NEW ISSUE

Ratings: See "RATINGS" herein.
BOOK-ENTRY ONLY

In the opinion of Co-Bond Counsel, under existing statutes, regulations, rulings and court decisions, interest on the Series 2018 Bonds, including interest in the form of original issue discount, will not be includible in gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the Authority with the requirements of the Internal Revenue Code of 1986, as amended. Interest on the Series 2018 Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax on individuals. Under the laws of the Commonwealth of Pennsylvania, as enacted and construed on the date hereof, interest on the Series 2018 Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax and the Series 2018 Bonds are exempt from personal property taxes in Pennsylvania. See "TAX MATTERS" herein.

$1,487,170,000
Commonwealth Financing Authority
Tobacco Master Settlement Payment Revenue Bonds, Series 2018

Dated: Date of Delivery

Due: June 1, as shown on the inside front cover

The Tobacco Master Settlement Payment Revenue Bonds, Series 2018 (the "**Series 2018 Bonds**") are limited obligations of the Commonwealth Financing Authority (the "**Authority**").

The Series 2018 Bonds are issued under the Indenture, dated as of February 1, 2018 (the "**Indenture**"), between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "**Trustee**"). The Series 2018 Bonds, together with any additional refunding bonds to be issued under the Indenture (collectively, the "**Bonds**"), are payable from and secured by a pledge under the Indenture of the "**Revenues**," which consist primarily of (i) the Pledged Annual Payments (defined below) transferred by the Commonwealth of Pennsylvania (the "**Commonwealth**"), acting through the Office of the Budget of the Commonwealth (the "**Office**"), to the Authority pursuant to the Transfer Agreement, dated as of February 1, 2018 (the "**Transfer Agreement**"), and (ii) the Article II Revenues (as defined herein) (consisting of revenues from certain sales taxes and hotel occupancy taxes), pledged under Section 2804(c)(1) of the Tax Reform Code (as defined herein) and certified by the Secretary of the Budget of the Commonwealth (the "**Secretary**") under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Revenues, which Article II Revenues are set forth in the amounts certified by the Secretary and payable by the Commonwealth, acting through the Office, and payable pursuant to the Service Agreement, dated as of February 1, 2018 (the "**Service Agreement**"). See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS," "SUMMARY OF THE TRANSFER AGREEMENT" and "SUMMARY OF THE SERVICE AGREEMENT" herein.

Pursuant to the Article XXVIII of the Tax Reform Code and the Transfer Agreement, the Commonwealth will transfer to the Authority, on the Closing Date, its right, title and interest in and to the "**Pledged Annual Payments**," consisting of a specified amount of the Commonwealth Annual Payments (as defined herein) payable to the Commonwealth pursuant to Article IX(c)(1) of the Master Settlement Agreement (the "**MSA**") and received on and after April 15, 2019 in the annual amounts required to pay principal of and interest on the Bonds, as certified by the Secretary.

The MSA was entered into by participating cigarette manufacturers (the "**PMs**"), the Commonwealth, 45 other states and six other U.S. jurisdictions (collectively, the "**Settling States**"), in November 1998 in the settlement of certain smoking related litigation pursuant to which the PMs agreed to make certain payments to the Settling States. Payments by the PMs under the MSA are subject to certain adjustments, including the NPM Adjustment (defined herein), some of which have occurred and may continue to occur and may be material. See "BONDHOLDERS' RISKS" herein.

In the Service Agreement, the Office agrees to pay "**Service Charges**" (as defined herein) to the Authority. The portion of the Service Charges to be applied to the payment of debt service on the Bonds each year (the "**Bond Payment Obligations**") will be paid from the Pledged Annual Payments and, if necessary, from the Article II Revenues. The Pledged Annual Payments and the Article II Revenues are subject to appropriation by the General Assembly of the Commonwealth (the "**General Assembly**"), and these amounts are currently subject to continuing appropriation. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS" and "BONDHOLDERS' RISKS" herein.

The Authority will apply the proceeds of the Series 2018 Bonds to (i) fund a deposit in the General Fund of the Commonwealth to provide General Fund budgetary relief, (ii) pay capitalized interest on the Series 2018 Bonds and (iii) pay the costs of issuance incurred in connection with the issuance of the Series 2018 Bonds.

The proceeds of the Series 2018 Bonds (other than the amount deposited in the Debt Service Account to pay capitalized interest), and other assets of the Authority (other than the Revenues pledged under the Indenture), are not pledged to the payment of, and are therefore not available to the holders of, the Series 2018 Bonds. The Commonwealth will covenant in the Transfer Agreement for the benefit of the Bondholders that it will not amend, supersede or cancel the MSA in any way that would materially and adversely affect the amount of Pledged Annual Payments or the rights of the Authority thereto.

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

THE SERIES 2018 BONDS SHALL BE LIMITED OBLIGATIONS OF THE AUTHORITY AND SHALL NOT CONSTITUTE NOR GIVE RISE TO ANY CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY. THE SERIES 2018 BONDS SHALL NOT CONSTITUTE A DEBT OR LIABILITY OF, AND SHALL NOT BE PAYABLE BY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS, NOR SHALL THE AUTHORITY BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS EXCEPT FROM THE REVENUES AND FUNDS OF THE AUTHORITY PLEDGED FOR THE PAYMENT THEREOF UNDER THE INDENTURE. THE PAYMENTS MADE BY THE COMMONWEALTH UNDER THE TRANSFER AGREEMENT AND THE SERVICE AGREEMENT SHALL BE SUBJECT TO THE APPROPRIATION OF FUNDS FOR SUCH PURPOSE BY THE GENERAL ASSEMBLY. THERE CAN BE NO ASSURANCE THAT SUCH FUNDS WILL BE APPROPRIATED BY THE COMMONWEALTH AS REQUIRED TO TIMELY MAKE SUCH PAYMENTS. THE AUTHORITY HAS NO TAXING POWER.

The Series 2018 Bonds will be dated their date of delivery, and mature on the dates and in the aggregate principal amounts set forth on the inside front cover. Interest on the Series 2018 Bonds will be payable on June 1 and December 1 of each year, commencing on June 1, 2018. The Series 2018 Bonds are subject to optional redemption prior to maturity as set forth herein. See "THE SERIES 2018 BONDS."

See Inside Front Cover for Maturity Schedule, Interest Rates and Yields

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The Series 2018 Bonds are offered when, as and if issued and accepted by the Underwriters, subject to the approval of legality by Eckert Seamans Cherin & Mellott, LLC, Philadelphia, Pennsylvania, and Ahmad Zaffarese LLC, Philadelphia, Pennsylvania, as Co-Bond Counsel to the Authority. Certain legal matters will be passed upon for the Authority by its counsel, Stradley Ronon Stevens & Young, LLP, Philadelphia, Pennsylvania. Certain legal matters with respect to the obligations of the Office will be passed upon by the Office of Chief Counsel for the Office of the Budget. Certain legal matters will be passed upon for the Underwriters by McNees Wallace & Nurick LLC, Lancaster, Pennsylvania, and Orrick, Herrington & Sutcliffe LLP, New York, New York, as Co-Underwriters' Counsel. It is expected that the Series 2018 Bonds will be available for delivery in book entry form only through The Depository Trust Company in New York, New York on or about February 20, 2018.

Jefferies
BofA Merrill Lynch
Loop Capital Markets, LLC

Morgan Stanley
Citigroup
Boenning & Scattergood Inc.

Dated: February 13, 2018

$1,487,170,000
Commonwealth Financing Authority
Tobacco Master Settlement Payment Revenue Bonds, Series 2018

Maturity Date (June 1)	Principal Amount	Interest Rate	Yield	CUSIP*
2020	$45,165,000	5.000%	2.140%	20282E AA4
2021	47,425,000	5.000	2.370	20282E AB2
2022	49,795,000	5.000	2.610	20282E AC0
2023	52,285,000	5.000	2.800	20282E AD8
2024	54,900,000	5.000	2.960	20282E AE6
2025	57,645,000	5.000	3.130	20282E AF3
2026	60,525,000	5.000	3.270	20282E AG1
2027	63,555,000	5.000	3.400	20282E AH9
2028	66,730,000	5.000	3.470	20282E AJ5
2029	70,070,000	5.000	3.560c	20282E AK2
2030	73,570,000	5.000	3.620c	20282E AL0
2031	77,250,000	5.000	3.670c	20282E AM8
2032	81,110,000	5.000	3.710c	20282E AN6
2033	85,165,000	5.000	3.750c	20282E AP1
2034	89,425,000	5.000	3.780c	20282E AQ9
2035	93,895,000	5.000	3.810c	20282E AR7

$418,660,000 4.00% Term Bonds due June 1, 2039** Priced @ 99.5% CUSIP* 20282E AS5

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c Yield to the first optional redemption date of June 1, 2028.

* CUSIP data herein are provided by CUSIP Global Services, operated on behalf of the American Bankers Association by S&P Global Market Intelligence, a division of S&P Global Inc. This data is not intended to create a database and does not serve in any way as a substitute for CUSIP Global Services. CUSIP numbers have been assigned by an independent company not affiliated with the Authority and are included solely for the convenience of the registered owners of the applicable Series 2018 Bonds. The Authority and the Underwriters are not responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness by the Authority or the Underwriters as included therein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2018 Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2018 Bonds.

** The Term Bonds stated to mature on June 1, 2039 are insured by Assured Guaranty Municipal Corp. See “BOND INSURANCE” herein.

COMMONWEALTH FINANCING AUTHORITY
400 North Street, 4th Floor
Harrisburg, Pennsylvania 17120

Dennis M. Davin, Chair
Secretary of Community and Economic Development

Robin L. Wiessmann
Secretary of Banking and Securities

Randy Albright
Secretary of the Budget

Austin J. Burke
Appointed by The Minority Leader of the Senate

D. Raja
Appointed by the President Pro Tempore of the Senate

Michael Karp
Appointed by the Speaker of the House of Representatives

Marc Little
Appointed by the House Minority Leader

THE UNDERWRITERS PARTICIPATING IN THIS OFFERING MAY ENGAGE IN TRANSACTIONS THAT STABILIZE OR MAINTAIN THE PRICE OF THE SECURITIES AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET, OR OTHERWISE AFFECT THE PRICE OF THE SECURITIES OFFERED HEREBY, INCLUDING OVER-ALLOTMENT AND STABILIZING TRANSACTIONS. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

NO DEALER, BROKER, SALESPERSON OR OTHER PERSON IS AUTHORIZED BY THE AUTHORITY, THE COMMONWEALTH, OR THE UNDERWRITERS IN CONNECTION WITH ANY OFFERING MADE HEREBY TO GIVE ANY INFORMATION OR MAKE ANY REPRESENTATION OTHER THAN AS CONTAINED HEREIN, AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATION MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE AUTHORITY, THE COMMONWEALTH OR THE UNDERWRITERS. THIS OFFICIAL STATEMENT DOES NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF AN OFFER TO BUY, NOR SHALL THERE BE A SALE OF ANY OF THE SECURITIES OFFERED HEREBY BY ANY PERSON IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL FOR SUCH PERSON TO MAKE SUCH AN OFFER, SOLICITATION OR SALE.

This Official Statement contains information furnished by the Authority, the Commonwealth, IHS Global (defined herein) and other sources, all of which are believed to be reliable. Information concerning the Commonwealth contained in APPENDIX A—"FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH" has been obtained from the Commonwealth. The information contained under the caption "SUMMARY OF THE TOBACCO CONSUMPTION REPORT" and in APPENDIX D—"TOBACCO CONSUMPTION REPORT" hereto has been included in reliance upon IHS Global as an expert in econometric forecasting. Information concerning the tobacco industry and participants therein has been obtained from certain publicly available information provided by certain participants and certain other sources (see APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY"). The participants in such industry have not provided any information to the Authority for use in connection with this offering. In certain cases, tobacco industry information provided herein (such as market share data) may be derived from sources which are inconsistent or in conflict with each other. The Authority has not independently verified the information contained in APPENDIX E hereto and cannot and does not warrant the accuracy or completeness of this information.

The information and expressions of opinion contained herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority or the Commonwealth or the matters covered by the report of IHS Global included as APPENDIX D to this Official Statement since the date hereof or that the information contained herein is correct as of any date subsequent to the date hereof. Such information and expressions of opinion are made for the purpose of providing information to prospective investors and are not to be used for any other purpose or relied on by any other party. See APPENDIX H—"FORM OF CONTINUING DISCLOSURE AGREEMENT."

This Official Statement contains forecasts, projections and estimates that are based on current expectations or assumptions. In light of the important factors that may materially affect the amount of Pledged Annual Payments (see "BONDHOLDERS' RISKS" and APPENDIX C—"MASTER SETTLEMENT AGREEMENT"), the inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the Authority, the Commonwealth, IHS Global or the Underwriters that the results of such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results.

References in this Official Statement to the Acts, the Indenture, the Transfer Agreement, the Service Agreement, the Letter Agreement and the Continuing Disclosure Agreement do not purport to be complete. Refer to the Acts, the Indenture, the Transfer Agreement, the Service Agreement, the Letter Agreement and the Continuing Disclosure Agreement for full and complete details of their provisions. Copies of the Acts, the Indenture, the Transfer Agreement, the Service Agreement, the Letter Agreement and the Continuing Disclosure Agreement are on file with the Authority and the Trustee.

The order and placement of material in this Official Statement, including its appendices, are not to be deemed a determination of relevance, materiality or importance, and all materials in this Official Statement, including its appendices, must be considered in their entirety.

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

THE SERIES 2018 BONDS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION, ANY COMMONWEALTH SECURITIES COMMISSION OR ANY OTHER REGULATORY AUTHORITY, NOR HAVE ANY OF THE FOREGOING PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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

The Underwriters have furnished the information under the heading "UNDERWRITING" for use in this Official Statement.

The Commonwealth and the Authority offer no opinion with respect to discussions and summaries of information from Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 or discussions and summaries concerning other states and other state court decisions related to the MSA and NPM Adjustment (as defined herein) and take no responsibility with respect to the accuracy thereof.

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 in APPENDIX I – "SPECIMEN MUNICIPAL BOND INSURANCE POLICY."

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SUMMARY STATEMENT

This Summary Statement is subject in all respects to more complete information contained in this Official Statement and should not be considered a complete statement of the facts material to making an investment decision. The offering of the Series 2018 Bonds to potential investors is made only by means of the entire Official Statement. Terms used herein and not previously defined have the meanings ascribed to them in APPENDIX F—"SUMMARY OF THE INDENTURE—Certain Definitions." For locations of definitions of certain terms used herein, see the "Index of Defined Terms."

Overview .... The Commonwealth Financing Authority (the "**Authority**") is issuing $1,487,170,000 aggregate principal amount of its Tobacco Master Settlement Payment Revenue Bonds, Series 2018 (the "**Series 2018 Bonds**"). The Series 2018 Bonds are issued under the Indenture, dated as of February 1, 2018 (the "**Indenture**"), between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "**Trustee**").

The Series 2018 Bonds, together with any refunding bonds which may be issued from time to time under the Indenture (collectively, the "**Bonds**"), are limited obligations of the Authority, payable from and secured by a pledge under the Indenture of the "**Revenues**," which consist primarily of (i) the Pledged Annual Payments (defined below) in amounts certified by the Secretary of the Budget of the Commonwealth (the "**Secretary**") received by the Commonwealth of Pennsylvania (the "**Commonwealth**") pursuant to the MSA (defined below) and to be transferred to the Authority pursuant to the Transfer Agreement, dated as of February 1, 2018 (the "**Transfer Agreement**"), between the Commonwealth, acting through the Office of the Budget of the Commonwealth (the "**Office**"), and the Authority, and (ii) the Article II Revenues (defined below) (consisting of revenues from certain sales and hotel occupancy taxes) pledged under Section 2804(c)(1) of the Tax Reform Code (defined below) and certified by the Secretary under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Payments, which Article II Revenues are set forth in the amounts so certified and payable by the Commonwealth, acting through the Office, to the Authority pursuant to the Service Agreement, dated as of February 1, 2018 (the "**Service Agreement**"), between the Authority and the Commonwealth, acting through the Office.

The Master Settlement Agreement (the "**MSA**") was entered into by participating cigarette manufacturers (the "**PMs**"), the Commonwealth and the other Settling States (as defined below) on November 23, 1998 in the settlement of certain smoking-related litigation pursuant to which the PMs agreed to make certain payments to the Settling States.

Issuer .... The Authority is a public instrumentality of the Commonwealth and a body corporate and politic organized and existing under the laws of the Commonwealth. The Authority was created by 64 Pa. C.S. §1501 *et seq.*, as amended (the "**Authority Act**"), and its purposes and powers have been supplemented by amendments to the Act of March 4, 1971 (P.L. 6, No. 2) known as the Tax Reform Code ("**Tax Reform Code**"), contained in the Act of October 30, 2017, P.L. 672, No. 43 ("**Act 43**"), which added Article XXVIII ("**Tax Reform Code Article XXVIII**") to the Tax Reform Code (the Authority Act, together with Article XXVIII of the Tax Reform Code being hereinafter referred to collectively as the "**Acts**"). The Authority is not a party to the MSA.

Securities Offered .... The Series 2018 Bonds are being issued pursuant to the Acts, a resolution of the Authority adopted November 14, 2017 (the "**Resolution**"), and the Indenture. Interest on the outstanding principal amount of the Series 2018 Bonds will be payable on each June 1 and December 1, commencing June 1, 2018 (each, a "**Payment Date**"). Interest on the Series 2018 Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The Series 2018 Bonds mature on June 1 in the years as set forth on the inside front cover. Failure to pay interest when due or the principal of any Bonds when due will constitute an Event of Default under the Indenture.

The Indenture permits the issuance of additional parity refunding bonds. See "THE SERIES 2018 BONDS—Refunding Bonds."

Individual purchases of beneficial ownership interests may be made in the principal amount of $5,000 or any integral multiple thereof (an "**Authorized Denomination**"). It is expected that the Series 2018 Bonds will be delivered in book-entry form through the facilities of The Depository Trust Company, New York, New York ("**DTC**"), on or about February 20, 2018 (the "**Closing Date**"). Beneficial owners of the Series 2018 Bonds will not receive physical delivery of bond certificates.

Security for the Bonds .... The Bonds, including the Series 2018 Bonds, are limited obligations of the Authority, payable from and secured by a pledge of the Revenues, which consist primarily of (i) the Pledged Annual Payments received by the Commonwealth pursuant to the MSA and to be transferred to the Authority pursuant to the Transfer Agreement and (ii) the Article II Revenues (consisting of revenues from certain sales and hotel occupancy taxes) pledged under Section 2804(c)(1) of the Tax Reform Code and certified by the Secretary under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Payments, which Article II Revenues are set forth in the amounts so certified and payable by the Commonwealth to the Authority pursuant to the Service Agreement.

Pursuant to Tax Reform Code Article XXVIII and the Transfer Agreement, the Commonwealth will transfer to the Authority its right, title and interest in and to the "**Pledged Annual Payments**," consisting of the portion of the Commonwealth Annual Payments (as defined herein) payable to the Commonwealth pursuant to the MSA and received on and after April 15, 2019, in the annual amounts required to pay principal of and interest on the Bonds (the "**Bond Payment Obligations**"), as certified by the Secretary. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS—The Transfer Agreement," "SUMMARY OF THE TRANSFER AGREEMENT" and APPENDIX B-1—"FORM OF TRANSFER AGREEMENT."

In the Service Agreement, the Office agrees to pay to the Authority as "**Service Charges**" (as defined herein), subject to appropriation by the General Assembly of the Commonwealth (the "**General Assembly**"), sufficient funds to pay the Bond Payment Obligations and certain administrative costs. The portion of the Service Charges to be applied to pay the Bond Payment Obligations comes first from the Pledged Annual Payments, which are equal to the Bond Payment Obligations, and, second, to the extent the Pledged Annual Payments received by the Authority are insufficient to pay Bond Payment Obligations, from the Article II Revenues (consisting of revenues from certain sales taxes and hotel occupancy taxes).

If necessary because the Pledged Annual Payments and Article II Revenues received by the Authority are insufficient to pay Bond Payment Obligations, the Secretary covenants in the Service Agreement to use his best efforts to request a supplemental appropriation to pay the Bond Payment Obligations. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS—The Service Agreement" and APPENDIX B-2—"FORM OF SERVICE AGREEMENT."

The Authority will assign its right, title and interest in and to the Transfer Agreement and the Service Agreement to the Trustee, except for the Authority's right to receive Service Charges under the Service Agreement to pay the Authority's Administrative Expenses.

The Bonds, including the Series 2018 Bonds, are additionally secured by the amounts on deposit in the Pledged Accounts (as defined herein).

The Trustee has no lien on the Tobacco Revenue Bond Debt Service Account (defined below), a restricted account established in the State Treasury, but the funds in the Tobacco Revenue Bond Debt Service Account may only be transferred to the Trustee as assignee of the Authority to be used to pay principal of and interest on the Bonds, and, if necessary, the Trustee (as assignee of the Authority) may bring an action in mandamus against the State Treasurer pursuant to the Transfer Agreement and the Service Agreement to direct the State Treasurer to make the transfers from the Tobacco Revenue Bond Debt Service Account to the Trustee so that the Trustee may pay the principal of and interest on the Bonds.

THE SERIES 2018 BONDS SHALL BE LIMITED OBLIGATIONS OF THE AUTHORITY AND SHALL NOT CONSTITUTE NOR GIVE RISE TO ANY CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY. THE SERIES 2018 BONDS SHALL NOT CONSTITUTE A DEBT OR LIABILITY OF, AND SHALL NOT BE PAYABLE BY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS, NOR SHALL THE AUTHORITY BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS EXCEPT FROM THE REVENUES AND FUNDS OF THE AUTHORITY PLEDGED FOR THE PAYMENT THEREOF UNDER THE INDENTURE. THE PAYMENTS MADE BY THE COMMONWEALTH UNDER THE TRANSFER AGREEMENT AND THE SERVICE AGREEMENT SHALL BE SUBJECT TO THE APPROPRIATION OF FUNDS FOR SUCH PURPOSE BY THE GENERAL ASSEMBLY. THERE CAN BE NO ASSURANCE THAT SUCH FUNDS WILL BE APPROPRIATED BY THE COMMONWEALTH AS REQUIRED TO TIMELY MAKE SUCH PAYMENTS. THE AUTHORITY HAS NO TAXING POWER.

Appropriations................................ The payment of all Pledged Annual Payments under the Transfer Agreement and the Service Agreement and Article II Revenues under the Service Agreement is subject to the appropriation of funds for such purpose by the General Assembly. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS," "SUMMARY OF THE SERVICE AGREEMENT" and Appendix B-2 "FORM OF SERVICE AGREEMENT."

Sections 2805 and 2809 of the Tax Reform Code create continuing appropriations for the Pledged Annual Payments and the Article II Revenues. The General Assembly may take legislative action to repeal such continuing appropriations, in which case the Secretary will use his best efforts to request a supplemental appropriation to pay the debt service on the Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS—Appropriations Relating to the Series 2018 Bonds" and "—Sections 2805 and 2809 of the Tax Reform Code" herein.

Covenants .... In the Transfer Agreement, in accordance with the Authority Act and Tax Reform Code Article XXVIII, the Commonwealth agrees that the Commonwealth will (i) as required by Section 2805(a) of the Tax Reform Code, acting through the State Treasurer, transfer all Pledged Annual Payments when received to the "**Tobacco Revenue Bond Debt Service Account**," a restricted account in the General Fund established for such purpose by Tax Reform Code Article XXVIII, and direct the State Treasurer to transfer such amounts directly to the Trustee as the assignee of the Authority, (ii) enforce its right to collect all Pledged Annual Payments due under the MSA, and (iii) not amend, supersede or cancel the MSA in any way that would materially and adversely affect the amount of Pledged Annual Payments or the rights of the Authority thereto. See "SUMMARY OF THE TRANSFER AGREEMENT—Covenants of the Commonwealth." See APPENDIX B-1—"FORM OF TRANSFER AGREEMENT" and APPENDIX B-2—"FORM OF SERVICE AGREEMENT" for covenants made by the Authority and the Commonwealth and APPENDIX F—"SUMMARY OF THE INDENTURE" for a summary of the covenants made by the Authority.

In the Service Agreement, the Authority and the Office covenant that the Authority and the Office will at all times do and perform all acts and things necessary and desirable in order to assure that interest paid on the Bonds will, for purposes of federal income taxation, be and remain excludable from the gross income of the holders of the Bonds (the "**Bondholders**" or "**Holders**" or "**holders**") and that the Authority and the Office will refrain from doing or performing any act or thing that will cause such interest not to be so excludable. See APPENDIX B-2—"FORM OF SERVICE AGREEMENT" for the covenants made by the Authority and the Commonwealth.

Use of Proceeds and Purpose.......... The proceeds of the Series 2018 Bonds will be applied by the Authority to: (i) fund a deposit in the General Fund of the Commonwealth to provide General Fund budgetary relief, (ii) pay capitalized interest on the Series 2018 Bonds to June 1, 2019 and (iii) pay the costs of issuance incurred in connection with the issuance of the Series 2018 Bonds. The General Fund budgetary relief consists of a deposit in the General Fund in the amount of the Commonwealth's General Fund deficit during the 2016-2017 Fiscal Year, and the moneys so deposited shall be available for expenditure in accordance with appropriations by the General Assembly. See "INTRODUCTORY STATEMENT." The Series 2018 Bonds will provide the entire amount of net proceeds authorized under the Acts. Any Bonds issued after the issuance of the Series 2018 Bonds will only be refunding bonds.

Master Settlement Agreement .... The MSA was entered into on November 23, 1998 among the attorneys general of 46 states (including the Commonwealth), the Commonwealth of Puerto Rico, Guam, the U.S. Virgin Islands, the District of Columbia, American Samoa and the Commonwealth of the Northern Mariana Islands (collectively, the "**Settling States**") and the then four largest United States

tobacco manufacturers: Philip Morris USA Inc. ("**Philip Morris**"), R.J. Reynolds Tobacco Company ("**Reynolds Tobacco**"), Brown & Williamson Tobacco Corporation ("**B&W**") and Lorillard Tobacco Company ("**Lorillard**"). In January 2004, Reynolds American Inc. ("**Reynolds American**") was incorporated as a holding company to facilitate the combination of the U.S. assets, liabilities and operations of B&W with those of Reynolds Tobacco. On June 12, 2015, Reynolds American acquired Lorillard, Inc., of which Lorillard was a wholly-owned subsidiary, and Lorillard was merged into Reynolds Tobacco, with Reynolds Tobacco as the surviving entity. Contemporaneous with Reynolds American's acquisition of Lorillard, Inc., Imperial Tobacco Group PLC ("**Imperial Tobacco**") purchased certain of Reynolds Tobacco's and certain of Lorillard's cigarette brands, among other assets. The payment obligations under the MSA follow tobacco product brands if they are transferred; thus, Imperial Tobacco is required to make payments under the MSA as a result of its acquisition of those cigarette brands. On July 25, 2017, Reynolds American became a wholly-owned subsidiary of British American Tobacco p.l.c. ("**BAT**") following BAT's acquisition of the approximately 58% of Reynolds American stock not then owned by BAT. As a result of such acquisition, BAT is responsible for Reynolds Tobacco's payment obligations under the MSA.

