Pennsylvania Turnpike Commission Act 44 Financial Plan Fiscal Year 2022

June 1, 2021

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 Fiscal 2021, the Commission has fully met its obligations by providing a total of $7.45 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"). The Commission has primarily financed its Act 44/Act 89 Payments to the Commonwealth through the issuance of Subordinate Revenue Bonds and Subordinate Special Revenue Bonds.

Act 89 substantially altered the Commission's Act 44/Act 89 Payments to PennDOT. Under Act 89, beginning July 1, 2014, the Commission's aggregate Act 44/Act 89 Payments remained at $450 million annually. However, none of the Act 44/Act 89 Payments are dedicated to highways and bridges. Instead, all $450 million is allocated to support transit capital, operating, multi-modal and other non-highway programs. Fiscal 2022 represents the final year in which the Commission's Act 44/Act 89 Payments remain at $450 million. Beginning in Fiscal 2023 through 2057, the Commission's Act 44/Act 89 Payment is reduced to $50 million, which will be funded by current revenues and dedicated to transit capital and operating needs. Since its adoption, the Commission has financed most of the Act 44/Act 89 Payments with Subordinate Revenue Bond proceeds with at least $30 million annually funded from current revenues. 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 has the ability to issue refunding bonds on the Subordinate Special Revenue lien for debt service savings.

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 provides that the financial plan shall 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 Turnpike Revenue Bonds.

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

In Fiscal 2021, the Commission fully met its obligations under Act 44 and Act 89 and progressed with its capital plan. The Commission anticipates that it will issue debt in Fiscal 2022 to provide the final scheduled full Act 44/Act 89 Payment and provide critical capital investment into the system pursuant to the expanded capital plan.

Fiscal 2021 Performance and Activities. The COVID-19 pandemic continued to impact PTC's traffic and revenue performance in Fiscal 2021, primarily with respect to passenger car traffic and revenues. Commercial traffic and revenue demonstrated strong resilience, returning to levels in-line with pre-COVID-19 pandemic performance. Fiscal 2021 passenger car transactions through April 2021 declined 25.3% and 17.8% compared to results for the same period in Fiscal 2019 and Fiscal 2020, respectively. However, Fiscal 2021 commercial vehicle transactions through April 2021 increased by 2.0% and 3.0% compared to Fiscal 2019 and Fiscal 2020, respectively. Total transactions through April 2021 of 154.0 million represented a decline of 21.2% and 14.6% compared to the same time frame for Fiscal 2019 and 2020, respectively. Total toll revenue through April 2021, before discounts or other adjustments, of $1.13 billion represent a decline of approximately 6.7% compared to the same time frame for both Fiscal 2019 and Fiscal 2020. For the same period, passenger car toll revenue declined 19.2% and 17.0% compared to Fiscal 2019 and Fiscal 2020 revenues, respectively. However, this decrease was partially offset by strong performance of commercial vehicle toll revenue with improvements of 8.9% and 5.4% when compared to the same period for Fiscal 2019 and Fiscal 2020, respectively. On a combined basis, for the full Fiscal 2021 year, CDM Smith is forecasting in the May 2021 Bring Down Letter, over 170 million transactions and $1.2 billion in Net Toll Revenues, closely tracking the prior projection for Fiscal 2021 provided in the December 2020 Bring Down Letter.

Traffic Volume – Fiscal Year through April (000's)					
				Comparisons	
	2019	2020	2021	2021 v. 2019	2021 v. 2020
Class 1 (Passenger)	166,795	151,763	124,675	-25.3%	-17.8%
Class 2-9 (Commercial)	28,699	28,422	29,281	2.0%	3.0%
TOTAL	195,494	180,185	153,956	-21.2%	-14.6%

Toll Revenue – Fiscal Year through April (000's)					
				Comparisons	
	2019	2020	2021	2021 v. 2019	2021 v. 2020
Class 1 (Passenger)	$669,945	$652,084	$541,087	-19.2%	-17.0%
Class 2-9 (Commercial)	539,621	557,142	587,393	8.9%	5.4%
TOTAL	$1,209,566	$1,209,226	$1,128,480	-6.7%	-6.7%

Throughout Fiscal 2021, the Commission successfully implemented several cost mitigation measures which reduced operating expenses to $400 million, 6% below budget estimates. A portion of these cost savings was achieved through PTC's early implementation of all-electric tolling ("AET In-Place"). In June 2020, the Commission secured a revolving line of credit for a one-year term to enhance liquidity as a safeguard for managing revenue fluctuations throughout the COVID-19 pandemic. Ultimately, no draws on the line were needed to fund operations. In addition, the Commission's estimated Fiscal 2021 General Reserve Fund ending balance of $452 million remains well above the Commission's liquidity targets and the prior year balance of $404 million.

In response to the COVID-19 pandemic, the Commission adjusted its planned Fiscal 2021 capital expenditure within the ten-year capital plan to $469 million from a prior target of $567 million. With the revenue recovery and stabilization experienced in Fiscal 2021, the Commission relaxed its capital spending reduction, and current estimates reflect $553 million in capital spending for Fiscal 2021.

The Commission executed five debt transactions in Fiscal 2021. The Senior Revenue Bond debt service coverage ratio for Fiscal 2021 is projected to be 3.41x, which is higher than the 3.22x coverage ratio anticipated in the Amended Fiscal 2021 Financial Plan due to slightly improved toll revenues and lower than anticipated operating expenses and debt service. Subordinate Revenue Bond and Subordinate Special Revenue Bond debt service coverage ratios are projected to be 1.63x and 1.48x, respectively, which are also higher than figures projected in the Amended Fiscal 2021 Financial Plan.

Strategies, Policies and Covenants. As the Commission meets its Turnpike and Act 44/Act 89 Payment obligations over the course of Fiscal 2022, it will continue its ongoing activities to refine and strengthen its financial plan in compliance with its bond covenants and financial policies, which include the following strategies:

- **Regular Updates of Traffic and Revenue Forecasts:** PTC updated its Turnpike revenue projections in May 2021 based on its traffic consultants' assessment of recent economic conditions and their expected long-term impact on traffic demand and toll increases. PTC conducts an 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 2022, the Commission will continue its efforts to provide 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. As a result of the projected decrease in Act 44/Act 89 Payments beginning in Fiscal 2023, PTC has adopted a $7.0 billion Fiscal 2022-2031 ten-year capital plan, which restores capital funding to the 2015 capital plan levels. The increase over the prior ten-year capital plans is primarily due to significant investments in technology and infrastructure.
- **Financing Initiatives:** Using this year's 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 Turnpike Senior Revenue Bonds, 1.30x on combined debt service for its Turnpike Senior Revenue and Subordinate Revenue Bonds and 1.20x for all three of its liens. In addition, a liquidity level equal to at least 10% of operating revenues is assumed to be maintained.

Fiscal 2022 and Long-Range Financial Plan. The Fiscal 2022 Financial Plan reflects the full-year effects of the January 2021 toll increase, and the partial-year impacts of the October 2021 toll increase on the Southern Beltway and the January 2022 toll increase. It is anticipated that the January 2022 toll adjustment will yield a net increase in toll rates of 5%, which is a 1% decrease of prior yearly toll adjustments of 6%. After Fiscal 2022, forecasted revenues reflect annual toll increases of 5% through Fiscal 2025, with annual increases declining to 3% by Fiscal 2028. Budgeted Fiscal 2022 operating expenses are projected to decrease by approximately 2% to $417 million when compared to budgeted Fiscal 2021 operating expenses. For Fiscal years 2023 through 2027, the Commission has assumed an average growth in operating expenses of approximately 3% and then applied a flat grow rate of 2% thereafter, which is intended to represent inflationary expense growth in the long term, an adjustment to the Commission's historical planning growth target of 4%. 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 $450 million in contributions required to meet its Act 44/Act 89 Payments. Fiscal 2022 debt service coverages on the Commission's Senior Revenue Bonds, Subordinate Revenue Bonds and Subordinate Special Revenue Bonds are projected to be 3.12x, 1.54x and 1.44x, 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 ten-year plan spending levels, and fully fund its Act 44/Act 89 Payments. In this Fiscal 2022 and the Long-Range Plan, the Commission has taken preliminary steps to re-focus on its capital needs. The Fiscal 2022 Ten Year Capital Plan calls for $7.0 billion in spending paid for by $3.8 billion in pay-as-you-go funding and $3.2 billion in Senior Revenue Bond proceeds, which will require that PTC continue to regularly access the capital markets. Under the current plan, the Commission intends to issue one more series of Subordinate Revenue Bonds to meet the Fiscal 2022 Act 44/Act 89 Payment obligations. The 2022 Financial Plan allows the Commission to maintain debt service coverage ratios of at least 2.0x on annual debt service for its Turnpike Senior Revenue Bonds, 1.30x on combined debt service for its Turnpike Senior Revenue and Subordinate Revenue Bonds and 1.20x for all three of its liens. In addition, a liquidity level equal to at least 10% of operating revenues is assumed to be maintained. These coverage and liquidity targets reflect the Commission's goal to maintain financial flexibility consistent with its credit ratings. Under current planning assumptions, Turnpike Senior Revenue Bond debt service coverage is at least 2.73x and reaches 3.18x in 2031 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 1.52x and reaches 1.79x in 2031, while Subordinate Special Revenue Bond debt service coverage is at least 1.43x and reaches 1.66x in 2031. With all coverage ratios expected to continue to increase thereafter.

