the long-term nature of the forecast, CDM Smith conducted a review of the latest gross regional product (GRP) projections made by Woods & Poole Economics, Inc. (W&P) compared to the projections that informed the 2023 IG Study. As discussed in the previous section, CDM Smith also reviewed Moody's February 2024 GSP forecast for Pennsylvania against the projection available at the time of the 2023 IG Study.

Both W&P and Moody's forecasts estimate lower GRP and GSP growth from 2023 to 2054 (the outer year of the forecast) as compared to the forecasts utilized in the 2023 IG study. The downward revisions to GRP and GSP growth are generally smaller in the near-term but become larger due to cumulative impacts by 2054. GRP grows 1.7 percent less than prior projections by the outer year 2054.

GRP forecasts are an input to CDM Smith's econometric model developed in the 2023 IG Study. The econometric model, which remains unchanged from the 2023 IG Study, establishes the relationship between GRP and transactions. CDM Smith used the latest GRP forecasts to re-estimate growth in future transactions. As a result of lower long-term growth in GRP, the transactions forecast was lowered by 2.4 percent for PCs, 2.0 percent for CVs, and 2.3 percent for total vehicles in the forecast's outer year of 2054. The change in the GRP forecast and resultant impact on total transactions for the forecast period is shown in **Figure 8**.

Figure 8
Change in GRP forecast and Impact on Transactions



Summary of Trends in Fuel Prices

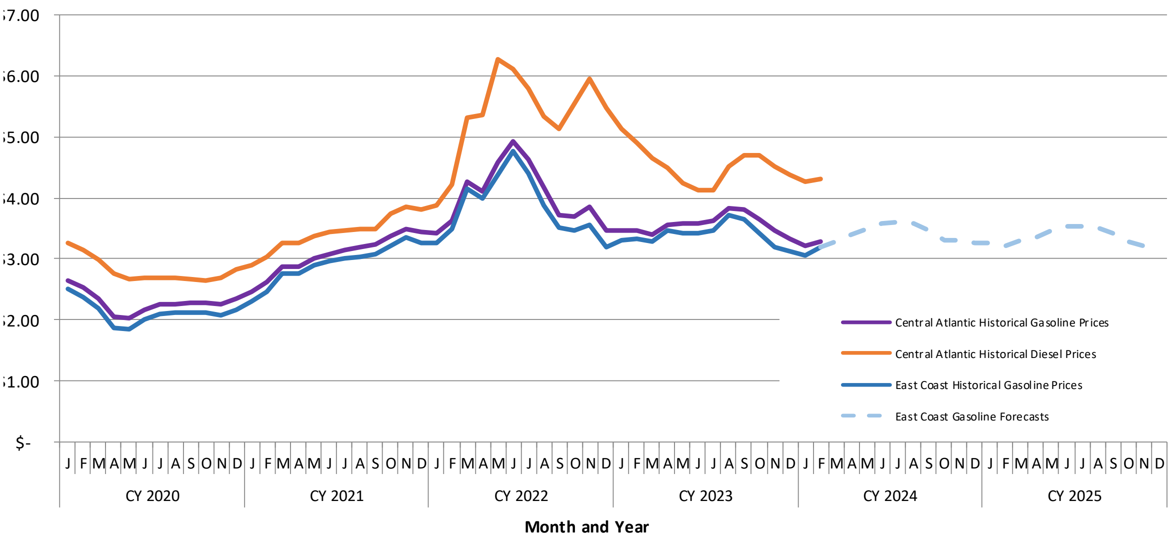
Figure 9 portrays actual gasoline and diesel prices for the Central Atlantic region from January 2020 through February 2024. Actual gasoline prices for the East Coast are also shown. They closely mirror those for the Central Atlantic gasoline prices and are shown here because the Energy Information Administration (EIA) only provides monthly forecasts for this larger region. Figure 9 shows the monthly gasoline price forecast through the end of 2025.

As shown, Central Atlantic gasoline and diesel prices have followed generally similar trends throughout this period and have moved in tandem. In March 2020, fuel prices dropped sharply due to the decrease in demand from the COVID-19 pandemic, bottoming out in May before steadily increasing nearly every month through November 2021. In February 2022, geopolitical tensions contributed to a sharp rise in fuel prices, and prices soared to a peak of $4.92 for gasoline in June and $6.26 for diesel in May. In nominal dollars, those fuel prices were the highest recorded in U.S. history. Prices have generally decreased since then, with per-gallon gasoline prices falling as low as $3.41 in March 2023 before rising through spring and summer, peaking at $3.84 in August, and falling since. Like gasoline prices, diesel prices fell notably through the spring of 2023 before rising through the summer, reaching $4.70 per gallon in September, and declining since. In January 2024, per-gallon prices were $3.21 for gasoline and $4.25 for diesel.

As noted above, the EIA only forecasts future gasoline prices for the East Coast, which is a region that is larger than, and wholly encompasses, the Central Atlantic region. Historically, East Coast region prices move in tandem with Central Atlantic prices but are approximately 10 to 20 cents lower. As represented by the dashed orange line in Figure 1, the EIA forecasts that the per-gallon price of gasoline on the East Coast will fluctuate between $3.10 and $3.60 for 2024 and 2025. In both years, prices are expected to gradually increase throughout the spring and summer and then decline in the fall. Based on historical trends, Central Atlantic prices can be expected to follow the same pattern, but at slightly higher prices.

The February 2024 East Coast per-gallon gasoline prices are about 20 cents higher than forecast by EIA in May 2023. Over the remainder of 2024, the current forecast is up to 50 cents higher each month than the previous forecast. (A 2025 forecast was not available at the time of the 2023 IG Study.) Although these gasoline prices are higher than those assumed in the 2023 IG Study, they are in a similar range and therefore there are no adjustments to the fuel price impacts used in the previous forecast.