References herein to the "**Original Participating Manufacturers**" or "**OPMs**" means (i) prior to July 30, 2004, collectively, Philip Morris, Reynolds Tobacco, B&W and Lorillard, (ii) after July 30, 2004 and prior to June 12, 2015, collectively Philip Morris, Reynolds Tobacco and Lorillard, and (iii) on and after June 12, 2015, Philip Morris and Reynolds Tobacco, along with Imperial Tobacco with respect to those cigarette brands that Imperial Tobacco acquired from Reynolds Tobacco and Lorillard. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Industry Overview." The MSA provides for tobacco companies, other than the OPMs, to become parties to the MSA ("**Subsequent Participating Manufacturers**" or "**SPMs**").

The MSA is an industry-wide settlement of litigation between the OPMs and SPMs (collectively, the "**Participating Manufacturers**" or "**PMs**") and the Settling States, and resolved cigarette smoking-related litigation among the Settling States and the OPMs, released the PMs from past and present smoking-related claims by the Settling States and provides for a continuing release of future smoking-related claims in exchange for certain payments to be made to the Settling States. The MSA also provides for the imposition of certain tobacco advertising and marketing restrictions, among other things. The Authority is not a party to the MSA.

MSA Payments..............................

Under the MSA, the OPMs are required to pay to the Settling States: (i) five initial payments (the "**Initial Payments**") (all of which have been previously made by the OPMs), (ii) annual payments (the "**Annual Payments**"), which are required to be made annually on each April 15, having commenced April 15, 2000, and continuing in perpetuity (subject to adjustment as described herein), and (iii) ten annual payments of $861 million (subject to adjustment as described herein) that were required to be made on each April 15 in the years 2008 through 2017, all of which have been paid (the "**Strategic Contribution Payments**"). SPMs are also required to make Annual Payments in certain circumstances. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Subsequent Participating Manufacturers." Under the MSA, the Commonwealth is entitled to 5.7468588% of the Annual

Payments made by PMs under the MSA (the "**Commonwealth Annual Payments**"). **Only the portion of each Commonwealth Annual Payment that is the Pledged Annual Payment is transferred to the Trustee, as assignee of Authority, and available to the holders of the Bonds.**

The Annual Payments that are due under the MSA (and the Strategic Contribution Payments that were due under the MSA) are subject to numerous adjustments, some of which are material. Such adjustments include reductions when the PMs experience a loss of market share to tobacco companies that do not become part of the MSA ("**Non-Participating Manufacturers**" or "**NPMs**"), as a result of the PMs' participation in the MSA (the "**NPM Adjustment**"). An arbitration panel determined that the Commonwealth and five other states (two of which subsequently joined the NPM Adjustment Settlement Term Sheet) did not diligently enforce their respective Qualifying Statutes (as hereinafter defined) during sales year 2003 and accordingly were subject to the 2003 NPM Adjustment. The Commonwealth and certain other Settling States are currently in arbitration regarding the 2004 NPM Adjustment. If the Commonwealth is again determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute in 2004 or a subsequent sales year, the amount of the NPM Adjustment applied to the Commonwealth following such determination could be as great as the amount of the Commonwealth Annual Payments that were otherwise payable to the Commonwealth relating to such sales year, plus applicable interest, if any. See "BONDHOLDERS' RISKS—Payment Decreases Under the Terms of the MSA," "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments," "—NPM Adjustment Claims—*2003 NPM Adjustment Claims*," "—*2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award*" and "—*Term Sheet Non-Signatories' Ongoing NPM Adjustment Claims*."

Other adjustments to payments due under the MSA include reductions for decreased domestic cigarette shipments, reductions for amounts paid by OPMs to four states which had previously settled their claims against the PMs independently of the MSA, increases related to inflation of not less than 3% each year, and offsets for disputed and/or miscalculated payments, as described herein.

Industry Overview ....

Philip Morris and Reynolds Tobacco (both OPMs) are the largest manufacturers of cigarettes in the United States (based on 2016 market share). The market for cigarettes is highly competitive and is characterized by brand recognition. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY."

As reported by the National Association of Attorneys General ("**NAAG**"), based upon OPM shipments reported to Management Science Associates, Inc., an independent third-party database management organization that collects wholesale shipment data ("**MSAI**"), the OPMs accounted for approximately 84.41%[†] of the U.S. domestic cigarette market in payment

[†] OPMs make payments under the MSA based upon the 0.0325 ounce per cigarette conversion rate, and SPMs make payments under the MSA based upon the 0.09 ounce per cigarette conversion rate. The aggregate market share information is based on information as reported by NAAG and may differ materially from the market share information as reported by the OPMs for purposes of their filings with the Securities and Exchange Commission. See APPENDIX F—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY." The aggregate market share information for sales year 2016 from NAAG used in the Commonwealth Annual Payments Projection Methodology and Assumptions may differ materially in the future from the market share information used by the MSA Auditor in calculating the adjustments to MSA payments

year 2017 (sales year 2016), based upon shipments and measuring roll-your-own cigarettes at 0.0325 ounces per cigarette conversion rate. Also as reported by NAAG, based upon shipments reported to MSAI, the SPMs accounted for approximately 8.72%† of the U.S. domestic cigarette market in payment year 2017 (sales year 2016), based upon shipments and measuring roll-your-own cigarettes at 0.09 ounces per cigarette conversion rate.

Certain information included in this Official Statement has been updated to reflect information from Altria's Form 8-K filed with the SEC on February 1, 2018.

Cigarette Consumption .... As described in the Tobacco Consumption Report (as defined below), domestic cigarette consumption grew dramatically in the 20th century, reaching a peak of 640 billion cigarettes in 1981. Consumption declined in the 1980s, 1990s and 2000s, falling to less than 400 billion cigarettes in 2003 and 264 billion cigarettes in 2014, before increasing slightly to 269 billion cigarettes in 2015 and then decreasing to 259 billion cigarettes in 2016. The Tobacco Consumption Report projects that consumption declines will continue in subsequent years. See "SUMMARY OF THE TOBACCO CONSUMPTION REPORT" and APPENDIX D—"TOBACCO CONSUMPTION REPORT."

Tobacco Consumption Report .... IHS Global Inc. ("**IHS Global**") has prepared a report dated February 13, 2018 on the consumption of cigarettes in the United States from 2017 through 2038 entitled, "*A Forecast of U.S. Cigarette Consumption (2017-2038) for the Commonwealth Financing Authority*" (the "**Tobacco Consumption Report**").

IHS Global's cigarette consumption model is based on historical United States data between 1965 and 2016. In the Tobacco Consumption Report, IHS Global has projected the average annual rate of decline in U.S. cigarette consumption from 2017 through 2038 to be 2.9%, resulting in a forecast of total U.S. cigarette consumption in 2038 to be 134.2 billion cigarettes (a 48% decline from the 2016 level). The projections and forecasts regarding future cigarette consumption included in the Tobacco Consumption Report are estimates which have been prepared on the basis of certain assumptions and hypotheses. No representation or warranty of any kind is or can be made with respect to the accuracy or completeness of, and no representation or warranty should be inferred from, these projections and forecasts. See "SUMMARY OF THE TOBACCO CONSUMPTION REPORT" and APPENDIX D—"TOBACCO CONSUMPTION REPORT." See also "COMMONWEALTH ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS."

Commonwealth Annual Payments Projection Methodology and Bond Structuring Assumptions .... Certain assumptions, forecasts and methodology were used to calculate a forecast of Commonwealth Annual Payments (including forecasts of United States cigarette consumption based on the Tobacco Consumption Report, which report is also based on assumptions) and the anticipated application of certain adjustments and offsets to Annual Payments to be made by the PMs pursuant to the MSA. Once Commonwealth Annual Payments were forecast, certain structuring assumptions for the Series 2018 Bonds were applied. No

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in future years. See "COMMONWEALTH ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS" and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments."

assurance can be given, however, that events will occur in accordance with such assumptions and forecasts. Any deviation from such assumptions and forecasts could materially and adversely affect the payment of the Pledged Annual Payments. See "TABLE OF PROJECTED COMMONWEALTH ANNUAL PAYMENTS AND DEBT SERVICE" and "COMMONWEALTH PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS."

Transfer of Pledged Annual Payments.. Pursuant to Tax Reform Code Article XXVIII and the Transfer Agreement, the Commonwealth will transfer the Pledged Annual Payments to the Authority. In the Transfer Agreement, the Service Agreement and the Indenture, the Authority will assign and pledge the Pledged Annual Payments to the Trustee. Pursuant to Tax Reform Code Article XXVIII, the Transfer Agreement and the Service Agreement, the Commonwealth, acting through the State Treasurer, will transfer all Pledged Annual Payments when received to the Tobacco Revenue Bond Debt Service Account and direct the State Treasurer to transfer such amounts directly to the Trustee as the assignee of the Authority.

Service Agreement .... Pursuant to the Acts, the Commonwealth, acting through the Office, will enter into the Service Agreement to provide additional security for the Bonds, including the Series 2018 Bonds. In the Service Agreement the Commonwealth agrees to pay to the Authority as Service Charges for Bond Payment Obligations, subject to appropriation by the General Assembly: (i) the Pledged Annual Payments, and (ii) Article II Revenues (consisting of revenues from certain sales and hotel occupancy taxes) pledged under Section 2804(c)(1) of the Tax Reform Code and certified by the Secretary under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Payments, which Article II Revenues are set forth in the amounts so certified and payable by the Commonwealth under the Service Agreement. The Commonwealth also agrees in the Service Agreement to pay to the Authority the amount necessary to pay Other Financing Obligations (which include administrative costs of the Trustee and the Authority Administrative Expenses). The Other Financing Obligations are not covered by the continuing appropriations for the Pledged Annual Payments and the Article II Revenues. The Other Financing Obligations must be paid from annual appropriations which the Office will seek pursuant to the Service Agreement.

Service Charges paid by the Commonwealth with respect to Bond Payment Obligations pursuant to the Service Agreement are only available to pay the principal of and interest on the Bonds, including the Series 2018 Bonds. The obligation of the Commonwealth to pay Pledged Annual Payments under the Transfer Agreement and the Service Agreement and other Service Charges under the Service Agreement is subject to and dependent upon appropriations being made by the General Assembly. See "Appropriations" above. There can be no assurance that the General Assembly will make any such appropriations. The Commonwealth, acting through the Office, covenants in the Service Agreement to seek appropriations from the General Assembly in amounts sufficient to make such payments and to cause such appropriations to be paid directly to the Authority or its assignee. So long as Sections 2805 and 2809 of the Tax Reform Code are in effect and provide for payment of Pledged Annual Payments and Article II Revenues, the continuing appropriations contained in Sections 2805 and 2809 of the Tax Reform Code will satisfy such agreement with respect to the Pledged Annual Payments and

Article II Revenues described in clauses (i) and (ii) above. The General Assembly may take legislative action to repeal such continuing appropriations, in which case the Secretary will use his best efforts to request a supplemental appropriation to pay the debt service on the Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS," "SUMMARY OF THE SERVICE AGREEMENT" and APPENDIX B-2 - "FORM OF SERVICE AGREEMENT."

THE SERIES 2018 BONDS SHALL BE LIMITED OBLIGATIONS OF THE AUTHORITY AND SHALL NOT CONSTITUTE NOR GIVE RISE TO ANY CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY. THE SERIES 2018 BONDS SHALL NOT CONSTITUTE A DEBT OR LIABILITY OF, AND SHALL NOT BE PAYABLE BY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS, NOR SHALL THE AUTHORITY BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS EXCEPT FROM THE REVENUES AND FUNDS OF THE AUTHORITY PLEDGED FOR THE PAYMENT THEREOF UNDER THE INDENTURE. THE PAYMENTS MADE BY THE COMMONWEALTH UNDER THE TRANSFER AGREEMENT AND THE SERVICE AGREEMENT SHALL BE SUBJECT TO THE APPROPRIATION OF FUNDS FOR SUCH PURPOSE BY THE GENERAL ASSEMBLY. THERE CAN BE NO ASSURANCE THAT SUCH FUNDS WILL BE APPROPRIATED BY THE COMMONWEALTH AS REQUIRED TO TIMELY MAKE SUCH PAYMENTS. THE AUTHORITY HAS NO TAXING POWER.

Article II Revenues……………….

Tax Reform Code Article XXVIII provides that revenues from Article II of the Tax Reform Code (such revenues are herein referred to as the "**Article II Revenues**") pledged by the Commonwealth in Section 2804 of the Tax Reform Code and certified by the Secretary in the amounts necessary for the payment of principal of and interest on the Bonds shall be deposited in the accounts in amounts determined by the Secretary. Pursuant to the Letter Agreement, the Treasurer is required to transfer Article II Revenues to provide for the payment of any deficiency in Pledged Annual Payments as may be necessary to the pay the principal of and interest on the Bonds.

The Article II Revenues include the Commonwealth's 6% sales tax on goods and services and the 6% hotel occupancy tax but do not include other special sales taxes on specific products such as the cigarette tax and the liquor tax. The Article II Revenues collected in fiscal year 2017 were in the amount of approximately $10.0 billion. Under current law, approximately 6% of such taxes are dedicated to specific programs (which are not programs of the Authority). Article II Revenues are also subject to continuing appropriations to pay debt service on the Existing Program Bonds. The General Assembly may amend, alter or repeal Article II at any time and may alter the rates and subjects of Article II taxes by legislative action. See "PROGRAMS AND OUTSTANDING DEBT OF THE AUTHORITY."

Distributions and Priorities	The Trustee will deposit all Revenues in the Revenue Account and distribute them in accordance with the "Flow of Funds" set forth herein under the caption "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS."
Optional Redemption	The Series 2018 Bonds maturing on or after June 1, 2029 are subject to redemption prior to maturity, at the option of the Authority, in whole or in part, on or at any time after June 1, 2028, at a redemption price of 100% of the principal amount of the Series 2018 Bonds to be redeemed, plus accrued and unpaid interest on the Series 2018 Bonds to be redeemed to the redemption date.
Events of Default	For a description of the Events of Default under the Indenture and the remedies available therefor, see "THE SERIES 2018 BONDS—Events of Default and Remedies." In no event will principal of any Bond be declared due and payable in advance of its stated maturity.
Refunding Bonds	The Indenture provides that additional Bonds may be issued by the Authority solely for refunding purposes. Additional refunding Bonds would be issued on a parity with the Series 2018 Bonds. See "THE SERIES 2018 BONDS—Refunding Bonds." No other additional Bonds may be issued under the Indenture.
Continuing Disclosure Agreement	The Authority and the Commonwealth will agree to provide, or cause to be provided, to the Municipal Securities Rulemaking Board, through its Electronic Municipal Market Access system, pursuant to Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission (the "**SEC**"), certain annual financial information and operating data and, in a timely manner, notices of certain events. See "CONTINUING DISCLOSURE AGREEMENT" and APPENDIX H—"FORM OF CONTINUING DISCLOSURE AGREEMENT" herein.
Ratings	S&P Global Ratings ("**S&P**") has rated the Series 2018 Bonds "A" (stable outlook), Moody's Investors Service, Inc. ("**Moody's**") has rated the Series 2018 Bonds "A1" (stable outlook), and Fitch Ratings ("**Fitch**" and, together with S&P and Moody's, the "**Rating Agencies**") has rated the Series 2018 Bonds "A+" (negative outlook). S&P and Moody's have also assigned the Insured Bonds (the Series 2018 Bonds stated to mature on June 1, 2039) ratings of "AA" (stable outlook) and "A2" (stable outlook), respectively, with the understanding that upon delivery of the Insured Bonds, the policy guaranteeing the payment when due of principal of and interest on the Insured Bonds will be issued by AGM. See "RATINGS" herein. See APPENDIX A—"FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH" and "BONDHOLDERS' RISKS—Pledged Annual Payments and Article II Revenues are Subject to Legislative Appropriation."
Legal Considerations Relating to Pledged Annual Payments	Reference is made to "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS" for a description of certain legal issues relevant to receipt of payments under the MSA.
Bondholders' Risks	Reference is made to "BONDHOLDERS' RISKS" for a description of certain considerations relevant to an investment in the Series 2018 Bonds.

$1,487,170,000
Commonwealth Financing Authority
Tobacco Master Settlement Payment Revenue Bonds, Series 2018

This Official Statement sets forth information concerning the issuance by the Commonwealth Financing Authority of its Tobacco Master Settlement Payment Revenue Bonds, Series 2018, pursuant to the Indenture. Defined terms used herein not otherwise defined below shall have the meanings set forth in the "SUMMARY STATEMENT" and in APPENDIX F—"SUMMARY OF THE INDENTURE."

INTRODUCTORY STATEMENT

The purpose of this Official Statement is to provide certain information concerning the $1,487,170,000 aggregate principal amount of Series 2018 Bonds being issued by the Authority. The Commonwealth experienced a revenue deficit of $1,106,700,308 in General Fund revenue for fiscal year 2016-2017. The General Fund fiscal year revenue shortfall in combination with the structural deficit, increased expenditure needs and increased tax refunds resulted in a significant negative ending balance in the General Fund of approximately $1,539,000,000 for fiscal year 2016-2017 (the "**2016-2017 Deficit**"). In order to protect the health, safety and welfare of the people of the Commonwealth, the Commonwealth intends to use the tobacco settlement proceeds to leverage funding (in the form of the proceeds of the Series 2018 Bonds) to offset the 2016-2017 Deficit. For that purpose, the net proceeds of the Series 2018 Bonds will be deposited in the Commonwealth's General Fund.

The Series 2018 Bonds will be secured by two primary sources: the Pledged Annual Payments deriving from the Commonwealth Annual Payments to be made by the PMs under the MSA, and, if necessary, the Article II Revenues payable by the Commonwealth under the Service Agreement. This Official Statement describes the terms of the Series 2018 Bonds and the two primary sources of security for the Series 2018 Bonds.

COMMONWEALTH FINANCING AUTHORITY

The Authority was established in April 2004 with the enactment of the Authority Act as an independent authority and an instrumentality of the Commonwealth whose purposes are to promote the health, safety, employment, business opportunities, economic activity and general welfare of the Commonwealth and its citizens and to build, improve and finance facilities owned by municipalities and other instrumentalities of the Commonwealth through loans, grants, guarantees, leases, lines and letters of credit and other financing arrangements to benefit both public and private entities. The Authority is authorized under the Authority Act and other statutes to issue its limited obligation revenue bonds and other types of limited obligation revenue financings to provide funding for certain activities of the Commonwealth's economic stimulus and as otherwise authorized, including by Tax Reform Code Article XXVIII. The Authority's bonds and finances are secured by certain revenues and accounts of the Authority, including funds appropriated to the Authority from general revenues of the Commonwealth for repayment of Authority obligations. The Authority has no power to pledge the credit or taxing power of the Commonwealth or any political subdivision thereof. No obligations of the Authority shall be deemed to be obligations of the Commonwealth or any political subdivision thereof. The Authority has no taxing power.

The Authority Act provides that the powers of the Authority shall be exercised by a governing body composed of seven members, consisting of the Secretary of Community and Economic Development or a designee, the Secretary of the Budget or a designee, the Secretary of Banking and Securities or a designee, and four legislative appointees, one of whom shall be appointed by each of the President Pro Tempore of the Senate, the Minority Leader of the Senate, the Speaker of the House of Representatives and the Minority Leader of the House of Representatives. All legislative appointees serve at the pleasure of their respective appointing authorities.

Section 1524(a) of the Authority Act provides that bonds reciting in substance that they have been issued by the Authority to accomplish the public purposes of the Authority Act shall be conclusively deemed in any suit, action or proceeding involving the validity or enforceability of the bonds or their security to have been issued for the public purposes of the Authority Act. Section 1524(a) reads as follows:

> **Presumption.--**Bonds reciting in substance that they have been issued by the authority to accomplish the public purposes of this chapter shall be conclusively deemed in any suit, action or proceeding involving the validity or enforceability of the bonds or their security to have been issued for the public purposes of this chapter.

The Bonds will recite that they have been issued by the Authority to accomplish the public purposes of the Authority under the Acts as provided in Section 1524(a) of the Authority Act and, as a result, pursuant to the Authority Act will be conclusively deemed in any suit, action or proceeding involving the validity or enforceability of the Bonds or their security to have been issued for the public purposes of the Authority Act.

Section 1524(b) of the Authority Act provides that after issuance, bonds shall be conclusively presumed to be fully authorized and issued under the laws of the Commonwealth, and any person shall be estopped from questioning their validity, sale, execution or delivery by the Authority. Section 1524(b) reads as follows:

> **Estoppel.--**After issuance, bonds shall be conclusively presumed to be fully authorized and issued under the laws of this Commonwealth, and any person shall be estopped from questioning their validity, sale, execution or delivery by the authority.

There is nothing in the Authority Act that requires the Authority to satisfy the provisions of Section 1524(a) in order for Section 1524(b) to apply.

Section 1526 of the Authority Act provides, in part, that a pledge of or grant of a security interest in revenues or instruments made by the Authority shall be valid and binding from the time when the pledge is made without any need for recording or filing. Section 1526 reads as follows:

> **Validity of pledge.**-- A pledge of or grant of a security interest in revenues or instruments made by the authority shall be valid and binding from the time when the pledge is made. The revenues, receipts, money, funds or other property or instruments pledged and later received by the authority shall immediately be subject to the lien of the pledge or security interest without any physical delivery of the property pledged or further act. The lien of the pledge or security interest shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the authority irrespective of whether the parties have notice of the lien, pledge or security interest. No instrument by which a pledge or security interest is created, evidenced or noticed need be recorded or filed to perfect the pledge or security interest except in the records of the authority.

In Section 1527(a) of the Authority Act, the Commonwealth pledges to and agrees with each obligee of the Authority that the Commonwealth will not limit or alter the rights and powers vested in the Authority or otherwise created by the Authority Act in any manner that is inconsistent with the obligations of the Authority to bondholders until all bonds are fully paid and discharged. Section 1527(a) reads as follows:

> **Bondholders.--**The Commonwealth pledges to and agrees with each obligee of the authority that the Commonwealth will not limit or alter the rights and powers vested in the authority or otherwise created by this chapter in any manner inconsistent with the obligations of the authority to its obligees until all bonds at any time issued, together with the interest on the bonds, are fully paid and discharged.

PROGRAMS AND OUTSTANDING DEBT OF THE AUTHORITY

The Authority has bonds outstanding under four trust indentures for other, existing programs of the Authority. Each trust indenture separately secures the bonds of a particular program and the programs are as follows:

Original Programs. Under a Trust Indenture dated as of November 1, 2005, as amended and supplemented, between the Authority and The Bank of New York Mellon Trust Company, N.A., as successor trustee, the Authority has $436,585,000 principal amount of bonds outstanding (the "**Original Programs Bonds**"). The proceeds of such

bonds fund several economic stimulus programs authorized under the Authority Act (the "**Original Programs**"). The Authority Act places annual and aggregate limitations on the incurring of debt by the Authority to fund portions of the Original Programs. Such limitations include a fiscal year limitation, which is reduced by the aggregate amount of indebtedness incurred by the Commonwealth for certain water supply and wastewater infrastructure programs, and a provision that no more than an aggregate of $1.135 billion of indebtedness may be incurred by the Authority for all the Original Programs authorized by the Authority Act. With respect to the Original Programs Bonds, the Authority and the Department of Community and Economic Development ("**DCED**") have entered into a Service Agreement dated as of November 1, 2005, as amended and supplemented (the "**Original Programs Service Agreement**"), under which DCED agrees to seek the annual budgeting of and appropriation for the debt service on the Original Programs Bonds.

Alternative Energy Development Program. Under a Trust Indenture dated as of May 1, 2009, as amended and supplemented, between the Authority and The Bank of New York Mellon Trust Company, N.A., as successor trustee, the Authority has $388,950,000 principal amount of bonds outstanding (the "**Alternative Energy Bonds**"). The Alternative Energy Bonds are issued pursuant to the Authority Act and the Alternative Energy Investment Act, 73 P.S. § 1649.101 *et seq.*, as amended (the "**Alternative Energy Act**"). The proceeds of such bonds fund various alternative energy projects authorized under the Alternative Energy Act (the "**Alternative Energy Development Program**"). The Alternative Energy Act provides for the Authority to incur indebtedness in an amount up to $500 million (plus payment of all reasonable costs and expenses related to the issuance of such indebtedness) and for the annual appropriation of up to $40 million per fiscal year through the 2037-2038 fiscal year to pay debt service on such indebtedness. With respect to the Alternative Energy Bonds, the Authority and DCED have entered into a Service Agreement dated as of May 1, 2009, as amended and supplemented (the "**Alternative Energy Service Agreement**"), under which DCED agrees to seek the annual budgeting of and appropriation for the debt service on the Alternative Energy Bonds.

H2O Program. Under a Trust Indenture dated as of November 1, 2009, as amended and supplemented, between the Authority and The Bank of New York Mellon Trust Company, N.A., as successor trustee, the Authority has $676,505,000 principal amount of bonds outstanding (the "**H2O Bonds**"). The H2O Bonds are issued pursuant to the Authority Act, the H2O PA Act, Act of July 9, 2008, P.L. 908, Act 63, 32 P.S. § 694.101 *et seq.*, as amended (the "**H2O Act**") and certain amendments to the Fiscal Code (defined below) contained in the Act of October 9, 2009, P.L. 537, No. 50 ("**Act 2009-50**"). The proceeds of such bonds fund various water, sewer, stormwater and related projects authorized under the H2O Act (the "**H2O Program**"). The H2O Act provides for the Authority to incur indebtedness in an amount up to $800 million. Pursuant to the H2O Act, although not pledged to secure the H2O Bonds, moneys allocated to the Authority from the Pennsylvania Gaming Economic Development and Tourism Fund ("**PA GEDTF Funds**") to the extent not encumbered by the Pennsylvania Gaming Economic Development and Tourism Capital Budget Itemization Act of 2007 (Act of July 25, 2007, P.L. 342, No. 53) have been used as the first source of funds (prior to the Commonwealth's General Fund) to make the required service fee payments under the H2O Service Agreement (defined below). With respect to the H2O Bonds, the Authority and DCED have entered into a Service Agreement dated as of November 1, 2009, as amended and supplemented (the "**H2O Service Agreement**"), under which DCED agrees to seek the annual budgeting of and appropriation for the debt service on the H2O Bonds.

PlanCon Projects Program. Under a Trust Indenture dated as of October 1, 2016, as amended and supplemented, between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee, the Authority has $1,170,705,000 principal amount of bonds outstanding (the "**PlanCon Bonds**"). The PlanCon Bonds are issued pursuant to the provisions of the Authority Act and the provisions of Article XVII-E.2 of the Fiscal Code, which article was added to the Fiscal Code by the Act of April 25, 2016, P.L. 168, No. 25. The proceeds of the PlanCon Bonds are applied to establish a program (the "**PlanCon Projects Program**") to issue up to $2.5 billion principal amount of bonds to provide debt service reimbursements and capital grants from the Commonwealth to school districts as required under Article XXV of the Pennsylvania Public School Code of 1949, as amended. With respect to the PlanCon Bonds, the Pennsylvania Department of Education ("**PDE**") has entered into a service agreement dated as of October 1, 2016, as amended and supplemented (the "**PlanCon Service Agreement**") pursuant to which PDE has agreed to seek the annual budgeting of and appropriation for debt service on the PlanCon Bonds.