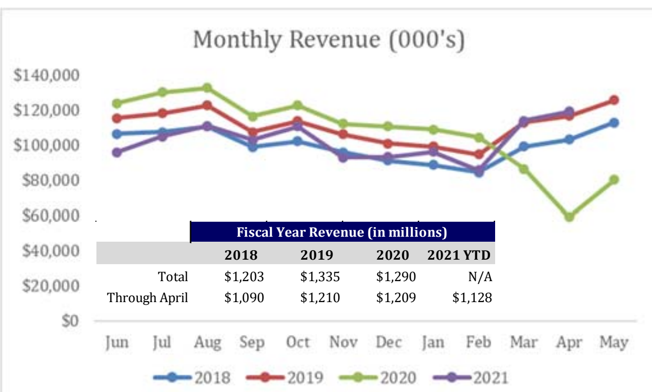
This plan and the matters discussed herein are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those that have been projected. While PTC's financial plan is based on reasonable financial assumptions, it is important to recognize that there are inherent uncertainties in projecting resources and obligations over a nearly 40-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 cost increases. 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 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

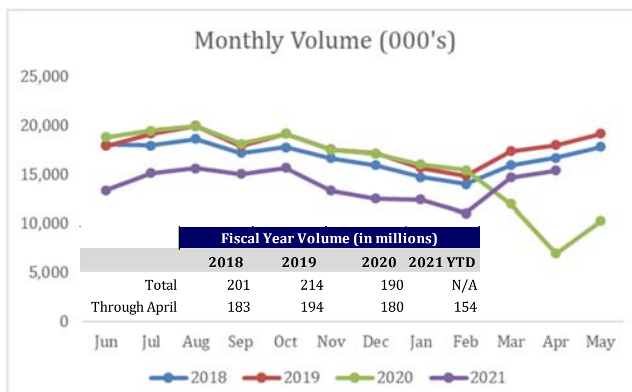
Commission Overview

The Pennsylvania Turnpike 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 552 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; and a six mile segment of the Southern Beltway (the "System").

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 COVID-19 pandemic, traffic volume declined on the System. Volume losses stabilized in May 2020 and improved on a monthly basis through August 2020. From August 2020 through April 2021, monthly volumes averaged approximately 20% below pre-pandemic levels as measured for all vehicles. The following charts display monthly revenue and monthly volume trends for PTC for Fiscal 2018 through Fiscal 2021.



Fiscal Year Revenue (in millions)	2018	2019	2020	2021 YTD
Total	$1,203	$1,335	$1,290	N/A
Through April	$1,090	$1,210	$1,209	$1,128



Fiscal Year Volume (in millions)	2018	2019	2020	2021 YTD
Total	201	214	190	N/A
Through April	183	194	180	154

Based on Fiscal 2020 data, passenger vehicles represent 84% 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 47% of its toll revenues from commercial vehicles and 53% from passenger vehicles.

Reflecting the growing acceptance of electronic tolling, electronic toll collection ("ETC") market share increased to 89% of revenues in Fiscal 2020. Prior to Fiscal 2020 and the onset of the COVID-19 pandemic, the Commission established a plan to transition to a cashless, non-stop system whereby the existing toll lanes were equipped with the technology for all-electric tolling to allow for cashless tolling to occur at the existing plaza locations, with an ultimate transition to a complete cashless conversion of the remaining System utilizing an AET In-Place originally scheduled for October 10, 2021. As a result of the COVID-19 pandemic, the Commission moved to all-electronic toll collection on March 16, 2020; removing toll collectors from toll booths and relying solely on AET In-Place and E-ZPass tolling across the System. Initially intended to be a temporary response to COVID-19, the Commissioners, on June 2, 2020, unanimously approved the permanent transition to all-electronic toll collection operations. Supplementing E-ZPass toll collections, the Commission's cashless tolling has been implemented, in part, by a new "Toll By Plate" system where non-E-ZPass customers are invoiced for assessed tolls. 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 transition to ORT was initially scheduled to commence with the Reading Interchange in October 2022. However, as result of 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) roadway resurfacing and total reconstruction programs; 2) the rehabilitation or replacement of structurally deficient bridges; 3) the implementation of Cashless Tolling; 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 2020 of $404 million, which exceeded the Commission's liquidity policy and represented a nearly 20% increase from the Fiscal 2016 balance of $337 million. The Financial Plan for 2022 assumes the Commission will have a General Reserve Fund balance of approximately $452 million on May 31, 2021.

Act 44, Act 89 and PTC's Expanded 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 are $450 million and then are reduced to $50 million from Fiscal 2023 to Fiscal 2057. Exhibit 1 provides the allocation of Act 44/Act 89 Payments by purpose pursuant to Act 89. This Fiscal 2022 Financial Plan represents the final year where the Commission 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	Total
	Operating	Capital (*)	Subtotal	Programs	Funding
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 these 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. Act 89 requires the Commission to provide at least $30 million in funding from pay-as-you-go resources from Fiscal 2015 to Fiscal 2022. In Fiscal 2023, once the Commission's Act 44/Act 89 Payments drops to $50 million annually, the Commission is required to provide 100% of this funding on a pay-as-you-go basis. As a result, debt issued to finance the Commission's Act 44/Act 89 Payments will end in Fiscal 2022. The 2022 Financial Plan assumes that the Commission will provide $30 million in funding from pay-as-you-go resources in Fiscal 2022

The Commission's Act 44/Act 89 Payments are only devoted to transit and other non-highway purposes which projects are assumed to have a shorter useful life than highway and bridge assets. As a result, a 30-year final maturity is assumed for the final Act 44 issuance of Subordinate Revenue Bonds. The amount of debt issued is net of the pay-as-you-go requirements of Act 89, as well as any additional available cash flow to fund 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 Turnpike 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 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) Turnpike Senior Revenue Bonds secured by Tolls received by or on behalf of the Commission from the System; (2) Turnpike Subordinate Revenue Bonds secured by Commission Payments from amounts transferred from the General Reserve Fund under the Senior Revenue Indenture after the payment of all Senior Revenue Indenture Obligations; (3) Motor License Fund-Enhanced Turnpike 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 revenues received from the Motor License Fund.

The Commission uses Senior Revenue Bonds and Subordinate Revenue Bonds to fund its capital program and 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, 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:** Give the size of the annual Act 44/Act 89 Payments, the Commission has debt financed the majority of these payments with 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.

In addition, cash from the General Reserve Fund can be used to fund Act 44/Act 89 Payments.

The following table summarizes the Commission's outstanding Indebtedness as of May 31, 2021:

Outstanding Commission Indebtedness

	Outstanding Principal	Accreted thru 6/1/2021	Total Outstanding
Turnpike Senior Revenue Bonds	$6,071,170,000	-	$6,071,170,000
Turnpike Subordinate Revenue Bonds	6,054,021,488	$41,740,585	6,095,762,073
Special Revenue Bonds	938,384,022	63,846,484	1,002,230,506
Oil Franchise Tax Revenue Bonds (Senior)	562,336,246	12,950,176	575,286,422
Oil Franchise Tax Revenue Bonds (Subordinate)	445,890,000	-	445,890,000
Registration Fee Revenue Bonds	350,280,000	-	350,280,000

III. Fiscal 2021 Activities

Fiscal 2021 Activities

PTC was prepared to continue to meet its funding commitments in full and on time during the fourteenth year of Act 44, providing $450 million to the Commonwealth. However, due to the COVID-19 pandemic and its impacts on traffic and revenue, PTC sought an amendment to the Funding Agreement in order to delay its Fiscal 2021 payments. Per the amendment, the Commission delayed two of the scheduled Fiscal 2021 Act 44/Act 89 Payments but ultimately paid the full $450 million within Fiscal 2021, issuing Subordinate Revenue Bonds in January 2021 to fund the Fiscal 2021 Act 44/Act 89 obligation covering payments originally due in July 2020 and October 2020, as well as the payments due January 2021 and a portion of the April 2021 payment.

As the Commission carries out its Act 44 responsibilities, it also continues to maintain and improve the Turnpike. It is important to note that PTC met its Act 44/Act 89 Payments despite the challenges presented by the COVID-19 pandemic by proactively managing its financial commitments through a multi-pronged approach with cost containment measures and financing strategies. For Fiscal 2021, two initiatives that had notable impacts on the Fiscal 2021 performance metrics were PTC's early implementation of AET In-Place, and two cash defeasances of outstanding debt. The Commission projected nearly $36 million in savings in Fiscal Year 2021 and over $50 million in annual savings in Fiscal 2022 as a result of the early conversion of toll operations to AET In-Place. For Fiscal 2021, the Commission cash defeased $96 million of Subordinate Revenue Bond maturities due on June 1, 2020 and December 1, 2020 and $67 million of Senior maturities due on December 1, 2020, improving debt service coverage ratios.