Figure 9
Historical and Forecast Regional Fuel Prices ($ per Gallon)



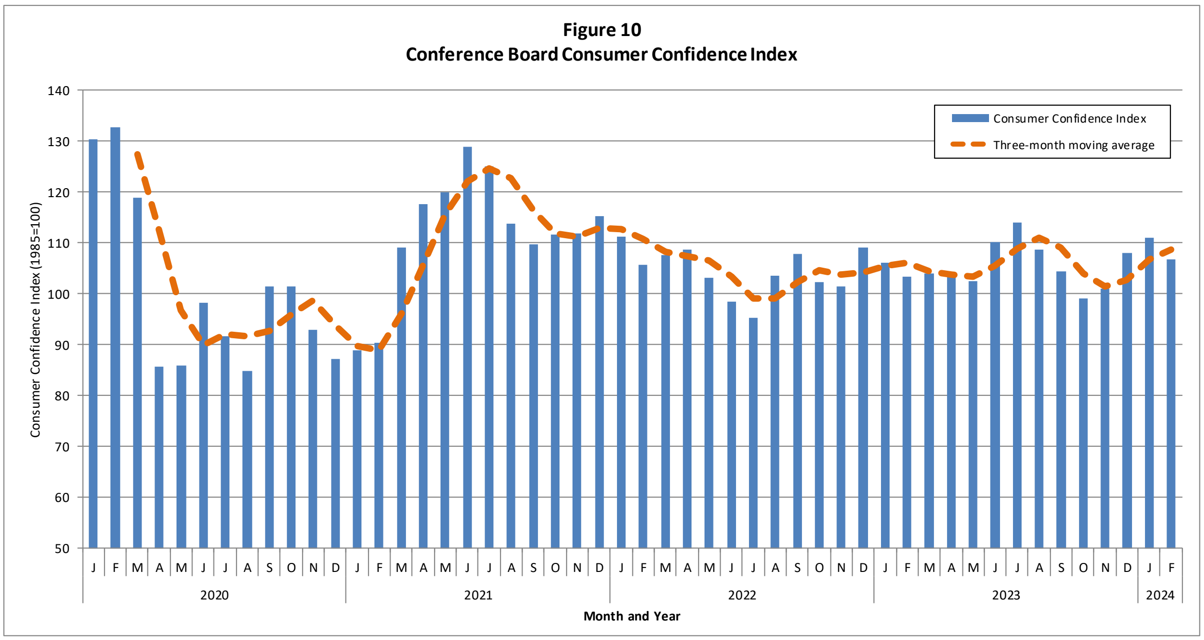
Source: U.S. Energy Information Administration, release dates 3/11/2024 (historical) and 3/12/2024 (forecast).
Note: Retail Prices in USD for Regular All Formulations Retail Gasoline and Number 2 Diesel.
Central Atlantic states include Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.
East Coast states include Central Atlantic and New England states, Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia.

Consumer Confidence

Consumer confidence is an important measure that highlights consumers' confidence in making purchases, willingness to travel, etc. Higher consumer confidence spurs demand for various goods and services, inferring that higher demand results in higher traffic on the roadways. Consumer confidence scores are indexed to the year 1985, for which consumer confidence equaled 100. **Figure 10** shows the Conference Board Consumer Confidence Index for the period between January 2020 and February 2024. Individual blue bars show index values for each month while the dotted line shows the three-month moving average.

Consumer confidence was strong at the beginning of 2020 prior to the pandemic but fell sharply in the spring, concurrent with the onset of the pandemic. For the remainder of 2020 and throughout 2021 consumer confidence fluctuated significantly, falling as low as 84.8 in August 2020 and reaching as high as 128.9 in June 2021, generally mirroring the national narrative regarding efforts to contain the COVID-19 pandemic.

Over the 26 months between January 2022 and February 2024, consumer confidence has stabilized, with an average reading of 105.2 during this period, a low of 95.3 in July 2022, and a high of 114.0 in July 2023. In February 2024, the last month for which data is available, the preliminary consumer confidence reading stood at 106.7. These data points generally align with the other socioeconomic data reviewed as part of this forecast in that there was a strong recovery from the pandemic in 2022 with steady and stable growth in 2023 and no expectations of large shocks in 2024.



Source: The Conference Board, release date February 27, 2024

Actual Versus Estimated Traffic and Toll Revenue

Table 10 provides a comparison of actual traffic and toll revenue versus estimated traffic and toll revenue from CDM Smith's 2023 IG Study. The analysis period in this table is from April 2023 through January 2024. This 10-month period corresponds to the period for which actual data currently exist but was estimated at the time of the 2023 IG Study.

For the 10-month period shown in Table 10, total system actual PC transactions and revenue exceeded estimates by 1.0 percent and 1.3 percent, respectively. CV transactions and revenue exceeded estimates by 0.5 percent and 0.9 percent, respectively. For all vehicles, actual transactions were 0.9 percent above estimates, while toll revenue overperformed estimates by 1.1 percent.

Table 10 also includes a comparison of actual traffic and toll revenue versus estimated traffic and toll revenue from CDM Smith's 2023 IG Study for each individual Turnpike toll facility. Total transactions for the Ticket System were 1.0 percent higher than the forecast traffic, while actual total revenue was 1.2 percent higher than estimated. For the combined barrier toll facilities, total actual toll transactions exceeded CDM Smith estimates by 0.7 percent and actual toll revenue exceeded estimates by 0.6 percent.

Table 10
Comparison of Estimated and Actual Traffic Volumes and Gross Toll Revenue
From April 2023 Through January 2024 (1)
Pennsylvania Turnpike System