The Authority may issue additional bonds from time to time under the indentures described above and may issue additional bonds from time to time for other purposes and programs authorized by the General Assembly under new legislation. All such bonds issued or to be issued by the Authority, except for the Bonds, are referred to herein as

the "**Other Bonds**." The Other Bonds are and will be secured separately from the Bonds under indentures, service agreements and other documents related to such Other Bonds.

The Act of April 9, 1929 (P.L. 343, No. 176), 72 P.S. Section 1 *et seq.* is known as the Fiscal Code (the "**Fiscal Code**"). Section 1753.1-E was added to the Fiscal Code under the Act of July 13, 2016, P.L. 664, No. 85 ("**Fiscal Code Section 1753.1-E**"). Fiscal Code Section 1753.1-E contains continuing appropriations, payable solely from delineated sources as further described below, for the payment of principal of and interest on all the outstanding indebtedness of the Authority coming due in each fiscal year beginning July 1, 2016 or thereafter, including the Existing Program Bonds, but not the Bonds. Fiscal Code Section 1753.1-E does not contain any appropriations for payment of principal and interest on the Bonds.

Fiscal Code Section 1753.1-E establishes a restricted revenue account (the "**CFA Restricted Revenue Account**") within the Commonwealth's General Fund for the purpose of making principal and interest payments coming due in each fiscal year, beginning July 1, 2016, or thereafter, on the Existing Program Bonds. The CFA Restricted Revenue Account is not available to pay debt service on the Bonds.

The State Treasurer, upon consultation with the Secretary, is required by Fiscal Code Section 1753.1-E to transfer from the Article II Revenues to the CFA Restricted Revenue Account such amounts as may be necessary to make the payment for such principal and interest on the Existing Program Bonds. Under the letter agreement dated February 20, 2018 with respect to the Bonds by and among the Authority, the State Treasurer, the Office and the Trustee (the "**Letter Agreement**"), the State Treasurer agrees to make transfers on account of the Bond Payment Obligations on the Bonds to the Tobacco Revenue Bond Debt Service Account created under Article XXVIII of the Tax Reform Code, which is also a restricted account within the General Fund. Under Section 2805(c) of the Tax Reform Code, the Secretary shall determine the transfer amounts of Article II Revenues.

In the event that there are insufficient funds to pay all of the Authority's debt service obligations for its various bond programs, it is unclear how the Article II Revenues would be allocated among the debt related to the various programs. In the case of Article II Revenues, if needed, transfers of amounts of such revenues to the Tobacco Revenue Bond Debt Service Account for the benefit of the Bonds are subject to compliance with the requirements of the Existing Program Bonds Letter Agreement as to the timing of monthly transfers relating to the Existing Program Bonds to the CFA Restricted Revenue Account. Article II Revenues collected by the Commonwealth in the maximum annual amounts certified by the Secretary are, by statute, to supplement Pledged Annual Payments, to pay debt service on the Bonds. In accordance with the Letter Agreement, such Article II Revenues shall, if needed, be subject to transfer to the Tobacco Revenue Bond Debt Service Account to accumulate amounts necessary to pay Bond Payment Obligations by November 15 and May 15 of each year. Such transfers will occur after the monthly transfers on or before the first day of each month of Article II Revenues to the CFA Restricted Revenue Account for Existing Program Bonds issued for the Existing Programs. Such transfers to the CFA Restricted Revenue Account with respect to the Existing Programs and the Existing Program Bonds are made in accordance with the Existing Program Bonds Letter Agreement. If necessary, because the Pledged Annual Payments and Article II Revenues needed to pay principal of and interest on the Bonds are insufficient to do so, the Secretary covenants in the Service Agreement to use his best efforts to request a supplemental appropriation to pay the Bond Payment Obligations on the Bonds.

The Article II Revenues include the Commonwealth's 6% sales tax on goods and services and the 6% hotel occupancy tax but do not include other special sales taxes on specific products such as the cigarette tax and the liquor tax. The Article II Revenues collected in fiscal year 2017 were in the amount of approximately $10.0 billion. Under current law, approximately 6% of such taxes are dedicated to specific programs (which are not programs of the Authority).

Both Fiscal Code Section 1753.1-E and Article II may be amended, modified or repealed at any time by the General Assembly. The General Assembly may also, at any time, dedicate Article II Revenues to other specific programs or to fund other appropriations.

TOBACCO PROGRAM AND TAX REFORM CODE ARTICLE XXVIII

Tax Reform Code Article XXVIII was added to the Tax Reform Code by Act 43 to address the Commonwealth's 2016-2017 Deficit. See "INTRODUCTORY STATEMENT." The purpose set forth in Tax Reform

Code Article XXVIII is referred to herein as the "**Tobacco Program**." **The Tobacco Program is not an ongoing program; it is a one-time initiative and when the Series 2018 Bonds are issued, no other bonds except refunding bonds can be issued for such purpose. The proceeds of the Series 2018 Bonds will fund the entire Tobacco Program.**

Pursuant to the Tax Reform Code Article XXVIII, the Authority is issuing the Series 2018 Bonds, the proceeds of which, except for amounts to fund capitalized interest and issuance costs, will be deposited in the Commonwealth's General Fund to provide General Fund budgetary relief and shall be available for expenditure in accordance with appropriations by the General Assembly. The Authority is issuing the Series 2018 Bonds in a principal amount sufficient to raise net proceeds of no more than $1,500,000,000, as provided by Article XXVIII. The Authority cannot issue any additional bonds under Tax Reform Code Article XXVIII, except refunding bonds. The Authority, at the request of the Secretary, may issue refunding Bonds at any time while Bonds are outstanding, provided that the final maturity of a series of Bonds being refunded shall not be extended. Interest on Bonds may be capitalized for a period not to exceed two years. The term of Bonds may not exceed 30 years.

Pursuant to Tax Reform Code Article XXVIII, Pledged Annual Payments received by the Commonwealth under the MSA are pledged by the Commonwealth in the amounts certified by the Secretary to pay principal and interest on the Bonds. Article II Revenues collected by the Commonwealth in the maximum annual amounts certified by the Secretary are, by statute, to supplement Pledged Annual Payments, to pay debt service on the Bonds. In accordance with the Letter Agreement, such Article II Revenues shall, if needed, be subject to monthly transfer on or before the tenth day of each month to the Tobacco Revenue Bond Debt Service Account described below. Such transfers will occur after the monthly transfers on or before the first day of each month of Article II Revenues to the CFA Restricted Revenue Account (described herein) for bonds (the "**Existing Program Bonds**") issued for the PlanCon Projects Program, the Original Programs, the Alternative Energy Development Program and the H2O Program (collectively, the "**Existing Programs**"). Such transfers to the CFA Restricted Revenue Account with respect to the Existing Programs and the Existing Program Bonds are made in accordance with a letter agreement dated October 6, 2016 among the Authority, the Trustee, the Office, and the Secretaries of Education and of Community and Economic Development (the "**Existing Program Bonds Letter Agreement**"). If necessary because the Pledged Annual Payments and Article II Revenues are insufficient, the Secretary covenants in the Service Agreement to use his best efforts to request a supplemental appropriation to pay the Bond Payment Obligations.

The Pledged Annual Payments and the Article II Revenues, if needed, shall be deposited by the State Treasurer in the Tobacco Revenue Bond Debt Service Account established as a restricted account in the General Fund by Tax Reform Code Article XXVIII, and have the benefit of continuing appropriations of such amounts. The amounts deposited in the Tobacco Revenue Bond Debt Service Account shall be transferred by the State Treasurer to the Trustee for the Bonds and deposited in the Revenue Account under the Indenture and will be applied to pay principal and interest due on the Bonds pursuant to the Indenture.

The Trustee has no lien on the Tobacco Revenue Bond Debt Service Account, a restricted account established in the State Treasury, but the funds in the Tobacco Revenue Bond Debt Service Account may only be transferred to the Trustee, as assignee of the Authority, to be used to pay principal of and interest on the Bonds, and, if necessary, the Trustee (as assignee of the Authority) may bring an action in mandamus against the State Treasurer pursuant to the Transfer Agreement and the Service Agreement to direct the State Treasurer to make the transfers from the Tobacco Revenue Bond Debt Service Account to the Trustee so that the Trustee may pay the principal of and interest on the Bonds.

Pursuant to Tax Reform Code Article XXVIII, the Authority and the Office will enter into the Service Agreement to effectuate the purposes of Tax Reform Code Article XXVIII. The Secretary agrees in the Service Agreement to pay Service Charges to the Authority in each fiscal year that Bonds are outstanding in amounts sufficient to timely pay in full the Bond Payment Obligations and the Other Financing Obligations. The Office's payment of any Service Charges is subject to and dependent upon approval by the Authority and the appropriation of funds by the General Assembly for payment of any Service Charges.

Pledged Annual Payments from the MSA and the Article II Revenues, both as certified by the Secretary, for the payment of principal and interest on the Bonds, are the subject of continuing appropriations by the General Assembly. The General Assembly may take legislative action to repeal such continuing appropriations. If continuing

appropriations are repealed, the Secretary will use his best efforts to request a supplemental appropriation to pay the debt service on the Bonds.

PLAN OF FINANCE

The Authority will transfer a portion of the proceeds of the Series 2018 Bonds to the Commonwealth to be deposited to the General Fund of the Commonwealth to provide General Fund budgetary relief. The General Fund budgetary relief consists of a deposit in the General Fund in the amount of the Commonwealth's General Fund deficit for the 2016-2017 Fiscal Year, and the moneys so deposited shall be available for expenditure in accordance with appropriations by the General Assembly. Proceeds of the Series 2018 Bonds will also be used to pay capitalized interest on the Series 2018 Bonds to June 1, 2019 and to pay costs of issuance of the Series 2018 Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS."

SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS

Set forth below is a narrative description of certain contractual and statutory provisions relating to the sources of payments and security for the Series 2018 Bonds issued under the Indenture. These provisions have been summarized and this description does not purport to be complete. Reference should be made to the Acts, the Indenture, the Transfer Agreement, the Service Agreement and the Letter Agreement for a more complete description of such provisions. Copies of the Acts, the Indenture, the Transfer Agreement, the Service Agreement and the Letter Agreement are on file with the Authority and the Trustee. See also APPENDIX B-1—"FORM OF TRANSFER AGREEMENT," APPENDIX B-2—"FORM OF SERVICE AGREEMENT" and APPENDIX F—"SUMMARY OF THE INDENTURE" for a more complete statement of the rights, duties and obligations of the parties thereto.

The Series 2018 Bonds – Limited Obligations of the Authority

The Series 2018 Bonds are limited obligations of the Authority issued under the Indenture, dated as of February 1, 2018 (the "**Indenture**"), between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "**Trustee**"). The Series 2018 Bonds, together with any additional refunding bonds to be issued under the Indenture (collectively, the "**Bonds**"), are payable from and secured by a pledge of the "**Revenues**," which consist of (i) the Pledged Annual Payments transferred by the Commonwealth to the Authority pursuant to the Transfer Agreement, (ii) Article II Revenues payable by the Commonwealth pursuant to the Service Agreement, and (iii) earnings on all Funds and Accounts held under the Indenture, except for moneys in the Rebate Account. The Revenues and the right to receive them have been pledged to the Trustee for the benefit of the Holders of the Bonds, including the Series 2018 Bonds.

The Series 2018 Bonds shall be limited obligations of the Authority and shall not constitute nor give rise to any charge against the general credit of the Authority. The Series 2018 Bonds shall not constitute a debt or liability of, and shall not be payable by, the Commonwealth or any political subdivision thereof and neither the full faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof is pledged to the payment of the principal of or interest on the Series 2018 Bonds, nor shall the Authority be obligated to pay the principal of or interest on the Series 2018 Bonds except from the revenues and funds of the Authority, including the Revenues, pledged for the payment thereof under the Indenture. The payments made by the Commonwealth under the Transfer Agreement and the Service Agreement shall be subject to the appropriation of funds for such purpose by the General Assembly. There can be no assurance that such funds will be appropriated by the Commonwealth as required to timely make such payments. The Authority has no taxing power.

Appropriations Relating to the Series 2018 Bonds

An appropriation is an authorization for a state agency to expend up to a stated amount of money from a specified state fund for a stated purpose. Appropriations must be enacted into law as provided for in the Pennsylvania Constitution. Most, although not all, of the Commonwealth's appropriations are valid for only one fiscal year. A one fiscal year appropriation is also referred to as an annual appropriation.

A continuing appropriation is an appropriation which is valid for more than one fiscal year. Some continuing appropriations are valid for a stated number of fiscal years, while other continuing appropriations are valid until repealed by the General Assembly. The Pledged Annual Payments and the Article II Revenues payable under the Service Agreement are the subject of continuing appropriations which are valid until (or unless) repealed by the General Assembly. See the description of the continuing appropriations related to the Series 2018 Bonds, set forth under "Sections 2805 and 2809 of the Tax Reform Code" below. The General Assembly may take legislative action to repeal a continuing appropriation such as those provided under Sections 2805 and 2809 of the Tax Reform Code. If such continuing appropriations are repealed, the Secretary will use his best efforts to request a supplemental appropriation to pay the debt service on the Bonds.

Appropriations to the Authority – General

As previously described herein, the Authority operates various bond programs. These Existing Programs each have a number of outstanding bond issues pursuant to trust indentures specific to each program. Each indenture separately secures the bonds of a particular program. See "PROGRAMS AND OUTSTANDING DEBT OF THE AUTHORITY" above.

The Commonwealth's General Fund support of the Authority's debt service obligations has traditionally been made using annual appropriations, except in the case of amounts flowing to the Authority from the Pennsylvania Gaming Economic Development and Tourism Fund, to the extent not encumbered by the Pennsylvania Gaming Economic Development and Tourism Fund Capital Budget Itemization Act of 2007, that are directed to be applied each year to support debt service on bonds issued by the Authority pursuant to the H2O PA Act, as described below, and each annual appropriation has been made through a single line item appropriation for DCED and has not contained a specific allocation among the various debt service obligations for the Authority's respective bond programs.

Under the PlanCon Service Agreement, PDE has agreed to seek the annual budgeting of and appropriation for debt service on the PlanCon Bonds. Under the Alternative Energy Service Agreement, the H2O Service Agreement and the Original Programs Service Agreement, DCED has agreed to seek the annual budgeting of and appropriation for the debt service on the Alternative Energy Bonds, the H2O Bonds and the Original Programs Bonds, respectively.

The PA GEDTF Funds are not specifically pledged as security for any of the Authority's bonds, including bonds issued pursuant to the H2O PA Act. However, PA GEDTF Funds have been used as a source of funds, together with the Commonwealth's General Fund appropriation, to provide payments under the H2O Service Agreement. In the event that PA GEDTF Funds are not received in expected amounts and at the expected quarterly intervals within a particular fiscal year, the Authority and DCED would need to seek a supplemental appropriation to provide for payments required under the H2O Service Agreement (and, while the Authority and DCED have not previously had to seek any such supplemental appropriation, no assurance can be provided that any such appropriation would be timely made).

Debt service on the Series 2018 Bonds will be, and all other outstanding debt of the Authority (including the Existing Program Bonds) is, currently payable pursuant to continuing appropriations. The continuing appropriations in Sections 2805 and 2809 of the Tax Reform Code are only for the benefit of the Bonds. The continuing appropriations in Fiscal Code Section 1753.1-E are for the benefit of all bonds issued by the Authority for the Existing Programs, but not for the Bonds. See "Sections 2805 and 2809 of the Tax Reform Code" below and "PROGRAMS AND OUTSTANDING DEBT OF THE AUTHORITY."

In the event that there are insufficient funds to pay all of the Authority's debt service obligations for its various bond programs, including debt service payments due on the Bonds, it is unclear how the appropriations of Article II Revenues would be allocated among the debt related to the various programs. In the case of Article II Revenues, if needed, transfers of amounts of such revenues to the Tobacco Revenue Bond Debt Service Account for the benefit of the Bonds are subject to compliance with the requirements of the Existing Program Bonds Letter Agreement as to the timing of monthly transfers to the CFA Restricted Revenue Account relating to the bonds issued under the Existing Programs. Article II Revenues collected by the Commonwealth in the maximum annual amounts certified by the Secretary are, by statute, to supplement Pledged Annual Payments, to pay debt service on the Bonds. In accordance with the Letter Agreement, such Article II Revenues shall, if needed, be subject to transfer to the Tobacco Revenue Bond Debt Service Account to accumulate amounts necessary to pay Bond Payment Obligations

by November 15 and May 15 of each year. Such transfers will occur after the monthly transfers on or before the first day of each month of Article II Revenues to the CFA Restricted Revenue Account for Existing Program Bonds issued for the Existing Programs. Such transfers to the CFA Restricted Revenue Account with respect to the Existing Programs and the Existing Program Bonds are made in accordance with the Existing Program Bonds Letter Agreement. If necessary because the Pledged Annual Payments and Article II Revenues needed to pay principal of and interest on the Bonds are insufficient to do so, the Secretary covenants in the Service Agreement to use his best efforts to request a supplemental appropriation to pay the Bond Payment Obligations. See "Administrative Arrangements" below.

The Transfer Agreement

Pursuant to Tax Reform Code Article XXVIII and the Transfer Agreement, the Commonwealth will transfer to the Authority all right, title and interest in the "**Pledged Annual Payments**," consisting of a specified amount of the Commonwealth Annual Payments (as defined herein) payable to the Commonwealth pursuant to the MSA (as defined below) and received on and after April 15, 2019, in the annual amounts required to pay principal of and interest on the Bonds, as certified by the Secretary.[†] The MSA requires that the PMs make Annual Payments. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Annual Payments." The Annual Payments are subject to various adjustments and offsets, some of which could be material.

The Commonwealth, acting through the State Treasurer, will transfer all Pledged Annual Payments to the Tobacco Revenue Bond Debt Service Account and will direct the State Treasurer to transfer such amounts directly to the Trustee as the assignee of the Authority. The Trustee will deposit the Pledged Annual Payments received by it to the Revenue Account established by the Indenture. Pledged Annual Payments will be disbursed from the Revenue Account in accordance with the provisions of the Indenture. See "Flow of Funds" below and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Payments Made to Date."

The Transfer Agreement contains certain representations and covenants of the Commonwealth for the benefit of the holders of the Bonds. See "SUMMARY OF THE TRANSFER AGREEMENT" and APPENDIX B-1—"FORM OF TRANSFER AGREEMENT" for a more detailed discussion of such representations and covenants.

The Service Agreement

The Bonds, including the Series 2018 Bonds, are secured by a pledge of all of the Authority's interest under the Service Agreement, including, without limitation, the Service Charges payable by the Commonwealth thereunder. The Service Agreement provides that the Commonwealth, acting through the Office, will pay or cause to be paid to the Trustee, as assignee of the Authority, as Service Charges for Bond Payment Obligations, subject to appropriation by the General Assembly: (i) the Pledged Annual Payments and (ii) Article II Revenues in the amount, if any, necessary to supplement any deficiency in the Pledged Annual Payment received in a given year. The Commonwealth, acting through the Office, also agrees in the Service Agreement to pay to the Trustee, as assignee of the Authority, the amount necessary to pay Other Financing Obligations (which include administrative costs of the Trustee and the Authority Administrative Expenses). The Other Financing Obligations are not covered by the continuing appropriations for the Pledged Annual Payments and the Article II Revenues. The Other Financing Obligations must be paid from annual appropriations which the Office will seek pursuant to the Service Agreement. The Office covenants to seek appropriations from the General Assembly in amounts sufficient to pay the Service Charges and to cause such appropriations to be paid directly to the Authority or its assignee. So long as Sections 2805 and 2809 of the Tax Reform Code are in effect and provide for payment of Pledged Annual Payments and Article II Revenues, the continuing appropriations contained in Sections 2805 and 2809 of the Tax Reform Code will satisfy such agreement with respect to Pledged Annual Payments and Article II Revenues described in clauses (i) and (ii) above. The Service Agreement also provides that the Commonwealth, acting through the Office, will pay to the Authority, subject to appropriation by the General Assembly, the amount necessary to make the full amount of any payment when due (and

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[†] The MSA also requires that the PMs make several other types of payments, including Initial Payments and Strategic Contribution Payments. Only Annual Payments are available to pay Pledged Annual Payments. The Initial Payments and Strategic Contribution Payments are not transferred by the Commonwealth nor is any payment received by the Commonwealth that represents an adjustment to a prior Strategic Contribution Payment. Certain other payments that are required to be made by the PMs, such as payments of attorneys' fees and payments to a national foundation established pursuant to the MSA, are also not transferred by the Commonwealth.

any cumulative amounts which remain unpaid) on Other Financing Obligations (such payments, together with the Service Charges for Bond Payment Obligations, are referred to herein as the "**Service Charges**").

The Service Agreement provides that the Commonwealth's obligation to make the payments due thereunder is absolute and unconditional, subject to the appropriation of funds for Service Charges by the General Assembly.

In the Service Agreement, the Secretary covenants that, until the Office is no longer obligated to pay the Service Charges under the Service Agreement, and whether or not Sections 2805 and 2809 of the Tax Reform Code provide continuing appropriations for the applicable Service Charges, the Secretary will use his best efforts to cause to be included in the annual budget submitted by the Governor of the Commonwealth to the General Assembly an amount, for payment of the Service Charges when due, equal to the aggregate amount specified in the Service Charge Estimate for the fiscal year covered by such budget request. If such annual budget is not passed by June 30 of such fiscal year, the Secretary covenants to use his best efforts to include Service Charges (or any portion thereof which is not provided for by a continuing appropriation) in a supplemental appropriation unless the Service Charge is payable from a continuing appropriation that remains in full force and effect.

If (a) as of the 30th calendar day preceding the next Service Charge payment date the annual budget of the Commonwealth passed for the then current fiscal year (together with any applicable continuing appropriations) does not contain an appropriation for the full amount of the Service Charges due on such next Service Charge payment date; (b) so long as the continuing appropriations are in effect for Bond Payment Obligations pursuant to Sections 2805 and 2809 of the Tax Reform Code on any Service Charge payment date pursuant to the Service Agreement, there are inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay the full amount of the Service Charges related to Bond Payment Obligations due on such payment date; or (c) at any time, Sections 2805 and 2809 of the Tax Reform Code or the source of Article II Revenues are repealed or modified so that it is reasonably expected that there will be inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay when due in such fiscal year the full amount of any Service Charges related to Bond Payment Obligations; then, in each case, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

In addition, so long as the continuing appropriations for debt service on Bonds in Sections 2805 and 2809 of the Tax Reform Code are in effect, if any deposit into the Tobacco Revenue Bond Debt Service Account required under the Letter Agreement is not made in full within five (5) days of the date when due: (i) the Authority shall immediately inform the Secretary of the failure to make such a deposit; and (ii) if such failure is not cured within thirty (30) days of such notice to the Secretary, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

Notwithstanding the enactment of Sections 2805 and 2809 of the Tax Reform Code, all Service Charges payable by the Office under the Service Agreement (including the Pledged Annual Payments) continue to be subject to appropriation by the General Assembly, and there can be no assurance that funds sufficient to pay such amounts will be appropriated by the General Assembly as required to timely make such payments. No obligations of the Authority shall be deemed to be obligations of the Commonwealth or any political subdivision thereof. The Authority has no taxing power.

For a more detailed discussion of the provisions of the Service Agreement, see "SUMMARY OF THE SERVICE AGREEMENT." The form of Service Agreement is attached hereto as APPENDIX B-2.

Sections 2805 and 2809 of the Tax Reform Code

Sections 2805 and 2809 of the Tax Reform Code established the Tobacco Revenue Bond Debt Service Account as a restricted account in the General Fund and provide that the Pledged Annual Payments from the MSA that are certified by the Secretary under Section 2804 of the Tax Reform Code for the payment of principal of and interest on the Bonds shall not be subject to appropriation under Section 1713-A.1 of the Fiscal Code and shall be deposited in the Tobacco Revenue Bond Debt Service Account. This constitutes continuing appropriations. The

General Assembly may take legislative action to repeal the continuing appropriations under Section 2809 of the Tax Reform Code.

Article II Revenues are pledged under Section 2804(c)(1) of the Tax Reform Code and certified by the Secretary under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Payments for payment of principal and interest on the Bonds.

Administrative Arrangements

The Authority, the Pennsylvania State Treasurer, the Office and the Trustee will enter into the Letter Agreement. The Letter Agreement is not a security agreement and provides only an administrative mechanism for implementing the transfer of the Pledged Annual Payments and Article II Revenues with respect to payment of debt service on the Bonds. The Letter Agreement specifically sets forth the understanding of the parties as to various matters relating to the implementation of Sections 2804 and 2805 of the Tax Reform Code, including, among other things: (i) the provision of annual information to the State Treasurer with respect to scheduled Bond Payment Obligations due during each fiscal year; (ii) the amounts, manner, and requirements for transfers of Pledged Annual Payments and Article II Revenues to the Tobacco Revenue Bond Debt Service Account in order to make timely payments of Bond Payment Obligations and timely satisfy the corresponding Service Charge related to Bond Payment Obligations; and (iii) the procedures by which payments to and from the Tobacco Revenue Bond Debt Service Account shall be made with respect to timely making the payments referenced in clause (ii).

The Letter Agreement provides the following with respect to the transfer of Pledged Annual Payments:

(a) On the Closing Date, the Office shall deliver to the State Treasurer the certificates of the Secretary of the Budget certifying the amounts of Pledged Annual Payments for each Fiscal Year to be deposited in the Tobacco Revenue Bond Debt Service Account and the maximum amounts of Article II Revenues to be deposited in the Tobacco Revenue Bond Debt Service Account in each Fiscal Year to supplement the Pledged Annual Payments received for such Fiscal Year. A "Pledged Annual Payment Subaccount" and an "Article II General Fund Revenue Subaccount" shall be established in the Tobacco Revenue Bond Debt Service Account.

(b) On or before April 15 of each Fiscal Year, commencing with the Fiscal Year ending June 30, 2019, the Office and the Authority shall deliver to the State Treasurer such other information as shall be necessary or appropriate as reasonably determined by the State Treasurer to enable him to timely make the deposits required into the appropriate subaccount of the Tobacco Revenue Bond Debt Service Account, including without limitation, any appropriate requisitions of such transfers.

(c) In each Fiscal Year beginning with the Fiscal Year ending June 30, 2019, within three (3) Business Days of the final receipt and posting to the Tobacco Settlement Fund by the Commonwealth of a Commonwealth Annual Payment, assuming receipt from the Office of the applicable requisition, the State Treasurer shall transfer from the Tobacco Settlement Fund an amount of such Commonwealth Annual Payment equal to the Pledged Annual Payment for that Fiscal Year to the Pledged Annual Payment Subaccount of the Tobacco Revenue Bond Debt Service Account. If the Commonwealth Annual Payment received is less than the Pledged Annual Payment for that Fiscal Year, the State Treasurer shall transfer the entire Commonwealth Annual Payment received to the Pledged Annual Payment Subaccount of the Tobacco Revenue Bond Debt Service Account and shall immediately notify the Office and the Authority of the amount of the deficiency.

(d) The State Treasurer shall transfer the Pledged Annual Payment amount received and deposited in the Pledged Annual Payment Subaccount of the Tobacco Revenue Bond Debt Service Account to the Trustee, as assignee of the Authority, on or before the last Business Day of April of that Fiscal Year, assuming receipt from the Office of the appropriate requisition.

