



Pennsylvania Turnpike Commission Act 44 Financial Plan Fiscal Year 2023

June 1, 2022

Submitted to:

Secretary of the Budget,
Commonwealth of Pennsylvania

Submitted by:

Pennsylvania Turnpike Commission

Prepared by:

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I. Executive Summary



Executive Summary

An act of the General Assembly of Pennsylvania, approved on July 18, 2007, P.L. 169, No 44 (“Act 44”), as amended by the Act of November 25, 2013, P.L. 794, No. 89 (“Act 89”) established the framework for the Pennsylvania Turnpike Commission’s (“PTC” or the “Commission”) expanded mandate from one focused entirely on constructing, operating and improving the Pennsylvania Turnpike (the “Turnpike”) to one that also provides annual funding contributions for broader Commonwealth of Pennsylvania (“Commonwealth”) transportation needs. Since Act 44’s passage through the end of the fiscal year (“Fiscal” or “Fiscal Year”) ended May 31, 2022 (“Fiscal 2022”), the Commission has fully met its obligations by providing a total of \$7.9 billion in funding support for Commonwealth transportation needs through payments (the “Act 44/Act 89 Payments”) under a Lease and Funding Agreement (the “Funding Agreement”), dated October 14, 2007 as amended on April 4, 2014, July 31, 2018 and June 22, 2020, with the Pennsylvania Department of Transportation (“PennDOT”).

Act 89 substantially altered the Commission’s Act 44/Act 89 Payments to PennDOT. Under Act 89, beginning July 1, 2014 through Fiscal 2022, the Commission’s aggregate Act 44/Act 89 Payments remained at \$450 million annually but were no longer dedicated to highways and bridges. Instead, all \$450 million is allocated to support the Commonwealth’s transit capital, operating, multi-modal and other non-highway programs. The Commission has primarily financed its Act 44/Act 89 Payments with Subordinate Revenue Bond proceeds with at least \$30 million annually funded from current revenues. From Fiscal 2023 through 2057, the Commission’s Act 44/Act 89 Payment is reduced to \$50 million, which is required by statute to be funded by current revenues and dedicated to the Commonwealth’s transit capital and operating needs. Effective on July 1, 2014, when the Commission’s Act 44/Act 89 Payments were exclusively used to support transit needs, the Commission no longer issued Subordinate Special Revenue Bonds. However, the Commission can still issue refunding bonds on the Subordinate Special Revenue lien for debt service savings.

In Fiscal 2022, the Commission issued Subordinate Revenue Bonds to fund \$420 million of the Fiscal 2022 Act 44/Act 89 Payment, with the remaining \$30 million paid from cash resources of the Commission, fully satisfying the Commission’s obligations under Act 44 and Act 89 for Fiscal 2022. In addition, the Commission also financed a portion of its expanded capital plan through the issuance of Senior Revenue Bonds. No future Subordinate Revenue Bond issuance to fund Act 44/Act 89 Payments is anticipated.

The provisions of Act 44 and the Funding Agreement require PTC to provide a financial plan to the Secretary of the Budget 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 revenues 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 Funding Agreement and Act 44 during the ensuing and future fiscal years. It is important to note that 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.

This report (the “Fiscal 2023 Act 44 Financial Plan”), which was prepared by Public Resources Advisory Group, Inc. (“PRAG”) and Phoenix Capital Partners LLP (“Phoenix” and together the “Advisors”) for the Commission, is submitted in compliance with the financial plan requirements of Act 44 and the Funding Agreement.



Fiscal 2022 Performance and Activities. PTC's traffic and total revenue performance in Fiscal 2022 (based upon actual data through April 2022) demonstrated substantial improvement from the prior year, with both passenger and commercial traffic volume and total revenue substantially exceeding prior year levels. More importantly, commercial traffic volume and total revenue in Fiscal 2022 substantially exceeded pre-pandemic levels (prior to March 2020). Fiscal 2022 through April 2022 reflects that passenger car transactions increased 21.4% compared to results for the same period in Fiscal 2021, while commercial vehicle transactions increased by 9.5%. Total transactions through April 2022 of 182.3 million increased by 19.1% compared to the same period for Fiscal 2021. Total toll revenue through April 2022, before discounts or other adjustments, of \$1.43 billion represent an increase of approximately 26.4% compared to the same time frame for Fiscal 2021. Gross passenger car toll revenue increased 38.0% compared to the same period for Fiscal 2021 revenues, while gross commercial toll revenue increased 15.8% through April 2022.

Passenger vehicle traffic has not fully returned to pre-pandemic levels. However, Fiscal 2022 commercial traffic and toll revenues for both passenger and commercial vehicles reflect a substantial improvement over pre-pandemic levels. Passenger and commercial revenue through April 2022 is up 11.4% and 26.0%, respectively, compared to the same time period in Fiscal 2019. Total toll revenues are 17.9% higher for the same time period.

Traffic Volume – Fiscal Year through April (000's)						
	2019	2020	2021	2022	Comparisons	
					2022 v. 2019	2022 v. 2021
Class 1 (Passenger)	166,795	151,763	123,993	150,485	-9.8%	21.4%
Class 2-9 (Commercial)	28,699	28,422	29,079	31,850	11.0%	9.5%
TOTAL	195,494	180,185	153,072	182,335	-6.7%	19.1%

Gross Toll Revenue – Fiscal Year through April (000's)						
	2019	2020	2021	2022	Comparisons	
					2022 v. 2019	2022 v. 2021
Class 1 (Passenger)	\$669,945	\$652,084	\$541,087	\$746,471	11.4%	38.0%
Class 2-9 (Commercial)	539,621	557,142	587,393	679,920	26.0%	15.8%
TOTAL	\$1,209,566	\$1,209,226	\$1,128,480	\$1,426,391	17.9%	26.4%

The current estimate of Net Toll Revenues for the full Fiscal 2022 is approximately \$1.45 billion which is an increase over the prior projection for Fiscal 2022 provided in the May 2021 Bring Down Letter (as defined herein).

The Commission's projected Fiscal 2022 operating expenses are approximately \$37 million or 9% below budgeted amounts, primarily due to lower than forecast benefit and salary costs. The Commission remains committed to controlling operating expense growth as demonstrated by six years of actual expenditures remaining essentially flat or declining. Conservative budget assumptions and cost reductions from initiatives including its early adoption of all-electronic tolling ("AET") have also contributed to controlling expense growth. In Fiscal 2022, the Commission funded various capital projects and completed a 13-mile section of the Southern Beltway between U.S. 22 and Interstate Route 79 ("I-79"), which opened on October 15, 2021. This was the first section of new roadway opened by the Commission since 2006. The Commission's estimated Fiscal 2022 General Reserve Fund ending balance of \$435 million remains well above the Commission's liquidity targets. In addition, on June 2, 2021, the Commission established a Supplemental Capital Fund to provide funding for improvements, extensions, and replacements to the System, or additional capital needs



beyond those projects identified in the FY 2022 Ten Year Capital Plan. The Supplemental Capital Fund is pledged to the Trust Estate under the Senior Indenture and funds may not be requisitioned for capital projects from such fund if there is a deficiency in any fund or account under the Senior Indenture. The Supplemental Capital Fund received \$107 million in deposits during Fiscal 2022 that otherwise would have remained in the General Reserve Fund. The Supplemental Capital Fund is estimated to have a Fiscal 2022 ending balance of \$95 million. As such, the Supplemental Capital Fund is viewed, by the Commission, as additional operational liquidity in combination with the General Reserve Fund and an existing \$200 million line of credit.

The Senior Revenue Bond debt service coverage ratio for Fiscal 2022 is projected to be 3.52x, which is higher than the 3.12x coverage ratio anticipated in the Fiscal 2022 Financial Plan largely due to improved toll and other revenues and lower than anticipated operating expenses. Subordinate Revenue Bond and Subordinate Special Revenue Bond debt service coverage ratios are projected to be 1.73x and 1.61x, respectively, which are also higher than figures projected in the Fiscal 2022 Financial Plan.

Strategies, Policies and Covenants. As the Commission meets its Turnpike and Act 44/Act 89 Payment obligations over the course of Fiscal 2023, it will continue to refine and strengthen its financial plan in compliance with its bond covenants and financial policies, which include the following strategies:

- **Periodic Updates of Traffic and Revenue Forecasts:** At the time of this Fiscal 2023 Act 44 Financial Plan, PTC and its traffic consultants are working on updates to the 2022 traffic and revenue forecasts and anticipates that CDM Smith will issue a new bring down letter further updating the forecasts set forth in the 2018 Traffic Study (as defined herein) in the coming months. As a result, this Fiscal 2023 Act 44 Financial Plan is based upon estimates and forecasts of traffic and revenue contained in the May 2021 Bring Down Letter (as defined herein) for toll revenues from Fiscal 2023 to 2057. PTC continues to conduct on-going analysis of its traffic and revenue trends to develop a toll rate setting strategy that balances the need to generate the required revenues to meet Turnpike obligations, as well as Act 44/Act 89 Payments, with the implementation of an equitable toll rate paid by customers that does not cause undue diversions to non-tolled highways.
- **Operations and Maintenance Cost Strategies:** During the course of Fiscal 2023, the Commission will continue its efforts to achieve recurring savings and operating efficiencies that control operating cost growth including workforce management and other expense controls.
- **Comprehensive Capital Plan:** To meet the travel needs of its customers and generate the necessary revenues to meet its obligations, PTC is committed to maintaining and improving its capital assets, and providing sufficient capacity to meet future traffic demand. The Commission has a well-established rolling ten-year capital planning effort. In Fiscal 2022, PTC adopted the Fiscal 2023-2032 Capital Plan, a \$7.2 billion ten-year capital plan.
- **Financing Initiatives:** Using this Fiscal 2023 Act 44 Financial Plan as a guide, the Commission will evaluate alternative structures that facilitate cost effective financing, meet PTC's and the Commonwealth's transportation needs, exceed bond indenture covenants and preserve credit rating strength and fiscal stability, through the maintenance of debt service coverage ratios of at least 2.0x on annual debt service for its Senior Revenue Bonds, 1.30x on combined debt service for its Senior Revenue Bonds 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.

Fiscal 2023 and Long-Range Financial Plan. The Fiscal 2023 Financial Plan reflects the full-year effects of the January 2022 toll increase, which yielded a net increase in toll rates of 5%, as well as the partial year impact of the assumed January 2023 net toll increase of 5%. Forecasted revenues reflect annual toll increases of 5% through Fiscal 2025, with annual increases declining to 3% by Fiscal 2028. Budgeted Fiscal 2023 operating expenses are projected to increase just under 2% to \$425 million when compared to budgeted Fiscal 2022



operating expenses. For Fiscal Years 2024 through 2026, the Commission has assumed a growth rate in operating expenses of 3% followed by a growth rate of 2.5% in Fiscal 2027 and then assumes a flat growth rate of 2% thereafter. The financial plan estimates that PTC is expected to generate the necessary resources to: (i) meet Turnpike operations and maintenance expenses; (ii) pay debt service obligations; (iii) satisfy bond indenture covenants; (iv) support capital reinvestment of \$661 million; and (v) provide \$50 million in current revenues contributions required to fully meet its Act 44/Act 89 Payments. Fiscal 2023 debt service coverages on the Commission's Senior Revenue Bonds, Subordinate Revenue Bonds and Subordinate Special Revenue Bonds are projected to be 2.97x, 1.60x and 1.49x, respectively, and are consistent with the Commission's targeted debt service coverage ratios.

The long-range financial plan reflects the Commission's commitment to operate and maintain its toll facilities, support a Turnpike capital investment program at levels consistent with the adopted Fiscal 2023 Capital Plan, and fully fund its Act 44/Act 89 Payments. As demonstrated in this Fiscal 2023 Act 44 Financial Plan and the Long-Range Plan, the Commission has continued to take steps to increase its investment in its capital needs. The Fiscal 2023 Ten Year Capital Plan calls for \$7.2 billion in spending paid for by \$4.2 billion in pay-as-you-go funding and \$2.7 billion in future Senior Revenue Bond proceeds, as well as \$309 million in funds from prior bond issuance and \$40 million from expected federal funds reimbursement. This bonding need will require that PTC continue to regularly access the capital markets, although annual debt issuance for capital spending is anticipated to decline as the Commission moves towards more pay-as-you-go funding. The 2023 Financial Plan allows the Commission to maintain debt service coverage ratios of at least 2.0x on annual debt service for its Senior Revenue Bonds, 1.30x on combined debt service for its Senior Revenue and Subordinate Revenue Bonds and 1.20x for all three of its revenue 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. Under current planning assumptions (discussed herein), Senior Revenue Bond debt service coverage is at least 2.82x and reaches 3.17x in 2032 and continues to increase thereafter, which should enable the Turnpike to retain its current bond ratings. Subordinate Revenue Bond debt service coverage is lower, but at least 1.57x and reaches 1.84x in 2032, while Subordinate Special Revenue Bond debt service coverage is at least 1.47x and reaches 1.71x in 2032, with all coverage ratios expected to continue to increase thereafter. Finally, the Fiscal 2023 Act 44 Financial plan includes \$1.75 billion in current revenue contributions to the Commonwealth through 2057 in compliance with its Act 44 / Act 89 Payment obligations.

This Fiscal 2023 Act 44 Financial Plan and the matters discussed herein are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those reflected herein. While PTC's financial plan is based on reasonable financial assumptions, it is important to recognize that there are inherent uncertainties in projecting resources and obligations over a thirty-five year 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 and/or greater than projected operating and/or capital costs. To accommodate these risks, the financial plan requires PTC to maintain strong debt service coverage and preserve internal liquidity. Nevertheless, it is also important to assess how the combination of downside risks may impact the financial plan and to identify remediation measures the Commission could implement to maintain fiscal stability. PTC will continue to monitor its performance relative to the financial plan, and take corrective action if costs are higher and/or toll revenues are less than projected. While such a scenario may call for further adjustments in toll rates, the Commission will explore strategies to contain cost growth or reprioritize capital initiatives to manage the level of toll rate adjustments and maintain fiscal stability.

II. Commission Overview



Commission Overview

The Commission serves an integral role in meeting the Commonwealth's mobility needs. Since 1940, the Commission has been responsible for the construction, operation and maintenance of the Pennsylvania Turnpike, a system now encompassing 565 route miles. The Turnpike's facilities include the 359 mile east-west Mainline traversing the southern portion of Pennsylvania that connects with the New Jersey Turnpike in the east and the Ohio Turnpike in the west; the 110 mile north-south Northeastern Extension; the 16 mile north-south Beaver Valley Expressway; the 13 mile Amos K. Hutchinson Bypass near the New Stanton Interchange; completed segments of the Mon/Fayette project totaling 48 miles in length; a six mile segment of the Southern Beltway (known as the "Findlay Connector"); and a 13 mile section of the Southern Beltway between U.S. 22 and I-79 which connects to the Findlay Connector (collectively, the "System"). This new section of the Southern Beltway, which opened in October of 2021, leads to I-79 at the Allegheny-Washington County line.

By fostering access and facilitating economic development, PTC has benefited from significant traffic demand since the initial segment of the Turnpike opened in 1940. Reflecting the combination of regular toll increases, economic cycles and the mature travel market that PTC serves, traffic demand was steady between Fiscal 2004 and 2019. In March 2020, as result of the impacts of the COVID-19 pandemic, traffic volume declined on the System. Volume losses stabilized in May 2020 and with some periodic exceptions, have continued to improve.

Through April 2022, passenger vehicles represent 82.5% of Turnpike traffic, while commercial vehicles (mostly trucks) comprise the balance. Reflecting PTC's strategy to charge trucks a toll more commensurate with the greater maintenance requirements to accommodate these vehicles, the Commission recognized 52.3% of its toll revenues from passenger vehicles and 47.7% from commercial vehicles.

Prior to the onset of the COVID-19 Pandemic, the Commission was in the midst of a multi-year effort of planning for and converting to AET by the fall of 2021. Various segments and extensions of the System were converted to AET prior to March 2020. However, as a result of the impacts of the COVID-19 pandemic, the Commission, for health and safety reasons, accelerated its conversion to AET on March 16, 2020. As a result of the conversion to AET, the Commission's cashless tolling is executed through two main types of electronic tolling ("ETC"): (i) by E-ZPass, and (ii) by a "Toll By Plate" system where non-E-ZPass customers are invoiced for assessed tolls. Fiscal Year 2021 was the first full Fiscal Year for which the Commission almost exclusively utilized AET across the whole System. Only the Mon/Fayette Expressway used cash to start the fiscal year but was converted to AET in mid-June 2020. ETC revenues include E-ZPass, violation enforcement system ("VES") and Toll by Plate revenues. Ultimately, the Commission plans to fully convert the System to Open Road Tolling ("ORT") 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 conversion to ORT will eventually lead to the removal of toll plaza structures at existing exits on the System, allowing for a free flow of traffic on and off the System. An ORT-based system will also allow the Commission to increase access points (entrances and exits) to the System. The transition to ORT was initially scheduled to commence on the segment from the Reading Interchange to the New Jersey line in October 2022. However, as result of pandemic-induced downward adjustments in spending under the Fiscal Year 2021 Capital Plan, ORT conversion was deferred to instead begin in October 2024.

To provide and maintain high quality transportation infrastructure for its customers and preserve the Turnpike's economic competitiveness, PTC continues to implement its rolling ten-year capital improvement program that features 1) total reconstruction programs and roadway resurfacing; 2) the continued rehabilitation or replacement of structurally deficient bridges; 3) the conversion to ORT; and 4) provide for the installation of a fiber optic network.



The combination of a resilient travel market, periodic toll increases, capital reinvestment and a prudent financial management have allowed PTC to maintain a strong financial position. After meeting all Turnpike-related obligations, PTC had an ending General Reserve Fund balance in Fiscal 2021 of \$452 million, which exceeded the Commission's liquidity policy and represented a 20% increase from the Fiscal 2017 balance of \$376 million. In addition, the PTC established a Supplemental Capital Fund on June 2, 2021 which is estimated to have a balance of \$95 million on May 31, 2022. The Financial Plan for 2023 assumes the Commission will have a General Reserve Fund balance of approximately \$435 million on May 31, 2022 reflecting a decrease of \$16.5 million compared to Fiscal 2021 which is mainly attributable to the funding of the Supplemental Capital Fund.

Act 44, Act 89 and PTC's Mandate

Act 44 as amended by Act 89, expanded PTC's mandate from one focused on constructing, operating and improving the Turnpike to one that also includes providing annual funding contributions for broader Commonwealth transportation needs. Commission Act 44/Act 89 Payments are deposited into the Public Transportation Trust Fund. PTC's contributions are in addition to certain dedicated taxes and fees received by the fund. Beginning in Fiscal 2015, Act 89 dedicated all of the Commission's Act 44/Act 89 Payments to transit and multi-modal programs. Total annual Act 44/Act 89 Payments through Fiscal 2022 were \$450 million but going forward are reduced to \$50 million through Fiscal 2057. Exhibit 1 provides the allocation of Act 44/Act 89 Payments by purpose pursuant to Act 89 in Fiscal 2018 through Fiscal 2057. Fiscal 2023 is the first year in which the Commission no longer anticipates issuing bonds to fund its Act 44/Act 89 Payments.