	Total Traffic (in Thousands)			Total Gross Toll Revenue (in Thousands)		
Facility	Estimated	Actual	Percent Difference between Actual and Estimated	Estimated	Actual	Percent Difference between Actual and Estimated
			Passenger Cars			
Ticket System	102,727	103,845	1.1	$621,392	$630,339	1.4
Gateway	2,712	2,754	1.6	22,568	22,911	1.5
Delaware River Bridge	8,558	8,490	(0.8)	59,983	59,779	(0.3)
Turnpike 43	10,510	10,667	1.5	24,534	24,825	1.2
Turnpike 66	5,413	5,399	(0.3)	13,553	13,642	0.7
Northeast Extension (Barrier)	3,520	3,463	(1.6)	5,412	5,261	(2.8)
Turnpike I-376	5,567	5,666	1.8	12,346	12,540	1.6
Turnpike I-576	6,220	6,433	3.4	10,258	10,457	1.9
Barrier Subtotal	42,499	42,872	0.9	$148,654	$149,415	0.5
Total System	145,226	146,716	1.0	$770,046	$779,754	1.3
			Commercial Vehicles			
Ticket System	21,344	21,512	0.8	$581,828	$587,002	0.9
Gateway	991	980	(1.0)	25,314	25,447	0.5
Delaware River Bridge	1,552	1,545	(0.4)	35,735	35,937	0.6
Turnpike 43	972	946	(2.7)	5,934	5,840	(1.6)
Turnpike 66	1,085	1,061	(2.3)	6,510	6,403	(1.6)
Northeast Extension (Barrier)	1,128	1,168	3.6	8,919	9,354	4.9
Turnpike I-376	1,357	1,354	(0.2)	5,542	5,512	(0.5)
Turnpike I-576	1,543	1,541	(0.1)	6,709	6,800	1.4
Barrier Subtotal	8,627	8,595	(0.4)	$94,664	$95,295	0.7
Total System	29,972	30,107	0.5	$676,492	$682,296	0.9
			Total Vehicles			
Ticket System	124,072	125,356	1.0	$1,203,220	$1,217,340	1.2
Gateway	3,702	3,735	0.9	47,883	48,358	1.0
Delaware River Bridge	10,109	10,035	(0.7)	95,718	95,716	(0.0)
Turnpike 43	11,481	11,613	1.1	30,468	30,665	0.6
Turnpike 66	6,498	6,460	(0.6)	20,063	20,045	(0.1)
Northeast Extension (Barrier)	4,648	4,631	(0.4)	14,332	14,615	2.0
Turnpike I-376	6,924	7,019	1.4	17,888	18,053	0.9
Turnpike I-576	7,763	7,974	2.7	16,967	17,258	1.7
Barrier Subtotal	51,126	51,467	0.7	$243,318	$244,710	0.6
Total System	175,198	176,823	0.9	$1,446,538	$1,462,050	1.1

(1) These 10 months correspond to the period for which actual data exists, but was estimated at the time of CDM Smith's 2023 IG Study.

Estimated Traffic and Gross Toll Revenue

Updated traffic and gross toll revenue estimates were developed through FY 2053-54 incorporating the following changes into the forecast. All these changes were described in previous sections.

- Actual traffic and revenue experience through January 2024 (Tables 3-5)
- Revised estimates of E-ZPass + v-toll penetration rates (Table 9)
- Elimination of continued recovery in PC traffic from COVID-19 impacts
- Modified normalization of CV traffic from its pandemic-related height in 2022
- Removal of the probability of a recession having a negative impact on transactions through 2025
- Long-term growth of socioeconomic indicators

Other assumptions remain unchanged from the 2023 IG Study:

- None of the scheduled capital improvement projects will have impacts on transactions or toll revenue within in the next five years (Table 6)
- Future toll rate increase assumptions (Table 8)
- Forecast fuel prices (Figure 9)
- Structure of the CV discount program

Table 11 shows the estimated total traffic and toll revenue for the Ticket System only. Data for FY 2022-23 reflects a full year of actual experience. Total toll transactions and forecasted to increase from 146.8 million to 168.1 million over the period shown in Table 11, an average annual increase of 0.4 percent. Gross toll revenue increases from $1.4 billion to $4.3 billion by FY 2053-54. This amounts to an average annual increase of 3.7 percent, reflecting the impact of normal growth plus annual toll rate increases.

The same information is shown for the Barrier System in **Table 12**. Total annual toll transactions are estimated to grow from 59.5 million to 65.5 million over the period shown, an average annual growth rate of 0.3 percent. Barrier System total revenue is estimated to increase from $274.4 million to $857.7 million over the same period, an annual rate of 3.7 percent, reflecting normal growth plus annual toll rate increases.

Table 11

Ticket System[1]: Estimated Annual Transactions and Gross Toll Revenue

Pennsylvania Turnpike Commission

Traffic and Toll Revenue in Thousands

		Annual Traffic (2)			Annual Gross Toll Revenue (2)		
Fiscal Year	(3)	Passenger Cars	Commercial Vehicles	Total Vehicles	Passenger Cars	Commercial Vehicles	Total Vehicles
2022-23	(4)	121,046	25,733	146,779	$703,728	$683,556	$1,387,284
2023-24	(5)	122,869	25,341	148,210	746,011	702,918	1,448,929
2024-25	(6)	123,898	25,096	148,994	777,902	724,501	1,502,403
2025-26		124,696	25,183	149,879	812,942	756,039	1,568,981
2026-27	(7)	125,343	25,432	150,775	845,645	789,782	1,635,427
2027-28		126,454	25,764	152,218	881,214	825,601	1,706,815
2028-29		127,023	25,972	152,995	911,881	857,038	1,768,919
2029-30		127,860	26,237	154,097	945,424	891,715	1,837,139
2030-31		128,654	26,494	155,148	979,820	927,509	1,907,329
2031-32		129,721	26,817	156,538	1,017,469	967,154	1,984,623
2032-33		130,148	27,015	157,163	1,051,584	1,003,387	2,054,971
2033-34		130,909	27,291	158,200	1,089,451	1,044,013	2,133,464
2034-35		131,624	27,571	159,195	1,128,269	1,086,233	2,214,502
2035-36		132,621	27,917	160,538	1,170,751	1,133,078	2,303,829
2036-37		132,917	28,126	161,043	1,208,751	1,175,696	2,384,447
2037-38		133,489	28,408	161,897	1,250,388	1,223,066	2,473,454
2038-39		134,016	28,688	162,704	1,292,954	1,272,276	2,565,230
2039-40		134,822	29,046	163,868	1,339,555	1,326,881	2,666,436
2040-41		134,909	29,258	164,167	1,380,886	1,376,435	2,757,321
2041-42		135,282	29,536	164,818	1,426,218	1,431,297	2,857,515
2042-43		135,591	29,806	165,397	1,472,409	1,487,706	2,960,115
2043-44		136,182	30,140	166,322	1,522,951	1,549,606	3,072,557
2044-45		136,054	30,319	166,373	1,567,372	1,605,387	3,172,759
2045-46		136,206	30,572	166,778	1,616,227	1,667,290	3,283,517
2046-47		136,311	30,823	167,134	1,665,983	1,731,330	3,397,313
2047-48		136,699	31,143	167,842	1,720,601	1,802,302	3,522,903
2048-49		136,365	31,309	167,674	1,768,156	1,866,131	3,634,287
2049-50		136,316	31,556	167,872	1,820,541	1,937,060	3,757,601
2050-51		136,212	31,800	168,012	1,873,761	2,010,449	3,884,210
2051-52		136,394	32,119	168,513	1,932,242	2,091,861	4,024,103
2052-53		135,847	32,278	168,125	1,982,578	2,164,968	4,147,546
2053-54		135,584	32,512	168,096	2,038,091	2,246,284	4,284,375

(1) Ticket System includes the Mainline (I-76/I-276) and Northeast Extension (I-476).
(2) Annual toll rate increases are implemented on or about January 1st of each year.
(3) PTC fiscal year ends May 31st.
(4) Reflects actual traffic and revenue experience.
(5) Reflects actual experience through January 2024.
(6) Does not reflect ORT Phase 1 (Eastern and Northeast Ticket). ORT conversion is assumed to be revenue neutral.
(7) Does not reflect ORT Phase 2 (Western Ticket). ORT conversion is assumed to be revenue neutral.