The Letter Agreement provides the following with respect to transfers of Article II Revenues:

(a) For the Fiscal Year beginning July 1, 2019, and each Fiscal Year thereafter so long as any Bonds are Outstanding, Article II Revenues shall be transferred to the Article II General Fund Revenue Subaccount of the

Tobacco Revenue Bond Debt Service Account to provide for the payment of any deficiency in Pledged Annual Payments in the following manner (assuming receipt from the Office of the applicable requisition):

(i) with respect to the interest portion of Bond Payment Obligations due on each December 1 and June 1, commencing with the interest portion due on December 1, 2019, the amount necessary together with the Pledged Annual Payment amount received as provided above, to equal the interest due on such December 1 or June 1 shall, upon receipt by Treasury of appropriate requisition, be transferred to the Article II General Fund Revenue Subaccount of the Tobacco Revenue Bond Debt Service Account so that by November 10 or May 10, respectively, immediately preceding such December 1 or June 1, an amount at least equal to such deficiency in the amount of interest due is on deposit in the Article II General Fund Revenue Subaccount of the Tobacco Revenue Bond Debt Service Account by each November 10 and May 10; and

(ii) with respect to the principal portion of Bond Payment Obligations due on each June 1, commencing June 1, 2020, the amount necessary, together with the amount of the Pledged Annual Payment received as provided above, to equal the principal due on such June l, upon receipt by Treasury of appropriate requisition, shall be transferred to the Article II General Fund Revenue Subaccount of the Tobacco Revenue Bond Debt Service Account so that the amount equal to such deficiency in principal is on deposit in the Tobacco Revenue Bond Debt Service Account by each May 10, commencing May 10, 2020.

(b) In connection with determining the amount of Article II Revenues to be transferred to the Article II General Fund Revenue Subaccount of the Tobacco Revenue Bond Debt Service Account, the transfers made by the State Treasurer, in consultation with the Secretary, shall be adjusted to take account of: (i) compliance with the requirements of the Letter Agreement dated October 6, 2016 among the Authority, the Commonwealth, the Commonwealth Secretaries of Education and of DCED with respect to the timing of transfers of Article II Revenues to the CFA Restricted Revenue Account each month with respect to debt service on bonds issued for the Existing Programs; and (ii) other appropriations made by the Commonwealth for the purpose of paying Bond Payment Obligations (and related Bond Payment Obligation Service Charges).

All payments from the Pledged Annual Payment Subaccount of the Tobacco Revenue Bond Debt Service Account shall be transferred by the State Treasurer to the Trustee, upon receipt by Treasury of appropriate requisition, as assignee of the Authority (and in satisfaction of the related Bond Payment Obligation Service Charges), on or before the last Business Day of April of the Fiscal Year of the deposit in such subaccount, assuming receipt from the Office of the applicable requisition. All payments from the Article II General Fund Revenue Subaccount shall be transferred to the Trustee by November 15 and May 15 of each Fiscal Year the Bonds are Outstanding, commencing November 15, 2019, assuming receipt from the Office of the applicable requisition.

Monies on deposit in the Pledged Annual Payment Subaccount shall be maintained as a cash balance. Monies on deposit in the Article II General Fund Revenue Subaccount shall be invested consistent with the investment restrictions for the Commonwealth's General Fund under applicable law.

The Trustee is explicitly recognized as a third-party beneficiary under the Letter Agreement and the Trustee may (on behalf of the holders of the applicable series of the Bonds) enforce any right, remedy or claim conferred, given or granted therein with respect to the Bonds.

Commonwealth Information

Certain information relating to the Commonwealth is contained in APPENDIX A—"FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH." This information is presented in the format utilized by the Commonwealth when preparing official statements for the offering of Commonwealth general obligation bonds ("**GO Official Statements**") and contains much of the data included in such documents. Tabular material utilizes the same numbering as appears in such GO Official Statements and accordingly the first table in APPENDIX A is numbered "Table 4". Upon issuance, GO Official Statements are available at the Office of the Budget web site under "Bond and Tax Note Sale Information" and at the EMMA web site, each as described in the next paragraph.

As referenced in APPENDIX A, copies of the Commonwealth's Comprehensive Annual Financial Report ("**CAFR**") are available at the Office of the Budget's web site at www.budget.state.pa.us in the Budget & Financial Reports section and from the Secretary. In addition, the Commonwealth has filed such information with the Municipal Securities Rulemaking Board's (the "**MSRB**") Electronic Municipal Market Access System ("**EMMA**"). The Commonwealth's CAFR for its fiscal year ended June 30, 2017 was filed with the MSRB via EMMA on December 18, 2017.

THE AUTHORITY MAKES NO REPRESENTATION AS TO THE ACCURACY OF ANY INFORMATION CONTAINED IN, OR REFERENCED IN, THIS OFFICIAL STATEMENT RELATING TO THE COMMONWEALTH. BECAUSE THE GENERAL CREDIT OF THE AUTHORITY IS NOT PLEDGED TO THE PAYMENT OF THE SERIES 2018 BONDS, NO FINANCIAL INFORMATION OR OPERATING DATA WITH RESPECT TO THE AUTHORITY HAS BEEN INCLUDED IN THIS OFFICIAL STATEMENT.

Revenue Pledge under the Indenture

In order to secure the payment of the principal of and interest on the Bonds issued under the Indenture, the Indenture provides for the assignment, pledge and grant by the Authority to the Trustee of the "**Trust Estate**," which consists of all right, title and interest of the Authority in and to (i) the Pledged Annual Payments; (ii) the Transfer Agreement; (iii) the Service Agreement; (iv) all monies deposited into accounts or funds created by the Indenture and held by the Trustee, other than the Rebate Account; and (v) all investment earnings on monies held in accounts and funds established by the Indenture, other than the Rebate Account. "**Revenues**" consist of the Pledged Annual Payments received by the Trustee from the Transfer Agreement, all amounts payable under the Service Agreement and earnings on all Funds and Accounts under the Indenture, except for moneys in the Rebate Account. See APPENDIX F—"SUMMARY OF THE INDENTURE."

Defeasance

The Indenture provides that upon a defeasance of all Bonds Outstanding under the Indenture and payment of all other sums due thereunder, the pledge of the Trust Estate and all other rights granted by the Indenture shall be discharged and satisfied. See APPENDIX F—"SUMMARY OF THE INDENTURE—Defeasance."

The Budgetary Process

The Commonwealth operates on a fiscal year beginning July 1 and ending June 30. The budget process commences in September, nine months prior to the beginning of the fiscal year, as departments formulate their initial budgets and hold preliminary hearings with the Office of the Budget and other members of the Governor's staff. By November 1, formal budget requests are submitted to the Office of the Budget by all government departments and other institutions requesting appropriations. The Office of the Budget, under the direction of the Secretary, reviews the requests through November and December and may hold formal hearings. The Department of Revenue, in conjunction with the Office of the Budget, prepares revenue estimates.

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 must be appropriated in law before they may be expended. 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.

The operating budget is considered in the form of the General Appropriations Bill and its supplements. The General Appropriations 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 Commonwealth-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 General Assembly may change, eliminate or add amounts and items to the proposed budget submitted by the Governor and there can be no assurance that the budget, as proposed by the Governor, will be enacted into law by June 30. 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 appropriation act prior to July 1 of any fiscal year for that fiscal year, the Pennsylvania Constitution, the laws of the Commonwealth and certain state and federal court decisions provide that the Commonwealth may continue during such periods of an 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.

Continuing appropriations are not part of the annual operating budget, but are taken into account in determining the revenues available for the annual operating budget.

For additional information see APPENDIX A—"FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH—The Budgetary Process."

Historical Appropriation to the Authority

Fiscal Year 2010. The Commonwealth's fiscal year 2010 enacted budget appropriated $65.039 million in funds from the Commonwealth's General Fund to the Authority to be applied toward its debt service obligations during the fiscal year ended June 30, 2010, which amount, with $12.875 million of PA GEDTF Funds transferred to the appropriate trustee for the benefit of the Authority, was sufficient for the Authority to meet its debt service obligations.

Fiscal Year 2011. In preparation for the enactment of the fiscal year 2011 Commonwealth budget, DCED and the Office of the Budget, in compliance with various service agreements, requested an appropriation from the General Assembly in the full amount of the Authority's estimated debt service obligations. The Commonwealth's fiscal year 2011 enacted budget appropriated $76.480 million in funds from the Commonwealth's General Fund to the Authority. The appropriated amount, together with $30.559 million of PA GEDTF Funds, was approximately $3.5 million less than required for the Authority to meet its debt service obligations in the fiscal year ended June 30, 2011. In order to address this shortfall, the Authority applied $3.5 million in available interest earnings ("**Available Interest Earnings**") to its debt service payments.

Fiscal Year 2012. The Commonwealth's fiscal year 2012 enacted budget appropriated $82.019 million in funds from the Commonwealth's General Fund to support the Authority's debt service obligations during the fiscal year ended June 30, 2012, which amount, together with $33.797 million of PA GEDTF Funds, was sufficient for the Authority to meet its debt service obligations.

Fiscal Year 2013. The Commonwealth's fiscal year 2013 enacted budget appropriated $85.519 million in funds from the Commonwealth's General Fund to support the Authority's debt service obligations during the fiscal year ended June 30, 2013, which amount, together with $43.019 million of PA GEDTF Funds, was sufficient for the Authority to meet its debt service obligations.

Fiscal Year 2014. The Commonwealth's fiscal year 2014 enacted budget appropriated $81.667 million in funds from the Commonwealth's General Fund to the Authority to be applied toward its debt service obligations during the fiscal year ended June 30, 2014, which amount, together with $9.516 million of funds from the Pennsylvania Department of Environmental Protection ("**PA DEP Funds**") and $56.701 million of PA GEDTF Funds, was sufficient for the Authority to meet its debt service obligations in fiscal year 2014.

Fiscal Year 2015. In preparation for the enactment of the fiscal year 2015 Commonwealth budget, DCED and the Office of the Budget, in compliance with various service agreements, requested an appropriation from the General Assembly in the full amount of the Authority's estimated debt service obligations. The Commonwealth's fiscal year 2015 enacted budget appropriated $77.755 million in funds from the Commonwealth's General Fund to the Authority. The appropriated amount, together with $8.672 million of PA DEP Funds and $56.577 million of PA GEDTF Funds was approximately $4.749 million less than required for the Authority to meet its debt service obligations during the 2015 fiscal year. In order to address this shortfall, the Authority's Board authorized the application of approximately $4.749 million in Available Interest Earnings to its debt service payments sufficient to meet debt service. However, rather than so applying the Available Interest Earnings, the Authority ultimately addressed the approximately $4.749 million shortfall by applying interest cost savings realized from the issuance of its $196,190,000 Revenue Bonds, Series 2015 (the "Series 2015 Bonds"), the proceeds of which were used to refund certain prior Original Programs Bonds.

Fiscal Year 2016. On March 28, 2016, the balance of the Commonwealth's fiscal year 2016 budget was enacted without the Governor's signature, and appropriated $88.812 million in funds from the Commonwealth's General Fund to the Authority. The appropriated amount, together with $6.810 million of PA DEP Funds, and $56.437 million of PA GEDTF Funds, was sufficient for the Authority to meet debt service in fiscal year 2016. The failure of the Commonwealth to adopt a budget for the 2016 fiscal year by July 1, 2015 as required by law did not affect the ability of the Authority to meet its debt service obligations in fiscal year 2016, as monies available during the budget impasse were used to meet its debt service obligations.

Fiscal Year 2017. The legislature approved the passage of a $31.5 billion budget for the fiscal year 2017 on July 1, 2016. The budget was sent to the Governor who did not sign or veto the bill, allowing it to become law on July 11, 2016. On July 13, 2016 the legislature approved, and the Governor signed into law, a $1.3 billion revenue package which balanced the fiscal year 2017 budget. Included in such budget was an appropriation of $95.614 million in funds from the Commonwealth's General Fund to the Authority, which, together $56.28 million of PA GEDTF Funds, was sufficient for the Authority to meet debt service in fiscal year 2017.

Fiscal Year 2018. The Commonwealth's fiscal year 2018 budget was passed by the legislature and sent to the Governor who did not sign or veto the spending bill that was delivered to him, allowing it to become law, and, accordingly, the fiscal year 2018 budget became effective as of July 11, 2017. Included in such budget was an appropriation of $126.401 million in funds from the Commonwealth's General Fund to the Authority. The appropriated amount, together $56.102 million of PA GEDTF Funds, is expected to be sufficient for the Authority to meet debt service in fiscal year 2018.

The appropriations referred to in the foregoing discussions pertaining to fiscal year 2017 and fiscal year 2018 are continuing appropriations. See "Appropriations Relating to the Series 2018 Bonds," above.

The Commonwealth enacted legislation simultaneously with the enactment of each of the Commonwealth's fiscal year 2014, 2015 and 2016 budgets to require the transfer of PA DEP Funds, which were unexpended proceeds

of previously issued Alternative Energy Bonds, from the Pennsylvania Department of Environmental Protection to the Authority to be applied to support debt service on Alternative Energy Bonds. PA DEP Funds are not specifically pledged as security for the Authority's debt. All such PA DEP Funds were expended by the end of Fiscal Year 2016 and therefore none were available for use in Fiscal Year 2017 and none are anticipated to be available for use in the current or in any future fiscal year.

With respect to future fiscal year budgets, DCED under the Original Programs Service Agreement, the H2O Service Agreement and the Energy Service Agreement, PDE under the PlanCon Service Agreement, and the Office under the Service Agreement are required (a) to provide the State Treasurer and the Secretary with all required information so that the State Treasurer transfers the appropriate monies to the Authority (or to the appropriate bond trustees) for the payment of its debt service on the PlanCon Bonds, the H2O Bonds, the Original Programs Bonds and the Alternative Energy Bonds and the Bonds, consistent with Fiscal Code Section 1753.1-E and Sections 2805 and 2809 of the Tax Reform Code, and (b) to request an annual appropriation in an aggregate amount sufficient to pay debt service on the applicable series of the Authority's bonds, to pay financing facility payment obligations (for example, to credit enhancers or swap counterparties) with respect to the related bonds, to make up debt service reserve fund deficiencies with respect to the related bonds, to make required deposits in the rebate fund for the related bonds, to pay the Authority's administrative expenses and to pay the administrative fees and expenses of the trustee for the related bonds.

Notwithstanding the enactment of Sections 2805 and 2809 of the Tax Reform Code, such sums payable by the Office as the service fees under the Service Agreement, and notwithstanding the enactment of Fiscal Code Section 1753.1-E, such sums payable by DCED as the service fees under the Original Programs Service Agreement, the H2O Service Agreement and the Alternative Energy Service Agreement and by PDE under the PlanCon Service Agreement, continue to be subject to appropriation by the General Assembly, and there can be no assurance that funds sufficient to pay such service fees will be appropriated by the Commonwealth as required to timely make such payments. No obligations of the Authority shall be deemed to be obligations of the Commonwealth or any political subdivision thereof. The Authority has no taxing power.

In certain recent years the Commonwealth has experienced prolonged budget stalemates which resulted in the related fiscal year budgets being adopted after July 1 of the fiscal year as required by law. So long as the continuing appropriations in Section 2805 and 2809 of the Tax Reform Code and in Fiscal Code Section 1753.1-E remain in effect, and sufficient revenues are deposited in the Tobacco Revenue Bond Debt Service Account and the CFA Restricted Revenue Account, respectively, the Authority expects to be able to pay debt service on all of its outstanding debt if a Commonwealth budget is not timely enacted for a fiscal year. See "Sections 2805 and 2809 of the Tax Reform Code" above.

Refunding Bonds

Once the Series 2018 Bonds are issued, the Authority may issue additional Bonds under the Indenture only to refund Bonds. Refunding Bonds will be secured on a parity with the Series 2018 Bonds. See "TOBACCO PROGRAM AND TAX REFORM CODE ARTICLE XXVIII" above.

Accounts

Each of the following accounts is established under the Indenture as a segregated trust account and are held by the Trustee for the benefit of the holders of the Bonds, including the Series 2018 Bonds (other than the Rebate Account) (the "**Pledged Accounts**"). All moneys on deposit in the following accounts will be invested in Eligible Investments as defined in the Indenture.

Revenue Account. The Trustee holds the "**Revenue Account**" into which the Trustee deposits all Revenues. Funds on deposit in the Revenue Account are transferred to various other accounts under the Indenture and applied to certain other purposes as described below.

Debt Service Account. The Trustee holds the "**Debt Service Account**" and within the Debt Service Account the Pledged Annual Payments/Master Settlement Subaccount, the Pledged Article II Revenues/Other Appropriated

Funds Subaccount and the Capitalized Interest Subaccount, into which the Trustee deposits amounts (as described below under "Flow of Funds") transferred from the Revenue Account in respect of principal of and interest on the Bonds, including the Series 2018 Bonds. The Trustee makes payments on the Bonds, including the Series 2018 Bonds, in accordance with the priority of the deposits and transfers as described below under "Flow of Funds."

Other Financing Obligations Account. The Trustee holds the "**Other Financing Obligations Account**" into which the Trustee deposits amounts transferred from the Surplus Account to pay Other Financing Obligations in accordance with the priority of payments as described below under "Flow of Funds."

Costs of Issuance Account. The Trustee holds the "**Costs of Issuance Account**" into which the Trustee shall deposit amounts funded from the proceeds of Series 2018 Bonds and disburse such amounts for the Costs of Issuance for the Series 2018 Bonds. Any money or investments held in the Costs of Issuance Account for more than 180 days shall be transferred to the Debt Service Account and be used to pay interest on the Bonds on the next succeeding Payment Date.

Surplus Account. The Trustee holds the "**Surplus Account**" into which the Trustee deposits the Surplus Revenues, which are those Revenues, other than Pledged Annual Payments and Article II Revenues, in excess of those required to make the deposits required by clauses (i) and (ii) of paragraph (A) set forth below under "Flow of Funds." Amounts on deposit in the Surplus Account will be applied to pay Trustee fees and expenses and Other Financing Obligations.

Rebate Account. The Trustee holds the "**Rebate Account**" into which the Trustee will deposit amounts to the extent required to satisfy the Rebate Requirement (as defined, computed and provided to the Trustee in accordance with the Tax Certificate), for payment to the United States Treasury. The Rebate Account is not a Pledged Account and is not pledged for the benefit of the holders of the Bonds and amounts on deposit therein are not available to pay principal of and interest on the Bonds.

Flow of Funds

The Trustee will deposit all Revenues received by it pursuant to the Transfer Agreement or the Service Agreement to the Revenue Account.

(A) Not later than five Business Days following each deposit of Revenues to the Revenue Account (but in no event later than the next Payment Date), the Trustee will withdraw Revenues on deposit in the Revenue Account and transfer such amounts as follows and in the following order of priority:

(i) to the Pledged Annual Payments/Master Settlement Subaccount of the Debt Service Account, an amount equal to the Pledged Annual Payments or moneys received under the MSA which have been appropriated by the General Assembly;

(ii) to the Pledged Article II Revenues/Other Appropriated Funds Subaccount of the Debt Service Account, amounts constituting Pledged Article II Revenues or funds, other than moneys received under the MSA, which have been appropriated by the General Assembly for the payment of debt service; and

(iii) to the Surplus Account, the Surplus Revenues.

(B) Not later than five Business Days following each deposit of Surplus Revenues to the Surplus Account pursuant to paragraph (A)(iii) above (but in no event later than the next Payment Date), the Trustee will withdraw Surplus Revenues from the Surplus Account and transfer such amounts as follows and in the following order of priority:

(i) to the Other Financing Obligations Account, the amount required to pay Trustee fees and expenses (including reasonable attorney's fees, if applicable) reasonably expected to be due during the next Fiscal Year; and

(ii) to the Other Financing Obligations Account, the amount set forth in an Officer's Certificate necessary to pay Other Financing Obligations then due and payable or reasonably expected to be due during the next Fiscal Year.

(C) The Trustee will apply amounts in the various subaccounts of the Debt Service Account in the following order of priority:

(i) from the Capitalized Interest Subaccount, on each Payment Date to and including June 1, 2019, to pay interest on the Bonds;

(ii) on each Payment Date, from and after December 1, 2019, first from the Pledged Annual Payments/Master Settlement Subaccount and thereafter, if necessary, from the Pledged Article II Revenues/Other Appropriated Funds Subaccount, to pay interest on the Outstanding Bonds due on such Payment Date;

(iii) on each Payment Date, from and after December 1, 2019, first from the Pledged Annual Payments/Master Settlement Subaccount and thereafter, if necessary, from the Pledged Article II Revenues/Other Appropriated Funds Subaccount, to pay in order of Maturity Dates and Sinking Fund Installment Dates, the principal and Sinking Fund Installments due on such Payment Date; and

(iv) from the Other Financing Obligations Account, as and when moneys are transferred thereto, to the parties entitled thereto (or to the Rebate Account), the Trustee's fees and expenses and the Other Financing Obligations set forth in clauses (B)(i) and (ii) above.

THE SERIES 2018 BONDS

The following summary describes certain terms of the Series 2018 Bonds. This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the Indenture and the Series 2018 Bonds. Copies of the Indenture may be obtained upon written request to the Trustee.

Description of the Series 2018 Bonds

The Series 2018 Bonds will initially be represented by one or more bond certificates registered in the name of The Depository Trust Company or its nominee ("**DTC**"), New York, New York. DTC will act as securities depository for the Series 2018 Bonds. The Series 2018 Bonds will be available for purchase in denominations of $5,000 or any integral multiple thereof, in book-entry only form. Except under the limited circumstances described herein, no Beneficial Owner of the Series 2018 Bonds will be entitled to receive a physical certificate representing its ownership interest in such Series 2018 Bonds. See "BOOK-ENTRY ONLY SYSTEM" herein.

The Series 2018 Bonds will be issued pursuant to the Acts and the Indenture, will be dated as of the Closing Date and will mature at the times and in the aggregate principal amounts set forth on the inside front cover hereof. Interest on the Series 2018 Bonds will be payable on each Payment Date, commencing on June 1, 2018. For each Payment Date, payments that are to be made on the Series 2018 Bonds will be made to holders of the Series 2018 Bonds of record (the "**Series 2018 Bondholders**") as of the applicable Record Date.

Interest will accrue from and including the Closing Date, or from and including the most recent Payment Date on which interest has been paid to, but excluding, the subsequent Payment Date. Interest on the Series 2018 Bonds will be computed on the basis of a 360-day year consisting of twelve 30-day months.

Redemption Provisions

Optional Redemption

The Series 2018 Bonds maturing on or after June 1, 2029 are subject to redemption prior to maturity, at the option of the Authority, in whole or in part, on or at any time after June 1, 2028, at a redemption price of 100% of the principal amount of the Series 2018 Bonds to be redeemed, plus accrued and unpaid interest on the Series 2018 Bonds to be redeemed to the redemption date.

Mandatory Sinking Fund Redemption

The Series 2018 Bonds stated to mature on June 1, 2039 are subject to mandatory sinking fund redemption prior to maturity in part by lot, on June 1 of the years set forth below, in the respective principal amounts listed opposite each such year, at a redemption price equal to 100% of the principal amount to be redeemed, plus accrued interest to the redemption date.

Year	Principal Amount
2036	$98,590,000
2037	102,535,000
2038	106,635,000
2039*	110,900,000

*Maturity

Notice of Redemption

Notice of redemption for the Bonds shall be mailed by first-class mail by the Trustee, not less than 20 (or such lesser number of days as permitted by DTC) prior to the date fixed for redemption, to the Rating Agencies, if any, then rating the Bonds, and to the respective holders of any Bonds designated for redemption at their addresses appearing on the bond registration books of the Trustee. Each such notice also shall state that on said date there will become due and payable on each of said Bonds the Redemption Price thereof or of said specified portion of the principal amount thereof in the case of a Bond to be redeemed in part only, together with interest accrued thereon to the date fixed for redemption, and that from and after such date, upon the deposit of the amounts required for such redemption, interest on such Bond shall cease to accrue, and shall require that such Bonds be then surrendered at the address or addresses of the Trustee or its agent specified in the redemption notice.

Any notice of optional redemption may be conditioned upon the deposit of monies with the Trustee sufficient to effect such redemption. If the required deposit is not made in a timely manner to effect the redemption, the Trustee shall give notice that such deposit was not made, as soon thereafter as practicable, in the same manner, to the same persons, as notice of such redemption was given.

Refunding Bonds

The Authority may authorize, issue, sell and deliver Bonds from time to time in such principal amounts as the Authority may determine but solely to refund Bonds, by exchange, purchase, redemption or payment. The final maturity of a series of Bonds being refunded shall not be extended.

Events of Default and Remedies

Events of Default

The Indenture provides that each of the following shall be an "**Event of Default**" thereunder:

(i) principal or Sinking Fund Installments (if any) of or interest on any Bond has not been paid when due (a "**Payment Default**");

(ii) any Other Financing Obligations have not been paid when due;

(iii) the Authority fails to observe or perform any other provision of the Indenture, which failure is not remedied within 60 days after written notice thereof has been given to the Authority by the Trustee or to the Authority and the Trustee by the holders of at least 25% of the principal amount of the Outstanding Bonds, provided that if the default cannot be corrected within the said 60-day period and is diligently pursued until corrected, it shall not constitute an Event of Default if corrective action is instituted by the Authority within said 60-day period and diligently pursued until the default is corrected;

(iv) the Transfer Agreement or the Service Agreement for any reason ceases to be valid and binding or is declared to be null and void as a result of an act of the General Assembly or a final, non-appealable judgment or order of a court or governmental agency or authority having jurisdiction over the Office or in a judicial proceeding or any other official action commenced by the Office results in a non-applicable judgment or order of court declaring the Transfer Agreement or the Service Agreement null and void or unenforceable or the validity or enforceability of the Transfer Agreement or the Service Agreement is contested by the Office or the Office denies that it has any or further liability or obligation under the Transfer Agreement or the Service Agreement; or

(v) bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of debtors, are instituted by or against the Authority and, if instituted against the Authority, are not dismissed within 60 days after such institution.

Any failure by the General Assembly to appropriate funds (including any continuing appropriation which remains in effect) for any fiscal year in the amount required for the Office to meet its obligations under the Service Agreement (an "**Event of Non-Appropriation**") will not constitute an Event of Default.

Remedies

If an Event of Default occurs the Trustee may, and upon written request of the holders of 25% in principal amount of the Bonds Outstanding shall, in its own name by action or proceeding in accordance with the law:

(i) by an action in mandamus, or otherwise, enforce all rights of the holders and require the Authority or, to the extent permitted by law, the Office to carry out its agreements with the holders and to perform its duties under the Transfer Agreement and the Service Agreement;

(ii) sue upon such Bonds;

(iii) require the Authority to account as if it were the trustee of an express trust for the holders of such Bonds; and

(iv) enjoin any acts or things which may be unlawful or in violation of the rights of the holders of such Bonds.

In no event shall the outstanding principal of any Bond be accelerated and declared due and payable in advance of its stated maturity.