Credit market conditions greatly improved throughout 2020 and early calendar year 2021 with bond and Treasury rates reaching near historical lows. PTC has continued to pursue debt structures to yield the lowest possible costs as evidenced by its selective use of variable rate demand bonds with attractive letter of credit pricing and thirty-year fixed rate Senior and Subordinate Revenue bond structures that took advantage of historically low interest rates while maximizing investor demand. PTC continually monitors its Senior and Subordinate lien debt for refunding opportunities, but did not execute any refundings in Fiscal 2021. Finally, the Commission expects to obtain a new revolving line of credit for a one-year term to enhance liquidity.

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 lien bonds. 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 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 of 2021, given the strong market conditions, PTC issued $250 million of Senior Revenue Bonds which repaid the Prior EB-5 Loans and provided an additional $87 million in capital funding. 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 in future EB-5 loans. 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 plan.

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 2021 Estimated Results compared to Fiscal 2020 and Prior Year Plan
($ 000s), Fiscal Year End May 31

	Actual 2020	Prior Estimated 2021 Plan	Current Estimated 2021 Plan	% Diff Act 2020	% Diff Prior 2021
Turnpike Operating Income					
Adjusted Gross Toll Revenues (+)	1,279,740	1,187,526	1,192,059	-6.9%	0.4%
Gross Non-Toll Revenues (+)	4,043	-	-	-100.0%	-
Gross Operating Revenues (+)	1,283,783	1,187,526	1,192,059	-7.1%	0.4%
Operating Expense (-)	376,164	426,197	400,000	6.3%	-6.1%
Interest Income (Senior DSRF and GRF earnings) (+)	20,605	14,618	11,415	-44.6%	-21.9%
Net Turnpike Revenues Before Debt Service	928,224	775,947	803,474	-13.4%	3.5%
Senior Turnpike Revenue Bond Debt Service	306,338	240,620	235,349	-23.2%	-2.2%
Net Income Before Capital Expense and General Reserve	621,886	535,327	568,125	-8.6%	6.1%
Capital Funding					
Construction Fund Beginning Balance	129,262	193,315	193,315	49.6%	0.0%
Newly Sized Senior Bond Proceeds (+)	488,400	334,764	421,794	-13.6%	26.0%
Federal Fund Reimb. (+)	5,697	-	743	-87.0%	-
PAYGO Contribution (+)	129,569	65,000	59,100	-54.4%	-9.1%
Capital Expenditure (-)	554,861	461,303	552,868	-0.4%	19.8%
Reconciliation (+)	(4,751)	-	722		
Construction Fund Ending Balance	193,315	131,776	122,807	-36.5%	-6.8%
Cash Balances					
Cash Beginning Balance (excl. Liquidity)	257,734	275,953	275,953	7.1%	0.0%
Net Income (+)	621,886	535,327	568,125	-8.6%	6.1%
PAYGO (-)	129,569	65,000	59,100	-54.4%	-9.1%
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	51,254	110,115	143,115	179.2%	30.0%
Reconciliation (+)	32,523	-	24,533		
Liquidity Requirement Cashflow Set-aside (-)	-	-	-	-	-
Subordinate and Sub. Special Revenue Bonds DSRF Earnings (+)	7,396	8,508	6,127	-17.2%	-28.0%
Subordinate Bonds Debt Service (-)	320,707	262,267	261,311	-18.5%	-0.4%
Subordinate Special Revenue Bonds Debt Service (-)	42,057	48,818	48,818	16.1%	0.0%
Net Funds Remaining Before Act 44 Payments	375,953	333,588	362,394	-3.6%	8.6%
Liquidity Balance	128,378	118,753	119,206	-7.1%	0.4%
Debt Service Coverage Ratios					
Senior Lien					
Pledged Revenues	928,224	775,947	803,474		
Debt Service	306,338	240,620	235,349		
Coverage	3.03 x	3.22 x	3.41 x		
Subordinate Lien					
Pledged Revenues	934,982	783,810	809,177		
Debt Service	627,045	502,887	496,661		
Coverage	1.49 x	1.56 x	1.63 x		
Subordinate Special Revenue Lien					
Pledged Revenues	935,620	784,455	809,601		
Debt Service	669,102	551,705	545,479		
Coverage	1.40 x	1.42 x	1.48 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 and electronic toll collection adjustments are estimated to have declined 6.9% in Fiscal 2021, to $1.192 billion, compared to Fiscal 2020 results. The decline in revenues is primarily a result of the decreased traffic volume caused by the COVID-19 pandemic, and an increase in revenue leakage associated with all-electronic tolling. The Commission adopted various policies to mitigate the decline in toll revenues and the impact of the COVID-19 pandemic, which primarily include: the early permanent conversion to AET-In-Place, effective March 16, 2020; the slightly larger toll increase in January 2021, at 6% versus the planned 5%; and the implementation of a 45% additional charge on Toll by Plate transactions. Total transactions for Fiscal 2021 are estimated to be 170 million, 6.2% below Fiscal 2020. Through April 2021, actual transactions have declined by 14.6% in Fiscal 2021 year to date versus Fiscal 2020 and 21.2% compared to Fiscal 2019. These declines are primarily driven by declines in passenger vehicles. Commercial traffic is 3.0% higher year over year through April, which has helped offset passenger revenue declines. For Fiscal 2021, PTC adopted a conservative budgeting approach and has excluded from its planning other income, which primarily consists of ETC related fees, lease and rental fees and concession fees. Interest income on debt service reserve funds and the General Reserve Fund is estimated to be an additional $17.5 million.

Turnpike Operations and Capital Program

Projected operating expenses in Fiscal 2021 were below budget due to the Commission's cost containment measures. The budgeted operating expenses for Fiscal 2021 were estimated to be 1.3% lower versus Fiscal 2020. Actual operating expenses for Fiscal 2021 came in 6% under budget at $400 million. As the Commission has done in the past, it made an additional deposit of $33 million to its OPEB Trust Fund as part of its strategy to help control operating budget increases in future years. Actual debt service coverage ratios are estimated to be higher than forecasted in the Amended Fiscal 2021 Financial Plan due to improved operating performance and reduced debt service.

Turnpike capital outlays are estimated at $553 million for Fiscal 2021, which is 18% higher than the Fiscal 2021 budgeted amount. 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.
- Information technology which includes toll collection projects, communication, application development and technical operational needs.

Act 44 Activities

Per a Funding Agreement amendment with PennDOT, the Commission delayed the first two scheduled Fiscal 2021 Act 44/Act 89 Payments due to COVID-19 but ultimately paid its full $450 million in Act 44/Act 89 Payments within Fiscal 2021. The Commission issued Subordinate revenue bonds in January 2021 to fund the Fiscal 2021 Act 44/Act 89 obligation covering payments originally due in July 2020 and October 2020, as well as the payments due January 2021 and a portion of the April 2021 payment.

The Commission's General Reserve Fund ("GRF") ending balance is estimated to be $452 million. The General Reserve Fund balance for Fiscal 2021 is 6.9% higher than the amount projected in the Amended Fiscal 2021 Financial Plan. 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. The General Reserve Fund is an additional source of funds for Act 44/Act 89 Payments and can also be used for capital funding. With the upcoming reduction in PTC annual Act 44/Act 89 Payments, the balance in the General Reserve Fund is expected to improve over the near term.

Exhibit 3
Fiscal 2021 Estimated Results compared to Fiscal 2020 and Prior Year Plan
($ 000s), Fiscal Year End May 31

	Actual 2020	Prior Estimated 2021 Plan	Current Estimated 2021 Plan	% Diff Act 2020	% Diff Prior 2021
Act 44 Payment Sources					
Net Funds Remaining Before Act 44 Payments	375,953	333,588	362,394	-3.6%	8.6%
Subordinate Bond Proceeds	800,000	420,000	420,000		
Act 44 Payments					
Transit Capital/Other Payments	850,000	425,000	425,000		
Transit Capital/Other Payments Sources					
Turnpike Cash	50,000	5,000	5,000		
Tax-Exempt Subordinate Bond Proceeds	800,000	420,000	420,000		
Transit Capital/Other Total Sources	850,000	425,000	425,000		
Transit Operations Payments	50,000	25,000	25,000		
Transit Operations Sources					
Turnpike Cash	50,000	25,000	25,000		
Transit Operations Total Sources	50,000	25,000	25,000		
Total Act 44 Payments	900,000	450,000	450,000		
Total Act 44 Sources	900,000	450,000	450,000		
Remaining Turnpike Cash	275,953	303,588	332,394		
General Reserve Fund/Liquidity Requirement	404,332	422,341	451,600		

Planning Activities

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 was delayed until 2022 to capture long-term implications from the pandemic and socio-economic changes that may occur and impact traffic trends in the long term. For the Fiscal 2022 Financial Plan, CDM Smith prepared the May 2021 Bring Down Letter to update its forecast which reflects actual traffic and toll revenue data through March 2021. On-going cost containment measures have allowed the Commission to assume annual expense growth at an average of approximately 3% over the next five years. In Fiscal 2022, the Commission expanded ten-year Turnpike capital plan to allow for more investment within the System to be consistent with the Fiscal 2015 ten-year capital plan. PTC continues to examine strategies to reduce project costs, take advantage of favorable construction bidding conditions and prioritize initiatives so that the most critical projects are pursued in the near term to further ensure that the System remains in a state of good repair.

