NEW ISSUE – BOOK-ENTRY ONLY

Ratings: Fitch:		AA-
Moody's:		Aa3
Standard & Poor's:		A+
(See "Ratings" herein)		
AGM (Insured Bonds):		
Kroll:		AA+
Moody's:		A2
Standard & Poor's:		AA
(See "Bond Insurance" and "Ratings" herein)		

In the opinion of Co-Bond Counsel, under existing law, interest on the Bonds (as defined herein) is excludable from gross income for purposes of federal income tax, assuming continuing compliance with the requirements of federal tax law, subject to the conditions described in "TAX EXEMPTION AND OTHER MATTERS" herein. Interest on the Bonds is not a preference item for purposes of the individual federal alternative minimum tax; however, interest paid to certain corporate holders of the Bonds indirectly may be subject to alternative minimum tax under circumstances described in "TAX EXEMPTION AND OTHER MATTERS" herein. The Bonds are exempt from personal property taxes in Pennsylvania and the interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date of initial delivery of the Bonds. See "TAX EXEMPTION AND OTHER MATTERS" herein.

$1,247,000,000
Commonwealth of Pennsylvania
General Obligation Bonds,
First Series of 2018

Dated: Date of Issuance and Delivery **Due: As shown on the inside front cover**

This Official Statement relates to the issuance by the Commonwealth of Pennsylvania (the "Commonwealth") of $1,247,000,000 in aggregate principal amount of its General Obligation Bonds, First Series of 2018 (the "Bonds"). The Bonds are being issued to provide funds for and toward the costs of various capital facilities projects and other projects to carry out the purposes of the Growing Greener II and Pennvest Acts (each as defined herein) and to pay all or a portion of the costs of issuance of the Bonds. See "ESTIMATED USE OF PROCEEDS" herein.

The Bonds will be issued only in book-entry only form and initially registered in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"), New York, New York. DTC will act as securities depository for the Bonds. Interest on the Bonds will be payable semi-annually on March 1 and September 1, commencing September 1, 2018. Manufacturers and Traders Trust Company, a New York banking corporation, Harrisburg, Pennsylvania, is the Loan and Transfer Agent for the Bonds. Principal of and interest and redemption premium, if any, on the Bonds are payable to Cede & Co. See "THE BONDS – Book-Entry Only System" and Appendix D "INFORMATION REGARDING THE DEPOSITORY TRUST COMPANY AND ITS BOOK-ENTRY SYSTEM."

The Bonds are subject to redemption prior to maturity as set forth herein. See "THE BONDS – Redemption."

The Bonds are direct and general obligations of the Commonwealth and the full faith and credit of the Commonwealth are pledged for the payment of principal of and interest on the Bonds. See "SECURITY AND SOURCE OF PAYMENT FOR BONDS."

The scheduled payment of principal of and interest on the Bonds maturing on March 1 of the years 2033, 2034 and 2039 (the "Insured Bonds") when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bond by **ASSURED GUARANTY MUNICIPAL CORP.**

This cover page contains certain information for quick reference only. It is not a summary of the issue. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision regarding the Bonds.

The Bonds are offered when, as and if issued, and are subject to the receipt of the legal opinions of the Attorney General of the Commonwealth and, Ballard Spahr LLP and Turner Law, P.C., Co-Bond Counsel, both of Philadelphia, Pennsylvania. Certain legal matters will be passed upon for the Commonwealth by Greenberg Traurig, LLP and Andre C. Dasent, P.C., both of Philadelphia, Pennsylvania, serving as Co-Disclosure Counsel to the Commonwealth. The Commonwealth expects that the Bonds will be available in definitive form for delivery through the facilities of DTC on or about May 23, 2018.

Dated: May 16, 2018

$1,247,000,000
Commonwealth of Pennsylvania
General Obligation Bonds,

First Series of 2018

MATURITY SCHEDULE

(Base CUSIP Number†: 70914P)

Due March 1	Principal Amount	Interest Rate	Yield	CUSIP† Number	Due March 1	Principal Amount	Interest Rate	Yield		CUSIP† Number
2020	$37,710,000	5.00%	2.190%	K84	2030	$61,430,000	3.35%	3.350%		M25
2021	$39,600,000	5.00%	2.330%	K92	2031	$64,500,000	3.50%	3.500%		M33
2022	$41,580,000	5.00%	2.400%	L26	2032	$67,725,000	5.00%	3.300%	*	M41
2023	$43,655,000	5.00%	2.520%	L34	2033**	$71,110,000	4.00%	3.640%	*	M58
2024	$45,840,000	5.00%	2.680%	L42	2034**	$74,670,000	4.00%	3.690%	*	M66
2025	$48,130,000	5.00%	2.830%	L59	2035	$78,400,000	4.00%	3.790%	*	M74
2026	$50,540,000	5.00%	2.970%	L67	2036	$82,320,000	4.00%	3.820%	*	M82
2027	$53,065,000	5.00%	3.040%	L75	2037	$86,440,000	4.00%	3.850%	*	M90
2028	$55,720,000	5.00%	3.100%	L83	2038	$90,760,000	4.00%	3.870%	*	N24
2029	$58,505,000	3.20%	3.200%	L91	2039**	$95,300,000	3.75%	3.855%		N32

†The above CUSIP (Committee on Uniform Securities Identification Procedures) numbers have been assigned by an organization not affiliated with the Commonwealth; the Commonwealth is not responsible for the selection or use of the CUSIP numbers. The CUSIP numbers are included solely for the convenience of bondholders and no representation is made as to the correctness of such CUSIP numbers. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors including, but not limited to, the refunding or defeasance of such issue or the use of secondary market financial products. The Commonwealth has not agreed to, and there is no duty or obligation to, update this Official Statement to reflect any change or correction in the CUSIP numbers set forth above. CUSIP is a registered trademark of the American Bankers Association (the "ABA"). CUSIP data is provided by CUSIP Global Services, which is managed on behalf of the ABA by S&P Capital IQ, a division of McGraw Hill Financial, Inc.

* Yield to first optional redemption date of March 1, 2028.

** Insured Bonds

THE ISSUING OFFICIALS

Governor ……………………………………………….TOM WOLF
State Treasurer………………………………….JOSEPH TORSELLA
Auditor General……………………….EUGENE A. DePASQUALE

OFFICE OF THE BUDGET

Secretary…………………………………………..RANDY ALBRIGHT

Attorney General of the Commonwealth of Pennsylvania:

Josh Shapiro

Co-Bond Counsel:

Ballard Spahr LLP
Philadelphia, Pennsylvania

Turner Law, P.C.
Philadelphia, Pennsylvania

Special Co-Disclosure Counsel:

Greenberg Traurig, LLP
Philadelphia, Pennsylvania

Andre C. Dasent, P.C.
Philadelphia, Pennsylvania

No dealer, broker, salesperson or other person has been authorized to give any information or to make any representations, other than as contained in this Official Statement, in connection with the offering contained herein, and, if given or made, such other information or representations must not be relied upon as having been authorized by the Commonwealth of Pennsylvania. This Official Statement does not constitute an offer to sell, or a solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction where such sale would be unlawful.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "Bond Insurance" and "Exhibit I - Specimen Municipal Bond Insurance Policy".

Except as otherwise noted, the information herein speaks as of its date and is as of the date of this Official Statement and is subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, in any circumstances, create any implication that there has been no change in the affairs of the Commonwealth of Pennsylvania since the date hereof.

The order and placement of the information this Official Statement, including the Appendices hereto and the information incorporated herein by reference, are not to be deemed to be a determination of relevance, materiality or importance, and this Official Statement, including the Appendices, and the information incorporated herein by reference, must be considered in its entirety.

TABLE OF CONTENTS

SUMMARY INFORMATION

THIS SUMMARY STATEMENT IS SUBJECT IN ALL RESPECTS TO THE MORE COMPLETE INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT. OFFERING OF THE BONDS TO THE POTENTIAL PURCHASERS IS MADE ONLY BY MEANS OF THIS ENTIRE OFFICIAL STATEMENT, INCLUDING THE COVER AND APPENDICES HERETO AND THE INFORMATION INCORPORATED BY REFERENCE.

Issuer....................................... Commonwealth of Pennsylvania (the "Commonwealth")

Offering.................................. $1,247,000,000 Commonwealth of Pennsylvania, General Obligation Bonds, First Series of 2018 (the "Bonds").

Dated Date .... Date of issuance and delivery

Security .... General obligation of the Commonwealth; full faith and credit pledged (See "Security and Source of Payment for Bonds" herein). Principal and interest payments on the Bonds due March 1, of the years 2033, 2034 and 2039 are secured by a municipal bond insurance policy purchased by the Underwriter and issued by Assured Guaranty Municipal Corp.

Estimate Use of Proceeds....... The Commonwealth is issuing the Bonds for the following purposes:

Purpose	**Amount**
Capital Facilities Projects	$1,205,000,000
Growing Greener II Projects.................................	26,000,000
Pennvest Projects...	16,000,000
Capitalized Interest..	41,149,841
Costs of issuance	4,393,166

Redemption............................. The Bonds maturing on and after March 1, 2029 are subject to optional redemption in whole or in part (and if in part, in part within one or more maturities) at any time on and after March 1, 2028 at a redemption price equal to the principal amount thereof, plus accrued interest to the date fixed for redemption.

Authorized Denominations.... $5,000 or integral multiples thereof.

Form of Bonds........................ The Bonds are issued in fully registered form through a book-entry only system.

Loan & Transfer Agent......... Manufacturers and Traders Trust Company, Harrisburg, Pennsylvania.

Legal Opinions .... Ballard Spahr LLP and Turner Law, P.C., Co-Bond Counsel.
Greenberg Traurig, LLP and Andre C. Dasent, P.C., Co-Disclosure Counsel.
Josh Shapiro, Attorney General of the Commonwealth.

Bond Ratings .... Fitch Ratings, Inc. ....AA- (outlook "Negative")
Moody's Investors Service, Inc. ....Aa3 (outlook "Stable")
Standard & Poor's Rating Services.................. A+ (outlook "Stable")

Insured Bonds Ratings .... Kroll.. AA+
Moody's.. A2
Standard & Poor's Rating Services................................. AA

See "RATINGS" herein.

Official Statement

$1,247,000,000
Commonwealth of Pennsylvania
General Obligation Bonds,
First Series of 2018

INTRODUCTION

This Official Statement of the Commonwealth of Pennsylvania (the "Commonwealth"), including the cover page, inside front cover page and appendices hereof, presents certain information in connection with the issuance of $1,247,000,000 Commonwealth of Pennsylvania, General Obligation Bonds, First Series of 2018 (the "Bonds"). The Bonds are being issued to provide funds for and toward the costs of various capital facilities projects and for other projects to carry out the purposes of the Growing Greener II Acts and Pennvest Acts (each defined herein). See "ESTIMATED USE OF PROCEEDS."

The Bonds are general obligations of the Commonwealth to which the full faith and credit of the Commonwealth are pledged. See "SECURITY AND SOURCE OF PAYMENT FOR BONDS." Principal of and interest payments on the Bonds will be paid from the General Fund. See "COMMONWEALTH FINANCIAL PERFORMANCE" and "COMMONWEALTH FINANCIAL STRUCTURE AND PROCEDURES."

The Bonds will be initially registered in the name of Cede & Co., as nominee for The Depository Trust Company, securities depository for the Bonds under a book-entry only registration system. See "THE BONDS — Book-Entry Only System" and Appendix D.

The Bonds are authorized investments for fiduciaries and personal representatives, as defined in the Probate, Estates and Fiduciaries Code within the Commonwealth; are legal investments for Pennsylvania banks, trust companies, bank and trust companies, savings banks, and insurance companies; and are acceptable as security for deposits of the funds of the Commonwealth. See "LEGALITY FOR INVESTMENT."

Except where otherwise expressly noted, the financial and other information provided in this Official Statement is generally derived from the records of the Commonwealth. Financial information and other data provided herein are derived from the best information available as of the date of this Official Statement. Because agencies of the Commonwealth have different reporting periods, "as of" dates of certain financial and other information presented herein may vary. All financial information should be considered as unaudited unless otherwise specifically identified. All estimates and assumptions are based on the best information available to the Commonwealth but do not constitute factual information. All estimates of future performance or events constituting "forward-looking statements" may or may not be realized because of a wide variety of economic and other circumstances. Included in such forward-looking statements are numbers and other information from budgets for current and future fiscal years. The references to, and summaries of, constitutional and statutory provisions of the Commonwealth and to bond resolutions and other documents are qualified in their entirety by reference to the complete text of such documents and to any judicial interpretations thereof.

THE BONDS

Description of the Bonds

The Bonds will be dated their date of issuance and delivery, will bear interest from such date, at the rate per annum for each maturity as specified on the inside front cover page hereof. Such interest will be payable semi-annually on each March 1 and September 1, commencing September 1, 2018, calculated on the basis of a 360-day year of twelve 30-day months, and will mature in the amounts and on the dates as set forth on the inside cover page hereof.

The resolutions adopted by the Governor, State Treasurer and Auditor General dated May 9, 2018 and May 16, 2018 (collectively, the "Resolutions") and all provisions thereof are incorporated by reference in the text of the Bonds, including, without limitation, those provisions setting forth the conditions under which the Resolutions may be modified. The Bonds provide that each registered owner, Beneficial Owner, DTC Participant or Indirect Participant (as hereinafter defined) in DTC, by acceptance of a Bond (including receipt of a book-entry credit evidencing an interest therein), assents to all of such provisions as an explicit and material portion of the consideration running to the Commonwealth to induce it to adopt the Resolutions and to issue such Bonds.

Copies of the Resolutions, including the full text of the forms of the Bonds, are on file at the designated office in Harrisburg, Pennsylvania, of Manufacturers and Traders Trust Company (the "Loan and Transfer Agent").

Interest on the Bonds will be payable by check or draft mailed or other transfer made to the persons in whose names the Bonds shall be registered at the close of business on the fifteenth day (whether or not a business day) of the calendar month next proceeding each interest payment date (the "Record Date"). Any interest on any Bond not timely paid or duly provided for shall cease to be payable to the person who is the registered owner as of the regular Record Date, and shall be payable to the person who is the registered owner at the close of business on a special record date for the payment of such defaulted interest. A special record date shall be a date not more than fifteen nor less than ten days prior to the date of the proposed payment and shall be fixed by the Loan and Transfer Agent whenever moneys become available for payment of the defaulted interest. Notice of a special record date shall be given to registered owners of the Bonds not less than fifteen days prior thereto.

Whenever the due date for payment of interest on or principal of the Bonds or the date fixed for redemption of any Bond shall be a Saturday, a Sunday, a legal holiday or a day on which banks in the Commonwealth are required or authorized by law (including by executive order) to close, then payment of such interest, principal or redemption price need not be made on such date, but may be made on the next succeeding day which is not a Saturday, a Sunday, a legal holiday, or a day upon which banks in the Commonwealth are required or authorized by law (including by executive order) to close, with the same force and effect as if made on the due date for such payment of principal, interest or redemption price, and no interest shall accrue thereon for any period after such due date.

Book-Entry Only System

The Depository Trust Company, New York, New York ("DTC") will act as securities depository for the Bonds pursuant to a book-entry only system. Information regarding DTC and its book-entry system, provided by DTC, appears as Appendix D. Such information has been provided by DTC, and the Commonwealth does not assume any responsibility for the accuracy or completeness of such information. The Commonwealth may decide to discontinue use of the system of book-entry transfers through DTC (or another securities depository). In that event, Bond certificates will be printed and delivered.

For so long as the Bonds are registered in the name of DTC, or its nominee Cede & Co., the Commonwealth and the Loan and Transfer Agent will treat Cede & Co. as the registered owner of the Bonds for all purposes, including payments, notices and voting.

Neither the Commonwealth nor the Loan and Transfer Agent shall have any responsibility or obligation to any Direct or Indirect Participant or Beneficial Owner (as defined in Appendix D) with respect to (i) the accuracy of any records maintained by DTC or any Direct or Indirect Participant with respect to any beneficial ownership interest in any Bonds; (ii) the payment by any Direct or Indirect Participant of any amount due to any Beneficial Owner in respect of the principal of, premium, if any, and interest on the Bonds; (iii) the delivery or timeliness of delivery by any Direct or Indirect Participant of any notice to any Beneficial Owner with respect to the Bonds, including, without limitation, any notice of redemption; or (iv) other action taken by DTC or Cede & Co., including the effectiveness of any action taken pursuant to an Omnibus Proxy.

Payments made by or on behalf of the Commonwealth to DTC or its nominee shall satisfy the Commonwealth's payment obligations with respect to the Bonds to the extent of such payments.

Optional Redemption

The Bonds, or portions thereof in integral multiples of $5,000, maturing on and after March 1, 2029 are subject to redemption at the option of the Commonwealth prior to scheduled maturity on and after March 1, 2028, as a whole or in part (and if in part, within one or more maturities) at any time and from time to time, in any order of maturity determined by the Commonwealth and by lot within a maturity in such manner as the Commonwealth in its discretion may determine, on at least 30 days (but not more than 60 days) notice, at a redemption price equal to par (100% of stated principal amount) plus accrued interest to the date fixed for redemption.

Notice of Redemption

As long as the Bonds are registered pursuant to a book-entry only system, notice of redemption will be given, as required by DTC's (or any successor depository's) procedures, to DTC, its nominee, or successor securities depository, as registered owner of the Bonds. So long as Cede & Co. is the registered owner of the Bonds, the Commonwealth will not be responsible for mailing notices of redemption to anyone other than DTC or its nominee.

Notice of redemption shall be given by the Loan and Transfer Agent via first-class mail not less than 30 days, nor more than 60 days, prior to the date fixed for redemption to the persons in whose names the Bonds to be redeemed are registered at the close of business on the fifth (5^{th}) business day prior to such mailings; provided, however, that any defect in the notice or in the mailing thereof with respect to any registered owner shall not affect the validity of the proceedings for such redemption as to any other registered owner. Deposit of any such notice in the United States mail shall constitute constructive receipt of such notice by the registered owner to whom such notice is sent. Notice having been given as aforesaid and provision having been made for redemption from funds on deposit with the Loan and Transfer Agent, no interest on the Bonds, or portions thereof, called for redemption shall accrue after the date fixed for redemption, and the registered holders of the Bonds, or portions thereof, called for redemption shall thereafter have no further right except to receive payment of the redemption price plus accrued interest to the redemption date.

In addition to the notice of redemption to the registered owners of the Bonds, the Loan and Transfer Agent shall cause copies of the original redemption notice to be sent by facsimile transmission, overnight delivery or certified mail with return receipt requested (or other similar means that can provide evidence of receipt) to all registered securities depositories then in the business of holding obligations similar to the Bonds, and to two or more national information services that disseminate redemption information; provided however, that failure to send such copies of the original redemption notice or any defect therein shall not affect the validity of the redemption proceedings.

SECURITY AND SOURCE OF PAYMENT FOR BONDS

The Bonds are direct and general obligations of the Commonwealth to which the full faith and credit of the Commonwealth have been pledged for the payment of the interest thereon as it becomes due and the payment of the principal thereof at maturity or prior redemption. The various acts authorizing the incurrence of debt by the Commonwealth require the General Assembly to appropriate annually the moneys necessary to pay such interest and principal for which other provisions are not made. See the statutes described in the subsection "Authorization" below. Principal of and interest payments on the Bonds will be made from the General Fund.

The Constitution of the Commonwealth of Pennsylvania (the "Constitution") places a claim on certain revenues of the Commonwealth for the payment of principal of and interest on all debt of the Commonwealth. Article VIII, Section 7(d) of the Constitution provides that, if sufficient funds are not appropriated for the timely payment of the interest on and principal of all Commonwealth debt, the State Treasurer shall set apart from the first revenues thereafter received applicable to the appropriate fund, a sum sufficient to pay such interest and principal, and shall so apply the money so set apart.

The State Treasurer may be required to set aside and apply such revenues at the suit of any holder of Commonwealth obligations.

For a description of the constitutional provisions relating to the Bonds, see Appendix E. The proposed form of the opinion of the Attorney General of the Commonwealth is set forth in Appendix F, and the proposed form of the opinion of Co-Bond Counsel is set forth in Appendix G.

The Bonds maturing March 1, of the years 2033, 2034 and 2039 are insured by a municipal bond insurance policy purchased by the Underwriter and issued by Assured Guaranty Municipal Corp. as further described herein. See "Bond Insurance" herein.

Authorization

The Bonds are authorized and issued pursuant to and in full compliance with the provisions, restrictions and limitations of Section 7 of Article VIII of the Constitution; the laws of the Commonwealth, including but not limited to the Capital Facilities Debt Enabling Act, Act No. 1999-1, approved February 9, 1999, as amended by: Act No. 2002-130, approved October 28, 2002; Act No. 2003-49, approved December 23, 2003; Act No. 2004-67, approved July 4, 2004; Act No. 2005-87, approved December 22, 2005; Act No. 2008-48, approved July 4, 2008; Act No. 2010-48, approved July 7, 2010; Act No. 2013-77, approved October 25, 2013; Act No. 2017-52, approved October 30, 2017 (as so amended, the "Capital Facilities Debt Enabling Act"); the Growing Greener Environmental Stewardship and Watershed Protection Enhancement Authorization Act, Act No. 2005-1, approved April 13, 2005 (the "Growing Greener Environmental Stewardship and Watershed Protection Enhancement Authorization Act"); Act No. 2005-45, approved July 13, 2005 (collectively, with the Growing Greener Environmental Stewardship and Watershed Protection Enhancement Authorization Act, the "Growing Greener II Acts"); a constitutional referendum question approved by the voters of the Commonwealth on May 17, 2005 (the "Growing Greener Referendum"); the Pennsylvania Infrastructure Investment Authority Act, Act No. 1988-16, approved March 1, 1988 (the "1988 Pennvest Act"); the Small Water Systems Assistance Act, Act No.1992-5, approved March 16, 1992 (the "1992 Pennvest Act"); the Water and Sewer Systems Assistance Act, Act No. 2008-64, approved July 9, 2008 (the "2008 Pennvest Assistance Act"); a constitutional referendum question approved by the voters of the Commonwealth on November 4, 2008 (the "Pennvest Assistance Referendum"); and the Fiscal Code, as amended in Act No. 2009-50, approved October 9, 2009 (collectively, with the 1988 Pennvest Act, the 1992 Pennvest Act and the 2008 Pennvest Assistance Act, the "Pennvest Acts") and, annual capital budget bills and various bond authorization bills enacted by the General Assembly. The Bonds are also issued pursuant to the Resolutions.

Debt Limits

The Constitution (Article VIII, Section 7(a)) permits debt to be incurred (i) for purposes itemized in law and approved by voter referendum, (ii) without approval of the electorate for the rehabilitation of areas affected by man-made or natural disasters, and (iii) without approval of the electorate for capital facilities projects specifically itemized in a capital budget if such debt does not cause the amount of all net debt outstanding (as defined for purposes of that Section) to exceed one and three quarters times (1.75x) the average of the annual tax revenues of the Commonwealth deposited in all funds in the previous five fiscal years, as certified by the Auditor General (the "Constitutional Debt Limit"). The most recent semi-annual computation of the Constitutional Debt Limit and the amount of net debt outstanding subject to such limit are shown in Table 1 on the next page.

Table 1
Constitutional Debt Limit[a]
February 28, 2018
(In Millions)

Average Annual Tax Revenues FYs ended June 30, 2013-2017..	$ 38,281.0
Times 1.75	66,991.8
Less: Net Debt Outstanding[b]	11,435.9
Debt Issuable Within Limit	$ 55,555.9

[a] As certified by the Auditor General on February 28, 2018 (See Appendix A to this Official Statement).
[b] After credit for refunded debt.

[INTENTIONALLY LEFT BLANK]

The capital debt authorizations for the various categories of capital facilities projects are shown in Table 2 below.

Table 2
Pro Forma Remaining Debt Authorized After Issuance of the Bonds
(In Millions)

Capital Facilities Projects Category	Debt Authorized	Issued[(a)]	Remaining Debt Authorized	Pro Forma Remaining Debt Authorized After Issuance Of The Bonds
Buildings and Structures……………….	$45,194.0	$12,268.8	$32,925.2	$32,245.2
Furniture and Equipment ………………	1,629.6	546.5	1,083.1	1,083.1
Transportation Assistance …………….	15,184.8	4,036.9	11,147.9	10,797.9
Redevelopment Assistance ……………	53,783.6	4,749.8	49,033.9	48,858.9
Community Colleges …………………..	35.8	28.0	7.8	7.8
Highway and Highway Bridge………..	43,341.3	3,287.5	40,053.8	40,053.8
Flood Control ………………………….	1,103.3	65.8	1,037.5	1,037.5
Total…………………..……………	$160,272.4	$24,983.3	$135,289.2	$134,084.2

(a) Original issuance amounts; not all are presently outstanding.

The amount of debt that may be issued in any given fiscal year for capital projects authorized in current or previous capital budgets is enacted annually by the General Assembly and approved by the Governor. The maximum principal amount of debt currently authorized by the fiscal year 2017-2018 capital budget is as shown in Table 3 below.

Table 3
Pro Forma Remaining Debt After Issuance of the Bonds (a)
(In Millions)

Capital Facilities Projects Category	Limits	Debt Issued To Date	Remaining Issuable Within Limit	Pro Forma Remaining After Issuance Of The Bonds
Buildings and Structures………………	$680.0	$0.0	$680.0	$0.0
Furniture and Equipment ……………..	10.0	0.0	10.0	10.0
Transportation Assistance ……………	350.0	0.0	350.0	0.0
Redevelopment Assistance …………..	175.0	0.0	175.0	0.0
Flood Control …………………………	10.0	0.0	10.0	10.0
Total…………………..……………	$1,225.0	$0.0	$1,225.0	$20.0

(a) The Bonds are being issued under the fiscal year 2017-2018 capital budget debt limits, which became effective on October 30, 2017.

After issuance of the Bonds under the fiscal year 2017-2018 capital budget, approximately $20 million principal amount of debt will remain authorized and unissued thereunder. See "ESTIMATED USE OF PROCEEDS-Capital Facilities Projects."

The Growing Greener II Acts authorized the issuance of $625 million aggregate principal amount of debt for the purposes of maintenance and protection of the environment, open space and farmland preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other environmental initiatives. See "ESTIMATED USE OF PROCEEDS-Growing Greener II Projects." To date, bonds in the principal amount of $599 million have been issued pursuant to the Growing Greener II Acts. Upon the issuance of $26 million of the Bonds pursuant to the Growing Greener II Acts, no debt will remain authorized and unissued thereunder.

The Pennvest Acts authorized the issuance of $1,050 million aggregate principal amount of debt for the purpose of making grants and loans for the acquisition, construction, improvement, expansion, extension, repair or rehabilitation of all or part of a project for the improvement of water supply and sewage treatment systems. See

"ESTIMATED USE OF PROCEEDS-Pennvest Projects." To date, bonds in the principal amount of $998.4 million have been issued pursuant to the Pennvest Acts. Upon the issuance of $16 million of the Bonds pursuant to the Pennvest Acts, $35.6 million principal amount of debt will remain authorized and unissued thereunder.

For a discussion of the Commonwealth's outstanding debt and projected future issuance of general obligation debt, see "OUTSTANDING INDEBTEDNESS OF THE COMMONWEALTH."

BOND INSURANCE

Bond Insurance Policy

Concurrently with the issuance of the Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the Insured Bonds. The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as an exhibit to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

Assured Guaranty Municipal Corp.

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. ("AGL"), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol "AGO". AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and global public finance, infrastructure and structured finance markets. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM's financial strength is rated "AA" (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("S&P"), "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A2" (stable outlook) by Moody's Investors Service, Inc. ("Moody's"). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM's long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

Current Financial Strength Ratings

On May 7, 2018, Moody's announced it had affirmed AGM's insurance financial strength rating of "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

On January 23, 2018, KBRA announced it had affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On June 26, 2017, S&P announced it had affirmed AGM's financial strength rating of "AA" (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Capitalization of AGM

At March 31, 2018:

- The policyholders' surplus of AGM was approximately $2,247 million.
- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("MAC") (as described below) were approximately $1,133 million. Such amount includes 100% of AGM's contingency reserve and 60.7% of MAC's contingency reserve.
- The net unearned premium reserves of AGM and its subsidiaries (as described below) were approximately $1,646 million. Such amount includes (i) 100% of the net unearned premium reserves of AGM and AGM's wholly owned subsidiaries Assured Guaranty (Europe) plc, Assured Guaranty (UK) plc, CIFG Europe S.A. and Assured Guaranty (London) plc (together, the "AGM European Subsidiaries") and (ii) 60.7% of the net unearned premium reserve of MAC.

The policyholders' surplus of AGM and the contingency reserves and net unearned premium reserves of AGM and MAC were determined in accordance with statutory accounting principles. The net unearned premium reserves of the AGM European Subsidiaries were determined in accordance with accounting principles generally accepted in the United States of America.

Incorporation of Certain Documents by Reference

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the "SEC") that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

(i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (filed by AGL with the SEC on February 23, 2018); and

(ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018 (filed by AGL with the SEC on May 4, 2018).

All consolidated financial statements of AGM and all other information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at http://www.sec.gov, at AGL's website at http://www.assuredguaranty.com, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

Miscellaneous Matters

AGM makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE".

ESTIMATED USE OF PROCEEDS

The Commonwealth is issuing the Bonds for the following purposes:

(i) $1,205,000,000 to provide for the construction, acquisition and major rehabilitation of capital facilities projects as described below under "Capital Facilities Projects";

(ii) $26,000,000 to provide for Growing Greener II Projects described below under "Growing Greener II Projects";

(iii) $16,000,000 to provide for Pennvest Projects described below under "Pennvest Projects";

(iv) $41,149,842 will be used to fund capitalized interest; and

(v) $4,393,166 will be used to pay all or a portion of the costs of issuance for the Bonds, including financial advisors and attorneys' fees, rating agency fees, printing costs, and underwriting discount, from which the bond insurance premium for the Insured Bonds will be paid.

Capital Facilities Projects

A portion of the proceeds of the Bonds will be deposited into the Capital Facilities Fund and applied: 1) to pay a portion of the costs of issuance of the Bonds and 2) to the financial costs of various capital facilities projects of the Commonwealth. Of the combined $1,205,000,000 aggregate principal amount of the Bonds issued for capital facilities projects: (i) $680,000,000 aggregate principal amount of the Bonds shall be allocated to the Department of General Services and used to fund the construction and major rehabilitation of public buildings for the Commonwealth and its institutions, approximately $15,000,000 of which shall be applied to pay capital costs relating to public improvement projects administered by the Department of General Services, as provided for in the Capital Facilities Debt Enabling Act, including costs of administration, salaries and expenses of administrators, reviewing architects and engineers, construction inspectors, accountants and legal counsel of the Commonwealth and its agencies or authorities, incurred solely for the proper planning and supervision of such capital projects; (ii) $175,000,000 aggregate principal amount of the Bonds shall be allocated to the Office of the Budget to fund redevelopment assistance projects; and (iii) $350,000,000 aggregate principal amount of the Bonds shall be allocated to the Department of Transportation to fund transportation assistance projects. Pending application for the above purposes, the proceeds of the Bonds will be held by the State Treasurer in the Capital Facilities Fund and invested in accordance with applicable state and federal laws.

Growing Greener II Projects

A portion of the proceeds of the Bonds is dedicated to carrying out the purposes of the Growing Greener II Acts and to pay the costs of issuance of the Bonds allocated to such purposes. $26,000,000 aggregate principal amount of the Bonds to be issued pursuant to the Growing Greener II Acts will be deposited into the Growing Greener Bond Fund (established pursuant to the Growing Greener II Acts) and applied to the costs of maintenance and protection of the environment, open space and farmland preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other environmental initiatives. Pending application for the above purposes, the proceeds of the Bonds will be held by the State Treasurer in the Growing Greener Bond Fund and invested in accordance with applicable state and federal laws.

Pennvest Projects

A portion of the proceeds of the Bonds is dedicated to carrying out the purposes of the Pennvest Acts and to pay the costs of issuance of the Bonds allocated to such purposes. $16,000,000 aggregate principal amount of the Bonds to be issued pursuant to the Pennvest Acts will be deposited into the Water and Sewer Systems Assistance Bond Fund (established pursuant to the Pennvest Acts) and applied to the costs of making grants to local governments and, in certain circumstances, to private companies, for the acquisition, construction, improvement, expansion, extension, repair or rehabilitation of all or part of a project for the improvement of water supply and sewage treatment systems. Pending application for the above purposes, the proceeds of the Bonds will be held by the State Treasurer in the Water and Sewer Systems Assistance Bond Fund and invested in accordance with applicable state and federal laws.

COMMONWEALTH GOVERNMENT

The Commonwealth is organized into three separate branches of government — executive, legislative and judicial — as defined in the Constitution. Five officials of the Commonwealth's executive branch are elected in statewide elections for four-year terms expiring on the dates shown below.

Name	Office	Term Expires
Tom Wolf	Governor	January 15, 2019
Mike Stack	Lieutenant Governor	January 15, 2019
Josh Shapiro	Attorney General	January 19, 2021
Joseph Torsella	State Treasurer	January 19, 2021
Eugene A. DePasquale	Auditor General	January 19, 2021

Commonwealth Employees

Employees are permitted to organize and bargain collectively. As of July 1, 2017, 81.5% of full-time salaried employees under the Governor's jurisdiction were covered by collective bargaining agreements or memoranda of understanding, with approximately 41% of state employees represented by the American Federation of State, County and Municipal Employees (AFSCME). Approximately 60% of these represented employees are currently covered by three-year contracts that expire on June 30, 2019. Said pacts provide general pay increases totaling 7.25% over the term of the contracts while concurrently requiring employees to assume a greater contribution toward their health care.

Interest arbitration awards typically dictate the employee salary increases and employee and employer health care contributions to be provided to, or on behalf of, employees covered by five public safety unions who possess the statutory right under Act 111 (1968) or Act 195 (1970) to have a neutral arbitrator decide the terms of a contract when parties are unable to agree. Two such units (the PA State Rangers Association and the PA Capitol Police - FOP Lodge 85) are currently working under the terms of four-year contracts, which commenced on July 1, 2015, awarded by an interest arbitration panel. Under the award issued for the Rangers unit, said employees will receive general pay increases totaling 8.75%, while the award issued for the Capitol Police provides for general pay increases totaling 9.75%. Another such unit (PA State Corrections Officers Association) is currently working under the terms of a three-year contract, which commenced on July 1, 2017, awarded by an interest arbitration panel. Under the award issued for the Corrections Officers unit, said employees will receive general pay increases totaling 6.0%. Further, the Commonwealth and the PA State Troopers Association recently negotiated a three-year agreement, which commenced on July 1, 2017, and provides for general pay increases totaling 4.75% over the term of the contract. In relation to the fifth public safety union (PA Wildlife Conservation Officers - FOP Lodge 114), the Commonwealth recently reached a tentative agreement with said unit on a three-year contract commencing on July 1, 2017, which provides for general pay increases totaling 7.25% over the contract term.

Table 4
Filled Salaried Positions and Employees
Under the Governor's Jurisdiction[(a)]
2013-2017

As of July 1	Total Full and Part Time Filled Salaried Positions	Total Full Time Salaried Positions	Union Positions	Union Positions As a % of Total Filled Salaried Positions
2013	72,768	72,574	59,312	81.5
2014	72,650	72,347	59,174	81.5
2015	72,830	72,622	59,190	81.3
2016	72,984	72,793	59,347	81.3
2017	72,815	72,560	58,926	80.9

(a) Excludes employees of the legislative and judicial branches, the Department of the Auditor General, the Treasury Department, the State System of Higher Education and independent agencies, boards and commissions.
Source: Office of Administration, 2017 State Government Workforce Statistics.

COMMONWEALTH FINANCIAL STRUCTURE AND PROCEDURES

The Constitution and the laws of the Commonwealth require all payments from the State Treasury, with the exception of refunds of taxes, licenses, fees and other charges, to be made only by duly enacted appropriations. Amounts appropriated from a fund may not exceed its actual and estimated revenues for the fiscal year plus any unappropriated surplus available. Appropriations from the principal operating funds of the Commonwealth (the General Fund, the Motor License Fund and the State Lottery Fund) are generally made for one fiscal year and are returned to the unappropriated surplus of the fund categorized as a lapse if not spent or encumbered by the end of the fiscal year. The Commonwealth's fiscal year begins July 1 and ends June 30. (Fiscal year 2018 refers to the fiscal year ended June 30, 2018.)