BOOK-ENTRY ONLY SYSTEM

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Series 2018 Bonds. The Series 2018 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 the Series 2018 Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("**Direct Participants**") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("**DTCC**"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. 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 the Series 2018 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2018 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2018 Bond ("**Beneficial Owner**") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2018 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 the Series 2018 Bonds, except in the event that use of the book-entry system for the Series 2018 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2018 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2018 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 Series 2018 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2018 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 and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Series 2018 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2018 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. For example, Beneficial Owners of Series 2018 Bonds may wish to ascertain

that the nominee holding the Series 2018 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2018 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 any other DTC nominee) will consent or vote with respect to Series 2018 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2018 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

NONE OF THE AUTHORITY, THE TRUSTEE OR ANY UNDERWRITER (OTHER THAN IN ITS CAPACITY, IF ANY, AS A DIRECT PARTICIPANT OR INDIRECT PARTICIPANT) WILL HAVE ANY OBLIGATION TO DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO DTC'S PROCEDURES OR ANY PROCEDURES OR ARRANGEMENTS BETWEEN DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS AND THE PERSONS FOR WHOM THEY ACT RELATING TO THE MAKING OF ANY DEMAND BY CEDE & CO. AS THE REGISTERED OWNER OF THE SERIES 2018 BONDS, THE ADHERENCE TO SUCH PROCEDURES OR ARRANGEMENTS OR THE EFFECTIVENESS OF ANY ACTION TAKEN PURSUANT TO SUCH PROCEDURES OR ARRANGEMENTS.

Payments of principal of, premium, if any, and interest on the Series 2018 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, its nominee, the Trustee or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments of principal of, premium, if any, and interest on the Series 2018 Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

So long as Cede & Co. is the registered owner of the Series 2018 Bonds, as nominee for DTC, references in this Official Statement to Bondholders or registered owners of the Series 2018 Bonds (other than under the caption "TAX MATTERS" herein) shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Series 2018 Bonds.

As long as the book-entry system is used for the Series 2018 Bonds, the Trustee and the Authority will give any notice required to be given to Bondholders only to DTC or its nominee. Any failure of DTC to advise any Direct Participant, or of any Direct Participant to notify any Indirect Participant, or of any Direct Participant or Indirect Participant to notify any Beneficial Owner, of any such notice and its content or effect will not affect any action premised on such notice. 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 SHOULD MAKE APPROPRIATE ARRANGEMENTS WITH THEIR BROKER OR DEALER TO RECEIVE NOTICES AND OTHER INFORMATION REGARDING THE SERIES 2018 BONDS THAT MAY BE SO CONVEYED TO DIRECT PARTICIPANTS AND INDIRECT PARTICIPANTS.

For every transfer and exchange of a beneficial ownership interest in the Series 2018 Bonds, the Beneficial Owner may be charged a sum sufficient to cover any tax, fee or other governmental charge, that may be imposed in relation thereto.

DTC may discontinue providing its services as depository with respect to the Series 2018 Bonds at any time by giving reasonable notice to the Authority or Trustee. Under such circumstances, in the event that a successor depository is not obtained, Series 2018 Bond are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Series 2018 Bond certificates will be printed and delivered.

THE ABOVE INFORMATION CONCERNING DTC AND DTC'S BOOK-ENTRY SYSTEM HAS BEEN OBTAINED FROM SOURCES THAT THE AUTHORITY BELIEVES TO BE RELIABLE, BUT THE AUTHORITY TAKES NO RESPONSIBILITY FOR THE ACCURACY THEREOF. NEITHER THE AUTHORITY, THE COMMONWEALTH NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DIRECT OR INDIRECT PARTICIPANTS, BENEFICIAL OWNERS OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS FOR (1) SENDING TRANSACTION STATEMENTS; (2) MAINTAINING, SUPERVISING OR REVIEWING, OR THE ACCURACY OF, ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS; (3) PAYMENT OR THE TIMELINESS OF PAYMENT BY DTC TO ANY DIRECT OR INDIRECT PARTICIPANT, OR BY ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNER, OF ANY AMOUNT DUE IN RESPECT OF THE PRINCIPAL OR INTEREST ON THE SERIES 2018 BONDS; (4) DELIVERY OR TIMELY DELIVERY BY DTC TO ANY DIRECT OR INDIRECT PARTICIPANT, OR BY ANY DIRECT OR INDIRECT PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNERS, OF ANY NOTICE OR OTHER COMMUNICATION WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE INDENTURE TO BE GIVEN TO OWNERS OF THE SERIES 2018 BONDS; OR (5) ANY ACTION TAKEN BY DTC OR ITS NOMINEE AS THE REGISTERED OWNER OF SERIES 2018 BONDS.

None of the Authority, the Commonwealth, the Trustee or the Underwriters can give any assurance that DTC or Direct and Indirect Participants will distribute payments of principal, premium or interest on the Series 2018 Bonds paid to DTC or its nominee, or send any notice, to the Beneficial Owners, or that they will do so in a timely manner or that DTC will act in the manner described in this Official Statement.

BOND INSURANCE

Bond Insurance Policy

Concurrently with the issuance of the Series 2018 Bonds, Assured Guaranty Municipal Corp. ("**AGM**") will issue its Municipal Bond Insurance Policy (the "**Policy**") for the Series 2018 Bonds maturing on June 1, 2039 (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 Appendix I 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, "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A2" (stable outlook) by 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 January 23, 2018, KBRA issued a financial guaranty surveillance report in which it 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 issued a research update report in which it 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.

On August 8, 2016, Moody's published a credit opinion affirming its existing insurance financial strength rating of "A2" (stable outlook) on AGM. AGM can give no assurance as to any further ratings action that Moody's 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, 2016.

Capitalization of AGM

At September 30, 2017:

- The policyholders' surplus of AGM was approximately $2,322 million.

- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("**MAC**") (as described below) were approximately $1,371 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 $1,681 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 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, 2016 (filed by AGL with the SEC on February 24, 2017);

(ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2017 (filed by AGL with the SEC on May 5, 2017);

(iii) the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2017 (filed by AGL with the SEC on August 3, 2017); and

(iv) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2017 (filed by AGL with the SEC on November 3, 2017).

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 Series 2018 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 Series 2018 Bonds or the advisability of investing in the Series 2018 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 in APPENDIX I -- "SPECIMEN MUNICIPAL BOND INSURANCE POLICY."

ESTIMATED SOURCES AND USES OF FUNDS

The expected sources and uses of funds of the Series 2018 Bonds is set forth below:

Sources of Funds

Principal Amount of Series 2018 Bonds	$1,487,170,000.00
Net Original Issue Premium on Series 2018 Bonds	115,258,732.85
Total Sources	$1,602,428,732.85

Uses of Funds

Deposit to Commonwealth General Fund	$1,500,000,000.00
Capitalized Interest on the Series 2018 Bonds	89,859,016.39
Costs of Issuance*	2,342,799.89
Underwriters' Discount	6,548,321.46
Bond Insurance Premium	3,678,595.11
Total Uses	$1,602,428,732.85

* Includes legal fees, financial advisory fees, IHS Global fees, printing costs, rating agency fees and certain other expenses related to the issuance of the Series 2018 Bonds.

TABLE OF PROJECTED COMMONWEALTH ANNUAL PAYMENTS AND DEBT SERVICE

Series 2018 Bonds

The following table sets forth (i) the estimated amounts required to be paid by the Authority during each calendar year of the years shown for the payment of debt service on the Series 2018 Bonds, (ii) the projected amount of estimated Commonwealth Annual Payments, which projection has been calculated based on the Tobacco Consumption Forecast (as hereinafter defined) and other structuring assumptions and (iii) the projected debt service coverage. No assurances can be given that the Commonwealth Annual Payments will be received in the amounts projected using the Tobacco Consumption Forecast and other structuring assumptions. See "SUMMARY OF COMMONWEALTH ANNUAL PAYMENTS METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS" for the structuring assumptions used to calculate the projected amount of Commonwealth Annual Payments.

Projected Commonwealth Annual Payments and Series 2018 Bond Debt Service and Debt Service Coverage

MSA Payment Year (April)	Projected Commonwealth Annual Payments[1]	Commonwealth Fiscal Year (June 30)	Series 2018 Bond Debt Service Principal (June 1)	Interest (December 1 and June 1)	Capitalized Interest	Net Bond Debt Service	Bond Debt Service Coverage [2]
2017	$ -	2018	$-	$19,687,116	$(19,687,116)	$-	N/A
2018	401,833,985	2019	-	70,171,900	(70,171,900)	-	N/A
2019	399,775,939	2020	45,165,000	70,171,900		115,336,900	3.47x
2020	398,031,599	2021	47,425,000	67,913,650		115,338,650	3.45x
2021	396,842,310	2022	49,795,000	65,542,400		115,337,400	3.44x
2022	395,984,452	2023	52,285,000	63,052,650		115,337,650	3.43x
2023	395,692,980	2024	54,900,000	60,438,400		115,338,400	3.43x
2024	395,905,524	2025	57,645,000	57,693,400		115,338,400	3.43x
2025	396,657,997	2026	60,525,000	54,811,150		115,336,150	3.44x
2026	397,835,455	2027	63,555,000	51,784,900		115,339,900	3.45x
2027	399,304,126	2028	66,730,000	48,607,150		115,337,150	3.46x
2028	400,950,942	2029	70,070,000	45,270,650		115,340,650	3.48x
2029	402,631,038	2030	73,570,000	41,767,150		115,337,150	3.49x
2030	404,279,508	2031	77,250,000	38,088,650		115,338,650	3.51x
2031	405,927,604	2032	81,110,000	34,226,150		115,336,150	3.52x
2032	407,609,320	2033	85,165,000	30,170,650		115,335,650	3.53x
2033	409,322,704	2034	89,425,000	25,912,400		115,337,400	3.55x
2034	410,789,207	2035	93,895,000	21,441,150		115,336,150	3.56x
2035	412,203,198	2036	98,590,000	16,746,400		115,336,400	3.57x
2036	413,614,753	2037	102,535,000	12,802,800		115,337,800	3.59x
2037	414,952,170	2038	106,635,000	8,701,400		115,336,400	3.60x
2038	416,249,564	2039	110,900,000	4,436,000		115,336,000	3.61x
Total	$8,476,394,372		$1,487,170,000	$909,438,016	($89,859,016)	$2,306,749,000	

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(1) Based on application of the Commonwealth Annual Payments Projection Methodology and Assumptions (including forecasts for cigarette consumption prepared by IHS Global) described in "COMMONWEALTH ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS" herein. Totals may not add due to rounding.
(2) Bond Debt Service Coverage equals Projected Commonwealth Annual Payments divided by Net Bond Debt Service.

The Bonds are further secured under the Indenture by a pledge of all of the Authority's interest under the Service Agreement (except for the Authority's right to payment of its Administrative Expenses), including, without limitation, the Service Charges for Bond Payment Obligations payable by the Commonwealth thereunder. The Commonwealth's obligation to pay all Bond Service Charges (including the Pledged Annual Payments) under the Service Agreement is subject to and dependent upon appropriation by the General Assembly. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS—The Transfer Agreement" and "SUMMARY OF THE SERVICE AGREEMENT."

SUMMARY OF THE TRANSFER AGREEMENT

Terms used herein and not previously defined have the meanings ascribed to them in the Transfer Agreement. The following summary describes certain terms of the Transfer Agreement. This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the Transfer Agreement. See APPENDIX B-1—"FORM OF TRANSFER AGREEMENT."

Conveyance of Pledged Annual Payments

Pursuant to the terms of the Transfer Agreement, the Commonwealth will transfer, set over and convey to the Authority, as of the Closing Date, without recourse (subject to certain continuing obligations in the Transfer Agreement), all of the right, title and interest of the Commonwealth on the Closing Date in and to the Pledged Annual Payments (when transferred to the Tobacco Revenue Bond Debt Service Account). As consideration for such transfer and conveyance, the Authority promises to pay and otherwise convey to the Commonwealth, without recourse, on the Closing Date, the proceeds (net of the costs of issuance, capitalized interest and Other Financing Obligations) of the Bonds in accordance with and subject to the terms of the Indenture, the Authority Act and Article XXVIII of the Tax Reform Code for deposit in the General Fund. From and after the Closing Date all Pledged Annual Payments made to the Commonwealth shall be paid to the Trustee in accordance with the provisions of the Transfer Agreement and the Service Agreement and as provided in Section 2805 of the Tax Reform Code.

Commonwealth Representations

Under the Transfer Agreement, the Commonwealth represents that is the sole owner of the Pledged Annual Payments. On and after the Closing Date, (i) the Commonwealth shall have no right, title or interest in or to the Pledged Annual Payments, and (ii) the Pledged Annual Payments shall be the property of the Authority, and not of the Commonwealth, and shall be owned, received, held and disbursed by the Authority, without further appropriation (after their transfer to the Tobacco Revenue Bond Debt Service Account). Pursuant to the Transfer Agreement and the Service Agreement, the Pledged Annual Payments shall be paid directly to the Trustee as provided in the Transfer Agreement, and the Trustee shall deposit the Pledged Annual Payments in the Revenue Account and shall promptly, and in no event later than five Business Days after receipt thereof, transfer the Pledged Annual Payments in accordance with the Indenture. In addition, under the Transfer Agreement, the Commonwealth represents that it has not sold, transferred, assigned, set over or otherwise conveyed any right, title or interest of any kind whatsoever in all or any portion of the Pledged Annual Payments except to the Authority as provided in Article XXVIII of the Tax Reform Code and in the Transfer Agreement, nor has the Commonwealth created, or to its knowledge permitted the creation of, any lien thereon. The Commonwealth warrants that the Pledged Annual Payments are being transferred to the Authority free and clear of all liens.

Covenants of the Commonwealth

Under the Transfer Agreement, the Commonwealth agrees with the Authority, and the Authority is authorized to include such agreement in the Indenture for the benefit of the owners of the Bonds, that the Commonwealth shall (i) as required by Section 2805(a) of the Tax Reform Code, acting through the State Treasurer, transfer all Pledged Annual Payments when received to the Tobacco Revenue Bond Debt Service Account and shall direct the State Treasurer to transfer such amounts directly to the Trustee as the assignee of the Authority, (ii) enforce its right to collect all Pledged Annual Payments due under the MSA; provided, that nothing in the Acts, the Transfer Agreement or the Indenture shall be construed to preclude the Commonwealth's regulation of smoking, smoking cessation activities and laws, and taxation and regulation of the sale of cigarettes or the like or to restrict the right of the Commonwealth to amend, modify, repeal or otherwise alter statutes imposing or relating to the taxes, and (iii) not amend, supersede or cancel the MSA in any way that would materially and adversely affect the amount of Pledged Annual Payments or the rights of the Authority thereto. Notwithstanding these agreements by the Commonwealth, nothing in the Transfer Agreement, in the Service Agreement, in the Indenture, in the Bonds or in Article XXVIII of the Tax Reform Code shall be construed or interpreted to limit or impair the authority or discretion of the Attorney General to administer and enforce provisions of the MSA or to direct, control and settle any litigation or arbitration proceeding arising from or relating to the MSA.

Refunding Bonds

If and when refunding bonds are issued pursuant to the Indenture and the Office shall have approved the issuance of such refunding bonds (if such approval is then required by the Acts or the Indenture), the Authority shall provide the Office with a revised debt service schedule that will include the payment dates for the Bonds that continue to be Outstanding and the refunding bonds that are then being issued, and the Secretary shall then issue and certify a revised schedule of Pledged Annual Payments which shall immediately replace Exhibit "A" annexed to the Transfer Agreement without the necessity for any further act or deed.

Restriction on Bankruptcy

The Authority covenants that it has no authority to file a voluntary petition, under or become a debtor or bankrupt under, the Federal Bankruptcy Code or any other federal or State bankruptcy, insolvency, or moratorium law or statute and neither any public officer nor any organization, entity, or other person can authorize the Authority to become a debtor or bankrupt under the Federal Bankruptcy Code or any other federal or State bankruptcy, insolvency or moratorium law or statute.

Amendment

After issuance of the Bonds, the Transfer Agreement may be amended by the Commonwealth and the Authority with the consent of the Trustee, but without the consent of any of the Bondholders: (a) to cure any ambiguity; (b) to correct or supplement any provisions in the Transfer Agreement; (c) to correct or amplify the description of the Pledged Annual Payments; (d) to add additional covenants for the benefit of the Authority; or (e) for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions in the Transfer Agreement that shall not adversely affect in any material respect the provisions of the Bonds.

Except as otherwise provided in the preceding paragraph, the Transfer Agreement may also be amended from time to time by the Commonwealth and the Authority with the consent of a Majority in Interest of the Bonds for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Transfer Agreement or of modifying in any manner the rights of the Bondholders; but no such amendment shall reduce the portion of the outstanding principal amount of the Bonds, the Holders of which are required to consent to any such amendment, without the consent of the Holders of all the Outstanding Bonds.

Prior to the execution of any amendment to the Transfer Agreement, the Trustee shall be entitled to receive and conclusively rely upon an opinion of counsel stating that the execution of such amendment is authorized or permitted by the Transfer Agreement. Without the prior written consent of the Trustee, no amendment, supplement or other modification of the Transfer Agreement shall be entered into or be effective if such amendment, supplement or modification affects the Trustee's own rights, duties or immunities under the Transfer Agreement or the Indenture.

Limitations on Rights of Others

The provisions of the Transfer Agreement are solely for the benefit of the Commonwealth, the Authority, and the Trustee, as assignee of the Authority for the benefit of the Bondholders, and nothing in the Transfer Agreement, whether express or implied, shall be construed to give to any other person any legal or equitable right, remedy or claim under or in respect of the Transfer Agreement or any covenants, conditions or provisions contained herein.

SUMMARY OF THE SERVICE AGREEMENT

Terms used herein and not previously defined have the meanings ascribed to them in the Service Agreement. The following summary describes certain terms of the Service Agreement. This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to the provisions of the Service Agreement. See APPENDIX B-2—"FORM OF SERVICE AGREEMENT."

Term

The term of the Service Agreement will commence on February 20, 2018, and end on the later of: (i) close of business on June 1, 2039 or (ii) the date on which there are no longer any Obligations Outstanding; provided, however, that the term of the Service Agreement shall be automatically extended to enable the Authority to comply with any covenant, condition, term or provision of any Authority agreement with respect to the Bonds, or to enable the Office or the Authority to comply with any covenant, condition, term or provision of the Indenture or any other agreement entered into by such party with the consent of the other party.

Payment of Service Charges by the Office

The Office covenants that it will seek appropriations from the General Assembly in amounts sufficient to pay the Service Charges and to cause such appropriations to be paid directly to the Authority or its assignee. The Office further covenants that it will use its best efforts to have the Governor of the Commonwealth request the General Assembly to include in the Office's annual budget an amount for payment of the Service Charges when due pursuant to the following paragraph, equal to the aggregate amount specified in the Service Charge Estimate (hereinafter defined) for the fiscal year of the Office covered by such budget request.

The Office shall pay or cause to be paid to the Trustee as assignee of the Authority (for deposit in the Revenue Account under the Indenture), as Service Charges under the Service Agreement, subject to the appropriation by the General Assembly of sufficient funds to pay such Service Charges, an aggregate amount equal to the sum of the following amounts: (i) no later than May 1 of each year, commencing May 1, 2019, the amount of the Pledged Annual Payments as set forth in Exhibit A to the Service Agreement net of any amount then held in the Debt Service Account under the Indenture; (ii) no later than November 15 and May 15 of each year commencing November 15, 2019, the amount, if any, of the Article II Revenues necessary to supplement any deficiency in the Pledged Annual Payment received in such year so that the Trustee, as assignee of the Authority, receives an amount equal to the full amount of the Pledged Annual Payment for such year net of any amounts then held in the Pledged Article II Revenues/Other Appropriated Funds Subaccount of the Debt Service Account under the Indenture; and (iii) as required to make timely payment thereof, the amount necessary to be provided by the Authority in order to enable the Trustee to make the full amount of any payment when due (and any cumulative amounts which remain unpaid) on Other Financing Obligations.

No later than February 1 of each Commonwealth fiscal year commencing with the fiscal year ending June 30, 2018 or such other date set forth in the Service Agreement, the Office shall establish during the term of the Service Agreement the estimated amounts of the Service Charges for the following fiscal year, consisting of the amounts of the Pledged Annual Payments and an amount equal to the estimated Other Financing Obligations and Authority Administrative Expenses (the "**Service Charge Estimate**").

In the event that the Service Charges paid under the Service Agreement for any fiscal year shall exceed the actual Service Charges paid to the Trustee and the Authority during such fiscal year, then the Authority shall cause the Trustee to accumulate and hold such excess in the Surplus Account under the Indenture in accordance with any requirements of the Tax Compliance Agreement, and such excess and interest earned thereon (except any such interest which is required to be transferred to the Rebate Fund) shall be applied as a credit against the next year's Service Charges.

AGM is Third-Party Beneficiary

AGM, as the provider of the Policy, shall be a third-party beneficiary of the Service Agreement.

Termination of Obligation to Pay Service Charges

If and when there are sufficient funds available to the Trustee, within the funds held by the Trustee for such purposes, to make the full payments of the Bond Payment Obligations and all Other Financing Obligations under the Indenture, the Office shall be relieved of making any further payments of the Service Charges and the Authority may terminate the Service Agreement.

Covenants of the Office

The Secretary covenants that, if any section of Act 43 affecting the validity and enforceability of the Bonds or the sources of payment and security therefor is held by a court of competent jurisdiction in an order whose effect has not been stayed, to be unconstitutional or otherwise invalid, and the effect of such decision is to make the Bonds invalid, the Secretary will use his best efforts to request legislation to be introduced in the General Assembly, which legislation would reauthorize Article XXVIII of the Tax Reform Code, in a manner which would cause the Bonds to remain valid and entitled to the sources of payment and security therefor.

The Secretary covenants that, until the Office is no longer obligated to pay the Service Charges under the Service Agreement, and whether or not Sections 2805 and 2809 of the Tax Reform Code provide continuing appropriations for the applicable Service Charges, the Secretary will use his best efforts to cause to be included in the annual budget submitted by the Governor of the Commonwealth to the General Assembly an amount, for payment of the Service Charges when due pursuant to the Service Agreement, equal to the aggregate amount specified in the Service Charge Estimate for the fiscal year covered by such budget request.

During any fiscal year of the Commonwealth, beginning July 1, 2018, or thereafter if: as of the 30th calendar day preceding the next Service Charge payment date pursuant to the Service Agreement the annual budget of the Commonwealth passed for the then current fiscal year (together with any applicable continuing appropriations) does not contain an appropriation for the full amount of the Service Charges due on such next Service Charge payment date; so long as the continuing appropriations are in effect for Bond Payment Obligations pursuant to Sections 2805 and 2809 of the Tax Reform Code on any Service Charge payment date, there are inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay the full amount of the Service Charges related to Bond Payment Obligations due on such payment date as a consequence of any event or circumstance (whether legal, financial or otherwise, including, without limitation, insufficient receipts of Pledged Annual Payments and Article II Revenues); or at any time, Sections 2805 and 2809 of the Tax Reform Code or the source of Article II Revenues are repealed or modified so that it is reasonably expected that there will be inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay when due in such fiscal year the full amount of any Service Charges related to Bond Payment Obligations; then, in each case, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

In addition, so long as the continuing appropriations for debt service on Bonds in Sections 2805 and 2809 of the Tax Reform Code is in effect, if any deposit into the Tobacco Revenue Bond Debt Service Account required under the Letter Agreement is not made in full within five (5) days of the date when due: (i) the Authority shall immediately inform the Secretary of the failure to make such a deposit; and (ii) if such failure is not cured within thirty (30) days of such notice to the Secretary, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

Defaults and Remedies

Except as is otherwise provided below under "Non-Appropriation Not an Event of Default," (i) if the Office fails to pay the full amount of the Service Charges when due under the Service Agreement; or (ii) if the Office fails to comply with its obligations in connection with an issuance of refunding bonds, or (iii) if the Office fails to perform any other covenant, condition or agreement under the Service Agreement within thirty (30) days after the Authority or the Trustee has given the Office written notice requiring the same to be performed; or (iv) if certain events occur in connection with a Commonwealth bankruptcy, then and in addition to any other rights or remedies the Authority may have under the Service Agreement and at law and in equity, the Authority shall have the following rights: (i) to recover from the Office all monies that are not paid when due, together with interest on the unpaid balance, at the rate of interest payable on the Bonds, between the date when each such sum is due and the date on which the Office actually pays such sum and interest thereon; and (ii) to obtain specific performance of the Office's obligations under the Service Agreement and the Letter Agreement, including bringing an action in mandamus against the State Treasurer.

Non-Appropriation Not an Event of Default

Notwithstanding any provision in the Service Agreement to the contrary, it shall not be a default under the Service Agreement if and to the extent that a failure to pay Service Charges occurs because the General Assembly has not appropriated sufficient money in the Office's annual budget or pursuant to a continuing appropriation for such purpose to enable the Office to pay such Service Charges, even though the annual budget request of the Office submitted to the General Assembly for this purpose did include sufficient funds to pay such Service Charges in full.

BONDHOLDERS' RISKS

The Series 2018 Bonds differ from many other tax-exempt securities in a number of respects, and more specifically differ from tobacco revenue bonds that are payable solely from payments under the MSA. The Series 2018 Bonds have two primary sources of Revenues as well as a pledge of the amounts in the Pledged Accounts. The first are the Pledged Annual Payments to be made by the PMs under the MSA. The second are payments to be made by the Commonwealth pursuant to the Service Agreement if the Pledged Annual Payments and the amounts in the Pledged Accounts are insufficient to pay the Bonds. Each source of the Revenues has different risk factors. Prospective investors should carefully consider the factors set forth below regarding an investment in the Series 2018 Bonds, as well as other information contained in this Official Statement.

The discussion of the risks facing the domestic tobacco industry and potentially impacting the Pledged Annual Payments has been compiled from certain publicly available documents of the tobacco companies and their current or former parent companies, certain publicly available analyses of the tobacco industry and other public sources. Certain of those companies currently file annual, quarterly and certain other reports with the SEC. Such reports are available on the SEC's website (www.sec.gov) and upon request from the SEC's Investor Information Service, 100 F Street, NE, Washington, D.C. 20549 (phone: (800) SEC-0330 or (202) 551-8090; e-mail: publicinfo@sec.gov). Because the Series 2018 Bonds are payable from Revenues that also include payments of Article II Revenues and other amounts to be paid by the Commonwealth pursuant to the Service Agreement in addition to the Pledged Annual Payments, the following discussion lists risks associated with such payments as well as risks related to the Pledged Annual Payments.

The list of risks set forth herein is not a complete list of the risks associated with the Pledged Annual Payments or the risks associated with the Article II Revenues payable to the Authority under the Service Agreement, nor does the order of presentation necessarily reflect the relative importance of the various and separate risks. See also APPENDIX B-2 – "FORM OF SERVICE AGREEMENT" herein.

Potential purchasers of the Series 2018 Bonds are advised to consider the following factors, among others, and to review the other information in this Official Statement in evaluating the Series 2018 Bonds. Any one or more of the risks discussed, and other risks, could lead to a decrease in the market value and/or the liquidity of the Series 2018 Bonds, or, in certain circumstances, in combination could lead to a complete loss of a Bondholder's investment. There can be no assurance that other risk factors will not become material in the future. Further information regarding these risk factors can be found under "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT" below, APPENDIX D - "TOBACCO CONSUMPTION REPORT" and APPENDIX E - "CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY" herein.

Certain information included in this Official Statement has been updated to reflect information from Altria's Form 8-K filed with the SEC on February 1, 2018.