Table 12

Barrier Systems[1]: Estimated Annual Transactions and Gross Toll Revenue

Pennsylvania Turnpike Commission

Traffic and Toll Revenue in Thousands

Fiscal Year	(3)	Annual Traffic (2) Passenger Cars	Annual Traffic (2) Commercial Vehicles	Annual Traffic (2) Total Vehicles	Annual Gross Toll Revenue (2) Passenger Cars	Annual Gross Toll Revenue (2) Commercial Vehicles	Annual Gross Toll Revenue (2) Total Vehicles
2022-23	(4,5)	49,309	10,165	59,474	$164,624	$109,800	$274,423
2023-24	(6)	50,503	10,075	60,578	178,495	113,991	292,486
2024-25		50,885	10,081	60,966	188,756	119,030	307,786
2025-26		51,106	10,177	61,283	197,994	125,113	323,107
2026-27		51,216	10,291	61,507	206,001	130,949	336,950
2027-28		51,481	10,433	61,914	214,253	136,827	351,080
2028-29		51,512	10,527	62,039	221,254	141,899	363,153
2029-30		51,649	10,640	62,289	228,938	147,573	376,511
2030-31		51,766	10,758	62,524	236,808	153,425	390,233
2031-32		51,998	10,901	62,899	245,472	159,904	405,376
2032-33		52,009	11,002	63,011	253,333	165,876	419,209
2033-34		52,189	11,141	63,330	262,240	172,658	434,898
2034-35		52,351	11,283	63,634	271,374	179,707	451,081
2035-36		52,631	11,432	64,063	281,426	187,392	468,818
2036-37		52,646	11,498	64,144	290,382	194,188	484,570
2037-38		52,774	11,589	64,363	300,241	201,744	501,985
2038-39		52,884	11,683	64,567	310,342	209,597	519,939
2039-40		53,106	11,807	64,913	321,440	218,324	539,764
2040-41		53,055	11,874	64,929	331,252	226,238	557,490
2041-42		53,114	11,969	65,083	342,048	235,029	577,077
2042-43		53,147	12,060	65,207	353,050	244,094	597,144
2043-44		53,289	12,179	65,468	365,120	254,078	619,198
2044-45		53,161	12,242	65,403	375,692	263,097	638,789
2045-46		53,145	12,327	65,472	387,357	273,128	660,485
2046-47		53,107	12,422	65,529	399,261	283,539	682,800
2047-48		53,183	12,540	65,723	412,378	295,105	707,483
2048-49		52,987	12,599	65,586	423,778	305,566	729,344
2049-50		52,899	12,693	65,592	436,388	317,214	753,602
2050-51		52,804	12,784	65,588	449,230	329,310	778,540
2051-52		52,810	12,911	65,721	463,412	342,771	806,183
2052-53		52,551	12,977	65,528	475,627	354,943	830,570
2053-54		52,405	13,069	65,474	489,170	368,518	857,688

(1) Barrier System includes Mon/Fayette Expressway (PA 43), Amos K. Hutchinson Bypass (PA 66), Northeast barriers (Clarks and Keyser), Beaver Valley Expressway (I-376), Southern Beltway (PA 576), Delaware River Bridge (New Jersey border), and Gateway Toll Plaza (Ohio border).

(2) Annual toll rate increases are implemented on or about January 1st of each year.

(3) PTC fiscal year ends May 31st.

(4) Reflects actual traffic and revenue experience.

(5) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.

(6) Reflects actual experience through January 2024.

Table 13 presents estimated total combined Ticket and Barrier System transactions, gross toll revenue, and toll discounts and adjustments. The vast majority of discounts and adjustments result from commercial account toll adjustments due to PTC's volume discount program. This program provides a 3.0-percent discount to accounts that accrue $20,000 or more in monthly tolls. Discounts and adjustments shown in Table 13 assume no changes to the post-paid commercial volume discount program during the forecast period. Actual discounts and adjustments have been slowly increasing over time and amounted to 1.80 percent of CV gross toll revenue in FY 2022-23. The forecast assumes that the adjustment will continue to gradually increase to 2.04 percent of CV gross toll revenue in FY 2031-32 and then remain at that level for the remainder of the forecast period.

As shown in Table 13, total toll transactions are expected to increase from 206.3 million to 233.6 million over the period shown. This amounts to an average annual growth rate of 0.4 percent. Total net toll revenue is estimated to grow from approximately $1.6 billion in FY 2022-23 to $5.1 billion by FY 2053-54. This reflects an average annual growth rate in gross toll revenue of 3.7 percent which reflects the impact of normal growth plus annual toll rate increases.

Table 14 compares the current traffic and net toll revenue forecast with the forecast developed in the 2023 IG Study. As shown, actual total transactions for FY 2022-23 were 0.2 percent higher than forecast in the 2023 IG Study. Over the next five fiscal years, through FY 2027-28, the current forecast estimates that transactions will be between 0.3 and 1.5 percent higher each year than previously estimated. This is mostly due to the recent overperformance of the system as well as removal of the assumed recessionary impact in the 2023 IG study. However, all but one year of the remainder of the forecast period now has fewer transactions than in the 2023 IG Study. The downward revision is less than 0.1 percent lower in FY 2028-29 and then generally grows more negative in most years, eventually reaching a 2.1-percent difference in the FY 2052-53, which was the last year included in the 2023 IG Study forecast. Previously detailed updates to the econometric forecast account for most of the long-term difference in the forecast.

Differences between the 2023 IG Study and the current forecast are somewhat greater for annual net toll revenue. Although annual net toll revenue in FY 2022-23 underperformed the 2023 IG Study forecast by 0.1 percent, the current forecast is 1.6 percent higher in FY 2023-24 and 0.3 percent higher in FY 2024-25. Beginning in FY 2025-26, revenue is forecast to be 0.7 percent lower than estimated in the 2023 IG Study, with the difference generally growing larger each year through FY 2052-53, when it reaches 3.1 percent.