Exhibit 1
Act 44 as Amended by Act 89
Annual Funding Requirements
(\$ 000s), Fiscal Year End May 31

	Transit			Mult-Modal Programs	Total Funding
	Operating	Capital (*)	Subtotal		
2018	\$25,000	\$395,000	\$420,000	\$30,000	\$450,000
2019	\$25,000	\$395,000	\$420,000	\$30,000	\$450,000
2020	\$25,000	\$395,000	\$420,000	\$30,000	\$450,000
2021	\$25,000	\$395,000	\$420,000	\$30,000	\$450,000
2022	\$25,000	\$395,000	\$420,000	\$30,000	\$450,000
2023-2057	\$25,000	\$25,000	\$50,000	\$0	\$50,000

(*) Includes funding for Alternative Energy and Projects of Statewide Significance

Historically, funding Act 44/Act 89 Payments has required the Commission to: 1) significantly increase its debt levels to finance Act 44/Act 89 Payments; 2) implement a regular schedule of toll increases on the Turnpike; and 3) pursue an aggressive cost containment program to manage expense growth. Beginning in Fiscal 2023, the Commission is required to provide 100% of its Act 44/Act 89 Payments from current Commission revenues. As a result, Fiscal 2022 is expected to be the final year in which debt was issued to finance the Commission's Act 44/Act 89 Payments.



Commission Revenue Sources, Debt Portfolio and Financing Tools

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, 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. Tolls are pledged to secure the Commission's outstanding Senior Revenue Bonds and other parity and subordinate obligations issued under the Senior Revenue Indenture. The Commission has unlimited toll rate setting authority which provides security for the Commission to meet funding needs for all expenditures and other fixed costs.
- **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 allocated by statute to the Commission. Oil Franchise Tax Revenues are primarily pledged to the separate trust estate securing the Commission's Oil Franchise Tax Revenue Bonds and are not reflected in the financial plan.
- **Registration Fee Revenues.** The Commission's third principal stream of revenues consists of a portion of the Commonwealth's vehicle registration fee revenues. Registration Fee Revenues consist of an annual appropriation of \$28 million of increased registration fees on deposit in the Commonwealth's Motor License Fund maintained by the State Treasurer and allocated to the Commission pursuant to Act 3 of 1997. Registration Fee Revenues are primarily pledged to the separate trust estate securing the Commission's Registration Fee Revenue Bonds and are not reflected in the financial plan.

The Commission has the following outstanding indebtedness: (1) Senior Revenue Bonds secured by Tolls received by or on behalf of the Commission from the System; (2) Subordinate Revenue Bonds secured by payments transferred from the General Reserve Fund under the Senior Revenue Indenture after the payment of all Senior Revenue Indenture Obligations (the "Commission Payments"); (3) Motor License Fund-Enhanced Subordinate Special Revenue Bonds secured by Commission Payments on a subordinate basis to 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 registration fee revenues allocated to the Commission from the Commonwealth's the Motor License Fund.

The Commission uses Senior Revenue Bonds to fund its capital program and in the past has issued Subordinate Revenue Bonds to meet its Act 44/Act 89 Payments. These are summarized below:

- **Senior Revenue Bonds:** Given PTC's multi-year capital needs and the long useful life of major capital improvements to the System, the Commission debt finances a substantial portion of its capital improvement program. The Senior Revenue Bonds are payable from the net toll revenues of the Turnpike.
- **Subordinate Revenue Bonds:** Historically, the Commission debt financed the majority of its Act 44/Act 89 Payments with proceeds from its Subordinate Revenue Bonds. The Subordinate Revenue Bonds are secured by payments from the General Reserve Fund, known as Commission Payments, and are used to finance transit and multi-modal obligations.



The following table summarizes the Commission's outstanding Indebtedness as of June 1, 2022:

Outstanding Commission Indebtedness

	Outstanding Principal	Accreted thru 6/1/2022	Total Outstanding
Senior Revenue Bonds	\$6,386,400,000	-	\$6,386,400,000
Subordinate Revenue Bonds	6,271,744,983	\$46,567,366	6,318,312,348
Subordinate Special Revenue Bonds	947,394,785	44,314,636	991,709,421
Oil Franchise Tax Revenue Bonds (Senior)	875,736,246	14,476,664	890,212,910
Oil Franchise Tax Revenue Bonds (Subordinated)	620,845,000	-	620,845,000
Registration Fee Revenue Bonds	340,235,000	-	340,235,000

PTC has various loan agreements outstanding under the EB-5 program which is also known as the Immigrant Investor Program and is administered by the U.S. Citizenship and Immigration Services (the "EB-5 Loans"). The EB-5 Loans are on parity with the Commission's Senior Revenue Bonds and are captured in the table above in the Turnpike Senior Revenue Bonds outstanding principal. EB-5 Loans are five-year interest only construction loans with an interest rate of 2.0%. After the initial five-year period, PTC has the option to enter into a 30-year loan with the Delaware Valley Regional Center or repay the five-year EB-5 Loan with an alternative source of funds. In Fiscal 2021, PTC's first 4 tranches of EB-5 Loans issued in 2016 (the "Prior EB-5 Loans") were scheduled to mature. In March and May of 2021, the Commission repaid the Prior EB-5 Loans using proceeds from Senior Revenue Bonds. Separately, in 2016, the Commission entered into a second loan agreement providing an up to \$800 million draw-down loan available to be borrowed in 16 tranches of up to \$50 million under the EB-5 program (the "2016 EB-5 Loans"), of which \$183,500,000 has been drawn to date, leaving \$616,500,000 of 2016 EB-5 Loans available to be drawn down. Proceeds of the EB-5 Loans have been and will be used on selected projects on the Turnpike Mainline which are included in the 10-year capital plans.

III. Fiscal 2022 Activities



Fiscal 2022 Activities

PTC's Fiscal Year 2022 financial results notably reflect continued revenue recovery at levels surpassing pre-pandemic figures and the final annual \$450 million Act 44/Act 89 payment. While meeting its funding commitments under the fifteenth year of Act 44, the Commission also maintained and improved the Turnpike. With improving revenues, the Commission committed \$211 million of revenue to pay-as-you-go capital funding, compared to only \$59 million in Fiscal 2021. The Commission also established on June 2, 2021 a Supplemental Capital Fund under the Senior Revenue Bond indenture to fund additional capital projects beyond those identified in the Fiscal 2023 Capital Plan. The Commission has made deposits into this account totaling \$107 million and has used \$12 million to fund additional capital needs. This increasing commitment of pay-go resources is consistent with the Commission's focus on capital investment and the substantial increase in the Fiscal 2023 Capital Plan compared to the Fiscal 2021 and prior capital plans.

PTC took advantage of the historically low interest rate environment during the first half of Fiscal 2022 to secure long term capital financing and reduce exposure to future interest rates by executing three bond transactions totaling \$1.1 billion in par. These transactions consisted of the \$386 million Senior Turnpike Revenue Bonds, Series B of 2021, which retired a portion of the Commission's variable rate portfolio and provided additional capital funding, \$394 million Turnpike Subordinate Revenue Bonds, Series B of 2021 issued in July of 2021 to fund \$420 million of the FY 2022 Act 44/Act 89 Payments, and finally the \$275 million Senior Turnpike Revenue Bonds, Series C of 2021, of which \$8.4 million of proceeds were used to refund outstanding debt with the bulk of the net proceeds being allocated to capital funding. The Commission also defeased \$4 million of callable Subordinate Special Revenue bonds and \$13 million of Subordinate Revenue Bonds.

In addition, the Commission also issued \$529 million in Oil Franchise Tax Senior and Subordinated Revenue Bonds, Series A and B of 2021 in September 2021. This transaction provided \$610 million for capital funding applied towards the Mon/Fayette and Southern Beltway projects and included a small refunding. Principal and interest on these Oil Franchise Tax Bonds are not paid by the PTC's toll revenues and, as such, are not reflected in this financial plan.

In April of 2022, the Commission refunded the privately placed Turnpike Subordinate Revenue Refunding Bonds, First Series of 2017 with a new direct purchase floating rate note with a similar structure and reduced cost through Fiscal 2029. In addition, the Commission expects to renew its \$200 million revolving line of credit, in June 2022, for an Indenture-mandated term of just under one year, to maintain its enhanced levels of liquidity.

Meeting Act 44 and Turnpike funding commitments requires carefully managing financial obligations while maintaining fiscal balance and flexibility. As part of the Act 44 financial planning process, the Commission evaluates alternative tolling, operating cost, capital program and debt financing strategies to meet its obligations in a cost-effective and prudent manner. The ability to continually review and, as appropriate, adjust strategies throughout the term of the Funding Agreement provides the Commission with the necessary flexibility to adapt to changing market conditions.



Exhibit 2
Fiscal 2022 Estimated Results compared to Fiscal 2021 Actual Results and Prior Fiscal 2022 Estimate
(\$ 000s), Fiscal Year End May 31

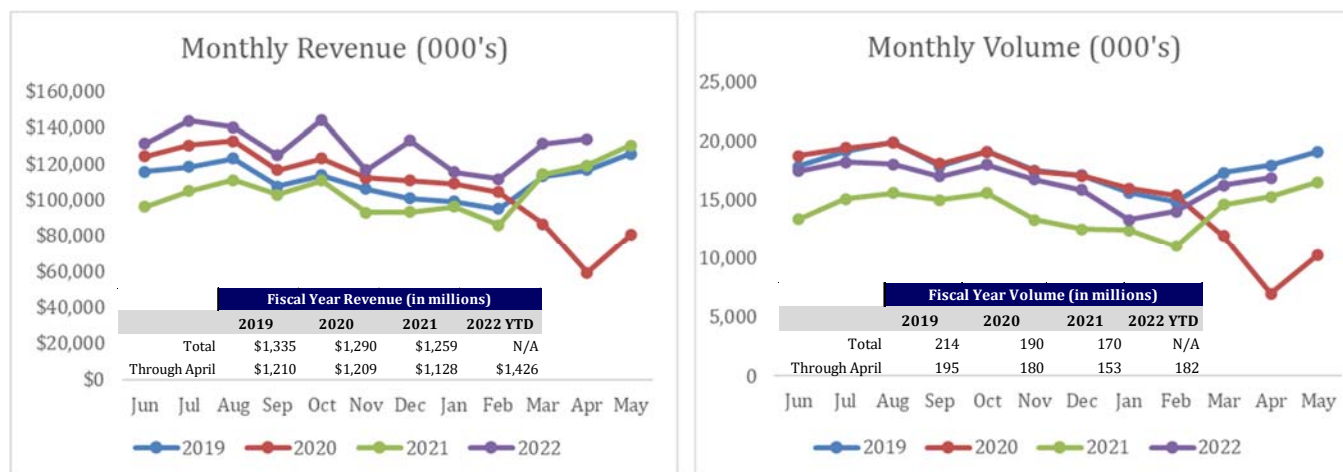
	Actual 2021	Prior Estimated 2022 Plan	Current Estimated 2022 Plan	% Diff Act 2021	% Diff Prior 2022
Turnpike Operating Income					
Adjusted Gross Toll Revenues (+)	1,190,419	1,386,368	1,448,922	21.7%	4.5%
Gross Non-Toll Revenues (+)	39,753	23,806	40,040	0.7%	68.2%
Gross Operating Revenues (+)	1,230,172	1,410,174	1,488,962	21.0%	5.6%
Operating Expense (-)	361,822	417,274	380,000	5.0%	-8.9%
Interest Income (Senior DSRF and GRF earnings) (+)	13,391	11,432	11,834	-11.6%	3.5%
Net Turnpike Revenues Before Debt Service	881,741	1,004,332	1,120,796	27.1%	11.6%
Senior Turnpike Revenue Bond Debt Service	234,905	321,827	318,025	35.4%	-1.2%
Net Income Before Capital Expense and General Reserve	646,836	682,505	802,771	24.1%	17.6%
Capital Funding					
Construction Fund Beginning Balance	193,315	122,807	122,811	-36.5%	0.0%
Newly Sized Senior Bond Proceeds (+)	421,794	342,965	506,950	20.2%	47.8%
Federal Fund Reimb. (+)	1,239	-	11,232	806.8%	-
PAYGO Contribution (+)	59,100	195,000	210,718	256.5%	8.1%
Additional Transfer from Gen. Res. Fund (+)	-	-	19,605	-	-
Capital Expenditure (-)	552,868	660,772	529,880	-4.2%	-19.8%
Reconciliation (+)	231	-	(32,230)		
Construction Fund Ending Balance	122,811	-	309,207	151.8%	-
Cash Balances					
Cash Beginning Balance (excl. Liquidity)	275,953	332,394	329,029	19.2%	-1.0%
Net Income (+)	646,836	682,505	802,771	24.1%	17.6%
PAYGO (-)	59,100	195,000	210,718	256.5%	8.1%
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	143,115	-	17,365	-87.9%	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	-	-	19,605	-	-
Transfer to Supplemental Capital Fund (-)	-	-	107,000	-	-
Other Transfers (-)	-	-	3,600	-	-
Reconciliation (+)	(57,392)	-	(55,446)		
Liquidity Requirement Cashflow Set-aside (-)	-	21,812	25,879	-	18.6%
Subordinate and Sub. Special Revenue Bonds DSRF Earnings (+)	5,976	6,137	6,169	3.2%	0.5%
Subordinate Bonds Debt Service (-)	261,311	332,283	332,283	27.2%	0.0%
Subordinate Special Revenue Bonds Debt Service (-)	48,818	49,481	49,481	1.4%	0.0%
Net Funds Remaining Before Act 44 Payments	359,029	422,460	316,592	-11.8%	-25.1%
Liquidity Balance	123,017	141,017	148,896	21.0%	5.6%
Debt Service Coverage Ratios					
Senior Lien					
Pledged Revenues	881,741	1,004,332	1,120,796		
Debt Service	234,905	321,827	318,025		
Coverage	3.75 x	3.12 x	3.52 x		
Subordinate Lien					
Pledged Revenues	887,255	1,010,044	1,126,525		
Debt Service	496,216	654,110	650,309		
Coverage	1.79 x	1.54 x	1.73 x		
Subordinate Special Revenue Lien					
Pledged Revenues	887,717	1,010,469	1,126,965		
Debt Service	545,034	703,591	699,789		
Coverage	1.63 x	1.44 x	1.61 x		

Note: Pledged revenues include net revenues and debt service reserve fund interest earnings attributable to each lien

Estimated Toll Rates, Tolls and Other Revenues

PTC toll revenues after commercial discounts, electronic toll collection adjustments and allowances for toll bad debt are estimated to have increased 21.7% in Fiscal 2022, to \$1.45 billion, compared to Fiscal 2021 results. The increase in revenues is primarily a result of improving traffic volume and toll increases. The Commission previously adopted various policies to mitigate the impact of the COVID-19 pandemic which it continued to benefit from in Fiscal 2022. The policies include: the early permanent conversion to AET; the slightly larger toll increases in January 2021, at 6% versus the planned 5%; and the implementation of a 45% additional charge on Toll by Plate transactions. In Fiscal 2022 the Commission also implemented an additional scheduled 5% toll increase that took effect in January 2022.

Through April 2022, Fiscal 2022 monthly transactions only lag pre-pandemic (Fiscal 2019) levels by approximately 7%, with the exception of January 2022 when there was a large spike of COVID-19 cases caused by the Omicron variant. Monthly revenues for FY 2022 have exceeded pre-pandemic levels. The following charts display monthly revenue and monthly volume trends for PTC for Fiscal 2019 through Fiscal 2022.



For Fiscal 2022, PTC's other income consisting of VES and other ETC related fees, lease and rental fees and concession fees is expected to be \$40 million. Interest income on debt service reserve funds and the General Reserve Fund is estimated to be an additional \$18 million.

Turnpike Operations and Capital Program

The budgeted operating expenses for Fiscal 2022 of \$417 million were 2.1% lower than Fiscal 2021 budgeted figures of \$426 million consistent with the Commission's continued focus on managing year over year costs. Projected actual operating expenses for Fiscal 2022 are approximately \$380 million, \$37 million or 9% under budget. Actual debt service coverage ratios are estimated to be higher than forecasted in the Fiscal 2022 Financial Plan due to improved operating performance, higher revenues, and slightly lower than anticipated debt service.

Turnpike capital outlays are estimated at \$530 million for Fiscal 2022, of which, \$211 million or nearly 40% was pay as you go. While originally forecasted at \$661 million, the lower estimated Fiscal 2022 capital outlay was due to several large capital projects experiencing delays related to supply chain issues and the availability of CDL truck drivers, among other things. Major initiatives undertaken include:

- Highway improvements encompassing the design and reconstruction of the Turnpike Mainline and addition of a third lane in all reconstruction activities. To date, PTC has completed reconstruction of



152 miles of the Mainline with most of these sections widened to six lanes. Approximately another 10 miles are currently in construction and 88 miles are currently in design.

- Bridge projects focused on the rehabilitation or replacement of bridges that are classified as structurally deficient. While this measure is an indication of a bridge's structural soundness it does not imply the facility is unsafe.
- Tuscarora Tunnel improvement project to improve the eastbound and westbound tunnel tubes.
- Facilities and energy management improvements including repair and replacement of maintenance facilities and redevelopment of service plazas.
- The fleet program which includes the purchase of rolling stock to insure adequate maintenance of the roadway system.
- Installation of the initial segments of a planned full-System fiber optic network along the right-of-way. Two initial segments are currently under construction: (i) on the Mainline from the Harrisburg East interchange to the Delaware River Bridge, and (ii) the full length of the Northeast Extension.
- Information technology which includes toll collection projects, communication, application development and technical operational needs.

The Commission also established on June 2, 2021 a Supplemental Capital Fund under the Senior Revenue Bond indenture to fund additional capital projects beyond those identified in the FY 2023 Ten Year Capital Plan. The Commission made initial deposits into this account totaling \$107 million and has used \$12 million to fund additional capital needs.

Act 44 Activities

The Commission met its Fiscal 2022 Act 44 obligations through the issuance of Subordinate Revenue Bonds in July 2021 and contributing \$30 million from cash resources to fund the full \$450 million Fiscal 2022 Act 44/Act 89 obligation. With future annual obligations reduced to \$50 million and required to come from current revenues of the Commission, the July 2021 debt issuance is anticipated to have been the final issuance for Act 44/Act 89 Payment funding.