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 managing increasing liabilities 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 will now need to refocus its funding efforts toward funding its own capital needs. The Commission's Fiscal 2022 rolling 10-year capital plan reflects a 20% increase over the Fiscal 2021 capital plan, which was reduced to address uncertainties created by the impact of the COVID-19 pandemic but is intended to restore capital funding to the 2015 capital plan levels and was 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 the capital markets.

Large Financial and Capital Obligations. PTC's mandate under Act 44/89 required the Commission to take on greater financial responsibilities to help fund the Commonwealth's highway, bridge and transit needs. The Commission primarily met its Act 44/Act 89 Payments through the issuance of Subordinate and Subordinate Special Revenue Bonds with over $7.1 billion currently outstanding. As noted earlier, Fiscal 2022 is the final year of the Commission's $450 million funding Act 44/Act 89 Payments, removing the need for additional debt issuance to fund Act 44/Act 89 Payments beginning in Fiscal 2023. Despite the reduced Act 44/Act 89 Payments, PTC still anticipates debt financing a significant portion of its capital program over the long term. PTC has a well-established track record of executing large capital initiatives while maintaining financial flexibility.

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 on the Senior Revenue Bonds and 'A3' and 'A-' ratings on the Subordinate Revenue Bonds in Fiscal 2021 both with "stable" outlooks on March 19, 2021 and March 22, 2021, respectively. S&P affirmed its 'A' and 'A-' ratings on the Senior Revenue Bonds and Subordinate Revenue Bonds on March 22, 2021 and January 12, 2021, respectively, with "negative" outlooks. The outlooks were maintained due to S&P's concern of ongoing uncertainties from COVID-19. Kroll affirmed their ratings and outlooks on the Senior Revenue Bonds and Subordinate Revenue Bonds on March 23, 2021 and January 7, 2021, respectively. The following table highlights the Commission's credit strengths and weaknesses as described by each respective credit rating agency.[1]

Rating Agency	Credit Strengths	Credit Challenges
MOODY'S INVESTORS SERVICE **Senior**: A1 (Stable) **Sub. Lien:** A3 (Stable) *Date of report: 6/19/2020 (3/19/2021 and 3/22/2021 ratings affirmed)*	• Essential transportation corridor in the eastern US. • Long history of well managed financial operations with demonstrated willingness to raise tolls. • Demand is relatively inelastic. • 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.	• Political risk that PTC could shoulder more transportation infrastructure needs as Commonwealth's revenues decline. • No flexibility to reduce Act 44 payments until FY 2023. • Risk of opposition to toll increases. • Revenue growth requires annual above inflation toll rate increases. • Significant 10-year CIP will increase debt. • Relatively complex debt profile.
STANDARD & POOR'S RATINGS SERVICES **Senior**: A+ (Negative) **Sub. Lien**: A (Negative) *Date of report: 3/22/2021*	• 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.	• 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 beyond fiscal 2021. • Significant additional debt needed to fund PTC CIP projects and Act 44 payments.
FitchRatings **Senior**: A+ (Stable) **Sub. Lien**: A- (Stable) *Date of report: 3/22/2021*	• Strong traffic profile. • Ability and willingness to raise tolls. • History of prudent cost management. • Essential route with commercial exposure. • Reasonable debt structure.	• Sizeable debt burden with debt service pressure for the next several years. • Sizeable capital program. • Potential political opposition to annual toll increases.
KBRA KROLL BOND RATING AGENCY **Senior:** AA- (Stable) **Sub. Lien:** A+ (Negative) *Date of report: 3/23/2021*	• 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 a slate of significant operating and capital cost reductions and revenue enhancers to address COVID-19 related revenue declines. • PTC has full rate setting autonomy. • Liquidity is ample.	• 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.

[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.

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 Payments 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 fourteenth 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 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.

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 would likely 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.

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 2022 operating budget and its ten-year capital budget for Fiscal 2022-2031, on May 4, 2021.

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. The Commission follows a practice of full disclosure by regularly communicating with bond rating agencies and the Municipal Securities Rulemaking Board's EMMA system to inform them of the Commission's current financial condition and future financial outlook. 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 posts disclosure information (see https://www.paturnpike.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 polices 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 2022 Financial Plan

Fiscal 2022 Financial Plan

PTC's Fiscal 2022 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 2022 Financial Plan
($ 000s), Fiscal Year End May 31

	2021	2022
Turnpike Operating Income		
Adjusted Gross Toll Revenues	1,192,059	1,386,368
Gross Non-Toll Revenues	-	23,806
Gross Operating Revenues	1,192,059	1,410,174
Operating Expense	400,000	417,274
Interest Income (Senior DSRF and GRF earnings)	11,415	11,432
Net Turnpike Revenues Before Debt Service	803,474	1,004,332
Senior Turnpike Revenue Bond Debt Service	235,349	321,827
Net Income Before Capital Expense and General Reserve	568,125	682,505
Capital Funding		
Construction Fund Beginning Balance	193,315	122,807
Newly Sized Senior Bond Proceeds (+)	421,794	342,965
Federal Fund Reimb. (+)	743	-
PAYGO Contribution (+)	59,100	195,000
Capital Expenditure (-)	552,868	660,772
Reconciliation (+)	722	-
Construction Fund Ending Balance	122,807	-
Cash Balances		
Cash Beginning Balance (excl. Liquidity)	275,953	332,394
Net Income (+)	568,125	682,505
PAYGO (-)	59,100	195,000
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	143,115	-
Reconciliation (+)	24,533	-
Liquidity Requirement Cashflow Set-aside (-)	-	21,812
Subordinate and Sub. Special Revenue Bonds DSRF Earnings (+)	6,127	6,137
Subordinate Bonds Debt Service (-)	261,311	332,283
Subordinate Special Revenue Bonds Debt Service (-)	48,818	49,481
Net Funds Remaining Before Act 44 Payments	362,394	422,460
Liquidity Balance	119,206	141,017
Debt Service Coverage Ratios		
Senior Lien		
Pledged Revenues	803,474	1,004,332
Debt Service	235,349	321,827
Coverage	3.41 x	3.12 x
Subordinate Lien		
Pledged Revenues	809,177	1,010,044
Debt Service	496,661	654,110
Coverage	1.63 x	1.54 x
Subordinate Special Revenue Lien		
Pledged Revenues	809,601	1,010,469
Debt Service	545,479	703,591
Coverage	1.48 x	1.44 x

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

Exhibit 5
Projected Fiscal 2022 Financial Plan
($ 000s), Fiscal Year End May 31

	2021	2022
Act 44 Payment Sources		
Net Funds Remaining Before Act 44 Payments	362,394	422,460
Subordinate Bond Proceeds	420,000	420,000
Act 44 Payments		
Transit Capital/Other Payments	425,000	425,000
Transit Capital/Other Payments Sources		
Turnpike Cash	5,000	5,000
Tax-Exempt Subordinate Bond Proceeds	420,000	420,000
Transit Capital/Other Total Sources	425,000	425,000
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	450,000
Total Act 44 Sources	450,000	450,000
Remaining Turnpike Cash	332,394	392,460
General Reserve Fund/Liquidity Requirement	451,600	533,478

The Fiscal 2022 Financial Plan and the long-term financial plan was developed based on the following assumptions.