Description of Funds

The Commonwealth utilizes the fund method of accounting. For purposes of governmental accounting, a "fund" is defined as an independent fiscal and accounting entity with a self-balancing set of accounts. Each fund records the cash and/or other resources together with all related liabilities and equities that are segregated for the purpose of the fund. In the Commonwealth, funds are established by legislative enactment or in certain limited cases by administrative action. Over 150 funds have been established and currently exist for the purpose of recording the receipt and disbursement of moneys received by the Commonwealth. Annual budgets are adopted each fiscal year for the principal operating funds of the Commonwealth and several other special revenue funds. Expenditures and encumbrances against these funds may be made only pursuant to appropriation measures enacted by the General Assembly and approved by the Governor.

The General Fund, the Commonwealth's largest operating fund, receives all tax revenues, non-tax revenues and federal grants and entitlements that are not specified by law to be deposited elsewhere. The majority of the Commonwealth's operating and administrative expenses are payable from the General Fund. Debt service on all bond indebtedness of the Commonwealth, except that issued for highway purposes or for the benefit of other special revenue funds, is payable from the General Fund.

The Motor License Fund receives all tax and fee revenues relating to motor fuels and vehicles. All revenues relating to motor fuels and vehicles are required by the Constitution to be used only for highway purposes. Most federal aid revenues designated for transportation programs and tax revenues relating to aviation fuels are also deposited in the Motor License Fund. Operating and administrative costs for the Department of Transportation and other Commonwealth departments conducting transportation related programs, including the highway patrol activities of the Pennsylvania State Police, are also paid from the Motor License Fund. Debt service on certain bonds issued by the Commonwealth for highway purposes is payable from the Motor License Fund.

Other special revenue funds have been established by law to receive specified revenues that are appropriated to departments, boards and/or commissions for payment of their operating and administrative costs. Such funds include the Game, Fish, Boat, Banking Department, Milk Marketing, State Farm Products Show, Environmental Stewardship, State Racing, and Tobacco Settlement Funds. Some of these special revenue funds are required to transfer excess revenues to the General Fund, and some receive funding, in addition to their specified revenues, through appropriations from the General Fund.

The Tobacco Settlement Fund is a special revenue fund established to receive tobacco litigation settlement payments paid to the Commonwealth. The Commonwealth is one of forty-six states that settled certain smoking-related litigation in a November 1998 master settlement agreement with participating tobacco product manufacturers (the "Tobacco MSA"). Under the Tobacco MSA, the Commonwealth is entitled to receive a portion of payments made pursuant to the Tobacco MSA by tobacco product manufacturers participating in the Tobacco MSA. Most revenues to the Tobacco Settlement Fund are subject to annual appropriation by the General Assembly and approval by the Governor.

The Budget Stabilization Reserve Fund is a special revenue fund designated to receive a statutorily determined portion of the budgetary basis fiscal year-end surplus of the General Fund, as was its predecessor fund, the Tax Stabilization Reserve Fund. The Budget Stabilization Reserve Fund was established in July 2002 after the Tax Stabilization Reserve Fund was abolished and its balance transferred to the General Fund for the 2002 fiscal year budget. The Budget Stabilization Reserve Fund is to be used for emergencies threatening the health, safety or welfare of citizens or during downturns in the economy that result in significant unanticipated revenue shortfalls not able to be addressed through the normal budget process. Assets of the Budget Stabilization Reserve Fund may be used upon recommendation by the Governor and an approving vote by two-thirds of the members of each house of the General Assembly. For GAAP (as defined below) reporting purposes, the Budget Stabilization Reserve Fund (previously designated the Tax Stabilization Reserve Fund) has been reported as a fund balance reservation in the General Fund (governmental fund category) since fiscal year 1999. Prior to that fiscal year, the Tax Stabilization Reserve Fund was reported, on a GAAP basis, as a designation of the General Fund unreserved fund balance. See "Budget Stabilization Reserve Fund" below.

The Commonwealth maintains trust and agency funds that are used to administer funds received pursuant to a specific bequest or as an agent for other governmental units or individuals.

Enterprise funds are maintained for departments or programs operated like private enterprises. Two of the largest of such funds are the State Stores Fund and the State Lottery Fund. The State Stores Fund is used for the receipts and disbursements of the Commonwealth's liquor store system. Sale and distribution of all liquor within Pennsylvania is a government enterprise. The State Lottery Fund is also an enterprise fund for the receipt of all revenues from lottery ticket sales and lottery licenses and fees. Its revenues, after payment of prizes and all other costs, are dedicated to paying the costs of programs benefiting the elderly and handicapped in Pennsylvania.

In addition, the Commonwealth maintains funds classified as working capital, bond, and sinking funds for other specified purposes.

Accounting Practices

Financial information for the principal operating funds of the Commonwealth is maintained on a budgetary basis of accounting. The Commonwealth also prepares annual financial statements in accordance with generally accepted accounting principles ("GAAP"). Annual financial statements prepared in accordance with GAAP are audited jointly by the Department of the Auditor General and an independent public accounting firm.

Budgetary Basis

A budgetary basis of accounting is used for ensuring compliance with the enacted operating budget and is governed by applicable statutes of the Commonwealth and by administrative procedures. The Constitution provides that operating budget appropriations shall not exceed the actual and estimated revenues and unappropriated surplus available in the fiscal year for which funds are appropriated. Annual budgets are enacted for the General Fund and certain special revenue funds that together represent the majority of expenditures of the Commonwealth. The annual budget classifies fund revenues as Commonwealth revenues, augmentations, federal revenues, or restricted receipts and revenues. Commonwealth revenues are revenues from taxes and from non-tax sources such as licenses and fee charges, penalties, interest, investment income and other miscellaneous sources. Augmentations consist of departmental and institutional billings that supplement an appropriation of Commonwealth revenues, thereby increasing authorized spending. For example, patient billings for services at Commonwealth-owned institutions are augmentations that supplement Commonwealth revenues appropriated to each institution for operating costs. Federal revenues are those federal aid receipts that pay for or reimburse the Commonwealth for funds disbursed for federally assisted programs. Restricted receipts and revenues are funds that are restricted to a specific use or uses by state law, administrative decision, or the provider of the funds. Only Commonwealth revenues and expenditures from these revenues are included in the computation made to determine whether an enacted budget is constitutionally balanced. Augmenting revenues and federal revenues are considered to be self-balancing with expenditures from their respective revenue sources.

The Commonwealth's budgetary basis financial reports for its governmental funds are based on a modified cash basis of accounting as opposed to the modified accrual basis prescribed by GAAP. Under the Commonwealth's budgetary basis of accounting, tax receipts, non-tax revenues, augmentations and all other receipts are recorded at the time cash is received. An adjustment is made at fiscal year-end to include accrued unrealized revenue, that is, revenues earned but not collected. Revenues accrued include estimated receipts from (i) sales and use, personal income, realty transfer, inheritance, cigarette, liquor, liquid fuel, fuels, and oil company franchise taxes, and interest earnings, and (ii) federal government commitments to the Commonwealth. Expenditures are recorded at the time payment requisitions and invoices are submitted to the Treasury Department for payment. Appropriated amounts are reserved for payment of contracts for the delivery of goods or services to the Commonwealth through an encumbrance process. Unencumbered appropriated funds are automatically lapsed at fiscal year-end and are available for re-appropriation. Estimated encumbrances are established at fiscal year-end to pay certain direct expenditures for salaries, wages, travel, and utility costs payable against current year appropriations but disbursed in the subsequent fiscal year. Recording of the applicable expenditure liquidates the encumbered amount. Over-estimates of fiscal year-end encumbrances are lapsed in the subsequent fiscal year and under-estimates are charged to a subsequent fiscal year appropriation. Appropriation encumbrances are shown on the Commonwealth's balance sheet as a reservation of fund balance.

Other reservations of fund balance include (i) the unexpended balance of continuing appropriations (that is, appropriations that do not lapse at fiscal year-end), and (ii) requested appropriation supplements and deficiency appropriations. Revenues dedicated for specific purposes and remaining unexpended at the fiscal year-end are likewise reserved.

GAAP Financial Reporting

At fiscal year-end, budgetary basis financial information, both revenues and expenditures, is adjusted to reflect appropriate accruals for financial reporting in conformity with GAAP. The Commonwealth is not required to prepare GAAP financial statements and does not prepare them on an interim basis. GAAP financial reporting for governmental funds requires a modified accrual basis of accounting, while proprietary and fiduciary funds are reported on the accrual basis of accounting.

Financial statements of the Commonwealth's government funds prepared under GAAP differ from those traditionally prepared on a budgetary basis for several reasons. Among other differences, the GAAP financial statements for government funds (i) generally recognize revenues when they become measurable and available rather than when cash is received, (ii) report expenditures when goods and services are received and a liability incurred rather than when cash is disbursed, (iii) include a combined balance sheet for the Commonwealth presented by GAAP fund type rather than by Commonwealth fund, and (iv) include activities of all funds in the reporting entity, including agencies and authorities usually considered as independent of the Commonwealth for budgetary purposes. Adjustments to budgetary basis revenues and expenditures required to conform to GAAP accounting generally require including (i) corporation, sales, and personal income tax accruals, (ii) tax refunds payable and tax credits, and (iii) expenditures incurred but not yet posted as expenditures or not covered by appropriations.

An independent public accounting firm and the Department of the Auditor General jointly audit the Commonwealth's annual GAAP basis financial statements. The audited Basic Financial Statements are a component of the Commonwealth's Comprehensive Annual Financial Report ("CAFR"). The CAFRs for recent fiscal years, including the fiscal year ended June 30, 2017, have been filed with the Municipal Securities Rulemaking Board via its Electronic Municipal Market Access system ("EMMA") and are available from EMMA (http://www.emma.msrb.org) and at the Publication & Reports – Annual Financial Report section of the Office of the Budget's website – (www.budget.state.pa.us). The CAFR for the year ended June 30, 2017 is incorporated herein by reference.

Investment of Funds

The Treasury Department is responsible for the deposit and investment of most funds belonging to the Commonwealth, including the proceeds of the Commonwealth's bonds and the funds held for the payment of interest on and maturing principal of the Commonwealth's bonds. The Commonwealth's Fiscal Code contains statutory limitations on the investment of funds by the Treasury Department. The Board of Finance and Revenue, a three-member board of state officials chaired by the State Treasurer, is authorized to establish the aggregate amount of funds that may be invested in some of the various categories of permitted investments. The State Treasurer ultimately determines the asset allocation and selects the investments within the parameters of the law.

The Commonwealth's Fiscal Code permits investments in the following types of securities: (i) United States Treasury securities and United States Agency securities maturing within two years of issue; (ii) commercial paper issued by industrial, common carrier or finance companies rated "Prime One" or its equivalent; (iii) certificates of deposit of Pennsylvania-based commercial banks, savings banks or savings and loans; (iv) repurchase obligations secured by Federal obligations; (v) banker's acceptances written by domestic commercial banks with a Moody's

Investors Service "AA" rating or the equivalent rating by Standard & Poor's Financial Services or Fitch's Rating Service; and (vi) other non-equity investments not to exceed ten percent of assets subject to a "prudent investor" test. The Treasury Department maintains additional investment restrictions contained in its Investment Policy Guidelines. A summary of the Investment Policy Guidelines and a report on investment activity and performance of funds invested by the Treasury Department are contained in a report periodically prepared and publicly distributed by the Treasury Department.

The State Treasurer has been legislatively authorized to invest Commonwealth moneys in securities under the "prudent investor" standard since June 1999. The common investment pool operated by the State Treasurer for the investment of operating funds of the Commonwealth maintains a portion of its investments in securities subject to this test. The legislative authorization to invest in such securities presently expires on December 31, 2019.

Budget Stabilization Reserve Fund

Balances in the Budget Stabilization Reserve Fund are to be used only when emergencies involving the health, safety or welfare of the residents of the Commonwealth or downturns in the economy resulting in significant unanticipated revenue shortfalls cannot be dealt with through the normal budget process. Funds in the Budget Stabilization Reserve Fund may be appropriated only upon the recommendation of the Governor and the approval of a separate appropriation bill by a vote of two-thirds of the members of both houses of the General Assembly. Any funds appropriated from the Budget Stabilization Reserve Fund that are not spent are returned to the Budget Stabilization Reserve Fund. As of February 28, 2018, the Budget Stabilization Reserve Fund had a balance of $479,053.

COMMONWEALTH FINANCIAL PERFORMANCE

Fiscal Year 2018 Budget

The Pennsylvania legislature approved the passage of a $32 billion budget on July 1, 2017. The budget was sent to the Governor, who did not sign or veto the bill, allowing it to become law on July 11, 2017. The fiscal year 2018 enacted budget increases spending by 0.2% over the 2017 budget. On October 26, 2017, the legislature passed, and sent to the Governor, a revenue plan to balance the budget. The revenue plan incorporates borrowing $1.5 billion, which will be paid through tobacco settlement proceeds, major expansion of legalized gaming, taxing the sale of fireworks, and applying Pennsylvania's 6% sales tax to goods sold on online market places. On October 30, 2017, the Governor signed the revenue bills. The administration has been taking steps to balance the fiscal year 2018 budget by not filling approximately 1,600 currently vacant state jobs, selling buildings, and consolidating agencies.

In addition, on January 30, 2018, the Commonwealth, acting by and through the Department of General Services ("DGS"), entered into a Financing Agreement dated as of January 30, 2018 with Municipal Real Estate Funding, LLC ("MRE Funding"), providing for the payment by MRE Funding of $200 million to DGS in connection with the financing of the Farm Show Complex. The loan will be financed through the issuance of Certificates of Participation, Series A of 2018, evidencing the proportionate interest of the owners thereof in payments to be made to MRE Funding by DGS. DGS will use the proceeds of the $200 million payment from MRE Funding to pay its operational and other expenses in fiscal year 2018.

On February 13, 2018, the Commonwealth Financing Authority (the "CFA") pursuant to Article XXVIII of the Tax Reform Code, and the Act of October 30, 2017, No. 43 ("Act 43"), issued Tobacco Master Settlement Payment Revenue Bonds (the "Tobacco Bonds") in a principal amount necessary to fund a deposit of $1.5 billion into the General Fund of the Commonwealth to provide General Fund budgetary relief.

No assurances can be made that any or all these particular steps will be implemented or that any or all of these steps will have the desired impact on the fiscal year 2018 budget. The budget also authorizes the full funding of the actuarially determined state contributions for the state public pension plans in fiscal year 2018. See "Pensions and Retirement Systems" and "Other Post-Employment Benefits" herein. The fiscal year 2018 budget can be viewed at the Governor's Budget Office website at: www.budget.state.pa.us.

Financial Statements Introduction

The most recent Commonwealth audited financial statements are available in the CAFR of the Commonwealth for the fiscal year ended June 30, 2017, which was issued on December 13, 2017 and was filed with EMMA on

December 18, 2017. Copies of the CAFRs beginning with fiscal year 2006 through fiscal year 2017 issued by the Commonwealth are available from (i) the Secretary of the Budget, Attn: Mr. Mike Higgins, 555 Walnut Street, 9th Floor, Harrisburg, Pennsylvania 17101 (Telephone (717) 425-6736)), and (ii) Publication & Reports – Annual Financial Report section of the Office of the Budget's website at www.budget.state.pa.us, which CAFRs are incorporated herein by reference. The audited Basic Financial Statements for fiscal year 2017 included in the CAFR for fiscal year 2017 are incorporated herein by reference. This means that (i) the incorporated information is considered part of this Official Statement, and (ii) such information should be reviewed by prospective purchasers of the Bonds as a part of their review of this entire Official Statement.

Government-Wide Financial Data (GAAP Basis)

Government-wide financial statements report financial position and results of activity for the Commonwealth as a whole. Government-wide statements do not report information on a fund-by-fund basis; rather, they reveal information for all governmental activities and all business-type activities in separate columns. In government-wide statements, for both governmental and business-type activities, the economic resources measurement focus and accrual basis of accounting are used, with revenues and expenses recognized when they occur, rather than when cash is received or paid. This treatment results in including in assets an estimate of the total amount of receivables due at fiscal year-end that are expected to be collected in the future. Capital assets are reported with acquisition or construction costs being reported when the assets are placed in service less accumulated depreciation. Reported liabilities include all liabilities, regardless of when payment is due, including bond principal, employee disability claims liability, and employee compensated absence liabilities.

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Table 5 below presents condensed comparative financial statement information derived from the Commonwealth's government-wide June 30 Statements of Net Position for the fiscal years indicated.

Table 5

Government-wide Condensed Statement of Net Position as of June 30, 2016 and 2017

(Amounts in millions)

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2017	2016	2017	2016	2017	2016
Assets:						
Cash and investments...............	$ 8,972	$ 8,767	$ 7,498	$ 7,278	$ 16,470	$ 16,045
Capital assets (net)...................	37,466	36,451	567	547	38,033	36,998
All other assets.........................	10,932	10,318	1,693	1,714	12,625	12,032
Total assets...........................	57,370	55,536	9,758	9,539	67,128	65,075
Total deferred outflows........	3,457	3,020	151	134	3,608	3,154
Liabilities:						
Accounts payable.....................	8,768	8,101	783	766	9,551	8,867
All other current liabilities........	4,146	4,107	1,226	1,646	5,372	5,753
Bonds payable, non-current......	12,223	11,762	3,459	3,298	15,682	15,060
All other long-term liabilities...	22,429	21,175	3,687	3,514	26,116	24,689
Total liabilities.....................	47,566	45,145	9,155	9,224	56,721	54,369
Total deferred inflows..........	832	377	29	9	861	386
Net position:						
Net invested in capital assets....	31,541	30,525	556	528	32,097	31,053
Restricted................................	2,164	1,917	2,444	1,307	4,608	3,224
Deficit.....................................	(21,276)	(19,408)	(2,275)	(1,395)	(23,551)	(20,803)
Total net position.................	$ 12,429	$ 13,034	$ 725	$ 440	$ 13,154	$ 13,474

Source: Comprehensive Annual Financial Report, fiscal year ended June 30, 2017 (GAAP).

Net position is one way of measuring the health of the Commonwealth's finances. An overall surplus in net position is reported for both Governmental Activities and Business-Type Activities; however, the majority of the surplus is related to net investment in capital assets and other restricted funds which are unavailable to utilize in satisfying the Commonwealth's day-to-day expenses.

The increase of Primary Government deferred outflows of $454 million is the result of increases in pension related resources. Deferred outflows of resources related to the Commonwealth's employer share of the State Employee's Retirement Systems ("SERS") net pension liability increased primarily due to the changes in actuarial assumptions that lowered the discount rate from 7.5% to 7.25% and the inflation rate from 2.75% to 2.6%. Governmental Activities deferred outflows of resources increased $437 million due to the change in pension related items.

The deferred inflows of resources net increase of $475 million is due to the increase in pension related deferred inflows of resources. Deferred inflows of resources related to the Commonwealth's employer share of the SERS net pension liabilities increased primarily due to reported experience gains for the plan and changes to the Commonwealth agencies' proportionate share of the plan.

Financial Data for Governmental Fund Types (GAAP Basis)

Governmental fund financial statements provide fund-specific information about the General Fund, the Motor License Fund, and for other Commonwealth funds categorized as Governmental funds and reported as such in the Basic

Financial Statements of prior fiscal years. Where government-wide financial statements cover the entirety of the Commonwealth, fund financial statements provide a more detailed view of the major individual funds established by the Commonwealth. Fund financial statements further differ from government-wide statements in the use by the latter of the current financial resources measurement focus and the modified accrual basis of accounting.

The governmental funds balance sheet reports total fund balances for all governmental funds. Assets of the Commonwealth's governmental funds (the General Fund, and the Motor License Fund are major governmental funds) as of June 30, 2017, were $20,181.5 million. Liabilities for the same date totaled $12,375.9 million and deferred inflows of resources totaled $3,067.6 million resulting in a fund balance of $4,738.0 million, an increase of $189.7 million from the fund balance at June 30, 2016. On a fund specific basis, the fund balance for the General Fund decreased by $787.7 million, the fund balance for the Motor License Fund increased by $124.4 million and the fund balance for aggregated non-major funds increased by $853.0 million. See "General Fund – Fiscal Year 2017 Financial Results" and "Motor License Fund – Fiscal Year 2017 Financial Results" herein.

To help understand the relationship between the Commonwealth's GAAP fund balance (fund perspective) for governmental funds and the Commonwealth's governmental net assets (government-wide perspective) under the presentation of financial information, the following reconciliation is presented in Table 6 below:

Table 6
Reconciliation of the Balance Sheet
Governmental Funds (Fund Perspective) to
the Statement of Net Position - Governmental Activities
June 30, 2017
(In Thousands)

Fund Balances - Governmental Funds		
General Fund	$	(697,568)
Motor License Fund		1,009,113
Nonmajor Funds		4,426,431
Total Fund Balance - Governmental Funds	$	4,737,976
Plus: Capital Assets, including infrastructure	$	64,321,348
Less: Accumulated depreciation		(26,897,313)
Plus: Deferred revenue		3,067,607
Plus: Deferred outflows of resources		(198,657)
Plus: Other miscellaneous adjustments		73,507
Plus: Net assets of internal service funds		29,510
Plus: Inventories		103,950
Less: Net pension liabilities		(12,623,901)
Less: Long-term liabilities		(20,184,933)
Total Net Position - Governmental Activities	$	12,429,094

Source: Comprehensive Annual Financial Report, fiscal year ended June 30, 2017.

More detailed information with respect to the General Fund and the Motor License Fund, major operating funds that are categorized as governmental funds, is presented in Table 7 (General Fund) and in Table 9 (Motor License Fund).

The financial tables and the textual discussions that follow containing GAAP basis financial data are unaudited but are derived from the Commonwealth's audited financial statements for fiscal years 2013-2017 and unaudited data for fiscal year 2018. The discussion of financial performance on a budgetary basis for prior fiscal years is based on an analysis of budget numbers and not on numbers prepared in accordance with GAAP. Likewise, the discussion of the fiscal year 2018 enacted budget reflects a budgetary basis analysis rather than a GAAP basis analysis.

General Fund

The General Fund is the Commonwealth's largest operating fund. All tax revenue, non-tax revenue and federal grants and entitlements not specified by law to be deposited elsewhere are deposited into the General Fund. The General Assembly makes appropriations of specific amounts from tax revenue and certain non-tax revenue of the General Fund.

Financial Results for Fiscal Years 2013-2017

The following five-year table presents information on a GAAP basis taken from the fiscal year 2017 CAFR.

GAAP Basis. During the five-year period from fiscal year 2013 through fiscal year 2017, total revenues and other sources increased by an average of 5.2% annually. Tax revenues during this same period increased by an annual average of 2.2%. Expenditures and other uses during fiscal years 2013 through 2017 rose at an average annual rate of 5.7%. Expenditures for the protection of persons and property during this period increased at an average annual rate of 1.1%; public education expenditures during this period increased at an average annual rate of 4.4%; health and human services expenditures increased at an average annual rate of 7.5%; and capital outlays increased at an average annual rate of 6.4%. Commonwealth expenditures for direction and support services (state employees and government administration) declined at an average annual rate of 6.8% during fiscal years 2013 through 2017.

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Table 7 presents a summary of revenues, expenditures and fund balance (GAAP basis) for the General Fund, for fiscal years 2013 through 2017.

Table 7
Results of Operations–General Fund
GAAP Basis–Unaudited
(In Thousands)

	Fiscal Year Ended June 30				
	2013	**2014**	**2015**	**2016**	**2017**
Fund Balance — Beginning of Period	$ 1,259,295	$ 1,566,010	$ (566,038)	$ 273,553	$ 90,197
Restatements..	(6,165)	(342)	-	-	-
Fund Balance — Beginning of Period, as Restated................	$ 1,253,130	$ 1,565,668	$ (566,038)	$ 273,553	$ 90,197
Revenues:					
Taxes...	$27,574,159	$27,277,301	$29,930,133	$29,629,553	$ 30,072,951
Licenses and fees..	587,720	537,242	521,956	551,565	586,815
Intergovernmental..	20,151,590	19,995,975	21,550,040	24,405,051	26,964,688
Charges for sales and services..........................	1,451,899	1,494,040	2,458,961	1,807,964	2,749,478
Other revenues..	408,449	247,894	66,314	347,373	364,994
Other Financing Sources:					
Operating transfers in......................................	450,234	485,641	689,759	480,332	1,342,969
Bonds issued and bond premiums.....................	-	-	-	-	-
Other additions...	1,251	715	-	-	-
TOTAL REVENUES AND OTHER SOURCES..	$50,625,302	$50,038,808	$55,217,163	$57,221,838	$ 62,081,895
Expenditures:					
Direction and supportive services....................	$ 888,592	$ 901,917	$ 756,400	$ 629,484	$ 669,491
Protection of persons and property.................	4,343,958	4,423,816	4,536,112	4,241,572	4,540,329
Health and human services..............................	29,766,550	31,250,318	33,071,003	36,116,515	39,688,917
Public education..	13,226,745	13,482,539	13,784,265	14,233,462	15,705,958
Recreation and cultural enrichment.................	234,799	260,837	282,858	291,359	305,531
Economic development...................................	473,059	458,631	444,701	425,765	487,300
Transportation..	14,396	52,672	44,143	65,942	28,400
Capital outlay..	123,486	103,579	189,383	116,497	158,177
Debt service..	25,479	25,108	44,272	15,273	22,794
Other Uses:					
Operating transfers out....................................	1,215,358	1,211,097	1,224,435	1,269,413	1,262,763
TOTAL EXPENDITURES AND OTHER USES	$50,312,422	$52,170,514	$54,377,572	$57,405,282	$ 62,869,660
REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURE AND OTHER USES	312,880	(2,131,706)	839,591	(183,444)	(787,765)
Fund Balance — End of Period	$ 1,566,010	$ (566,038)	$ 273,553	$ 90,109	$ (697,568)
Components of Fund Balance					
Nonspendable..	$ 223,930	$ 265,403	$ 247,216	$ 284,398	$ 218,343
Restricted..	76	45	36	45	78
Committed..	1,334,872	1,119,470	1,289,298	1,486,831	2,321,358
Assigned..	7,132	-	-	-	-
Unassigned deficit...	-	(1,950,956)	(1,262,997)	(1,681,165)	(3,237,347)
TOTAL FUND BALANCE...............................	$ 1,566,010	$ (566,038)	$ 273,553	$ 90,109	$ (697,568)

Source: Compiled from Office of the Budget, Comprehensive Annual Financial Reports for fiscal years ended June 30, 2013 through 2017 (GAAP).

Fiscal Year 2015 Financial Results

GAAP Basis. At June 30, 2015, the General Fund reported a fund balance of $273.6 million, an increase to fund balance of $839.6 million from the $566.0 million fund balance deficit at June 30, 2014 as expenditures and other uses increased by $2,207.1 million and revenues and other sources increased by $5,178.4 million.

Tax revenues increased by $2,652.8 million primarily due to changes in the associated methodologies for the accrual approach used for personal and corporate income taxes, and sales and use taxes. A portion of the increased tax revenues was also attributable to increased collection efforts and inheritance tax revenues. Health and human services increased $1,820.7 million and was due primarily to increased expenditures for the Medical Assistance program of the Department of Human Services. Expenditures for education increased $301.7 million and occurred primarily due to ready-to-learn block grants and state contributions for school employee pension costs. Protection of persons and property programs experienced an increase largely due to an increase in the Commonwealth's employers' share of retirement contributions. This increase was offset by a decrease in federally funded grant programs administered by the Pennsylvania Emergency Management Agency and the Department of Insurance.

Budgetary Basis. General Fund revenues of the Commonwealth were above the certified estimate by $411.9 million or 1.4 percent during fiscal year 2015. Final Commonwealth General Fund revenues for the fiscal year totaled $30,592.5 million. After accounting for a positive fiscal year 2015 beginning balance of $83.7 million, the Commonwealth ended fiscal year 2015 with an unappropriated surplus balance of $274.5 million.

General Fund revenues increased $1,985 million or 6.9 percent during fiscal year 2015 when measured on a year-over-year basis as compared to fiscal year 2014. Tax revenue collections increased $1,394.2 million or 5.0 percent on a year-over-year basis from fiscal year 2014 to fiscal year 2015 while non-tax revenue collections increased $591.1 million or 116.1 percent from fiscal year 2014 to fiscal year 2015. Corporate tax receipts were $218.5 million higher than fiscal year 2014 levels. The year-over-year increase in corporate taxes was 4.5 percent during fiscal year 2015 as corporate net income tax collections increased 12.4 percent and financial institutions tax decreased 7.5 percent. Personal income taxes were $670.1 million above fiscal year 2014 actual collection and the year-over-year growth in personal income tax receipts was 5.9 percent. Personal income tax collections attributable to withholding increased by 3.8 percent or $327.9 million during fiscal year 2015 and tax collections from the non-withholding portion of the personal income tax increased 12.7 percent or $342.2 million on a year-over-year basis. Sales and use tax receipts were $363.5 million greater during fiscal year 2015 than during the prior fiscal year, a growth rate of 4.0 percent. Sales tax collections increased during fiscal year 2015 as non-motor vehicle sales tax collections grew 3.5 percent and motor vehicle sales tax receipts increased 7.2 percent during fiscal year 2015. Cigarette tax collections declined 5.1 percent during fiscal year 2015 and inheritance tax collections grew 14.2 percent. Realty transfer tax revenues grew 10.2 percent during fiscal year 2015.

Commonwealth General Fund appropriations for fiscal year 2015 totaled $29,152.8 million, an increase of $757.7 million or 2.7 percent from fiscal year 2014 levels. The ending unappropriated balance was $83.7 million for fiscal year 2015.

Fiscal Year 2016 Financial Results

GAAP Basis. At June 30, 2016, the General Fund reported a fund balance of $90.1 million, a decrease to fund balance of $183.4 million from the $273.6 million fund balance at June 30, 2015 as expenditures and other uses increased by $3,027.7 million and revenues and other sources increased by $2,004.7 million.

Tax revenues decreased by $300.6 million. Health and human services increased $3,045.5 million primarily due to increased expenditures for the Medical Assistance program of the Department of Human Services. Expenditures for education increased $449.2 million and occurred primarily due to ready-to-learn block grants and state contributions for school employee pension costs. Protection of persons and property programs experienced an increase largely due to an increase in Commonwealths employers' share of retirement contributions. This increase was offset by a decrease in federally funded grant programs administered by the Pennsylvania Emergency Management Agency and the Department of Insurance.

Budgetary Basis. General Fund revenues of the Commonwealth were above the certified estimate by $29.9 million or 0.1 percent during fiscal year 2016. Final Commonwealth General Fund revenues for the fiscal year totaled $30,901.6 million. Total expenditures, net of appropriation lapses and including public health and human services assessments and expenditures from additional sources, were $30,127.2 million. After accounting for a positive fiscal year 2016 beginning balance of $256.6 million, the Commonwealth ended fiscal year 2016 with an unappropriated surplus balance of $2.0 million. (See Table 8 below).

General Fund revenues increased $309.1 million or 1.0 percent during fiscal year 2016 when measured on a year-over-year basis as compared to fiscal year 2015. Tax revenue collections increased $765.5 million or 2.6 percent on a year-over-year basis from fiscal year 2015 to fiscal year 2016 while non-tax revenue collections decreased $456.4 million or down 41.5 percent from fiscal year 2015 to fiscal year 2016. Corporate tax receipts were $20.9 million higher than fiscal year 2015 levels. The year-over-year increase in corporate taxes was 0.4 percent during fiscal year 2016 as corporate net income tax collections increased 1.1 percent and financial institutions tax increased 12.2 percent. Personal income taxes were $398.6 million above fiscal year 2015 actual collection and the year-over-year growth in personal income tax receipts was 3.3 percent. Personal income tax collections attributable to withholding increased by 3.5 percent or $319.3 million during fiscal year 2016 and tax collections from the non-withholding portion of the personal income tax increased 2.6 percent or $79.3 million on a year-over-year basis. Sales and use tax receipts were $302.1 million greater during fiscal year 2016 than during the prior fiscal year, a growth rate of 3.2 percent. Sales tax collections increased during fiscal year 2016 as non-motor vehicle sales tax collections grew 3.4 percent and motor vehicle sales tax receipts increased 1.6 percent during fiscal year 2016. Cigarette tax collections declined 1.7 percent during fiscal year 2016 and inheritance tax collections declined 4.0 percent. Realty transfer tax revenues grew 16.4 percent during fiscal year 2016.

Commonwealth General Fund appropriations for fiscal year 2016 totaled $30,023.8 million, an increase of $974.4 million or 3.3 percent from fiscal year 2015 levels. The ending unappropriated balance was $5.1 million for fiscal year 2016.

Fiscal Year 2017 Financial Results

GAAP Basis. At June 30, 2017, the General Fund reported a fund deficit of $697.6 million, a decrease to fund balance of $787.7 million from the $90.1 million fund balance at June 30, 2016 as expenditures and other uses increased by $5,454.4 million and revenues and other sources increased by $4,860.1 million.

Budgetary Basis. General Fund revenues of the Commonwealth were below the certified estimate by $1,106.7 million or 3.4 percent during fiscal year 2017. Final Commonwealth General Fund revenues for the fiscal year totaled $31,669.0 million. Total expenditures, net of appropriation lapses and including public health and human services assessments and expenditures from additional sources, were $31,941.8 million. After accounting for a positive fiscal year 2017 beginning balance of $5.1 million, the Commonwealth ended fiscal year 2017 with a deficit balance of $1,539.3 million.

General Fund revenues increased $767.4 million or 2.5 percent during fiscal year 2017 when measured on a year-over-year basis as compared to fiscal year 2016. Tax revenue collections increased $495.2 million or 1.6 percent on a year-over-year basis from fiscal year 2016 to fiscal year 2017 while non-tax revenue collections increased $272.9 million or 42.4 percent from fiscal year 2016 to fiscal year 2017. Corporate tax receipts were $319.3 million lower than fiscal year 2016 levels. The year-over-year decrease in corporate taxes was 6.2 percent during fiscal year 2017 as corporate net income tax collections decreased 3.2 percent and financial institutions tax decreased 2.3 percent. Personal income taxes were $158.4 million above fiscal year 2016 actual collection and the year-over-year growth in personal income tax receipts was 1.3 percent. Personal income tax collections attributable to withholding increased by 2.4 percent or $223.5 million during fiscal year 2017 and tax collections from the non-withholding portion of the personal income tax decreased 2.1 percent or $65.1 million on a year-over-year basis. Sales and use taxes receipts were $210 million greater during fiscal year 2017 than during the prior fiscal year, a growth rate of 2.1 percent. Sales tax collections increased during fiscal year 2017 as non-motor vehicle sales tax collections grew 2.3 percent and motor vehicle sales tax receipts increased 1.5 percent during fiscal year 2017. Cigarette tax collections increased 38.4 percent during fiscal year 2017 and inheritance tax collections increased 1.6 percent. Realty transfer tax revenues declined 0.8 percent during fiscal year 2017.

Commonwealth General Fund appropriations for fiscal year 2017 totaled $31,941.8 million, an increase of $1,814.6 million or 6.0 percent from fiscal year 2016 levels. The ending unappropriated balance was a deficit of $1,539.3 million for fiscal year 2017.

The following budgetary basis information is derived from the Commonwealth's unaudited budgetary basis financial statements and enacted fiscal year 2018 budget.

Table 8
Sources, Uses and Changes in Unappropriated Balance
General Fund and Other Funding Sources – Unaudited Budgetary Basis
Commonwealth Revenues Only

(In Thousands)

	Actual	Actual	Enacted
Sources:	**Fiscal Year 2016**	**Fiscal Year 2017**	**Fiscal Year 2018**
Beginning Balance (Plus Adjustments)……………….	$ 256,622	$ 5,141	$ (1,539,333)
Revenue Receipts………………………………….…	30,901,581	31,669,000	34,752,100
Refunds…………………………………………….	(1,250,000)	(1,350,000)	(1,385,000)
Prior Year Lapses………………………………..…	220,953	78,313	210,000
Funds Available……………………………..…	$ 30,129,156	$ 30,402,454	$ 32,037,767
Uses:			
Appropriations……………………………………….	$ 30,023,825	$ 31,544,221	$ 31,996,101
Supplemental Appropriations/Current Year Lapses	103,340	397,567	
Total Expenditures…………………………..	$ 30,127,165	$ 31,941,787	$ 31,996,101
Preliminary Balance………………………………..	$ 1,991	$ (1,539,333)	$ 41,666
Transfer to Budget Stabilization Fund……………….	0	0	(10,417)
Ending Unappropriated Balance……………….	$ 1,991	$ (1,539,333)	$ 31,250

Notes: No transfers to Rainy Day Fund in fiscal years 2016 and 2017.