Table 13
Total System: Estimated Annual Transactions and Gross Toll Revenue
Pennsylvania Turnpike Commission

Traffic and Toll Revenue in Thousands

		Annual Traffic (1)			Annual Gross Toll Revenue (1)			Discounts	
Fiscal Year	(2)	Passenger Cars	Commercial Vehicles	Total Vehicles	Passenger Cars	Commercial Vehicles	Total Vehicles	and Adjustments	Net Toll Revenue
2022-23	(3,4)	170,355	35,898	206,253	$868,352	$793,355	$1,661,707	($14,258)	$1,647,449
2023-24	(5)	173,372	35,416	208,788	924,506	816,909	1,741,415	(15,117)	1,726,298
2024-25	(6)	174,783	35,177	209,960	966,658	843,531	1,810,189	(15,833)	1,794,356
2025-26		175,802	35,360	211,162	1,010,936	881,152	1,892,088	(16,894)	1,875,194
2026-27	(7)	176,559	35,723	212,282	1,051,646	920,731	1,972,377	(17,881)	1,954,496
2027-28		177,935	36,197	214,132	1,095,467	962,428	2,057,895	(18,933)	2,038,962
2028-29		178,535	36,499	215,034	1,133,135	998,937	2,132,072	(19,900)	2,112,172
2029-30		179,509	36,877	216,386	1,174,362	1,039,288	2,213,650	(20,863)	2,192,787
2030-31		180,420	37,252	217,672	1,216,628	1,080,934	2,297,562	(21,858)	2,275,704
2031-32		181,719	37,718	219,437	1,262,941	1,127,058	2,389,999	(22,962)	2,367,037
2032-33		182,157	38,017	220,174	1,304,917	1,169,263	2,474,180	(23,820)	2,450,360
2033-34		183,098	38,432	221,530	1,351,691	1,216,671	2,568,362	(24,786)	2,543,576
2034-35		183,975	38,854	222,829	1,399,643	1,265,940	2,665,583	(25,790)	2,639,793
2035-36		185,252	39,349	224,601	1,452,177	1,320,470	2,772,647	(26,902)	2,745,745
2036-37		185,563	39,624	225,187	1,499,133	1,369,884	2,869,017	(27,907)	2,841,110
2037-38		186,263	39,997	226,260	1,550,629	1,424,810	2,975,439	(29,026)	2,946,413
2038-39		186,900	40,371	227,271	1,603,296	1,481,873	3,085,169	(30,189)	3,054,980
2039-40		187,928	40,853	228,781	1,660,995	1,545,205	3,206,200	(31,478)	3,174,722
2040-41		187,964	41,132	229,096	1,712,138	1,602,673	3,314,811	(32,650)	3,282,161
2041-42		188,396	41,505	229,901	1,768,266	1,666,326	3,434,592	(33,946)	3,400,646
2042-43		188,738	41,866	230,604	1,825,459	1,731,800	3,557,259	(35,279)	3,521,980
2043-44		189,471	42,319	231,790	1,888,071	1,803,684	3,691,755	(36,744)	3,655,011
2044-45		189,215	42,561	231,776	1,943,064	1,868,484	3,811,548	(38,063)	3,773,485
2045-46		189,351	42,899	232,250	2,003,584	1,940,418	3,944,002	(39,531)	3,904,471
2046-47		189,418	43,245	232,663	2,065,244	2,014,869	4,080,113	(41,047)	4,039,066
2047-48		189,882	43,683	233,565	2,132,979	2,097,407	4,230,386	(42,728)	4,187,658
2048-49		189,352	43,908	233,260	2,191,934	2,171,697	4,363,631	(44,243)	4,319,388
2049-50		189,215	44,249	233,464	2,256,929	2,254,274	4,511,203	(45,925)	4,465,278
2050-51		189,016	44,584	233,600	2,322,991	2,339,759	4,662,750	(47,666)	4,615,084
2051-52		189,204	45,030	234,234	2,395,654	2,434,632	4,830,286	(49,599)	4,780,687
2052-53		188,398	45,255	233,653	2,458,205	2,519,911	4,978,116	(51,335)	4,926,781
2053-54		187,989	45,581	233,570	2,527,261	2,614,802	5,142,063	(53,269)	5,088,794

(1) Annual toll rate increases are implemented on or about January 1st of each year.
(2) PTC fiscal year ends May 31st.
(3) Reflects actual traffic and revenue experience.
(4) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.
(5) Reflects actual experience through January 2024.
(6) Does not reflect ORT Phase 1 (Eastern and Northeast Ticket). ORT conversion is assumed to be revenue neutral.
(7) Does not reflect ORT Phase 2 (Western Ticket). ORT conversion is assumed to be revenue neutral.

Table 14
Comparison of New Traffic and Revenue
Estimates with those from the 2023 IG Study
Total System
Pennsylvania Turnpike