Estimated Toll Rates, Tolls and Other Revenues

Fiscal 2022 toll revenues reflect the full year impact of the toll increase implemented in January 2021, partial year impacts of the October 2021 toll increase on the Southern Beltway and a partial year impact of a planned adjustment yielding an average toll rate increase of 5% scheduled for January 2022. Toll revenues are projected to increase by 16.3% to $1.386 billion in Fiscal 2022, consistent with the 2018 Traffic Study, as supplemented by the Bring Down Letters. Other PTC revenues, primarily consisting of ETC related fees, lease and rental fees and concession fees, result in total projected operating revenues of $1.410 billion for Fiscal 2022. Interest income is projected to be $17.6 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 2022, the Commission's operating expenses are budgeted to be 2% lower than Fiscal 2021 budget levels at $417 million. Expenses are projected to grow by an average of approximately 3% for Fiscal years 2023 to 2027 and then grow at 2% thereafter to be consistent with standard inflationary cost adjustments, an adjustment to the Commission's historical planning growth target of 4%. Achievement of planning level operating growth is a result of aggressive cost containment efforts of the Commission for expenses under its direct control. The Commission's estimated contributions to the State Employees Retirement System ("SERS"), for employee pension expenses, is projected to be flat in Fiscal 2022. However, overall pension expense is expected to level out and the Fiscal 2022 budget was held flat at the Fiscal 2021 amount. The Commission's Fiscal 2022 budget for the Pennsylvania State Police was increased by $3.2 million, or 5.47% compared to the Fiscal 2021 budget. For all remaining operating expenses under the control of the Commission, the PTC was able to reduce its Fiscal 2022 budget amounts by $12.1 million, or 3.8%. Capital expenditures are budgeted to be $661 million for Fiscal 2022, an increase of $192 million over the budgeted Fiscal 2021 Capital Plan amount. As noted, the Fiscal 2022 capital plan restores system investments to levels consistent with the Commission's the 2015 capital plan levels and aligns with the projected decrease in Act 44/Act 89 Payments which will increase the Commission's funding capacity.

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 to the newly established growth target of 2% over the long term.

In this Fiscal 2022 and the Long-Range plan, the Commission has taken preliminary steps to re-focus on its capital needs. The Fiscal 2022 Ten Year Capital Plan continues to improve and maintain the Turnpike in a state of good repair, ensure customer safety and convenience and address capacity constraints. Over the fiscal 2022-

2031 period, the proposed capital plan calls for $7.0 billion in spending, which returns spending to PTC's 2015 capital plan levels, and 1) continues the Commission's efforts for total roadway reconstruction and resurfacing; 2) continues the rehabilitation or replacement of structurally deficient bridges; 3) provides for implementation of Cashless Tolling, and 4) provides for the development and installation of a fiber optic network. To fund the Fiscal 2022 Ten Year Capital Plan, the Commission will commit $3.8 billion in pay-as-you-go funding, $3.2 billion in Senior Revenue Bond proceeds, and approximately $41 million in federal funds. While the Commission is currently estimated to have approximately $122 million in funds available from prior issuances, the additional bond proceeds will be raised by issuing a par amount of $2.9 billion of Senior Revenue Bonds.

Debt service payments on the Commission's Senior Revenue Bonds for Fiscal 2022 are projected to be $322 million. Combined Subordinate Revenue Bond and Subordinate Special Revenue Bond debt service is estimated to equal $382 million. Compared to the Fiscal 2022 estimate shown in the Amended Fiscal 2021 Financial Plan total debt service costs for all three liens is expected to be 4.4% lower than previously projected.

It should be mentioned that 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 these bonds are not paid by the 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 2022 capital expenditures, PTC expects to utilize $122.8 million of previously unused funds, $195 million in pay-as-you-go, as well as $343 million in additional Senior Revenue Bond proceeds. Pay-as-you-go funding will be deployed to manage leverage and ensure financial flexibility. Fiscal 2022 Act 44/Act 89 Payments are expected to be paid as scheduled in Fiscal 2022. Depending upon market conditions, PTC may refund additional outstanding debt for savings. The Fiscal 2022 Plan also assumes a fixed rate refinancing of a portion of the Commission's outstanding variable rate debt.

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. The final planned Subordinate Revenue Bond issuance, scheduled for Fiscal 2022, assumes current interest bonds with three years of capitalized interest and a level debt service amortization beginning after the capitalized interest period, with a thirty-year final maturity. The following interest rates are assumed:

- Senior Revenue Bond issuance assumes the current market 'AAA' MMD Index with an additional 150 basis point market rate cushion and an 80 basis point credit spread. The bonds are issued with 5% coupons and a ten year-par call.
- Subordinate Revenue Bond issuance assumes the current market 'AAA' MMD Index with an additional 150 basis point market rate cushion and a 115 basis point credit spread. The bonds are issued with 5% coupons and a ten-year par call.

Based on the above assumptions for revenues, operations and maintenance expense and debt service, Fiscal 2022 debt service coverage of the Commission's Senior Revenue Bonds is expected to be 3.12x, 1.54x on the Subordinate Revenue Bonds, and 1.44x on the Subordinate Special Revenue Bonds.

General Reserve Fund Requirements and Balance

In compliance with PTC's Liquidity Standard Policy, the Fiscal 2022 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 2022 of $533 million, which includes an $141 million liquidity level set aside in the General Reserve Fund.

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 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 $450 million in Fiscal 2022 and $50 million annually thereafter.
- 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 Payments 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 2022 Financial Plan assumes annual toll increase of 5% from Fiscal 2022 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 Turnpike Senior Revenue Bonds, 1.30x on combined debt service for its Turnpike Senior Revenue and Subordinate Revenue Bonds and 1.20x for all three of its liens. In addition, a liquidity level equal to at least 10% of operating revenues is assumed to be maintained. These coverage and liquidity targets reflect the Commission's goal to maintain financial flexibility consistent with its credit ratings. 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 a five-year average of approximately 3% through 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 $7.0 billion rolling ten-year capital plan through Fiscal 2031. With the expected decrease in the Commission's Act 44/Act 89 Payments, the Commission is refocusing on System capital needs. To fund the $7.0 billion Fiscal 2022 Ten Year Capital Plan, the Commission will commit $3.8 billion in pay-as-you-go funding, $3.2 billion in Senior Revenue Bond proceeds, and approximately $41 million in federal funds. While the Commission is currently estimated to have approximately $122 million in funds available from prior issuance, the additional bond proceeds will be raised by issuing a 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 facility 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 2035. Thereafter, capital expenses grow by 2% annually throughout the term of financial plan, reflecting inflationary growth. Over the Fiscal 2022-2057 period, total capital spending is estimated to be $38.5 billion with $3.9 billion of the capital program expected to be paid from bond proceeds raised from issuing a par amount of $3.6 billion of Senior Revenue Bonds and the $122 million of available proceeds from past issuance. Senior Revenue Bonds are assumed to fund approximately 33% of Turnpike capital outlays from Fiscal 2022 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 $450 million through Fiscal 2022 and $50 million annually thereafter.

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.

- Senior Revenue Bonds secured by the net revenues of the Turnpike finance Turnpike capital improvements. The amount of debt financing is structured to utilize surplus cash flow and reduce debt levels and represents a significant positive revision to the debt assumptions initiated in the prior year financial plan. It is also important to note that the amount of debt to finance Turnpike capital needs is substantially reduced in later years, as surplus cash flow increases as a result of declining Act 44/Act 89 Payments.

- The Senior Revenue Bonds reflect the following structural assumptions:
  - Base yields reflect current 'AAA' MMD rates with an additional 150 basis point market rate cushion. This assumption reflects a change from the previous assumption, which used a ten-year historical average of rates, in order to avoid using a low rate assumption determined by the low benchmark rates realized in prior years.
  - 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.

- Current Fiscal 2022 Plan assumes a future fixed rate refinancing of a portion of the Commission's outstanding variable rate debt.

- 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 are used to fund $30 million in Act 44/Act 89 Payments annually through Fiscal 2022, and $50 million thereafter through Fiscal 2057.

- The Subordinate Revenue Bonds reflect the following structural features:
  - Base yields reflect current 'AAA' MMD rates with an additional 150 basis point market rate cushion. This assumption reflects a change from the previous assumption, which used a ten-year historical average of rates, in order to avoid using a low rate assumption determined by the low benchmark rates realized in prior years.
  - To account for the tax-exempt Subordinate Revenue Bonds' credit spread over 'AAA' MMD rates, an additional 115 basis points is assumed.
  - The Subordinate Revenue Bonds feature a debt service reserve fund equal to the lesser of 10% of total principal, 125% of average aggregate annual debt service or maximum aggregate annual debt service.
  - Issuance costs include $11 per $1000 of par for cost of underwriting and issuance.
  - Current interest bonds with 5% coupons are assumed for the issuance with a ten-year par call.
  - The issuance assumes three years of capitalized interest with a level debt service amortization beginning after the capitalized interest period, with a thirty-year final maturity.
  - 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.