Fiscal Year 2018 Enacted Budget

The enacted fiscal year 2018 budget provides appropriations and executive authorizations, net of lapses and other reductions, totaling $31,996.1 million of Commonwealth funds against estimated funds available of $32,037.8 million. Enacted General Fund appropriations represent an increase of $54.3 million, or 0.2 percent on a year-over-year basis, from fiscal year 2017. The budget document and related information is available on the Office of the Budget's website at www.budget.state.pa.us.

General fund revenues from all sources are estimated to increase approximately $1.6 billion or 5.4 percent on a year-over-year basis during fiscal year 2018. As part of its 2018 budget, the Commonwealth enacted Act 43 of 2017 (a package of tax increases and other provisions) and Act 40 of 2017 (a package of augmentation and fee increases and other fiscal administration improvements) that will both improve the Commonwealth's fiscal administration and provide significant, recurring revenues to the General Fund.

Corporate taxes are expected to grow in fiscal year 2018. Year-over-year growth of corporate net income tax revenue is expected to be approximately 13.3 percent. This significant increase is partially due to the Nextel court decision. (See "Litigation" herein). Overall, corporation taxes from all sources are projected to increase in fiscal year 2018 by 6.1 percent. Sales and use tax receipts are estimated to grow 3.4 percent on a year-over-year basis and personal income tax receipts are forecast to grow 5.1 percent during fiscal year 2018.

The Commonwealth also enacted a substantial expansion of its gaming laws pursuant to Act 42 of 2017 signed into law on October 30, 2017 ("Act 42"). Act 42 is expected to benefit the General Fund's fiscal year 2018 revenues primarily through one-time license fees, and the General Fund's future fiscal year recurring revenues via taxes on newly authorized video game terminals, table games, internet gaming, and fantasy sports.

In addition to enacting recurring revenues, the Commonwealth is also working to shrink its long-term cost drivers. For example, the Commonwealth enacted Act 5 of 2017 to fundamentally change retirement options for most newly hired state employees beginning January 1, 2019. Act 5 also permits current state employees to make an irrevocable choice to opt-in to one of the three new retirement options between January 1, 2019, and March 31, 2019 that will go into effect on July 1, 2019.

Actual revenues to the General Fund through April 30, 2018 were approximately 0.6 percent above the fiscal year 2018 enacted budget estimate and General Fund collections totaled $29 billion, which is $164.1 million above the enacted budget estimate. Total tax revenue was $47.8 million, or 0.2 percent below the enacted budget estimate while Personal Income tax revenue was $124.0 million, or 1.1 percent above the enacted budget estimate and Sales and Use tax revenue was $21.5 million, or 0.3 percent above the enacted budget estimate.

The achievement of budgeted results may be adversely affected by a number of trends or events, including developments in the national and state economies. Deficits in the enacted budget can result from failures to timely receive projected revenues, inability to control or reduce expenses as projected, incurrence of unforeseen expenses, imposition of unforeseen obligations, whether of a legislative or litigation nature or resulting from a natural disaster, and a multitude of other causes. Cost cutting and revenue producing measures are less efficacious if imposed later in a fiscal year because of the shorter time period over which they will operate.

Motor License Fund

The Constitution requires all proceeds of motor fuels taxes, vehicle registration fees, license taxes, operators' license fees and other excise taxes imposed on products used in motor transportation to be used exclusively for construction, reconstruction, maintenance and repair of and safety on highways and bridges and for debt service on obligations incurred for these purposes. The Motor License Fund is the fund through which most such revenues are accounted for and expended. Portions of certain taxes whose receipts are deposited into the Motor License Fund are legislatively restricted to specific transportation programs. These receipts are accounted for in restricted accounts in the Motor License Fund and are not included in the budgetary basis presentations or discussions on the Motor License Fund. The Motor License Fund budgetary basis includes only unrestricted revenue available for annual appropriation for highway and bridge purposes. In contrast, the GAAP basis presentations include all the restricted account revenues and expenditures.

Financial Results for Fiscal Years 2013-2017

The following five-year table presents information on a GAAP basis taken from the fiscal year 2017 CAFR.

GAAP Basis. The fund balance at June 30, 2017, of the Motor License Fund was $1,009.1 million, a $124.4 million or 14.4 percent increase from the June 30, 2016 fund balance. Over the five fiscal years 2013 through 2017, revenues and other sources averaged an annual 7.3 percent increase. Expenditures and other uses during the same period averaged a 6.2 percent annual increase.

Overall, total revenues and other sources increased by $384 million during the fiscal year ended June 30, 2017, a 6 percent increase from the prior fiscal year. Tax revenues increased $279.9 million during fiscal year 2017 primarily due to Act 89 of 2013. The increase in the liquid fuels tax rate began in the second half of the fiscal year ended June 30, 2017 (January 2017) to the rate of 58.2 cents per gallon for gasoline and 74.7 cents per gallon for diesel fuel. Rates prior to the increase were 50.3 cents per gallon for gasoline and 64 cents per gallon for diesel fuel. Licenses and fees revenues saw an increase of $43 million primarily due to a mid-year option change for vehicle registration fees. Beginning December 31, 2016, motorists were given the option of being able to renew vehicle registrations for two years instead of the standard one-year renewal. The two-year option doubles the amount of a one-year registration fee and does not incorporate a discount. Other assets, which are comprised of several types of receivables, increased $81 million over the prior period. The increase stems from two main sources. The first is a $44 million increase in liquid fuels tax receivables which are directly related to an increase in tax revenues. The other is a $31 million increase in federal funds receivables for highway and safety projects.

Total expenditures and other uses increased by $155.8 million during fiscal year ended June 30, 2017, representing a 6.2 percent increase from the prior fiscal year. The capital outlay expenditure decreased by $205 million.

The decrease is due to the increased funding of Act 89 of 2013, the Commonwealth continues to strongly invest in infrastructure projects, however the timing of the projects created a decrease in capital outlay expenditures. Transportation expenditures increased by $266 million. Although this was the net result of many factors, a major influence was $184 million in additional debt service resulting from increased bond activity over the prior year. Additionally, there was a $60 million increase in grants and subsidies attributed to payments to municipalities for transportation-related projects and bridge construction.

Table 9 below sets forth a condensed summary of revenues and expenditures (presented on a GAAP basis) for the Motor License Fund for fiscal years 2013 through 2017.

Table 9
Results of Operations–Motor License Fund
GAAP Basis–Unaudited
(In Thousands)

	Fiscal Year Ended June 30				
	2013	**2014**	**2015**	**2016**	**2017**
Fund Balance — Beginning of Period	$1,192,998	$1,063,322	$1,122,852	$ 988,548	$ 884,742
Revenues:					
Taxes..	$2,058,228	$2,349,983	$3,017,991	$3,268,270	$3,548,156
Licenses and fees..	920,536	873,949	959,549	963,338	1,005,954
Intergovernmental..	1,935,313	1,948,619	1,785,473	1,884,139	1,895,792
Other revenues..	185,050	196,285	107,272	99,593	138,170
Other Financing Sources:					
Operating transfers in......................................	37,327	21,092	20,978	212,124	223,349
Other additions..	714	-	-	-	-
TOTAL REVENUES AND OTHER SOURCES..	$5,137,168	$5,389,928	$5,891,263	$6,427,464	$6,811,421
Expenditures:					
Direction and supportive services....................	$ 31,593	$ 25,545	$ 19,186	$ 23,196	$ 38,814
Protection of persons and property.................	743,349	781,151	857,850	942,966	963,705
Public education..	459	316	164	494	252
Economic development...................................	-	955	912	5,959	378
Recreation and cultural enrichment.................	901	1,677	4,827	945	6,695
Transportation...	2,036,728	2,226,073	2,642,804	2,645,657	2,911,619
Capital outlay..	2,384,372	2,228,241	2,423,556	2,838,090	2,632,571
Other Uses:					
Operating transfers out....................................	69,442	66,440	76,268	73,963	133,016
TOTAL EXPENDITURES AND OTHER USES	$5,266,844	$5,330,398	$6,025,567	$6,531,270	$6,687,050
REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURE AND OTHER USES	(129,676)	59,530	(134,304)	(103,806)	124,371
Fund Balance — End of Period	$1,063,322	$1,122,852	$ 988,548	$ 884,742	$1,009,113
Components of Fund Balance					
Restricted..	1,063,322	1,122,852	988,548	884,742	1,009,113
TOTAL FUND BALANCE...............................	$1,063,322	$1,122,852	$ 988,548	$ 884,742	$1,009,113

Source: Compiled from Office of the Budget, Comprehensive Annual Financial Reports for fiscal years ended June 30, 2013 through 2017.

The following budgetary basis information is derived from the Commonwealth's unaudited budgetary basis financial statements and enacted fiscal year 2018 budget.

Fiscal Year 2015 Financial Results

Budgetary Basis. Commonwealth revenues to the Motor License Fund totaled $2,611.5 million, an increase of $164.7 million or 6.7 percent over fiscal year 2014 revenues. Receipts from liquid fuels taxes increased by 20.7 percent while license and fee revenue increased by 6.4 percent from the previous year. Other revenue receipts decreased by 62.0 percent over the previous fiscal year. Fiscal year 2015 Motor License Fund appropriations and executive authorizations totaled $2,609.2 million, an increase of 4.6 percent from fiscal year 2014. The Motor License Fund concluded fiscal year 2015 with an unappropriated surplus of $130.3 million, a net increase of 24.4 percent.

Fiscal Year 2016 Financial Results

Budgetary Basis. Commonwealth revenues to the Motor License Fund totaled $2,657.5 million, an increase of $46.0 million or 1.8 percent over fiscal year 2015 revenues. Receipts from liquid fuels taxes increased by 6.2 percent while license and fee revenue increased by 1.2 percent from the previous year. Other revenue receipts decreased by 63.7 percent over the previous fiscal year. Fiscal year 2016 Motor License Fund appropriations and executive authorizations totaled $2,766.9 million, an increase of 6.0 percent from fiscal year 2015. The Motor License Fund concluded fiscal year 2016 with an unappropriated surplus of $40.1 million, a net decrease of 69.3 percent.

Fiscal Year 2017 Financial Results

Budgetary Basis. Commonwealth revenues to the Motor License Fund totaled $2,758.5 million, an increase of $101 million or 3.8 percent over fiscal year 2016 revenues. Receipts from liquid fuels taxes increased by 4.4 percent while license and fee revenue increased by 3.9 percent from the previous year. Other revenue receipts decreased by 29.0 percent over the previous fiscal year. Fiscal year 2017 Motor License Fund appropriations and executive authorizations totaled $2,762.1 million, a decrease of 0.2 percent from fiscal year 2016. The Motor License Fund concluded fiscal year 2017 with an unappropriated surplus of $73.1 million, a net increase of 82.4 percent.

Fiscal Year 2018 Enacted Budget

Commonwealth revenues to the Motor License Fund are budgeted to be $2,896.5 million, an increase of $138 million or 5 percent over fiscal year 2017 revenues. Receipts from liquid fuels tax are budgeted to rise 7.1 percent over the prior year while license and fee revenues are budgeted to decrease by 0.8 percent. Additionally, other revenue receipts are budgeted to increase by 88.2 percent due to the liquidation of some investments. Fiscal year 2018 Motor License Fund appropriations and executive authorizations are budgeted to equal $2,894.9 million, an increase of 4.8 percent from fiscal year 2017 appropriations. The Motor License Fund is budgeted to conclude fiscal year 2018 with an unappropriated balance of $194 million, an increase of $120.9 million over the fiscal year 2017 unappropriated fund balance of $73.1 million.

State Lottery Fund

The Commonwealth operates a statewide lottery program that consists of various lottery games using computer sales terminals located throughout the state, and instant games using preprinted tickets. The net proceeds of all lottery game sales, less sales commissions and directly paid prizes, are deposited into the State Lottery Fund.

State Lottery Fund receipts support programs to assist elderly and handicapped individuals, primarily through property tax and rent rebate assistance and a pharmaceutical assistance program to recipients who meet specified income limits, and the provision of free mass transit rides during off-peak hours. Certain administrative costs and the payment to the General Fund of the personal income tax due on lottery prizes, which taxes and costs were previously paid from the State Lottery Fund, are now paid by the General Fund, beginning in fiscal year 2000.

Financial Results for Fiscal Years 2013-2017

GAAP Basis. During the fiscal year ended June 30, 2017, the net year over year decrease in total revenues and other sources was $149.2 million. This decrease is largely attributed to the prior year's world-record Powerball jackpot of nearly $1.6 billion which drove sales upward in 2015. In February 2017, the Pennsylvania Lottery created a new category of games called Fast Play, with current year sales revenues totaling $55 million. Cost of sales and services increased $79.1 million. Additionally, customer demand for higher payouts on instant tickets led to an increase in the purchase of higher price point tickets. Increased purchases of higher price point instant tickets increased the overall payout on instant prizes. Implemented in fiscal year 2013, a change in the methodology for calculating the unpaid prize liability resulted in an improved account of expired instant tickets no longer subject to prize payout, thus reducing the liability. The previous prize liability (computed using the prior methodology) became subject to a reduction to grant and subsidy expenses accrued and reported at June 30, 2014.

Table 10 sets forth a condensed summary of revenues and expenditures (presented on a GAAP basis) for the State Lottery Fund for fiscal years 2013 through 2017.

Table 10
Results of Operations–State Lottery Fund
GAAP Basis–Unaudited
(In Thousands)

	Fiscal Year Ended June 30				
	2013	**2014**	**2015**	**2016**	**2017**
Net Position -					
Beginning of Period	$ (68,858)	$ (135,106)	$ (16,213)	$ (297,209)	$ (231,428)
Restatements..	-	-	(41,530)	-	-
Net PositIon					
Beginning of Period, as Restated................	$ (68,858)	$ (135,106)	$ (57,743)	$ (297,209)	$ (231,428)
Revenues:					
Lottery revenues..	3,699,186	3,800,883	3,825,052	4,135,245	4,002,544
Intergovernmental..	-	-	-	-	-
Investment income...	4,989	6,841	2,517	939	1,308
Other revenues..	76,278	88,199	98,354	1,407	3,367
Other Financing Sources:					
Operating transfers in......................................	166,800	166,500	162,800	166,800	148,000
TOTAL REVENUES AND OTHER SOURCES..	$3,947,253	$4,062,423	$4,088,723	$4,304,391	$4,155,219
Expenditures:					
Costs of sales and services...............................	$3,621,866	$3,606,376	$3,961,636	$3,898,987	$3,978,049
Depreciation and amortization........................	2,772	3,522	4,023	3,617	3,923
Other expenses..	107,595	110,676	113,087	65,099	39
Other Uses:					
Operating transfers out....................................	281,268	222,956	249,443	270,907	264,907
TOTAL EXPENDITURES AND OTHER USES	$4,013,501	$3,943,530	$4,328,189	$4,238,610	$4,246,918
REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURE AND OTHER USES	(66,248)	118,893	(239,466)	65,781	(91,699)
Net Position - End of Period..........................	$ (135,106)	$ (16,213)	$ (297,209)	$ (231,428)	$ (323,127)
Components of Net Position					
Invested in capital assets, net of debt................	$ 19,802	$ 26,229	$ 22,652	$ 21,621	$ 23,953
Deficit...	(154,908)	(42,442)	(319,861)	(253,049)	(347,080)
TOTAL NET POSITION.................................	$ (135,106)	$ (16,213)	$ (297,209)	$ (231,428)	$ (323,127)

Source: Compiled from Office of the Budget, Comprehensive Annual Financial Reports for fiscal years ended June 30, 2013 through 2017.

The following budgetary basis information is derived from the Commonwealth's unaudited budgetary basis financial statements and enacted fiscal year 2018 budget.

Fiscal Year 2015 Financial Results

Budgetary Basis. Fiscal year 2015 net revenues from lottery sources, including instant ticket sales and the State's participation in the multi-state Powerball game, decreased by 2.4 percent. Total funds available, including prior year lapses and net revenues received by the Lottery Fund during fiscal year 2015, were $1,723.2 million, while total appropriations, net of current year lapses, were $1,939.4 million. Additionally, fiscal year 2015 expenditures included a transfer of approximately $309.1 million in long-term care costs from the Commonwealth's General Fund to the State Lottery Fund. The fiscal year-end unappropriated balance and reserve was $14.8 million, a decrease of 92.7 percent.

Fiscal Year 2016 Financial Results

Budgetary Basis. Fiscal year 2016 net revenues from lottery sources, including instant ticket sales and the State's participation in the multi-state Powerball game, increased by 10.5 percent. Total funds available, including prior year lapses and net revenues received by the Lottery Fund during fiscal year 2016, were $1,903.7, including a temporary $50 million General Fund loan to the Lottery Fund to address cash flow requirements that has since been repaid. Total appropriations, net of current year lapses, were $1,915 million. Additionally, fiscal year 2016 expenditures included a transfer of approximately $184.1 million in long-term care costs from the Commonwealth's General Fund to the State Lottery Fund. The fiscal year-end unappropriated balance and reserve was $26.9 million, an increase of 81.8 percent.

Fiscal Year 2017 Financial Results

Budgetary Basis. Fiscal year 2017 net revenues from lottery sources, including instant ticket sales and the State's participation in the multi-state Powerball game, decreased by 10.2 percent. Total funds available, including prior year lapses and net revenues received by the Lottery Fund during fiscal year 2017, were $1,709.2. Total appropriations, net of current year lapses, were $1,852.5 million. Additionally, fiscal year 2017 expenditures included a transfer of approximately $184.1 million in long-term care costs from the Commonwealth's General Fund to the State Lottery Fund. The fiscal year-end unappropriated balance and reserve had a deficit of $18.2 million, a decrease of 167.6 percent.

Fiscal Year 2018 Enacted Budget

The enacted fiscal year 2018 budget anticipates a 3.8 percent increase in revenues from all lottery sources, including instant ticket sales and the state's participation in the multi-state Powerball game. This increase is primarily due to an anticipated $62 million or 1.54% growth in total ticket sales. Act 42 contained extensive revisions to the Commonwealth's gaming provisions, including the implementation of new I-Lottery, Keno and Virtual Sports lottery products that will increase sales and profits beginning in fiscal year 2018. State Lottery Funds available including lapses are estimated to be $1,785.9 million in fiscal year 2018, a decrease of $48.4 million. Budgeted Appropriations and Executive Authorizations total $1,807 million, which represents a decrease of $45.5 million or a 2.5 percent reduction from fiscal year 2017. The fiscal year-end balance is a deficit budgeted to total $21.1 million, a decrease of $2.9 million from the fiscal year 2017 ending balance. This and future deficits are anticipated to be mitigated as Act 42 revenues ramp up and annualize in fiscal year 2019.

COMMONWEALTH REVENUES AND EXPENDITURES

Recent Receipts and Forecasts

Table 11, on the next page, presents the Commonwealth revenue receipts, including net revenues accrued but not deposited, on a budgetary basis, for the major operating funds of the Commonwealth as actually received for fiscal years 2013 through 2017 and as estimated in the fiscal year 2018 enacted budget.

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Table 11
Commonwealth Revenues [(a)]
General Fund, Motor License Fund and State Lottery Fund - Unaudited
Fiscal Year 2013 – Fiscal Year 2017 and Fiscal Year 2018 Enacted Budget*
(In $ Millions)

	2013	2014	2015	2016	2017	2018
General Fund						
Tax Revenues:						
Sales and use	$ 8,893.7	$ 9,129.6	$ 9,493.1	$ 9,795.2	$ 10,004.5	$ 10,340.9
Personal income	11,371.2	11,437.3	12,107.4	12,506.0	12,664.4	13,304.8
Corporate (b)	3,025.7	2,821.8	3,053.1	2,993.0	2,784.5	3,118.7
Public utility (c)	1,350.2	1,316.3	1,300.0	1,344.1	1,270.7	1,277.1
Inheritance	845.3	877.4	1,002.3	962.2	977.9	1,017.0
Financial and insurance (d)	798.4	749.9	748.4	794.6	756.0	713.2
Cigarette	1,024.1	976.9	927.2	911.5	1,261.6	1,250.6
Other Tobacco Products					83.9	121.6
Realty transfer	338.7	375.4	413.8	481.7	478.0	514.1
Alcoholic beverages (e)	336.4	346.0	358.9	373.0	386.3	404.1
Other	83.5	67.3	88.3	101.0	84.6	71.2
TOTAL TAX REVENUES	$ 28,067.2	$ 28,097.9	$ 29,492.5	$ 30,262.3	$ 30,752.4	$ 32,133.3
Non-Tax Revenues:						
Liquor store profits	$ 80.0	$ 80.0	$ 80.0	**	$ 216.4	$ 185.1
Licenses, fees and miscellaneous	444.3	358.1	950.0	571.8	621.0	2,316.3
Fines, penalties and interest	55.4	71.0	70.2	72.0	79.3	69.4
TOTAL NON-TAX REVENUES	$ 579.7	$ 509.1	$ 1,100.2	$ 643.8	$ 916.7	$ 2,570.8
TOTAL GENERAL FUND	$ 28,646.9	$ 28,607.0	$ 30,592.7	$ 30,906.1	$ 31,669.1	$ 34,704.1
Motor License Fund						
Tax Revenues:						
Liquid fuels	$ 576.3	$ 627.6	$ 815.0	$ 822.3	$ 828.8	$ 851.9
Fuels use	152.0	95.1	0.0	0.0	0.0	0.0
Oil company franchise	445.1	534.1	747.4	836.9	903.9	1,004.5
Motorbus & alt fuels	49.7	37.7	0.0	0.0	0.0	0.0
TOTAL TAX REVENUES	$ 1,223.1	$ 1,294.5	$ 1,562.4	$ 1,659.2	$ 1,732.7	$ 1,856.4
Non-Tax Revenues:						
Licenses and fees	$ 892.5	$ 893.9	$ 950.8	$ 962.7	$ 1,000.5	$ 992.4
Other and miscellaneous	300.6	258.4	98.3	35.7	25.3	47.7
TOTAL NON-TAX REVENUES	$ 1,193.1	$ 1,152.3	$ 1,049.1	$ 998.4	$ 1,025.8	$ 1,040.1
TOTAL MOTOR LICENSE FUND	$ 2,416.2	$ 2,446.8	$ 2,611.5	$ 2,657.6	$ 2,758.5	$ 2,896.5
State Lottery Fund						
Non-Tax Revenues:						
Lottery revenues	$ 1,591.7	$ 1,598.0	$ 1,558.7	$ 1,676.0	$ 1,559.9	$ 1,621.1
Other and miscellaneous	166.8	168.4	164.5	167.7	149.3	153.0
TOTAL NON-TAX REVENUES	$ 1,758.5	$ 1,766.4	$ 1,723.2	$ 1,843.7	$ 1,709.2	$ 1,774.1
TOTAL STATE LOTTERY FUND	$ 1,758.5	$ 1,766.4	$ 1,723.2	$ 1,843.7	$ 1,709.2	$ 1,774.1

Source: Office of the Budget. Totals may not add due to rounding.
(a) Budgetary basis including taxes and interest accrued but not deposited by the Commonwealth by June 30 of each fiscal year.
(b) Includes the corporate net income and the capital stock and franchise taxes.
(c) Includes the utility gross receipts and utility property taxes.
(d) Includes the financial institution and insurance premium taxes.
(e) Includes the liquor and malt beverage taxes.
* Data from fiscal year 2018 enacted budget.
** Act 10A of 2015 appropriates $100 million Liquor Store Profits directly from the State Store Fund.

Table 12, below, presents a comparison of the actual revenues on a budgetary basis to the official revenue estimate used for budget enactment for the General Fund and the Motor License Fund for fiscal years 2013 through 2017.

Table 12
Commonwealth Revenues — Official Estimate vs. Actual[(a)]
General Fund and Motor License Fund – Unaudited
Fiscal Year 2013 — Fiscal Year 2017
(In $ Millions)

	General Fund			Motor License Fund		
Fiscal Year Ended June 30	Official Estimate[(b)]	Actual	Variance	Official Estimate[(b)]	Actual	Variance
2013	$ 28,590.0	$ 28,646.9	$ 56.9	$ 2,397.0	$ 2,416.2	$ 19.2
2014	29,116.0	28,607.7	(508.3)	2,468.8	2,446.8	(22.0)
2015	30,194.5	30,592.5	398.0	2,527.9	2,611.5	83.6
2016	30,871.7	30,901.5	29.8	2,680.1	2,657.5	(22.6)
2017	32,776.4	31,669.7	(1,106.7)	2,751.0	2,758.5	7.5

Source: Office of the Budget.
(a) Budgetary basis including taxes and interest accrued but not deposited by the Commonwealth by June 30 of each fiscal year.
(b) As certified for budget enactment.

Tax Revenues (Unaudited Budgetary Basis)

Tax revenues constituted approximately 97.1 percent of Commonwealth revenues in the General Fund for the fiscal year ended June 30, 2017. The major tax sources for the General Fund of the Commonwealth are the personal income tax, the sales tax, the corporate net income tax, the gross receipts tax, and the cigarette tax. Together these five taxes produced 90.8 percent of General Fund tax revenues for the fiscal year ended June 30, 2017.

The major tax source for the Motor License Fund are the liquid fuels taxes. These taxes produced just over 62.8 percent of non-restricted Motor License Fund revenues in fiscal year 2017. Portions of certain taxes whose receipts are deposited into the Motor License Fund are legislatively restricted to specific transportation programs. These receipts are accounted for in restricted accounts in the Motor License Fund and are not included in the budgetary basis discussions of the tax revenues of the Motor License Fund.

The major tax sources for the General Fund and the Motor License Fund are described briefly below. The tax receipt amounts in the descriptions are on a budgetary basis.

Personal Income Tax. This tax accounted for $12,664.4 million or 40.0 percent of fiscal year 2017 General Fund Commonwealth revenues. The tax is levied at a flat rate on the taxable income of all residents and resident trusts and estates and taxable income attributable to Pennsylvania non-residents and non-resident estates and trusts. The current tax rate of 3.07 percent was first effective in tax year 2004. In general, credit against the tax is allowed for income taxes paid to other states by Pennsylvania residents.

Withholding is required by employers from all persons liable for the tax with the size of collections determining the frequency for remittance to the Commonwealth. A declaration and partial payment of the estimated tax are required for those individuals with taxable incomes over $8,000 per year, other than wages subject to withholding. Act 84 of 2016, which made Pennsylvania lottery winnings subject to taxation, also required withholding of personal income tax for certain prizes of the Pennsylvania State Lottery.

Individuals and families meeting qualifying income limits may have their personal income tax forgiven on all or a portion of their taxable income. Currently, a qualifying family of four owes no personal income tax on taxable income up to $32,000 annually.

Sales Tax. This tax accounted for $10,005.2 million or 31.6 percent of fiscal year 2017 General Fund Commonwealth revenues. The tax is levied at a rate of 6 percent on the sale, use, storage, rental or consumption of tangible personal property, cigarettes, and certain services, and upon the occupancy of hotel rooms. Substantial exemptions from the tax include clothing, food purchased in grocery stores or supermarkets, medical supplies, drugs, residential use of certain utilities, motor fuels, and machinery, equipment and items used in manufacturing, processing, farming or dairying, and utility service. The tax base was expanded in fiscal year 1992 to include a number of services not previously taxed. The tax base was further expanded through Act 84 of 2016 to include digital downloads. The same act also exempted timber production, corrugated boxes used in the snack food industry, and services related to exhibiting at the Pennsylvania Convention Center and the David L. Lawrence Convention Center. Beginning in fiscal year 2004, 0.947 percent of collections are transferred to a special fund for mass transit assistance. Beginning in fiscal year 2008 with the enactment of Act 44, an additional 4.4 percent of receipts are transferred for transit assistance purposes.

Sales tax licensees reporting an actual tax liability equal to or greater than $100,000 for the third calendar quarter of the preceding year must make a payment of 50 percent of the tax liability for the same month of the previous year.

Sales tax licensees reporting an actual tax liability of at least $25,000 and less than $100,000 for the third calendar quarter of the preceding year are provided an option for their tax payment - 50 percent of the tax liability for the same month of the previous year or at least 50 percent of the actual tax liability for the same month in the current year. This option is effective for tax returns due after September 30, 2012.

Corporate Net Income Tax. The Commonwealth received $2,751.5 million, or 8.7 percent of fiscal year 2017 General Fund Commonwealth revenues, from this tax. Domestic and foreign corporations are subject to the corporate net income tax for the privilege of doing business, carrying on activities, having capital or property employed or used in Pennsylvania, or owning property in Pennsylvania. Limited liability companies and business trusts that are classified as corporations for Federal income tax purposes are also subject to tax. Building and loan associations, banks, saving institutions, trust companies, insurance and surety companies, and nonprofit corporations are exempt from the tax. When less than the entire business of any corporation is transacted within the Commonwealth, the taxable income in Pennsylvania is determined by an apportionment formula. The current tax rate of 9.99 percent became effective for fiscal years beginning on or after January 1, 1995. The previous tax rate of 11.99 percent had been in effect since January 1, 1994.

The corporate net income tax is to be paid in four equal installments throughout the corporation's tax year based on estimated taxes due for the entire tax year. Any remaining portion of taxes due is to be paid with the corporation's annual report due three-and-one-half months following the end of the corporation's tax year.

Gross Receipts Tax. This tax accounted for $1,230.5 million, or 3.9 percent of fiscal year 2017 General Fund Commonwealth revenues. The gross receipts tax is levied on telephone, telegraph, and mobile telecommunications companies; electric light, water power, and hydroelectric companies; managed care organizations; and pipeline and miscellaneous transportation companies. Municipally owned or operated public utilities may exclude gross receipts derived from business done inside the limits of the municipality.

Beginning January 1, 2004, interstate and cellular telecommunications services became subject to the gross receipts tax. The tax rate is 50 mills, which became effective in July 1991, having been raised from its prior tax rate of 44 mills for all utilities except electric utilities, which are taxed at the rate of 59 mills. Revenue from 0.25 mills of the tax is deposited in the Alternative Fuels Incentive Grant Fund. All firms, except public utilities owned or operated by a municipality or a municipal authority, are required to file estimated revenue reports annually, together with the estimated payment of the current year's tax calculated by applying the current tax rate to 90 percent of the tax base for the current year or 100 percent of the liability two years prior, subject to the current rate. The adequacy of these payments is judged retrospectively based on the final return.

Effective for tax years after January 1, 2000, natural gas companies became exempt from the tax. The tax report and estimated payment are required to be made by March 15. The remaining tax is due and payable by the succeeding March 15.

Cigarette Tax. Collections of this tax totaled $1,261.6 million in fiscal year 2017, or 4.0 percent of General Fund Commonwealth revenues. The tax is imposed and assessed on the sale or possession of cigarettes and little cigars within the Commonwealth. It is levied on the consumer but is collected by the sale of stamps and meter units to dealers who affix them to each package. The current rate is $2.60 per package of 20 cigarettes, which was set by Act 84 – 2016 and has been in effect since August 1, 2016. The 6.0 percent sales tax is also imposed on the retail sale of cigarettes and is included in the sales tax receipts. A portion of the collections from the tax are transferred to a special fund for children’s health insurance and to a special fund for preserving farmland. Act 84 of 2016 also increased the transfer to the farmland preservation fund by $5 million.

Other Tobacco Products Tax. Effective October 1, 2016, tax is imposed on smokeless tobacco, pipe tobacco, e-cigarettes, products and substances intended for use inside e-cigarettes, and any other tobacco products for chewing, ingesting or smoking, except cigars. Tax on roll-your-own tobacco became effective December 14, 2016. The tax rate on e-cigarettes and liquid substances to be used with them is 40 percent of the purchase price from the wholesaler. Tax on roll-your-own, pipe, chewing tobacco and snuff is levied at a rate of 55 cents per ounce, with a minimum tax per package of 66 cents. Other Tobacco Products Tax collections totaled $83.9 million in fiscal year 2017.

Inheritance and Estate Taxes. Collections of these taxes were $977.9 million in fiscal year 2017, or 3.1 percent of General Fund Commonwealth revenues. The inheritance tax is levied on the value of property transferred to heirs of a deceased person. Prior to July 1, 2000, the tax rate was 6 percent of the value, if passing to lineal heirs, and 15 percent if passing to collateral heirs. Effective July 1, 2000, the tax rate on transfers to parents, grandparents and lineal descendants was lowered to 4.5 percent and a new tax rate of 12 percent on transfers to siblings was established. The estate tax was a “pick-up” tax in the amount of the maximum federal tax credit less State death taxes paid. The federal estate tax credit was phased out between 2002 and 2005. As a result of the American Taxpayer Relief Act of 2012, the federal estate tax credit, and thus Pennsylvania’s estate tax, will not return. Counties collect the inheritance and estate tax, which is due within nine months following the death of the person whose property is being transferred.

Insurance Premiums Tax. This tax is levied at the rate of 2 percent of the gross premiums on all business of domestic and foreign insurance companies transacted within the Commonwealth during each calendar year. Foreign insurance companies may also be subject to retaliatory fees. Revenues from the two percent tax on foreign fire and foreign casualty companies are deposited in special revenue funds while the remaining taxes are deposited in the General Fund. Insurance premiums for policies written with unlicensed insurers by a surplus lines agent where the insured’s home state is Pennsylvania are subject to a 3 percent tax. Marine insurance companies, both domestic and foreign, pay a 5 percent tax on underwriting profits attributable to Pennsylvania in lieu of the gross premium tax.

Estimated payments are due March 15th for the current taxable year and must exceed 90 percent of reported annual liability, or 100 percent of the liability two years prior, subject to the current rate. The adequacy of these payments is judged retrospectively based on the final return. Final payments and reports must be remitted together by April 15th of each year for the previous tax year.

Realty Transfer Tax. This tax is levied at the rate of 1 percent of the value of the real property transferred, as represented by deed, instrument or other writing. The tax is collected by the recorders of deeds in the counties and transmitted to the Commonwealth when collected. Since fiscal year 2008, a portion of the realty transfer tax (15 percent) has been transferred to the Keystone Recreation, Park and Conservation Fund.

Liquor Tax. This tax is levied at the rate of 18 percent of the net purchase price on all liquor sold by the Pennsylvania Liquor Control Board. Revenues from this tax accrue to the General Fund. The 6 percent sales tax is also imposed on all liquor sold by the Pennsylvania Liquor Control Board and is included in the sales tax receipts.

Financial Institution Taxes. The bank shares tax is levied at the rate of 0.89 percent of the value of shares of state and national banks and domestic title insurance companies, beginning January 1, 2014. Under Act 84 of 2016, this rate increased to 0.95 percent beginning January 1, 2017. This is a reduction from the rate of 1.25 percent which was in effect from 1990 through 2013. Effective January 1, 2014, each institution computes the tax base on the most recent year-end value of the institution’s total bank equity capital, adjusted to exclude the value of United States obligations. Previously, the tax base was computed by averaging an institution’s total equity capital for each quarter, adjusted to exclude the value of United States obligations, for the previous six calendar years. Goodwill is also deducted from a bank’s equity and total assets when computing the tax base. A payment of the tax for the current year is due by March 15th of that year. Revenues of this tax are deposited into the General Fund.

The mutual thrift institutions tax is levied on the taxable net income of such institutions at the rate of 11.5 percent. Revenues of this tax accrue to the General Fund. Mutual thrift institutions make quarterly estimated payments by applying the current tax rate to 100 percent of the tax base for the second preceding year, or by paying at least 90 percent of the reported annual liability for the current year. Final reports are due 105 days after the close of the fiscal year. Extensions are available for filing reports; however, no extensions are granted for payment of the tax.

Public Utility Realty Tax. The tax is levied on the state taxable value of utility real property belonging to a firm or other entity (i) furnishing utility service and (ii) regulated by the Pennsylvania Public Utility Commission or similar regulatory body. State taxable value is the current market value derived from assessed values for county real estate tax purposes. Certain items are specifically exempt from the tax. The tax rate for the General Fund portion of the tax is set annually by the Secretary of Revenue. The tax rate is to be set at a rate intended to produce revenues sufficient to reimburse local taxing authorities for foregone property tax revenues. An additional tax rate of 7.6 mills is applied to the tax base and remains in the General Fund. The tax is subject to a tentative payment of the then current year's tax liability. The tentative reports and tax payments are due in May. The remaining tax payments must be paid in September of the following year.