The Commission's General Reserve Fund ending balance for Fiscal 2022 is estimated to be \$435 million, which is \$98 million or 18% lower than the amount projected in the Fiscal 2022 Financial Plan. This is generally due to the Commission's deposit of \$107 million into the newly established Supplemental Capital Fund during Fiscal 2022. Additionally, the Commission transferred nearly \$54 million from the General Reserve Fund to fund, among other things: 1) the cash defeasance of a portion of existing debt; 2) pay as you go capital funding above levels included in the Fiscal 2022 Financial Plan; and 3) funding additional solar capital projects. The improving financial position of the Commission is demonstrated by the General Reserve Fund balance, which is estimated to have doubled from Fiscal 2014 levels and significantly exceeds the amount required under the Commission's policy.



Exhibit 3
Fiscal 2022 Estimated Results compared to Fiscal 2021 Actual Results and Prior Fiscal 2022 Fiscal Plan
Estimate
(\$ 000s), Fiscal Year End May 31

	Actual 2021	Prior Estimated 2022 Plan	Current Estimated 2022 Plan	% Diff Act 2021	% Diff Prior 2022
Act 44 Payment Sources					
Net Funds Remaining Before Act 44 Payments	359,029	422,460	316,592	-11.8%	-25.1%
Subordinate Bond Proceeds	420,000	420,000	420,000		
Act 44 Payments					
Transit Capital/Other Payments	425,000	425,000	425,000		
Transit Capital/Other Payments Sources					
Turnpike Cash	5,000	5,000	5,000		
Tax-Exempt Subordinate Bond Proceeds	420,000	420,000	420,000		
Transit Capital/Other Total Sources	425,000	425,000	425,000		
Transit Operations Payments	25,000	25,000	25,000		
Transit Operations Sources					
Turnpike Cash	25,000	25,000	25,000		
Transit Operations Total Sources	25,000	25,000	25,000		
Total Act 44 Payments	450,000	450,000	450,000		
Total Act 44 Sources	450,000	450,000	450,000		
Remaining Turnpike Cash	329,029	392,460	286,592		
General Reserve Fund/Liquidity Requirement	452,046	533,478	435,488		
Supplemental Capital Fund	-	-	94,709		
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	452,046	533,478	530,197		

Challenges





While PTC has achieved several important accomplishments since the passage of Act 44, the Commission continues to face a number of challenges. Specifically, these challenges center on balancing significant capital needs while maintaining financial flexibility and navigating various economic and interest rate cycles. With the material reductions in annual Act 44/Act 89 Payments in Fiscal 2023, the Commission is focused on its future capital needs. The Commission's Fiscal 2023 Capital Plan provides a \$237 million expansion upon the robust capital plan levels established in the Fiscal 2022 capital plan, which itself reflected a 20% increase from the Fiscal 2021 Capital Plan. This elevated capital funding continues PTC's progress toward restoring capital improvement funding levels to the Fiscal 2015 amounts and is strategically implemented to align with the projected decrease in Act 44/Act 89 Payments beginning in Fiscal 2023. With the increased capital investment comes a continued need to access capital markets. However, it is important to note that the Commission anticipates that 58% of the capital investment anticipated in the Fiscal 2023 Capital Plan will come from current revenues rather than from additional debt.

Large and Increasing Capital Needs. PTC's Fiscal 2023 rolling ten year capital plan represents a modest 3% increase over the Fiscal 2022 capital plan. The Commission's projected capital needs will continue to require regular capital market access, with total anticipated Senior Revenue Bond issuance of \$3.4 billion through 2036. The Commission will also need to manage its substantial existing debt portfolio of \$6.4 billion in Senior Revenue Bonds and \$7.3 billion in Subordinate and Special Revenue Bonds. As noted earlier, Fiscal 2022 was the final year of the Commission's \$450 million Act 44/Act 89 Payments, removing the need for additional debt issuance to fund Act 44/Act 89 Payments beginning in Fiscal 2023. PTC has a well-established track record of executing large capital initiatives while maintaining financial flexibility.

These large capital funding needs will have to be managed in a period of substantial interest rate and inflation uncertainty, which may result in increasing debt, capital, and operating costs. Long-term changes in user behavior including telework and travel preferences in response to COVID-19 and technological changes may also create additional pressures. The Commission remains committed to navigating these challenges through prudent budgeting and operational initiatives to minimize cost increases and maintaining the System to best serve the Commonwealth and its citizens.

Managing Rating Agency Concerns. The Commission maintains ratings from Moody's Investor Services ("Moody's"), Fitch Ratings Inc. ("Fitch"), S&P Global Ratings ("S&P") and Kroll Bond Rating Agency ("Kroll"). Moody's and Fitch affirmed their 'A1' and 'A+' ratings and "stable" outlooks on the Senior Revenue Bonds on November 1, 2021, respectively, and affirmed their 'A3' and 'A-' ratings with "stable" outlooks on the Subordinate Revenue Bonds on July 12, 2021 and November 1, 2021, respectively. S&P affirmed its 'A' and 'A-' ratings on the Senior Revenue Bonds and Subordinate Revenue Bonds, as well as revise their outlook from "negative" to "stable" on June 22, 2021. The outlooks were revised due to improved traffic volume and planned toll increases. Kroll affirmed their ratings and outlooks on the Senior Revenue Bonds at 'AA- (stable)' and Subordinate Revenue Bonds at 'A+ (stable)' on November 4, 2021, respectively. The following table highlights the Commission's credit strengths and weaknesses as described by each respective credit rating agency.¹

¹ The ratings, including any related outlook with respect to potential changes in such ratings, reflect only the respective views of said rating agencies and an explanation of the significance of the ratings may be obtained only from said rating agencies. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies, and assumptions of its own. There is no assurance that such ratings will be retained for any given period of time or that the same will not be revised downward or withdrawn entirely by said rating agencies if, in their judgment, circumstances so warrant.

Rating Agency	Credit Strengths	Credit Challenges
 Senior: A1 (Stable) Sub. Lien: A3 (Stable) <i>Date of report: 6/25/2021 (7/12/2021 and 11/1/2021 ratings affirmed)</i>	<ul style="list-style-type: none"> • Essential transportation corridor in the eastern US. • Long history of well managed financial operations with demonstrated willingness to raise tolls. • Strong historical and forecast DSCRs. • Flexibility to delay, scale back or cash fund portions of CIP. • Annual public update of Act 44 Financial Plan provides transparency. 	<ul style="list-style-type: none"> • Political risk that PTC could shoulder more transportation infrastructure needs as Commonwealth's revenues decline. • Risk of opposition to toll increases. • Revenue growth requires annual above inflation toll rate increases. • Significant 10-year CIP will increase debt.
 Senior: A+ (Stable) Sub. Lien: A (Stable) <i>Date of report: 6/22/2021 (7/14/2021 ratings affirmed)</i>	<ul style="list-style-type: none"> • Strategic location and favorable traffic trends, with direct links to adjacent state turnpikes in Ohio and New Jersey. • Lack of significant competition from toll-free roads. • Demonstrated willingness and ability to adjust toll rates frequently. • Ability to maintain steady financial metrics, despite increases in debt service and leverage. • Good revenue diversity. 	<ul style="list-style-type: none"> • Potentially lower-than-forecast traffic levels due to increased use of remote-work environments and a weaker-than-expected economic recovery could pressure financial metrics. • Reliance on frequent toll increases to address rising debt service requirements.
 Senior: A+ (Stable) Sub. Lien: A- (Stable) <i>Date of report: 11/1/2021</i>	<ul style="list-style-type: none"> • Strong traffic profile. • Ability and willingness to raise tolls. • History of prudent cost management. • Essential route with commercial exposure. • Reasonable debt structure. 	<ul style="list-style-type: none"> • Sizeable debt burden with debt service pressure for the next several years. • Sizeable capital program. • Potential political opposition to annual toll increases.
 Senior: AA- (Stable) Sub. Lien: A+ (Stable) <i>Date of report: 11/4/2021</i>	<ul style="list-style-type: none"> • Highly essential statewide, regional toll road system with limited competition. • Prudent, proactive management of operations, debt and capital investment has resulted in improving operating margins. • Rapidly implemented operating and capital cost reductions and revenue enhancers to address COVID-19 related revenue declines. • PTC has full rate setting autonomy. • Liquidity is ample. 	<ul style="list-style-type: none"> • Traffic and toll revenues are susceptible to a recurrence of the COVID-19 crisis or other exogenous event. • O&M, capital and existing debt obligations, are substantial and require annual toll increases, which may dampen traffic demand, reducing operating margins and financial flexibility. • Planned long-term issuance may strain subordinate obligation coverage if actual traffic demand is materially weaker than forecast.

Managing Financial Obligations. The Commission meets the challenges of managing increasing financial obligations by having a financial planning process to track toll revenues and develop financing strategies to meet the Commission's ongoing Turnpike and Act 44/Act 89 Payment obligations while maintaining sufficient fund balances that provide internal liquidity to meet unexpected short-term needs. As part of this effort and in consideration of CDM Smith's projected net toll revenues, PTC estimates and refines Turnpike capital and operating needs and cost efficiency measures to ensure its toll facility is functioning in a state of good repair in the most cost-effective manner possible. This financial plan represents PTC's fifteenth annual report of this effort. During the year, PTC will track its performance relative to the financial plan. As needed, PTC will adjust its operations to meet the financial plan's objectives. In the event of unforeseen circumstances that hinder the Commission's ability to comply with its Act 44/Act 89 Payments, PTC may need to adjust the assumptions of the financial plan and will provide the revised plan to the Secretary of the Budget. In addition, as required by Act 44 and reflecting good financial planning practices, PTC will continue to update its financial plan each year



as part of its June 1 submission to the Secretary of the Budget, identifying how actual results varied from plan assumptions and identifying necessary revisions and updates based on the prior year outcomes.

Litigation

The Commission is routinely subject to claims for personal injury and/or property damage pending against the Commission pertaining to matters normally incidental to routine operations. The Commission is covered by Act No. 152, approved September 28, 1978, which provides for a limited waiver of sovereign immunity by the Commonwealth. Damages for most losses are limited to \$250,000 for each plaintiff or \$1,000,000 in the aggregate.

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 Turnpike, 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 Turnpike, 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 asks the Court to certify a class action.

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 Commission's and TransCore's motions to dismiss without prejudice, and has allowed Plaintiff 45 days to take jurisdictional discovery.

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

IV. Strategies, Policies and Covenants to Maintain Financial Flexibility

Strategies, Policies and Covenants to Maintain Financial Flexibility

The Commission has established strategies to meet its Turnpike and Act 44/Act 89 Payments in a financially prudent manner. PTC carries out these strategies in accordance with the provisions of Act 44, under the covenants it has entered into with bondholders in the Commission's trust indentures, and through the internal financial management policies it has adopted.

Covenants with Bondholders

PTC's Senior Revenue Bond and Subordinate Revenue Bond indentures feature covenants to bondholders that are based on the need to preserve the Commission's financial flexibility and to provide investors with sufficient security. Key covenants include the pledge of revenues, flow of funds, rate covenant, additional bonds test and maintenance of reserves.

Pledge of Revenues. PTC toll and other operating revenues are first used to pay Turnpike operating and maintenance expenses. This is the typical approach used in toll road financing where both the toll road operator and its investors want to ensure there are sufficient revenues to meet ongoing operating needs so that it can generate the necessary resources to cover debt service and other obligations. Debt service on the PTC's Senior Revenue Bonds is secured by toll and other operating revenues after payment of operations and maintenance expenses, i.e., net revenues. Subordinate Revenue Bond investors are paid after the Senior Revenue Bonds, while Subordinate Special Revenue Bonds are secured on a junior basis to the Subordinate Revenue Bonds but benefit from a back-up pledge of the Commonwealth Motor License Fund. The Commission established this subordinate payment structure to ensure sufficient revenues are available first to meet the needs of the Turnpike's debt service, capital reinvestment and reserve needs before payments to PennDOT are made.

Flow of Funds. All revenues of the Commission are deposited daily into its Revenue Fund. On or before the last business day of the month, an amount equal to the following month's operating and maintenance expenses is transferred into the Operating Account. After meeting the Operating Account requirement, the Commission transfers an amount equal to that month's accrued interest and principal requirement into the Senior Revenue Bonds Debt Service Fund. Remaining amounts are paid into the Reserve Maintenance Fund equal to the amount required for the following month defined in the Commission's annual capital budget, into the Senior Revenue Bond Debt Service Reserve Fund to restore a deficiency, if any, within 18 months, with the remaining surplus deposited into the General Reserve Fund. Balances in the General Reserve Fund are available to pay PTC subordinate debt, optionally redeem bonds, fund capital improvements or be applied for any other authorized Commission purposes.

Amounts on deposit in the General Reserve Fund are first applied toward payments to meet administrative expenses. Each month an amount equal to 115% of one-sixth of the next interest payment and one-twelfth of the next principal payment is paid into the Commission Payment Account for the Subordinate Revenue Bonds. After meeting this requirement, the Subordinate Indenture requires an amount equal to one-sixth of the next interest payment and one-twelfth of the next principal payment be paid into the Subordinate Special Revenue Bond Debt Service Fund. Funds are then deposited to make up any deficiencies in the debt service reserve funds for the Subordinate Bonds, the Special Revenue Bonds Funded Debt Service Sub Account, or to repay PennDOT for any draws on the Motor License Fund. The remainder is deposited into the Residual Fund which may be used for any authorized Commission purposes.



Rate Covenant. PTC has covenanted with bondholders to set tolls so that pledged revenues cover debt service by at least the following amounts:

- Net revenues cover the greater of 1.30x Senior Revenue Bond debt service or 1.00x the sum of Senior Revenue Bond maximum annual debt service, deposits into the Reserve Maintenance Fund and amounts necessary, if required, to restore a deficiency in the Debt Service Reserve Fund. In addition, net revenues must be sufficient to cover any short-term indebtedness outstanding for 365 consecutive days.
- Commission Payments out of the General Reserve Fund are required to be at least 1.15x annual debt service on Subordinate Revenue Bonds, 1.00x annual debt service on the Subordinate Special Revenue Bonds and amounts, if required, to restore a deficiency in the Subordinate Debt Service Reserve Fund.

Commission Policy Targets. While the rate covenant provides an important level of protection to bondholders, the PTC also targets certain debt service coverage ratios as part of its broader financial management policies. For Senior Revenue Bonds, the Commission targets a net revenue to debt service ratio of at least 2.0x, well above the 1.30x rate covenant. In addition, the Commission targets a debt service coverage ratio of at least 1.30x on combined Senior and Subordinate Revenue Bond debt service, and 1.20x on debt service across all three liens. This commitment and established track record of maintaining strong debt service coverage is a key factor that drives the Commission's ratings. It also provides the PTC greater financial flexibility in the event it needs to deal with unexpected financial circumstances. While the Commission would be complying with its commitment to bondholders if it allowed its debt service coverage ratios to decline to the minimum rate covenant requirements, such coverage levels could result in a downgrade of the PTC's debt, increasing its borrowing costs and limiting its financial flexibility.

Additional Bonds Test. To provide additional protection to bond holders, additional issuance is subject to following additional bonds tests:

- Issuance of additional Senior Revenue Bonds requires that the maximum annual debt service coverage was at least 1.75x for prior fiscal year net revenues or debt service coverage was at least 1.30x maximum annual debt service including the proposed issuance, and that projected debt service coverage for the two fiscal years following the end of capitalized interest is at least 1.30x.
- Debt service coverage provided by Commission Payments for the prior fiscal year was at least 1.15x Subordinate Revenue Bond debt service and 1.00x Subordinate Special Revenue Bond debt service or projected debt service coverage for the next two fiscal years is at least equal to 1.10x on combined Subordinate Revenue Bond and Subordinate Special Revenue Bond debt service. In addition, Act 44 and the Funding Agreement include further limits on Subordinate Special Revenue Bonds where no more than \$5 billion may be issued in total, with no more than \$600 million issued annually. With the passage of Act 89, the Commission no longer issues Subordinate Special Revenue Bonds to finance Act 44/Act 89 Payments, and with the reduction in the Commission's Act 44/Act 89 Payments, no future Subordinate Revenue Bond issuance is anticipated for this purpose

Reserve Funds. PTC has the option to provide added protection to bondholders by offering a debt service reserve fund which provides liquidity in the event of unforeseen short-term circumstances that result in lower than expected revenues or higher than expected expenses that could adversely impact the Commission's ability pay its debt service obligations. Variable rate Senior Revenue Bonds and Subordinate Revenue Bonds are not secured by a debt service reserve fund. Senior Revenue Bonds debt service reserve funds are funded at maximum annual debt service. The Subordinate Revenue Bonds debt service reserve fund requirement is based upon a standard test to satisfy Internal Revenue Service arbitrage requirements equal to the lesser of 10% of proceeds, maximum annual debt service or 125% of average annual debt service. Additionally, the Subordinate Special Revenue Bonds are secured by a Debt Service Reserve Sub-Account equal to one half



maximum annual debt service. Given the strong coverage levels the Commission has achieved and plans to maintain, there is a low likelihood that such funds would be drawn upon.

Operations, Maintenance and Capital Improvements. The Commission commits to an inspection of the Turnpike every three years by an independent engineering consultant to determine whether it is maintained in a state of good repair and to make recommendations for revisions or additions to the Commission's capital improvement program. On or before May 31st of each year, the Commission will adopt an annual operating budget. Prior to adopting the budget, the Commission will provide it to a consulting engineer to provide comments on the proposed budget. At the same time, the Commission adopts its annual budget, it will also approve a capital budget that establishes its capital improvement program for the next ten years. Similar to the operating budget, the capital budget is provided to the consulting engineer for review and comment. The Commission adopted its Fiscal 2023 operating budget and its ten-year capital budget for Fiscal 2023-2032, on May 3, 2022.

Financial Management Policies

PTC has established financial management policies that guide the Commission's prudent use of debt and derivatives to mitigate risk, and to ensure the maintenance of adequate fund balances and proper investment of available funds. The following summarizes the Commission's financial management policies, while the Appendix contains a copy of each policy.

Debt Policy. The purpose of the Commission's debt policy is (i) to establish sound, prudent and appropriate parameters; (ii) to provide guidance governing the issuance, management, continuing evaluation of and reporting on all debt obligations issued by the PTC; and (iii) to take the steps necessary to assure compliance and conformity with this policy. The Commission recognizes the importance and value of the continued creditworthiness and marketability of its bonds, and this policy is intended to ensure that any and all potential debt structures comply with all applicable laws and regulations, as well as sound financial principles.

In an effort to maximize capital funding availability, the Commission has utilized a reasonable mix of borrowing and pay-as-you-go funding, and intends to do so in the future. The Commission does not fund Turnpike current operations or normal maintenance from the proceeds of long-term borrowing.

The Commission seeks to maintain bond ratings that minimize borrowing costs and preserve market access. The Commission understands the importance of demonstrating to rating agencies, investors, investment bankers, creditors and users of the Turnpike that it is following a prescribed financial plan and adhering to sound financial policy.

Continuing Disclosure Policy. In addition to regular communications with bond rating agencies, the Commission maintains its continuing disclosure obligations by filing the requisite notices and information with the Municipal Securities Rulemaking Board's Electronic Municipal Marketplace Access system ("EMMA"); keeping investors informed about the Commission's current financial and operating conditions. The Commission has adopted both a Continuing Disclosure Policy and a Post Issuance Compliance Policy, and also maintains an investor relations page on its website where it provides certain additional information (see https://www.paturndpike.com/business/investor_relations.aspx).