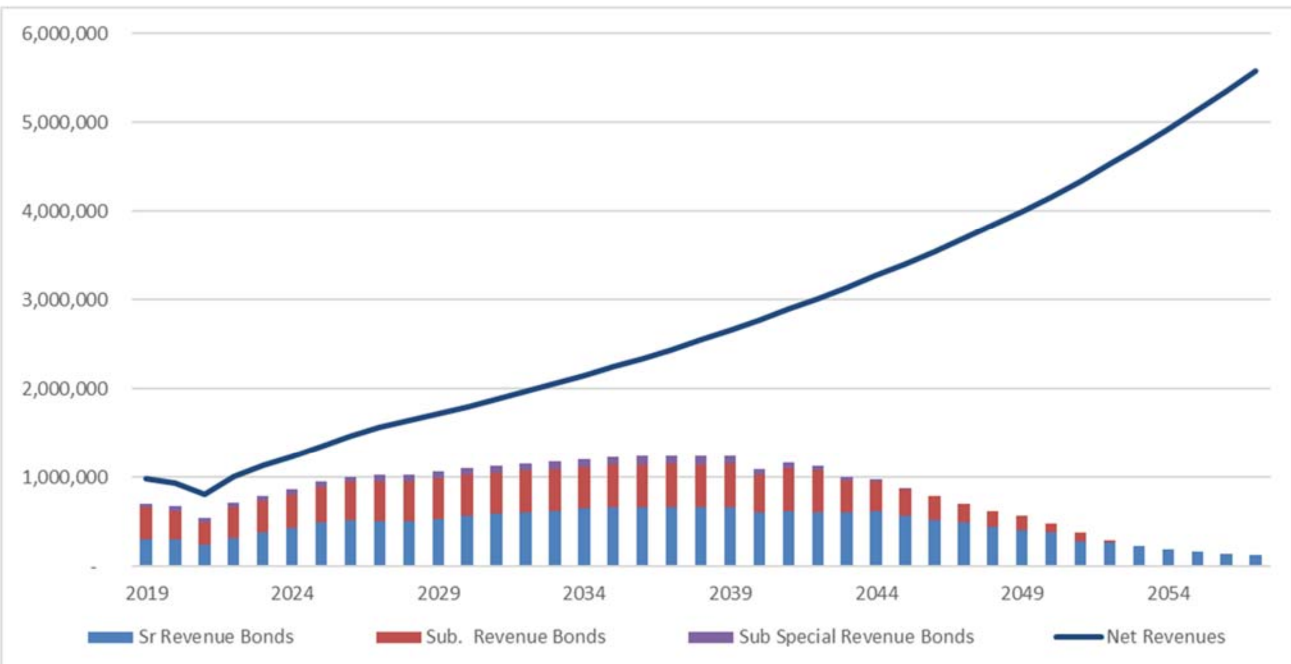
Financial Plan Results

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. Between Fiscal 2022 and 2057 plan period, PTC is projected to issue $4.1 billion in debt. The Fiscal 2022 plan includes $330 million in Senior Revenue Bonds and $486 million in Subordinate Revenue Bonds.

Exhibit 6 presents Turnpike net revenues relative to annual debt service obligations. Projected toll revenues are estimated to provide sufficient debt service coverage. Turnpike Senior Revenue Bond debt service coverage is at least 2.73x and reaches 3.18x in 2031 and continues to increase thereafter, which should enable the Turnpike to retain its current mid-investment grade bond ratings. Subordinate Revenue Bond debt service coverage is lower, but at least 1.52x and reaches 1.79x in 2031, while Subordinate Special Revenue Bond debt service coverage is no less than 1.43x and reaches 1.66x in 2031. Both coverage ratios continue to increase thereafter.

Exhibit 6
Long Range Financial Plan
Turnpike Net Revenues and Debt Service
($000) Fiscal Years Ending 5/31



The financial plan is structured to apply Turnpike cash for its Act 44/Act 89 Payments. Fiscal 2022 Act 44/Act 89 Payments will be paid as a lump sum on or about July 30, 2021, with $30 million of this Act 44/Act 89 Payment to be funded with Turnpike cash and the rest being financed with bond proceeds. Beginning in Fiscal 2023, each $50 million Act 44 annual amount will be cash funded.

To provide added protection, the financial plan assumes the Commission maintains at least 10% of annual gross revenues in the General Reserve 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 nearly forty-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 Polices**

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	1,279,740	1,192,059	1,386,368	1,517,333	1,632,077	1,757,049	1,885,782	1,996,176	2,081,919
Gross Non-Toll Revenues (+)	9,574	4,043	0	23,806	35,851	36,210	36,572	36,938	37,307	37,680
Gross Operating Revenues (+)	1,336,605	1,283,783	1,192,059	1,410,174	1,553,184	1,668,287	1,793,621	1,922,720	2,033,483	2,119,599
Operating Expense (-)	376,503	376,164	400,000	417,274	425,620	438,388	455,924	469,602	481,342	490,969
Interest Income (Senior DSRF and GRF earnings) (+)	17,155	20,605	11,415	11,432	11,461	11,518	11,576	11,633	11,692	11,750
Net Turnpike Revenues Before Debt Service	977,257	928,224	803,474	1,004,332	1,139,025	1,241,417	1,349,273	1,464,751	1,563,833	1,640,381
Senior Turnpike Revenue Bond Debt Service	303,781	306,338	235,349	321,827	386,469	437,098	494,932	520,847	511,278	504,512
Net Income Before Capital Expense and General Reserve	673,476	621,886	568,125	682,505	752,556	804,319	854,341	943,904	1,052,555	1,135,869
Capital Funding										
Construction Fund Beginning Balance	203,179	129,262	193,315	122,807	-	-	20,000	20,000	-	-
Newly Sized Senior Bond Proceeds (+)	345,000	488,400	421,794	342,965	400,954	399,682	328,073	280,023	249,875	250,697
Federal Fund Reimb. (+)	58,843	5,697	743	-	-	20,000	20,000	-	-	-
PAYGO Contribution (+)	100,000	129,569	59,100	195,000	250,000	250,000	350,000	400,000	450,000	450,000
Capital Expenditure (-)	550,128	554,861	552,868	660,772	650,954	649,682	698,073	700,023	699,875	700,697
Reconciliation (+)	(27,632)	(4,751)	722	-	-	-	-	-	-	-
Construction Fund Ending Balance	129,262	193,315	122,807	-	-	20,000	20,000	-	-	-
Cash Balances										
Cash Beginning Balance (excl. Liquidity)	225,050	257,735	275,953	332,394	392,460	436,048	513,933	509,853	514,107	541,337
Net Income (+)	673,476	621,886	568,125	682,505	752,556	804,319	854,341	943,904	1,052,555	1,135,869
PAYGO Contribution (-)	100,000	129,569	59,100	195,000	250,000	250,000	350,000	400,000	450,000	450,000
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	53,000	51,254	143,115	-	-	-	-	-	-	-
Reconciliation (+)	(32,000)	32,523	24,533	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	13,533	-	-	21,812	14,301	11,510	12,533	12,910	11,076	8,612
FRN Redemptions (-)	50,000	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,638	6,758	5,703	5,712	5,726	5,754	5,783	5,812	5,841	5,870
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	526	638	424	425	426	428	430	432	434	436
Cash Ending Balance (excl. Liquidity)	656,157	738,717	672,523	804,224	886,868	985,039	1,011,953	1,047,091	1,111,861	1,224,900
Liquidity Balance	133,661	128,378	119,206	141,017	155,318	166,829	179,362	192,272	203,348	211,960
Cash Ending Balance (excl. Liquidity)	656,157	738,717	672,523	804,224	886,868	985,039	1,011,953	1,047,091	1,111,861	1,224,900
Subordinate Bonds Debt Service	355,247	320,707	261,311	332,283	343,817	363,953	393,919	424,541	444,585	449,128
Subordinate Special Revenue Bonds Debt Service	43,175	42,057	48,818	49,481	57,003	57,153	58,182	58,443	75,939	77,470
Net Funds Remaining Before Act 44 Payments	257,735	375,953	362,394	422,460	486,048	563,933	559,853	564,107	591,337	698,302

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	362,394	422,460	486,048	563,933	559,853	564,107	591,337	698,302
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	332,394	392,460	436,048	513,933	509,853	514,107	541,337	648,302
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	391,569	404,331	451,600	533,478	591,366	680,762	689,215	706,379	744,685	860,262
Coverage Calculations										
Mainline Debt Service Coverage										
Senior Lien										
Pledged Revenues	977,257	928,224	803,474	1,004,332	1,139,025	1,241,417	1,349,273	1,464,751	1,563,833	1,640,381
Debt Service	(303,781)	(306,338)	(235,349)	(321,827)	(386,469)	(437,098)	(494,932)	(520,847)	(511,278)	(504,512)
Coverage	3.22 x	3.03 x	3.41 x	3.12 x	2.95 x	2.84 x	2.73 x	2.81 x	3.06 x	3.25 x
Subordinate Lien										
Pledged Revenues	982,895	934,982	809,177	1,010,044	1,144,751	1,247,171	1,355,056	1,470,563	1,569,674	1,646,251
Debt Service	(659,028)	(627,045)	(496,661)	(654,110)	(730,285)	(801,051)	(888,851)	(945,388)	(955,863)	(953,640)
Coverage	1.49 x	1.49 x	1.63 x	1.54 x	1.57 x	1.56 x	1.52 x	1.56 x	1.64 x	1.73 x
Subordinate Special Revenue Lien										
Pledged Revenues	983,421	935,620	809,601	1,010,469	1,145,177	1,247,599	1,355,486	1,470,995	1,570,108	1,646,687
Debt Service	(702,203)	(669,102)	(545,479)	(703,591)	(787,288)	(858,203)	(947,033)	(1,003,831)	(1,031,802)	(1,031,110)
Coverage	1.40 x	1.40 x	1.48 x	1.44 x	1.45 x	1.45 x	1.43 x	1.47 x	1.52 x	1.60 x