Pledged Annual Payments and Article II Revenues are Subject to Legislative Appropriation

The Service Agreement contains the agreement of the Commonwealth, acting through the Office, to pay to the Authority: (i) the Pledged Annual Payments and (ii) Article II Revenues in the amount, if any, necessary to supplement the Pledged Annual Payments due in such year so that the Authority receives an amount equal to the full amount of the Pledged Annual Payments for such year. The obligation of the Commonwealth to make all such payments: (i) is subject to and dependent upon appropriations being made by the General Assembly for such purpose, (ii) shall not constitute a debt of the Commonwealth within the meaning of any constitutional or statutory provision,

and (iii) shall be deemed executory only to the extent of moneys available to the Commonwealth therefor; and no liability shall be incurred by the Commonwealth beyond the moneys available for the purposes thereof. Sections 2805 and 2809 of the Tax Reform Code contain continuing appropriations for the Pledged Annual Payments. The General Assembly may take legislative action to repeal such continuing appropriations, in which case the Secretary will use his best efforts to request a supplemental appropriation to pay the debt service on the Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS—Appropriations Relating to the Series 2018 Bonds," "—Appropriations to the Authority – General," "—Sections 2805 and 2809 of the Tax Reform Code" and "—Historical Appropriation to the Authority" and "SUMMARY OF THE SERVICE AGREEMENT" above.

Taxes which Constitute Article II Revenues are Subject to Change by the General Assembly

The General Assembly may alter the rates and subjects or repeal the sales taxes or hotel occupancy taxes currently imposed which constitute the Article II Revenues by legislative action. Any such changes could adversely affect the amount of Article II Revenues available to the Authority.

Payment Decreases Under the Terms of the MSA

Adjustments to MSA Payments

The MSA provides that the amounts payable by the PMs are subject to numerous adjustments, offsets and recalculations, some of which are material, including without limitation, the NPM Adjustment discussed below. Any such adjustment could trigger the Offset for Miscalculated or Disputed Payments. See "*—Disputed MSA Payments and Potential for Significant Future Year Offsets to MSA Payments*" and "*—NPM Adjustment*" below for a description of disputes concerning MSA payments and the calculation thereof, including pending arbitration regarding the 2004 NPM Adjustment. Any such adjustments could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

An amendment to the MSA (as described further herein, the "**PSS Credit Amendment**") has been proposed that would allow SPMs to elect to receive a reduction in their MSA payments in an amount equal to a percentage of the fees paid to Previously Settled States pursuant to state legislation in the Previously Settled States requiring tobacco product manufacturers that did not sign onto the Previously Settled State Settlements to pay a fee to such Previously Settled States. By its terms, the PSS Credit Amendment will only take effect if and when all Settling States having aggregate Allocable Shares equal to at least 99.937049% (the equivalent of the aggregate Allocable Share of the 46 states that are Settling States), and all OPMs and Commonwealth Brands, Inc., have executed the PSS Credit Amendment. The Commonwealth agreed to the PSS Credit Amendment on November 19, 2008 and reaffirmed on December 18, 2009. No assurance can be given as to if or when such an amendment will take effect. No assurance can be given as to whether the PSS Credit Amendment, if and when it takes effect, will reduce the amount of Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds. See "BONDHOLDERS' RISKS—Other Risks Relating to the MSA and Related Statutes—Amendments, Waivers and Termination" and "—Reliance on Commonwealth Enforcement of the MSA; State Impairment" and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments—Previously Settled States Reduction—PSS Credit Amendment."

Disputed MSA Payments and Potential for Significant Future Year Offsets to MSA Payments

Disputes concerning Annual Payments (as well as Strategic Contribution Payments) and their calculations may be raised up to four years after the respective Payment Due Date (as defined in the MSA). The resolution of disputed payments that arise in prior years may result in the application of offsets against subsequent payments. Disputes could result in the future diversion of disputed payments to the Disputed Payments Account (the "**DPA**"), the withholding of all or a portion of any disputed amounts, or the application of offsets against future payments. Any such disputes or the resolution thereof could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

Miscalculations or recalculations by the MSA Auditor or disputed calculations by any of the parties to the MSA have resulted and could in the future result in offsets to, or delays in disbursements of, payments to the Settling

States pending resolution of the disputed item in accordance with the provisions of the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments—*Offset for Miscalculated or Disputed Payments*."

The Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions used to prepare the coverage table herein do not factor in an offset for miscalculated or disputed payments. See "COMMONWEALTH ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS." Adjustments to future Commonwealth Annual Payments could be different from those projected.

Growth of NPM Market Share and Other Factors

Should a decline in cigarette consumption occur, but be accompanied by a material increase in the relative aggregate market share of the NPMs, shipments by PMs would decline at a rate greater than the decline in consumption. This would result in greater reductions of Annual Payments by the PMs due to application of the Volume Adjustment, even for Settling States that have negotiated with the PMs alternative arrangements to the NPM Adjustment or have adopted enforceable Qualifying Statutes and are diligently enforcing such statutes and are thus exempt from the NPM Adjustment. Such reductions of Annual Payments could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

NPM market share could grow due to a variety of reasons, including, among others, a failure of Settling States to enforce their Qualifying Statutes and Allocable Share Release Amendments (see "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—MSA Provisions Relating to Model/Qualifying Statutes"), relative ease of entry into the market, and increased profit margins on account of lower sales prices, operating costs and litigation costs.

NPM Adjustment

General. One of the adjustments under the MSA is the "**NPM Adjustment**", which operates in certain circumstances to reduce the payments of the PMs under the MSA in the event of losses in Market Share by PMs (who are subject to the payment obligations and marketing restrictions of the MSA) to non-participating manufacturers ("**NPM**s") (who are not subject to such obligations and restrictions), during a calendar year as a result of such PMs' participation in the MSA. Under the MSA, three conditions must be met in order to trigger an NPM Adjustment for one or more Settling States: (1) a Market Share loss for the applicable year must exist (as described herein); (2) a nationally recognized firm of economic consultants must determine that the disadvantages experienced as a result of the provisions of the MSA were a "significant factor" contributing to the Market Share loss for the year in question; and (3) the Settling States in question must be found to not have diligently enforced their Qualifying Statutes. If the PMs make a claim for an NPM Adjustment for any particular sales year and a Settling State is determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute in such sales year, the amount of the NPM Adjustment applied to such Settling State following such determination could be as great as the amount of Annual Payments that were otherwise payable to such Settling State relating to such sales year, plus applicable interest, if any.

According to OPM SEC filings, certain PMs, including the OPMs, and the Settling States entered into three separate agreements (covering sales years 2007 to 2009, 2010 to 2012, and 2013 to 2014, respectively) wherein the Settling States would not contest that the disadvantages of the MSA were a significant factor contributing to the Market Share loss experienced by the PMs in those years. The stipulation pertaining to each of the years covered by the agreements became effective in February of the year a final determination by the firm of independent economic consultants would otherwise have been expected if the issue had been arbitrated on the merits. Pursuant to such agreements, the parties agreed that all the conditions for the NPM Adjustment were met for 2014 on February 1, 2017, permitting those PMs, including the OPMs, to deposit their portion of the 2014 NPM Adjustment into the Disputed Payments Account in April 2017.

An arbitration panel determined that the Commonwealth and five other states (two of which subsequently joined the NPM Adjustment Settlement Term Sheet) did not diligently enforce their respective Qualifying Statutes during 2003 and accordingly were subject to the 2003 NPM Adjustment. The Commonwealth and certain other

Settling States are currently in arbitration regarding the 2004 NPM Adjustment. If the Commonwealth is again determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute in 2004 or a subsequent sales year, the amount of the NPM Adjustment applied to the Commonwealth following such determination could be as great as the amount of the Commonwealth Annual Payments that were otherwise payable to the Commonwealth relating to such sales year, plus applicable interest, if any. No assurance can be given that the Commonwealth will be found by the relevant arbitration panel to have diligently enforced its Qualifying Statute for such sales year or any subsequent sales year. The Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions contain an assumption that the Commonwealth has diligently enforced and will diligently enforce its Qualifying Statute from and after sales year 2004 and therefore that the Commonwealth will not be subject to the NPM Adjustment. No assurance can be given that the assumptions underlying the Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions will be consistent with future events.

Declines in Cigarette Consumption

Cigarette consumption in the U.S. has declined significantly over the last several decades. According to the Centers for Disease Control ("**CDC**"), the smoking rate for adults in the United States fell to approximately 15.8% in 2016, from 16.8% in 2014, and from 20.9% in 2004. NAAG reported that total industry domestic cigarette shipment volume was 260.2 billion cigarettes in sales year 2016, as compared to shipments of approximately 404.4 billion in 2004. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Cigarette Shipment Trends."

Payments under the MSA are determined in part by the volume of cigarettes sold by the PMs in the U.S. cigarette market. U.S. cigarette consumption in recent years has been reduced because of price increases, restrictions on advertising and promotions, increases in excise taxes, smoking bans in public places, the raising of the minimum age to possess or purchase tobacco products, other increased regulation such as state and local bans on characterizing flavors, a decline in the social acceptability of smoking, health concerns, funding of smoking prevention campaigns, increased pressure from anti-tobacco groups, increased usage of alternative products such as e-cigarettes and other vapor products, curtailments in the chain of distribution, and other factors. U.S. cigarette consumption is expected to continue to decline for the reasons stated above and others. Continuing declines in cigarette consumption could materially adversely affect the amount and/or timing of the Pledged Annual Payments. The following factors, among others, may negatively impact cigarette consumption in the U.S.

The Regulation of Tobacco Products by the FDA May Adversely Affect Overall Consumption of Cigarettes in the U.S.

The Family Smoking Prevention and Tobacco Control Act (the "**FSPTCA**"), signed by President Obama on June 22, 2009, granted the U.S. Food and Drug Administration (the "**FDA**") broad authority over the manufacture, sale, marketing and packaging of tobacco products. The legislation, among other things, requires larger and more severe health warnings on cigarette packs and cartons, bans the use of certain descriptors on tobacco products, requires the disclosure of ingredients and additives to consumers, requires FDA pre-market review for new or modified products, and allows the FDA to place more severe restrictions on the advertising, marketing and sales of cigarettes. Since the passage of the FSPTCA, the FDA, among other things, has prohibited fruit, candy or clove flavored cigarettes (menthol is currently exempted from this ban), prohibited misleading marketing terms ("Light," "Low," and "Mild") for tobacco products, rejected applications for the introduction of new tobacco products into the market, and issued its final rule subjecting e-cigarettes and certain other tobacco products to FDA regulations. Most recently, in July 2017, the FDA announced its intent to develop a comprehensive plan for tobacco and nicotine regulation and is considering the issues surrounding the presence of menthol and the level of nicotine in cigarettes. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*FSPTCA*."

Tobacco manufacturers have filed suit regarding certain provisions of the FSPTCA and actions taken thereunder. In August 2009, a group of tobacco manufacturers and a tobacco retailer filed a complaint against the United States in the U.S. District Court for the Western District of Kentucky, *Commonwealth Brands, Inc. v. U.S.*, in which they asserted that various provisions of the FSPTCA violate their free speech rights under the First Amendment, constitute an unlawful taking under the Fifth Amendment, and are an infringement on their Fifth Amendment due

process rights. In March 2012, the U.S. Court of Appeals for the Sixth Circuit affirmed the district court's earlier decision upholding the FSPTCA's restrictions on the marketing of modified-risk tobacco products, the FSPTCA's bans on event sponsorship, branding non-tobacco merchandise, and free sampling, and the requirement that tobacco manufacturers reserve significant packaging space for textual health warnings. However, the Sixth Circuit affirmed the district court's grant of summary judgment to plaintiff manufacturers on the unconstitutionality of the FSPTCA's restriction of tobacco advertising to black and white text. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues" for a discussion of this case.

On June 22, 2011, the FDA issued a final regulation for the imposition of larger, graphic health warnings on cigarette packaging and advertising, which was scheduled to take effect September 22, 2012 (but which the FDA is currently enjoined from enforcing, as described below). On August 16, 2011, tobacco companies filed a lawsuit against the FDA in the U.S. District Court for the District of Columbia, *R. J. Reynolds Tobacco Co. v. U.S. Food and Drug Administration*, challenging the FDA's final regulation specifying nine new graphic "warnings" pursuant to the FSPTCA and seeking a declaratory judgment that the final regulation violates the plaintiffs' rights under the First Amendment to the U.S. Constitution and the Administrative Procedure Act ("**APA**"). On August 24, 2012, the U.S. Court of Appeals for the District of Columbia Circuit affirmed a February 29, 2012 decision of the district court that invalidated the graphic warning rule. On March 19, 2013, the FDA announced that it would undertake research to support a new rulemaking on different warning labels consistent with the FSPTCA and would propose a new graphic warnings rule in the future. The FDA has not provided a timeline for a new rule. In October 2016, several public health groups filed suit in federal court to force the FDA to issue final rules requiring graphic warnings on cigarette packs and advertising. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues" for a discussion of this case and several other cases.

The FDA has yet to issue guidance with respect to many provisions of the FSPTCA. It is likely that future regulations promulgated by the FSPTCA, including regulation of menthol (including an outright ban thereof) or decreasing the permitted level of nicotine (though not to zero), as discussed herein, could result in a decrease in cigarette sales in the U.S., and an increase in costs to PMs, potentially resulting in a material adverse effect on the PMs' financial condition, results of operations and cash flows. Additionally, the FDA's rules regarding clearance for new or modified cigarette products brand names could adversely impact PMs' access to the market and could result in the removal of products from the market. The negative impact of the foregoing factors could be to reduce consumption of cigarettes in the U.S., thereby reducing payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

Concerns that Mentholated Cigarettes May Pose Greater Health Risks Could Result in Further FDA Regulation Which Could Materially Adversely Affect the Volume of Cigarettes Sold in the U.S. and Thus Payments Under the MSA

Some plaintiffs and constituencies, including public health agencies and non-governmental organizations, have claimed or expressed concerns that mentholated cigarettes may pose greater health risks than non-mentholated cigarettes, including concerns that mentholated cigarettes may make it easier to start smoking and harder to quit, and increase smoking initiation among youth and the incidence of smoking among youth. Such plaintiffs and constituencies may seek restrictions or a ban on the production and sale of mentholated cigarettes. On November 8, 2013, twenty-seven states (including the Commonwealth) sent a letter to the FDA in support of a ban on menthol-flavored cigarettes. In an August 2016 letter, the African American Tobacco Control Leadership Council asked President Obama to direct the FDA to issue a proposed rule to remove all flavored tobacco products, including mentholated cigarettes, from the marketplace. Any ban or material limitation on the use of menthol in cigarettes could materially adversely affect the results of operations, cash flow and financial condition of the PMs that sell large quantities of mentholated cigarettes, especially Reynolds Tobacco, a significant portion of whose sales, after the merger with Lorillard, are dependent on the Newport brand of mentholated cigarettes.

The FSPTCA established the Tobacco Products Scientific Advisory Committee ("**TPSAC**") and directs the TPSAC to evaluate issues surrounding the use of menthol as a flavoring or ingredient in cigarettes. In addition, the legislation permits the FDA to ban menthol upon a finding that such a prohibition would be appropriate for the public health. The TPSAC or the Menthol Report Subcommittee held meetings throughout 2010 and 2011 to consider the issues surrounding the use of menthol in cigarettes. At a March 2011 meeting, TPSAC presented its findings that menthol likely increases experimentation and regular smoking, menthol likely increases the likelihood and degree of

addiction for youth smokers, non-white menthol smokers (particularly African-Americans) are less likely to quit smoking and are less responsive to certain cessation medications, and consumers continue to believe that smoking menthol cigarettes is less harmful than smoking nonmenthol cigarettes as a result of the cigarette industry's historical marketing. TPSAC's overall recommendation to the FDA was that "removal of menthol cigarettes from the marketplace would benefit public health in the United States." In July 2013, the FDA released a preliminary evaluation on menthol cigarettes, finding among other things that menthol cigarettes likely pose a public health risk above that seen with non-menthol cigarettes. In July 2017, as part of the FDA's announcement of its intent to develop a comprehensive plan for tobacco and nicotine regulation, the FDA announced its intent to issue Advance Notices of Proposed Rulemaking requesting public stakeholder input on the impact of flavors (including menthol) in increased initiation among youth and young adults. The FDA is not required to follow the TPSAC's recommendations, and the FDA has not yet taken any definitive action with respect to menthol use. There is no timeline or statutory requirement for the FDA to act on the TPSAC's recommendations. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*FSPTCA Litigation*" for a discussion on litigation regarding the TPSAC.

If the FDA determines that the regulation of menthol is warranted, the FDA could promulgate regulations that, among other things, could result in a ban on or a restriction on the use of menthol in cigarettes. According to a report by the Federal Trade Commission released in 2016, menthol cigarettes made up 31% of the U.S. cigarette market in 2013. A ban or any material restriction on the use of menthol in cigarettes could adversely affect the overall sales volume of cigarettes by the PMs, thereby reducing payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

The Volume of Cigarettes Sold by PMs in the U.S. Cigarette Market is Expected to Continue to Decline as a Result of Increases in Cigarette Excise Taxes

In the U.S., tobacco products are subject to substantial and increasing federal and state excise taxation, which has a negative effect on consumption. On April 2, 2009, Congress increased the federal excise tax per pack of cigarettes to $1.01 per pack (an increase of $0.62), and significantly increased taxes on other tobacco products. All of the states, the District of Columbia, Puerto Rico, Guam and the Northern Mariana Islands currently impose cigarette taxes, which in calendar year 2017 ranged from $0.17 per pack in Missouri to $4.35 per pack in New York, according to the Campaign for Tobacco-Free Kids. Since January 1, 2002, 48 states, the District of Columbia and several U.S. territories have raised their cigarette taxes, many of them more than once. In addition to federal and state excise taxes, certain city and county governments also impose substantial excise taxes on tobacco products sold, such as New York, Philadelphia and Chicago. In November 2013, New York City passed an ordinance that set a minimum price of $10.50 for every pack of cigarettes sold in New York City, and in August 2017 New York City raised the price of a pack of cigarettes to $13, effective June 1, 2018. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, between the end of 1998 (the year that the MSA was executed) and October 23, 2017, the weighted-average state and certain local cigarette excise taxes increased from $0.36 to $1.75 per pack. In addition, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, as of October 23, 2017 Rhode Island, Delaware, Oklahoma and Puerto Rico enacted cigarette excise tax increases in 2017, although in August 2017 the Oklahoma Supreme Court found that Oklahoma's tobacco tax increase, labeled as a "smoking cessation fee," was unconstitutional because the legislature failed to abide by the state's procedures for passing a tax measure. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*Excise Taxes*" for a further description of excise taxes on cigarettes.

It is expected that states and local governments will continue to raise excise taxes on cigarettes in future years. Increased excise taxes are likely to result in declines in overall sales volume and shifts by consumers to less expensive brands, deep discount brands, untaxed cigarettes sold on certain Native American reservations and duty-free shops, counterfeit brands or pipe tobacco for roll-your-own consumers. Such trends and reductions in consumption will lead to reductions of payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

The Volume of Cigarettes Sold by PMs in the U.S. Cigarette Market is Expected to Continue to Decline Because of Efforts to Raise the Minimum Age for Purchase and Possession of Cigarettes

U.S. cigarette consumption is expected to continue to decline due to legislative efforts to raise the minimum age to possess or purchase tobacco products. All states and the District of Columbia have enacted statutes generally prohibiting the sale of tobacco products to individuals under the age of 18. The minimum age to purchase tobacco products rose to 21 in the State of Hawaii effective as of January 1, 2016 (the first state to do so), and subsequently, California (effective June 2016), New Jersey (July 2017 legislation, effective November 2017), Maine (August 2017 legislation, effective July 2018) and Oregon (August 2017 legislation, effective January 2018) have raised the minimum age to purchase tobacco products to 21. According to the Campaign for Tobacco-Free Kids, at least 255 localities have raised the tobacco age to 21, including New York City, Chicago, Boston, Cleveland, St. Louis and both Kansas Cities. According to the Tobacco Consumption Report, proposals to raise the minimum age to 21 have been introduced in at least twenty-four states. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, the minimum age in Alabama, Alaska and Utah is 19. On March 12, 2015, the Institute of Medicine of the National Academy of Sciences released a report recommending that the minimum age of legal access to tobacco products be raised to 21 and concluding that raising the minimum legal age to 21 would likely decrease smoking prevalence by 12% among today's teenagers when they become adults. In October 2015, the American Academy of Pediatrics issued a policy statement strongly recommending that the age for the purchase of tobacco products be raised to 21 as a means to decrease reduce youth smoking rates. In November 2017, U.S. Congresswoman Diana DeGette introduced the Tobacco to 21 Act (H.R. 4273), a bicameral legislation that would prohibit the sale of tobacco products to anyone under age 21. Declines in consumption due to increasing the minimum age to possess or purchase tobacco products could lead to reductions of payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

Increased Restrictions on Smoking in Public Places Could Adversely Affect U.S. Tobacco Consumption and Therefore Amounts to be Paid Under the MSA

In recent years, federal, state and many local and municipal governments and agencies, as well as private businesses, have adopted legislation, regulations, insurance provisions or policies which prohibit, restrict, or discourage smoking generally, smoking in public buildings and facilities, public housing, stores, restaurants and bars, and smoking on airline flights and in the workplace. Other similar laws and regulations are currently under consideration and may be enacted by state and local governments in the future. Restrictions on smoking in public and other places may lead to a decrease in the number of people who smoke or a decrease in the number of cigarettes smoked or both. Smoking bans have recently been extended by many state and local governments to outdoor public areas, such as beaches, parks and space outside restaurants, and others may do so in the future. Increased restrictions on smoking in public and other places have caused a decrease, and may continue to cause a decrease, in the volume of cigarettes that would otherwise be sold in the U.S. absent such restrictions, which could lead to reductions of payments under the MSA and could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*State and Local Regulation.*"

Several of the PMs and Their Competitors Have Developed Alternative Tobacco and Cigarette Products, Including Electronic Cigarettes and Vaporizers, Sales of Which Do Not Currently Result in Payments Under the MSA

Certain of the major cigarette makers have developed (or acquired) and marketed alternative cigarette products the shipments of which do not give rise to payment obligations under the MSA. For example, numerous manufacturers have developed and are marketing "electronic cigarettes" or "e-cigarettes," which are not tobacco products but are battery powered devices that vaporize liquid nicotine which is then inhaled. E-cigarettes do not currently constitute "cigarettes" within the meaning of the MSA (as deemed by the manufacturers and certain states) because they do not contain or burn or heat tobacco. The fastest growth in this area comes from devices called "vaporizers", which are larger, customizable devices that hold more liquid, produce larger vapor clouds and last longer. They allow users to mix and match hardware and refill cartridges with liquid bought in bulk, so that they are cheaper than e-cigarettes. E-cigarettes and other vapor products are currently not subject to the advertising restrictions to which tobacco products are subject. In addition, most jurisdictions do not subject electronic cigarettes or other vapor products to excise taxes.

According to the Tobacco Consumption Report, 2015 sales of electronic cigarettes in the U.S. have been estimated at over $3 billion, though growth is slowing after years of rapid gains. The CDC in September 2014 reported results of a survey that indicated that in 2013 approximately 8.5% of the adult population (representing approximately two-and-a-half times the 2010 estimates), and 36.5% of smokers (representing approximately four times the 2010 estimates), had tried e-cigarettes at some time. In April 2016, the CDC's National Youth Tobacco Survey found that e-cigarette use among high school students had increased to 16% in 2015, from 1.5% in 2011. The CDC in June 2016 released survey results showing that 45% of high school students had tried e-cigarettes in 2015, compared with only 32% who had tried cigarettes. In December 2014 the University of Michigan's Survey for Research Center reported its findings that e-cigarette use exceeded traditional cigarette smoking among teens in 2014. The National Health Survey of the CDC reported that in 2016, 15.4% of adults had tried e-cigarettes, and 3.2% were current users. In September 2017, Philip Morris International announced that it would contribute approximately $80 million each year for the following 12 years to a non-profit organization called the Foundation for a Smoke-Free World, to fund research on smoke-free alternatives, among other things, and in January 2018, Philip Morris International announced that its intention is to stop selling cigarettes in the U.K. and to replace cigarettes with products such as e-cigarettes and heated tobacco.

On May 5, 2016, the FDA released its final rule, which subjects manufacturers, importers and/or retailers of e-cigarettes and certain other tobacco related products (including cigars and pipe tobacco) to the same and, in some cases additional, regulations applicable to cigarettes, cigarette tobacco and smokeless tobacco. Among other things, the rule bans sales of e-cigarettes and other vapor products, cigars, hookah tobacco, pipe tobacco and other products to people under 18 and requires new health warnings for these products. In addition, manufacturers must seek federal permission to continue marketing all e-cigarettes and other such products launched since 2007 (making up virtually all of the market). The rule does not restrict flavored products, online sales or advertising. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*FSPTCA*." No assurance can be given that regulation of e-cigarettes by the FDA will alter the trend of increased sales of e-cigarettes.

Cigarette manufacturers also market other types of alternative products, such as moist snuff, "snus" (a smokeless, spitless tobacco product that originated in Sweden), disposable nicotine discs, and dissolvable tobacco tablets, orbs, strips and sticks. Sales of moist snuff products have increased by 65.6% between 2005 and 2011, according to the National Center for Biotechnology Information. A June 2014 report by the CDC found that smokeless tobacco use among U.S. workers has remained relatively steady since 2005, with 2.7% of U.S. workers using smokeless tobacco products in 2005 and 3.0% of U.S. workers using smokeless tobacco products in 2010, while cigarette use has declined since 2005.

Electronic cigarettes, vapor products, heated tobacco products and smokeless tobacco products are viewed by some as alternatives to cigarette smoking that may lead to cigarette smoking cessation. It has been reported that increases in cigarette taxes have caused an increase in the sale of e-cigarettes and other alternatives to cigarettes. According to the Tobacco Consumption Report, certain sources have shown that e-cigarette use is associated with quit attempts by smokers; that youth use of e-cigarettes is unlikely to increase the number of future cigarette smokers; and that the substantial increase in e-cigarette use among U.S. adult smokers this decade was associated with a statistically significant increase in the smoking cessation rate at the population level. Growth in the electronic cigarette, vapor product and smokeless tobacco product markets may have an adverse effect on the traditional cigarette market. If consumers use such alternative products in lieu of traditional cigarettes containing nicotine or to quit smoking, it could reduce the size of the cigarette market. In addition, recreational marijuana, which has been legalized in Alaska, Colorado, Oregon, Washington, California, Maine, Massachusetts and Nevada, may be an alternative to cigarette smoking and reduce the size of the cigarette market. Furthermore, while alternative cigarette products continue to be deemed not to constitute "cigarettes" under the MSA and gain market share of the domestic cigarette market to the detriment of traditional cigarettes, payments under the MSA may decrease, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—E-Cigarettes and Vapor Products" and "—Smokeless Tobacco Products."