Swap Policy. The Swap Policy establishes guidelines for the use and management of all interest rate management agreements, including interest rate swaps, swap options, caps, collars and floors (collectively "Swaps" or "Agreements") incurred in connection with the issuance of debt. The Commission revised its swap policy in Fiscal 2013 to reflect certain requirements of the Dodd-Frank Wall Street Reform and Consumer



Protection Act of 2010 regarding policies and procedures governing the Commission's interaction with swap dealers and to update the policies based on current trends in the management of derivatives.

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.

Prior to the execution of any swap transaction, the Chief Financial Officer, the Assistant Chief Financial Officer for Financial Management, the Commission's Swap Advisor and legal counsel are required to evaluate the proposed transaction based on an assessment of potential benefits and risks defined in the Swap Policy. As part of its review of a proposed Swap agreement, the Commission will evaluate prevailing market practices and requirements, legal requirements and potential impacts on the PTC's management if its swaps. Swaps are required to include financial terms and conditions that are fair and reasonable to be evidenced in a letter from a qualified independent Swap Advisor. The Commission will use terms and conditions defined in the International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement and may use the ISDA August 2012 Dodd-Frank Protocol or other such documentation deemed necessary to meet market requirements related to swap provisions of the Dodd-Frank Act. The Assistant Chief Financial Officer for Financial Management in consultation with the Swap Advisor and legal counsel will evaluate the risks of the Commission's outstanding swaps annually and provide a report of the findings to the Senior Executives.

Liquidity Standard Policy. The purpose of this policy is to ensure that the PTC will maintain minimum annual year-end fund balances for the ongoing level of uncommitted reserves necessary for the Commission to secure and protect its long-term debt. Pursuant to the policy, the PTC will budget and maintain a cumulative fund balance, including cash balances in the Reserve Maintenance Fund and the General Reserve Fund, equal to the greater of either the maximum annual debt service on all bonds not secured by a Debt Service Reserve Fund or 10% of annual budgeted revenues.

Investment Policy and Guidelines. PTC's Investment Policy and Guidelines govern the Commission's investment of cash assets and the Investment Policy and Guidelines were updated in February 2019. Investment objectives are centered on the safety and preservation of invested funds, maintenance of adequate liquidity to meet Commission cash flow requirements, maximizing the total rate of return and providing preference to Pennsylvania investments when the return on investment is no less than a non-Pennsylvania investment. The policy defines eligible securities and requirements for diversification of investments to provide for safety and preservation of funds.

All investments are made with judgment and care, not for speculation, considering the probable safety of capital as well as the probable income to be derived. At the time of purchase, the maturity of each security in the portfolio may not exceed five years and portfolio managers shall adhere to a semi-active portfolio management strategy.

All investment ratings shall be based on the security ratings at the time of purchase. In the event of a rating downgrade, the portfolio manager is to discuss such downgrade with the Chief Financial Officer with a recommendation on whether to sell or hold. The portfolio's average credit quality should be rated Aa3/AA- or better by Moody's and Standard and Poor's, respectively. Portfolio performance is reported each quarter. The quarterly reports describe investment performance, conformity with the policy, status of the portfolio and transactions made over the reporting period.

V. Fiscal 2023 Financial Plan



Fiscal 2023 Financial Plan

PTC's Fiscal 2023 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. Exhibits 4 and 5 show the Commission's financial plan for the ensuing fiscal year.

Exhibit 4 Projected Fiscal 2023 Financial Plan (\$ 000s), Fiscal Year End May 31

	2022	2023
Turnpike Operating Income		
Adjusted Gross Toll Revenues	1,448,922	1,517,333
Gross Non-Toll Revenues	40,040	40,440
Gross Operating Revenues	1,488,962	1,557,773
Operating Expense	380,000	425,219
Interest Income (Senior DSRF and GRF earnings)	11,834	11,864
Net Turnpike Revenues Before Debt Service	1,120,796	1,144,418
Senior Turnpike Revenue Bond Debt Service	318,025	385,325
Net Income Before Capital Expense and General Reserve	802,771	759,092
Capital Funding		
Construction Fund Beginning Balance	122,811	309,207
Newly Sized Senior Bond Proceeds (+)	506,950	101,832
Federal Fund Reimb. (+)	11,232	-
PAYGO Contribution (+)	210,718	250,000
Additional Transfer from Gen. Res. Fund (+)	19,605	-
Capital Expenditure (-)	529,880	661,038
Reconciliation (+)	(32,230)	-
Construction Fund Ending Balance	309,207	-
Cash Balances		
Cash Beginning Balance (excl. Liquidity)	329,029	286,592
Net Income (+)	802,771	759,092
PAYGO (-)	210,718	250,000
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	17,365	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	19,605	-
Transfer to Supplemental Capital Fund (-)	107,000	23,000
Other Transfers (-)	3,600	-
Reconciliation (+)	(55,446)	-
Liquidity Requirement Cashflow Set-aside (-)	25,879	6,881
Subordinate and Sub. Special Revenue Bonds DSRF Earnings (+)	6,169	6,184
Subordinate Bonds Debt Service (-)	332,283	333,185
Subordinate Special Revenue Bonds Debt Service (-)	49,481	53,427
Net Funds Remaining Before Act 44 Payments	316,592	385,375
Liquidity Balance	148,896	155,777
Debt Service Coverage Ratios		
Senior Lien		
Pledged Revenues	1,120,796	1,144,418
Debt Service	318,025	385,325
Coverage	3.52 x	2.97 x
Subordinate Lien		
Pledged Revenues	1,126,525	1,150,161
Debt Service	650,309	718,510
Coverage	1.73 x	1.60 x
Subordinate Special Revenue Lien		
Pledged Revenues	1,126,965	1,150,602
Debt Service	699,789	771,938
Coverage	1.61 x	1.49 x

Note: Pledged revenues include net revenues and debt service reserve fund interest earnings attributable to each lien



Exhibit 5
Projected Fiscal 2023 Financial Plan
(\$ 000s), Fiscal Year End May 31

	2022	2023
Act 44 Payment Sources		
Net Funds Remaining Before Act 44 Payments	316,592	385,375
Subordinate Bond Proceeds	420,000	-
Act 44 Payments		
Transit Capital/Other Payments	425,000	25,000
Transit Capital/Other Payments Sources		
Turnpike Cash	5,000	25,000
Tax-Exempt Subordinate Bond Proceeds	420,000	-
Transit Capital/Other Total Sources	425,000	25,000
Transit Operations Payments	25,000	25,000
Transit Operations Sources		
Turnpike Cash	25,000	25,000
Transit Operations Total Sources	25,000	25,000
Total Act 44 Payments	450,000	50,000
Total Act 44 Sources	450,000	50,000
Remaining Turnpike Cash	286,592	335,375
General Reserve Fund/Liquidity Requirement	435,488	491,152
Supplemental Capital Fund	94,709	59,649
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	530,197	550,801



The Fiscal 2023 Financial Plan and the long-term financial plan was developed based on the following assumptions and methodologies.

Revenue Forecasting

CDM Smith, PTC's traffic and revenue consultant, developed a full investment grade traffic and revenue forecast for the Turnpike in April 2018 to account for the annual toll increases implemented between 2009 and 2018, planned additional increases and projected economic conditions (the "2018 Traffic Study"). The 2018 Traffic Study was updated in April 2019, May 2020, December 2020, and May 2021, each time through a "Bring Down Letter" to reflect subsequent toll increases and actual traffic and toll revenue data at the time of the update. Based on the advice of CDM Smith, the regularly scheduled full investment grade study continues to be delayed in order to continue to evaluate the long-term implications of the COVID-19 pandemic and related socio-economic changes that impact traffic trends. The Commission is presently coordinating with CDM Smith to provide an updated Bring Down Letter for 2022. As the 2022 Bring Down Letter has not yet been finalized and given the need to submit the Act 44 Financial Plan to the Commonwealth by the statutorily mandated date of June 1st, the Fiscal 2023 Financial Plan has been prepared utilizing the May 2021 Bring Down Letter for toll revenue from Fiscal 2023 to 2057.

Estimated Toll Rates, Tolls and Other Revenues

Fiscal 2023 toll revenues reflect the full year impact of the toll increase implemented in January 2022 with an adjustment yielding an average toll rate increase of 5% as well as a partial year impact from an anticipated 5% toll increase in January of 2023. Toll revenues are projected to increase by 4.7% to \$1.52 billion in Fiscal 2023. Other PTC revenues, primarily consisting of ETC related fees, lease and rental fees and concession fees, result in total projected operating revenues of \$1.56 billion for Fiscal 2023. Interest income is projected to be \$18 million, which includes interest earned on the General Reserve Fund and the Senior, Subordinate and Subordinate Special Revenue debt service reserve funds.

PTC will continue to review and refine its Turnpike tolling strategies and revenue projections based on the continued recovery from the COVID-19 pandemic and on its traffic consultants' assessment of recent economic conditions and their expected long-term impact on traffic demand. The traffic and revenue analyses will help the Commission further optimize its toll rate setting strategy to balance the need to generate the required revenues to meet Turnpike needs and Act 44/Act 89 Payments, with the implementation of an equitable toll rate paid by customers that does not cause undue diversions to non-tolled highways. Refined estimates of traffic demand will also help guide the Commission's capital planning efforts to determine the timing and scope of capacity expansion needs to meet future traffic demand.

Operating, Capital and Other Expenditures

For Fiscal 2023, the Commission's operating expenses are budgeted to be just under 2% higher than Fiscal 2022 budget levels at \$425 million compared to \$417 million for Fiscal 2022. The cost for employee benefits is expected to decline \$12 million, or 11% from Fiscal 2022. For all remaining operating expenses under the control of the Commission, budget amounts increased by \$19 million, or 7.8%, in Fiscal 2023 with increased spending on information technology and service centers responsible for a majority of the increase.

Capital expenditures for the 2023 Ten Year Capital Plan are budgeted to be \$661 million for Fiscal 2023, almost equal to the budgeted amount for Fiscal 2022 from the Fiscal 2022 Ten Year Capital Plan.



During the course of the fiscal year, the Commission will evaluate updated pension contribution assumptions provided by the State Employees' Retirement System and funding strategies to manage OPEB obligations as well as continue to identify, evaluate and implement measures that provide recurring savings and operating efficiencies that continue to control future cost growth.

Debt service payments on the Commission's Senior Revenue Bonds for Fiscal 2023 are projected to be \$385 million. Combined Subordinate Revenue Bond and Subordinate Special Revenue Bond debt service is estimated to equal \$387 million. Compared to the Fiscal 2023 estimate shown in the Fiscal 2022 Financial Plan, total debt service costs for all three liens is expected to be 1.9% lower than previously projected.

Budgeted debt service does not include payments on separately secured Oil Franchise Tax Revenue Bonds and Registration Fee Revenue Bonds issued to finance the costs of the Mon/Fayette and Southern Beltway projects. Principal and interest on such bonds are not secured by or paid from PTC's toll revenues and are only obligations of the taxes and fees allocated to PTC by the Commonwealth to pay debt service on these bonds. Similarly, the capital needs for the Mon/Fayette and Southern Beltway, which are assumed to be funded with non-Turnpike sources, are not reflected in the financial plan.

Planned Borrowings

To meet its Fiscal 2023 capital expenditures, PTC expects to utilize \$309 million of proceeds from previously issued series of bonds, \$250 million in pay-as-you-go funding, as well as \$102 million in additional Senior Revenue Bond proceeds. Pay-as-you-go funding will be deployed to manage leverage and ensure financial flexibility. Depending upon market conditions, PTC may refund additional outstanding debt for savings.

For Senior Revenue Bond issuance, the bonds are assumed to be current interest, fixed rate bonds with a 30-year final maturity amortizing on a level debt service basis. Senior Revenue Bond issuance assumes the current market 'AAA' MMD Index with an additional 100 basis point market rate cushion and an 80 basis point credit spread. The bonds are expected to be issued with 5% coupons and a ten year-par call. See "VI. Long-Range Financial Plan – Financing Guidelines" for additional discussion of bonding assumptions.

No additional Subordinate Revenue Bond or Subordinate Special Revenue Bond issuances are assumed for Fiscal 2023.

Based on the above assumptions for revenues, operations and maintenance expense and debt service, Fiscal 2023 debt service coverage of the Commission's Senior Revenue Bonds is expected to be 2.97x, 1.60x on the Subordinate Revenue Bonds, and 1.49x on the Subordinate Special Revenue Bonds.

General Reserve Fund and Supplemental Capital Fund

In compliance with PTC's Liquidity Standard Policy, the Fiscal 2023 Financial Plan assumes that Commission retains a liquidity balance equal to at least 10% of annual budgeted revenues. PTC expects to exceed this requirement with an estimated ending balance for Fiscal 2023 of \$491 million, which includes a \$156 million liquidity level set aside in the General Reserve Fund.

The Commission also intends to contribute an additional \$23 million to the Supplemental Capital Fund in Fiscal 2023 to support additional capital projects, resulting in an estimated ending balance is \$60 million, providing an additional source of liquidity for the Commission.

Financing Initiatives

The Commission continues to successfully navigate through an evolving capital markets environment to meet its commitments on a timely basis. Using this year's financial plan as a guide, the Commission will evaluate alternative pay-as-you-go and debt financing structures that meet the PTC and Commonwealth's needs while preserving fiscal stability. Specific initiatives include:

- Continue the use of traditional fixed rate current interest bonds.
- Increasing the use of pay-as-you-go capital to reduce future debt issuance and leverage.
- Continually monitor interest rates to maximize the opportunity to both current and advance refund higher interest rate debt with lower interest rate debt.
- Assess the costs and benefits of variable rate and interest rate derivative strategies relative to current market conditions.
- Monitor actual financial results with financial plan assumptions and adjust the financial plan if circumstances arise that could affect the ability of the Commission to meet its Act 44/Act 89 Payments.
- Update financial management policies, as needed, to better reflect changing market conditions and Turnpike and Act 44/Act 89 Payments.
- Pursue innovative financing strategies that may allow the Commission to take advantage of flexible debt repayment terms and favorable borrowing rates.

VI. Long-Range Financial Plan

Long-Range Financial Plan

This section sets forth the assumptions and results of the PTC's Act 44 long-range financial plan to identify how the Commission can meet annual Turnpike obligations and Act 44/Act 89 Payments during the course of the Funding Agreement, through Fiscal 2057. Given the inherent uncertainties associated with long-range financial projections, the Commission recognizes the inevitability of needing to make substantial modifications to the financial plan over the course of the next four decades. Nevertheless, the Commission has developed a set of assumptions based on current conditions that it believes are a reasonable basis for preparing a long-range financial plan, as required under Act 44.

PTC's multi-year financial plan reflects several key factors:

- The Commission's assumptions and expectations reflecting the long-term traffic and revenue performance of the Turnpike.
- The Commission's goals to contain operating and maintenance expense growth.
- The Turnpike's capital needs under its near to medium term proposed ten-year capital plan and a sustained level of spending thereafter adjusted for inflation.
- Required Act 44/Act 89 Payments of \$50 million annually.
- The mix of debt and pay-as-you-go financing to meet Turnpike and Act 44 needs and maintenance of required liquidity levels.

Toll Revenues

The long-range financial plan reflects the Commission's commitment to operate and maintain its toll facilities, support a Turnpike capital investment program at levels consistent with the adopted ten-year plan and spending levels adjusted for inflation, and fully fund its Act 44/Act 89 Payments. To meet these operating, capital and Act 44/Act 89 Payment obligations and maintain appropriate coverage and liquidity ratios, the financial plan assumes Turnpike traffic volumes and toll rates revenues will increase at levels sufficient to comply with these parameters. The Fiscal 2023 Financial Plan assumes annual toll increase of 5% from Fiscal 2023 to 2025, with the increases then declining to 3% annually by Fiscal 2028. This toll plan allows the Commission to maintain debt service coverage ratios of at least 2.0x on annual debt service for its Senior Revenue Bonds, 1.30x on combined debt service for its 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. As part of the Act 44 financial planning process, the Commission will continue to annually review underlying economic conditions and traffic to establish toll rates to meet its goals.

Operations and Maintenance Expenses

Projected operating expenses are based on PTC's goal to contain annual operations and maintenance cost growth to 3% through 2026, 2.5% in 2027, and 2% annually thereafter. In addition to operating the Turnpike, these expenses include pension contributions as required by the State Employees Retirement System and funding OPEB obligations.

Capital Expenses

The financial plan assumes the Turnpike's proposed \$7.2 billion rolling ten-year capital plan through Fiscal 2032. With the decrease in the Commission's Act 44/Act 89 Payments, the Commission is continuing to focus



on System capital needs. To fund the \$7.2 billion Fiscal 2023 Ten Year Capital Plan, the Commission will have to commit \$4.2 billion in pay-as-you-go funding, \$2.7 billion in additional Senior Revenue Bond proceeds, approximately \$40 million in federal funds and \$309 million in proceeds from previously issued series of bonds. The additional bond proceeds are assumed to be funded by issuing an aggregate par amount of \$2.9 billion of Senior Revenue Bonds.

Although PTC is undertaking a significant investment to rebuild and rehabilitate Turnpike capital assets over the next ten years, there will be on-going capital needs to maintain the System in a state of good repair beyond the current ten-year plan. The financial plan assumes a sustained level of increased annual capital investment, ultimately reaching \$1.0 billion in Fiscal 2036. Thereafter, capital expenses grow by 2% annually throughout the term of the financial plan, reflecting inflationary growth. Over the Fiscal 2023-2057 period, total capital spending is estimated to be \$37.2 billion with \$3.2 billion of the long-term capital program expected to be paid from new bond proceeds raised from issuing a par amount of \$3.4 billion of Senior Revenue Bonds. Additional Senior Revenue Bonds are assumed to fund approximately 29% of Turnpike capital outlays from Fiscal 2023 to Fiscal 2036, with pay-as-you-go funding generally increasing while the debt contribution declines. All capital funding after Fiscal 2036 is from cash resources.

Act 44/Act 89 Payments

PTC will meet its Act 44/Act 89 Payments of \$50 million annually.

Financing Guidelines

The following guidelines were used to develop the financing strategy for the financial plan:

Turnpike financial obligations are accounted for separately to clearly define the flow of Turnpike resources to Turnpike operating expenses, capital expenses, debt service and Act 44/Act 89 Payments. Debt service coverage provided by net revenues is targeted to be at least 1.30x for combined Senior Revenue Bond and Subordinate Revenue Bond debt service in order to maintain financial flexibility. Debt service coverage provided by net revenues is targeted to be at least 1.20x for combined Senior Revenue Bond, Subordinate Revenue Bond and outstanding Subordinate Special Revenue Bond debt service. After meeting the Turnpike General Reserve Fund policy where the balance equals at least 10% of that fiscal year's revenues, a portion of the remaining revenues are used to supplement pay-as-you-go capital or for Act 44 purposes, either directly (through pay-as-you-go contributions) or indirectly (through debt service payments on Subordinate Revenue Bonds). Contributions from the Turnpike General Reserve Fund to fund \$50 million in Act 44/Act 89 Payments annually through Fiscal 2057 are expected.