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

	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 (+)	38,057	38,437	38,822	39,210	39,602	39,998	40,398	40,802	41,210	41,622	42,038
Gross Operating Revenues (+)	2,203,807	2,293,316	2,386,478	2,483,213	2,583,459	2,687,031	2,794,075	2,904,721	3,019,005	3,136,243	3,257,370
Operating Expense (-)	500,788	510,804	521,020	531,440	542,069	552,910	563,969	575,248	586,753	598,488	610,458
Interest Income (Senior DSRF and GRF earnings) (+)	11,809	11,868	11,927	11,987	12,047	12,107	12,167	12,228	12,289	12,351	12,413
Net Turnpike Revenues Before Debt Service	1,714,828	1,794,380	1,877,385	1,963,760	2,053,437	2,146,228	2,242,274	2,341,701	2,444,542	2,550,106	2,659,325
Senior Turnpike Revenue Bond Debt Service	528,261	567,543	590,076	607,293	625,930	641,527	655,963	662,160	662,116	652,953	657,702
Net Income Before Capital Expense and General Reserve	1,186,567	1,226,837	1,287,309	1,356,467	1,427,507	1,504,701	1,586,311	1,679,542	1,782,426	1,897,153	2,001,623
Capital Funding											
Construction Fund Beginning Balance	-	-	-	-	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	300,372	251,690	241,211	250,000	200,000	150,000	100,000	20,000	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-	-	-	-	-
PAYGO Contribution (+)	450,000	500,000	500,000	600,000	700,000	800,000	900,000	1,000,000	1,040,400	1,061,208	1,082,432
Capital Expenditure (-)	750,372	751,690	741,211	850,000	900,000	950,000	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Cash Balances											
Cash Beginning Balance (excl. Liquidity)	648,302	794,381	930,696	1,121,628	1,277,947	1,401,084	1,493,093	1,557,524	1,605,465	1,706,887	1,895,637
Net Income (+)	1,186,567	1,226,837	1,287,309	1,356,467	1,427,507	1,504,701	1,586,311	1,679,542	1,782,426	1,897,153	2,001,623
PAYGO Contribution (-)	450,000	500,000	500,000	600,000	700,000	800,000	900,000	1,000,000	1,040,400	1,061,208	1,082,432
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	8,421	8,951	9,316	9,674	10,025	10,357	10,704	11,065	11,428	11,724	12,113
FRN Redemptions (-)	-	-	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	436	436	436	436	436	436	436	436	436	436	436
Cash Ending Balance (excl. Liquidity)	1,382,755	1,518,573	1,714,995	1,874,727	2,001,735	2,101,733	2,175,006	2,232,307	2,342,369	2,537,414	2,809,021
Liquidity Balance	220,381	229,332	238,648	248,321	258,346	268,703	279,407	290,472	301,901	313,624	325,737
Cash Ending Balance (excl. Liquidity)	1,382,755	1,518,573	1,714,995	1,874,727	2,001,735	2,101,733	2,175,006	2,232,307	2,342,369	2,537,414	2,809,021
Subordinate Bonds Debt Service	459,126	460,258	464,191	465,496	467,075	472,806	479,977	483,950	489,475	493,362	495,032
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	844,381	980,696	1,171,628	1,327,947	1,451,084	1,543,093	1,607,524	1,655,465	1,756,887	1,945,637	2,230,833

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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	844,381	980,696	1,171,628	1,327,947	1,451,084	1,543,093	1,607,524	1,655,465	1,756,887	1,945,637	2,230,833
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	794,381	930,696	1,121,628	1,277,947	1,401,084	1,493,093	1,557,524	1,605,465	1,706,887	1,895,637	2,180,833
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	1,014,762	1,160,027	1,360,276	1,526,268	1,659,430	1,761,796	1,836,932	1,895,938	2,008,788	2,209,261	2,506,570
Coverage Calculations											
Mainline Debt Service Coverage											
Senior Lien											
Pledged Revenues	1,714,828	1,794,380	1,877,385	1,963,760	2,053,437	2,146,228	2,242,274	2,341,701	2,444,542	2,550,106	2,659,325
Debt Service	(528,261)	(567,543)	(590,076)	(607,293)	(625,930)	(641,527)	(655,963)	(662,160)	(662,116)	(652,953)	(657,702)
Coverage	3.25 x	3.16 x	3.18 x	3.23 x	3.28 x	3.35 x	3.42 x	3.54 x	3.69 x	3.91 x	4.04 x
Subordinate Lien											
Pledged Revenues	1,720,698	1,800,250	1,883,255	1,969,630	2,059,307	2,152,098	2,248,144	2,347,571	2,450,412	2,555,976	2,665,195
Debt Service	(987,387)	(1,027,801)	(1,054,267)	(1,072,789)	(1,093,005)	(1,114,333)	(1,135,940)	(1,146,110)	(1,151,591)	(1,146,316)	(1,152,733)
Coverage	1.74 x	1.75 x	1.79 x	1.84 x	1.88 x	1.93 x	1.98 x	2.05 x	2.13 x	2.23 x	2.31 x
Subordinate Special Revenue Lien											
Pledged Revenues	1,721,134	1,800,686	1,883,691	1,970,066	2,059,743	2,152,534	2,248,580	2,348,007	2,450,848	2,556,412	2,665,631
Debt Service	(1,066,635)	(1,105,420)	(1,133,443)	(1,154,074)	(1,176,581)	(1,200,167)	(1,223,444)	(1,239,002)	(1,247,598)	(1,244,731)	(1,235,889)
Coverage	1.61 x	1.63 x	1.66 x	1.71 x	1.75 x	1.79 x	1.84 x	1.90 x	1.96 x	2.05 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 (+)	42,459	42,883	43,312	43,745	44,183	44,625	45,071	45,522	45,977	46,437	46,901
Gross Operating Revenues (+)	3,382,824	3,512,694	3,647,072	3,786,006	3,929,735	4,078,428	4,232,202	4,391,419	4,556,319	4,727,259	4,904,660
Operating Expense (-)	622,667	635,120	647,823	660,779	673,995	687,475	701,224	715,248	729,553	744,145	759,027
Interest Income (Senior DSRF and GRF earnings) (+)	12,475	12,537	12,600	12,663	12,726	12,790	12,854	12,918	12,983	13,047	13,113
Net Turnpike Revenues Before Debt Service	2,772,631	2,890,111	3,011,849	3,137,889	3,268,467	3,403,743	3,543,832	3,689,088	3,839,748	3,996,162	4,158,746
Senior Turnpike Revenue Bond Debt Service	605,254	621,614	602,022	605,918	621,024	575,001	517,416	488,471	444,088	406,407	379,179
Net Income Before Capital Expense and General Reserve	2,167,377	2,268,496	2,409,827	2,531,971	2,647,442	2,828,741	3,026,416	3,200,617	3,395,660	3,589,755	3,779,566
Capital Funding											
Construction Fund Beginning Balance	-	-	-	-	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	-	-	-	-	-	-	-	-	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-	-	-	-	-
PAYGO Contribution (+)	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	1,345,868
Capital Expenditure (-)	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	1,345,868
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-	-	-	-	-
Cash Balances											
Cash Beginning Balance (excl. Liquidity)	2,180,833	2,702,066	3,245,228	3,917,571	4,824,410	5,859,661	7,125,451	8,585,110	10,246,742	12,115,969	14,155,926
Net Income (+)	2,167,377	2,268,496	2,409,827	2,531,971	2,647,442	2,828,741	3,026,416	3,200,617	3,395,660	3,589,755	3,779,566
PAYGO Contribution (-)	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	1,345,868
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	12,545	12,987	13,438	13,893	14,373	14,869	15,377	15,922	16,490	17,094	17,740
FRN Redemptions (-)	-	-	-	-	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870	5,870
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	436	436	436	436	436	436	-	-	-	-	-
Cash Ending Balance (excl. Liquidity)	3,237,890	3,837,718	4,499,237	5,270,296	6,268,693	7,460,844	8,898,985	10,507,434	12,338,174	14,375,022	16,577,754
Liquidity Balance	338,282	351,269	364,707	378,601	392,974	407,843	423,220	439,142	455,632	472,726	490,466
Cash Ending Balance (excl. Liquidity)	3,237,890	3,837,718	4,499,237	5,270,296	6,268,693	7,460,844	8,898,985	10,507,434	12,338,174	14,375,022	16,577,754
Subordinate Bonds Debt Service	426,758	482,482	478,566	357,044	334,377	280,217	263,875	210,693	172,205	169,096	105,400
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	2,752,066	3,295,228	3,967,571	4,874,410	5,909,661	7,175,451	8,635,110	10,296,742	12,165,969	14,205,926	16,472,354