U.S. Tobacco Companies are Subject to Significant Limitations on Advertising and Marketing Cigarettes that Could Negatively Impact Sales Volume

Television and radio advertisements of tobacco products have been prohibited since 1971. U.S. tobacco companies generally cannot use billboard advertising, cartoon characters, sponsorship of concerts, non-tobacco merchandise bearing brand names and various other advertising and marketing techniques. In addition, the MSA prohibits the targeting of youth in advertising, promotion or marketing of tobacco products. Accordingly, the tobacco companies have determined not to advertise cigarettes in magazines with large readership among people under the age of 18. Under the FSPTCA, which grants authority over the regulation of tobacco products to the FDA, the FDA has issued rules restricting access and marketing of cigarettes and smokeless tobacco products to youth, and announced its plans to propose a new rule in the future for the imposition of larger, graphic health warnings on cigarette packaging and advertising, as discussed herein. In addition, many states, cities and counties have enacted legislation or regulations further restricting tobacco advertising, marketing and sales promotions, and others may do so in the future. Additional restrictions may be imposed or agreed to in the future. These limitations significantly impair the ability of tobacco product manufacturers to launch new premium brands. Moreover, these limitations may make it difficult for PMs to maintain sales volume of cigarettes in the U.S., which could lead to reductions of payments under the MSA and could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

As discussed above, electronic cigarettes and other vapor products are not currently subject to the advertising restrictions to which tobacco products are subject, and the FDA did not include advertising restrictions in its final regulations on e-cigarettes and other vapor products. Therefore, e-cigarettes and other vapor products, which can currently be marketed more extensively than traditional cigarettes and other tobacco products, could gain market share to the detriment of the traditional cigarette market. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—E-Cigarettes and Vapor Products."

The Distribution Chain for Cigarettes May Continue to be Curtailed, which could Negatively Impact Sales Volume

Certain stores have ceased the sale of tobacco products. The retail chain store Target reportedly stopped selling tobacco products in 1996. In September 2014 the national pharmacy chain CVS reportedly stopped selling all cigarettes and other tobacco products in all its stores (following a February 2014 announcement), citing that such sales were inconsistent with its mission. A group of U.S. Attorneys General have pressured large retail stores with pharmacies to take similar action, and in April 2014 several members of Congress called on these retailers to stop selling cigarettes and other items containing tobacco. According to the American Nonsmokers' Rights Foundation ("**ANRF**"), as of October 2, 2017, 168 municipalities have tobacco-free pharmacy laws. In addition, Costco has also reportedly reduced the number of locations that sell cigarettes because of slowing demand, according to news reports in March 2016. Continued curtailment in the distribution of cigarettes could negatively impact sales volume, which could lead to reductions of payments under the MSA and could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

Smoking Cessation Products May Reduce Cigarette Sales Volumes and Adversely Affect Payments Under the MSA

Large pharmaceutical companies have developed and increasingly expanded their marketing of smoking cessation products. Companies such as GlaxoSmithKline, Johnson & Johnson, Novartis and Pfizer are very well capitalized public companies that have entered this market and have the capability to fund significant investments in research and development and marketing of these products. Smoking cessation products can be obtained both in prescription and over the counter forms. From Nicorette gum in 1984, to nicotine patches, nicotine inhalers and tablets, as well as other non-pharmaceutical smoking cessation products, this market has evolved into a $1 billion business in the U.S., according to some estimates. Studies have shown that these programs are effective, and that excise taxes and smoking restrictions drive additional expenditures to the smoking cessation market. Certain health insurance policies, including Medicaid and Medicare, cover various forms of smoking cessation treatments, making smoking cessation treatments more affordable for covered smokers. To the extent that existing smoking cessation products, new products or products used in combination become more effective and more widely available, or that more smokers use these products, sales volumes of cigarettes in the U.S. may decline, which could lead to reductions of payments under the MSA and could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See

APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Smoking Cessation Products."

The U.S. Cigarette Industry is Subject to Significant Law, Regulation and Other Requirements That Could Adversely Affect the Businesses, Results of Operations or Financial Condition of Tobacco Product Manufacturers

The consumption of cigarettes in the U.S., and therefore the amounts payable under the MSA and the Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds, could be materially adversely affected by new or future legal requirements imposed by legislative or regulatory initiatives, including but not limited to those relating to health care reform, climate change and environmental matters.

The Availability of Counterfeit Cigarettes Could Adversely Affect Payments by the PMs Under the MSA

Sales of counterfeit cigarettes in the U.S. could adversely impact sales by the PMs of the brands that are counterfeited and potentially damage the value and reputation of those brands. Smokers who mistake counterfeit cigarettes for cigarettes of the PMs may attribute quality and taste deficiencies in the counterfeit product to the actual branded products brands and discontinue purchasing such brands. Most significantly, the availability of counterfeit cigarettes together with substantial increases in excise taxes and other potential price increases of branded products could result in increased demand for counterfeit products that could have a material adverse effect on the sales volume of the PMs, resulting in lower payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

General Economic and Other Conditions May Materially Adversely Affect Consumption of Cigarettes and the Ability of the PMs to Continue to Operate, Reducing Their Sales of Cigarettes and Payments under the MSA

The volume of cigarette sales in the U.S. is adversely affected by general economic downturns as smokers tend to reduce expenditures on cigarettes, especially premium brands, in times of economic hardship. In addition, consumers may become more price-sensitive, which may result in some consumers switching to lower priced, deep discount NPM brands, or counterfeit brands, or travelling to purchase untaxed NPM cigarettes on Native American reservations. Reductions in cigarette consumption or changes in consumption habits to NPM cigarettes could lead to reductions of payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

The ability of the PMs to continue their operations selling cigarettes in the U.S. generally is dependent on the health of the overall economy and their ability to access the capital markets on favorable terms. In addition, the ability of the PMs to continue their operations manufacturing cigarettes is dependent on, among other things, their production facilities, shifts in crops, government mandated prices, economic trade sanctions, geopolitical instability and production control programs. To the extent that overall economic or other conditions or constrained capital access materially adversely impacts their operations, the PMs may manufacture and sell fewer cigarettes, potentially resulting in reduced payments under the MSA and reduced Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds.

If Litigation Challenging the MSA, the Qualifying Statutes and Related Legislation Were Successful, Payments under the MSA Might be Suspended or Terminated

Certain parties, including smokers, smokers' rights organizations, consumer groups, cigarette manufacturers, cigarette wholesalers, cigarette importers, cigarette distributors, Native American tribes, taxpayers, taxpayers' groups and other parties have filed actions against some, and in certain cases all, of the signatories to the MSA, alleging, among other things, that the MSA and related legislation including the Settling States' Qualifying Statutes, Allocable Share Release Amendments and Complementary Legislation (as each term is defined herein) as well as other legislation such as "Contraband Statutes" are void or unenforceable under certain provisions of law, such as the U.S. Constitution, state constitutions, federal antitrust laws, federal civil rights laws, state consumer protection laws, bankruptcy laws, federal cigarette advertising and labeling law, unfair competition laws, and NAFTA. Certain of the lawsuits further sought, among other relief, an injunction against one or more of the Settling States from collecting any moneys under the MSA, an injunction barring the PMs from collecting cigarette price increases related to the MSA, a determination that the MSA is void or unenforceable, and an injunction against the enforcement of the Qualifying Statutes and the related legislation. In addition, class action lawsuits have been filed in several federal and state courts alleging that under the federal Medicaid law, any amount of tobacco settlement funds that the Settling States receive in excess of what they paid through the Medicaid program to treat tobacco related diseases should be paid directly to Medicaid recipients.

All of the judgments rendered to date on the merits have rejected challenges to the MSA, Qualifying Statutes and Complementary Legislation presented in the cases. Courts rendering those decisions include the U.S. Courts of Appeals for the Second Circuit in *Freedom Holdings v. Cuomo* and *Grand River Enterprises Six Nations, Ltd. v. King*; the Third Circuit in *Mariana v. Fisher*, and *A.D. Bedell Wholesale Co. v. Philip Morris Inc.*; the Fourth Circuit in *Star Sci., Inc. v. Beales*; the Fifth Circuit in *Xcaliber Int'l Ltd. v. Caldwell* and *S&M Brands v. Caldwell*; the Sixth Circuit in *S&M Brands v. Cooper, S&M Brands, Inc. v. Summers*, *Tritent Inter'l Corp. v. Commonwealth of Kentucky* and *VIBO Corporation, Inc. d/b/a/ General Tobacco v. Conway, et al.*; the Eighth Circuit in *Grand River Enterprises v. Beebe*; the Ninth Circuit, in *Sanders v. Brown*; the Tenth Circuit in *KT & G Corp. v. Edmondson*, and *Hise v. Philip Morris Inc.*; and multiple lower courts. In addition, in January 2011, an international arbitration tribunal rejected claims brought against the United States challenging MSA-related legislation in various states under NAFTA.

The MSA, Qualifying Statutes and related state legislation may continue to be challenged in the future, on the theories described above or for other reasons that are not described herein. A determination by a court that the MSA, a Qualifying Statute, or related legislation is unenforceable, unconstitutional, or void could have a material adverse effect on the payments by the PMs under the MSA, which could materially adversely affect the amount or timing of the Pledged Annual Payments, and thus could materially delay, reduce, or eliminate payments on the Series 2018 Bonds. No assurance can be given that a court will not find the MSA, a Qualifying Statute, or related legislation to be unenforceable, unconstitutional, or void.

Although a determination that a Qualifying Statute is unconstitutional would have no effect on the enforceability of the MSA, such a determination could have a material adverse effect on payments to be made under the MSA and Pledged Annual Payments available to the Authority if an NPM were to gain market share in the future and there occurred an impact on the market share of the PMs under the MSA. A determination that an Allocable Share Release Amendment is unenforceable would not constitute a breach of the MSA but could permit NPMs to exploit differences among states, and thereby potentially increase their market share at the expense of the PMs. A determination that the Commonwealth's Complementary Legislation is unenforceable would not constitute a breach of the MSA or affect the enforceability of the Commonwealth's Qualifying Statute; such a determination could, however, make enforcement of the Commonwealth's Qualifying Statute against NPMs more difficult for the Commonwealth. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT."

Litigation Seeking Monetary and Other Relief from Tobacco Industry Participants May Adversely Impact the Ability of the PMs to Continue to Make Payments Under the MSA

The tobacco industry has been the target of litigation for many years. Both individual and class action lawsuits have been brought by or on behalf of smokers alleging various theories of recovery including that smoking has been injurious to their health, by non-smokers alleging harm from environmental tobacco smoke ("**ETS**"), also known as "secondhand smoke", and by the federal, state and local governments seeking recovery of expenditures

relating to the adverse effects on the public health caused by smoking. The MSA was the result of such litigation. If additional litigation against the PMs is successful on a significant level, the ability of the PMs to continue to operate their businesses and make payments under the MSA may be materially adversely affected, which in turn could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation" for more information regarding the litigation described below.

The tobacco companies are defendants in thousands of tobacco related lawsuits which are extremely costly to defend, could result in substantial judgments, liabilities and bonding difficulties, and may negatively impact their ability to continue to operate

Numerous legal actions, proceedings and claims arising out of the sale, distribution, manufacture, development, advertising, marketing and claimed health effects of cigarettes are pending against the PMs and it is likely that similar claims will continue to be filed for the foreseeable future. The claimants have sought recovery on a variety of legal theories, including, among others, negligence, fraud, misrepresentation, strict liability in tort, design defect, breach of warranty, enterprise liability (including claims asserted under the Racketeer Influenced and Corrupt Organizations Act ("**RICO**")), civil conspiracy, intentional infliction of harm, injunctive relief, indemnity, restitution, unjust enrichment, public nuisance, unfair trade practices, claims based on antitrust laws and state consumer protection acts, and claims based on failure to warn of the harmful or addictive nature of tobacco products. Various forms of relief are sought, including compensatory and, where available, punitive damages in amounts ranging in some cases into the hundreds of millions or even billions of dollars. Claimants in some of the cases have sought treble damages, statutory damages, disgorgement of rights, equitable and injunctive relief and medical monitoring and smoking cessation programs, among other damages.

It is possible that the outcome of these and similar cases, individually or in the aggregate, could result in bankruptcy or cessation of operations by one or more of the PMs. It is also possible that the PMs may be unable to post a surety bond in an amount sufficient to stay execution of a judgment in jurisdictions that require such bond pending an appeal on the merits of the case. Furthermore, even if the PMs are successful in defending some or all of the tobacco-related lawsuits against them, these types of cases are very expensive to defend. A material increase in the number of pending claims could significantly increase defense costs and have a material adverse effect on the results of operations and financial condition of the PMs. Adverse decisions in litigation against the tobacco companies could have an adverse impact on the industry overall. Any of the foregoing results could potentially lower the volume of cigarette sales and thus materially adversely affect the amounts of payments under the MSA and the Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation."

The Florida Supreme Court's ruling in Engle has resulted in additional litigation against cigarette manufacturers.

The case of *Engle v. R.J. Reynolds Tobacco Co., et al.* (Circuit Court, Dade County, Florida, filed May 5, 1994) was certified in 1996 as a class action on behalf of Florida residents, and survivors of Florida residents, who were injured or died from medical conditions allegedly caused by addiction to smoking and a multi-phase trial resulted in verdicts in favor of the class. During a three-phase trial, a Florida jury awarded compensatory damages to three individuals and approximately $145 billion in punitive damages to the certified class. In 2006, although the Florida Supreme Court vacated the punitive damages award and determined that the case could not proceed further as a class action, it permitted members of the *Engle* class to file individual claims, including claims for punitive damages, and held that these individual plaintiffs are entitled to rely on a number of the jury's findings in favor of the plaintiffs in the first phase of the *Engle* trial, including that smoking cigarettes causes a number of diseases; that cigarettes are addictive or dependence-producing; and that the defendants were negligent, breached express and implied warranties, placed cigarettes on the market that were defective and unreasonably dangerous, and concealed or conspired to conceal the risks of smoking. In the wake of the Florida Supreme Court ruling, thousands of individuals filed separate lawsuits seeking to benefit from the *Engle* findings. Altria and/or Philip Morris are defendants in approximately 2,400 cases involving approximately 3,100 plaintiffs (according to Altria in its Form 8-K filed with the SEC on February 1, 2018) pending in various state and federal courts in Florida that were filed by members of the Engle class (the "***Engle* Progeny Cases**") (although most federal cases were settled, as discussed herein).

At the beginning of the *Engle* Progeny Cases litigation, a central issue was the proper use of the preserved *Engle* findings. The tobacco manufacturers had argued that use of the *Engle* findings to establish individual elements of progeny claims (such as defect, negligence and concealment) was a violation of federal due process, but in 2013, both the Florida Supreme Court (in the *Douglas* case) and the Eleventh Circuit (in the *Duke* and *Walker* cases) rejected that argument, and the U.S. Supreme Court denied the tobacco manufacturers' petitions for writ of certiorari in all of those cases. As discussed herein, in May 2017, in the *Graham* case, the en banc Eleventh Circuit rejected the due process and implied preemption arguments of the tobacco manufacturers, holding that giving preclusive effect to the findings of negligence and strict liability by the *Engle* jury in individual *Engle* Progeny Case actions against the tobacco companies is not preempted by federal tobacco laws and does not deprive the tobacco companies of due process, and in January 2018, the U.S. Supreme Court denied the tobacco manufacturers' petition for writ of certiorari. Other issues with respect to the *Engle* Progeny Cases were decided or remain pending on appeal. It is not possible to predict the final outcomes of any of the *Engle* Progeny Cases, but such outcomes may materially adversely affect the operations of the defendants and thus payments under the MSA and the Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation—*Engle Progeny Cases*."

A December 2008 decision by the U.S. Supreme Court could limit the ability of cigarette manufacturers to contend that certain claims asserted against them in product liability litigation are barred, and could encourage litigation involving cigarettes labeled as "lights" or "low tar"

In December 2008, the U.S. Supreme Court in a purported "lights" class action, *Good v. Altria Group, Inc.*, issued a decision that neither the Federal Cigarette Labeling and Advertising Act nor the Federal Trade Commission's ("**FTC**") regulation of cigarettes' tar and nicotine disclosures preempts (or bars) some of plaintiffs' claims. The decision also more broadly addresses the scope of preemption based on the Federal Cigarette Labeling and Advertising Act, and could significantly limit cigarette manufacturers' arguments that certain of plaintiffs' other claims in smoking and health litigation, including claims based on the alleged concealment of information with respect to the hazards of smoking, are preempted. In addition, the Supreme Court's ruling could encourage litigation against cigarette manufacturers regarding the sale of cigarettes labeled as "lights" or "low tar", and it may limit cigarette manufacturers' ability to defend such claims with regard to the use of these descriptors prior to the FDA's ban thereof in June 2010. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation—*Class Action Cases*."

The amount or range of losses that could result from unfavorable outcomes of pending litigation are unable to be meaningfully estimated

Except for the impact of the State Settlement Agreements (defined below) on an annual basis when calculated, the PMs have stated in SEC filings that (i) their management has concluded that it is not probable that a loss has been incurred in any material pending litigation against them, (ii) their management is unable to estimate the possible loss or range of loss that could result from an unfavorable outcome of any material pending litigation due to the many variables, uncertainties and complexities, and (iii) accordingly, their management has not provided any amounts in their consolidated financial statements for possible losses related to material pending litigation. It is possible that their results of operations, cash flows and financial positions could be materially adversely affected by an unfavorable outcome of certain pending or future litigation, potentially leading to cessation of operations or insolvency or bankruptcy of one or more PMs, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

The ultimate outcome of these and any other pending or future lawsuits is uncertain. Verdicts of substantial magnitude that are enforceable as to one or more PMs, if they occur, could encourage commencement of additional litigation, or could negatively affect perceptions of potential triers of fact with respect to the tobacco industry, possibly to the detriment of pending litigation. An unfavorable outcome or settlement or one or more adverse judgments could result in bankruptcy, insolvency or a decision by the affected PMs to substantially increase cigarette prices, thereby reducing cigarette consumption. In addition, the financial condition of any or all of the PM defendants could be adversely affected by the ultimate outcome of pending litigation, including bonding and litigation costs or a verdict or verdicts awarding substantial compensatory or punitive damages. Depending upon the magnitude of any such negative financial impact (and irrespective of whether the PM is thereby rendered insolvent), an adverse outcome in one or more of the lawsuits could materially impair the affected PMs' ability to make payments under the MSA, which could

materially adversely affect the amount and/or timing of the Pledged Annual Payments. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation" and "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS."

The PMs have substantial payment obligations under litigation settlement agreements which, together with their other litigation liabilities, may adversely affect the ability of the PMs to continue operations in the future

In 1998, the OPMs entered into the MSA with 46 states and 6 other U.S. jurisdictions to settle asserted and unasserted health care cost recovery and other claims. Certain U.S. tobacco product manufacturers had previously settled similar claims brought by Mississippi, Florida, Texas and Minnesota (the "**Previously Settled State Settlements**" and, together with the MSA, are referred to as the "**State Settlement Agreements**").

Under the State Settlement Agreements, the PMs are obligated to pay billions of dollars each year. Annual payments under the State Settlement Agreements are required to be paid in perpetuity and are based, among other things, on domestic market share and unit volume of domestic shipments. With respect to the MSA, payments are based on data from the year preceding the year in which payment is due, and, with respect to the Previously Settled State Settlements, payments are based on data from the year in which payment is due. If the volume of cigarette sales by the PMs were materially reduced, these payment obligations could materially adversely affect the financial condition of the PMs and potentially the ability of PMs to make payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT."

The verdict returned in the federal government's reimbursement case could materially adversely affect PMs' cigarette sales and their profits therefrom and thus payments under the MSA

In August 2006, a final judgment and remedial order was entered in *United States of America v. Philip Morris USA, Inc., et al.* (U.S. District Court, District of Columbia, filed September 22, 1999) (the "**DOJ Case**") and in June 2010 the U.S. Supreme Court denied all petitions for review of the case. The district court based its final judgment and remedial order on the government's only remaining claims, which were based on the tobacco industry defendants' alleged violations of RICO. Although the verdict did not award monetary damages to the plaintiff U.S. government, the final judgment and remedial order imposed a number of requirements on the defendants. Such requirements include, but are not limited to, corrective statements by defendants related to the health effects of smoking. The remedial order also placed certain prohibitions on the manner in which defendants market their cigarette products and enjoined any use of "lights" or similar product descriptors. On November 27, 2012, the district court released the text of the corrective statements that the defendants must make. In January 2013, defendants appealed to the U.S. Court of Appeals for the District of Columbia Circuit the district court's November 2012 ruling on the text of the corrective statements, claiming a violation of free speech rights. On June 2, 2014, the U.S. District Court for the District of Columbia approved a joint motion by the U.S. government and the defendant tobacco companies, pursuant to which, for specified time periods following the date when all appeals are exhausted, corrective statements would be disseminated in newspapers (print and online), on television, on the tobacco companies' websites, and on "onserts" affixed to cigarette packs. On February 8, 2016, the district court issued an order on the content of the corrective statements, in April and May 2016 the defendants filed notices of appeal to the U.S. Court of Appeals, including on the content of the corrective statements. In April 2017, the U.S. Court of Appeals reversed in part the district court's decision on the content of the corrective communications, striking certain content (the statement "Here is the Truth") and remanding to the district court the decision on how to revise certain other content. In June 2017, the U.S. District Court for the District of Columbia issued an order adopting modified corrective statements, featuring a preamble to the effect that a federal court has ordered the OPMs to make the specified statements, and featuring statements regarding the adverse health effects of smoking, the addictiveness of smoking and nicotine, the lack of significant health benefit from smoking "low tar", "light", "ultra light", "mild" and "natural" cigarettes, the manipulation of cigarette design and composition to ensure optimum nicotine delivery, and the adverse health effects of exposure to second hand smoke. A remaining issue pending on appeal is whether the corrective statements must be placed on point-of-sale displays.

According to an October 2017 court order, beginning in November 2017, the OPMs will run court-mandated announcements containing the agreed-upon corrective statements. Television announcements will be between 30 and

45 seconds long and will run in prime time five days a week for 52 weeks. Full-page print ads will appear in at least 45 newspapers and will run on five weekends spread over approximately four months, and will also appear on the newspapers' websites. The corrective statements will also appear on company-owned websites and in "onserts" affixed to cigarette packs, and the parties are in the process of finalizing the details for the company-owned websites and onserts. Altria has stated that it will spend $31 million to implement the court-ordered corrective statements. It is possible that the district court's order, including the prohibitions on the use of the descriptors relating to low tar cigarettes and the stark text required in the corrective statements, will negatively affect the PMs' sales of and profits from cigarettes, as well as result in significant compliance costs, which could materially adversely affect their payments under the MSA, which in turn could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Civil Litigation—*Health-Care Cost Recovery Cases*."

Risks Relating to the Tobacco Consumption Report

The Commonwealth Annual Payments projections developed using the Commonwealth Annual Payments Projection Methodology and Assumptions and described in "COMMONWEALTH ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS" are based in part upon the tobacco consumption forecast contained in the Tobacco Consumption Report. No assurance can be given that actual future consumption will be consistent with that which is projected in the Tobacco Consumption Report. See APPENDIX D—"TOBACCO CONSUMPTION REPORT."

Other Risks Relating to the MSA and Related Statutes

Severability

Most of the major provisions of the MSA are not severable. If a court materially modifies, renders unenforceable or finds unlawful any non-severable provision, the attorneys general of the Settling States and the OPMs are required by the MSA to attempt to negotiate substitute terms. If, however, any OPM does not agree to the substitute terms, the MSA terminates in all Settling States affected by the court's ruling. Even if substitute terms are agreed upon, payments under such terms may be less than payments under the MSA or otherwise could be made according to or subject to different terms and conditions, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments. See "—If Litigation Challenging the MSA, the Qualifying Statutes and Related Legislation Were Successful, Payments under the MSA Might be Suspended or Terminated" and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Severability."

Amendments, Waivers and Termination

As a settlement agreement between the PMs and the Settling States, the MSA is subject to amendment in accordance with its terms, and may be terminated upon consent of the parties thereto. Parties to the MSA, including the Commonwealth, may waive the performance provisions of the MSA. The Authority is not a party to the MSA; accordingly, the Authority does not have any right to challenge any such amendment, waiver or termination. While the economic interests of the Commonwealth and the holders of the Series 2018 Bonds are expected to be the same in many circumstances, no assurance can be given that such an amendment, waiver or termination of the MSA would not have a material adverse effect on the Authority and its ability to pay debt service on the Series 2018 Bonds. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Amendments and Waivers."

Reliance on Commonwealth Enforcement of the MSA; Commonwealth Non-Impairment

The Commonwealth may not convey and has not conveyed to the Authority or the Bondholders any right to enforce the terms of the MSA. Pursuant to its terms, the MSA, as it relates to the Commonwealth, can only be enforced by the Commonwealth. Failure by the Commonwealth to enforce the MSA may have a material adverse effect on the receipt of Pledged Annual Payments by the Authority. See "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS." It is also possible that the Commonwealth could attempt to claim some or all of the Pledged Annual Payments for itself or otherwise interfere with the security for the Bonds. In that event, the Bondholders, the Trustee or the Authority may assert claims based on contractual, fiduciary or constitutional rights,

but no prediction can be made as to the disposition of such claims. See "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS."

Amendment to the Commonwealth's Qualifying Statute

The MSA provides that if a state adopts the Model Statute or a Qualifying Statute but then repeals it or amends it in such fashion that it is no longer a Qualifying Statute, then such state will no longer be entitled to any protection from the NPM Adjustment. No assurance can be provided that a PM would not assert that, or a court or arbitrator would not determine that, the Commonwealth's Qualifying Statute, if amended, would not continue to constitute a Qualifying Statute. Should it be determined that any amendments to the Commonwealth's Qualifying Statute cause it to no longer be a Qualifying Statute, then the Commonwealth would no longer be entitled to any protection from the NPM Adjustment, and there could be substantial reductions in the amount of Pledged Annual Payments available to the Authority to make payments on the Series 2018 Bonds. See "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS—MSA and Qualifying Statute Enforceability."

Bankruptcy of a PM May Delay, Reduce or Eliminate Payments Under the MSA

If one or more PMs were to become a debtor in a case under Title 11 of the United States Code (the "**Bankruptcy Code**") and, as a result, there were delays in or reductions or elimination of the debtor PMs payments under the MSA, the annual Pledged Settlement Payments received by the Authority could be reduced.

In the event of the bankruptcy of a PM, unless approval of the bankruptcy court is obtained, the automatic stay provisions of the Bankruptcy Code could prevent any action by the Commonwealth, the Authority, the Trustee or the holders or the beneficial owners of the Series 2018 Bonds to collect any tobacco settlement payments or any other amounts owing by the bankrupt PM. In addition, even if the bankrupt PM wanted to continue paying the tobacco settlement payments, it could be prohibited as a matter of law from making such payments. In particular, if it were to be determined that the MSA was not an "executory contract" under the Bankruptcy Code, then the PM may be unable to make further payments of tobacco settlement payments. If the MSA is determined in a bankruptcy case to be an "executory contract" under the Bankruptcy Code, the bankrupt PM could seek court approval to reject the MSA and stop making payments under it. No assurance can be given as to whether a court will find that the MSA is or is not an executory contract.

Furthermore, payments previously made to the holders or beneficial owners of the Series 2018 Bonds could be avoided as preferential payments, so that such holders or beneficial owners would be required to return such payments to the bankrupt PM. Also, the bankrupt PM may have the power to alter the terms of its payment obligations under the MSA without the consent, and even over the objection of the Commonwealth, the Authority, the Trustee or the holders and beneficial owners of the Series 2018 Bonds. Finally, while there are provisions of the MSA purporting to deal with the situation when a PM goes into bankruptcy (including provisions regarding the termination of that PM's obligations) (see "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Termination of MSA"), such provisions may be unenforceable. NAAG has stated that it actively monitors any bankruptcy related activity of the PMs with the goals of preventing the debtors from using bankruptcy law to avoid their MSA payment obligations to the Settling States and ensuring that Settling States can continue to perform their regulatory duties despite the bankruptcy filing, but there can be no assurance that the actions of NAAG will be successful. There may be other possible effects of a bankruptcy of a PM that could result in delays and/or reductions in, or elimination of, tobacco settlement payments under the MSA. Regardless of any specific adverse determination in a PM bankruptcy proceeding, the fact of a PM bankruptcy proceeding could have a material adverse effect on the timing of receipt, amount and value of the Pledged Annual Payments.