Traffic and Toll Revenue in Thousands

	Total Annual Transactions			Annual Net Toll Revenue		
Fiscal Year (1)	Current Estimates (2)	2023 IG Study (3)	Percent Difference	Current Estimates (2)	2023 IG Study (3)	Percent Difference
2022-23	206,253	205,865	0.2	$1,647,449	$1,649,638	(0.1)
2023-24	208,788	205,613	1.5	1,726,298	1,699,910	1.6
2024-25	209,960	207,557	1.2	1,794,356	1,788,716	0.3
2025-26	211,162	210,112	0.5	1,875,194	1,887,984	(0.7)
2026-27	212,282	211,903	0.2	1,954,496	1,974,550	(1.0)
2027-28	214,132	213,490	0.3	2,038,962	2,057,046	(0.9)
2028-29	215,034	215,066	(0.0)	2,112,172	2,137,252	(1.2)
2029-30	216,386	216,547	(0.1)	2,192,787	2,220,069	(1.2)
2030-31	217,672	217,970	(0.1)	2,275,704	2,305,414	(1.3)
2031-32	219,437	219,349	0.0	2,367,037	2,393,564	(1.1)
2032-33	220,174	220,781	(0.3)	2,450,360	2,485,683	(1.4)
2033-34	221,530	222,319	(0.4)	2,543,576	2,582,246	(1.5)
2034-35	222,829	223,801	(0.4)	2,639,793	2,681,993	(1.6)
2035-36	224,601	225,211	(0.3)	2,745,745	2,784,893	(1.4)
2036-37	225,187	226,533	(0.6)	2,841,110	2,890,948	(1.7)
2037-38	226,260	227,797	(0.7)	2,946,413	3,000,426	(1.8)
2038-39	227,271	229,000	(0.8)	3,054,980	3,113,426	(1.9)
2039-40	228,781	230,145	(0.6)	3,174,722	3,230,070	(1.7)
2040-41	229,096	231,227	(0.9)	3,282,161	3,350,351	(2.0)
2041-42	229,901	232,239	(1.0)	3,400,646	3,474,166	(2.1)
2042-43	230,604	233,163	(1.1)	3,521,980	3,601,126	(2.2)
2043-44	231,790	233,993	(0.9)	3,655,011	3,731,058	(2.0)
2044-45	231,776	234,759	(1.3)	3,773,485	3,864,792	(2.4)
2045-46	232,250	235,462	(1.4)	3,904,471	4,002,431	(2.4)
2046-47	232,663	236,099	(1.5)	4,039,066	4,144,066	(2.5)
2047-48	233,565	236,674	(1.3)	4,187,658	4,289,809	(2.4)
2048-49	233,260	237,183	(1.7)	4,319,388	4,439,762	(2.7)
2049-50	233,464	237,631	(1.8)	4,465,278	4,594,032	(2.8)
2050-51	233,600	238,016	(1.9)	4,615,084	4,752,725	(2.9)
2051-52	234,234	238,336	(1.7)	4,780,687	4,915,936	(2.8)
2052-53	233,653	238,594	(2.1)	4,926,781	5,083,760	(3.1)
2053-54	233,570			5,088,794		

(1) PTC fiscal year ends May 31.
(2) Reflects actual experience through May 2022.
(3) Reflects actual traffic and revenue experience through March 2021.

Table 15 summarizes the full net revenue forecast, including written off bad debt expenses. The bad debt expense accounts for uncollectable TBP tolls that are written off and subtract from net toll revenue. As transactions and revenue are estimated to grow each year, so too does bad debt expense. In FY 2022-23 bad debt expense was $114.0 million, representing 42.8 of TBP revenue. Analyses conducted by CDM Smith indicate that the bad debt expense proportion of TBP revenue will grow further, reaching 48.6% of TBP invoices that will not be paid by FY 2028-29 and stabilizing at that level for the remainder of the forecast period. As a result, bad debt expense is estimated to grow to $346.6 million in FY 2053-54. Total net toll revenue minus the video bad debt expense is estimated to grow from approximately $1.5 billion in FY 2022-23 to $4.7 billion by FY 2053-54.

Table 15
Total System: Estimated Annual Video Revenue Leakage
Pennsylvania Turnpike Commission

Traffic and Toll Revenue in Thousands

Fiscal Year	(2)	Net Toll Revenue (1)	Estimated Video Revenue Bad Debt Expense	Net Toll Revenue Minus Video Bad Debt Expense
2022-23	(3,4)	$1,647,449	($113,993)	$1,533,455
2023-24	(5)	1,726,298	(127,715)	1,598,582
2024-25	(6)	1,794,356	(128,200)	1,666,156
2025-26		1,875,194	(129,370)	1,745,824
2026-27	(7)	1,954,496	(134,197)	1,820,299
2027-28		2,038,962	(141,256)	1,897,706
2028-29		2,112,172	(147,812)	1,964,360
2029-30		2,192,787	(153,619)	2,039,168
2030-31		2,275,704	(159,311)	2,116,393
2031-32		2,367,037	(165,551)	2,201,486
2032-33		2,450,360	(171,263)	2,279,097
2033-34		2,543,576	(177,625)	2,365,951
2034-35		2,639,793	(184,178)	2,455,615
2035-36		2,745,745	(191,358)	2,554,387
2036-37		2,841,110	(197,849)	2,643,261
2037-38		2,946,413	(204,975)	2,741,438
2038-39		3,054,980	(212,302)	2,842,678
2039-40		3,174,722	(220,338)	2,954,384
2040-41		3,282,161	(227,569)	3,054,592
2041-42		3,400,646	(235,504)	3,165,142
2042-43		3,521,980	(243,612)	3,278,368
2043-44		3,655,011	(252,468)	3,402,543
2044-45		3,773,485	(260,378)	3,513,107
2045-46		3,904,471	(269,075)	3,635,396
2046-47		4,039,066	(277,988)	3,761,078
2047-48		4,187,658	(287,774)	3,899,884
2048-49		4,319,388	(296,465)	4,022,923
2049-50		4,465,278	(306,038)	4,159,240
2050-51		4,615,084	(315,839)	4,299,245
2051-52		4,780,687	(326,616)	4,454,071
2052-53		4,926,781	(336,122)	4,590,659
2053-54		5,088,794	(346,610)	4,742,184

(1) Annual toll rate increases are implemented on or about January 1st of each year.
(2) PTC fiscal year ends May 31st.
(3) Reflects actual traffic and revenue experience.
(4) Reflects opening of all ramp movements between the Southern Beltway and I-79 in June 2022.
(5) Reflects actual experience through January 2024.
(6) Does not reflect ORT Phase 1 (Eastern and Northeast Ticket). ORT conversion is assumed to be revenue neutral.
(7) Does not reflect ORT Phase 2 (Western Ticket). ORT conversion is assumed to be revenue neutral.

Fiduciary 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 the Pennsylvania Turnpike Commission (PTC). 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 PTC. 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 timing of toll rate adjustments, 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 PTC and designated parties approved by PTC 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 PTC and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to PTC with respect to the information and material contained in this report. CDM Smith is not recommending and has not recommended any action to PTC. PTC 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.

*   *   *

Sincerely,

Scott A. Allaire

Scott Allaire
Vice President
CDM Smith Inc.

Yogesh Patel, AICP, PMP
Associate
CDM Smith Inc.

APPENDIX G

FORM OF CONTINUING DISCLOSURE AGREEMENT

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CONTINUING DISCLOSURE AGREEMENT

PENNSYLVANIA TURNPIKE COMMISSION
TURNPIKE REVENUE REFUNDING BONDS, FIRST SERIES OF 2024

This Continuing Disclosure Agreement ("***Disclosure Agreement***") is executed and delivered this 4th day of September, 2024, by the Pennsylvania Turnpike Commission (the "***Commission***") in connection with the issuance and sale by the Commission of $280,495,000 aggregate principal amount of its Turnpike Revenue Refunding Bonds, First Series of 2024 (the "***First Series Bonds***").