- The Senior Revenue Bonds reflect the following structural assumptions:
 - Base yields reflect current 'AAA' MMD rates with an additional 100 basis point market rate cushion.
 - To account for the tax-exempt Senior Revenue Bonds credit spread over 'AAA' MMD rates, an additional 80 basis points is assumed. The Senior Revenue Bonds are assumed to be uninsured.
 - The Senior Revenue Bonds feature a debt service reserve fund equal to aggregate maximum annual debt service, but no greater than 10% of proceeds to comply with IRS tax exempt requirements.
 - Issuance costs include \$11 per \$1000 of par for underwriting and other issuance expenses.
 - Current interest bonds with 5% coupons are assumed for each issuance with a ten-year par call.
 - Each issuance amortizes over thirty years with a level debt service structure.

- A minimum debt service coverage ratio of at least 2.00x is assumed in order to maintain financial flexibility, provide resources for pay-as-you-go capital, meet liquidity requirements and retain mid-investment grade ratings to ensure broad market access.

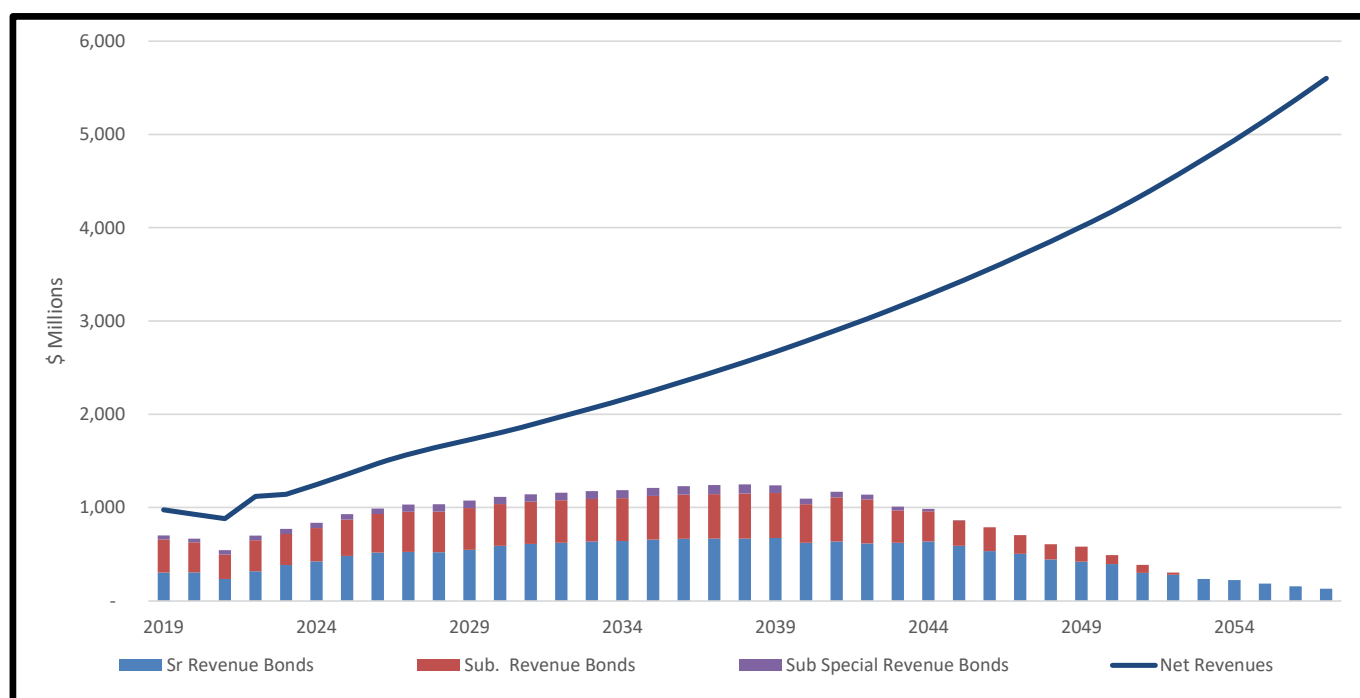
Financial Plan Results

During the course of the financial plan, 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. The Appendix presents the financial plan annual cash flow.

Given capital needs and Act 44/Act 89 Payments, the Commission is projected to continue to regularly access the capital markets to finance its needs. Over the Fiscal 2023 to 2057 plan period, PTC is projected to issue \$3.4 billion of Senior Revenue Bonds.

Exhibit 6 presents both historic and projected Turnpike net revenues relative to annual debt service obligations. Projected toll revenues are estimated to provide sufficient debt service coverage. Future Senior Revenue Bond debt service coverage is at least 2.82x and reaches 3.17x in 2032 and continues to increase thereafter, which should enable the Turnpike to retain its current mid-investment grade bond ratings. Future Subordinate Revenue Bond debt service coverage is lower, but at least 1.57x and reaches 1.84x in 2032, while Subordinate Special Revenue Bond debt service coverage is no less than 1.47x and reaches 1.71x in 2032. Both coverage ratios continue to increase thereafter.

Exhibit 6
Long Range Financial Plan
Turnpike Net Revenues and Debt Service
(\$millions) Fiscal Years Ending 5/31





To provide added protection, the financial plan assumes the Commission maintains at least 10% of annual gross revenues in the General Reserve Fund, Supplemental Capital Fund and Reserve Maintenance Fund. This internal liquidity is available to help the Commission meet its obligations in the event of a short term disruption, lower than expected revenues or higher than expected obligations.

Although the financial plan is based on reasonable financial assumptions, PTC recognizes that there are inherent uncertainties in projecting the Commission's resources and obligations over a thirty-five year 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 and/or greater than projected cost increases. To accommodate these risks, the financial plan requires that PTC maintain strong debt service coverage and preserve internal liquidity. Nevertheless, it is also important to assess how the combination of downside risks may impact the financial plan and to identify remediation measures the Commission could implement to maintain fiscal stability. PTC will monitor its performance relative to the financial plan and take corrective action if costs are higher than projected and/or toll revenues are less than expected. While under such a scenario, toll rates may need to be increased at higher rates, the Commission will explore strategies to contain cost growth or reprioritize capital initiatives to manage the level of rate adjustments and maintain fiscal stability.

VI. Appendices



Appendices

- A. Financial Plan Cash Flows**
- B. Financial Management Policies**

A. Financial Plan Cash Flows

Pennsylvania Turnpike Commission
Act 44 Financial Plan
(\$000) Fiscal Year End 5/31

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Turnpike Operating Income										
Adjusted Gross Toll Revenues (+)	1,327,031	1,247,779	1,190,419	1,448,922	1,517,333	1,632,077	1,757,049	1,885,782	1,996,176	2,081,919
Gross Non-Toll Revenues (+)	9,574	36,004	39,753	40,040	40,440	40,844	41,252	41,665	42,082	42,503
Gross Operating Revenues (+)	1,336,605	1,283,783	1,230,172	1,488,962	1,557,773	1,672,921	1,798,301	1,927,447	2,038,258	2,124,422
Operating Expense (-)	376,503	376,164	361,822	380,000	425,219	437,976	451,115	464,648	476,264	485,790
Interest Income (Senior DSRF and GRF earnings) (+)	17,155	20,605	13,391	11,834	11,864	11,923	11,983	12,042	12,103	12,163
Net Turnpike Revenues Before Debt Service	977,257	928,224	881,741	1,120,796	1,144,418	1,246,869	1,359,169	1,474,841	1,574,097	1,650,796
Senior Turnpike Revenue Bond Debt Service	303,781	306,338	234,905	318,025	385,325	424,726	482,003	519,759	523,560	521,755
Net Income Before Capital Expense and General Reserve	673,476	621,886	646,836	802,771	759,092	822,143	877,166	955,082	1,050,536	1,129,041
Capital Funding										
Construction Fund Beginning Balance	203,179	129,262	193,315	122,811	309,207	-	-	20,000	20,000	-
Newly Sized Senior Bond Proceeds (+)	345,000	488,400	421,794	506,950	101,832	425,319	425,779	348,838	297,358	283,154
Federal Fund Reimb. (+)	58,843	5,697	1,239	11,232	-	-	20,000	20,000	-	-
PAYGO Contribution (+)	100,000	129,569	59,100	210,718	250,000	250,000	300,000	350,000	400,000	450,000
Additional Transfer from Gen. Res. Fund	-	-	-	19,605	-	-	-	-	-	-
Capital Expenditure (-)	550,128	554,861	552,868	529,880	661,038	675,319	725,779	718,838	717,358	733,154
Reconciliation (+)	(27,632)	(4,751)	231	(32,230)	-	-	-	-	-	-
Construction Fund Ending Balance	129,262	193,315	122,811	309,207	-	-	20,000	20,000	-	-
Cash Balances										
Cash Beginning Balance (excl. Liquidity)	225,050	257,735	275,953	329,029	286,592	335,375	440,331	513,979	591,262	678,322
Net Income (+)	673,476	621,886	646,836	802,771	759,092	822,143	877,166	955,082	1,050,536	1,129,041
PAYGO Contribution (-)	100,000	129,569	59,100	210,718	250,000	250,000	300,000	350,000	400,000	450,000
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	53,000	51,254	143,115	17,365	-	-	-	-	-	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	-	-	-	19,605	-	-	-	-	-	-
Supplemental Capital Fund Deposit (-)	-	-	-	107,000	23,000	-	-	-	-	-
Other Transfers (-)	-	-	-	3,600	-	-	-	-	-	-
Reconciliation (+)	(32,000)	32,523	(57,392)	(55,446)	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	13,533	-	-	25,879	6,881	11,515	12,538	12,915	11,081	8,616
FRN Redemptions	50,000	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,638	6,758	5,514	5,729	5,743	5,772	5,801	5,830	5,859	5,888
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	526	638	462	440	441	443	446	448	450	452
Cash Ending Balance (excl. Liquidity)	656,157	738,717	669,158	698,356	771,987	902,218	1,011,206	1,112,424	1,237,026	1,355,086
Liquidity Balance	133,661	128,378	123,017	148,896	155,777	167,292	179,830	192,745	203,826	212,442
Cash Ending Balance (excl. Liquidity)	656,157	738,717	669,158	698,356	771,987	902,218	1,011,206	1,112,424	1,237,026	1,355,086
Subordinate Bonds Debt Service	355,247	320,707	261,311	332,283	333,185	355,304	389,313	412,719	432,765	437,306
Subordinate Special Revenue Bonds Debt Service	43,175	42,057	48,818	49,481	53,427	56,583	57,914	58,443	75,939	77,470
Net Funds Remaining Before Act 44 Payments	257,735	375,953	359,029	316,592	385,375	490,331	563,979	641,262	728,322	840,310

Pennsylvania Turnpike Commission
Act 44 Financial Plan
(\$000) Fiscal Year End 5/31

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Act 44 Payment Sources										
Net Funds Remaining Before Act 44 Payments	-	375,953	359,029	316,592	385,375	490,331	563,979	641,262	728,322	840,310
Subordinate Bond Proceeds	-	800,000	420,000	420,000	-	-	-	-	-	-
Act 44 Payments										
Transit Capital/Other Payments	-	850,000	425,000	425,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Capital/Other Payments Sources										
Turnpike Cash	-	50,000	5,000	5,000	25,000	25,000	25,000	25,000	25,000	25,000
Tax-Exempt Subordinate Bond Proceeds	-	800,000	420,000	420,000	-	-	-	-	-	-
Transit Capital/Other Total Sources	-	850,000	425,000	425,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Payments	-	50,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Sources										
Turnpike Cash	-	50,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Total Sources	-	50,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total Act 44 Payments	-	900,000	450,000	450,000	50,000	50,000	50,000	50,000	50,000	50,000
Total Act 44 Sources	-	900,000	450,000	450,000	50,000	50,000	50,000	50,000	50,000	50,000
Remaining Turnpike Cash	257,735	275,953	329,029	286,592	335,375	440,331	513,979	591,262	678,322	790,310
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	391,569	404,331	452,046	435,488	491,152	607,623	693,809	784,007	882,147	1,002,753
Supplemental Capital Fund										
Starting Balance	-	-	-	-	94,709	59,648.5	28,824.5	5,730.5	-	-
Deposits (+)	-	-	-	107,000	23,000	-	-	-	-	-
Draws (-)	-	-	-	12,337	58,060	30,824	23,094	5,731	-	-
Reconciliation (+)	-	-	-	45	-	-	-	-	-	-
Ending Balance	-	-	-	94,709	59,649	28,825	5,731	-	-	-
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	391,569	404,331	452,046	530,197	550,801	636,447	699,540	784,007	882,147	1,002,753
Coverage Calculations										
Mainline Debt Service Coverage										
Senior Lien										
Pledged Revenues	977,257	928,224	881,741	1,120,796	1,144,418	1,246,869	1,359,169	1,474,841	1,574,097	1,650,796
Debt Service	(303,781)	(306,338)	(234,905)	(318,025)	(385,325)	(424,726)	(482,003)	(519,759)	(523,560)	(521,755)
Coverage	3.22 x	3.03 x	3.75 x	3.52 x	2.97 x	2.94 x	2.82 x	2.84 x	3.01 x	3.16 x
Subordinate Lien										
Pledged Revenues	982,895	934,982	887,255	1,126,525	1,150,161	1,252,641	1,364,970	1,480,671	1,579,956	1,656,684
Debt Service	(659,028)	(627,045)	(496,216)	(650,309)	(718,510)	(780,030)	(871,316)	(932,478)	(956,325)	(959,061)
Coverage	1.49 x	1.49 x	1.79 x	1.73 x	1.60 x	1.61 x	1.57 x	1.59 x	1.65 x	1.73 x
Subordinate Special Revenue Lien										
Pledged Revenues	983,421	935,620	887,717	1,126,965	1,150,602	1,253,084	1,365,416	1,481,119	1,580,406	1,657,136
Debt Service	(702,203)	(669,102)	(545,034)	(699,789)	(771,938)	(836,613)	(929,230)	(990,921)	(1,032,265)	(1,036,531)
Coverage	1.40 x	1.40 x	1.63 x	1.61 x	1.49 x	1.50 x	1.47 x	1.49 x	1.53 x	1.60 x

Pennsylvania Turnpike Commission
Act 44 Financial Plan
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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Turnpike Operating Income											
Adjusted Gross Toll Revenues (+)	2,165,751	2,254,878	2,347,656	2,444,003	2,543,857	2,647,033	2,753,677	2,863,919	2,977,795	3,094,621	3,215,332
Gross Non-Toll Revenues (+)	42,928	43,357	43,791	44,229	44,671	45,118	45,569	46,025	46,485	46,950	47,419
Gross Operating Revenues (+)	2,208,679	2,298,236	2,391,447	2,488,232	2,588,528	2,692,151	2,799,246	2,909,944	3,024,280	3,141,571	3,262,751
Operating Expense (-)	495,506	505,416	515,524	525,834	536,351	547,078	558,020	569,180	580,564	592,175	604,019
Interest Income (Senior DSRF and GRF earnings) (+)	12,224	12,285	12,347	12,408	12,470	12,533	12,595	12,658	12,722	12,785	12,849
Net Turnpike Revenues Before Debt Service	1,725,397	1,805,105	1,888,270	1,974,806	2,064,647	2,157,605	2,253,821	2,353,422	2,456,438	2,562,181	2,671,581
Senior Turnpike Revenue Bond Debt Service	549,018	589,779	611,488	623,772	637,110	641,534	656,384	665,619	668,370	668,871	673,598
Net Income Before Capital Expense and General Reserve	1,176,379	1,215,326	1,276,782	1,351,034	1,427,537	1,516,071	1,597,437	1,687,803	1,788,068	1,893,310	1,997,983
Capital Funding											
Construction Fund Beginning Balance	-	-	-	-	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	293,474	232,910	157,522	124,833	150,000	125,000	125,000	75,000	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-	-	-	-	-
PAYGO Contribution (+)	475,000	525,000	575,000	625,000	700,000	775,000	825,000	925,000	1,020,000	1,040,400	1,061,208
Additional Transfer from Gen. Res. Fund	-	-	-	-	-	-	-	-	-	-	-
Capital Expenditure (-)	768,474	757,910	732,522	749,833	850,000	900,000	950,000	1,000,000	1,020,000	1,040,400	1,061,208
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Cash Balances											
Cash Beginning Balance (excl. Liquidity)	790,310	913,087	1,024,775	1,142,066	1,279,835	1,414,885	1,555,151	1,717,590	1,860,678	1,999,806	2,217,008
Net Income (+)	1,176,379	1,215,326	1,276,782	1,351,034	1,427,537	1,516,071	1,597,437	1,687,803	1,788,068	1,893,310	1,997,983
PAYGO Contribution (-)	475,000	525,000	575,000	625,000	700,000	775,000	825,000	925,000	1,020,000	1,040,400	1,061,208
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-	-	-	-	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	-	-	-	-	-	-	-	-	-	-	-
Supplemental Capital Fund Deposit (-)	-	-	-	-	-	-	-	-	-	-	-
Other Transfers (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	8,426	8,956	9,321	9,678	10,030	10,362	10,710	11,070	11,434	11,729	12,118
FRN Redemptions	-	-	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	455	455	455	455	455	455	455	455	455	455	455
Cash Ending Balance (excl. Liquidity)	1,489,637	1,600,830	1,723,609	1,864,794	2,003,716	2,151,967	2,323,251	2,475,696	2,623,686	2,847,360	3,148,038
Liquidity Balance	220,868	229,824	239,145	248,823	258,853	269,215	279,925	290,994	302,428	314,157	326,275
Cash Ending Balance (excl. Liquidity)	1,489,637	1,600,830	1,723,609	1,864,794	2,003,716	2,151,967	2,323,251	2,475,696	2,623,686	2,847,360	3,148,038
Subordinate Bonds Debt Service	447,302	448,436	452,368	453,674	455,255	460,982	468,157	472,126	477,873	481,937	483,840
Subordinate Special Revenue Bonds Debt Service	79,247	77,619	79,176	81,285	83,576	85,834	87,504	92,892	96,007	98,415	83,156
Net Funds Remaining Before Act 44 Payments	963,087	1,074,775	1,192,066	1,329,835	1,464,885	1,605,151	1,767,590	1,910,678	2,049,806	2,267,008	2,581,042