Malt Beverage Tax. This tax is levied on all malt or brewed beverages sold in Pennsylvania. The tax rate is two-thirds cent per half-pint, 1 cent per pint and $2.48 per barrel. The various manufacturers pay the tax monthly to the Department of Revenue. Revenues from this tax are deposited into the General Fund.

Liquid Fuels Taxes. These taxes accounted for $1,732.7 million, or 62.8 percent of Motor License Fund Commonwealth revenues in fiscal year 2017.

The Oil Company Franchise Tax is an excise tax on all taxable liquid fuels, fuels, and alternative fuels. This tax is imposed on a cents-per-gallon equivalent basis by multiplying a millage rate and an average wholesale price (AWP) set by the Department of Revenue annually. Act 3 of 1997 imposed a tax of 153.5 mills on all taxable liquid fuels and 208.5 mills on all taxable fuels. Act 89 of 2013 added 64 mills in calendar year 2014, 49 mills in 2015, 48 mills in 2016, 41 mills in 2017, and 39 mills in 2018 and each year thereafter. Act 89 of 2013 also increased the AWP from 2014 through 2016, and uncapped it in 2017 and thereafter. There is also a statutory AWP floor set at $2.99 per gallon for 2017 and each year thereafter. Receipts from 57 mills of the tax on liquid fuels and fuels and all of the millage added by Act 89 of 2013 are deposited as unrestricted Motor License Fund revenue. However, of the additional mills added by Act 89 of 2013, 4.17% of the receipts is transferred to the Liquid Fuels Tax Fund. Act 89 also provided for a transfer of $35 million annually from the Oil Company Franchise Tax in the unrestricted Motor License Fund to the Multimodal Transportation Fund beginning in fiscal year 2015-16. The remaining balance of the revenues from the 153.5 mills on liquid fuels and the 208.5 mills on fuels are deposited in restricted accounts for certain transportation spending. These dedicated and restricted revenues are not included in the Liquid Fuels Tax figure above.

The Motor Carrier Road Tax is levied on motor carriers operating vehicles with a gross weight or registered gross weight in excess of 26,000 pounds. The tax rate is equal to the current Oil Company Franchise Tax. The Alternative Fuels Tax is imposed on fuels other than liquid fuels (primarily gasoline) or fuels (primarily diesel fuel) used to propel motor vehicles on public highways. The tax rate applied to each gasoline gallon equivalent of alternative fuel equals the current Oil Company Franchise Tax on liquid fuels.

Non-Tax Revenues

Licenses and Fees. License and fee receipts in the General Fund for fiscal year 2017 totaled $119.1 million, representing 0.4 percent of Commonwealth revenues to the General Fund. Revenues from motor vehicle licenses and fees in fiscal 2017 were $1,000.5 million, representing 36.3 percent of total fiscal year 2017 Motor License Fund Commonwealth revenues.

Miscellaneous Revenue. Revenues from non-tax sources not categorized elsewhere are credited to miscellaneous revenues. Interest earnings on securities and deposits are included in this source. Miscellaneous revenues receipts in the General Fund for fiscal year 2017 totaled $501.9 million. Receipts from miscellaneous motor vehicle revenues in fiscal 2017 were $25.3 million, representing 0.9 percent of total fiscal year 2017 Motor License Fund Commonwealth revenues.

State Stores Fund Transfers. This is an amount determined by the Liquor Control Board to be available for transfer to the General Fund. The amount transferred for fiscal year 2017 was $216.4 million. In Pennsylvania, the distribution and sale of liquor is a state enterprise.

Fines, Penalties and Interest. This revenue source includes all fines, penalties and interest collected in the enforcement of non-tax regulations, such as moving violation surcharges. The amount deposited to the General Fund for fiscal year 2017 was $79.3 million.

Tobacco Settlement Payments. The Commonwealth's portion of payments made by cigarette manufacturers participating in the Tobacco MSA are deposited in the Tobacco Settlement Fund to be used for certain health-related programs. The Commonwealth anticipates receiving a total MSA payment of approximately $352 million for fiscal year 2018. See "COMMONWEALTH FINANCIAL STRUCTURE AND PROCEDURES – Description of Funds" herein.

Federal Revenues

Receipts by the Commonwealth in its General Fund, Motor License Fund, Tobacco Settlement Fund and State Lottery Fund from the federal government during fiscal year 2016 totaled $26.8 billion and during fiscal year 2017 totaled $28.7 billion. Anticipated receipts from the federal government included in the fiscal year 2018 enacted budget are $29.1 billion. Approximately $20.6 billion, or 76.8 percent of total federal revenue to the Commonwealth for fiscal year 2016, was attributable to public health and welfare programs, the largest of which are for the Medical Assistance and Temporary Assistance to Needy Families programs. In fiscal year 2017, $22.5 billion, or 78.2 percent of federal revenues, were attributable to these types of programs. In the fiscal year 2018 enacted budget, approximately $22.7 billion or 77.7 percent of federal revenues are expected to be attributable to public health and welfare programs.

Major Commonwealth Expenditures

The Commonwealth's major operating funds—the General Fund, the Motor License Fund and the State Lottery Fund—provide financial resources to operate programs and fund grants. Trends in expenditures from those funds for various program areas are discussed below based on budgetary basis financial statements for fiscal year 2016 and fiscal year 2017 and the enacted budget for fiscal year 2018.

Education

In fiscal year 2016, expenditures from Commonwealth revenues for education purposes were more than $12.4 billion. For fiscal year 2017 Commonwealth expenditures included over $13.1 billion in education funding, an increase of approximately 5.7 percent over fiscal year 2016. The enacted budget for fiscal year 2018 includes over $13.5 billion in education funding, an increase of 3.4 percent over the 2017 budget.

Elementary and Secondary Education. The financing of public elementary and secondary education in Pennsylvania is shared by the Commonwealth and local school districts. There are 500 local school districts in the state. With certain exceptions, each is governed by a locally elected school board responsible for the administration of the public schools in the school district with the authority to levy taxes within the limits prescribed by the Public School Code of 1949, as amended. Funds supplied by the Commonwealth supplement the funds raised locally. Local school districts receive various subsidy payments for basic instruction, vocational education, debt service, pupil transportation, employee retirement programs including Social Security, and various special education programs. The largest such subsidy is the Basic Education subsidy. The enacted budget for fiscal year 2017 increased the state Basic Education subsidy by $200 million to $5.895 billion. For fiscal year 2017, each school district received an amount equal to its 2015 Basic Education Funding allocation and a share of the $353 million increase based on a new fair funding formula. The increase in education funding was distributed to school districts, based on local wealth, existing tax burden, district size and certain student characteristics. The Basic Education subsidy is increased by $100 million to $5.995 billion in the enacted fiscal year 2018 budget. A new fair funding formula is being used to distribute the $453 million increases in funding subsequent to fiscal year 2015.

Certain specialized education programs are operated and administered in Pennsylvania by 29 intermediate units established by the component local school districts. These intermediate units are funded from contributions from member school districts. Programs operated by intermediate units generally are special education programs for the gifted, for individuals with mental and physical disabilities, and for support of nonpublic schools through the provision of auxiliary services and the lending of instructional materials such as textbooks to children attending nonpublic schools in Pennsylvania.

Total Commonwealth expenditures for basic education programs in fiscal year 2016 were more than $10.7 billion, representing 86.5 percent of all Commonwealth expenditures for education in fiscal year 2016. Total

Commonwealth expenditures for basic education programs in fiscal year 2017 were more than $11.4 billion, representing 86.9 percent of all Commonwealth expenditures for education in fiscal year 2017. The enacted budget for fiscal year 2018 includes more than $11.8 billion for basic education programs.

Table 13
Fall Enrollment in Pennsylvania Public and Non-Public Elementary Schools and Secondary Schools
School Years 2013-2017
(In Thousands)

	School Year Ended June 30				
	2013	**2014**	**2015**	**2016**	**2017**
Elementary Schools					
Public	927	926	924	919	913
Nonpublic	161	160	159	157	155
Secondary Schools					
Public	828	824	815	813	810
Nonpublic	74	73	73	73	72
Total					
Public	1,755	1,750	1,740	1,732	1,723
Nonpublic	235	233	231	230	227
Total	1,990	1,983	1,971	1,962	1,950

Source: Pennsylvania Department of Education.

Higher Education. Higher education in Pennsylvania is provided through 243 degree-granting institutions, which include the fourteen universities of the State System of Higher Education (PASSHE), four State-related universities, community colleges, independent colleges and universities and specialized degree-granting institutions. PASSHE, created in 1982 from the fourteen state-owned colleges, is administered by a Board of Governors whose members are appointed by the governor and confirmed by the Senate. In fiscal years 2016 and 2017, approximately $1.6 billion was expended by the Commonwealth for institution and student financial assistance, and in the fiscal year 2018 enacted budget more than $1.6 billion is expected to be expended.

Table 14
Full-Time Equivalent Enrollment at State-Supported Institutions of Higher Education
School Years 2013-2017
(In Thousands)

	School Year Ended June 30				
	2013	**2014**	**2015**	**2016**	**2017**
State System of Higher Education	107	104	102	100	97
State-Related Universities	161	161	164	166	170
Community Colleges	98	95	91	87	83
Total	366	361	357	353	351

Source: Governor's Executive Budget, various years.

Public Health and Human Services

Fiscal year 2017 public health and human services expenditures were $38,964 million and are projected to be $39,173 million in fiscal year 2018. With regard to fiscal year 2017 expenditures, nearly $12,643 million was funded from the General Fund, while $12,365 million is estimated to be provided from the General Fund for fiscal year 2018.

Federal funds are expected to increase by $151 million, and augmentations are expected to increase by $350 million for fiscal year 2018. Public health and human service programs are the largest single component of combined state and federal spending in the Commonwealth's operating budget. The overall budget increase reflects the impact of caseload increases, federal mandates, litigation and continued support of county operated programs for child welfare, mental health and intellectual disabilities.

The fiscal year 2018 budget includes $352 million of receipts from the Tobacco Settlement Fund to be expended for health care related programs. Federal funds matching the state Tobacco Master Settlement Agreement (MSA) funds are also expected to be provided. However, under the terms of the 1998 settlement that created the Tobacco Settlement Fund, payments by the tobacco companies may, in certain circumstances be reduced, reflecting decline in cigarette sales, and such payments also may be limited, delayed or terminated as a result of bankruptcy or insolvency of tobacco companies or legal challenges to the settlement or to amounts due thereunder. The tobacco companies continue to adjust for the non-participating manufacturer (NPM) adjustment. Pennsylvania will continue arbitration with the tobacco companies until this issue is resolved. The Commonwealth's share of withheld Tobacco MSA funds currently totals over $364 million. For fiscal year 2018, estimated receipts from the April 2018 payment are projected to be reduced by $45.7 million due to the NPM adjustment.

Programs providing temporary financial assistance and medical assistance comprise the largest portion of public health and human services expenditures. General Fund expenditures for these assistance programs by the Commonwealth amounted to $9,276 million in fiscal year 2017, while $9,049 million is budgeted from the General Fund for fiscal year 2018. In addition, a nursing home assessment fee provided a General Fund offset (meaning a reduction in required General Fund appropriations) of $199 million in fiscal year 2017 and is expected to provide a $199 million offset in fiscal year 2018. A Managed Care Organization assessment provided a General Fund offset of $601 million in fiscal year 2017 and in fiscal year 2018 the offset is projected at $808 million. Also, a Statewide Quality Care assessment provided a $220 million offset in fiscal year 2017 and is expected to provide a $220 million offset in fiscal year 2018. For 2018 approximately 31.56 percent of the total cost of assistance to the economically needy is proposed to be supported by Commonwealth funds appropriated from the General Fund. The balance is expected to be provided from reimbursements by the federal government and through various program collection activities conducted by the Commonwealth.

Medical assistance continues to be a growing component of public health and human services expenditures. Despite implementation of Commonwealth initiatives to restrain costs, the program continues to grow due to an expanding caseload, technology improvements and general medical cost inflation. Expenditures for medical assistance increased during the period from fiscal years 2007 through 2017 by an average annual rate of 7.12 percent. Fiscal year 2017 expenditures from Commonwealth funds were $9,127 million and are projected to be $8,896 million in fiscal year 2018, a decrease of 2.5 percent from the prior fiscal year. Income maintenance cash assistance payments to families in transition to independence were $989 million for fiscal year 2017, of which $178.1 million was from the General Fund. The enacted budget for fiscal year 2018 includes a total of $988 million, for such purpose with $165 million provided from the General Fund. Cash assistance is time-limited and requires participation in work activities to maintain eligibility.

Transportation

The Commonwealth is responsible for the construction, restoration and maintenance of the highways and bridges in the 40,000-mile state highway system, including certain city streets that are a part of the state highway system. Assistance for the maintenance and construction of local roads and bridges is provided to municipalities through grants of financial aid. Highway maintenance costs, construction costs and assistance grants are paid from the Motor License Fund. Other special funds, including the Public Transportation Assistance Fund, the Public Transportation Trust Fund, the Multimodal Transportation Fund and the State Lottery Fund provide funding for mass transit and other modes of transportation.

Act 89 of 2013 provided dedicated additional funding for highways and bridges through the incremental uncapping of the Oil Company Franchise Tax (OCFT) and the indexing of vehicle and driver services fees. Act 89 also restructured Act 44 of 2007 Pennsylvania Turnpike Commission payment distributions. Beginning in fiscal year 2015, the annual $200 million highway and bridge distribution by the Pennsylvania Turnpike Commission is being redirected to transit, resulting in annual distributions to mass transit of $450 million.

In addition to its unrestricted state funds, the Motor License Fund includes five restricted revenue accounts funded by state revenues legislatively dedicated to these specific purposes. Some of the restricted purposes funded from these accounts also receive funding by annual appropriations of unrestricted Motor License Fund revenues. Programs receiving funds from a restricted account include highway bridges, highway construction and maintenance, grants to municipalities for highways and bridges, and airport development.

Total funding for the Commonwealth's highway and bridge program for fiscal year 2016 was $2.701 billion. The funding decreased to $2.584 billion in fiscal year 2017. The enacted and authorized fiscal year 2018 budget reflects an increase to $2.837 billion.

Support of highway and bridge expenditures by local governments through grants paid from the Motor License Fund and restricted revenues was $576 million in fiscal year 2016 and $629 million in fiscal year 2017. In the fiscal year 2018 enacted budget, grants to local governments increase to $667 million.

In addition to its support of the highway system, the Commonwealth provides subsidies for mass transit systems including passenger rail and bus service.

In fiscal year 2008, the funding mechanisms for mass transit in the Commonwealth were changed with the enactment of Act 44. Mass transit funding was shifted from the General Fund to a combination of sources of revenue primarily going into a Public Transportation Trust Fund established by Act 44. The Public Transportation Trust Fund was created to provide a long-term, predictable and growing source of revenues for public transportation systems. Act 89 increased funding and revenue sources for the Public Transportation Trust Fund. Revenues are provided by scheduled payments by the Pennsylvania Turnpike Commission, a portion of the Sales and Use Tax, certain motor vehicle fees, vehicle code fines and surcharges, and transfers from the Public Transportation Assistance Fund and the Lottery Fund. This funding supports mass transit programs statewide, providing financial assistance for operating costs, capital costs, and certain administrative costs for the Department of Transportation. For fiscal year 2016, Commonwealth funding available for mass transit was $1.596 billion. Funding for mass transit was increased in fiscal year 2017 to $1.722 billion. The authorized fiscal year 2018 enacted budget funding for mass transit is slightly reduced to $1.652 billion.

Act 89 created the Multimodal Transportation Fund to provide additional funding for freight and passenger rail, ports, aviation, bicycle and pedestrian facilities, and other modes of transportation. Revenues deposited into the Multimodal Transportation Fund include payments from the Pennsylvania Turnpike Commission, a portion of certain motor vehicle fees and beginning in fiscal year 2016, a portion of the Oil Company Franchise Tax. For fiscal year 2016, Commonwealth funding available for multimodal transportation was $137.9 million. The fiscal year 2017 funding was $140.8 million and fiscal year 2018 enacted budgetary funding is $143.9 million.

The Commonwealth's current aviation program funds the development of public airport facilities through grants providing for airport development, runway rehabilitation, and real estate tax rebates for public use airports. Taxes levied on aviation and jet fuel provide revenues for a restricted account for aviation programs in the Motor License Fund. In fiscal year 2016, $9.4 million was expended from aviation restricted accounts. In fiscal year 2017, $9.0 million was available for such purposes. A total of $9.8 million is budgeted for fiscal year 2018.

Act 89, authorized the Department of Transportation to enter into transportation public-private partnerships ("P3"). The Rapid Bridge Replacement Project is a P3 initiative to finance the replacement of 558 bridges across Pennsylvania. In 2015, the department and the winning bidder (concessionaire) entered into a concession agreement pursuant to which the concessionaire is to design, construct and maintain the bridges. The costs of the Rapid Bridge Replacement Project are being funded by the concessionaire through bond proceeds. The bond purchase agreement was executed on February 24, 2015, and the sale of $721.485 million of related bonds by the Pennsylvania Economic Development Financing Authority closed on March 18, 2015. The Department of Transportation expects that it will make two types of payments under the concession agreement. These are "milestone payments" as construction phases are completed and "availability payments" with respect to completed bridges. The department will make milestone and availability payments from funds in the Motor License Fund.

The Commonwealth is not responsible for toll roads and bridges in Pennsylvania. These are under the jurisdiction of various authorities and commissions. See "GOVERNMENT AUTHORITIES AND OTHER ORGANIZATIONS" herein.

OUTSTANDING INDEBTEDNESS OF THE COMMONWEALTH

General

The Constitution permits the Commonwealth to incur the following types of debt: (i) debt to suppress insurrection or rehabilitate areas affected by disaster, (ii) electorate-approved debt, (iii) debt for capital projects subject to the Constitutional Debt Limit, and (iv) tax anticipation notes payable in the fiscal year of issuance. All debt, except debt incurred through the issuance of tax anticipation notes, must be amortized in substantial and regular amounts.

Debt service on Commonwealth general obligation debt is paid from appropriations out of the General Fund except for debt issued for highway purposes, which is paid from Motor License Fund appropriations.

Table 15
General Obligation Debt Outstanding[(a)]
Fiscal Years 2008-2017
(In Millions)

At June 30	General Obligation Debt Outstanding
2008	$8,177.0
2009	8,653.7
2010	9,891.7
2011	9,872.1
2012	10,727.5
2013	10,860.3
2014	11,408.9
2015	12,074.8
2016	11,578.5
2017	12,009.0

(a) Net of sinking fund balances.

Net outstanding general obligation debt totaled $12,009.0 million at June 30, 2017, an increase of $430.5 million from June 30, 2016. Over the 10-year period ended June 30, 2017, total net outstanding general obligation debt increased at an annual rate of 4.4 percent. Over the 5-year period ended June 30, 2017, total net outstanding general obligation debt has increased at an annual rate of 2.3 percent.

General obligation debt for non-highway purposes of $10,885.0 million was outstanding on June 30, 2017. Outstanding debt for these purposes increased by a net $476.4 million since June 30, 2016. For the period ended June 30, 2017, the 10-year and 5-year average annual compound growth rate for total outstanding debt for non-highway purposes has been 3.5 percent and 1.5 percent respectively. In its current debt financing plan, Commonwealth infrastructure investment projects include improvement and rehabilitation of existing capital facilities and construction of new facilities, such as public buildings, prisons and parks, transit facilities, economic development and community facilities, and environmental remediation projects.

Outstanding general obligation debt for highway purposes was $1,154.0 million on June 30, 2017, a decrease of $45.9 million from June 30, 2016. Highway outstanding general obligation debt grew over the 10-year and 5-year periods ended June 30, 2017, at the annual average rates of 26.2 percent and 12.3 percent respectively. A previous decline in outstanding highway debt was due to the policy begun in 1980 of funding highway capital projects with current revenues except for very limited exceptions. However, beginning with fiscal year 2009, the Commonwealth initiated a multi-year plan to issue an average of $200 million in general obligation bonds annually to accelerate the rehabilitation of a portion of the Commonwealth's 6,000 structurally deficient bridges. Funding to support such debt issuance was initially provided from an existing restricted account rather than from general revenues of the Motor License Fund or the General Fund. During the 2010 fiscal year, the Commonwealth issued $200 million in general obligation bonds to jumpstart its bridge rehabilitation program. During fiscal years 2011, 2012, 2013 and 2014 the Commonwealth issued $130 million, $120 million, $85 million and $40 million respectively in general obligation debt for the bridge rehabilitation program.

Table 16, below, shows selected debt ratios for the Commonwealth for fiscal year 2008 and for fiscal years 2013 through 2017. Table 16 contains corrections to certain prior fiscal year data as well as a revision in the methodology to have debt service payments include funding from all sources rather than show debt service solely as paid from appropriations (resulting in some information in Table 16 being different from that appearing in previous Official Statements of the Commonwealth).

Table 16
Selected Debt Ratios
Fiscal Years 2008 and 2013 through 2017
(In Millions)

	2008	2013	2014	2015	2016	2017
Net Outstanding Debt (Millions)						
General Obligation Debt(a)	$ 8,177	$ 10,860	$ 11,409	$ 12,074	$ 11,578	$ 12,009
Lease Payment Obligations(b)	1,137	2,493	2,401	2,383	2,319	2,981
Total	$ 9,314	$ 13,353	$ 13,810	$ 14,457	$ 13,897	$ 14,990
% Increase (Decrease) over prior year	7.4%	2.9%	3.4%	4.7%	-3.9%	7.9%
Population (Thousands)	12,566	12,781	12,791	12,792	12,782	12,788
Per Capita Debt	$ 741	$ 1,045	$ 1,080	$ 1,130	$ 1,087	$ 1,172
Personal Income (Millions)	$ 512,992	$ 589,000	$ 614,000	$ 637,000	$ 656,000	$ 667,500
Debt as a % of Personal Income	1.8%	2.3%	2.3%	2.3%	2.1%	2.3%
Debt Service (Millions)(c)						
Highway Bonds(d)	$ 30	$ 52	$ 54	$ 52	$ 49	$ 48
All Other Bonds	912	1,223	1,232	1,221	1,264	1,210
Lease Payments	58	156	155	155	155	149
Total	$ 1,000	$ 1,431	$ 1,441	$ 1,428	$ 1,468	$ 1,407
Increase (Decrease) Over Prior Year	8.0%	6.8%	0.7%	(0.9%)	2.8%	(4.2%)
Cash Revenues (Million)(e)						
Motor License Fund	$ 2,668	$ 2,416	$ 2,447	$ 2,611	$ 2,657	$ 2,758
General Fund	27,928	28,646	28,607	30,592	30,901	31,669
Total	$ 30,596	$ 31,062	$ 31,054	$ 33,203	$ 33,558	$ 34,427
% Increase (Decrease) over prior year	2.9%	3.2%	(0.0%)	6.9%	1.1%	2.6%
Highway Bond Debt Service as a % of Motor License Fund Revenues	1.1%	2.2%	2.2%	2.0%	1.8%	1.7%
All Other Bond Debt Service and Lease Payments as a % of General Fund Revenues	3.5%	4.8%	4.9%	4.5%	4.6%	4.3%
Total Debt Service and Lease Payments as a % of Motor Motor License and General Fund Revenues	3.3%	4.6%	4.6%	4.3%	4.4%	4.1%

Prior fiscal year debt ratios can be found in previous Official Statements under Investor Information at www.budget.pa.gov.

(a) Net of all sinking fund balances. Includes bond anticipation notes.
(b) Includes unduplicated data of issues contained in Table 20.
(c) As paid from appropriations, available funds and/or sinking fund balances.
(d) Highway Bonds and Highway Bridge Improvement Bonds.
(e) Commonwealth revenues only.

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General Obligation Debt Outstanding

As of June 30, 2017, the Commonwealth had the following amount of general obligation debt outstanding:

Table 17
General Obligation Debt Outstanding as of June 30, 2017[(a)]

(In Thousands)

	Debt Outstanding	Less: Refunding Escrow[(b)]	Less: Sinking Funds[(c)]	Net Debt Outstanding
Capital Projects Debt:				
Capital Facilities Bonds	$ 7,764,223	$ (1,116,400)	$ (3,952)	$ 6,643,871
Highway Bonds	1,161,582	(123,870)	-	1,037,711
Refunding Bonds	3,233,765	-	-	3,233,765
Total Capital Projects Debt Outstanding	$ 12,159,570	$ (1,240,270)	$ (3,952)	$ 10,915,347
Electorate Approved Debt:				
PA Economic Revitalization Bonds	-	-	-	-
Land & Water Development Bonds	-	-	-	-
Nursing Home Loan Development Bonds	-	-	-	-
Volunteer Companies' Loan Bonds	-	-	-	-
Vietnam Veterans Compensation Bonds	-	-	-	-
Water Facilities Restoration-1981 Referendum	-	-	-	-
Pennvest—1988 Referendum Bonds	-	-	(2,694)	(2,694)
Pennvest—1992 Referendum Bonds	126,330	(10,040)	-	116,290
Agricultural Conservation Easement Bonds	-	-	-	-
Local Criminal Justice Bonds	1,020	(1,020)	-	-
Keystone Recreation, Parks & Conservation Bonds	-	-	-	-
Growing Greener Bonds	294,601	(105,740)	-	188,861
Water Supply and Wastewater Treatment Bonds	137,875	(77,505)	-	60,370
Persian Gulf Conflict Veterans	4,770	(4,770)	-	-
Water and Sewer Assistance	320,170	-	-	320,170
Total Electorate Approved Debt Outstanding	$ 884,766	$ (199,075)	$ (2,694)	$ 682,997
Other Bonded Debt:				
Disaster Relief Bonds	-	-	-	-
Refunding Bonds	410,665	-	-	410,665
Total Other Bonded Debt Outstanding	$ 410,665	-	-	$ 410,665
Total General Obligation Debt Outstanding	$ 13,455,001	$ (1,439,345)	$ (6,646)	$ 12,009,009

[(a)] Does not include any general obligation debt issued in fiscal year 2018.
[(b)] Principal amount of bonds refunded to be paid from escrowed bond proceeds in State Treasurer escrow account.
[(c)] Funds already deposited in sinking funds.

Debt service payable during each fiscal year on outstanding general obligation debt, net of refunding escrow amounts, as of June 30, 2017, for the years shown is set forth in Table 18 on the next page.

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Table 18
General Obligation Bond Debt Service
(In Thousands)

Fiscal Year Ending June 30	Principal	Interest	Total
2018	$757,560	$499,192	$1,256,752
2019	770,445	460,270	1,230,715
2020	758,180	421,860	1,180,040
2021	755,720	385,926	1,141,646
2022	758,940	349,634	1,108,574
2023	730,100	313,325	1,043,425
2024	733,535	277,621	1,011,156
2025	696,765	244,172	940,937
2026	729,770	210,045	939,815
2027	701,605	175,433	877,038
2028	659,200	141,729	800,929
2029	589,725	111,243	700,968
2030	534,805	82,720	617,525
2031	409,735	57,846	467,581
2032	375,865	40,366	416,231
2033	266,565	24,746	291,311
2034	204,900	12,763	217,663
2035	110,515	5,165	115,680
2036	35,495	710	36,205
Total	$10,579,425	$3,814,768	$14,394,193

Totals may not add due to rounding.
Does not include general obligation bonds issued during fiscal year 2018.

Nature of Commonwealth Debt

Capital Projects Debt. The Commonwealth may incur debt to fund capital projects for community colleges, highways, bridge projects, public improvements, transportation assistance, flood control, and redevelopment assistance. Before a project may be funded, it must be itemized in a capital budget bill adopted by the General Assembly. An annual capital budget bill states the maximum amount of debt for capital projects that may be incurred during the current fiscal year for projects authorized in the current or previous years' capital budget bills. Capital projects debt is subject to the Constitutional Debt Limit.

Once capital projects debt has been authorized by the necessary legislation, issuance authority rests with at least two of the three Issuing Officials (the Governor, the State Treasurer and the Auditor General), one of whom must be the Governor.

Electorate Approved Debt. The issuance of electorate approved debt is subject to the enactment of legislation that places on the ballot the question of whether debt shall be incurred. The legislation authorizing the referendum must state the purposes for which the debt is to be authorized and, as a matter of practice, includes a maximum amount of funds to be borrowed. Upon electorate approval and enactment of legislation implementing the proposed debt-funded program, bonds may be issued. All such authorizing legislation to date has given issuance authority to at least two of the Issuing Officials, one of whom must be the Governor.

Other Bonded Debt. Debt issued to rehabilitate areas affected by disasters is authorized by specific legislation. Authorizing legislation has given issuance authority to at least two of the three Issuing Officials, one of whom must be the Governor.

Tax Anticipation Notes. Due to the timing of major tax payment dates, the Commonwealth's General Fund cash receipts are generally concentrated in the last four months of the fiscal year, from March through June. Disbursements are distributed more evenly throughout the fiscal year. As a result, operating cash shortages can occur during certain months of the fiscal year. When necessary, the Commonwealth engages in short-term borrowing to fund expenses within the fiscal year through the sale of tax anticipation notes. The authority to issue such notes rests with the Issuing Officials.

The Commonwealth may issue tax anticipation notes only for the account of the General Fund or the Motor License Fund or both such funds. The principal amount issued, when added to already outstanding amounts, may not exceed in the aggregate 20 percent of the revenues estimated to accrue to the appropriate fund or funds in the fiscal year.

Tax anticipation notes must mature within the fiscal year in which they are issued. The Commonwealth is not permitted to fund deficits between fiscal years with any form of debt. Any year-end deficit balances must be funded in the succeeding fiscal year budget.

Currently, the Commonwealth has no tax anticipation notes outstanding.

Line of Credit (General Fund). The Commonwealth has entered into an agreement with the Pennsylvania Treasury Department which allows the Commonwealth to engage in short-term borrowing of governmental monies on deposit with the Treasury to fund General Fund expenses within the fiscal year (the "STIP Facility"). The Commonwealth borrowed and repaid $1.5 billion in cash in fiscal year 2015, $1.0 billion in fiscal year 2016, $2.2 billion in fiscal year 2017 and $1.75 billion in fiscal year 2018. It is anticipated that the Commonwealth will not borrow additional funds for the remainder of fiscal year 2018. All STIP Facility borrowings are repaid with interest within the fiscal year.

Line of Credit (Capital Facilities Fund). The Commonwealth has entered into an agreement with the Pennsylvania Treasury Department which allows the Commonwealth to engage in short-term borrowing of governmental monies on deposit with the Treasury to fund capital expenses within the fiscal year. As of March 31, 2018, the Commonwealth had a zero-borrowing balance. If funds are borrowed, they are repaid with interest at settlement of the next general obligation bond issue.

Bond Anticipation Notes. Pending the issuance of general obligation bonds, the Commonwealth may issue bond anticipation notes subject to the same statutory and constitutional limitations generally imposed on general obligation bonds. The term of such borrowings may not exceed three years. Issuing authority rests with the Issuing Officials. No bond anticipation notes are outstanding.

Projected Issuance of Long-Term Debt

Table 19 on the next page shows projected future issuance of new-money general obligation bonds (or bond anticipation notes) through fiscal year 2022 as currently estimated, based on current authorizations. Included below in Table 19 are bonds expected to be issued under three bond referenda proposed by the Governor and enacted by the General Assembly in 2004, 2005 and 2008. Not included however, are bonds authorized under the economic stimulus program of the Commonwealth Financing Authority. Actual issuance of bonds will be affected by a number of economic and other factors and may vary significantly from the projections contained in Table 19 on the following page.

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Table 19
Projected General Obligation Bond Issuance and Principal Retirements
Fiscal Years 2018-2022(a)
(In Millions)

	Fiscal Year Ending June 30				
	2018	**2019**	**2020**	**2021**	**2022**
Capital Facilities[b]					
Buildings and Structures………………………..	$680	$650	$650	$650	$650
Furniture and Equipment……………………….	0	10	10	10	10
Transportation Assistance………………………	350	175	175	175	175
Redevelopment Assistance……………….……	175	175	175	175	175
Flood Control…………………………………..	0	0	0	0	0
Highway and Bridge Projects……..…………	0	0	0	0	0
Special Purpose:					
Pennvest — 1988, 1992 & 2008 Referenda……	16	16	0	0	0
Water and Wastewater Referendum[a] …………	0	0	0	0	0
Growing Greener II Referendum[a]……...……..	20	6	0	0	0
Total Projected Issuance……………………….	$1,241	$1,032	$1,010	$1,010	$1,010
Principal Retirement[c] ……..........................……	$1,527	$745	$805	$838	$875

Totals may not add due to rounding.
[a] As proposed in the fiscal year 2018 enacted budget.
[b] Includes issuance for new projects and for projects previously authorized.
[c] On bonded debt, outstanding and pro forma for projected bond issuances.

OTHER STATE-RELATED OBLIGATIONS

Pennsylvania Housing Finance Agency ("PHFA")

The PHFA is a state-created agency that provides financing for housing for low and moderate-income families, and people with special housing needs in the Commonwealth. The bonds, but not the notes, of the PHFA are partially secured by a capital reserve fund required to be maintained by the PHFA in an amount equal to the maximum annual debt service on its outstanding bonds in any succeeding calendar year. If there is a potential deficiency in the capital reserve fund or if funds are necessary to avoid default on interest, principal or sinking fund payments on bonds or notes of PHFA, the statute creating PHFA directs the Governor, upon notification from PHFA, to include in the proposed executive budget of the Commonwealth for the next succeeding year an amount sufficient to fund such deficiency to avoid such default. The budget as finally adopted by the General Assembly may or may not include the amount so requested by the Governor. PHFA is not permitted to borrow additional funds so long as any deficiency exists in the capital reserve fund. No deficiency exists currently.

According to PHFA, as of December 31, 2017, PHFA had $2,946.6 million of revenue bonds outstanding.

Lease Financing

The Commonwealth, through several of its departments and agencies, leases various real property and equipment. Some leases and the lease payments thereunder are, with the Commonwealth's approval, pledged as security for debt obligations issued by certain public authorities or other entities within the state. All lease payments payable by Commonwealth departments and agencies are subject to and dependent upon an annual spending authorization being approved by the legislature through the Commonwealth's annual budget process. The Commonwealth is not required by law to appropriate or otherwise provide moneys to pay lease payments. The obligations to be paid from such lease payments do not constitute bonded debt of the Commonwealth.

Table 20 below contains summary information on material obligations secured by annual appropriations of Commonwealth departments and agencies payable from the General Fund or other budgeted special funds.

Table 20
Obligations Secured by Commonwealth
Annual Appropriations (as of June 30, 2017)
(In Thousands)

Entity	Purpose	Maximum Annual Principal	Principal Amount Outstanding as of 6/30/2017	Final Maturity
Harristown Development Corporation	Office Space	$5,685	$35,160	May 1, 2024
Philadelphia Regional Port Authority	Port Facilities	4,495	16,705	Sept. 1, 2020
Sports & Exhibition Authority of Pittsburgh and Allegheny County	Public Auditorium	15,230	268,730	Nov. 1, 2039
NORESCO, LLC	Equipment	2,158	13,225	Oct. 1, 2026
NORESCO, LLC	Equipment	1,559	9,990	Oct. 1, 2026
NORESCO/Johnson Controls	Equipment	8,416	58,585	Oct. 1, 2026
Pennsylvania Economic Development Finance Authority	Convention Center	23,680	212,990	June 15, 2039
Commonwealth Financing Authority	General Government	152,185	2,260,225	Dec. 30, 2039
Pennsylvania Economic Development Finance Authority	Office Space	17,260	97,740	Mar. 1, 2034
Pennsylvania Economic Development Finance Authority	Rapid Bridge Replacement	66,635	721,485	June 30, 2042

The Commonwealth has also leased port facilities of the Philadelphia Regional Port Authority ("PRPA") to encourage trade through the Port of Philadelphia. Lease revenue bonds of PRPA in the amount of $53.9 million were issued by PRPA in August 2003 to refund all outstanding PRPA Series 1993 Bonds. Lease revenue bonds of PRPA in the amount of $41.9 million were issued by PRPA in September 2008 to refund the outstanding PRPA Series 2003 Bonds. These bonds are payable from lease payments made by the Commonwealth, subject to annual appropriations authorizing such payments to PRPA.

In 2009, the Commonwealth executed an annually renewable lease purchase agreement with CAFCO-PA Leasing I, LLC, a Colorado limited liability company, to assist the Commonwealth, acting through its Department of Corrections, to acquire certain modular prison dormitory facilities. Certificates of participation in the amount of $19,300,000 were issued in December 2009. The certificates of participation are payable from lease payments made by the Commonwealth from and subject to annual appropriation to its Department of Corrections.