In consideration of the mutual covenants, promises and agreements contained herein and intending to be legally bound hereby, the Commission agrees as follows:

SECTION 1. <u>DEFINITIONS</u>

In this Disclosure Agreement and any agreement supplemental hereto (except as otherwise expressly provided or unless the context clearly otherwise requires), terms defined in the recitals hereto shall have the meanings set forth therein, and the following terms shall have the meanings specified below:

"***Annual Filing Date***" means the November 30th immediately following the preceding Fiscal Year ended May 31st, commencing with the Fiscal Year ending May 31, 2024, and each anniversary thereof. If November 30th falls on a day that is not a Business Day, the Annual Filing Date shall be the first Business Day thereafter. The Commission may adjust the Annual Filing Date upon change of its Fiscal Year by providing written notice of such change and the new Annual Filing Date to the Dissemination Agent and the Repository, provided that the period of time between the end of the new Fiscal Year and the new Annual Filing Date does not exceed the period of time between the end of the existing Fiscal Year and the current Annual Filing Date.

"***Business Day***" means a day other than: (a) a Saturday or a Sunday, (b) a day on which banks are required or authorized to be closed, (c) a day on which the Commission is required or authorized to be closed, or (d) a day on which the New York Stock Exchange is closed.

"***Dissemination Agent***" means Digital Assurance Certification, L.L.C., acting in its capacity as the initial Dissemination Agent with respect to the continuing disclosure obligations set forth herein, or any successor Dissemination Agent designated in writing by the Commission.

"***EMMA***" means the Electronic Municipal Market Access system, a service of the MSRB, or any successor thereto.

"***MSRB***" means the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934, as amended.

"***Official Statement***" shall mean the Official Statement dated August 14, 2024 with respect to the public offering of the First Series Bonds.

"***Registered Owner" or "Owners***" shall mean the person or persons in whose name a 2024D Bond is registered on the books of the Commission kept for that purpose. For so long as the First Series Bonds are registered in the name of the Securities Depository or its nominee, "***Registered Owner***" shall mean and include the holder of a book-entry credit evidencing an interest in the First Series Bonds, including holders of book-entry credits who may file their names and addresses with the Commission for the purposes of receiving notices and giving direction under this Disclosure Agreement.

"***Repository***" means each entity authorized and approved by the SEC from time to time to act as a repository for purposes of complying with the Rule. As of the date hereof, the only Repository recognized by the SEC for such purpose is the MSRB, which currently accepts continuing disclosure filings through the EMMA website at http://emma.msrb.org.

"***Representative***" shall mean, Raymond James & Associates, Inc., as representative of itself and the other Underwriters of the First Series Bonds.

"***Rule***" shall mean Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934, as amended.

"***SEC***" means the United States Securities and Exchange Commission.

"***Securities Depository***" shall mean The Depository Trust Company, New York, New York, or its nominee, Cede & Co., or any successor thereto.

"***Underwriters***" shall mean the underwriters of the First Series Bonds, as set forth in the Official Statement.

SECTION 2. AUTHORIZATION AND PURPOSE OF DISCLOSURE AGREEMENT

This Disclosure Agreement is authorized to be executed and delivered by the Commission in order to enable the Underwriter to comply with the requirements of the Rule. This Disclosure Agreement relates solely to the First Series Bonds.

SECTION 3. ANNUAL FINANCIAL INFORMATION

The Commission agrees to provide or cause to be provided no later than the Annual Filing Date to the MSRB via EMMA, annual financial information (the "***Annual Financial Information***"), consisting of the following: (a) financial and operating data of the type set forth in the Official Statement in Tables I, II and III of APPENDIX A – "THE PENNSYLVANIA TURNPIKE COMMISSION – CERTAIN FINANCIAL INFORMATION"; (b) the Commission's audited financial statements for such fiscal year; and (c) a summary of any material legislative or regulatory developments affecting Act 44 and/or Act 89 (each as defined in the Official Statement), since the Commission's most recent Annual Financial Information filing.

The Commission's audited financial statements shall be prepared in accordance with generally accepted accounting principles consistently applied as in effect from time to time; provided, however, that the Commission reserves the right to change the basis upon which its audited financial statements are prepared at any time and from time to time. Should the Commission exercise its right to change the basis upon which its audited financial statements are prepared as provided in the immediately preceding sentence, it shall provide notice of any such accounting change to the MSRB via EMMA, which notice shall include a reference to the specific federal or state law or regulation requiring or permitting such accounting change and a description of such change. In the event that audited financial statements are not available by the Annual Filing Date, the Annual Financial Information will contain unaudited financial statements and the audited financial statements will be provided for filing when available.

Any or all of the items listed above may be included by specific reference to documents previously filed with the MSRB via EMMA, or the SEC, including, but not limited to, official statements of debt issues with respect to the Commission. If the document incorporated by reference is a final official statement, it must be available from the Repository. The Commission will clearly identify each such document so incorporated by reference.

SECTION 4. <u>EVENT DISCLOSURE</u>

The Commission agrees that it shall provide, in a timely manner, not to exceed ten business days after occurrence, to the MSRB via EMMA on such form and in such format as shall be required by the MSRB for such filings, notice of any of the following events with respect to the First Series Bonds within the meaning of the Rule (each a "***Reportable Event***");

(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 First Series Bonds, or other material events affecting the tax status of the First Series Bonds;

(7) Modifications to the rights of the holders of the First Series Bonds, if material;

(8) Bond calls, if material, and tender offers;

(9) Defeasance of all or any portion of the First Series Bonds;

(10) Release, substitution or sale of property securing repayment of the First Series Bonds, if material;

(11) Rating changes;

(12) Bankruptcy, insolvency, receivership or similar event of the Commission[1];

(13) The consummation of a merger, consolidation, or acquisition involving the Commission or the sale of all or substantially all of the assets of the Commission, 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 or the change of name of the trustee, if material;

(15) Incurrence of a financial obligation of the Commission, if material, or agreement to covenants, events of default, remedies, priority rights or other similar terms of a financial obligation of the Commission, any of which affects holders of the First Series Bonds, if material; and

(16) Default, event of acceleration, termination event, modification of terms or other similar events under the terms of a financial obligation of the Commission, any of which reflect financial difficulties.