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Act 44 Payment Sources											
Net Funds Remaining Before Act 44 Payments	963,087	1,074,775	1,192,066	1,329,835	1,464,885	1,605,151	1,767,590	1,910,678	2,049,806	2,267,008	2,581,042
Subordinate Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Act 44 Payments											
Transit Capital/Other Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Capital/Other Payments Sources											
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Tax-Exempt Subordinate Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Transit Capital/Other Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Sources											
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total Act 44 Payments	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Total Act 44 Sources	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Remaining Turnpike Cash	913,087	1,024,775	1,142,066	1,279,835	1,414,885	1,555,151	1,717,590	1,860,678	1,999,806	2,217,008	2,531,042
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	1,133,955	1,254,599	1,381,211	1,528,659	1,673,738	1,824,366	1,997,514	2,151,673	2,302,234	2,531,165	2,857,317
Supplemental Capital Fund											
Starting Balance	-	-	-	-	-	-	-	-	-	-	-
Deposits (+)	-	-	-	-	-	-	-	-	-	-	-
Draws (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	1,133,955	1,254,599	1,381,211	1,528,659	1,673,738	1,824,366	1,997,514	2,151,673	2,302,234	2,531,165	2,857,317
Coverage Calculations											
Mainline Debt Service Coverage											
Senior Lien											
Pledged Revenues	1,725,397	1,805,105	1,888,270	1,974,806	2,064,647	2,157,605	2,253,821	2,353,422	2,456,438	2,562,181	2,671,581
Debt Service	(549,018)	(589,779)	(611,488)	(623,772)	(637,110)	(641,534)	(656,384)	(665,619)	(668,370)	(668,871)	(673,598)
Coverage	3.14 x	3.06 x	3.09 x	3.17 x	3.24 x	3.36 x	3.43 x	3.54 x	3.68 x	3.83 x	3.97 x
Subordinate Lien											
Pledged Revenues	1,731,315	1,811,023	1,894,188	1,980,724	2,070,565	2,163,523	2,259,739	2,359,340	2,462,356	2,568,099	2,677,499
Debt Service	(996,320)	(1,038,215)	(1,063,855)	(1,077,446)	(1,092,365)	(1,102,516)	(1,124,541)	(1,137,745)	(1,146,243)	(1,150,808)	(1,157,438)
Coverage	1.74 x	1.74 x	1.78 x	1.84 x	1.90 x	1.96 x	2.01 x	2.07 x	2.15 x	2.23 x	2.31 x
Subordinate Special Revenue Lien											
Pledged Revenues	1,731,770	1,811,478	1,894,643	1,981,179	2,071,020	2,163,978	2,260,194	2,359,795	2,462,811	2,568,554	2,677,954
Debt Service	(1,075,567)	(1,115,834)	(1,143,031)	(1,158,731)	(1,175,941)	(1,188,350)	(1,212,046)	(1,230,636)	(1,242,250)	(1,249,223)	(1,240,594)
Coverage	1.61 x	1.62 x	1.66 x	1.71 x	1.76 x	1.82 x	1.86 x	1.92 x	1.98 x	2.06 x	2.16 x

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	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Turnpike Operating Income											
Adjusted Gross Toll Revenues (+)	3,340,365	3,469,811	3,603,760	3,742,260	3,885,552	4,033,803	4,187,131	4,345,897	4,510,342	4,680,822	4,857,759
Gross Non-Toll Revenues (+)	47,893	48,372	48,856	49,345	49,838	50,336	50,840	51,348	51,862	52,380	52,904
Gross Operating Revenues (+)	3,388,258	3,518,183	3,652,616	3,791,605	3,935,390	4,084,140	4,237,971	4,397,245	4,562,204	4,733,203	4,910,664
Operating Expense (-)	616,099	628,421	640,989	653,809	666,885	680,223	693,827	707,704	721,858	736,295	751,021
Interest Income (Senior DSRF and GRF earnings) (+)	12,913	12,978	13,043	13,108	13,174	13,239	13,306	13,372	13,439	13,506	13,574
Net Turnpike Revenues Before Debt Service	2,785,073	2,902,740	3,024,670	3,150,904	3,281,679	3,417,156	3,557,449	3,702,914	3,853,785	4,010,414	4,173,216
Senior Turnpike Revenue Bond Debt Service	621,155	637,505	617,927	621,811	636,919	591,604	534,013	505,065	445,654	422,769	395,531
Net Income Before Capital Expense and General Reserve	2,163,917	2,265,235	2,406,742	2,529,093	2,644,759	2,825,552	3,023,436	3,197,848	3,408,131	3,587,645	3,777,685
Capital Funding											
Construction Fund Beginning Balance	-	-	-	-	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	-	-	-	-	-	-	-	-	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-	-	-	-	-
PAYGO Contribution (+)	1,082,432	1,104,081	1,126,162	1,148,686	1,171,659	1,195,093	1,218,994	1,243,374	1,268,242	1,293,607	1,319,479
Additional Transfer from Gen. Res. Fund	-	-	-	-	-	-	-	-	-	-	-
Capital Expenditure (-)	1,082,432	1,104,081	1,126,162	1,148,686	1,171,659	1,195,093	1,218,994	1,243,374	1,268,242	1,293,607	1,319,479
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Cash Balances											
Cash Beginning Balance (excl. Liquidity)	2,531,042	3,081,475	3,653,494	4,354,594	5,290,740	6,355,951	7,651,663	9,141,914	10,834,837	12,751,094	14,824,003
Net Income (+)	2,163,917	2,265,235	2,406,742	2,529,093	2,644,759	2,825,552	3,023,436	3,197,848	3,408,131	3,587,645	3,777,685
PAYGO Contribution (-)	1,082,432	1,104,081	1,126,162	1,148,686	1,171,659	1,195,093	1,218,994	1,243,374	1,268,242	1,293,607	1,319,479
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-	-	-	-	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	-	-	-	-	-	-	-	-	-	-	-
Supplemental Capital Fund Deposit (-)	-	-	-	-	-	-	-	-	-	-	-
Other Transfers (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	12,551	12,992	13,443	13,899	14,379	14,875	15,383	15,927	16,496	17,100	17,746
FRN Redemptions	-	-	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918	5,918
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	455	455	455	455	455	455	-	-	-	-	-
Cash Ending Balance (excl. Liquidity)	3,606,350	4,236,010	4,927,003	5,727,476	6,755,834	7,977,908	9,446,639	11,086,379	12,964,148	15,033,951	17,270,382
Liquidity Balance	338,826	351,818	365,262	379,160	393,539	408,414	423,797	439,725	456,220	473,320	491,066
Cash Ending Balance (excl. Liquidity)	3,606,350	4,236,010	4,927,003	5,727,476	6,755,834	7,977,908	9,446,639	11,086,379	12,964,148	15,033,951	17,270,382
Subordinate Bonds Debt Service	415,807	472,508	469,310	347,894	325,229	271,069	254,725	201,542	163,054	159,948	96,251
Subordinate Special Revenue Bonds Debt Service	59,067	60,009	53,100	38,842	24,654	5,177	-	-	-	-	-
Net Funds Remaining Before Act 44 Payments	3,131,475	3,703,494	4,404,594	5,340,740	6,405,951	7,701,663	9,191,914	10,884,837	12,801,094	14,874,003	17,174,131

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	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Act 44 Payment Sources											
Net Funds Remaining Before Act 44 Payments	3,131,475	3,703,494	4,404,594	5,340,740	6,405,951	7,701,663	9,191,914	10,884,837	12,801,094	14,874,003	17,174,131
Subordinate Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Act 44 Payments											
Transit Capital/Other Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Capital/Other Payments Sources											
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Tax-Exempt Subordinate Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Transit Capital/Other Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Sources											
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total Act 44 Payments	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Total Act 44 Sources	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Remaining Turnpike Cash	3,081,475	3,653,494	4,354,594	5,290,740	6,355,951	7,651,663	9,141,914	10,834,837	12,751,094	14,824,003	17,124,131
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	3,420,301	4,005,312	4,719,856	5,669,900	6,749,490	8,060,077	9,565,712	11,274,562	13,207,315	15,297,324	17,615,197
Supplemental Capital Fund											
Starting Balance	-	-	-	-	-	-	-	-	-	-	-
Deposits (+)	-	-	-	-	-	-	-	-	-	-	-
Draws (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	3,420,301	4,005,312	4,719,856	5,669,900	6,749,490	8,060,077	9,565,712	11,274,562	13,207,315	15,297,324	17,615,197
Coverage Calculations											
Mainline Debt Service Coverage											
Senior Lien											
Pledged Revenues	2,785,073	2,902,740	3,024,670	3,150,904	3,281,679	3,417,156	3,557,449	3,702,914	3,853,785	4,010,414	4,173,216
Debt Service	(621,155)	(637,505)	(617,927)	(621,811)	(636,919)	(591,604)	(534,013)	(505,065)	(445,654)	(422,769)	(395,531)
Coverage	4.48 x	4.55 x	4.89 x	5.07 x	5.15 x	5.78 x	6.66 x	7.33 x	8.65 x	9.49 x	10.55 x
Subordinate Lien											
Pledged Revenues	2,790,991	2,908,658	3,030,588	3,156,822	3,287,597	3,423,074	3,563,367	3,708,832	3,859,703	4,016,332	4,179,134
Debt Service	(1,036,963)	(1,110,013)	(1,087,237)	(969,704)	(962,149)	(862,673)	(788,738)	(706,607)	(608,708)	(582,716)	(491,782)
Coverage	2.69 x	2.62 x	2.79 x	3.26 x	3.42 x	3.97 x	4.52 x	5.25 x	6.34 x	6.89 x	8.50 x
Subordinate Special Revenue Lien											
Pledged Revenues	2,791,446	2,909,113	3,031,043	3,157,277	3,288,052	3,423,529	3,563,367	3,708,832	3,859,703	4,016,332	4,179,134
Debt Service	(1,096,030)	(1,170,021)	(1,140,336)	(1,008,547)	(986,803)	(867,850)	(788,738)	(706,607)	(608,708)	(582,716)	(491,782)
Coverage	2.55 x	2.49 x	2.66 x	3.13 x	3.33 x	3.94 x	4.52 x	5.25 x	6.34 x	6.89 x	8.50 x


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	2051	2052	2053	2054	2055	2056	2057
<u>Turnpike Operating Income</u>							
Adjusted Gross Toll Revenues (+)	5,052,070	5,254,153	5,464,319	5,682,891	5,910,207	6,146,615	6,392,480
Gross Non-Toll Revenues (+)	53,433	53,967	54,507	55,052	55,603	56,159	56,720
Gross Operating Revenues (+)	5,105,503	5,308,120	5,518,826	5,737,944	5,965,810	6,202,774	6,449,200
Operating Expense (-)	766,042	781,362	796,990	812,929	829,188	845,772	862,687
Interest Income (Senior DSRF and GRF earnings) (+)	13,642	13,710	13,778	13,847	13,917	13,986	14,056
Net Turnpike Revenues Before Debt Service	4,353,103	4,540,468	4,735,615	4,938,862	5,150,538	5,370,989	5,600,569
Senior Turnpike Revenue Bond Debt Service	300,678	279,650	235,488	222,107	186,256	156,194	131,585
Net Income Before Capital Expense and General Reserve	4,052,425	4,260,818	4,500,127	4,716,755	4,964,282	5,214,794	5,468,984
<u>Capital Funding</u>							
Construction Fund Beginning Balance	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	-	-	-	-	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-
PAYGO Contribution (+)	1,345,868	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666
Additional Transfer from Gen. Res. Fund	-	-	-	-	-	-	-
Capital Expenditure (-)	1,345,868	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666
Reconciliation (+)	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-
<u>Cash Balances</u>							
Cash Beginning Balance (excl. Liquidity)	17,124,131	19,680,490	22,480,130	25,508,945	28,725,541	32,160,226	35,815,376
Net Income (+)	4,052,425	4,260,818	4,500,127	4,716,755	4,964,282	5,214,794	5,468,984
PAYGO Contribution (-)	1,345,868	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-
Additional Transfer to Res. Main. Fund for Capital Funding (-)	-	-	-	-	-	-	-
Supplemental Capital Fund Deposit (-)	-	-	-	-	-	-	-
Other Transfers (-)	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	19,484	20,262	21,071	21,912	22,787	23,696	24,643
FRN Redemptions	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,918	5,918	-	-	-	-	-
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	-	-	-	-	-	-	-
Cash Ending Balance (excl. Liquidity)	19,817,121	22,554,178	25,558,945	28,775,541	32,210,226	35,865,376	39,744,052
Liquidity Balance	510,550	530,812	551,883	573,794	596,581	620,277	644,920
Cash Ending Balance (excl. Liquidity)	19,817,121	22,554,178	25,558,945	28,775,541	32,210,226	35,865,376	39,744,052
Subordinate Bonds Debt Service	86,632	24,048	-	-	-	-	-
Subordinate Special Revenue Bonds Debt Service	-	-	-	-	-	-	-
Net Funds Remaining Before Act 44 Payments	19,730,490	22,530,130	25,558,945	28,775,541	32,210,226	35,865,376	39,744,052

Pennsylvania Turnpike Commission
Act 44 Financial Plan
(\$000) Fiscal Year End 5/31

	2051	2052	2053	2054	2055	2056	2057
Act 44 Payment Sources							
Net Funds Remaining Before Act 44 Payments	19,730,490	22,530,130	25,558,945	28,775,541	32,210,226	35,865,376	39,744,052
Subordinate Bond Proceeds	-	-	-	-	-	-	-
Act 44 Payments							
Transit Capital/Other Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Capital/Other Payments Sources							
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Tax-Exempt Subordinate Bond Proceeds	-	-	-	-	-	-	-
Transit Capital/Other Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Payments	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Sources							
Turnpike Cash	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transit Operations Total Sources	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total Act 44 Payments	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Total Act 44 Sources	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Remaining Turnpike Cash	19,680,490	22,480,130	25,508,945	28,725,541	32,160,226	35,815,376	39,694,052
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	20,191,040	23,010,942	26,060,827	29,299,336	32,756,807	36,435,654	40,338,972
Supplemental Capital Fund							
Starting Balance	-	-	-	-	-	-	-
Deposits (+)	-	-	-	-	-	-	-
Draws (-)	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-
Gen. Res. Fund/Liquidity Req. + Suppl. Capital Fund	20,191,040	23,010,942	26,060,827	29,299,336	32,756,807	36,435,654	40,338,972
Coverage Calculations							
Mainline Debt Service Coverage							
Senior Lien							
Pledged Revenues	4,353,103	4,540,468	4,735,615	4,938,862	5,150,538	5,370,989	5,600,569
Debt Service	(300,678)	(279,650)	(235,488)	(222,107)	(186,256)	(156,194)	(131,585)
Coverage	14.48 x	16.24 x	20.11 x	22.24 x	27.65 x	34.39 x	42.56 x
Subordinate Lien							
Pledged Revenues	4,359,021	4,546,386	4,735,615	4,938,862	5,150,538	5,370,989	5,600,569
Debt Service	(387,310)	(303,698)	(235,488)	(222,107)	(186,256)	(156,194)	(131,585)
Coverage	11.25 x	14.97 x	20.11 x	22.24 x	27.65 x	34.39 x	42.56 x
Subordinate Special Revenue Lien							
Pledged Revenues	4,359,021	4,546,386	4,735,615	4,938,862	5,150,538	5,370,989	5,600,569
Debt Service	(387,310)	(303,698)	(235,488)	(222,107)	(186,256)	(156,194)	(131,585)
Coverage	11.25 x	14.97 x	20.11 x	22.24 x	27.65 x	34.39 x	42.56 x

B. Financial Management Policies

 <div> PA TURNPIKE COMMISSION POLICY <i>This is a statement of official Pennsylvania Turnpike Policy</i> </div>		NUMBER: 7.03 APPROVAL DATE: 04-20-2004 EFFECTIVE DATE: 05-05-2004 REVISED DATE: 10-02-2018
POLICY SUBJECT: Debt Management	RESPONSIBLE DEPARTMENT: Finance and Administration	

A. Purpose:

The purpose of this policy is to establish sound, prudent and appropriate parameters and to provide guidance governing the issuance, management, continuing evaluation of and reporting on all debt obligations issued by the Pennsylvania Turnpike Commission ("Commission"), and to provide for the preparation and implementation necessary to assure compliance and conformity with this policy. Recognizing the importance and value to the Commission's creditworthiness and marketability of the Commission's bonds, this policy is intended to ensure that any and all potential debt structures comply with all applicable laws and regulations, as well as sound financial principles.

B. Policy Statement:

Under the governance and guidance of its various Indentures, the Commission may periodically enter into debt obligations to finance the construction of infrastructure and other assets, fund Act 44 obligations or to refinance existing debt for the purpose of meeting its responsibilities to users of the Turnpike. It is the Commission's desire and direction to assure that such debt obligations are issued and administered in such fashion as to obtain the best long-term financial advantage to the Commission.

The Commission will limit long-term borrowing to fund primarily capital improvements, projects, or equipment that cannot be financed from current financial resources. In an effort to maximize capital funding availability, the Commission shall utilize a reasonable mix of borrowing and pay-as-you-go funding. The Commission will not fund current operations or normal maintenance of the Commission from the proceeds of long-term financing.

The Commission shall seek to maintain investment grade bond ratings so borrowing costs are minimized and access to credit is preserved. It is imperative that the Commission demonstrates to rating agencies, investors, creditors and users of the Turnpike that Commission officials are following a prescribed financial plan and adhering to sound financial policy. The Commission will follow a practice of full disclosure by regularly communicating with bond rating agencies and Electronic Municipal Market Access (EMMA) operated by the Municipal Securities Rulemaking Board (MSRB) to inform them of the Commission's current financial condition and future financial outlook.

The Commission will strive to review this Debt Management Policy on an annual basis and update it on a timely basis as necessary.

C. Uses:

Bond proceeds are limited to financing the costs of planning, design, land acquisition, buildings, permanent structures, attached fixtures or equipment and “rolling stock” equipment or to fund Act 44 Obligations. Generally acceptable uses of bond proceeds can be viewed as items that can be capitalized where possible. Non-capital furnishings and supplies are not to be financed from bond proceeds. Refunding bond issues that are intended to restructure currently outstanding debt in order to reduce debt service costs are an acceptable use of bond proceeds.

The Commission may use short-term borrowing to finance operating needs but only in the case of an extreme financial liquidity condition that is beyond its control or reasonable ability to forecast.

D. Decision Analysis:

The Ten Year Capital Plan (“Capital Plan”) is the process for identifying both short and long-term needs, establishing priorities, examining long-range financial implications and the overall effectiveness of funding such long term needs with debt. The Capital Plan will be prepared on an annual basis and will list each project and its priority, its estimated cost and proposed funding source. The Commission will measure the impact of total debt service requirements including both outstanding and proposed debt obligations on one, five, ten and thirty-year periods. This analysis will include debt service maturities and payment patterns.

The Commission will use the services of qualified internal staff and external advisors to assist in the analysis, evaluation, and decision process. In addition to debt analysis, the decision process may include financial, government and economic reviews. For example, potential funding streams may be identified and their respective financial and legal impacts assessed versus various alternatives.