In 2010, the Commonwealth executed an installment purchase agreement with Noresco, LLC, a Massachusetts limited liability company ("Noresco"). The purpose of the installment purchase agreement is to assist the Commonwealth, acting through its Department of Human Services, to acquire certain energy-savings improvements at its Ebensburg facility. Certificates of participation in the amount of $15,580,000 were issued in March 2010 and are payable from lease payments made by the Commonwealth from and subject to annual appropriation to its Department of Human Services. The Commonwealth has also entered into additional installment purchase agreements with Noresco and Johnson Controls. Certificates of participation in the amount of $86,850,000 were issued in October 2010 and are payable by the Commonwealth from and subject to annual appropriations to its Departments of General Services, Corrections and Human Services. Certificates of participation in the amount of $12,385,000 were issued in December

2010 and are payable by the Commonwealth from and subject to annual appropriations to its Departments of General Services and Human Services. The purpose of the additional installment purchase agreements was to assist the Commonwealth, acting through various departments, to acquire certain energy-savings improvements. As it relates to certain of these certificates of participation, the Commonwealth filed a notice (the "Notice") on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access system ("EMMA"), for purposes of Securities and Exchange Commission Rule 15c2-12 (the "Rule"), of its failure to make timely installment payments due on October 1, 2017 as it relates to those series of certificates as specified in the Notice. The payment for the 2010H Series was made on October 13, 2017 and the payments for the 2010C and 2010D Series were made on October 19, 2017.

On March 1, 2009, the Commonwealth entered into a 25-year master lease agreement for certain office space within the Forum Place complex in the City of Harrisburg. The master lease covered 375,000 square feet of office space and had a term through February 28, 2034. In January 2012, the Pennsylvania Economic Development Financig Authority ("PEDFA") issued lease revenue bonds in the principal amount of $107,360,000 to acquire the Forum Place complex from the then-controlling majority holder of the defaulted 1998 Dauphin County General Authority bonds. Contemporaneous with the issuance of the PEDFA bonds to acquire the Forum Place, the Capital Region Economic Development Corporation (CREDC) entered into an agreement with both the Commonwealth and PEDFA pursuant to which the Commonwealth leases approximately 375,000 square feet of office space and 500,000 square feet of parking space in the Forum Place complex from CREDC. The PEDFA Bonds are payable from lease payments made by the Commonwealth to CREDC from and subject to annual appropriations authorizing payments to various Commonwealth agencies occupying the leased space.

Lease for Pittsburgh Penguins Arena

In October 2007, the Commonwealth and the Sports and Exhibition Authority of Pittsburgh and Allegheny County (the "SEA") entered into a lease agreement (the "Arena Lease") that, while not creating indebtedness of the Commonwealth, creates a "subject to appropriation" obligation of the Commonwealth. The SEA, a joint public benefit authority, issued in October 2007 its $313.3 million Commonwealth Lease Revenue Bonds (the "Arena Bonds") to finance a multi-purpose arena (the "Arena"), to serve as the home of the Pittsburgh Penguins (the "Penguins"), a hockey team in the National Hockey League. The Arena Bonds are not debt of the Commonwealth but are limited obligations of the SEA payable solely from the special revenues pledged therefor. These special revenues include annually (1) $4.1 million from a lease with the Penguins, (2) not less than $7.5 million from the operator of a casino located in the City of Pittsburgh, and (3) $7.5 million from the Commonwealth's Economic Development and Tourism Fund (the "Development and Tourism Fund"). The Development and Tourism Fund is funded with an assessment of five percent of the gross terminal revenue of all total wagers received by all slot machines in the Commonwealth less cash payments.

While the special revenues were projected to be adequate to pay all debt service on the Arena Bonds, the revenues have not been able to fully cover the debt service. To the extent such revenues are in any year inadequate to cover debt service, the Commonwealth is obligated under the Arena Lease to fund such deficiency, subject in all cases to appropriation by the General Assembly. The maximum annual amount payable by the Commonwealth under the Arena Lease is $18.6 million. In December 2009, the Commonwealth was notified by the SEA that an additional $2.8 million would be required in fiscal year 2010 to support debt service. In compliance with its obligations under the Arena Lease, the Commonwealth included an appropriation request for $2.8 million from the Pennsylvania Gaming and Economic Development Tourism Fund in its fiscal year 2010 budget. Subsequent to the fiscal year 2010 budget, the Commonwealth has been annually notified by the SEA that additional funds are required to support debt service. In each subsequent year, the Commonwealth included the appropriation request in the appropriate fiscal year budget. In fiscal year 2013, the actual amount appropriated to support the SEA debt service was $736,852.71; in fiscal year 2014, it was $625,131.51; in fiscal year 2015 it was $357,712.30; in fiscal year 2016 it was $640,624.36; and in fiscal year 2017 it was $222,129.79. For fiscal year 2018 the debt service is estimated to be $897,237.49.

During April 2010, the SEA issued $17.36 million in additional Commonwealth Lease Revenue Bonds (the "Supplemental Arena Bonds") to complete the Arena. The Supplemental Arena Bonds do not constitute debt of the Commonwealth but are limited obligations of the SEA payable solely from the special revenues pledged therefor. As with the Arena Bonds, the Commonwealth is obligated under the Arena Lease, as amended, to fund any deficiency in special revenues necessary to pay debt service on the Supplemental Arena Bonds, subject in all cases to appropriation by the General Assembly.

Pennsylvania Convention Center

In April 2010, the Commonwealth acquired (through ownership and a long-term leasehold interest) the Pennsylvania Convention Center located in Philadelphia, Pennsylvania and the expansion thereto that was recently constructed. Such acquisition was financed through the issuance by PEDFA of $281.075 million of revenue bonds (the "Convention Center Bonds"). The Commonwealth, the City of Philadelphia (the "City") and the Pennsylvania Convention Center Authority (the "Convention Center Authority") entered into an Operating Agreement (the "Operating Agreement") in connection with the issuance of the Convention Center Bonds and the acquisition of the Pennsylvania Convention Center which provides for the operation of the Pennsylvania Convention Center by the Convention Center Authority (which also leases the facility), for the City to make an annual payment of $15 million plus a percentage of its Hotel Room Rental Tax and Hospitality Promotion Tax revenues to support operations of the Pennsylvania Convention Center and for the Commonwealth to make payments to finance operating deficits and operating and capital reserve deposits of the Pennsylvania Convention Center and to pay debt service on the Convention Center Bonds. The Commonwealth also entered into a Grant Agreement (the "Grant Agreement") with PEDFA and U.S. Bank National Association, as trustee for the Convention Center Bonds, with respect to the obligations of the Commonwealth to make the payments required under the Operating Agreement and related amounts due with respect to the Pennsylvania Convention Center and the Convention Center Bonds.

The obligations of the Commonwealth under the Operating Agreement and the Grant Agreement do not create indebtedness of the Commonwealth but are payable from (1) funds available in the Gaming Economic Development and Tourism Fund and (2) other funds of the Commonwealth, subject to annual appropriation by the state legislature. Payments from the Gaming Economic Development and Tourism Fund of up to $64,000,000 per year for up to 30 years (but not exceeding $880 million in the aggregate) have been appropriated by the General Assembly (by Act 53 of 2007, ("Act 53")) for the payment of debt issued with regard to the Pennsylvania Convention Center and for operating expenses of the Pennsylvania Convention Center; however, there is no requirement in Act 53 or otherwise that funds in the Gaming Economic Development and Tourism Fund be so applied. Moneys in the Gaming Economic Development and Tourism Fund have also been appropriated by the General Assembly to a number of other projects and could be appropriated to additional projects in the future. The Gaming Economic Development and Tourism Fund is funded with an assessment of five percent of the gross terminal revenue of all total wagers received by all slot machines in the Commonwealth less cash payments. While the Gaming Economic Development and Tourism Fund is projected to continue to have sufficient revenues to pay its current appropriated obligations, there can be no absolute assurance that the Gaming Economic Development and Tourism Fund in any future fiscal year will receive sufficient receipts to pay its appropriated obligations.

Any payments due from the Commonwealth under the Operating Agreement and the Grant Agreement and which are not paid from the Gaming Economic Development and Tourism Fund are subject to annual appropriation by the General Assembly. The Commonwealth currently projects that payments materially in excess of the aggregate $880 million appropriated from the Gaming Economic Development and Tourism Fund will be required to be paid by it to satisfy the Commonwealth's obligations under the Operating Agreement and the Grant Agreement over the terms of such agreements.

Commonwealth Financing Authority

The CFA was established in April 2004 with the enactment of legislation establishing the CFA as an independent authority and an instrumentality of the Commonwealth. The CFA is authorized to issue limited obligation revenue bonds and other types of limited obligation revenue financing for the purposes of promoting the health, safety, employment, business opportunities, economic activity and general welfare of the Commonwealth and its citizens through loans, grants, guarantees, leases, lines and letters of credit and other financing arrangements to benefit both for-profit and non-profit entities. The CFA's bonds and financings are to be secured by revenues and accounts of the CFA, including funds appropriated to CFA from general and other revenues of the Commonwealth for repayment of CFA obligations. The obligations of the CFA do not constitute a debt or liability of the Commonwealth.

In Act 85 of 2016, the General Assembly enacted a new Section 1753.1-E of the Fiscal Code that obligates the State Treasurer, in consultation with the Commonwealth's Secretary of the Budget, to transfer the monies necessary for payment of CFA's debt service each fiscal year, beginning July 1, 2016 from sales tax receipts deposited in the General Fund to a restricted revenue account within the General Fund which may only be used to pay that debt service. Section 1753.1-E is a continuing appropriation of those monies from the State Treasury for payment of the CFA's debt service each fiscal year. The obligations of the CFA do not constitute a debt or liability of the Commonwealth.

Since November 2005, the CFA has completed multiple bond issues to fund programs established by its original economic stimulus mission of April 2004.

As part of the enactment process for the fiscal year 2009 budget, the General Assembly enacted and on July 9, 2008, the Governor signed into law Act 63 of 2008 ("Act 63") and Act 1 of Special Session 1 of 2008 ("Act 1"). Combined, these two acts provided the CFA with additional bond issuance authority of up to an additional $1,300 million. Act 63 provides the CFA with authority to issue up to $800 million in limited obligation revenue bonds in order to fund water or sewer projects, storm water projects, flood control projects and high hazard unsafe dam projects. Act 63 also provides for the use of Pennsylvania Gaming and Economic Development and Tourism Fund revenues to support debt service costs associated with the $800 million in additional CFA debt authority. Act 1 provides the CFA with authority to issue up to $500 million in limited obligation revenue bonds to fund the development of alternative sources of energy. As of February 29, 2016, the CFA had issued $461.0 million in limited obligation revenue bonds authorized by Act 1. Further, the CFA has issued $757.0 million in limited obligation revenue bonds authorized by Act 63.

As of March 31, 2018, the CFA had $2,260.0 million in outstanding bond debt. With respect thereto, the Commonwealth's General Fund has been the appropriation source used to service approximately $1,583.5 million of such outstanding debt and the Pennsylvania Gaming and Economic Development and Tourism Fund has been the appropriation source used to service approximately $676.5 million of such outstanding debt. Including the effect of a recent refunding, CFA debt service for fiscal year 2018-19 is estimated to be $95.616 million (net of debt service in the estimated amount of $55.9 million supported by transfers from the Pennsylvania Gaming and Economic Development Tourism Fund (the "PA GEDTF Funds")). The Commonwealth's fiscal year 2017-18 budget appropriated $95.621 million in funds from the Commonwealth's General Fund to the CFA and $56.102 million of PA GEDTF Funds.

Pursuant to Act 25 of 2016 ("Act 25"), the CFA is authorized to issue debt related to the Commonwealth's share of school district construction costs referred to as the PlanCon process. Act 25 established a new funding mechanism to pay school districts for construction reimbursements due to them and to fund capital grants to school districts as part of the PlanCon process. The CFA is authorized to issue up to $2.5 billion in appropriation backed debt in connection with the Commonwealth's share of school construction costs; debt in excess of $2.5 billion may be incurred by CFA for this purpose if CFA and the Department of Education determine that $2.5 billion is insufficient to carry out the purposes of Act 25 and if the Secretary of the Budget approves such determination. The expectation is that the borrowings will occur from time to time over the next five to ten years. To date, the CFA has issued $1.17 billion for construction reimbursement purposes under Act 25.

In addition to the PlanCon Program described above, the CFA pursuant to Article XXVIII of the Tax Reform Code, added by the Act of October 30, 2017, No. 43 ("Act 43"), which authorized the CFA to do so, issued Tobacco Master Settlement Payment Revenue Bonds, (the "Tobacco Bonds") on February 13, 2018, in a principal amount necessary to (i) fund a deposit of $1.5 billion in the General Fund of the Commonwealth to provide General Fund budgetary relief (ii) pay capitalized interest on the Tobacco Bonds, and (iii) pay the costs of issuance incurred in connection with the issuance of the Tobacco Bonds.

Pensions and Retirement Systems

General Information

The Commonwealth maintains contributory benefit pension plans covering all state employees, public school employees and employees of certain state-related organizations. State employees and employees of certain state-related organizations are members of the SERS. Public school employees are members of the Public School Employees'

Retirement System ("PSERS"). With certain exceptions, membership in the applicable retirement system is mandatory for covered employees.

History and Projection of Retirement System Participants

	PSERS			SERS		
Year[a]	Total Annuitants, Beneficiaries and Survivor Annuitants[b]	Active Members	Total Membership	Total Annuitants and Beneficiaries[c]	Active Members	Total Membership[d]
2013	209,204	267,428	476,632	120,052	105,186	225,238
2014	213,900	263,312	477,212	122,249	104,431	226,680
2015	219,775	259,868	479,643	124,689	105,025	229,714
2016	224,828	257,080	481,908	127,338	104,632	231,970
2017	230,014	255,945	485,959	129,622	104,632	234,254

(a) PSERS data as of June 30, 2017, SERS data based upon calendar year 2016.
(b) The number for the fiscal year of the projection reflects the assumption that all active members age 74 and above, and that all vested inactive members who have reached superannuation age retire immediately.
(c) The retirement projections are based upon the current retirement assumptions used for the valuation.
(d) Does not include inactive plan members entitled to but not yet receiving benefits.

SERS and PSERS are established by state law as independent administrative boards of the Commonwealth, each directed by a governing board that exercises control and management of its system, including the investment of its assets. The board of the SERS consists of eleven members, six appointed by the Governor, two members each from the Senate and House of Representatives and the State Treasurer. The PSERS board has fifteen members, including the Commonwealth's Secretary of Education, the Commonwealth's Secretary of Banking and Securities, the State Treasurer, the Executive Director of the Pennsylvania School Boards Association, one member appointed by the Governor, six elected members (three from among the System's certified members, one from among the System's noncertified members, one from among the System's annuitants, and one from among school board members in Pennsylvania), two members from the Senate, and two members from the House of Representatives. The PSERS and SERS audited financial statements, investment policies, board personnel and other data regarding the respective pension plans are available electronically at the following respective websites: www.psers.pa.gov and www.sers.pa.gov.

The retirement plans of SERS and PSERS are contributory defined benefit plans for which the benefit payments to members and contribution rates by employees are specified in state law. Changes in benefit and contribution provisions for each retirement plan must be made by legislation enacted by the General Assembly. Under statutory provisions established in 1981, all legislative bills and amendments proposing to change a public employee pension or retirement plan are to be accompanied with an actuarial note prepared by an enrolled pension actuary providing an estimate of the cost and actuarial effect of the proposed change.

The Commonwealth's retirement programs are funded by contributions from both the employer and employee. The contribution rate for PSERS members who enrolled in the pension plan on or after January 1, 2002 and before July 1, 2011 is 7.5% of compensation. The contribution rate for PSERS members who enrolled on or after July 1, 2011 is 7.5% or 10.3%, depending upon elections made by each employee member. The contribution rates for PSERS members who enrolled prior to January 1, 2002 range from 5.25% to 7.5% of compensation, depending upon the date of commencement of employment and elections made by each employee member. The SERS' employee contribution rate is 6.25% for a majority of member employees. Interest on each employee's accumulated contributions is credited annually at a 4% rate mandated by state statute. Accumulated contributions plus interest credited are refundable to covered employees upon termination of their employment for most members.

Act 5 of 2017

On June 12, 2017, the Governor signed Act 5 of 2017 into law ("Act 5") which established three new pension plan design options for most state employees hired on or after January 1, 2019 and for most school employees hired on or after July 1, 2019.

The new plan design options include two hybrid options, which have both a defined benefit (DB) component and a defined contribution (DC) component, as well as a stand-alone DC plan option. New Pennsylvania State Police officers, corrections officers and other hazardous duty personnel hired on or after January 1, 2019, are exempt from participation in the new plan options. New judges and legislators beginning State service after January 1, 2019, would be included under the new plan designs. The following table provides a brief outline of the new plan designs for SERS and PSERS. The PSERS and SERS information regarding Act 5 are available electronically at the following respective websites: www.psers.pa.gov and www.sers.pa.gov.

Act 5 of 2017

	Hybrid (SERS Class A-5, PSERS Class T-G)	**Alternate Hybrid (SERS Class A-6, PSERS Class T-H)**	**Defined Contribution (DC)**
Annual Benefit Accrual Rate	1.25%	1.0%	N/A
New Employee Contribution Rate			
SERS	**8.25%** (DB 5.0%, DC 3.25%)	**7.5%** (DB 4.0%, DC 3.5%)	7.5%
PSERS	**8.25%** (DB 5.5%, DC 2.75%)	**7.5%** (DB 4.5%, DC 3.0%)	7.5%
DC Employer Contribution Rate			
SERS	2.25%	2.0%	3.5%
PSERS	2.25%	2.0%	2.0%
Vesting Years	DB 10/DC 3	DB 10/DC 3	3
Final Average Salary	Highest 5 Years	Highest 5 Years	N/A
Normal Retirement Age (Unreduced Pension)	**Age 67/3 years** of service; Rule of 97 and 35 eligibility points	**Age 67/3 years** of service; Rule of 97 and 35 eligibility points for SERS only	N/A
Early Retirement Milestone	**Age 57/25 years** of service	**Age 62/25 years** of service for SERS; ***Age 55/25 years** of service for PSERS	N/A
Early Retirement Reduction	**If reach milestone:** 3% reduction for each year under age 67 **OR** **Age 62/10 years of service for SERS:** Actuarial reduction for each year under age 67 **OR** **10 years of service but NOT age 62:** Standard Actuarial reduction from 62-67 plus special 7.375% rate actuarial reduction for each year under 62 for SERS: PSERS special rate has yet to be determined	**If reach milestone:** 3% reduction for each year under age 67 **OR** **Age 62/10 years of service for SERS:** Actuarial reduction for each year under age 67 **OR** **10 years of service but NOT age 62:** Standard Actuarial reduction from 62-67 plus special 7.375% rate actuarial reduction for each year under 62 for SERS: *PSERS special rate has yet to be determined	N/A

* PSERS special rate has yet to be determined.

Investment Performance

SERS returns for the calendar years 2012, 2013, 2014, 2015, and 2016 were, 12.0 percent, 13.6 percent, 6.4 percent, 0.4, and 6.5 percent respectively. PSERS' fiscal years 2012, 2013, 2014, 2015, 2016, and 2017 investment performance was 3.43 percent, 7.96 percent, 14.91 percent, 3.04 percent, 1.29 percent, and 10.14 percent respectively. See "Actuarial Calculations and Unfunded Actuarial Accrued Liability" below regarding investment rate of return assumptions for PSERS and SERS.

Plan Assets

Contributions to the PSERS and SERS pension plans by the Commonwealth including medical premium assistance payments, employee contributions, interest earnings and benefit payments are shown in the following tables, which have been prepared by the respective staffs of PSERS and SERS.

Table 21
Public School Employees' Retirement Fund
(In Millions)

Year Ended June 30	Employer Contributions	Employee Contributions[(a)]	Net Investment Income (Loss)	Total Deductions From Plan Net Assets[(b)]	Plan Net Assets[(c)]
2008	$ 835	$ 880	$ (1,776)	$ 4,991	$ 62,659
2009	608	911	(16,198)	4,983	43,207
2010	638	952	6,115	5,300	45,837
2011	748	1,043	9,247	5,675	51,433
2012	1,086	953	1,094	6,049	48,764
2013	1,555	991	4,126	6,436	49,276
2014	2,110	967	7,098	6,454	53,262
2015	2,714	985	1,329	6,686	51,885
2016	3,303	989	474	6,860	50,151
2017	3,944	1,014	4,996	7,008	53,506

(a) PSERS no longer classifies member premiums to its Health Option Plans as Employee Contributions. Numbers have been adjusted for each year to reflect this change.
(b) Includes PSERS administrative expenses.
(c) For the fiscal year ended June 30, 2014, PSERS adopted GASB Statement 67 (Plans) which replaces requirements of Statement 25. This new standard impacts the accounting treatment of pension plans in which state and local governments participate. Except as noted, the presentations above include the effects of financial activity related to the administration of the PSERS healthcare insurance premium assistance program and Health Options Program. As required with the adoption of GASB Statement No. 26, separate financial presentations for these programs are made in PSERS financial statements. For the fiscal year ended June 30, 2017, PSERS adopted GASB Statement 74, Financial Reporting for Postemployment Benefit Plans other than Pension Plans. This statement requires changes in presentation of the financial statements and required supplementary information for PSERS' Premium Assistance Plan.

Table 22
State Employees' Retirement Fund
(In Millions)

Year Ended December 31	Employer Contributions	Employee Contributions	Net Investment Income/Loss[(a)]	Total Deductions From Fiduciary Net	Fiduciary Net
2008	$ 235	$ 337	$ (11,061)	$ 2,231	$ 22,796
2009	253	349	3,561	2,297	24,662
2010	273	349	3,076	2,474	25,886
2011	392	351	480	2,732	24,377
2012	566	348	2,794	2,696	25,389
2013	795	352	3,724	2,866	27,394
2014	1,084	366	1,462	2,968	27,338
2015	1,360	372	88	3,103	26,055
2016	1,622	375	1,587	3,251	26,388

Fiscal year 2017 data not available
(a) Includes net appreciation (depreciation) in fair value of investments.
(b) Includes SERS administrative costs.
(c) Market value of investment assets. For the fiscal year ended December 31, 2014, SERS adopted GASB Statement No. 67, which replaces requirements of GASB Statement No. 25. These require that investments be reported at their fair value. Also includes securities lending collateral pool pursuant to GASB Statement No. 28.

Actuarial Calculations and Unfunded Actuarial Accrued Liability

Annual actuarial valuations are required by state law to determine the employer contribution rates necessary to accumulate sufficient assets and provide for payment of future benefits. Actuarial assessments are "forward-looking" information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans. The actuary's recommendations for employer contribution rates represent a funding plan for meeting current and future retirement obligations. The employer's contribution rate is computed to fully amortize the unfunded actuarial accrued liability of a plan as determined by the actuary. The unfunded accrued liability is a measure of the present value of benefits estimated to be due in the future for current employees under specified assumptions as to mortality, pay levels, retirement experience and employee turnover, less the present value of assets available to pay those benefits, under specified assumptions of normal cost, supplemental annuity amortization, employer contribution levels and employee contributions. The unfunded actuarial accrued liability for recent years with completed valuations is shown in Table 23 below for both SERS and PSERS.

The Boards of PSERS and SERS hire their actuarial firms through a competitive Request for Proposal process generally for a five-year term. PSERS current actuary is Conduent Business Services, LLC, and SERS actuary is Korn Ferry Hay Group. The Boards of PSERS and SERS periodically review their respective system actuarial assumptions with actuaries, investment consultants and staff and determine whether to make any prospective changes to these assumptions. Both Boards have adopted changes to their respective system actuarial assumptions. In January 2009, the PSERS Board of Trustees decreased PSERS' actuarial investment rate of return assumption from 8.5 percent to 8.25 percent, effective for the June 30, 2008 actuarial valuation, and further decreased the rate of return assumption from 8.25 percent to 8.0 percent for the June 30, 2009 valuation. In March 2011, the PSERS Board decreased the actuarial investment rate of return for a third time from 8.0 percent to 7.5 percent for the June 30, 2011 actuarial valuation based on a further reduction in the long-term capital market rate of return assumptions of its investment consultant. In June 2016, the PSERS Board decreased the actuarial rate of return for a fourth time in eight years from 7.5 percent to 7.25 percent for the June 30, 2016 actuarial valuation based on a further reduction in expected long term capital market return assumptions. In April 2009, the State Employees' Retirement Board decreased SERS' assumed rate of return on investments from 8.5 percent to 8.0 percent effective for the December 31, 2008 valuation. In May 2012, SERS' Board decreased the actuarial rate of return from 8.0 percent to 7.5 percent for the December 31, 2011 valuation. The SERS Board decreased the actuarial rate of return from 7.5 percent to 7.25% for the December 31, 2016 valuation. These changes to SERS' and PSERS' investment return assumptions bring both Fund's return assumptions below the median assumption used by public pension funds nationally.

Table 23
Unfunded Actuarial Accrued Liability
2006-2016
(In Millions)

Valuation Year Ended In	SERS [(a)]	PSERS [(b)]
2006……………………………	$ 2,216	$ 12,163
2007……………………………	914	9,438
2008……………………………	3,801	9,924
2009……………………………	5,592	15,739
2010……………………………	9,736	19,699
2011……………………………	14,664	26,499
2012……………………………	17,753	29,533
2013……………………………	17,900	32,599
2014……………………………	18,166	35,121
2015……………………………	19,452	37,336
2016……………………………	19,923	42,599

(a) The fiscal year for SERS ends on December 31 of each year.
(b) The fiscal year for PSERS ends on June 30 of each year. Amounts presented are for Pension only and excludes Premium Assistance.

The funded ratios, on an actuarial value of assets basis, for PSERS and SERS were 63.8% and 59.2%, respectively as of their 2013 actuarial valuations. For PSERS, its funded ratios as of June 30, 2014 were 62.0% and approximately 57.4% on an actuarial and market value basis, respectively. For PSERS, its funded ratios as of June 30, 2015 were 60.6% and 54.6% on an actuarial and market value basis, respectively. For PSERS, its funded ratios as of June 30, 2016 were 57.3% and 49.9% on an actuarial and market value basis, respectively. As of June 30, 2017, PSERS funded ratio were 56.3% and 52.2% on an actuarial and market value basis, respectively.

For SERS, its funded ratios as of December 31, 2014 were 59.4% and 61.1% on an actuarial and market value basis, respectively. For SERS, its funded ratios as of December 31, 2015 were 58.0% and 56.2% on an actuarial and market value basis, respectively. For SERS, its funded ratios as of December 31, 2016 were 58.1% and 55.5% on an actuarial and market value basis, respectively.

The net increase in the unfunded actuarial accrued liability is attributable to legislative pension plan modifications to limit funding increases, to changes to the actuarial assumptions and to recent actual rates of return on pension fund investments being materially below the actuarially assumed rates.

Previously for financial reporting purposes, both PSERS and SERS adopted the Governmental Accounting Standards Board's Statement No. 25. Statement No. 25 required a specific method of accounting and financial reporting for defined benefit pension plans. Among other things, Statement No. 25 required a comparison of employer contributions to "annual required contributions" ("ARC'). Governmental Accounting Standards Board's Statement No. 25 is superseded by Governmental Accounting Standards Board's Statement No. 67 and is only provided for informational purposes. Currently for financial reporting purposes starting with December 31, 2014 for SERS and June 30, 2014 for PSERS, both systems adopted Governmental Accounting Standards Board's Statement No. 67, which is discussed in the following section under "New Accounting Standards". While the ARC is no longer applicable to 2014 and subsequent years for SERS and PSERS, the ARC amounts provided in the following table for years before 2014 are being provided for informational purposes.

Table 24

Comparison of Employer Contributions to Actuarially Determined Contribution/Annual Required Contribution

(In Thousands)

Public School Employees' Retirement Fund

Year Ended June 30	ADC or ARC[(a)]	Actual Employer Contributions	Percentages Contributed
2017…………..	$3,824,908	$3,824,908*	100%
2016…………..	3,976,798	3,181,438*	80
2015…………..	3,760,827	2,582,114*	69
2014…………..	3,410,373	1,986,384*	58
2013…………..	3,110,429	1,434,815*	46
2012…………..	2,629,244	1,001,140*	38
2011…………..	2,436,602	646,700*	27
2010…………..	1,928,278	527,212*	27
2009…………..	1,761,295	503,227*	29
2008…………..	1,852,238	753,532	41
2007…………..	1,708,821	659,545	39

[INTENTIONALLY LEFT BLANK]

State Employees' Retirement Fund

Year Ended December 31	ADC or ARC[(b)]	Actual Employer Contributions	Percentages Contributed
2016…………..	$1,613,626	$1,613,626	100%
2015…………..	1,360,431	1,360,431	100
2014…………..	1,084,104	1,084,104	100
2013…………..	1,314,925	790,996	60
2012…………..	1,044,632	562,883	54
2011…………..	913,778	391,189	43
2010…………..	866,822	272,525	31
2009…………..	643,861	251,870	39
2008…………..	584,248	233,138	40
2007…………..	617,253	242,337	39
2006…………..	584,745	195,407	36

[(a)] Amounts presented are for Pension only and excludes Premium Assistance. The ADC or ARC presented above was determined as part of the actuarial valuation as of two years prior to the dates indicated (i.e., the ADC for the fiscal year ended June 30, 2016 was determined by the valuation completed as of June 30, 2014 which was based on an 7.50% interest rate).
[(b)] The ARC is calculated as part of SERS funding valuation using Governmental Accounting Standards Board Statement No. 25 (GASB 25) requirements. Starting in 2014, GASB 25 was superseded by Governmental Accounting Standards Board Statement No. 67 (GASB 67) for accounting purposes. GASB 67 replaces the ARC with an actuarially determined contribution (ADC).
(*) Net of purchase of service contributions

The following table provides the State's projected employer contribution rates expressed as a percentage of the actuarially determined covered payroll for PSERS and SERS for the current fiscal year and the next four fiscal years.

Table 25
Projected Employer Contribution Rates

Fiscal Year[(a)]	PSERS[(b)]	SERS[(c)]
2018	32.57%	32.80%
2019	33.43	32.80
2020	34.79	32.70
2021	35.26	32.20
2022	35.68	31.50

[(a)] The fiscal year 2018 employer contribution rates are actual rates which began on July 1, 2017.
[(b)] The projection of contribution rates is based on the assumption that there are no changes in demographic assumptions, no changes in benefit provisions, and no actuarial gains or losses other than gains or losses on the actuarial value of assets that result from recognizing currently deferred gains or losses on the market value of assets. In addition, a constant active population is assumed with future new members to be Class T-E members with the same demographic characteristics of new members during the period 7/1/2014 to 6/30/2017.
[(c)] This projection is based upon these assumptions: a projected investment return of 7.25 percent in 2017 and after; general pay increases of 2.90 percent; no future COLAs. The employer contributions are no longer subject to the Act 2010-120 collars effective with the July 1, 2017 employer contribution rates. Therefore, only the first half of the calendar year 2017 contribution is limited.

New Accounting Standards

In June 2012, GASB issued Statement No. 67 (GASB 67) (Financial Reporting for Pension Plans), which replaces requirements of GASB Statement No. 25 (effective for fiscal years beginning after June 15, 2013) and Statement No. 68 (Accounting and Financial Reporting for Pension Plans by Employers), which replaces the requirements of Statements No. 27 and No. 50 (effective for fiscal years beginning after June 15, 2014). These new standards impact the accounting treatment of pension plans in which state and local governments participate. Major changes are: 1) the inclusion of unfunded pension liabilities on the government's balance sheet (such unfunded liabilities were typically included as notes to the government's financial statements); 2) full pension costs are to be shown as expenses regardless of actual contribution levels; 3) lower actuarial discount rates may be required to be used for most plans for certain purposes of the financial statements, resulting in increased liabilities and pension expenses;

and 4) shorter amortization periods for unfunded liabilities will be required to be used for certain purposes of the financial statements, which generally would increase pension expenses.

PSERS implemented GASB 67 in fiscal year 2013-14. SERS is the administrator of a cost-sharing multiple-employer defined benefit pension plan and reports required items per GASB 67 in Notes to Financial Statements as well as in Required Supplementary Information starting with its 2014 Comprehensive Annual Financial Report. SERS implemented GASB 67 as of December 31, 2014 but also retroactively reported as of December 31, 2013. For SERS as of December 31, 2016 and 2015, net pension liability was $19.26 billion and $18.18 billion, respectively, while plan fiduciary net position as a percentage of the total pension liability was 57.8 percent and 58.9 percent, respectively. For SERS as of December 31, 2016, actuarially determined contribution (ADC) and contributions in relation to the ADC were both $1,614 million. For SERS as of December 31, 2015, actuarially determined contribution (ADC) and contributions in relation to the ADC were both $1,360 million.

Other Post-Employment Benefits

In addition to a defined benefit pension plan for state employees and employees of certain state-related organizations, the Commonwealth also provides health care plans for its eligible retirees and their qualifying dependents. These and similar plans are commonly referred to as "other post-employment benefits" or "OPEBs." The Commonwealth provides OPEBs under two plans. The Retired Pennsylvania State Police Program (RPSPP) provides collectively bargained benefits to retired state enlisted members and their dependents. The Retired Employee Health Program (REHP) provides Commonwealth-determined benefits to other retired state employees and their dependents.

The General Assembly, based upon the Governor's request, annually appropriates funds to meet the obligation to pay current retiree health care benefits on a "pay-as-you-go" basis. Retiree health care expenditures are currently funded by the Commonwealth's General Fund (approximately 41 percent), and by Federal, Other and Special Funds. Commonwealth costs for such benefits totaled $662 million in fiscal year 2013, $664 million in fiscal year 2014 and $725 million in 2015. Fiscal year 2016 employer contributions were approximately $895 million.

Governmental Accounting Standards Board Statement #45

On June 21, 2004, the Governmental Accounting Standards Board (GASB) released its Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions ("Statement No. 45").* Statement No. 45 establishes standards for the measurement, recognition and display in the financial reports of state and local governments of obligations to pay OPEBs, when provided separately from a pension plan, expense or expenditures and related liabilities. Under Statement No. 45, governments are required to: (i) measure the costs of benefits, and recognize other post-employment benefits expenses, on the accrual basis of accounting during periods that employees are providing service; (ii) provide information about the actuarial liabilities of promised benefits associated with past service and whether, or to what extent, those benefits have been funded; and (iii) provide information useful in assessing potential demands on the employer's future cash flows.

In fiscal year 2008, the Commonwealth's Office of Budget entered into an Interagency Agreement with the independent Pennsylvania Department of Treasury to establish irrevocable trust equivalent arrangements trust accounts for the purpose of providing advance funding to both the REHP and RPSPP programs. The Commonwealth had previously established restricted receipt accounts for the REHP and RPSPP programs in order to accumulate funds to pay retiree health care costs on a "pay-as-you-go" basis while maintaining an adequate reserve balance.

In fiscal year 2016, $50 million was transferred to the REHP Trust Account from the pre-existing restricted receipt account. No additional transfers have been made to the trust accounts. At the end of fiscal year 2016, the combined balance in the trust accounts and restricted receipt accounts was $813 million.

The Commonwealth has retained Deloitte Consulting, LLP, a multinational professional services firm, to provide actuarial services for GASB 45 implementation and reporting. The Deloitte Consulting's 2016 OPEB valuation for the REHP and RPSPP programs is updated to reflect the following:

1. The combined unfunded actuarial accrued liability ("UAAL") as of June 30, 2016 was $19,440 million. The UAAL for the REHP was $15,989 million comprised of an actuarial accrued liability of $16,134

million less $145 million of plan assets. The UAAL for the RPSPP was $3,450 million comprised of an actuarial accrued liability of $3,530 million less $80 million of plan assets.

2. The OPEB liability as of June 30, 2016 was $3,329 million consisting of $2,333 million for the REHP and $996 million for the RPSPP.

Unemployment Compensation

On June 30, 2012, the Commonwealth had $2,592.7 million in outstanding loans from the Federal Unemployment Account to the Pennsylvania Unemployment Compensation Fund (the "UC Fund").

The Commonwealth was one of 35 states that had exhausted its UC Fund balances during the most recent economic downturn. The federal loans, which began in March 2009, were needed to fund unemployment compensation benefits in excess of UC Fund receipts.