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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	2,752,066	3,295,228	3,967,571	4,874,410	5,909,661	7,175,451	8,635,110	10,296,742	12,165,969	14,205,926	16,472,354
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	2,702,066	3,245,228	3,917,571	4,824,410	5,859,661	7,125,451	8,585,110	10,246,742	12,115,969	14,155,926	16,422,354
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	3,040,348	3,596,497	4,282,279	5,203,010	6,252,634	7,533,294	9,008,331	10,685,883	12,571,601	14,628,652	16,912,820
Coverage Calculations											
Mainline Debt Service Coverage											
Senior Lien											
Pledged Revenues	2,772,631	2,890,111	3,011,849	3,137,889	3,268,467	3,403,743	3,543,832	3,689,088	3,839,748	3,996,162	4,158,746
Debt Service	(605,254)	(621,614)	(602,022)	(605,918)	(621,024)	(575,001)	(517,416)	(488,471)	(444,088)	(406,407)	(379,179)
Coverage	4.58 x	4.65 x	5.00 x	5.18 x	5.26 x	5.92 x	6.85 x	7.55 x	8.65 x	9.83 x	10.97 x
Subordinate Lien											
Pledged Revenues	2,778,501	2,895,981	3,017,719	3,143,759	3,274,337	3,409,613	3,549,702	3,694,958	3,845,618	4,002,032	4,164,616
Debt Service	(1,032,012)	(1,104,097)	(1,080,589)	(962,962)	(955,402)	(855,218)	(781,290)	(699,164)	(616,294)	(575,502)	(484,579)
Coverage	2.69 x	2.62 x	2.79 x	3.26 x	3.43 x	3.99 x	4.54 x	5.28 x	6.24 x	6.95 x	8.59 x
Subordinate Special Revenue Lien											
Pledged Revenues	2,778,937	2,896,417	3,018,155	3,144,195	3,274,773	3,410,049	3,549,702	3,694,958	3,845,618	4,002,032	4,164,616
Debt Service	(1,091,079)	(1,164,105)	(1,133,688)	(1,001,804)	(980,056)	(860,395)	(781,290)	(699,164)	(616,294)	(575,502)	(484,579)
Coverage	2.55 x	2.49 x	2.66 x	3.14 x	3.34 x	3.96 x	4.54 x	5.28 x	6.24 x	6.95 x	8.59 x

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	2051	2052	2053	2054	2055	2056	2057
Turnpike Operating Income							
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 (+)	47,370	47,844	48,322	48,805	49,293	49,786	50,284
Gross Operating Revenues (+)	5,099,440	5,301,996	5,512,641	5,731,697	5,959,500	6,196,402	6,442,764
Operating Expense (-)	774,208	789,692	805,486	821,596	838,028	854,788	871,884
Interest Income (Senior DSRF and GRF earnings) (+)	13,178	13,244	13,310	13,377	13,444	13,511	13,579
Net Turnpike Revenues Before Debt Service	4,338,410	4,525,548	4,720,465	4,923,478	5,134,917	5,355,124	5,584,459
Senior Turnpike Revenue Bond Debt Service	284,332	263,253	226,619	195,284	164,390	143,814	126,253
Net Income Before Capital Expense and General Reserve	4,054,078	4,262,296	4,493,846	4,728,194	4,970,527	5,211,310	5,458,206
Capital Funding							
Construction Fund Beginning Balance	-	-	-	-	-	-	-
Newly Sized Senior Bond Proceeds (+)	-	-	-	-	-	-	-
Federal Fund Reimb. (+)	-	-	-	-	-	-	-
PAYGO Contribution (+)	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666	1,545,980
Capital Expenditure (-)	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666	1,545,980
Reconciliation (+)	-	-	-	-	-	-	-
Construction Fund Ending Balance	-	-	-	-	-	-	-
Cash Balances							
Cash Beginning Balance (excl. Liquidity)	16,422,354	18,944,259	21,708,729	24,703,264	27,902,742	31,314,541	34,936,494
Net Income (+)	4,054,078	4,262,296	4,493,846	4,728,194	4,970,527	5,211,310	5,458,206
PAYGO Contribution (-)	1,372,786	1,400,241	1,428,246	1,456,811	1,485,947	1,515,666	1,545,980
Additional Cash Payments for OPEB, DSRF, Defeasance (-)	-	-	-	-	-	-	-
Reconciliation (+)	-	-	-	-	-	-	-
Liquidity Requirement Cashflow Set-aside (-)	19,478	20,256	21,064	21,906	22,780	23,690	24,636
FRN Redemptions (-)	-	-	-	-	-	-	-
Subordinate DSRF Interest Earnings (+)	5,870	5,870	-	-	-	-	-
Subordinate Special Revenue Bonds DSRF Interest Earnings (+)	-	-	-	-	-	-	-
Cash Ending Balance (excl. Liquidity)	19,090,039	21,791,927	24,753,264	27,952,742	31,364,541	34,986,494	38,824,084
Liquidity Balance	509,944	530,200	551,264	573,170	595,950	619,640	644,276
Cash Ending Balance (excl. Liquidity)	19,090,039	21,791,927	24,753,264	27,952,742	31,364,541	34,986,494	38,824,084
Subordinate Bonds Debt Service	95,780	33,198	-	-	-	-	-
Subordinate Special Revenue Bonds Debt Service	-	-	-	-	-	-	-
Net Funds Remaining Before Act 44 Payments	18,994,259	21,758,729	24,753,264	27,952,742	31,364,541	34,986,494	38,824,084

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	2051	2052	2053	2054	2055	2056	2057
Act 44 Payment Sources							
Net Funds Remaining Before Act 44 Payments	18,994,259	21,758,729	24,753,264	27,952,742	31,364,541	34,986,494	38,824,084
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	18,944,259	21,708,729	24,703,264	27,902,742	31,314,541	34,936,494	38,774,084
Turnpike General Reserve Fund (Remaining Cash/Liquidity)	19,454,203	22,238,929	25,254,528	28,475,911	31,910,491	35,556,134	39,418,361
Coverage Calculations							
Mainline Debt Service Coverage							
Senior Lien							
Pledged Revenues	4,338,410	4,525,548	4,720,465	4,923,478	5,134,917	5,355,124	5,584,459
Debt Service	(284,332)	(263,253)	(226,619)	(195,284)	(164,390)	(143,814)	(126,253)
Coverage	15.26 x	17.19 x	20.83 x	25.21 x	31.24 x	37.24 x	44.23 x
Subordinate Lien							
Pledged Revenues	4,344,280	4,531,418	4,720,465	4,923,478	5,134,917	5,355,124	5,584,459
Debt Service	(380,112)	(296,451)	(226,619)	(195,284)	(164,390)	(143,814)	(126,253)
Coverage	11.43 x	15.29 x	20.83 x	25.21 x	31.24 x	37.24 x	44.23 x
Subordinate Special Revenue Lien							
Pledged Revenues	4,344,280	4,531,418	4,720,465	4,923,478	5,134,917	5,355,124	5,584,459
Debt Service	(380,112)	(296,451)	(226,619)	(195,284)	(164,390)	(143,814)	(126,253)
Coverage	11.43 x	15.29 x	20.83 x	25.21 x	31.24 x	37.24 x	44.23 x

B. Financial Management Policies

PA TURNPIKE COMMISSION POLICY *This is a statement of official Pennsylvania Turnpike Policy*		**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. <u>Uses:</u>

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. <u>Decision Analysis:</u>

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. <u>Specific Debt Policies, Ratios and Measurement</u>

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. <u>Constraints, Ratios and Measures</u>

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.

<table>
<tr><td colspan="2">PA TURNPIKE COMMISSION POLICY
This is a statement of official Pennsylvania Turnpike Policy</td><td rowspan="2">NUMBER: 7.01
APPROVAL DATE: 08-16-2001
EFFECTIVE DATE: 08-31-2011
REVISED DATE: 02-05-2019</td></tr>
<tr><td>POLICY SUBJECT:
Investment Policy and Guidelines</td><td>RESPONSIBLE DEPARTMENT:
Finance and Administration</td></tr>
</table>

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. <u>Diversification</u>

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. <u>Quality</u>

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.

<table>
<tr><td colspan="2">PENNA TURNPIKE
PA TURNPIKE COMMISSION POLICY
This is a statement of official Pennsylvania Turnpike Policy</td><td rowspan="2">NUMBER: 7.07

APPROVAL DATE: 05-07-2013

EFFECTIVE DATE: 05-07-2013

REVISED DATE: 10-02-2018</td></tr>
<tr><td>POLICY SUBJECT:

7.07 – Interest Rate Swap Management Policy</td><td>RESPONSIBLE DEPARTMENT:

Finance and Administration Department</td></tr>
</table>

I. <u>Introduction</u>:

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. <u>Scope and Authority</u>:

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.

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. <u>Disclosure and Financial Reporting:</u>

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. <u>Record Keeping:</u>

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.