E. Specific Debt Policies, Ratios and Measurement

This section of the Debt Management Policy establishes guidance for target debt policies, ratios and measurements for the Commission in the following categories:

A. Constraints, Ratios and Measurements

B. Measurements of Future Flexibility

A. Constraints, Ratios and Measures

The following constraints, ratios and measures shall govern the issuance and administration of debt obligations:

1. Purposes of Issuance - The Commission will issue debt obligations for acquiring, constructing, reconstructing or renovating Capital Improvements or for refinancing existing debt obligations for any other permitted purpose. The Commission may also issue debt to meet its obligations under Act 44 of 2007.

2. Maximum Maturity - All debt obligations shall have a maximum maturity of the earlier of: (i) the estimated useful life of the Capital Improvements being financed; or, (ii) thirty years (unless a longer term is recommended by external advisors); or, (iii), in the event they are being issued to refinance outstanding debt obligations, the final maturity of the existing debt obligations being refinanced, or the latest estimate of the useful life of the capital improvements originally financed with the refunded bonds.

3. Annual Debt Service - The Commission will strive to structure debt issues to maintain a level or declining overall annual debt service structure.

4. Variable Rate Debt – The Commission will strive to maintain unhedged variable rate debt levels no greater than 25% of its total outstanding debt. On a periodic basis the Commission will reassess its acceptable level of variable rate debt assets in order to maintain a relative balance that mitigates potential long-term interest rate risk exposure under conditions of either rising or declining market interest rates.

5. Present Value Savings – The Commission shall continually monitor its outstanding debt for the purpose of determining if existing financial marketplace conditions afford the Commission the opportunity to refund existing issues and lessen debt service costs. In order to consider and favorably recommend the possible refunding of an issue, the Commission will generally look to attain at least a minimum acceptable threshold level of net Present Value (PV) savings over the life of the respective issue.

6. Bond Covenants and Laws - The Commission shall comply with all covenants and requirements of the bond resolutions, and state and federal laws authorizing and governing the issuance and administration of debt obligations. Further, the Commission shall consult with bond counsel regarding any such legal issues.

7. Rate Covenant as to Tolls for Traffic - The Commission covenants that at all times it will establish and maintain schedules of tolls for traffic over the system so that net revenues will be sufficient to provide funds for the greater of:

- a. 130% of annual debt service for such fiscal year on all applicable long-term indebtedness; or
- b. 100% of maximum annual debt service on all applicable long-term indebtedness, plus amounts of required transfers to Reserve Maintenance Fund and amounts to restore deficiencies in the Debt Service Reserve Fund;

plus, in either such case, the amount of short-term indebtedness outstanding for more than a year. In addition, net revenue in excess of the sum of the amounts of (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.

8. Debt Service Coverage Ratio (DSCR) - The Commission shall continually monitor its outstanding debt for the purpose of determining the DSCR are at or above policy ratios of 2.0x for Senior Revenue Debt, 1.3x for Subordinate Revenue Debt and 1.2x for all toll revenue supported Debt.

Capitalized terms used on this page are defined in the Commission's restated indenture for its toll revenue bonds.

B. Measurements of Future Flexibility

The Commission's future flexibility is governed through the following Indenture covenants and policies:

1. Limitations on Issuance of Additional Bonds – The Commission agrees that it will not issue any additional bonds constituting long-term indebtedness unless the following conditions are met:

- a. Historical pro forma debt service coverage ratio for the most recent fiscal year was not less than 1.75.
- b. Net revenues of the Commission during the preceding fiscal year were at least 130% of the maximum annual debt service and the projected debt service coverage ratio is not less than 1.30.

2. Structure of Additional Bonds - The Commission will attempt to structure bond issues with call provisions consistent with current market conditions and with a goal to maximize flexibility with future refunding opportunities. The Commission may use premium or discount bonds to enhance the marketing of the bonds and will analyze the cost in relation to future refunding opportunities and impact on debt service. Finally, the Commission may consider using capitalized interest only if there are budgetary constraints that need to be addressed by phasing in debt service impact.

3. Uncommitted General Fund Balance – The Commission will adhere to its Liquidity Policy that requires minimum balances to be maintained at all times in the Reserve Maintenance Fund and General Reserve Fund. The Policy is specifically stated as follows:

"The Pennsylvania Turnpike Commission will budget and maintain a cumulative Fund Balance, including cash balances in both the Reserve Maintenance Fund and the General Fund, equal to the greater of either the annual debt service of bonds not secured by a Debt Service Reserve Fund or 10% of annual budgeted revenues."

F. Sale of Bonds:

The Commission shall choose the method of sale of its bonds (competitive versus negotiated) in light of financial and market conditions as well as considering an assessment of the different benefits associated with each method.

The Commission shall require its financial advisor in conjunction with the senior underwriter(s) to prepare a marketing plan that includes recommended distribution rules (that will enhance the marketing effort),

descriptions of similar transactions in the market place and their rates of interest, prevailing market information and any other financial information deemed relevant.

G. Derivative Products:


The Commission will consider the use of derivative products in connection with the overall debt plan as a means of reducing debt service costs, increasing flexibility, hedging interest rate risk and accessing different investor markets. Additionally, the Commission will strive to only use derivative products after an analysis of the economic benefit of the interest rate swap market in relation to traditional financing methods has been undertaken and indicates a significant financial economic benefit without excessive or unacceptable levels of risk.

The Commission will comply with prevailing state law, if any, regarding the use of derivative products as well as certain disclosure requirements as specified by the Governmental Accounting Standard Board ("GASB"). The GASB recently issued GASB Technical Bulletin No. 2003-1 in June 2003 that requires a governmental entity to provide additional disclosure of derivatives not reported at fair value on the statement of net assets. The Commission has decided to incorporate the technical bulletin requirements into its audited financial statements ending fiscal year May 31, 2003.

The Commission has developed a separate Interest Rate Swap Policy. The policy addresses such issues as Scope and Authority, Conditions for the Use of Interest Rate Swaps, Interest Rate Swap Features, Evaluation, Management and Monitoring of Interest Rate Swap Risks and Selecting and Procuring Interest Rate Swaps. The Commission's policy and guidelines regarding Interest Rate Swaps are documented in the Commission's Interest Rate Swap Policy.

H. Disclosure and Financial Reporting:

The Commission will ensure that there is full and complete disclosure to rating agencies and other applicable regulatory bodies of all debt obligations. Offering documents for debt of the Commission shall also fully describe all outstanding debt as well all relevant information regarding the Commission and the particular financing transaction as required under federal securities law, subject to advice of bond counsel. The Commission will adhere to the guidelines for the financial reporting of debt obligations as recommended by the Government Accounting Standards Board ("GASB") or any other applicable regulatory agency.

 <div> PA TURNPIKE COMMISSION POLICY <i>This is a statement of official Pennsylvania Turnpike Policy</i> </div>		NUMBER: 7.01 APPROVAL DATE: 08-16-2001 EFFECTIVE DATE: 08-31-2011 REVISED DATE: 02-05-2019
POLICY SUBJECT: Investment Policy and Guidelines	RESPONSIBLE DEPARTMENT: Finance and Administration	

A. PURPOSE:

To define guidelines and operational factors governing the investment of financial assets of the Pennsylvania Turnpike Commission.

B. INVESTMENT OBJECTIVES:

- A. The safety and preservation of invested funds.
- B. To maintain adequate liquidity to meet Commission cash flow requirements.
- C. Maximize the Total Rate of Return.
- D. Provide preference to Pennsylvania investments when the ROI is no less than equal to the non-Pennsylvania investment.

C. INVESTMENT GUIDELINES:

1. Eligible Securities (to the extent permitted by any applicable indenture of trust)
 - a. U. S. Treasury Bills, Notes, Bonds, Strips
 - b. 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 have a combined capital and surplus of at least \$50,000,000.
 - c. 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.
 - d. 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 (Standard & Poors, Moody's and Fitch Investor Services).

- e. Obligations of any of federal agencies which obligations are backed by the full faith and credit of the United States of America, including (but not limited to):
- Export-Import Bank
 - Farm Credit System Financial Assistance Corporation
 - Farmers Home Administration
 - General Services Administration
 - U.S. Maritime Administration
 - Small Business Administration
 - Government National Mortgage Association (GNMA)
 - U.S. Dept. of Housing and Urban Development (PHAs)
 - Federal Housing Administration
- f. Senior debt obligations rated a minimum of “AA” by Standard & Poor’s Ratings Group (“Standard & Poor’s”) and “Aa2” by Moody’s Investors Service (“Moody’s”) issued by the following Government-Sponsored Enterprises (referred to as “Federal Agencies” throughout this policy):
- Federal Home Loan Bank
 - Federal Farm Credit Bank
 - Federal Home Loan Mortgage Corporation
 - Federal National Mortgage Association
- g. 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 Standard & Poor’s.
- h. 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 Standard & Poor’s, Moody’s and Fitch Investors Service (“Fitch”) and do not have a rating from any of Standard & Poor’s, 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 Standard & Poor’s (A1 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.
- i. Commercial Paper rated by at least two of Standard and Poor’s, Moody’s and Fitch and not less than “A-1/P-1/F-1” by Standard & Poor’s, Moody’s and Fitch, respectively.

- j. Corporate Bonds rated “Aa3/AA-” or better by Moody’s and S&P.
- k. Asset-Backed Securities rated “AAA” by Moody’s and S&P.
- l. Repurchase agreements with banks or primary government dealers reporting to the Federal Reserve Bank of New York (“Repurchasers”), collateralized by investments with a minimum 102% valuation in securities described above in paragraphs 1, 5 and 6.
- m. Share or Certificates in any short-term investment fund that invests not less than 90% of its assets in obligations described in (1) or (2) above.

2. Diversification

- a. No limitations are placed on Investments carrying the full faith and credit of the U.S. Government, including repurchase agreements collateralized by such investments.
- b. 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.
- c. Investments in Certificates of Deposit or Investment Agreements in total are limited to 30% of the Portfolio.
- d. The combined exposure to Commercial Paper, Corporate Bonds and Asset-Backed Securities is limited to 35% of the total Portfolio.
- e. Investments in any one single issuer (excluding U. S. Treasury and Federal Agency securities) are limited to 5% of the Portfolio.

3. Quality

All Investments shall be made with judgment and care, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of capital as well as the probable income to be derived.

All investment ratings shall be based on security ratings at the time of purchase. In the event of a downgrade in rating, the Portfolio Manager is to discuss such downgrade as soon as possible with the Chief Financial Officer or his designee with a recommendation on whether to sell or hold. The portfolio’s average credit quality should be rated Aa3/AA- or better by Moody’s / S&P.

4. Maturity

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 5 years.

5. Turnover

The Portfolio Managers shall follow a semi-active approach to investment management whereby 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.

D. PERFORMANCE BENCHMARK:

The Portfolio Manager shall work with the Chief Financial Officer or his designee to develop appropriate benchmarks for the various funds invested by the Commission, and shall compare the returns of the individual Portfolio segments to such benchmarks.


E. PERIODIC REVIEW:

The Investment Policy Committee of the Commission shall prepare an investment report to 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. Both Investment performance and conformity with this Investment Policy shall be reported.

F. AMENDMENTS:

This Investment Policy shall be reviewed annually by the Investment Policy Committee. Any amendments to the Investment Policy must be approved by the Commission.

This Policy Letter supersedes all previous Policy Letters on this subject.

 PA TURNPIKE COMMISSION POLICY <i>This is a statement of official Pennsylvania Turnpike Policy</i>		NUMBER: 7.07 APPROVAL DATE: 05-07-2013 EFFECTIVE DATE: 05-07-2013 REVISED DATE: 10-02-2018
POLICY SUBJECT: 7.07 – Interest Rate Swap Management Policy	RESPONSIBLE DEPARTMENT: Finance and Administration Department	

I. **Introduction:**

The purpose of the Interest Rate Swap Policy (“Policy”) of the Pennsylvania Turnpike Commission (“Commission”) is to establish 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” or “Agreements”) incurred in connection with the incurrence of debt obligations as authorized by the Commission’s Debt Policy (attached as Exhibit A). The Policy sets forth the manner of execution of Swaps and Agreements, provides for security and payment provisions, risk considerations, record keeping requirements and certain other relevant provisions as well as being responsive to (i) latest recommended practices of the Government Finance Officers Association regarding the contents of an interest rate swap policy, (ii) swap market practices and Protocols (as defined herein) in response to the Dodd-Frank Act (as defined herein), other applicable laws relating to Swaps and related rules or regulations, including, without limitation, rules and regulations of the Commodity Futures Trading Commission (the “CFTC”), the Securities and Exchange Commission (the “SEC”) (i.e., relating to security-based swaps or mixed interest rate and security-based swaps) or the Municipal Securities Rulemaking Board (the “MSRB”) and (iii) changes to, enhancements of, and deterioration in the swap market and its participants. The failure by the Commission to comply with any provision of this Policy shall not invalidate or impair any Swap or Agreement or the Commission’s adherence to a swap industry Protocol *e.g.*, the International Swaps and Derivatives Association, Inc. (“ISDA”) August 2012 Dodd-Frank Protocol, ISDA March 2013 Dodd-Frank Protocol, or similar agreements to which the Commission may adhere (including, without limitation, any bilateral agreement with a Swap counterparty).

II. **Scope and Authority:**

This Policy shall govern the Commission’s use and management of all Swaps. This Policy describes the circumstances and methods by which Swaps will be evaluated, executed, monitored, used, administered, managed and terminated, the guidelines to be employed when Swaps are used, and parties responsible for carrying out this Policy. While adherence to this Policy is required in applicable circumstances, the Commission recognizes that changes in the capital markets, agency programs, swap and financial market regulations and other unforeseen circumstances may from time to time produce situations that are not covered by the Policy and will require modifications or exceptions to achieve policy goals.

The Chief Financial Officer and the Assistant Chief Financial Officer for Financial Management are the designated administrators of the Commission’s Policy. The Chief Financial Officer shall

have the day-to-day responsibility and authority for structuring, implementing, and managing Swaps.

The Commission shall be authorized to enter into Swap transactions only with qualified Swap counterparties. The Commission, in consultation with the Chief Financial Officer, shall select the counterparties, in adherence with the criteria set forth in the Policy.

III. Conditions for the Use of Swaps:

A. General Usage

Due to the effects of continual innovation in the financial markets, this Policy recognizes that the reasons for, or desirability of, the use of Swaps may change over time. The Commission will 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.

B. Maximum Notional Amount

The Commission will limit the total notional amount of outstanding Swaps based on criteria set forth in this Policy regarding the proper management of risks, calculation of termination exposure, and development of a contingency plan. In no event, however, shall the Commission's exposure to any counterparty rated A3/A- or lower exceed 50% of the Commission total debt.

C. Impact of use of Liquidity

The Commission shall consider the impact of any variable rate bonds issued in combination with a Swap on the availability and cost of liquidity support for other Commission variable rate programs.

D. Call Option Value Considerations

When considering the relative advantage of a Swap versus fixed rate bonds, the Commission will take into consideration the value of any call option on fixed rate bonds.

E. Qualified Hedges

The Commission understands that, if payments on and receipts from the Agreement are to be taken into account in computing the yield on the related bonds, the Agreement must meet the requirements for a "qualified hedge" under federal tax law (sometimes referred to as an "integrated" Swap). In this situation, the terms of the Agreement and the process for entering into the Agreement must be reviewed and approved in advance by legal counsel. The Commission will use best efforts to integrate all Agreements as appropriate. In cases where the Commission is considering non-integration, it will consult legal counsel and its advisors to understand any implications.

F. Evaluation of Swap Risks

Prior to the execution of any Swap transaction, the Chief Financial Officer, the Assistant Chief Financial Officer for Financial Management, and Commission's Swap Advisor and legal counsel shall evaluate the proposed transaction and report the findings. Such a review shall include the identification and evaluation of the proposed benefit and potential risks.

Evaluation Methodology:

The Commission will review the following areas of potential risk for new and existing Swaps:

Type of Risk	Description	Evaluation Methodology
Basis risk	The mismatch between actual variable-rate debt service or the index on variable-rate debt and variable-rate indices used to determine Swap payments.	The Commission will review historical trading differentials between the variable-rate bond rates or indices and the index/variable-rate payments of the Swaps.
Tax risk	The risk created by potential tax events that could affect Swap payments.	The Commission will review the tax events in proposed Swap agreements. The Commission will evaluate the impact of potential changes in tax law on Swaps indexed to taxable rates such as LIBOR or LIBOR alternatives (SOFR, Fed Funds, etc.).
Counterparty risk	The failure of the counterparty to make required payments.	The Commission will monitor exposure levels, ratings thresholds, and collateralization requirements.
Termination risk	The need to terminate the transaction in a market that dictates a termination payment by the issuer.	The Commission will compute its termination exposure for all existing and proposed Swaps at market value with appropriate sensitivity and historic scenario analysis within the context of the Commission's ratings and termination triggers.
Swap/Bond Maturity Mismatch / Rollover risk	The mismatch of the maturity of the Swap and the maturity of the underlying bonds.	The Commission will determine, in accordance with its Debt Policy, its capacity to issue variable rate bonds. The Commission will consider any mismatch between bonds and Swaps that may create rollover/termination risk if the Swap maturity exceeds the bond maturity, the maturity of the liquidity facility or underlying floating-rate debt such as FRNs. As appropriate, the Commission will determine, in accordance with its Debt Policy, the capacity to have unhedged variable-rate debt in cases where the maturity of the Swap may be shorter than the maturity of the bonds.
Liquidity risk/Market Access risk	The inability to procure, continue or renew a liquidity facility, or access the market (private or public) for variable-rate debt.	The Commission will evaluate the expected availability of liquidity support or market access for swapped variable-rate debt.
Credit risk	The occurrence of an event modifying the credit rating of the issuer or its counterparty.	The Commission will monitor the ratings of its counterparties and insurers.
Collateral Posting risk	The risk of having to post collateral if the market valuation of a Swap is negative to the Commission.	The Commission will evaluate potential posting requirements through sensitivity analyses under different market and rating scenarios.
Amortization Mismatch risk	The risk that the notional of a Swap does not match the outstanding principal of the related debt.	The Commission will use best efforts to ensure that the notional schedule of a Swap will match the anticipated principal schedule of bonds being hedged.

Interest Rate risk	The risk that movements in levels of interest rates adversely impact the Commission's Swaps.	The Commission will monitor its exposure to interest rates and the impact to cash flows (taking into account the underlying hedged debt) as well market valuations.
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Prior to entering into any Protocol or similar agreement, the Chief Financial Officer, the Assistant Chief Financial Officer for Financial Management, and the Commission's Swap Advisor and legal counsel will evaluate prevailing market practices and requirements, legal requirements, the Protocol or similar agreement's impact on the efficiency of managing the Commission's Swaps, the Protocol or similar agreement's impact on communications with, and the receipt of information from, existing and potential Swap counterparties, and the extent of the need for, and the adequacy of, contractual or regulatory protections available to the Commission with respect to the Swaps to be covered by such Protocol or similar agreement.