Under current federal law, such loans must be repaid by the states with interest. Under ARRA, a waiver of interest on federal loans was extended through the end of calendar year 2010. Beginning in January 2011, interest started to accrue on outstanding loan amounts. Pursuant to the Unemployment Compensation Law, for each year in which interest is due on federal loans the Department calculates an Interest Factor tax to be paid by Commonwealth employers on the first $8,000 in wages paid to each employee. The assigned Interest Factor rate was 0.44 percent for calendar year 2011 and 0.20 percent for calendar year 2012. In addition, federal law requires that employers in a state with an outstanding loan balance at the end of two consecutive years must pay additional federal unemployment taxes ("FUTA") to repay the principal of the loan. Initially this FUTA tax increase is 0.3 percent on the federal wage base of $7,000 and automatically increases by 0.3 percent each year that the loan remains outstanding.

Based on econometric assumptions and in the absence of legislative action to improve the UC Fund's solvency and address the federal debt, the Commonwealth anticipated that the UC Fund would continue to require federal loans to pay benefits through at least 2018 and projected that its outstanding loan balance would total $286 million by 2018. Mandatory loan repayments through increased FUTA taxes, which began in 2011, were expected to grow from $94 million that year to an estimated $854 million annually by 2018. Additional voluntary loan repayments from the UC Fund would likely decrease from an estimated $2,560 million in fiscal year 2011 to $176 million by fiscal year 2018 and the estimated interest on the outstanding UC Fund loans would drop from $101 million annually in fiscal year 2011 to $9 million by fiscal year 2018. UC Fund-related expenditures did not have any impact on the Commonwealth's General Fund. They are funded solely by federal taxes, the UC Fund and the Interest Factor assessment, none of which affect the revenues or expenditures of the General Fund.

In 2011, 2012, and 2016 the General Assembly enacted legislation to better align the Fund's benefit payments with its resources, adjust the revenue structure to allow a greater accumulation of reserves in the Unemployment Compensation Fund, and improve the Fund's ability to perform in future economic downturns. The 2011 legislation is Act of June 17, 2011, P.L. 16, No. 6 ("Act 6"), the 2012 legislation is Act of June 12, 2012, P.L. 577, No. 60 ("Act 60"), and the 2016 legislation is Act of November 3, 2016, P.L. 1100, No. 144 ("Act 144").

In addition to the inclusion of provisions to address the UC Fund's solvency, Act 60 of 2012 authorized the issuance of up to $4,500 million of unemployment compensation bonds by the Department of Labor and Industry acting through PEDFA. The proceeds of such bonds, (the "UC Bonds") could be used to repay all outstanding loan advances, including interest, from the Federal Unemployment Account as well as to provide additional funding for the UC Fund.

On July 25, 2012, Pennsylvania's $2.8 billion federal loan balance was repaid in full from $3.2 billion in interim financing obtained through Citibank, N.A. The interim financing also included $382 million in UC benefits funding for the remainder of calendar year 2012. As provided by Act 60 of 2012, Pennsylvania issued Unemployment Compensation (UC) bonds in October 2012 with a total par value of $2.8 billion, generating $3.2 billion in bond proceeds to repay the interim financing. The total interest cost for the bonds was 1.29 percent, compared to federal loan interest rates of 2.94 percent in 2012, 2.58 percent in 2013, 2.39 percent in 2014, 2.34% in 2015, and 2.23% in 2016.

The FUTA credit reduction for 2011 was 0.3 percent. By repaying the federal loan balance in 2012 with the interim financing and bonds, the full FUTA credit was restored for employers starting in 2012. Without the bonds, the FUTA credit reduction would have increased to 0.6 percent for 2012, 0.9 percent for 2013, and continued to climb to

1.8 percent by 2016. In contrast, the bonds provide a more level repayment structure from the Interest Factor (a separate component of the employer UC contribution rate for servicing the UC bond debt starting in 2013), which is capped at 1.1 percent. The federal debt repayment also resulted in the forgiveness of $6.2 million in interest on the $1.1 billion in federal loans received in calendar year 2012 and an estimated $16.7 million in additional interest savings from the 0.36 percent rate on the interim financing in 2012. From the Interest Factor, Pennsylvania has redeemed $1.66 billion of the total $2.83 billion par value, reducing the outstanding bond balance to $1.17 billion as of July 1, 2017.

GOVERNMENT AUTHORITIES AND OTHER ORGANIZATIONS

Certain state-created organizations have statutory authorization to issue debt for which state appropriations to pay debt service thereon are not required. The debt of these organizations is funded by assets of, or revenues derived from, the various projects financed and is not a statutory or moral obligation of the Commonwealth. However, some of these organizations are indirectly dependent upon Commonwealth operating appropriations. In addition, the Commonwealth may choose to take action to financially assist these organizations. These organizations, their purposes and their outstanding debt, as computed by each organization, (excluding swap obligations) are as follows:

Delaware River Joint Toll Bridge Commission ("DRJTBC"). The DRJTBC, a public corporation of the Commonwealth and New Jersey, owns and operates bridges across the Delaware River. Debt service on bonds is paid from tolls and other revenues of DRJTBC. DRJTBC had $713.4 million in bonds outstanding as of December 31, 2017.

Delaware River Port Authority ("DRPA"). The DRPA, a public corporation of the Commonwealth and New Jersey, operates several toll bridges over the Delaware River, and promotes the use of the Philadelphia-Camden port and promotes economic development in the port district. Debt service on bonds is paid from toll revenues and other revenues pledged by DRPA to repayment of bonds. The DRPA had $1,434.7 million in revenue bond debt outstanding as December 31, 2017.

Pennsylvania Economic Development Financing Authority ("PEDFA"). PEDFA was created in 1987 to offer pooled bond and other bond issues of both taxable and tax-exempt bonds on behalf of local industrial and commercial development authorities for economic development projects. Bonds may be payable from and secured by loan repayments and all other revenues of the PEDFA. The PEDFA had $6,032.9 million of debt outstanding as of December 31, 2017.

Pennsylvania Energy Development Authority ("PEDA"). The PEDA was created in 1982 to finance energy research projects, demonstration projects promoting the production or conservation of energy and the promotion, utilization and transportation of Pennsylvania energy resources. The authority's funding is from appropriations and project revenues. Debt service on bonds is paid from project revenues and other revenues pledged by PEDA to repayment of bonds. The PEDA had no bonds outstanding as of December 31, 2017.

Pennsylvania Higher Education Assistance Agency ("PHEAA"). The PHEAA makes or guarantees student loans to students or parents, or to lending institutions or post-secondary institutions. Debt service on the bonds is paid by loan interest and repayments and other agency revenues. The PHEAA had $4,599.9 million in bonds outstanding as of December 31, 2017.

Pennsylvania Higher Educational Facilities Authority ("PHEFA"). The PHEFA is a public corporation of the Commonwealth established to finance college facilities. As of December 31, 2017, the PHEFA had $6,129.7 million in revenue bonds and notes outstanding payable from the lease rentals or loan repayments of the projects financed. Some of the lessees or borrowers, although private institutions, receive grants and subsidies from the Commonwealth.

Pennsylvania Industrial Development Authority ("PIDA"). The PIDA is a public corporation of the Commonwealth established for the purpose of financing economic development. The PIDA had $239.1 million in revenue bond debt outstanding on December 31, 2017, to which all of its revenues are pledged.

Pennsylvania Infrastructure Investment Authority ("Pennvest"). Pennvest was created in 1988 to provide low-interest rate loans and grants for the purpose of constructing new and improving existing water supply and sewage disposal systems to protect the health and safety of the citizens of the Commonwealth and to promote economic development within the Commonwealth. Loans and grants are available to local governments and, in certain circumstances, to private companies. The Pennvest bonds are secured by principal repayments and interest payments on Pennvest loans. Pennvest had $87.7 million of revenue bonds outstanding as of December 31, 2017.

Pennsylvania Turnpike Commission ("PTC"). The PTC operates the Pennsylvania Turnpike System ("System"). Its outstanding indebtedness, $12,169.7 million as of December 31, 2017, is payable from the net revenues of the System, primarily toll revenues, or from certain taxes dedicated to the System.

State Public School Building Authority ("SPSBA"). The SPSBA finances public school projects and community college capital projects. Bonds issued by the SPSBA are supported by the lease rental payments or loan repayments made to the SPSBA by local school districts and the community colleges. A portion of the funds appropriated annually by the Commonwealth as aid to local school districts and community colleges may be used by them to pay a portion of such lease rental payments or loan repayments. The SPSBA had $2,794.9 million of revenue bonds outstanding as of December 31, 2017.

CITY OF PHILADELPHIA – PICA

The Pennsylvania Intergovernmental Cooperation Authority ("PICA") was created by Commonwealth Act No. 1991-6, approved June 5, 1991 to assist the City of Philadelphia (the "City"), the Commonwealth's largest city, in remedying its fiscal emergencies. PICA is authorized to provide financial assistance to the City through the issuance of debt, and to make factual findings and recommendations to the City concerning its budgetary and fiscal affairs. This financial assistance has included grants used by the City for defeasance of certain City general obligation bonds, funding of capital projects, and the liquidation of the cumulative general fund deficit of the City, as of June 30, 1992, of $224.9 million. Currently the City is operating under a five-year financial plan covering fiscal years 2018 through 2022 which was approved by PICA.

No further bonds may be issued by PICA for the purpose of financing capital projects or an operating deficit, as the authority for such bond issuance expired December 31, 1994. PICA's authority to issue debt for the purpose of financing a cash flow deficit expired on December 31, 1996. Its ability to refund existing outstanding debt is unrestricted. PICA had $235.3 million in special tax revenue bonds outstanding as of June 30, 2017. Neither the taxing power nor the credit of the Commonwealth is pledged to pay debt service on PICA's bonds.

LITIGATION

The Commonwealth's Office of Attorney General and Office of General Counsel have reviewed the status of pending litigation against the Commonwealth, its officers and employees, and have provided the following brief descriptions of certain cases affecting the Commonwealth.

In 1978, the General Assembly approved a limited waiver of sovereign immunity with respect to lawsuits against the Commonwealth. This cap does not apply to tax appeals, such as *Nextel Communications* as detailed below. Damages for any loss are limited to $250,000 for each person and $1,000,000 for each accident. The Supreme Court of Pennsylvania has held that this limitation is constitutional. Approximately 850 suits against the Commonwealth remain open. Tort claim payments for the departments and agencies, other than the Department of Transportation, are paid from departmental and agency operating and program appropriations. Tort claim payments for the Department of Transportation are paid from an appropriation from the Motor License Fund. The Commonwealth also represents and indemnifies employees who have been sued under Federal civil rights statutes for actions taken in good faith in carrying out their employment responsibilities. There are no caps on damages in civil rights actions. The Commonwealth's self-insurance program covers damages in these civil cases up to $250,000 per incident. Damages in excess of $250,000 are paid from departmental and agency operating and program appropriations.

Mountainview Thoroughbred Racing Assn v. PGCB, et al. No. 1 MD 2018 (Pa Cmwlth Ct)

This is a declaratory judgement action seeking interpretation of certain provisions of Act 42 of 2017. Act 42 made several changes to the Pennsylvania Race Horse Development and Gaming Act including creating a new category of casino licenses (Category 4) and allowing for the development of up to 10 Category 4 casinos that will offer between 300 and 750 slot machines and up to 30 table games each. The Act created an auction process through which the winner receives the exclusive right to select a Category 4 location. Once the winning bidder selects a location, a 15-

mile linear radius buffer zone is reserved for that bidder. A Category 4 casino cannot be located within 25-miles of an existing Category 2 or Category 3 casino (unless they share ownership). Petitioners are arguing that the physical site of the Category 4 casino must be at the center point of the 15-linear mile radius buffer zone. The PGCB maintains that, per the plain language of the Act, the site of the Category 4 casino could be anywhere within the reserved buffer zone.

Defendants have filed an Answer to the Petition for Review but there has been no other activity in the case. To date, five Category 4 locations have been selected through the auction process resulting in approximately $127 million in revenue to the Commonwealth. Two of the auctions were won by Petitioner who then selected Category 4 locations (center point of the buffer zone) in municipalities that have opted out of hosting a Category 4 casino. Applications for a Category 4 casino licenses must be submitted within 6-months of winning the auction so they will start to be submitted no later than July 2018. Construction of the new casinos would likely begin shortly thereafter. As a result, Category 4 casinos could be operational before this issue is decided.

Mountainview Thoroughbred Racing Assn v. PGCB, et al. No. 1:18-CV-0063 (U.S.D.C. M.D. Pa.)

This is a Constitutional challenge to certain portions of Act 42. Act 42 made several changes to the Pennsylvania Race Horse Development and Gaming Act including creating a new category of casino licenses (Category 4) and allowing for the development of up to 10 Category 4 casinos which will offer between 300 and 750 slot machines and up to 30 table games each. The Act created an auction process through which the winner receives the exclusive right to select a Category 4 location. Once the winning bidder selects a location, a 15-mile linear radius buffer zone is reserved for that bidder. A Category 4 casino cannot be located within 25-miles of an existing Category 2 or Category 3 casino (unless they share ownership). Petitioners argue that their Hollywood Casino is disparately impacted by the new Category 4 scheme. Petitioners argue that, because the 25-mile protective zones surrounding most of the existing casinos overlap, those casinos are afforded greater protection from cannibalization of their revenues from the new Category 4 casinos. As Hollywood Casino is the only casino in Central PA they argue most of the new Category 4 locations selected will be in their geographic area. Petitioners seek a declaration that the Category 4 licensing program is unconstitutional as applied and discriminates against them as a “class of one.” Plaintiffs seek to enjoin Defendants from enforcing or exercising any authority under the Category 4 program.

To date, five Category 4 locations have been selected through an auction process. Only three of the reserved Category 4 locations are located in Central PA and two of those are reserved by Plaintiff. The first two rounds of auctions have been completed and the PGCB is considering whether to conduct an additional round of auctions. Defendants have answered the Complaint and a case management order was entered setting a May 6, 2019, trial. So far, approximately $127 million in revenue has been raised through the auction process. Applications for a Category 4 casino licenses must be submitted within 6-months of winning the auction so they will start to be submitted no later than July 2018. Construction of the new casinos would likely begin shortly thereafter. As a result, Category 4 casinos could be operational before this case is decided. Once opened, the new casinos are expected to generate significant revenue for the Commonwealth which will be lost if Plaintiffs are successful. Once the auction process is complete, Defendant may file a motion arguing that the Complaint is moot.

Owner Operator Independent Drivers Association, Inc. et al. v. Pennsylvania Turnpike Commission et al., No. 1:18-cv-00608-SHR (U.S.D.C. M.D. Pa).

On March 15, 2018, several individuals, entities and associations involved in or related to the commercial trucking industry (Plaintiffs) filed a class action lawsuit against the Pennsylvania Turnpike Commission the “Commission” and several state officials in their individual and official capacities. Plaintiffs allege that Act 44 of 2007, as amended by Act 89 of 2013 (hereinafter, “Act 44/89”), violates the Commerce Clause and the right to travel under the U.S. Constitution because the Commission: improperly imposes Turnpike tolls beyond that which is necessary for the operation and maintenance of the Turnpike; and, improperly expends toll revenues for purposes other than the operation and maintenance of the Turnpike. Plaintiffs seek several remedies from the Commission including monetary damages including a refund of a portion of certain tolls. They have asked the court to issue a preliminary injunction that would: require the Commission to segregate all toll receipts in excess of what may be required for the current operation and maintenance of the Pennsylvania Turnpike System or for the funding of Commission senior revenue bonds issued under an indenture dated March 1, 2001; prohibit the Commission from expending those toll receipts pending a ruling on this action; and, prohibit the Commission from issuing any further subordinate revenue bonds under another indenture dated April 1, 2008, and from incurring of any additional debt for the purpose of making any additional Act 44/89 payments to the Pennsylvania Department of Transportation. Plaintiffs also ask the Court to permanently enjoin the Commission from issuing any further bonds or incurring any additional debt for the purpose of making Act 44/89 payments, and prohibit the Commission from using toll revenues to make payments on outstanding bonds issued to meet Act 44/89 obligations. On April 2, 2018, the Plaintiffs filed a motion for preliminary injunction asking the court to enjoin the Commission, as relevant here, from (1) using any sums derived from Pennsylvania Turnpike toll revenue to satisfy the Commission's obligations under Act 44/89 for any purpose except operating, maintaining, or improving the Turnpike; (2) using any sums derived from such toll revenue to pay the cost of debt service for any bonds issued by Commission for any purpose other than operating, maintaining, or improving the Turnpike; and (3) issuing or causing to be issued additional bonds or other debt obligations for the purpose of complying with Act 44/89.

The Commission along with all of the Commonwealth defendants are evaluating the Plaintiffs' lawsuit and the response to their claims, and will vigorously defend Act 44/89 and the propriety of its use of the Turnpike toll revenues in court.

Phantom Fireworks Showrooms LLC, et al. v. Tom Wolf, Governor of Pennsylvania, et al., No. 21 MD 2018 (Pa. Cmwlth. Ct.).

On January 22, 2018, the Governor, Secretary of Agriculture, and Secretary of Revenue received service of a lawsuit filed with the Commonwealth Court on January 19, 2018 by fireworks sellers that challenges the constitutionality of Act 43 of 2017 ("Act 43"). Act 43 contains new fireworks licensing, regulation, and sales tax provisions, along with a number of other revisions, additions, and revenue enhancements to the Commonwealth's Tax Reform Code. One of those additional provisions is the authorization to leverage a portion of the annual payments received by the Commonwealth under the Tobacco Master Settlement Agreement via the issuance of Tobacco Master Settlement Payment Revenue Bonds (Series 2018) by the CFA. Although the fireworks sellers only specifically question the fireworks provisions of Act 43 and not any of the act's other specific provisions, their lawsuit nonetheless asks the court to declare Act 43 unconstitutional in its entirety and enjoin its enforcement. On March 9, 2018, the Executive Branch parties, Senator Scarnati, and Speaker Turzai all filed preliminary objections to the petitioners' lawsuit. Also on April 9, 2018, the fireworks sellers filed an application for summary relief. By an order entered on April 18, 2018, the court directed the parties to complete briefing on both the preliminary objections and the application for summary relief by August 10, 2018, with argument on both pleadings to occur in September 2018.

Brouillette, et al. v. Wolf, et al., No. 410 MD 2017 (Pa. Cmwlth. Ct.).

In this matter, filed on September 19, 2017, Plaintiffs challenge the Commonwealth's fiscal year 2017-18 budget. Petitioners claim that the fiscal year 2017-18 budget violates numerous provisions of the Constitution. Among other things, Petitioners request 1) a declaration that Governor Wolf violated the balanced budget provision and ask that he be required to reduce or freeze spending and that the Budget Secretary be enjoined from allocating accounting amounts beyond available revenues; 2) that the General Assembly be required to use the revenue estimate of the Independent Fiscal Office; and 3) that the Governor, Treasurer, and Auditor General be enjoined from authorizing any line of credit or borrowing to enable the continued deficit spending. The Petitioners filed an Amended Petition for Review on November 7, 2017. The Amended Petition tries to add the "Commonwealth of Pennsylvania" as a respondent and continues the suit against Governor Wolf and others named in the Original Petition, but no longer includes Secretary Albright as a respondent. Named respondents now include Governor Wolf, Treasurer Torsella, Auditor General DePasquale, the Commonwealth of Pennsylvania, House Speaker Turzai, House Majority Leader Reed, President Pro Ternpore of the Senate Scarnati III, Senate Majority Leader Corman, and the Pennsylvania General Assembly. The Petitioners seek a declaration that: (1) Governor Wolf, Treasurer Torsella and/or Auditor General DePasquale violated the Constitution and applicable statutes by authorizing lines of credit (and other borrowing) to fund the FY 2016-2017 deficit and (2) the General Appropriation Bill for FY 2017-2018 violated the Constitution by appropriating funds in excess of anticipated revenues. The Respondents Governor Wolf and the Commonwealth filed preliminary objections to the amended petition for review, as did Treasurer Torsella and the Senators and Representatives. Oral argument is tentatively scheduled for September 12, 2018.

Pennsylvania Professional Liability Joint Underwriting Association v. Wolf, No. 1:17-CV-2041 (U.S.D.C., M.D. Pa.).

The Pennsylvania Professional Liability Joint Underwriting Association ("JUA") initiated this action against Governor Wolf on November 7, 2017. The JUA challenges, on various federal constitutional grounds, a provision of Act 44 of 2017 that directed the transfer, by December 1, 2017, of $200,000,000 from the JUA to the state treasurer for deposit into the General Fund or, if the transfer was not made by December 1, 2017, the abolishment of the JUA. The JUA filed a complaint in federal court and requested a preliminary injunction regarding the Act 44 provision, and the General Assembly intervened as a party to the lawsuit. After a hearing on November 14, 2017, the court enjoined the state officials from enforcing the Act 44 provision against the JUA. Answers to the complaint have been filed on behalf of Governor Wolf and on behalf of the General Assembly. The parties filed motions for summary judgment, as well as briefs in supports thereof and in opposition thereto. On May 17, 2018, the court granted JUA's motion for summary judgment, and denied the defendants' motions for summary judgment, ruling that the transfer constituted an impermissible taking of private property. The court declared that Act 44 is, therefore, unconstitutional. The defendants intend to seek clarification regarding the breadth of the order, particularly whether the Judge intended to declare the Act in its entirety unconstitutional, or just the portion relating to the JUA. The defendants are in the process of deciding whether to file an appeal.

United States of America v. Com. of Pa., Pennsylvania State Police Civil Action (U.S.D.C., M.D. Pa.)

On July 29, 2014, the U.S. Department of Justice (DOJ) filed a complaint alleging disparate impact discrimination against the Pennsylvania State Police ("PSP"), based on the female cadet hiring rates. This was based on an investigation undertaken by the DOJ from 2009 – 2014, and occurred after several months of mediation with DOJ on a possible settlement. DOJ attributes the alleged discrimination to the failure rate of female cadets on the Physical Readiness Test, or PRT. In addition to injunctive relief regarding the administration of the test, DOJ seeks back pay with interest for women who failed the PRT, offers of employment, retroactive seniority and other monetary and non-monetary benefits to women who suffered loses or will suffer losses in the future based on the alleged discriminatory practices. Enjoining the administration of the current PRT will require the development of a new test. Costs associated with an adverse result are difficult to assess but could range in the tens of millions depending upon the scope of any order issued by the Court and the number of women who may have to be compensated for lost salary, seniority and other benefits.

The trial court denied PSP's Motion for Summary Judgment, and granted plaintiff's Motion for Partial Summary Judgment. A bench trial before the District Court Judge was scheduled to begin on December 11, 2017, but has been continued pending mediation.

Nextel Communications of the Mid-Atlantic, Inc. v. Commonwealth of Pennsylvania (Pennsylvania Supreme Court).

On September 16, 2015, the Commonwealth Court of Pennsylvania held that the Pennsylvania net operating loss deduction ("NOL Deduction"), violated the Uniformity Clause of the Constitution.

Pennsylvania law allows corporate taxpayers to deduct losses incurred in prior tax years to reduce the taxable income in subsequent years, and this deduction is referred as the NOL Deduction. The NOL Deduction is, however, limited. For example, in the tax year at issue in *Nextel*, the amount of the NOL Deduction was limited to the greater of: (i) 12.5% of the taxpayer's taxable income or (ii) $3 million.

Originally, the Court held $3 million fixed dollar cap, as-applied to this taxpayer, violated the Uniformity Clause.

The Court declined to delete the entire NOL Deduction and thus disallow all NOL Deductions (both for this taxpayer and all other taxpayers for this year (2007) and all years thereafter).

The Commonwealth appealed the decision to the Pennsylvania Supreme Court. The Supreme Court issued a decision on October 18, 2017 holding that the net operating loss carryover is unconstitutional as written because of its inclusion of the $3 million flat deduction. But the Supreme Court reversed Commonwealth Court's order directing the Department of Revenue to issue a refund to Nextel. The Supreme Court severed the $3 million flat deduction from the net operating loss carryover, limiting Nextel to the deduction it had claimed, consisting of 12.5% of taxable income. The effect of this decision is that the Commonwealth will likely realize additional tax revenues collected from small corporations who previously benefited from the $3 million flat deduction because it was greater than a deduction of 12.5% of taxable income. By now being limited to the percentage deduction, these small corporations will have lower net loss carryover deductions, and as a result will likely pay more tax.

Nextel filed a writ of certiorari with the United States Supreme Court on May 3, 2018, docketed at No. 17-1506. The Commonwealth has until June 4, 2018 to file a brief in opposition or waive its response.

RB Alden Corp. v. Commonwealth of PA (Pennsylvania Supreme Court)

This matter raises the same net operating loss deduction ("NOL Deduction") issue that was raised in *Nextel Communications of the Mid-Atlantic*, except that the statutory provision in *RB Alden* limits the deduction to $2 million (rather than $3 million in *Nextel*), and does not allow for an alternative deduction amount based on a percentage (12.5%) of taxable income. On June 15, 2016, a panel of the Commonwealth Court of Pennsylvania held that, in accordance with its decision in *Nextel*, the cap on the NOL Deduction was unconstitutional and should be eliminated in its entirety. On Exceptions, the decision was affirmed by the Commonwealth Court sitting *en banc*. Both decisions were handed down by the Commonwealth Court before the Supreme Court decided in *Nextel* to sever the $3 million flat deduction, leaving intact the deduction consisting of 12.5% of taxable income.

The Commonwealth appealed to the Pennsylvania Supreme Court. RB Alden filed a cross appeal because Commonwealth Court rejected RB Alden's argument that the Tax Benefit Rule applied to remove all caps on the NOL Deduction. This Rule provides that recovery of a previously deducted loss is not included in taxable income to the extent that the earlier deduction did not reduce the amount of tax owed in the year the initial deduction was taken. Commonwealth Court determined that the Tax Benefit Rule, operating to remove all caps on the NOL Deduction, is contrary to the statute which expressly limited the NOL Deduction to $2 million. Because each party filed an appeal, the Commonwealth and RB Alden filed opening briefs. The Commonwealth's second brief must be filed by May 23, 2018 and RB Alden's second brief is due subsequently.

Muscarella v. Commonwealth of PA (Pa Cmwlth. Ct.).

This is a class action challenging the Department of Revenue's application of the Senior Citizen's Property Tax and Rent Rebate Assistance Act. The department interpreted the law to require a person to live into the next calendar year to be eligible for any rebate from the prior year. Liability against the department was previously established. A tentative settlement in the amount of $20,000,000 was reached, and a fairness hearing on the proposed settlement was held on June 13, 2016. Following the fairness hearing, the Commonwealth Court entered an order confirming the $20,000,000 transfer from the Lottery Fund be made. Claims may be submitted until February 2017. A portion of the $20,000,000 has been set aside for attorneys fees. The $20 million has been since removed from the Lottery Fund and placed in escrow with plaintiff's counsel. The class action claims have been filed with plaintiff's counsel. The claims period has closed, and class counsel is processing the claims. The Commonwealth received back a payment of $8,000,000 but claims are still being processed.

Kingdom Vapor & Smoke 4 Less v. Department of Revenue (Pa Cmwlth. Ct.).

This case seeks declaratory relief as to whether a certain tax must be paid on certain items sold in the E-Cigarette industry or invalidation of the tax if it is applied to all items. The matter is pending in Commonwealth Court and, if Petitioners are successful, the case could result in lost revenues (and refunds) that approach $20,000,000. The Court, sitting *en banc*, heard oral argument on April 11, 2018 and a decision is pending.

East Coast Vapor, LLC v. Department of Revenue (Pa Cmwlth. Ct.).

This case seeks declaratory relief as to whether a certain tax must be paid on certain items sold in the E-Cigarette Industry or invalidation of the tax if it is applied to all items. The matter is pending in Commonwealth Court and, if Petitioners are successful, the case could result in lost revenues (and refunds) that approach $20,000,000. The Court, sitting *en banc*, heard oral argument on April 11, 2018 and a decision is pending.

Munchinski v. Warman, et al (U.S.D.C., W.D. Pa.).

This is a case alleging due process violations by a now-deceased Pennsylvania State Police (PSP) officer. It arises from the alleged malicious prosecution and failure to disclose exculpatory evidence in a 1986 murder trial and at a Post-Conviction Relief Act proceeding. The former inmate was released after spending 20-plus years in state prison. Dispositive motions were partially successful, leaving the malicious prosecution claim for trial. The Commonwealth's estimated exposure exceeds $2,000,000.

Walker v. Department of Corrections, et al (U.S.D.C., W.D. Pa.).

This is a deliberate indifference claim against Department of Corrections nurses who allegedly failed to properly stabilize the neck of an inmate who had fallen from his bunk and who had suffered an apparent neck injury. The plaintiff is now a quadriplegic. Trial has been set for October 15, 2018. The Commonwealth's estimated exposure exceeds $5,000,000.

Williams, et al v. Richards, et al (U.S.D.C., W.D. Pa.).

This is a collective opt-in action under the Fair Labor Standards Act for wage violations and record keeping violations brought by Pennsylvania Department of Transportation (PennDOT) employees against officials at PennDOT for allegedly failing to pay compensation and/or overtime for time spent driving PennDOT equipment to and from work sites. The Commonwealth's estimated exposure is between $1,600,000 and $4,000,000. The case was filed in April of 2016 and remains in active discovery. The outcome of the case could change PennDOT's practices regarding paying for such efforts in the future, which could result in additional on-going operating expenses exceeding $4,000,000.

William Penn Sch. Dist. v. Commonwealth, (Pa Cmwlth. Ct.).

The Petitioners (including School Districts, parents, and other interested parties) filed a Petition for Review in the Nature of an Action for Declaratory and Injunctive Relief in Commonwealth Court against, inter alia, the Department of Education, the Governor, and members of the General Assembly, seeking to mandate that the Respondents provide adequate funding that would result in equal opportunity for children throughout the Commonwealth to obtain an adequate education. Petitioners ask the Court to enter permanent injunctions compelling the Respondents to establish, fund, and maintain a thorough and efficient system of public education that provides all students in Pennsylvania with an equal opportunity to obtain an adequate education. This matter was previously dismissed by the Commonwealth Court, which found that it presented a nonjusticiable political question. Petitioners filed an appeal with the Pennsylvania Supreme Court, which reversed the Commonwealth Court and ordered the Commonwealth Court to address Petitioners' claims. The Executive Branch would not be solely responsible for funding and relief, and Petitioners have not yet articulated an amount that they would consider to be adequate funding. Previous studies, however, indicate that Petitioners may seek education investments totaling up to $4,000,000,000.

Knight v. PSP (U.S.D.C., W.D. Pa.).

This case involves the fatal shooting of a 50 year old man by Pennsylvania State Police troopers. Discovery closed November 30, 2016. Given the nature of the litigation, the Commonwealth's estimated exposure could exceed $1,000,000.

Barkus v. PSP (U.S.D.C., W.D. Pa.).

This case involves the fatal shooting of a 25 year old man by Pennsylvania State Police troopers. Fact discovery closed December 7, 2016. Expert discovery closed March 10, 2017 and dispositive motions are pending. Given the nature of the litigation, the Commonwealth's estimated exposure could exceed $1,000,000.

Kedra v. Schroeter (U.S.D.C., E.D. Pa.).

In this case, the defendant (a Pennsylvania State Police officer) was conducting firearms training for the Pennsylvania State Police. During this training, he unintentionally discharged his weapon and the plaintiff (a 26 year old trooper) was killed. The Court granted the Commonwealth's motion to dismiss, and the plaintiff appealed to the Court of Appeals for the Third Circuit. The appeal remains pending. The Commonwealth's estimated exposure is between $2,000,000 and $3,000,000.

Hall v. Millersville University (U.S.D.C., E.D. Pa.).

In this case, claims are made against Millersville University and a dorm resident assistant under Title IX and the Due Process Clause (state created danger theory) in a case where a student at Millersville was found dead in her room. Also sued in the case is the fraternity that hosted a party that evening and individual members of the fraternity. Total damages in this case, if recoverable, are likely to exceed $1,000,000.

DeGroat v. Commonwealth of PA (U.S.D.C M.D. Pa.).

This is a case alleging excessive force and state tort claims against the Commonwealth, Pennsylvania State Police, and individuals stemming from a fatal shooting. The deceased was only 23 years old at the time of his death. An Amended Complaint was recently filed. The Commonwealth is defending the case vigorously. In light of the fact that this is a case involving a fatality and the age of the deceased, the exposure could be $1,000,000 or more.

RATINGS

Fitch Ratings, Inc. ("Fitch") has assigned its municipal bond rating of "AA-" (outlook "Negative") to the Bonds. Moody's Investor Service, Inc. ("Moody's") has assigned its municipal bond rating of "Aa3" (outlook "Stable") to the Bonds. Standard and Poor's Ratings Services ("S&P") has assigned its municipal bond rating of "A+" (outlook "Stable") to the Bonds.

With respect solely to the Insured Bonds, S&P, Kroll and Moody's are expected to assign their respective ratings of "AA", "AA+" and "A2" to the Insured Bonds on the understanding that AGM will issue its standard municipal bond insurance policy insuring the scheduled payment of the principal of and interest due on the Insured Bonds upon the issuance of the Bonds. "See "Bond Insurance – Assured Guaranty Municipal Corp" herein for a discussion of the ratings assigned to AGM and the Insured Bonds.

The ratings reflect only the views of the respective rating agencies.

The ratings described in the first paragraph of this section are based upon current information furnished by the Commonwealth or obtained from other sources considered reliable by the rating agencies, which do not perform any audit in connection with any rating and may, on occasion, rely on unaudited financial information. Reference is made to the rating agencies' manuals for complete descriptions of their respective rating procedures and other rating categories, and to S&P's, Moody's and Fitch's written analyses of Commonwealth finances released upon release of their respective ratings.

A security rating is not a recommendation to buy, sell or hold securities. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely if, in the opinion of the rating agencies, circumstances warrant such revision or withdrawal. Any such downward revision or withdrawal could have an adverse effect on the marketability or market price of the Bonds. The Commonwealth has not undertaken any responsibility after issuance of the Bonds to assure the maintenance of the ratings, to oppose any revision or withdrawal of the ratings by S&P, Moody's or Fitch or to inform the holders of the Bonds of any such revision or withdrawal, except as set forth under "CONTINUING DISCLOSURE."

TAX EXEMPTION AND OTHER TAX MATTERS

Federal Tax Matters

In the opinion of Ballard Spahr LLP and Turner Law, P.C., Co-Bond Counsel, interest on the Bonds is excludable from gross income for purposes of federal income tax under existing laws as enacted and construed on the date of initial delivery of the Bonds, assuming the accuracy of the certifications of the Commonwealth and continuing compliance by the Commonwealth with the requirements of the Internal Revenue Code of 1986 (the "Code"). Interest on the Bonds is not an item of tax preference for purposes of the individual federal alternative minimum tax. The corporate alternative minimum tax was repealed by legislation enacted on December 22, 2017 (known as the "Tax Cuts and Jobs Act"), effective for tax years beginning after December 31, 2017. For tax years beginning on or before December 31, 2017 interest on the Bonds is not an item of tax preference for purposes of the corporate alternate minimum tax in effect prior to enactment of the Tax Cuts and Jobs Act; however, interest on Bonds held by a corporation (other than an S Corporation, regulated investment company, or real estate investment trust) indirectly may be subject to federal alternative minimum tax because of its inclusion in the adjusted current earnings of a corporate holder.

The opinion of Co-Bond Counsel will assume the accuracy of certifications made by the Commonwealth and will be subject to the condition that the Commonwealth will comply with all requirements of the Code that must be satisfied subsequent to the issuance of the Bonds in order that the interest thereon be, and continue to be, excludable from gross income for federal income tax purposes. The Commonwealth has covenanted to comply with all such requirements, which include, among others, restrictions upon the yield at which proceeds of the Bonds and other money held for the payment of the Bonds and deemed to be proceeds thereof may be invested, the requirement to calculate and rebate any arbitrage that may be generated with respect to investments allocable to the Bonds, and restrictions regarding the use of the facilities financed or refinanced with the proceeds of the Bonds. Failure to comply with such requirements could cause interest on the Bonds to be includible in gross income retroactive to the date of issuance of the Bonds.

Co-Bond Counsel will express no opinion regarding other tax consequences of ownership, disposition of, or the accrual or receipt of interest on, the Bonds.