The foregoing sixteen Reportable Events are quoted from the Rule. The SEC requires the listing of the Reportable Events set forth in clauses (1) through (16) above although some of such events may not be applicable to the First Series Bonds.

SECTION 5. <u>NOTICE OF FAILURE TO PROVIDE DISCLOSURE</u>

The Commission covenants to provide in a timely manner to the MSRB notice of a failure (of which the Commission has knowledge) to provide the required Annual Financial Information on or before the Annual Filing Date.

SECTION 6. <u>AMENDMENT; WAIVER</u>

The Commission may amend this Disclosure Agreement and waive any of the provisions hereof, but no such amendment or waiver shall be executed and effective unless (a) the amendment or waiver is made in connection with a change in legal requirements, change in law or change in the identity, nature or status of the Commission or the governmental operations conducted by the Commission, (b) this Disclosure Agreement, as modified by the amendment or waiver, would have complied with the requirements of the Rule at the time of original issuance of the First Series Bonds, taking into account any interpretations of the Rule provided by the SEC, and (c) the amendment or waiver does not materially impair the interests of the Registered Owners of the First

[1] This event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

Series Bonds. Evidence of compliance with the foregoing conditions shall be satisfied by delivery to the Commission of an opinion of counsel having recognized skill and experience in the issuance of municipal securities and federal securities law to the effect that the amendment or waiver satisfies the conditions set forth in the preceding sentence. Notice of any amendment or waiver shall be filed by the Commission with the MSRB (via EMMA) and shall be sent to the Registered Owners of the First Series Bonds. The Commission reserves the right to terminate its obligation to provide Annual Financial Information and notices of Reportable Events, as set forth above, if and when the Commission no longer remains an obligated person with respect to the First Series Bonds within the meaning of the Rule.

SECTION 7. OTHER INFORMATION

Nothing in this Disclosure Agreement shall preclude the Commission from disseminating any other information with respect to the Commission or the First Series Bonds, using the means of communication provided in this Disclosure Agreement or otherwise. Any election by the Commission to furnish any information not specifically required pursuant to this Disclosure Agreement, or by the means of communication provided for herein, shall not be deemed to be an additional contractual undertaking and the Commission shall have no obligation to furnish such information in any subsequent notice or by the same means of communication.

SECTION 8. BENEFIT; DEFAULT

The Commission acknowledges that its agreement to the disclosure undertaking set forth herein pursuant to the Rule is intended to be for the benefit of the Registered Owners from time to time of the First Series Bonds, and shall be enforceable by such Registered Owners; provided that the right to enforce the provisions of this undertaking shall be limited to a right to obtain specific enforcement of the Commission's obligations under this Disclosure Agreement and any failure by the Commission to comply with the provisions of this undertaking shall not be an Event of Default under the First Series Bonds or the Amended and Restated Trust Indenture dated as of March 1, 2001, as amended and supplemented through the date hereof, including being supplemented with respect to the First Series Bonds, by that certain Supplemental Trust Indenture No. 76 dated as of September 1, 2024, and as it may be further amended and supplemented from time to time, between the Commission and U.S. Bank Trust Company, National Association, as trustee. In the event the Commission fails to comply with any provision of this Disclosure Agreement, any Registered Owner of the First Series Bonds shall have the right, by mandamus, suit, action or proceeding at law or in equity, to compel the Commission to perform each and every term, provision and covenant contained in this Disclosure Agreement.

SECTION 9. FILING WITH EMMA; OTHER FILINGS

All filings required hereby shall be done electronically through EMMA in the form specified by the MSRB and accompanied by identifying information as prescribed by the MSRB or as otherwise specified by the MSRB.

In addition to filings through EMMA, the Commission may file any of the information necessary to be filed hereunder with such other electronic systems and entities as are approved by the SEC by interpretive letter or "no action" letter for receipt of such information in compliance with the requirements of paragraph (b)(5) of the Rule.

SECTION 10. TERM OF DISCLOSURE AGREEMENT

This Disclosure Agreement shall terminate (a) upon payment or provision for payment in full of the First Series Bonds, or (b) upon repeal or rescission of Section (b)(5) of the Rule, or (c) an opinion of counsel having nationally recognized skill and experience in the issuance of municipal securities and federal securities law to the effect that Section (b)(5) of the Rule is invalid or unenforceable.

SECTION 11. BENEFICIARIES

This Disclosure Agreement shall inure solely to the benefit of the Commission, the Underwriters and the Registered Owners from time to time of the First Series Bonds, and nothing herein contained shall confer any right upon any other person.

SECTION 12. NO PERSONAL RECOURSE

No personal recourse shall be had for any claim based on this Disclosure Agreement against any member, officer, or employee, past, present or future, of the Commission, or of any successor body.

SECTION 13. ENTIRE AGREEMENT

This Disclosure Agreement sets forth the entire understanding and agreement of the Commission with respect to the matters herein contemplated and no modification or amendment of or supplement to this Disclosure Agreement shall be valid or effective unless the same is in writing and signed by the parties hereto.

SECTION 14. COUNTERPARTS; ELECTRONIC SIGNATURES

This Disclosure Agreement may be executed in counterparts with the same force and effect as if all signatures appeared on a single instrument. The parties to this Disclosure Agreement acknowledge that any party may execute this Disclosure Agreement pursuant to digital or electronic means. Notwithstanding any time stamp accompanying a digital or electronic signature indicating an earlier time, this Disclosure Agreement shall be effective upon the delivery to the respective parties of a fully-executed version of this Disclosure Agreement.

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SECTION 15. <u>GOVERNING LAW</u>

The internal laws of the Commonwealth of Pennsylvania shall govern the construction and interpretation of this Disclosure Agreement; provided that, to the extent that the SEC, the MSRB or any other federal or state agency or regulatory body with jurisdiction in connection with the First Series Bonds shall have promulgated any rule or regulation governing the subject matter hereof (including without limitation the Rule), this Disclosure Agreement shall be interpreted and construed in a manner consistent therewith.

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SIGNATURE PAGE TO
CONTINUING DISCLOSURE AGREEMENT

PENNSYLVANIA TURNPIKE COMMISSION
TURNPIKE REVENUE REFUNDING BONDS, FIRST SERIES OF 2024

IN WITNESS WHEREOF, this Continuing Disclosure Agreement has been executed and delivered as of the day and year first written above.

PENNSYLVANIA TURNPIKE COMMISSION

By:______________________________________
Name: Richard C. Dreher
Title: Chief Financial Officer

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