IV. **Award:**

The Swap must contain financial terms and conditions that are fair and reasonable to be evidenced in a letter from a qualified independent Swap Advisor that satisfies the requirement for a "Qualified Independent Representative" under CFTC Regulation 23.450 implementing business conduct standards pursuant to the Dodd-Frank Act and any other applicable law relating to Swaps as described in Section VII.E. below.

V. **Swap Features:**

A. Swap Agreement

The Commission will use terms and conditions as set forth in the International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement and may use the ISDA August 2012 Dodd-Frank Protocol/March 2013 Dodd-Frank Protocol or such other documentation as the Commission, in consultation with its legal counsel and Swap Advisor, deems necessary in connection with meeting market requirements related to the swap provisions of the Dodd-Frank Act or other applicable laws relating to Swaps. The Swap agreement between the Commission and each counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions, provisions and safeguards as the Commission, in consultation with its legal counsel and Swap Advisor, deems necessary or desirable.

Subject to the provisions contained herein, the terms of any Commission Swap agreement shall use the following guidelines:

- (i) Downgrade provisions triggering termination shall in no event be worse than those affecting the counterparty.
- (ii) Governing law for Swaps will be the State of New York. Issues relating to jurisdiction, venue, waiver of jury trial and sovereign immunity will be subject to prevailing law and approval of the Commonwealth Attorney General. Preference will be given to language providing that the counterparty will consent to jurisdiction in the Pennsylvania courts with respect to enforcement of the Agreement.
- (iii) The specified indebtedness related to credit events in any Swap agreement should be narrowly defined and refer only to indebtedness of the Commission that could have a materially adverse effect on Commission's ability to perform its obligations under the Swap. Debt should typically only include obligations within the same lien as the Swap obligation.

- (iv) Collateral thresholds for the Swap provider should be set on a sliding scale reflective of credit ratings. Collateral requirements should be established and based upon the credit ratings of the Swap provider or guarantor. The Trustee or an independent third party or the counterparty if so directed should hold collateral.
- (v) Eligible collateral should generally be limited to Treasuries and obligations of Federal Agencies where the principal and interest are guaranteed by the United States. The market value of the collateral shall be marked to market no less than Bi-Monthly.
- (vi) The Commission shall have the right to optionally terminate a swap agreement at “market,” at any time over the term of the agreement.
- (vii) Termination value should be set by “second method” and “market quotation” methodology, unless the Commission deems an alternate appropriate.

B. Swap Counterparties

1. Credit Criteria

The Commission will make its best efforts to work with qualified Swap counterparties that have a general credit rating of: (i) at least “A3” or “A-” by two of the nationally recognized rating agencies and not rated lower than “A3” or “A” by any nationally recognized rating agency, or (ii) have a “non-terminating” “AAA” subsidiary as rated by at least one nationally recognized credit rating agency, provided that careful analysis of the risks and legal structure of such entity is conducted. The nationally recognized rating agencies are Moody’s Investors Services, Inc., Standard and Poor’s Rating Services, and Fitch Ratings.

In addition to the rating criteria specified herein, the Commission will seek additional credit enhancement and safeguards in the form of:

Contingent credit support or enhancement;

- i. Collateral consistent with the policies contained herein;
- ii. Ratings downgrade triggers;
- iii. Guaranty of parent, if any.

In addition, qualified Swap counterparties must have a demonstrated record of successfully executing and making markets for Swap transactions.

2. Counterparty Termination Exposure

In order to manage the Commission’s counterparty credit risk, and credit exposure to any one counterparty, the Commission will seek to avoid excessive concentration of exposure to a single counterparty or guarantor by diversifying its counterparty exposure over time. Exposure to any counterparty will be measured based on the aggregate termination value of all Swaps entered into with the counterparty, as well as notional amount and sensitivity to movements in interest rates, SIFMA/LIBOR ratios, and in the case of option-based products, volatility. Termination value will be determined at least monthly, based on a mid-mark-to-market calculation of a Swap given the market conditions on the valuation date. Aggregate Swap termination value for each counterparty should take into account netting of offsetting transactions (i.e. fixed-to- floating and floating-to-fixed).

C. Term and Notional Amount

For Swaps tied to an issued series of bonds, the term of the Swap agreement shall not extend beyond the final maturity date of the related bonds. The total net notional amount of all Swaps related to a bond issue should not exceed the amount of outstanding bonds. In calculating the net notional amount, netting credit shall be given to any Swaps that offset each other for a specific bond transaction.

D. Security and Source of Repayment

The Commission may use the same security and source of repayment (pledged revenues) for Swaps as is used for the bonds that are hedged or carried by the Swap, if any, but shall consider the economic costs and benefits of subordinating the Commission's payments and/or termination payment under the Swap. The Commission shall consult with legal counsel regarding the legal requirements associated with making the payments under the Swap on a parity or non-parity basis with outstanding Commission debt.

E. Prohibited Agreements

The Commission will not use Agreements that:

- i. Are speculative or create extraordinary leverage as risk;
- ii. Lack adequate liquidity to terminate without incurring a significant bid/ask spread;
- iii. Provide insufficient price transparency to allow reasonable valuation.

VI. Managing Ongoing Swap Risks:

A. Amendments, Modifications, Novations and Terminations

To permit the Commission to minimize risks, burdens or costs associated with, and to have the flexibility to manage the continuing obligations under, each Swap, and any related agreement necessary for the consummation of the transactions contemplated by each Swap (in each case, including without limitation, managing actual or expected collateral requirements, protecting against the risk of counterparty default, minimizing the risk of variations or increases in financing costs and ensuring compliance with applicable law), the Commission may enter into amendments, modifications or novations of, or optionally terminate, in whole or in part, any Swap or any Agreement based on the written advice of a Swap Advisor, that (a) the amendment, modification, novation or optional termination is (i) justified by the corresponding benefit to the Commission, and (ii) commercially reasonable based on then-current market conditions, and (b) any payments made or to be made by the counterparty to the Commission, or by the Commission to the counterparty, are fair value for such amendment, modification, novation or optional termination, given the credit of the counterparty, the terms and conditions of the amendment, modification, novation or optional termination, and market conditions at the time of the amendment, modification, novation or optional termination.

B. Swap Portfolio Review

1. Annual Swap Report

The Assistant Chief Financial Officer for Financial Management, in consultation with the Commission's Swap Advisor and legal counsel, will evaluate the risks associated with

outstanding Swaps at least annually and provide to the Senior Executives and the Commissioners a written report of the findings. This evaluation will include the following information:

- i. A description of all outstanding Swaps, including related bond series, types of Swaps, rates paid and received by Commission, existing notional amount, the average life and remaining term of each Swap agreement, and the current mark to market value of all outstanding Swaps.
- ii. The credit rating of each Swap counterparty, parent, guarantor, and credit enhancer insuring Swap payments, if any.
- iii. Actual collateral posting by Swap counterparty, if any, per Swap agreement and in total by Swap counterparty.
- iv. Information concerning any material event involving outstanding Swap agreements, including a default by a Swap counterparty, counterparty downgrade, or termination.
- v. An updated contingency plan to replace, or fund a termination payment in the event an outstanding Swap is terminated.
- vi. The status of any liquidity support used in connection with Swaps, including the remaining term and current fee, if any.

The Assistant Chief Financial Officer for Financial Management shall review the Policy at least annually, and suggest revisions or updates as deemed appropriate.

2. Contingency Plan

The Assistant Chief Financial Officer for Financial Management, in consultation with the Commission's Swap Advisor and legal counsel, shall compute the mark to market exposure of each of its Swaps and its total Swap mark to market exposure at least annually and prepare a contingency plan to either replace the Swaps or fund the termination payments, if any, in the event one or more outstanding Swaps are terminated. The Assistant Chief Financial Officer for Financial Management shall assess the ability to obtain replacement Swaps and identify revenue sources to fund potential termination payments. When appropriate, the Assistant Chief Financial Officer for Financial Management shall also evaluate the economic costs and benefits of incorporating a provision into the Swap agreement that will allow the Commission to make termination payments over time.

3. Termination Matrix

The Assistant Chief Financial Officer for Financial Management, in consultation with the Commission's Swap Advisor and legal counsel, shall prepare a matrix for each individual Swap and for all Swaps in the aggregate setting forth the termination costs under various interest rate scenarios.

C. Terminating Interest Rate Swaps

1. Optional Termination

The Commission, in consultation with its Swap Advisor and legal counsel, may optionally terminate a Swap subject to complying with the requirements set forth in Section VI.A. above.

2. Termination Events

In the event a Swap is terminated or subject to termination as a result of a termination event,

such as a default or a decrease in credit rating of either the Commission or the counterparty, the Assistant Chief Financial Officer for Financial Management, in consultation with the Commission's Swap Advisor and legal counsel, will evaluate whether to obtain a replacement swap, or, depending on market value and the particular circumstances giving rise to the termination event, make or receive a termination payment subject to complying with the applicable requirements set forth in Section VI.A. above.

In the event the Commission is required to make a Swap termination payment, the Commission shall attempt to follow the process identified in its Swap contingency plan.

The determination of the value of any termination payment to be made or received by the Commission in connection with the mandatory termination of a Swap shall be reviewed and confirmed by the Commission's Swap Advisor.

D. Market Developments

The Commission, in consultation with its Swap Advisor, will monitor for market developments such as the replacement or discontinuation of indices that have been included in the Commission's Swaps, or other practices that may affect the Commission's Swaps and associated documentation. The Commission will use its best efforts to minimize the potential risks associated with such changes.

VII. Selecting and Procuring Interest Rate Swaps:

A. Review of Proposals

Recommendations or proposals by counterparties to enter into Swaps, or to modify, amend, novate or terminate an existing Swap, shall be evaluated by the Commission and its Swap Advisor. Unless otherwise advised by a Swap Advisor, or reasonably determined by the Commission to be unnecessary or redundant, the Commission shall not waive delivery of any disclosure or analysis required of a prospective swap counterparty by applicable law.

With respect to such recommendations or proposals, the following elements should be analyzed:

- (i) The appropriateness of the Swap, or the modification, amendment, novation or optional termination of the existing Swap (for purposes hereof, the "transaction"), for the Commission based on the balance of risks and rewards presented by the proposed transaction, including a detailed description of the transactional structure, a description of the risks it presents, and risk mitigation measures;
- (ii) The legal framework for the transaction within the context of Pennsylvania statutes, Commission ordinances, and relevant indenture and contractual requirements (including those contained in credit enhancement agreements), as well as any implications of the transaction under federal tax law;
- (iii) Potential effects that the transaction may have on the credit ratings of any Commission obligations assigned by the rating agencies;
- (iv) The potential impact of the transaction on any areas where the Commission's capacity is limited, now or in the future, including the use of variable-rate debt, bank liquidity facilities or letters of credit, and bond insurance;

- (v) The ability of the Commission to handle any administrative burden that may be imposed by the transaction, including accounting and financial reporting requirements;
- (vi) Information reporting requirements, if any; and
- (vii) Other implications of the proposed transaction as warranted.

Approval to enter into a transaction will be subject to appropriate legal authorization. The authorization will include the appropriate Commission officials to whom relevant authority is delegated to carry out the necessary steps to enter into, monitor and administer the transaction, and the parameters within which their delegated authority may be exercised.

B. Financing Team

The Commission will use qualified legal counsel and retain the services of a qualified Swap Advisor for all Swaps. The Swap Advisor shall satisfy the requirements set forth below in VII.E. In addition, the Commission may retain the services of a qualified Financial Advisor for any Swap.

C. Underwriter Selection

In the event bonds are issued in connection with Swaps, the Commission will price the bonds according to the guidelines set forth in its Debt Policy.

D. Counterparty Selection

The Commission may use a competitive or a negotiated process to select a Swap counterparty and price a Swap as it believes business, market or competitive conditions justify such a process. In particular, the Commission may procure a Swap through a negotiated process if it makes a determination, in consultation with its Swap Advisor, that due to the Swap's characteristics (such as size, price transparency, liquidity, etc.), market conditions and other business considerations, a negotiated process would result in the most favorable pricing and execution.

E. Swap Advisor Selection Requirements and Ongoing Monitoring

Each Swap Advisor selected by the Commission shall meet the following requirements to be a Qualified Independent Representative pursuant to CFTC Regulation 23.450, subject to any amendments or interpretations by the CFTC and any comparable requirements set forth by other regulators, including, without limitation, the SEC or MSRB (collectively, the "Qualified Independent Representative Requirements"). The Commission's Swap Advisor shall:

- (i) have sufficient knowledge to evaluate the Swap transaction and risks;
- (ii) not be subject to a statutory disqualification (under the Commodity Exchange Act);
- (iii) be independent of the Commission's relevant Swap counterparty within the meaning of CFTC Regulation 23.450(c);
- (iv) undertake a duty to act in the best interests of the Commission;
- (v) makes appropriate and timely disclosures to the Commission of compensation and

all material conflicts of interest that would be sufficient to permit the Commission to assess the conflict and take steps to mitigate it;

- (vi) evaluate the fair pricing and the appropriateness of the Swap transaction; and
- (vii) be subject to restrictions on certain political contributions that may be imposed by the CFTC, the SEC, or a self-regulatory organization subject to jurisdiction of the CFTC or the SEC.

The Commission's staff shall undertake on-going monitoring of each Swap Advisor's performance consistent with the Qualified Independent Representative Requirements. The Commission's staff shall determine at least annually that each Swap Advisor to the Commission reasonably appears to satisfy the Qualified Independent Representative Requirements. The Commission's staff shall also determine prior to any Swap transaction that the particular Swap Advisor or Advisors retained by the Commission in connection with such Swap transaction reasonably appear to satisfy the Qualified Independent Representative Requirements. In making the determinations described above in this paragraph, the Commission's staff may take into account any report or other documentation provided by the Swap Advisor regarding its satisfaction of the requirements in clauses (i) through (vii) above which report and other documentation shall be reviewed by the Commission's staff in consultation with legal counsel.

In addition, the Commission shall require that each Swap Advisor to the Commission has written policies and procedures reasonably designed to ensure that such Swap Advisor satisfies the applicable requirements of the Qualified Independent Representative Requirements and that each Swap Advisor provide written representations to evidence compliance with such requirement.

In addition to the above, the Swap Advisor should be a registered Municipal Advisor with the MSRB and SEC.

VIII. Disclosure and Financial Reporting:

The Commission will ensure that there is full and complete disclosure of all Swaps to rating agencies, and in disclosure documents. Disclosure in marketing documents, including bond offering documents, shall provide a clear summary of the special risks involved with Swaps and any potential exposure to interest rate volatility or unusually large and rapid changes in market value. With respect to its financial statements, the Commission will adhere to the guidelines for the financial reporting of Swaps, as set forth by the Government Accounting Standards Board, the CFTC or other applicable regulatory agencies.

IX. Record Keeping:

The Commission shall obtain and maintain a "legal entity identifier" or such other entity identifier as shall be required by any market regulators from time to time and shall maintain records for Swaps in accordance with legal requirements applicable from time to time including CFTC Final Rule *Swap Data Recordkeeping and Reporting Requirements: Pre-Enactment and Transition Swaps*, 77 Fed. Reg. 35200 (June 12, 2012) and CFTC Final Rule *Swap Data Recordkeeping and Reporting Requirements*, 77 Fed. Reg. 2136 (January 13, 2012). The Commission shall, at a minimum and subject to any future changes in law, keep full, complete and systematic records, together with all pertinent data and memoranda with respect to each Swap throughout the life of the Swap and for a period of at least five years following the final termination of the Swap in either electronic or paper form so long as the information is retrievable within five business days during the period during

which it is required to be kept. The Commission shall maintain in such records any unique swap identifiers assigned by the Commission's Swap counterparties.

X. Dodd-Frank Act and Other Regulatory Developments:

The Chief Financial Officer and the Assistant Chief Financial Officer for Financial Management, in consultation with the Commission's Swap Advisor and legal counsel, shall monitor regulatory developments related to Swaps pursuant to the Dodd-Frank Act, other legislation relating to Swaps and related rules and regulations and market practices in response thereto. If determined to be necessary or advantageous in order for the Commission to maintain or improve communications with, or the receipt of information from, existing or potential Swap counterparties or to facilitate any Swap transactions, the Commission may enter into such Protocols or similar agreements relating to such regulatory developments.

Glossary of Terms

Asset/Liability Matching: Matching the term and amount of assets and liabilities in order to mitigate the impact of changes in interest rates.

Bid/Ask Spread: The difference between the bid price (at which a market maker is willing to buy) and the ask price (at which a market maker is willing to sell).

Call Option: The right to buy an underlying asset (e.g. a municipal bond) after a certain date and at a certain price. A call option is frequently embedded in a municipal bond, giving the issuer the right to buy, or redeem, the bonds at a certain price.

Collateral: Assets pledged to secure an obligation. The assets are potentially subject to seizure in the event of default.

Dodd-Frank Act: The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as it may be amended.

Downgrade: A negative change in credit ratings.

Forward Starting Swap: Swaps that start at some time in the future. Used to lock-in current interest rates.

Hedge: A transaction that reduces the interest rate risk of an underlying security.

Interest Rate Swap: The exchange of interest rate payments between counterparties.

ISDA August 2012 Dodd-Frank Protocol: ISDA's Protocol published on August 13, 2012 intended to address the CFTC Final Rule, *Business Conduct Standards for Swap Dealers and Major Swap Participants With Counterparties*, 77 Fed. Reg. 9734 (February 17, 2012).

ISDA March 2013 Dodd-Frank Protocol: ISDA's Protocol published on March 22, 2013 intended to address the CFTC Final Rule, *Confirmation, Portfolio Reconciliation, Portfolio Compression, and Swap Trading Relationship Documentation Requirements for Swap Dealers and Major Swap Participants*, 77 Fed. Reg. 55904 (September 11, 2012); CFTC Final Rule, *End-User Exception to the Clearing Requirement for Swaps*, 77 Fed. Reg. 42559 (July 19, 2012); and CFTC Final Rule, *Clearing Requirement Determination Under Section 2(h) of the CEA*, 77 Fed. Reg. 74284 (December 13, 2012).

Liquidity Support: An agreement by a bank to make payment on a variable rate security to assure investors that the security can be sold.

LIBOR: The London Interbank Offer Rate. Used as an index to compute the variable rate on an interest rate swap.

Notional Amount: The amount used to determine the interest payments on a swap.

Offsetting Swap: Secondary interest rate Swap that is placed in an opposite direction from the primary.

interest rate Swap. The offsetting Swap is used to minimize Swap risks associated with the use of Swaps and potentially gain monetary value from the transaction.

Protocol: A multilateral contractual amendment mechanism that allows for various standardized amendments to be deemed to be made to the relevant covered swap agreements between any two adhering parties.

Termination Payment: A payment made by a counterparty that is required to terminate the Swap. The payment is commonly based on the market value of the Swap, which is computed using the rate on the initial Swap and the rate on a replacement Swap.

This Policy Letter supersedes all previous Policy Letters on this subject.