Original Issue Discount. The Bonds being offered at a discount ("original issue discount") equal generally to the difference between the public offering price and principal amount are referred to as "Discount Bonds". For federal income tax purposes, original issue discount on a Discount Bond accrues periodically over the term of such Discount Bond as interest with the same tax exemption and alternative minimum tax status as regular interest. The accrual of original issue discount increases the holder's tax basis in such Discount Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Holders should consult their tax advisers for an explanation of the accrual rules.

Original Issue Premium. The Bonds being offered at a premium ("original issue premium") equal generally to the excess of their public offering price over their principal amount are referred to herein as the "Premium Bonds". For federal income tax purposes, original issue premium is amortizable periodically over the term of a Premium Bond through reductions in the holder's tax basis for such Premium Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Amortization of premium does not create a deductible expense or loss. Holders should consult their tax advisers for an explanation of the amortization rules.

Pennsylvania Tax Matters

The Bonds are exempt from personal property taxes in Pennsylvania and the interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date of initial delivery of the Bonds.

Changes in Federal and Commonwealth Tax Law

From time to time, there are legislative proposals in the Congress and in state legislatures that, if enacted, could alter or amend the treatment of the Bonds for federal and state tax purposes or adversely affect the market value or marketability of the Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to bonds issued prior to enactment. In addition, from time to time regulatory actions are announced or proposed, and litigation is threatened or commenced, which, if implemented or concluded in a particular manner, could adversely affect the market value or marketability of the Bonds. It cannot be predicted whether any such regulatory action will be implemented, whether any particular litigation or judicial action will be commenced or, if commenced, how it will be resolved, or whether the Bonds or the market value or marketability thereof would be affected thereby. Purchasers of the Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation. The opinions expressed by bond counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of delivery of the Bonds, and Co-Bond Counsel will express no opinion as of any date subsequent thereto or with respect to any pending legislation, regulatory initiatives or litigation.

The foregoing is only a general summary of certain provisions of the Code as enacted and in effect on the date hereof and does not purport to be complete; holders of the Bonds should consult their own tax advisors as to the effects, if any, of the Code in their particular circumstances.

See Appendix G hereto for the Proposed Form of Opinion of Co-Bond Counsel.

UNDERWRITING

After competitive bidding on May 16, 2018, the Bonds were awarded to a selling group represented by Bank of America Merrill Lynch (the "Underwriters") for a purchase price of $1,309,002,617.73 which is equivalent to the principal amount of such Bonds, less Underwriters' discount of $3,893,166.42 plus net original issue premium of $65,895,784.15. The Underwriters have supplied the public offering yields and prices of the Bonds shown on the inside cover hereof. If all of the Bonds are resold to the public at such yields, the underwriters' discount will approximate 0.3122 percent of the aggregate principal amount of the Bonds. The Underwriters may change the public offering yields from time to time.

LEGALITY FOR INVESTMENT

Under the Pennsylvania Probate, Estates and Fiduciaries Code, the Bonds are authorized investments for fiduciaries, as defined in that code, within the Commonwealth of Pennsylvania. The Bonds are legal investments for Pennsylvania savings banks, banks, bank and trust companies, and insurance companies and are acceptable as security for deposits of funds of the Commonwealth. The Bonds are eligible for purchase, dealing in, underwriting and unlimited holding by national banking associations pursuant to regulations promulgated by the Comptroller of the Currency set forth in the Code of Federal Regulations, Title 12—Banks and Banking, Sections 1.3(c) and 1.4.

CO-FINANCIAL ADVISORS

PFM Financial Advisors LLC, Philadelphia, Pennsylvania, and Sustainable Capital Advisors, LLC, Washington DC, are serving as independent co-financial advisors to the Commonwealth with respect to the Bonds (the "Co-Financial Advisors"). The Co-Financial Advisors' fees in connection with the issuance of the Bonds are expected to be paid from Bond proceeds. The Co-Financial Advisors are not obligated to undertake, and have not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in the Official Statement. PFM Financial Advisors LLC, is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities. Sustainable Capital Advisors, LLC is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

LEGAL MATTERS

All legal matters incident to the authorization and issuance of the Bonds are subject to the approval of the Attorney General of the Commonwealth of Pennsylvania, Ballard Spahr LLP, and Turner Law, P.C., both of Philadelphia, Pennsylvania, Co-Bond Counsel. A copy of the opinion of Co-Bond Counsel will accompany the Bonds delivered to DTC. Copies of the opinion of the Attorney General, together with additional copies of the opinions of Co-Bond Counsel, will be available at the time of delivery of the Bonds. Proposed forms of these opinions are included as Appendices F and G respectively.

Certain legal matters will be passed upon for the Commonwealth by Greenberg Traurig, LLP and Andre C. Dasent, P.C., both of Philadelphia, Pennsylvania, serving as Co-Disclosure Counsel to the Commonwealth.

ADDITIONAL INFORMATION

Periodic public reports relating to the financial condition of the Commonwealth are prepared by the Office of the Budget. These reports and additional information may be obtained upon request from the office of the Secretary of the Budget, Attn.: Ms. Mindy Dierich, 18th Floor, Harristown 2, 333 Market Street, Harrisburg, Pennsylvania 17101-2210 (Telephone (717) 787-7342). Recent annual Comprehensive Annual Financial Report summaries of enacted fiscal year budgets and certain other information are available in the Budget and Financial Reports section of the Office of the Budget's web site, http://www.budget.state.pa.us.

CONTINUING DISCLOSURE

In order to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the "SEC") promulgated pursuant to the Securities Exchange Act of 1934, as in effect on the date hereof (the “Rule”), simultaneously with the issuance of the Bonds, the Commonwealth will enter into a written agreement (the “Continuing Disclosure Agreement”) for the benefit of the Beneficial Owners of the Bonds in substantially in the form attached hereto as “APPENDIX H – FORM OF CONTINUING DISCLOSURE AGREEMENT.” The Commonwealth, as an “obligated person” under the Rule, has covenanted in the Continuing Disclosure Agreement to provide: (a) certain financial information and operating data relating to the Commonwealth and the Bonds in each year (the “Annual Report”); and (b) notice of the occurrence of certain enumerated events as described in the Continuing Disclosure Agreement (each, a “Listed Event Notice”). The Annual Report and each Listed Event Notice, if applicable, will be filed by or on behalf of the Commonwealth, with the repository designated by the SEC, presently the Municipal Securities Rulemaking Board (the “MSRB”) through its Electronic Municipal Market Access system in an electronic format prescribed by the MSRB. The specific nature and timing of filing the Annual Report and each Listed Event Notice, and other details of the Commonwealth’s undertakings are more fully described in “APPENDIX H – FORM OF CONTINUING DISCLOSURE AGREEMENT” attached hereto.

The following disclosure is being provided by the Commonwealth for the sole purpose of assisting the Underwriters in complying with the Rule: The Commonwealth previously entered into continuing disclosure undertakings, as an “obligated person” under the Rule (the “Undertakings”). In the previous five year period beginning on May 9, 2013 and ending on May 9, 2018 (the “Compliance Period”), the Commonwealth has, on several instances during the Compliance Period, failed to comply with certain provisions of the Undertakings, including: (a) failing to timely file certain annual financial information and/or operating data, (b) failing to provide certain required annual financial information and operating data in its annual filings, and (c) failing to file or timely file certain notices. The foregoing description of instances of non-compliance by the Commonwealth with the Undertakings should not be construed as an acknowledgement by the Commonwealth that any such instance was material.

AUTHORIZATION

The execution of this Official Statement has been authorized in the Resolutions and may be executed in any number or counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute but one and the same document.

/s/ Tom Wolf
Tom Wolf, Governor

/s/ Joseph Torsella
Joseph Torsella, State Treasurer

/s/ Eugene A. DePasquale
Eugene A. DePasquale, Auditor General

APPENDIX A

CERTIFICATE OF THE AUDITOR GENERAL
Pursuant to
ARTICLE VIII, SECTION 7(a)(4) and (c)
of the
CONSTITUTION OF PENNSYLVANIA
and
Section 304 of the Capital Facilities Debt Enabling Act

To the Governor and the General Assembly:

I, Eugene A. DePasquale, Auditor General of the Commonwealth of Pennsylvania, pursuant to Article VIII, Section 7(a)(4) of the Pennsylvania Constitution and Section 304 of Capital Facilities Debt Enabling Act (Act 1 of 1999, as amended) certify as follows:

	The average annual tax revenues deposited in all funds in the five fiscal years ended preceding the date of February 28, 2018	$ 38,281,016,071
(i)	The amount of outstanding net debt as of the end of the preceding fiscal year	$ 12,009,008,758
(ii)	The amount of such net debt as of February 28, 2018	$ 11,435,898,336
(iii)	The difference between the limitation upon all net debt outstanding as provided in Article VIII, Section 7 (a) (4) of the Constitution of Pennsylvania and the amount of such net debt as of the date of February 28, 2018	$ 55,555,879,788
(iv)	The amount of such debt scheduled to be repaid during the remainder of the current fiscal year	$ 182,480,000
(v)	The amount of debt authorized by law to be issued, but not yet incurred	$135,598,717,968
(vi)	The amount of outstanding obligations excluded from outstanding debt as self sustaining pursuant to Article VIII, Section 7(c)(1), (2) and (3) of the Constitution of Pennsylvania	$ 8,749,066,156

IN TESTIMONY WHEREOF, I have set my hand and affixed the seal of the Auditor General, this 28th day of February 2018.

/s/Eugene A. DePasquale
EUGENE A.DEPASQUALE
Auditor General
Commonwealth of Pennsylvania

(Seal)

APPENDIX B

SELECTED DATA ON THE COMMONWEALTH OF PENNSYLVANIA

General

The Commonwealth of Pennsylvania (the "Commonwealth" or "Pennsylvania") is one of the most populous states, ranking sixth behind California, Texas, Florida, New York and Illinois. Pennsylvania is an established state with a diversified economy. Pennsylvania had been historically identified as a heavy industrial state. That reputation has changed over the last thirty years as the coal, steel and railroad industries declined. The Commonwealth's business environment readjusted with a more diversified economic base. This economic readjustment was a direct result of a long-term shift in jobs, investment and workers away from the northeast part of the nation. Currently, the major sources of growth in Pennsylvania are in the service sector, including trade, medical and health services, education and financial institutions.

Pennsylvania's agricultural industries remain an important component of the Commonwealth's economic structure, accounting for more than $7.5 billion in crop and livestock products annually. Agribusiness and food related industries had export sales surpassing $1.3 billion in economic activity. Over 59,000 farms form the backbone of the state's agricultural economy. Farmland in Pennsylvania includes over four million acres of harvested cropland and three million acres of pasture and farm woodlands - nearly one-third of the Commonwealth's total land area. Agricultural diversity in the Commonwealth is demonstrated by the fact that Pennsylvania ranks among the top ten states in the production of a variety of agricultural products.

Pennsylvania's extensive public and private forests provide a vast source of material for the lumber, furniture and paper products industries. The forestry and related industries account for 1.5% of employment with economic activity of nearly $5 billion in domestic and international trade. Additionally, the Commonwealth derives a good water supply from underground sources, abundant rainfall, and a large number of rivers, streams and lakes. Other natural resources include major deposits of coal, petroleum and natural gas. Annually, about 66 million tons of anthracite and bituminous coal, 4 trillion cubic feet of natural gas and about 5.5 million barrels of oil are extracted from Pennsylvania. Pennsylvania is one of the top 10 producing states in the country for aggregate/crushed stone. The value of non-coal mineral production in Pennsylvania is around $1 billion dollars annually.

Pennsylvania is a Mid-Atlantic state within easy reach of the populous eastern seaboard as well as a gateway to the Midwest. A comprehensive transportation grid enhances the Commonwealth's strategic geographic position. The Commonwealth's water systems afford the unique feature of triple port coverage: a deep-water port at Philadelphia, a Great Lakes port at Erie and an inland water port at Pittsburgh. Between air, rail, water or road, Pennsylvania is easily accessible for both inter and intra state trade and commerce.

Population

The Commonwealth is highly urbanized. The largest Metropolitan Statistical Areas ("MSAs") in the Commonwealth are those that include the cities of Philadelphia and Pittsburgh, which together contain the majority of the Commonwealth's total population. The population of Pennsylvania, 12.8 million people in 2017, according to the U.S. Bureau of the Census, represents a population growing slower than the nation with a higher portion than the nation or the Middle Atlantic region comprised of persons 45 or over. The following tables present the population trend from 2013 to 2017 and the age distribution of the population for 2016.

Population Trends
Pennsylvania, Middle Atlantic Region and the United States
2013-2017

	Total Population (in thousands)				Total Population as a % of 2013 base		
As of July 1	PA	Middle Atlantic Region[a]	United States		PA	Middle Atlantic Region[a]	United States
2013......	12,781	41,354	319,798		100%	100%	100%
2014......	12,791	41,434	322,098		100%	100%	101%
2015......	12,792	41,475	324,370		100%	100%	101%
2016......	12,784	41,474	326,539		100%	100%	102%
2017......	12,806	41,661	329,056		100%	101%	103%

[a] Middle Atlantic Region: Pennsylvania, New York and New Jersey.

Source: U.S. Department of Commerce, Bureau of the Census

Population by Age Group - 2016
Pennsylvania, Middle Atlantic Region and the United States

Age	PA	Middle Atlantic Region[a]	United States
Under 5 Years...	5.6%	5.8%	6.2%
5 -24 Years...	24.6%	24.9%	26.2%
25-44 Years..	24.7%	26.1%	26.3%
45-64 years...	27.7%	27.3%	26.1%
65 years and over.....................................	17.4%	16.0%	15.3%

[a] Middle Atlantic Region: Pennsylvania, New York and New Jersey.

Source: U.S. Department of Commerce, Bureau of the Census

Employment

Non-agricultural employment in Pennsylvania over the five years ending in 2017 increased at an average annual rate of 0.89 percent compared with a 1.31 percent rate for the Middle Atlantic region and 1.83 percent rate for the U.S. The following table shows employment trends from 2013 through 2017.

Non-Agricultural Establishment Employment Trends
Pennsylvania, Middle Atlantic Region and the United States
2013-2017

	Total Establishment Employment (thousands)			Total Establishment Employment as a % of 2013 base		
Calendar Year	PA	Middle Atlantic Region [(a)]	U.S.	PA	Middle Atlantic Region [(a)]	U.S.
2013................	5,740	18,605	136,369	100%	100%	100%
2014................	5,788	18,849	138,937	101%	101%	102%
2015................	5,835	19,107	141,819	102%	103%	104%
2016................	5,885	19,360	144,349	103%	104%	106%
2017................	5,948	19,600	146,624	104%	105%	108%

[(a)] Middle Atlantic Region: Pennsylvania, New York and New Jersey

Non-manufacturing employment in Pennsylvania has increased in recent years and reached 91 percent of total employment by 2017. Consequently, manufacturing employment constitutes a diminished share of total employment within the Commonwealth. Manufacturing, contributing 9 percent of 2017 non-agricultural employment, has fallen behind the services sector, the trade sector and the government sector as the 4th largest single source of employment within the Commonwealth. In 2017, the services sector accounted for 50 percent of all non-agricultural employment while the trade sector accounted for 14 percent. The following table shows trends in employment by sector for Pennsylvania from 2013 through 2017.

Non-Agricultural Establishment Employment by Sector
Pennsylvania
2013-2017
(In Thousands)

	Calendar Year									
	2013		2014		2015		2016		2017	
	Employees	%	Employees	%	Employees	%	Employees	%	Employees	%
Manufacturing:										
Durable........................	346.1	6%	346.6	6%	346.0	6%	336.1	6%	335.3	6%
Non-Durable................	218.5	4%	220.9	4%	221.6	4%	223.5	4%	226.0	4%
Total Manufacturing	564.6	10%	567.5	10%	567.6	10%	559.5	10%	561.3	9%
Non-Manufacturing:										
Trade (a)......................	852.1	15%	855.3	15%	856.5	15%	852.8	14%	844.2	14%
Finance (b)..................	313.1	5%	315.4	5%	316.2	5%	317.2	5%	321.0	5%
Services (c)	2,782.9	48%	2,817.9	49%	2,855.5	49%	2,913.2	50%	2,959.9	50%
Government................	720.5	13%	711.1	12%	704.6	12%	703.4	12%	703.4	12%
Utilities........................	246.8	4%	254.2	4%	265.4	5%	274.9	5%	283.0	5%
Construction................	223.9	4%	228.7	4%	235.3	4%	239.1	4%	248.7	4%
Mining..........................	36.0	1%	37.7	1%	33.9	1%	25.0	0%	26.6	0%
Total Non-Manufacturing	5,175.2	90%	5,220.2	90%	5,267.4	90%	5,325.5	90%	5,386.7	91%
Total Employees (d) (e)	5,739.7	100%	5,787.7	100%	5,835.1	100%	5,885.0	100%	5,948.0	100%

(a) Wholesale Trade
(b) Finance, insurance and real estate
(c) Includes transportation, communications, electric, gas and sanitary services
(d) Discrepencies due to rounding
(e) Does not include workers involved in labor-management disputes
Source: US Bureau of Labor and Statistics
https://www.bls.gov/cps/cpsaat18.htm

The following table presents the percentages of non-agricultural employment in various sectors in Pennsylvania and the United States in 2017.

Non-Agricultural Establishment Employment by Sector
Pennsylvania and the United States

	2017 Calendar Year	
	Pennsylvania	United States
Manufacturing	9.4%	8.5%
Trade (a)	14.2	14.8
Finance (b)	5.4	5.8
Services	49.8	46.6
Government	11.8	15.2
Utilities (c)	4.8	3.5
Construction	4.2	4.7
Mining	0.4	0.5
Total	100.0%	100.0%

(a) Wholesale and retail trade.
(b) Finance, insurance and real estate.
(c) Includes transportation, communications, electric, gas and sanitary services.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Within the manufacturing sector of Pennsylvania's economy, which now accounts for about one-tenth of total non-agricultural employment in Pennsylvania, the fabricated metals industries employed the largest number of workers. Employment in the fabricated metals industries is 14 percent of Pennsylvania manufacturing employment but only 1.3 percent of total Pennsylvania non-agricultural employment in 2017. The following table shows trends in manufacturing employment by industry for Pennsylvania from 2013 through 2017.

Manufacturing Establishment Employment by Industry
Pennsylvania
2013-2017
(In Thousands)

	Calendar Year									
	2013	%	2014	%	2015	%	2016	%	2017	%
Durable Goods:										
Primary Metals	39.4	7.0	38.9	6.8	37.7	6.6	35.3	6.3	34.9	6.2
Fabricated Metals	80.8	14.3	81.1	14.3	81.6	14.4	79.5	14.2	80.1	14.3
Machinery (excluding electrical)	48.5	8.6	48.1	8.5	47.2	8.3	47.0	8.4	43.6	7.8
Electrical Equipment	26.0	4.6	26.0	4.6	26.0	4.6	26.1	4.7	26.2	4.7
Transportation Equipment	38.9	6.9	39.0	6.9	39.4	6.9	36.8	6.6	36.5	6.5
Furniture Related Products	15.1	2.7	15.1	2.7	15.1	2.7	15.1	2.7	15.1	2.7
Other Durable Goods	97.3	17.2	98.6	17.4	99.1	17.4	96.3	17.2	98.8	17.6
Total Durable Goods	346.1	61.3	346.6	61.1	346.0	61.0	336.1	60.1	335.3	59.7
Non-Durable Goods:										
Pharmaceutical/Medicine	17.9	3.2	17.5	3.1	17.7	3.1	17.9	3.2	18.1	3.2
Food Products	67.8	12.0	69.6	12.3	69.6	12.3	70.2	12.5	71.5	12.7
Chemical Products	40.6	7.2	39.9	7.0	40.1	7.1	40.1	7.2	40.6	7.2
Printing and Publishing	24.8	4.4	24.7	4.3	24.3	4.3	23.9	4.3	23.9	4.3
Plastics/Rubber Products	35.3	6.3	36.1	6.4	37.1	6.5	38.8	6.9	40.1	7.1
Other Non-Durable Goods	32.1	5.7	33.1	5.8	32.9	5.8	32.7	5.8	31.9	5.7
Total Non-Durable Goods	218.5	38.7	220.9	38.9	221.6	39.0	223.5	39.9	226.0	40.3
Total Manufacturing Employees (a)	564.6	100.0	567.5	100.0	567.6	100.0	559.5	100.0	561.3	100.0

(a) Discrepanicies due to rounding
Source: U.S. Department of Labor, Bureau of Labor Statistics

Unemployment

During 2017, Pennsylvania had an annual unemployment rate of 4.9 percent. This represents a significant drop since 2013 when the unemployment rate was 7.4 percent. The following table represents the annual unemployment rate in Pennsylvania, the Middle Atlantic Region, and the United States from 2013 through 2017.

Annual Average Unemployment Rate
Pennsylvania, Middle Atlantic Region and the United States
2013-2017

Calendar Year	PA	Middle Atlantic Region[(a)]	United States
2013...........................	7.4%	7.8%	7.4%
2014...........................	5.9	6.2	6.2
2015...........................	5.3	5.3	5.3
2016...........................	5.4	5.0	4.9
2017...........................	4.9	4.8	4.4

[(a)] Middle Atlantic Region: Pennsylvania, New York, New Jersey.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

The following table presents the thirty largest non-governmental employers in Pennsylvania:

Commonwealth of Pennsylvania
Thirty Largest Non-Governmental Employers
3rd Quarter, 2017

Company	Rank	Company	Rank
Wal-Mart Associates Inc..............................	1	Vanguard Group Inc.............................	16
Trustees of the University of PA....................	2	Target Corporation...............................	17
Giant Food Stores LLC...............................	3	Milton S Hershey Medical Center.........	18
Pennsylvania State University.........................	4	Wawa Inc..	19
UPMC Presbyterian Shadyside.....................	5	Merck Sharp & Dohme Corporation.....	20
United Parcel Service Inc..............................	6	Western Penn Allegheny Health.............	21
PNC Bank NA..	7	Temple University.................................	22
University of Pittsburgh.................................	8	Sheetz Inc..	23
Weis Markets Inc..	9	Pennsylvania CVS Pharmacy LLC........	24
Lowe's Home Centers LLC..........................	10	Heartland Employment Services LLC....	25
Comcast Cablevision Corp (PA)..................	11	Univeral Protection Service LLC...........	26
The Children's Hospital of Pennsylvania.........	12	American Airlines.................................	27
Home Depot USA Inc.................................	13	East Penn Manufacturing Company.......	28
Amazon.com DEDC LLC.............................	14	Thomas Jefferson University Hospital....	29
Giant Eagle Inc...	15	Lehigh Valley Hospital..........................	30

Source: Pennsylvania Department of Labor & Industry

Personal Income

Personal income in the Commonwealth for 2017 was $667 billion, an increase of 2.8 percent over the previous year. During the same period, national personal income increased by 3 percent. Based on the 2017 personal income estimates, per capita income was at $52,096 in the Commonwealth compared to per capita income in the United States of $50,392. The following tables represent annual personal income data and per capita income from 2013 through 2017.

Personal Income
Pennsylvania, Mideast Region and the United States
2013-2017

	Total Personal Income Dollars in Millions			Total Personal Income As a % of 2013 Base		
Year	PA	Mideast Region [a]	U.S. [b]	PA	Mideast Region [a]	U.S. [b]
2013......	589,000	2,552,000	14,068,960,000	0%	0%	0%
2014......	614,000	2,649,000	14,811,388,000	4%	4%	5%
2015......	637,000	2,763,000	15,547,661,000	8%	8%	11%
2016......	649,000	2,821,000	15,912,777,000	10%	11%	13%
2017......	667,000	2,902,000	16,413,551,000	13%	14%	17%

[a] Mideast Region: Pennsylvania, New York, New Jersey, Maryland, District of Columbia, and Delaware
[b] Sum of States
Source: U.S. Department of Commerce, Bureau of Economic Analysis

Per Capita Income
Pennsylvania, Mideast Region and the United States
2013-2017

	Per Capita Income			As a % of U.S.	
Calendar Year	PA	Mideast Region [a]	U.S.	PA	Mideast Region [a]
2013................................	46,132	52,170	44,489	104%	117%
2014................................	47,978	53,971	46,486	103%	116%
2015................................	49,815	56,166	48,429	103%	116%
2016................................	50,730	57,269	49,204	103%	116%
2017................................	52,096	58,783	50,392	103%	117%

[a] Mideast Region: Pennsylvania, New York, New Jersey, Maryland, District of Columbia, and Delaware.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

The following table presents growth rates in personal income and selected components of personal income for Pennsylvania, the Mideast Region and the United States from 2012 through 2016.

Annual Growth Rates
Personal Income and Selected Components of Personal Income
Pennsylvania, Mideast Region and the United States

Calendar Year	Pennsylvania	Mideast Region [(a)]	United States
Total Personal Income			
2012	4.4%	4.8%	5.0%
2013	0.6	0.9	1.1
2014	4.0	4.2	5.2
2015	3.8	3.9	4.4
2016	2.9	3.6	4.6
Manufacturing			
2012	2.1%	1.3%	4.1%
2013	1.4	0.3	1.1
2014	2.9	2.6	4.5
2015	2.4	2.4	3.5
2016	1.4	1.2	2.8
Trade [(b)]			
2012	2.6%	3.3%	4.5%
2013	1.3	1.3	2.6
2014	2.9	4.1	4.6
2015	1.9	3.6	4.2
2016	1.3	2.6	2.8
Finance [(c)]			
2012	3.7%	2.1%	5.4%
2013	2.8	-1.0	-1.2
2014	2.9	3.7	2.8
2015	2.8	2.0	5.1
2016	3.5	4.1	4.6
Services [(d)]			
2012	4.3%	4.9%	6.0%
2013	0.8	1.3	1.8
2014	4.3	6.0	6.5
2015	6.0	6.0	6.9
2016	6.4	7.0	6.7
Utilities			
2012	5.7%	-3.7%	-2.7%
2013	3.1	3.5	3.7
2014	2.2	8.0	5.3
2015	13.8	11.8	5.1
2016	2.9	3.7	4.4
Construction			
2012	1.3%	5.6%	7.6%
2013	3.4	4.2	4.5
2014	8.1	7.1	8.2
2015	6.9	7.3	8.5
2016	4.8	6.3	7.3
Mining			
2012	5.4%	14.5%	12.2%
2013	10.7	-14.1	6.7
2014	14.3	5.3	10.1
2015	-9.5	0.6	-13.3
2016	-20.5	-7.4	-13.6

(a) Mideast Region: Delaware, District of Columbia, Maryland, Pennsylvania, New York, and New Jersey.
(b) Wholesale and retail trade.
(c) Finance and insurance.
(d) Includes Forestry, Fishing, and related activities, Transportation and warehousing, and Information
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

The Commonwealth's average hourly wage rate of $20.34 for manufacturing and production workers is below the national average of $20.88 for 2017. The following table presents the average hourly wage rates for 2013 through 2017.

Average Hourly Wages
Production Workers on Manufacturing Payrolls
Pennsylvania and the United States
2013-2017

Calendar Year	PA	U.S.
2013	$ 19.16	$ 19.29
2014	19.03	19.56
2015	18.96	19.91
2016	19.29	20.44
2017	20.34	20.88

Source: U.S. Department of Labor, Bureau of Labor and Statistics

Market and Assessed Valuation of Real Property

Annually, the State Tax Equalization Board, Tax Equalization Division (the "STEB") determines an aggregate market value of all taxable real property in the Commonwealth. The STEB determines the market value by applying assessment to sales ratio studies to assessment valuations supplied by local assessing officials. The market values certified by the STEB do not include property that is tax exempt but do include an adjustment correcting the data for preferential assessments granted to certain farm and forestlands.

The table below shows the assessed valuation as determined and certified by the counties and the market value and the assessed to market value ratio determined by the STEB for real property over the last ten years. In computing the market values for uneven-numbered years, the STEB is statutorily restricted to certifying only those changes in market value that result from properties added to or removed from the assessment rolls. The STEB is permitted to adjust the market valuation to reflect any change in real estate values or other economic change in value only in even-numbered years. This restriction accounts for the two-year pattern of market value changes apparent in the data below.

Valutations of Taxable Real Property
2012-2016

Year	Market Value [a]	Assessed Valuation	Rate of Assessed Valuation to Market Value [a]
2012	$753,344,175,841	$ 452,361,346,637	60.0%
2013	781,362,158,748	499,743,087,376	64.0
2014	801,633,782,130	591,554,200,204	73.8
2015	810,805,701,762	599,081,315,279	73.9
2016	839,594,528,100	599,849,032,792	71.4

[a] Value adjusted for difference between regular assessment and preferential assessment permitted on certain farm and forestlands.
Source: Annual Certifications by the State Tax Equalization Board.

COMMONWEALTH GOVERNMENT AND FISCAL ADMINISTRATION

The government of the Commonwealth of Pennsylvania (the "Commonwealth" or "Pennsylvania") is composed of three separate branches. A general organization chart of the Commonwealth's government is shown on the following page.

Legislative Branch

The legislative branch consists of the General Assembly and its staff. The General Assembly is bicameral, composed of the Senate and the House of Representatives. The 50 members of the Senate serve staggered four-year terms and the 203 Representatives serve identical two-year terms. The General Assembly meets in regular session biannually beginning on the first Tuesday of January following elections. Special sessions may be called by the Governor on petition of a majority of the members of each house or whenever the Governor determines that public interest so requires. Legislative leadership includes majority and minority leaders in each house, a President Pro Tempore of the Senate and a Speaker of the House of Representatives.

Executive Branch

The Executive Branch is headed by five elected officials and encompasses 19 departments and approximately 36 independent commissions, boards, authorities and agencies.

The five elected officials are the Governor, the Lieutenant Governor, the Attorney General, the State Treasurer and the Auditor General. The Governor and the Lieutenant Governor are elected on the same ballot and serve a four-year term. The Governor is eligible to succeed himself for one term. The Auditor General, the Attorney General and the State Treasurer are elected for four-year terms in an even-year election held between gubernatorial elections.

The Governor is the chief executive officer of the Commonwealth. All departments except those of the State Treasurer, the Attorney General and the Auditor General are under the direct jurisdiction of the Governor. The head of each of the remaining departments is a Secretary who is appointed by the Governor and confirmed by a majority vote of the Senate. Each Secretary serves at the Governor's pleasure and is a member of the Governor's Cabinet.

The Lieutenant Governor presides over the Senate and serves as Acting Governor during the disability of the Governor and becomes Governor in the case of the death, conviction or impeachment, failure to qualify or resignation of the Governor.

The Attorney General is the chief law enforcement officer of the Commonwealth and is responsible for upholding and defending the constitutionality of all statutes. The Attorney General is also responsible for reviewing the form and legality of all proposed rules and regulations, deeds, leases and contracts to be executed by Commonwealth agencies. The Office of Attorney General is under the Attorney General's direct jurisdiction.

The State Treasurer is charged with receiving, depositing and investing all Commonwealth funds and is responsible for the pre-audit approval of all requisitions for the disbursements of monies in the State Treasury. The Treasury Department is under the State Treasurer's direct jurisdiction.

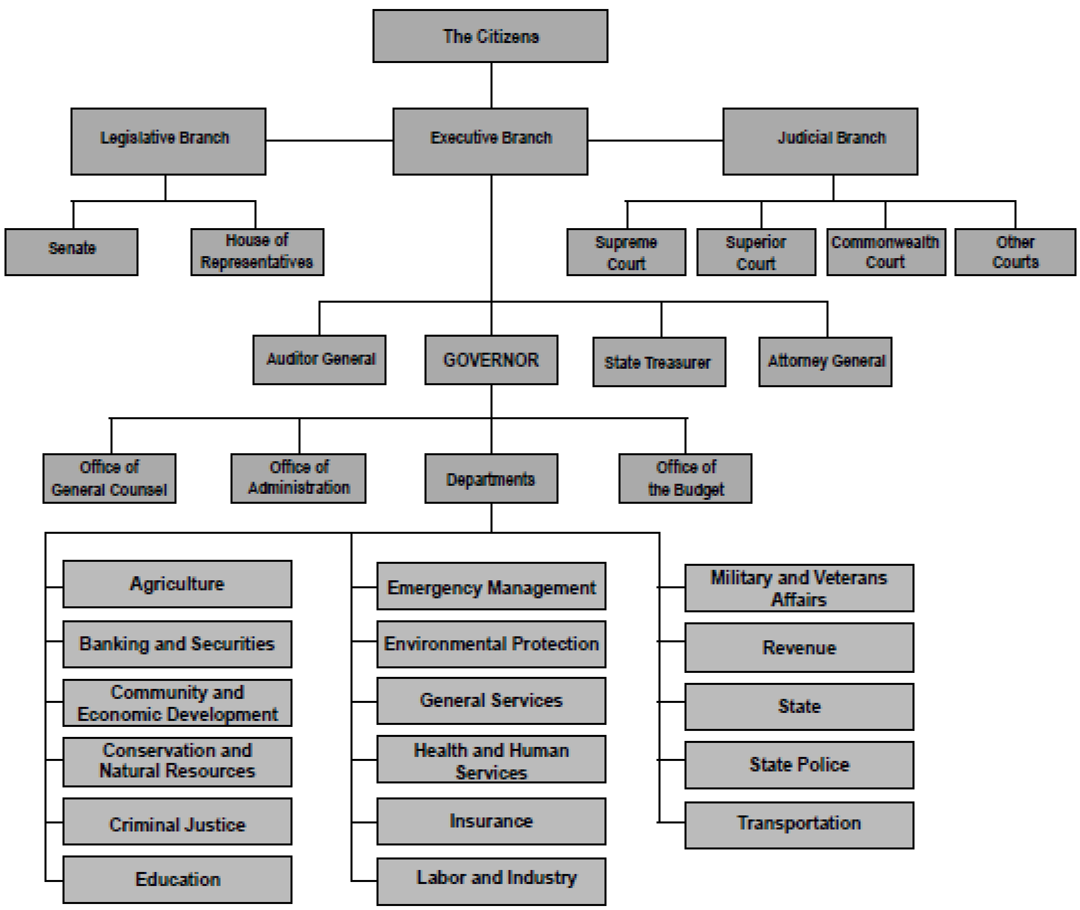
The Auditor General is charged with making audits of completed financial transactions. The Department of the Auditor General is under the Auditor General's direct jurisdiction.

Activities of state government are also conducted by various independent commissions, boards, authorities and agencies created by statute and not under the direct jurisdiction of the executive and legislative branches.

Judicial Branch

The judicial power of the Commonwealth is vested in a unified judicial system consisting of a Supreme Court and various other courts of original and appellate jurisdiction which are under the supervision and authority of the Supreme Court. All justices, judges and district justices are elected to office.

Commonwealth of Pennsylvania
Organization Chart



AGENCIES

Higher Education Assistance
Interstate Agencies

AUTHORITIES

Automobile Theft Prevention
Commonwealth Financing
Economic Development Financing
Energy Development
Higher Education Facilities
Industrial Development
Infrastructure Investment
Insurance Fraud Prevention
Minority Business Development
Patient Safety
Public School Building

BOARDS

Claims
Environmental Hearing
Gaming Control
Finance and Revenue
Liquor Control
Milk Marketing
Municipal Retirement
Pardons
Public School Employees' Retirement
State Employees' Retirement
Tax Equalization

COMMISSIONS

Civil Service
Crime and Delinquency
Ethics
Fish and Boat
Game
Harness Racing
Historical and Museum
Horse Racing
Human Relations
Juvenile Court Judges
Public Utility
Turnpike

Fiscal Organization

Each branch of the Commonwealth's government is responsible for its respective fiscal operations subject to restrictions embodied in the Constitution, the Administrative Code, and the Fiscal Code. Such restrictions are enforced and other central administrative functions are provided by five departments: the Office of the Budget ("OB"), the Office of Administration ("OA"), the Treasury Department, the Department of Revenue and the Department of the Auditor General. OB and OA are administrative offices within the Governor's offices. The Secretary of the Budget and the Secretary of Administration are appointed by the Governor and are responsible for the operations of their respective offices. The Department of Revenue is led by the Secretary of Revenue, who is appointed by the Governor subject to the advice of the Senate. The Treasury Department and the Department of the Auditor General are headed by the respective elected officials.

OB monitors the operation of the Commonwealth's departments, operates a central accounting system, compiles and publishes the Commonwealth's financial reports, assists in the preparation and publication of the budget, coordinates capital improvements and is responsible for the issuance of the Commonwealth's debt. OA is responsible for personnel policy and programs, management policy and organizational structure, data processing service, and electronic data processing policy and planning. The Treasury Department receives, invests and disburses all funds and maintains central cash records. The Department of Revenue administers the collection of most taxes. The Department of the Auditor General oversees the examination of the majority of financial transactions.

Commissions, authorities and agencies that are both independent by statute and financially self-supporting, operate autonomously although their capital projects and financing are reviewed by OB and included in the capital budget.

The Budgetary Process

The Commonwealth operates on a fiscal year beginning July 1 and ending June 30. For example, "fiscal year 2018" refers to the fiscal year ending on June 30, 2018.

The budget process commences in September, nine months prior to the beginning of the fiscal year, as departments formulate their initial budgets in response to Program Policy Guidelines issued by the Governor and hold preliminary hearings with OB and other members of the Governor's staff. By November 1, formal budget requests are submitted to OB by all government departments and other institutions requesting appropriations. OB, under the direction of the Secretary of Budget, reviews the requests through November and December and may hold formal hearings.

The Department of Revenue, in conjunction with OB, prepares revenue estimates. In the preparation of such estimates, internal analysis, information from selected departments and econometric analysis are utilized. The Commonwealth subscribes to economic forecasts prepared by Global Insight for national and Pennsylvania economic data that are used to estimate economically sensitive Commonwealth revenues. Other econometric forecasts are also consulted.

The Constitution requires that the Governor submit annually to the General Assembly a budget consisting of three parts:

(a) a balanced operating budget for the ensuing fiscal year setting forth proposed expenditures and estimated revenues from all sources and, if estimated revenues and available surplus are less than proposed expenditures, recommending specific additional sources of revenue sufficient to pay the deficiency;

(b) a capital budget for the ensuing fiscal year setting forth in detail proposed expenditures to be financed from the proceeds of obligations of the Commonwealth or of its agencies or authorities or from operating funds; and

(c) a financial plan for not less than the succeeding five fiscal years, which includes for each year (i) projected operating expenditures classified by department or agency and by program, and estimated revenues by major categories from existing and additional sources, and (ii) projected expenditures for capital projects specifically itemized by purpose and their proposed sources of financing.

All funds received by the Commonwealth are subject by statute to appropriation in specific amounts by the General Assembly or by executive authorizations by the Governor. The Governor's budget encompasses both annual appropriations and executive authorizations.

The Governor is required to submit the proposed budget as soon as possible after the organization of the General Assembly but not later than the first full week in February except in his first year of office. The Governor's submission begins with the Budget Message delivered in joint session. The budget in the form of a proposed bill is delivered to the appropriations committee of one of the houses. Hearings are held on the bills constituting the budget. In an iterative process, bills are reported from committee to floor and considered in and between houses.

The operating budget is considered in the form of the General Appropriations Bill and its supplements. The Bill is limited to appropriations for debt service, public schools and the executive, legislative and judicial branches. Its supplements cover appropriations from special revenue funds not included in the General Appropriations Bill and for such subjects as capital projects funded from current revenues. The operating budget also includes single subject bills covering appropriations made to any charitable or educational institutions not under the absolute control of the Commonwealth other than certain State-owned schools ("non-preferred appropriations").

The Constitution mandates that total operating budget appropriations made by the General Assembly may not exceed the sum of (a) the actual and estimated revenues in a given year, and (b) the surplus of the preceding year. The Constitution further specifies that a surplus of operating funds at the end of the fiscal year shall be appropriated. That is, if funds remain from the end of a fiscal year they must be appropriated for the ensuing year. Also, if a deficit occurs at year-end, funds must be provided for such a deficit.

Pursuant to the Administrative Code, the executive branch establishes the revenue estimates used in the budget. In practice, the revenue estimates used to balance the operating budget consist of the appropriate fund's available surplus and its estimated cash receipts for the fiscal year as well as net accruals. Appropriation lapses estimated to occur during the year or at year-end are not included; lapses are not available for re-appropriation until they occur.

Under this budgetary process a deficit can occur if revenues are less than those estimated in the budget and the shortfall is not offset by any unappropriated surplus or by appropriation lapses during or at the end of the year or by legislative action to increase revenues or reduce appropriation.

The Administrative Code was amended in 1978 to provide for stronger executive control of expenditures. All departments under the Governor's jurisdiction may be required to submit estimates of expenditures during the ensuing month, quarter or any other such period as requested by the Governor. These estimates are subject to the approval of the Secretary of Budget. The Governor is empowered to request the State Treasurer to withhold funds from any such department not spending within such estimates. The Secretary of Budget is empowered to set personnel levels for departments. Departments are required to provide personnel data monthly so that the Commonwealth's computerized data file on personnel levels can be maintained and used to monitor the Commonwealth's largest operating expense.

The proposed capital budget is considered in the form of the Capital Budget Bill and its supplements. The capital budget determines limits for the amount of debt that can be issued in that fiscal year for categories of capital projects, itemizes for funding all capital projects not previously itemized, authorizes the issuance of debt to finance these projects and appropriates the proceeds from the issuance of debt.

All appropriations require the majority vote of all members in each house except for non-preferred appropriations and appropriations from the Budget Stabilization Reserve Fund and from the Health Endowment Account portion of the Tobacco Settlement Fund which require passage by a two-thirds vote. During the legislative process, the General Assembly may add, change or delete any items in the budget proposed by the Governor. Once the bills constituting the budget have passed both houses and are returned to the Governor, he may either veto bills or item veto appropriations within bills. A gubernatorial veto can be overridden only by a two-thirds majority of all members of each house.

In the event that the General Assembly fails to pass or the Governor fails to sign an appropriations act prior to July 1 of any fiscal year for that fiscal year, the Pennsylvania Constitution, the laws of Pennsylvania and certain state and federal court decisions provide that the Commonwealth may continue during such un-budgeted fiscal year to make debt service payments, payments for mandated federal programs such as cash assistance and payments related to the health and safety of the citizens of the Commonwealth such as police and correctional services.

Accounting and Budgetary Controls

Every department of the executive branch that receives appropriations from the Commonwealth, with the exception of the Treasury Department and the Departments of the Auditor General and the Attorney General, has a comptroller appointed by and under the direct jurisdiction of the Governor. These agencies share a centralized encumbrance-based accounting system supervised by OB. Executive departments operating separate additional accounting systems include the Department of Transportation for the Motor License Fund, the Liquor Control Board for the State Stores Fund and the Department of Labor and Industry for the payment of unemployment compensation benefits. Officials within the Treasury Department, the Departments of the Auditor General and the Attorney General and the judicial and legislative branches administer individual operations under the jurisdiction of their respective areas.

Expenditure control occurs at two levels. The first is by appropriations and is enforced by the State Treasurer and centralized comptroller. The second is by allocations and allotments and is enforced by OB for all departments receiving appropriations, except for the legislative branch.

Departments receive authorization to spend and commit funds in the form of appropriations for a specific amount, purpose and time period. Funds appropriated to a single department may be in one or more appropriations as the General Assembly determines. When multiple appropriations to a department are enacted, separate appropriations are made for general operating expenses, special outlays and for specific programs or groupings thereof. The degree to which a department's total appropriations are itemized may vary, but control is exercised over both total and individual appropriations.

The Constitution requires that with the exceptions named, monies may be paid from the Treasury only if appropriated by law. Accordingly, when a voucher is submitted to the State Treasurer, a check will not be issued unless the amount is within the balance of the agency's total appropriation.

Departments are prevented by the comptroller from incurring obligations in excess of their unexpended individual appropriations by an encumbrance system. Encumbrance control prevents spending beyond remaining individual appropriation balances. When a commitment or obligation is incurred, for example, when a contract or purchase order is signed, the required portion of the corresponding appropriation is reserved. This reserving of funds is called the encumbrance procedure. All obligations anticipating future disbursement of cash in the fiscal year require an encumbrance, with the exception of debt service payments. Since a debt service appropriation is used for no purpose other than debt service, an encumbrance is not necessary.

All individual appropriations are allocated by OB to departments by major object groups. For example, a department's appropriation for operating expenses may be broken down into such major object groups as personnel service, operating expenses and supplies, etc. Additionally, major object groups are subdivided into minor object groups. For example, personnel service would be broken down into salaries, benefits, overtime, etc. Department expenditures are monitored to insure that expenditures within an allocation do not exceed the designated totals. The departments, however, are free to adjust their expenditures between minor object groups as long as they do not exceed the major object group allocation. OB can monitor department expenditures against their allocations on a continuing basis as the records of departments under the Governor's jurisdiction can be accessed from the central system while those of most other departments and branches are provided monthly.

In addition to the preceding controls, another check is provided by the financial reporting process. All department records are reconciled by OB on a monthly basis with the Treasury Department's records of cash transactions and with the Department of Revenue's records of cash collections.

Audits

The Constitution requires that the financial affairs of any entity receiving appropriations and all department boards, commissions, agencies, instrumentalities, authorities and institutions of the Commonwealth be subject to audits made in accordance with generally accepted auditing standards. Any Commonwealth officer whose approval is necessary for any transaction may not be charged with the function of auditing that transaction after its occurrence.

The Department of the Auditor General has the responsibility for auditing all state-related financial transactions except its own, those of the legislative and judicial branches, and boards and commissions on which the Auditor General serves and those of certain funds. At least one audit must be made annually of the fiscal affairs of the executive branch. Audits of the Commonwealth General Purpose Financial Statements since fiscal 1985 have been performed jointly by the Department of the Auditor General and an independent public accounting firm.

The Treasury Department is required to pre-audit all requests for expenditures to insure that they are in accordance with law. In addition, OB conducts, as a matter of administrative policy, periodic audits of comptrollers under the Governor's jurisdiction and performance audits of state and federal programs.

APPENDIX D

INFORMATION REGARDING THE DEPOSITORY TRUST COMPANY AND ITS BOOK-ENTRY SYSTEM

The information that follows concerning The Depository Trust Company, New York, New York ("DTC") and the book-entry only system described below is based solely on information furnished by DTC and is not, and should not be construed as, a representation by the Commonwealth as to its accuracy, completeness or otherwise.

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of each series of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.6 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

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

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

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Beneficial Owners of the Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners, or in the alternative, Beneficial Owners may wish to provide their names and addresses to the Loan and Transfer Agent and request that copies of notices be provided directly to them.

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

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the Bonds. Under its usual procedures, DTC will mail an Omnibus Proxy to the Commonwealth as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal or redemption price of and interest on the Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Commonwealth or its agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct and Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Direct and Indirect Participants and not of DTC (nor its nominee), the Loan and Transfer Agent, or the Commonwealth, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal or redemption price of and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Commonwealth or the Loan and Transfer Agent, disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of Direct and Indirect Participants.

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

The foregoing information concerning DTC and DTC's book-entry system has been obtained from information furnished by DTC. No representation or warranty is made by the Commonwealth as to the accuracy or completeness of such information.

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

For so long as the Bonds are registered in the name of DTC, or its nominee Cede & Co., the Commonwealth and the Loan and Transfer Agent will treat Cede & Co. as the registered owner of the Bonds for all purposes, including payments, notices and voting.

Neither the Commonwealth nor the Loan and Transfer Agent shall have any responsibility or obligation to any Direct or Indirect Participant or Beneficial Owner with respect to (a) the accuracy of any records maintained by DTC or any Direct or Indirect Participant with respect to any beneficial ownership interest in any Bonds; (b) the payment by any Direct or Indirect Participant of any amount due to any Beneficial Owner in respect of the principal of, premium, if any, and interest on the Bonds; (c) the delivery or timeliness of delivery by any Direct or Indirect Participant of any notice to any Beneficial Owner of any notice with respect to the Bond, including, without limitation any notice of redemption; or (d) other action taken by DTC or Cede & Co., including the effectiveness of any action taken pursuant to an Omnibus Proxy.

APPENDIX E

SELECTED CONSTITUTIONAL PROVISIONS RELATING TO THE FINANCES OF THE COMMONWEALTH

Article VIII — TAXATION AND FINANCE

Commonwealth Indebtedness

Section 7. (a) No debt shall be incurred by or on behalf of the Commonwealth except by law and in accordance with the provisions of this section.

(1) Debt may be incurred without limit to suppress insurrection, rehabilitate areas affected by man-made or natural disaster, or to implement unissued authority approved by the electors prior to the adoption of this article.

(2) The Governor, State Treasurer and Auditor General, acting jointly, may (i) issue tax anticipation notes having a maturity within the fiscal year of issue and payable exclusively from revenues received in the same fiscal year, and (ii) incur debt for the purpose of refunding other debt, if such refunding debt matures within the term of the original debt.

(3) Debt may be incurred without limit for purposes specifically itemized in the law authorizing such debt, if the question whether the debt shall be incurred has been submitted to the electors and approved by a majority of those voting on the question.

(4) Debt may be incurred without the approval of the electors for capital projects specifically itemized in a capital budget, if such debt will not cause the amount of all net debt outstanding to exceed one and three-quarters times the average of the annual tax revenues deposited in the previous five fiscal years as certified by the Auditor General. For the purposes of this subsection, debt outstanding shall not include debt incurred under clauses (1) and (2)(i), or debt incurred under clause (2)(ii) if the original debt would not be so considered, or debt incurred under subsection (3) unless the General Assembly shall so provide in the law authorizing such debt.

(b) All debt incurred for capital projects shall mature within a period not to exceed the estimated useful life of the projects as stated in the authorizing law, and when so stated shall be conclusive. All debt, except indebtedness permitted by clause (2)(i), shall be amortized in substantial and regular amounts, the first of which shall be due prior to the expiration of a period equal to one-tenth the term of the debt.

(c) As used in this section, debt shall mean the issued and outstanding obligations of the Commonwealth and shall include obligations of its agencies or authorities to the extent they are to be repaid from lease rentals or other charges payable directly or indirectly from revenues of the Commonwealth. Debt shall not include either (1) that portion of obligations to be repaid from charges made to the public for the use of the capital projects financed, as determined by the Auditor General, or (2) obligations to be repaid from lease rentals or other charges payable by a school district or other local taxing authority, or (3) obligations to be repaid by agencies or authorities created for the joint benefit of the Commonwealth and one or more other State governments.

(d) If sufficient funds are not appropriated for the timely payment of the interest upon and installments of principal of all debt, the State Treasurer shall set apart from the first revenues thereafter received applicable to the appropriate fund a sum sufficient to pay such interest and installments of principal, and shall so apply the money so set apart. The State Treasurer may be required to set aside and apply such revenues at the suit of any holder of Commonwealth obligations.

Commonwealth Credit Not to be Pledged

Section 8. The credit of the Commonwealth shall not be pledged or loaned to any individual, company, corporation or association nor shall the Commonwealth become a joint owner or stockholder in any company, corporation or association.

Municipal Debt Not to be Assumed by Commonwealth

Section 9. The Commonwealth shall not assume the debt, or any part thereof, of any county, city, borough, incorporated town, township or any similar general purpose unit of government unless such debt shall have been incurred to enable the Commonwealth to suppress insurrection or to assist the Commonwealth in the discharge of any portion of its present indebtedness.

Audit

Section 10. The financial affairs of any entity funded or financially aided by the Commonwealth, and all departments, boards, commissions, agencies, instrumentalities, authorities and institutions of the Commonwealth, shall be subject to audits made in accordance with generally accepted auditing standards.

Any Commonwealth officer whose approval is necessary for any transaction relative to the financial affairs of the Commonwealth shall not be charged with the function of auditing that transaction after its occurrence.

Gasoline Taxes and Motor License Fees Restricted

Section 11. (a) All proceeds from gasoline and other motor fuel excise taxes, motor vehicle registration fees and license taxes, operators' license fees and other excise taxes imposed on products used in motor transportation after providing therefrom for (a) cost of administration and collection, (b) payment of obligations incurred in the construction and reconstruction of public highways and bridges shall be appropriated by the General Assembly to agencies of the State or political subdivisions thereof; and used solely for construction, reconstruction, maintenance and repair of and safety on public highways and bridges and costs and expenses incident thereto, and for the payment of obligations incurred for such purposes, and shall not be diverted by transfer or otherwise to any other purpose, except that loans may be made by the State from the proceeds of such taxes and fees for a single period not exceeding eight months, but no such loan shall be made within the period of one year from any preceding loan, and every loan made in any fiscal year shall be repayable within one month after the beginning of the next fiscal year.

(b) All proceeds from aviation fuel excise taxes, after providing therefrom for the cost of administration and collection, shall be appropriated by the General Assembly to agencies of the State or political subdivisions thereof and used solely for: the purchase, construction, reconstruction, operation, and maintenance of airports and other air navigation facilities; aircraft accident investigation; the operation, maintenance and other costs of aircraft owned or leased by the Commonwealth; any other purpose reasonably related to air navigation including but not limited to the reimbursement of airport property owners for property tax expenditures; and costs and expenses incident thereto and for the payment of obligations incurred for such purposes, and shall not be diverted by transfer or otherwise to any other purpose.

Governor's Budgets and Financial Plan

Section 12. Annually, at the times set by law, the Governor shall submit to the General Assembly:

(a) A balanced operating budget for the ensuing fiscal year setting forth in detail (i) proposed expenditures classified by department or agency and by program and (ii) estimated revenues from all sources. If estimated revenues and available surplus are less than proposed expenditures, the Governor shall recommend specific additional sources of revenue sufficient to pay the deficiency and the estimated revenue to be derived from each source;

(b) A capital budget for the ensuing fiscal year setting forth in detail proposed expenditures to be financed from the proceeds of obligations of the Commonwealth or of its agencies or authorities or from operating funds; and

(c) A financial plan for not less than the next succeeding five fiscal years, which plan shall include for each such fiscal year:

(i) Projected operating expenditures classified by department or agency and by program, in reasonable detail, and estimated revenues, by major categories, from existing and additional sources; and

(ii) Projected expenditures for capital projects specifically itemized by purpose, and the proposed sources of financing each.

Appropriations

Section 13. (a) Operating budget appropriations made by the General Assembly shall not exceed the actual and estimated revenues and surplus available in the same fiscal year.

(b) The General Assembly shall adopt a capital budget for the ensuing fiscal year.

Surplus

Section 14. All surplus of operating funds at the end of the fiscal year shall be appropriated during the ensuing fiscal year by the General Assembly.

Project "70"

Section 15. In addition to the purposes stated in article eight, section seven of this Constitution, the Commonwealth may be authorized by law to create debt and to issue bonds to the amount of seventy million dollars ($70,000,000) for the acquisition of land for State parks, reservoirs and other conservation and recreation and historical preservation purposes and for participation by the Commonwealth with political subdivisions in the acquisition of land for parks, reservoirs and other conservation and recreation and historical preservation purposes, subject to such conditions and limitations as the General Assembly may prescribe.

Land and Water Conservation and Reclamation Fund

Section 16. In addition to the purposes stated in article eight, section seven of this Constitution, the Commonwealth may be authorized by law to create debt and issue bonds in the amount of five hundred million dollars ($500,000,000) for a Land and Water Conservation and Reclamation Fund to be used for the conservation and reclamation of land and water resources of the Commonwealth, including the elimination of acid mine drainage, sewage, and other pollution from the streams of the Commonwealth, the provision of State financial assistance to political subdivisions and municipal authorities of the Commonwealth of Pennsylvania for the construction of sewage treatment plants, the restoration of abandoned strip-mined areas, the control and extinguishment of surface and underground mine fires, the alleviation and prevention of subsidence resulting from mining operations, and the acquisition of additional lands and the reclamation and development of park and recreational lands acquired pursuant to the authority of Article VIII, section 15 of this Constitution, subject to such conditions and liabilities as the General Assembly may prescribe.

APPENDIX F

PROPOSED FORM OF OPINION OF THE OFFICE OF ATTORNEY GENERAL THE COMMONWEALTH OF PENNSYLVANIA

May 23, 2018

TO THE GOVERNOR, THE STATE TREASURER AND THE AUDITOR GENERAL AS THE ISSUING OFFICIALS OF THE COMMONWEALTH:

Re: Commonwealth of Pennsylvania General Obligation Bonds, First Series of 2018

This opinion is furnished to you in connection with the issuance and sale by the Commonwealth of Pennsylvania (the "Commonwealth") on the date hereof of $1,247,000,000 aggregate principal amount of Commonwealth of Pennsylvania General Obligation Bonds, First Series of 2018 (the "Bonds"). The Bonds are dated their date of issuance and delivery. The Bonds are issued as fully registered bonds without coupons in the denomination of $5,000 or any integral multiple thereof within a maturity and will bear interest from the date of issuance and delivery, payable semi-annually on March 1 and September 1 of each year commencing September 1, 2018, until the obligation with respect to the payment of such principal shall have been discharged.

The Bonds are authorized and issued pursuant to and in full compliance with the provisions, restrictions and limitations of Section 7 of Article VIII of the Constitution of the Commonwealth of Pennsylvania (the "Constitution"); the laws of the Commonwealth, including the Capital Facilities Debt Enabling Act, Act No. 1999-1, approved February 9, 1999, as amended, annual capital budget bills and various bond authorization bills enacted by the General Assembly. The Bonds are also authorized and issued pursuant to resolutions adopted by the Governor, the State Treasurer and the Auditor General (the "Issuing Officials") on May 9, 2018, and May 16, 2018 (collectively, the "Resolutions").

The Resolutions, among other things, authorize the issuance and sale of the Bonds, and prescribe the forms thereof, the manner of bidding therefor and the forms of the bidding documents used in connection with the issuance and sale of the Bonds.

I have examined Article VIII, Section 7 of the Constitution and the statutes referred to above, specimens of the Bonds, the Resolutions, and the other certificates delivered today at the Closing and such other matters and documents as I deemed necessary or appropriate.

I am of the opinion that:

1. Section 7 of Article VIII of the Constitution has been duly approved and adopted and has become part of the Constitution, and the statutes referred to above have been duly and properly enacted.

2. Pursuant to full and adequate legal power conferred upon them by the Constitution and the statutes referred to above, the Governor, the State Treasurer and the Auditor General have duly adopted the Resolutions and have validly taken all other necessary and proper action to issue and sell the Bonds, and the Bonds have been validly authorized, issued and sold pursuant to proper and appropriate action of such officials.

3. The Bonds are lawful, valid, direct and general obligations of the Commonwealth, and the full faith and credit of the Commonwealth is pledged for the payment of interest thereon as the same shall become due and for the payment of the principal thereof at maturity.

4. Under the provisions of Section 2901 of the Tax Reform Code of 1971, as amended, the Bonds and the interest thereon are exempt from taxation for state and local purposes within the Commonwealth, but this exemption does not extend to (a) gift, estate, succession or inheritance taxes or (b) any other taxes not levied or assessed directly on the Bonds or the interest thereon.

5. The Commonwealth has the power to provide for the payment of the principal of and interest on the Bonds (as defined in the Official Statement) by levying unlimited ad valorem taxes upon all taxable property within the Commonwealth and excise taxes upon all taxable transactions within the Commonwealth, uniform on the same class of subjects, except gasoline and other motor fuel excise taxes, motor vehicle registration fees and license taxes, and operators' license fees and other excise taxes imposed on products used in motor transportation, and aviation fuel excise taxes, the proceeds of which are limited to certain special purposes by Section 11 of Article VIII of the Constitution.

6. If sufficient funds are not appropriated for timely payment of interest on and installments of principal of the Bonds, the Constitution requires the State Treasurer to set apart from the first revenues thereafter received applicable to the appropriate fund, a sum sufficient to pay such interest and installments of principal and to apply said sum to such purposes, and the State Treasurer may be required to set aside and apply such revenues at the suit of the holder of any of the Bonds.

Very truly yours,

Josh Shapiro
Attorney General
Office of Attorney General of the
Commonwealth of Pennsylvania

APPENDIX G

BELOW IS THE PROPOSED FORM OF OPINION OF CO-BOND COUNSEL
EXPECTED TO BE DELIVERED IN CONNECTION WITH THE
ISSUANCE OF THE BONDS

RE: Commonwealth of Pennsylvania General Obligation Bonds,
$1,247,000,000 First Series of 2018

Ladies and Gentlemen:

We have served as Co-Bond Counsel to the Commonwealth of Pennsylvania (the "Commonwealth") in connection with the issuance of its $1,247,000,000 General Obligation Bonds, First Series of 2018 (the "Bonds"). The Bonds are issued under and pursuant to (i) Section 7 of Article VIII of the Constitution of the Commonwealth (the "Constitution"), (ii) the laws of the Commonwealth, including the Capital Facilities Debt Enabling Act, Act No. 1991-1, approved February 9, 1999, as amended (the "Act"), annual capital budget bills and various bond authorization bills enacted by the General Assembly, as amended, and (iii) bond resolutions adopted by the Governor, State Treasurer and Auditor General of the Commonwealth (collectively, the "Issuing Officials") on May 9, 2018 and May 16, 2018 (the "Resolutions"). Capitalized terms used but not defined herein have the meanings set forth in the Resolutions.

The Bonds are being issued by the Commonwealth to provide funds (i) to finance various capital projects as detailed in the Resolutions, and (iii) to pay the costs of issuance of the Bonds.

We have examined and relied on the proceedings relating to the authorization and issuance of the Bonds, including, among other things: (i) the Constitution, the Act and certain of the annual capital budget bills and bond authorization bills referenced above; (ii) certified copies of the Resolutions; (iii) an opinion of the Office of the Attorney General of the Commonwealth; (iv) certificates executed by the Commonwealth and the Loan and Transfer Agent for the Bonds as to the execution and authentication of the Bonds; (v) a certificate of the Auditor General of the Commonwealth regarding the Commonwealth's compliance with the debt limitation contained in Section 7(a)(4) of Article VIII of the Constitution; (vi) various other certificates executed by the Commonwealth, including a certificate with regard to Sections 103 and 141 through 150 of the Internal Revenue Code of 1986, as amended (the "Code"); and (vii) the Form 8038-G of the Commonwealth with respect to the Bonds. In rendering our opinion, we have assumed the accuracy of and not undertaken to verify the factual matters set forth in such certificates and other documents by independent investigation and have relied on the covenants, warranties and representations made by the Commonwealth in such certificates and in the Resolutions and other financing documents.

In addition, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity with originals of all documents submitted to us as copies and the authenticity of certificates of public officials.

From our examination of the foregoing and such other items as we deem relevant, we are of the opinion that:

1. The principal amount of the Bonds is within all applicable debt and other limitations fixed by the Constitution and the laws of the Commonwealth.

2. The Bonds have been duly authorized, executed and delivered by the Commonwealth pursuant to all necessary action of the Issuing Officials and constitute valid and binding

general obligations of the Commonwealth, enforceable against the Commonwealth in accordance with the terms thereof, except as enforcement may be limited by laws relating to bankruptcy, insolvency, reorganization, arrangement, moratorium or similar laws affecting creditors' rights generally and subject to limitations on legal remedies against public entities in the Commonwealth, to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and to the exercise of judicial discretion.

3. The full faith and credit of the Commonwealth are pledged for the payment of the interest due on the Bonds and the principal thereof due at maturity. If sufficient funds are not appropriated for the timely payment of interest on and installments of principal of the Bonds, the Constitution requires the State Treasurer to set apart from the first revenues thereafter received applicable to the appropriate fund, a sum sufficient to pay such interest and installments of principal and to apply said sum to such purposes, and the State Treasurer may be required to set aside and apply such revenues at the suit of the holder of any of the Bonds.

4. The Bonds are exempt from personal property taxes in Pennsylvania, and interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax, under the laws of the Commonwealth as enacted and construed on the date of initial delivery of the Bonds.

5. Interest on the Bonds (including original issue discount on certain of the Bonds) is excludable from gross income for purposes of federal income tax under existing laws as enacted and construed on the date of initial delivery of the Bonds, assuming the accuracy of the certifications of the Commonwealth and continuing compliance by the Commonwealth with the requirements of the Internal Revenue Code of 1986 (the "Code"). Interest on the Bonds is not an item of tax preference for purposes of the individual federal alternative minimum tax. The corporate alternative minimum tax was repealed by legislation enacted on December 22, 2017 (known as the "Tax Cuts and Jobs Act"), effective for tax years beginning after December 31, 2017. For tax years beginning on or before December 31, 2017 interest on the Bonds is not an item of tax preference for purposes of the corporate alternate minimum tax in effect prior to enactment of the Tax Cuts and Jobs Act; however, interest on Bonds held by a corporation (other than an S Corporation, regulated investment company, or real estate investment trust) indirectly may be subject to federal alternative minimum tax because of its inclusion in the adjusted current earnings of a corporate holder. Co-Bond Counsel expresses no opinion regarding other federal tax consequences of ownership or disposition of, or the accrual or receipt of interest on, the Bonds.

Certain Bonds were offered at a premium ("original issue premium") over their principal amount. For federal income tax purposes, original issue premium is amortizable periodically over the term of a Bond through reductions in the holder's tax basis for such Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Amortization of premium does not create a deductible expense or loss.

6. The Bonds are exempt from registration under the provisions of the Securities Act of 1933, as amended.

We express no opinion on the adequacy, completeness or accuracy of any official statement, placement memorandum or other disclosure document pertaining to the offering of the Bonds.

These opinions are rendered on the basis of federal law and the laws of the Commonwealth as enacted and construed on the date hereof.

This opinion is limited to the matters expressly stated herein. No implied opinions are to be inferred to extend this opinion beyond the matters expressly stated herein. This opinion is expressed as of the date hereof. We do not assume any obligation to update or supplement this opinion to reflect, or otherwise advise you of, any facts or circumstances which may hereafter come to our attention or any changes in facts, circumstances or law which may hereafter occur. This opinion is rendered and may be relied upon solely in connection with the transactions contemplated hereby and may not be relied upon for any other purpose.

Very truly yours,

CONTINUING DISCLOSURE AGREEMENT

This CONTINUING DISCLOSURE AGREEMENT dated May 23, 2018 (the "**Agreement**"), is executed and delivered by the Commonwealth of Pennsylvania ("**Commonwealth**") in connection with the issuance and delivery of $1,247,000,000 Commonwealth of Pennsylvania General Obligation Bonds, First Series of (the "**Bonds**").

The Bonds are being issued pursuant to the initial and final resolutions of the Commonwealth adopted by the Governor, State Treasurer and Auditor General to provide funds for and toward the costs of various capital facilities projects and for other projects to carry out the purposes of the Growing Greener II Acts and the Pennvest Acts.

The Commonwealth hereby covenants and agrees as follows:

Section 1. Purpose. This Agreement is being executed and delivered by the Commonwealth for the benefit of the holders and the beneficial owners of the Bonds and in order to assist the underwriters purchasing the Bonds to comply with the provisions of Section (b)(5)(i) of Rule 15c2-12 (the "**Rule**") promulgated by the Securities and Exchange Commission (the "**SEC**") by undertaking to provide certain annual financial information and material event notices required by the Rule (collectively, "**Continuing Disclosure**").

Section 2. Annual Disclosure.

(a) So long as any Bonds are outstanding, the Commonwealth annually shall provide financial information and operating data in accordance with the provisions of Section (b)(5)(i) of the Rule as follows:

(i) Audited financial statements of the Commonwealth, prepared in accordance with generally accepted accounting principles; and

(ii) Unless included in such financial statements, operating data with respect to the Commonwealth and its operations of the type found in the following tables in the Official Statement for the Bonds dated May 23, 2018: (a) Tables 5 through 10 under the heading "COMMONWEALTH FINANCIAL PERFORMANCE"; (b) Tables 11 and 12 under the heading "COMMONWEALTH REVENUES AND EXPENDITURES"; (c) Tables 15 through 18 under the heading "OUTSTANDING INDEBTEDNESS OF THE COMMONWEALTH"; and (d) Tables 20 through 24 under the heading "OTHER STATE RELATED OBLIGATIONS". If any of the tables listed above reflect information that is no longer calculated and available or relevant because of changes in operations, the Commonwealth will provide notice of such change in the first annual filing of annual operating data after such changes are undertaken. The format of such information may be altered from that set forth in the Official Statement.

If the audited financial statements to be filed pursuant to Section 2(a)(i) are not available by the date of the required filing, the Commonwealth may instead file unaudited statements by such date and file audited statements when available.

(b) The Commonwealth shall provide annually the financial information and operating data described in subsection (a) above (collectively, the "**Annual Disclosure**") within 240 days after the end of the Commonwealth's fiscal year, commencing with the Commonwealth's fiscal year ending June 30, 2018, to the Municipal Securities Rulemaking Board (the "**MSRB**") via the Electronic Municipal Market Access system, or any successor thereto ("**EMMA**").

(c) The Annual Disclosure may be included by specific reference to other documents available to the public on the MSRB internet website (presently www.msrb.org) or filed with the SEC.

(d) The Commonwealth shall provide in a timely manner to the MSRB via EMMA notice specifying any failure of the Commonwealth to provide the Annual Disclosure by the date specified.

Section 3. Event Disclosure. So long as any Bonds are outstanding, the Commonwealth shall provide in a timely manner, not in excess of ten business days after the occurrence of the event, to the MSRB notice of the occurrence of any of the following events with respect to the Bonds:

(a) Principal and interest payment delinquencies;

(b) Non-payment related defaults, if material;

(c) Unscheduled draws on debt service reserves reflecting financial difficulties;

(d) Unscheduled draws on credit enhancements reflecting financial difficulties;

(e) Substitution of credit or liquidity providers, or their failure to perform;

(f) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;

(g) Modifications to rights of holders of the Bonds, if material;

(h) Bond calls, if material, and tender offers;

(i) Defeasances;

(j) Release, substitution, or sale of property securing repayment of the Bonds, if material;

(k) Rating changes;

(l) Bankruptcy, insolvency, receivership or similar events of the Commonwealth;

(m) The consummation of a merger, consolidation, or acquisition involving the Commonwealth or the sale of all or substantially all of the assets of the Commonwealth, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

(n) Appointment of a successor or additional trustee or the change of name of a trustee, if material.

For the purposes of the event identified in paragraph (l) above, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Commonwealth in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Commonwealth, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Commonwealth.

Section 4. Termination. The obligations of the Commonwealth hereunder will terminate upon the redemption, defeasance (within the meaning of the Rule) or payment in full of all the Bonds.

Section 5. Amendment. The Commonwealth may modify their respective obligations hereunder without the consent of Owners of the Bonds, provided that this Agreement as so modified complies with the Rule as it exists at the time of modification. The Commonwealth, as applicable, shall within a reasonable time thereafter send to the MSRB a description of such modification(s).

Section 6. Defaults.

(a) If the Commonwealth fails to comply with any covenant or obligation regarding Continuing Disclosure specified in this Agreement, any holder (within the meaning of the Rule) of Bonds then outstanding may, by notice to the Commonwealth, proceed to protect and enforce its rights and the rights of the holders by an action for specific performance of such covenant to provide the Continuing Disclosure; provided that any holder seeking to require compliance by the Commonwealth with this Agreement shall first provide to the Commonwealth's Office of the Budget at least 30 days' prior written notice of the Commonwealth's failure, giving reasonable details of such failure, following which notice, the Commonwealth shall have 30 days to comply.

(b) Notwithstanding anything herein to the contrary, any failure of the Commonwealth to comply with any obligation regarding Continuing Disclosure specified in this Agreement (i) shall not be deemed to constitute an event of default under the Bonds or the resolutions or other documents providing for the issuance of the Bonds and (ii) shall not give rise to any right or remedy other than that described in Section 6(a) above.

Section 7. Additional Disclosure. The Commonwealth may from time to time disclose certain information and data in addition to the Continuing Disclosure. Notwithstanding anything herein to the contrary, the Commonwealth shall not incur any obligation to continue to provide, or to update, such additional information or data.

Section 8. Filing Format. Any information, document, data and/or notice submitted to the MSRB via EMMA hereunder shall be submitted in electronic format and shall be accompanied by identifying information, all as prescribed by the MSRB.

Section 9. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

Section 10. Successors and Assigns. All of the covenants, promises and agreements contained in this Continuing Disclosure Agreement by or on behalf of the Commonwealth shall bind and inure to the benefit of its successors and assigns, whether so expressed or not.

Section 11. Headings for Convenience Only. The descriptive headings in this Continuing Disclosure Agreement are inserted for convenience of reference only and shall not control or affect the meaning or construction of any of the provisions hereof.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF this Agreement is executed as of the date and year first above written.

COMMONWEALTH OF PENNSYLVANIA

By:____

APPENDIX I

MUNICIPAL BOND
INSURANCE POLICY

ISSUER: Policy No: -N

BONDS: $ in aggregate principal amount of

Effective Date:

Premium: $

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By ___________________________________
Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc.
1633 Broadway, New York, N.Y. 10019
(212) 974-0100