Bankruptcy of the Authority

Municipalities cannot file for bankruptcy under the Bankruptcy Code unless specifically authorized to be a debtor by state law or by a governmental officer or organization empowered by state law to authorize such entity to be a debtor in a bankruptcy proceeding. Pennsylvania law does not currently expressly authorize the Authority to file for bankruptcy proceeding. It is possible that the state legislature could in the future adopt legislation that would authorize the Authority to file for bankruptcy. The law is unclear as to whether the Governor of Pennsylvania or another member of the executive branch of the Pennsylvania government has the power to authorize the Authority to

file for bankruptcy. It is also possible that Congress could in the future enact legislation that changes the eligibility requirements for municipalities to file for bankruptcy.

If the Authority were to go into bankruptcy, there could be delays or reductions in payments on the Series 2018 Bonds or other losses to the holders of the Series 2018 Bonds. Actions could be taken in a bankruptcy of the Authority that could adversely affect the exclusion of interest on the Series 2018 Bonds from gross income for federal income tax purposes. Regardless of any specific adverse determinations in an Authority bankruptcy proceeding, the fact of an Authority bankruptcy proceeding could have an adverse effect on the liquidity and value of the Series 2018 Bonds.

Failures by PMs to Make Payments Under the MSA Could be Coupled with an Inability on the Part of the Settling States to Enforce and Collect Defaulted Payments

A PM could discontinue making required payments under the MSA for any reason. Any attempts to enforce payments under the MSA from a PM in breach could be costly and time consuming as well as likely to include litigation. For example, VIBO Corporation, Inc., d/b/a General Tobacco ("**General Tobacco**") ceased production of cigarettes in 2010 and has defaulted upon certain of its MSA payments. General Tobacco has stated that it will be unable to make any back payments it owes under the MSA. Two Settling States brought suit on behalf of all of the Settling States seeking full payment by General Tobacco of its MSA obligations. The ability of the Settling States to enforce and collect such payments in instances such as this is limited by the ability of the defaulting PM to meet its obligations and may be costly. Failure by other PMs to make payments could be coupled with an inability on the part of the Settling States to enforce and collect defaulted payments under the MSA, which could materially adversely affect the amount and/or timing of the Pledged Annual Payments.

California, Kentucky and Iowa have had disputes and have filed suit against Bekenton USA, Inc. ("**Bekenton**"), to among other things, compel Bekenton to comply with its full payment obligations under the MSA. In June 2005, the State of California filed an application in San Diego County Superior Court seeking an enforcement order against Bekenton. Bekenton was allowed by the court to file a suit that argued, among other things, that the State of California breached the "Most Favored Nation" ("**MFN**") provisions of the MSA by allowing three other SPMs to join the MSA under more favorable terms, and that it was entitled to similar relief under another clause of the MSA (the "**Relief Clause**"), which requires that if any PM is relieved of a payment obligation, such relief becomes applicable to all of the PMs. In a November 2005 tentative ruling (which subsequently became a final order on March 15, 2006), the court denied Bekenton's MFN claim and its motion to file suit under the Relief Clause. In 2005, Bekenton also filed for bankruptcy relief. In the Kentucky case, Bekenton failed to make its full MSA payment of approximately $7.7 million in April 2005, and, instead, paid only $198,000, less than 3% of the total payment due. The Commonwealth of Kentucky commenced an action against Bekenton in which Bekenton claimed that under the Relief Clause it was entitled to reduce its payment. In April 2006, the court dismissed Bekenton's claim for a reduction, holding that the Relief Clause was not applicable since the agreement with another PM did not relieve the PM of any payment obligations. In the Iowa case, the State of Iowa sought to de-list Bekenton as a PM for failing to comply with the MSA payment provisions and to prohibit Bekenton from doing business in Iowa for failing to comply with the escrow payment provisions of the Iowa Qualifying Statute. In August 2005, an Iowa state court enjoined Iowa from "de-listing" Bekenton, permitting Bekenton to continue selling cigarettes in Iowa. The court found that the MSA itself provides procedures for the resolution of disputes regarding MSA payments and that such procedures should be followed in this case.

Series 2018 Bonds Secured Solely by the Trust Estate

Investors in the Series 2018 Bonds must look solely to the Trust Estate pledged under the Indenture for repayment of their investment. The Series 2018 Bonds will not constitute a debt or liability of the Commonwealth or any political subdivision thereof and neither the full faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof is pledged to the payment of the principal of or interest on the Series 2018 Bonds, nor will the Authority be obligated to pay the principal of or interest on the Series 2018 Bonds except from the revenues and funds of the Authority, including the Revenues, pledged for the payment thereof under the Indenture. The Series 2018 Bonds are not secured by the proceeds thereof (other than other than the amount deposited in the Debt Service Account to pay capitalized interest to June 1, 2019). The Authority has no taxing power.

Limited Remedies

The Trustee is limited under the terms of the Transfer Agreement to enforcing the terms of such agreement and to receiving the Pledged Annual Payments and applying them in accordance with the Indenture. If an Event of Default occurs, the Trustee cannot sell or foreclose on the Pledged Annual Payments or its rights under the Transfer Agreement.

Limited Liquidity; Price Volatility

There is currently a limited secondary market for securities such as the Series 2018 Bonds. There can be no assurance that a secondary market for the Series 2018 Bonds will develop, or if a secondary market does develop, that it will provide holders of the Series 2018 Bonds with liquidity or that it will continue for the life of the Series 2018 Bonds. Consequently, any purchaser of the Series 2018 Bonds must be prepared to hold such securities for an indefinite period of time or until final redemption of such securities. Tobacco settlement bonds generally have also exhibited greater price volatility than traditional municipal bonds.

Limited Nature of Ratings; Reduction, Suspension or Withdrawal of a Rating

The Series 2018 Bonds have been assigned ratings by the Rating Agencies. The ratings for the Series 2018 Bonds address only the likelihood that the Authority will pay the interest on and principal of the Series 2018 Bonds when due. The respective ratings of the Series 2018 Bonds are not a recommendation to purchase, hold or sell such Series 2018 Bonds and such ratings will not address the marketability of such Series 2018 Bonds, any market price or suitability for a particular investor. There is no assurance that any rating will remain for any given period of time or that any rating will not be lowered, suspended or withdrawn entirely by the Rating Agency furnishing the same if, in its judgment, circumstances so warrant based on factors prevailing at the time. See "RATINGS" herein.

The Phantom Fireworks Case

See "LITIGATION" regarding the Phantom Fireworks Case, including the description of the Opinion being delivered by Greenberg Traurig, LLP on the date of issuance of the Series 2018 Bonds. The Opinion does not address the validity of the Series 2018 Bonds, nor does the Opinion express any opinion with respect to the merits of the Phantom Fireworks Case or the potential outcome of the Phantom Fireworks Case. Investors should be aware that the rendering of the Opinion is not a guaranty of what a court would hold; rather it is an informed judgment as to a specific question of law.

It is possible that a court could declare some or all of Act 43 to be unconstitutional which could have a negative effect on the validity of and security for the Bonds and could result in the holders of the Bonds not being paid. The Secretary has covenanted in the Service Agreement that, if any section of Act 43 affecting the validity and enforceability of the Bonds or the sources of payment and security therefor is held by a court of competent jurisdiction in an order whose effect has not been stayed, to be unconstitutional or otherwise invalid, and the effect of such decision is to make the Bonds invalid, the Secretary will use his best efforts to request legislation to be introduced in the General Assembly, which legislation would reauthorize Article XXVIII of the Tax Reform Code, in a manner which would cause the Bonds to remain valid and entitled to the sources of payment and security therefor. There can be no assurance that any such efforts by the Secretary would be successful or that the General Assembly would take such action.

The Phantom Fireworks Case does not address the Authority Act, including Sections 1524(a) and (b), 1526 and 1527(a), and does not seek to invalidate the issuance of any bonds, including the Bonds, to be issued thereunder.

LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS

The following discussion summarizes some, but not all, of the possible legal issues that could affect the Series 2018 Bonds. The discussion does not address every possible legal challenge that could result in a decision that would cause the Pledged Annual Payments to be reduced or eliminated.

Bankruptcy Considerations

General. The enforceability of the rights and remedies of the Commonwealth under the MSA (and thus the Authority, the Trustee and the holders of the Series 2018 Bonds as collateral assignees) and of the obligations of a PM under the MSA are subject to the Bankruptcy Code and to other applicable insolvency, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally. Some of the risks associated with a bankruptcy of a PM are described below and include the risks of delay in or reduction of amount of the payment or of nonpayment under the MSA and the risk that the Commonwealth (and, thus, the Authority) may be stayed for an extended time from enforcing any rights under the MSA or with respect to the payments owed by the bankrupt PM or from commencing legal proceedings against the bankrupt PM. As a result, if a PM becomes a debtor in a bankruptcy case and defaults in making payments required under the MSA, Pledged Annual Payments available to the Authority to pay holders of the Series 2018 Bonds may be reduced or eliminated. Furthermore, certain payments previously made to holders of the Series 2018 Bonds could be avoided as preferential payments, so that holders of the Series 2018 Bonds would be required to return such payments to the bankrupt PM.

Chapter 7 Liquidation. If a PM becomes bankrupt and does not reorganize under Chapter 11, it may be liquidated under Chapter 7 of the Bankruptcy Code, in which event its operations will cease and its assets will be sold. In such an event, there would likely be an elimination of payments received from the PM that is in the Chapter 7 case. To the extent that the volume of cigarettes sold by other PMs increased as a result of cessation of operations by the PM being liquidated under Chapter 7 of the Bankruptcy Code, the market share of such other PMs should increase.

Chapter 11 Reorganization. Should a PM become a debtor in a Chapter 11 reorganization bankruptcy case, the PM may not be authorized to make any payments owing under the MSA, or may be required to obtain bankruptcy court approval before making such payments. Legal proceedings necessary to determine whether such PM's obligations under the MSA can be paid during the pendency of the bankruptcy proceedings could be time-consuming and could result in delays in, or elimination of, payments by the bankrupt PM.

Examples of other bankruptcy-related risks include:

MSA as Executory Contract. The treatment of the MSA under the Bankruptcy Code may be dependent upon whether the MSA is held to be an executory contract (which is not defined by the Bankruptcy Code but generally is considered to be a contract in which material performance remains due to some extent from both parties). No assurance can be given as to whether the MSA is an executory contract. Under the Bankruptcy Code, if the MSA is treated as an executory contract, a trustee in bankruptcy or a PM acting as a debtor-in-possession would have the right to assume or reject the MSA. However, there is no time period within which a trustee or PM in bankruptcy would be required to assume or reject the MSA. Legal proceedings necessary to resolve the issue of whether the MSA is an executory contract under the Bankruptcy Code could be time consuming and could result in delays in, or elimination of, payments by the bankrupt PM.

Assumption or Rejection of MSA. If the MSA is determined to be an executory contract, and should a bankrupt PM determine to assume the MSA, it would have to cure all outstanding MSA payment defaults and provide "adequate assurance" that all future payments under the MSA will be paid in full. "Adequate assurance" is not defined in the Bankruptcy Code and is determined by the bankruptcy court. If the bankruptcy court rules that the PM cannot provide such adequate assurance, payments under the MSA may be delayed or eliminated.

However, if the MSA is determined to be an executory contract, a bankrupt PM decides to reject the MSA, and a court approves such a decision, the Commonwealth (and thus the Authority, the Trustee and the holders of the Series 2018 Bonds, as collateral assignees) may then have a prepetition unsecured, nonpriority claim for damages. Rejection of an executory contract should be treated as a breach of the contract by the PM. However, under the Bankruptcy Code, the Commonwealth (and thus the Authority, the Trustee and the holders of the Series 2018 Bonds) nevertheless may not, without the permission of the bankruptcy court, commence or continue any action against the PM to enforce remedies under the MSA (including an action to collect payments due under the MSA). In addition, because amounts owed by the PM under the MSA are not fixed, legal proceedings may be necessary to quantify the claims of the Commonwealth (and thus the Authority, the Trustee and the holders of the Series 2018 Bonds) for damages as a result of the PM's rejection of the MSA. Such legal proceedings could be time consuming and could result in delays, reductions, or elimination of, payments by the bankrupt PM.

Modification of MSA Obligations. If the MSA is determined not to be an "executory contract", the PM determines to reject the MSA or the PM is otherwise not authorized to make payments under the MSA, then a bankruptcy of the PM could result in long delays and possibly in large reductions in the amount of Pledged Annual Payments available to pay the holders of the Series 2018 Bonds because, under the Bankruptcy Code, the obligations of the PM under the MSA could be modified or discharged in their entirety. For example, the bankruptcy court may approve a plan of reorganization or liquidation of the PM that alters the timing or the amount of payments to be made by the PM under the MSA to the Commonwealth (and, thus, to the Authority, the Trustee and holders of the Series 2018 Bonds).

No Assurance as to the Outcome of Litigation or Arbitration Proceedings

With respect to all matters of litigation or arbitration proceedings mentioned herein that have been brought and may in the future be brought against the PMs, or involving the enforceability or constitutionality of the MSA and/or the Commonwealth's Complementary Legislation, the Commonwealth's Qualifying Statute or the enforcement of the right to the Pledged Annual Payments or otherwise filed in connection with the tobacco industry, the outcome of such litigation or arbitration proceedings, in general, cannot be predicted with certainty and depends, among other things, on (i) the issues being appropriately presented and argued before the courts (including the applicable appellate courts) and arbitration panels and (ii) the courts or panels, having been presented with such issues, correctly applying applicable legal principles in reaching appropriate decisions regarding the merits. In addition, courts and panels may, in their exercise of equitable jurisdiction, reach judgments based not upon the legal merits but upon a balancing of the equities among the parties. Accordingly, no assurance can be given as to the outcome of any such litigation or arbitration and any such adverse outcome could materially adversely affect the amount and/or timing of Pledged Annual Payments available to the Authority to pay debt service on all or a portion of the Series 2018 Bonds.

SUMMARY OF THE MASTER SETTLEMENT AGREEMENT

The following is a brief summary of certain provisions of the MSA and related information. This summary is not complete and is subject to, and qualified in its entirety by reference to, the MSA, as amended. A copy of the MSA in its original form is attached hereto as APPENDIX C. Several amendments have been made to the MSA which are not included in APPENDIX C. Except for those amendments pursuant to which certain tobacco companies became SPMs, such amendments involve technical and administrative provisions not material to the summary below. See "BONDHOLDERS' RISKS" and "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS" herein for a discussion of certain risks related to the MSA.

General

The MSA is an industry-wide settlement of litigation between the Settling States (including the Commonwealth) and the four original OPMs that was entered into between the attorneys general of the Settling States and the original OPMs on November 23, 1998. The MSA provides for other tobacco companies (the "**SPMs**") to become parties to the MSA. The OPMs together with the SPMs are referred to as the "**PMs**". The settlement represents the resolution of a large potential financial liability of the PMs for smoking-related injuries, the costs of which have been borne and will likely continue to be borne by states. Pursuant to the MSA, the Settling States agreed to settle all their past, present and future smoking-related claims against the PMs in exchange for agreements and undertakings by the PMs concerning a number of issues. These issues include, among others, making payments to the Settling States, abiding by more stringent advertising restrictions and funding educational programs, all in accordance with the terms and conditions set forth in the MSA. Distributors of PMs' products are also covered by the settlement of such claims to the same extent as the PMs.

Parties to the MSA

The Settling States are all of the states, territories and the District of Columbia, except for the four states (Florida, Minnesota, Mississippi and Texas) that separately settled with the original OPMs prior to the adoption of the MSA (the "**Previously Settled States**"). According to NAAG, the following PMs are parties to the MSA (as of January 2, 2018, NAAG's most recent reference date):

OPMs	SPMs	
Philip Morris USA Inc. (formerly Philip Morris Incorporated) R.J. Reynolds Tobacco Company (formerly R.J. Reynolds Tobacco Company, Brown & Williamson Tobacco Corporation (2004 merger) and Lorillard Tobacco Company (2015 merger))	Bekenton, S.A. (1) Canary Islands Cigar Co. Caribbean-American Tobacco Corp. (CATCORP) The Chancellor Tobacco Company, UK Ltd. Commonwealth Brands, Inc. Daughters & Ryan, Inc. M/s. Dhanraj International (1) Eastern Company S.A.E. Ets L Lacroix Fils NV S.A. (Belgium) Farmer's Tobacco Co. of Cynthiana, Inc. General Jack's Incorporated General Tobacco (VIBO Corporation d/b/a General Tobacco) (2) House of Prince A/S Imperial Tobacco Limited/ITL (USA) Limited Imperial Tobacco Limited/ITL (UK) Imperial Tobacco Mullingar (Ireland) Imperial Tobacco Polska S.A. (Poland) Imperial Tobacco Production Ukraine Imperial Tobacco Sigara ve Tutunculuk Sanayi Ve Ticaret S.A. (Turkey) International Tobacco Group (Las Vegas), Inc. ITG Brands, LLC (formerly known as Lignum-2, LLC) (3) Japan Tobacco International USA, Inc. King Maker Marketing Konci Group (USA) Inc. (formerly known as Konci G&D Management Group (USA) Inc.) Kretek International Liberty Brands, LLC (1)	Liggett Group LLC Mac Baren Tobacco Company A/S Monte Paz (Compania Industrial de Tabacos Monte Paz S.A.) NASCO Products, LLC (4) OOO Tabaksfacrik Reemtsma Wolga (Russia) P.T. Djarum Pacific Stanford Manufacturing Corporation Peter Stokkebye Tobaksfabrik A/S Planta Tabak-manufaktur Gmbh & Co. Poschl Tabak GmbH & Co. KG Premier Manufacturing Incorporated Reemtsma Cigarettenfacbriken GmbH (Reemtsma) Santa Fe Natural Tobacco Company, Inc. Scandinavian Tobacco Group Lane Ltd. (formerly Lane Limited and Tobacco Exporters International (USA) Ltd.) Sherman's 1400 Broadway N.Y.C., LLC (5) Societe National d'Exploitation Industrielle des Tabacs et Allumettes (SEITA) Tabacalera del Este, S.A. (TABESA) Top Tobacco, LP U.S. Flue-Cured Tobacco Growers, Inc. Van Nelle Tabak Nederland B.V. (Netherlands) Vector Tobacco Inc. (formerly Vector Tobacco Inc. and Medallion Company, Inc.) Virginia Carolina Corporation, Inc. Von Eicken Group Wind River Tobacco Company, LLC VIP Tobacco USA, LTD. (formerly Winner Sales Company) ZNF International, LLC

(1) Has filed for bankruptcy relief. There may be other PMs that have filed for bankruptcy relief, of which the Authority is not aware. NAAG reports that other tobacco manufacturers that had been SPMs are no longer SPMs due to dissolution from bankruptcy or otherwise.

(2) Ceased production of cigarettes and other tobacco products.

(3) OPM with respect to those cigarette brands purchased from Reynolds Tobacco and Lorillard.

(4) Acquired by 22nd Century Group, Inc. in August 2014, with 22nd Century Group, Inc. and its subsidiaries becoming signatories to an adherence agreement to the MSA, according to news reports.

(5) Altria acquired Sherman Group Holdings, LLC and its subsidiaries in January 2017.

The MSA restricts PMs from transferring their tobacco product brands, cigarette product formulas and cigarette businesses (unless they are being transferred exclusively for use outside the United States) to any entity that

is not a PM under the MSA, unless the transferee agrees to assume the obligations of the transferring PM under the MSA related to such brands, formulas or businesses. The MSA expressly provides that the payment obligations of each PM are not the obligation or responsibility of any affiliate of such PM and, further, that the remedies, penalties or sanctions that may be imposed or assessed in connection with a breach or violation of the MSA will only apply to the PMs and not against any other person or entity. Obligations of the SPMs, to the extent that they differ from the obligations of the OPMs, are described below under "—Subsequent Participating Manufacturers."

Scope of Release

Under the MSA, the PMs and the other "Released Parties" (defined below) are released from:

- claims based on past conduct, acts or omissions (including any future damages arising therefrom) in any way relating to the use, sale, distribution, manufacture, development, advertising, marketing or health effects of, or exposure to, or research statements or warnings regarding, tobacco products; and

- monetary claims based on future conduct, acts or omissions in any way relating to the use of or exposure to tobacco products manufactured in the ordinary course of business, including future claims for reimbursement of healthcare costs.

This release is binding upon each Settling State and any of its past, present and future agents, and officers acting in their official capacities, legal representatives, agencies, departments, commissions and divisions. The MSA is further stated to be binding on the following persons, to the full extent of the power of the signatories to the MSA to release past, present and future claims on their behalf: (i) any Settling State's subdivisions (political or otherwise, including, but not limited to, municipalities, counties, parishes, villages, unincorporated districts and hospital districts), public entities, public instrumentalities and public educational institutions; and (ii) persons or entities acting in a *parens patriae*, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or any other capacity, whether or not any of them participate in the MSA (a) to the extent that any such person or entity is seeking relief on behalf of or generally applicable to the general public in such Settling State or the people of such Settling State, as opposed solely to private or individual relief for separate and distinct injuries, or (b) to the extent that any such entity (as opposed to an individual) is seeking recovery of healthcare expenses (other than premium or capitation payments for the benefit of present or retired state employees) paid or reimbursed, directly or indirectly, by a Settling State. All such persons or entities are referred to collectively in the MSA as "**Releasing Parties**."

To the extent that the attorney general of a Settling State does not have the power or authority to bind any of the Releasing Parties in such state, the release of claims contemplated by the MSA may be ineffective as to the Releasing Parties and any amounts that become payable by the PMs on account of their claims, whether by way of settlement, stipulated judgment or litigated judgment, will trigger the Litigating Releasing Parties Offset. See "—Adjustments to Payments."

The release inures to the benefit of all PMs and their past, present and future affiliates, and the respective divisions, officers, directors, employees, representatives, insurers, lenders, underwriters, tobacco-related organizations, trade associations, suppliers, agents, auditors, advertising agencies, public relations entities, attorneys, retailers and distributors of any PM or any such affiliate (and the predecessors, heirs, executors, administrators, successors and assigns of each of the foregoing). They are referred to in the MSA individually as a "**Released Party**" and collectively as the "**Released Parties**." However, the term "Released Parties" does not include any person or entity (including, but not limited to, an affiliate) that is an NPM at any time after the MSA execution date, unless such person or entity becomes a PM.

Overview of Payments by the Participating Manufacturers; MSA Escrow Agent

The MSA requires that the PMs make several types of payments, including Initial Payments, Annual Payments and Strategic Contribution Payments, as discussed below.* These payments (with the exception of the

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* Other payments that are required to be made by the PMs, such as payments of attorneys' fees and payments to a national foundation established pursuant to the MSA, are not allocated to the Settling States (and thus not allocated to the Commonwealth) and are not available to the holders

upfront Initial Payment) are subject to various adjustments and offsets, some of which could be material. See "—Adjustments to Payments" and "—Subsequent Participating Manufacturers" below. SPMs were not required to make Initial Payments. The OPMs have made all of the Initial Payments. Thus far, most of the PMs* have made the Annual Payments due in 2000 through, and including, 2017, and Strategic Contribution Payments due in 2008 through, and including, 2017, which was the last year in which such Strategic Contribution Payments were due (subject, in each case, to certain withholdings and payments into the DPA under the MSA, including as described in "—NPM Adjustment Claims"). See "—Payments Made to Date."

Payments required to be made by the OPMs are calculated annually based on actual domestic shipments of cigarettes in the prior calendar year by reference to the OPMs' domestic shipment of cigarettes in 1997, with consideration under certain circumstances for the profitability of each OPM. Payments to be made by the SPMs are recalculated each year based on the Market Share of each individual SPM in relation to the Market Share of the OPMs. For SPMs that became signatories to the MSA within 90 days of its execution, payments are recalculated each year based on the Market Share less the Base Share of such SPM in relation to the Market Share of the OPMs. See "—Subsequent Participating Manufacturers" below. Pursuant to an escrow agreement (the "**MSA Escrow Agreement**") established in conjunction with the MSA, Annual Payments are to be made to Citibank, N.A., as escrow agent (the "**MSA Escrow Agent**"), which in turn will disburse the funds to the parties entitled thereto. Pursuant to Tax Reform Code Article XXVIII, the Transfer Agreement and the Service Agreement, the Commonwealth, acting through the State Treasurer, will transfer the portion of the Commonwealth Annual Payments that are the Pledged Annual Payments when received to the Tobacco Revenue Bond Debt Service Account and will direct the State Treasurer to transfer such amounts directly to the Trustee as the assignee of the Authority.

Beginning with the payments due in the year 2000, PricewaterhouseCoopers LLP, the independent auditor under the MSA (the "**MSA Auditor**") has, among other things, calculated and determined the amount of all payments owed pursuant to the MSA, the adjustments, reductions and offsets thereto (and all resulting carry-forwards, if any) and the allocation of such payments, adjustments, reductions, offsets and carry-forwards among the PMs and among the Settling States. This information is not publicly available and the MSA Auditor has agreed to maintain the confidentiality of all such information, except that the MSA Auditor may provide such information to PMs and the Settling States as set forth in the MSA.

Initial Payments

Initial Payments were made only by the OPMs. No Initial Payments were due after the 2003 Initial Payment.

Annual Payments

The OPMs and the other PMs are required to make Annual Payments on each April 15 in perpetuity. Most of the PMs made the Annual Payments due April 15 in each of the years 2000 through 2017. The scheduled base amounts of Annual Payments are set forth in the following table:

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of the Bonds, and consequently are not discussed herein.

* VIBO Corporation, Inc., d/b/a General Tobacco, ceased production of cigarettes in 2010 and has defaulted upon certain of its MSA payments. General Tobacco has stated that it will be unable to make any back payments it owes under the MSA.

Base Amounts of Annual Payments[(1)]

Payment Year	Base Amount	Payment Year	Base Amount
2000	$4,500,000,000	2010	$8,139,000,000
2001	5,000,000,000	2011	8,139,000,000
2002	6,500,000,000	2012	8,139,000,000
2003	6,500,000,000	2013	8,139,000,000
2004	8,000,000,000	2014	8,139,000,000
2005	8,000,000,000	2015	8,139,000,000
2006	8,000,000,000	2016	8,139,000,000
2007	8,000,000,000	2017	8,139,000,000
2008	8,139,000,000	Thereafter	9,000,000,000
2009	8,139,000,000		

(1) The Annual Payments from 2000 through 2017 have been made. Adjustments to Annual Payments for a given year may impact Annual Payments due in subsequent years. This table reflects base amounts of Annual Payments only, and does not reflect adjustments. Actual payments received have been substantially lower than the base amounts due to the application of adjustments. See "—Payments Made to Date" below.

The respective portion of each base amount applicable to each OPM is calculated by multiplying the base amount by the OPM's Relative Market Share (defined below) during the preceding calendar year. The base annual payments in the above table will be increased by at least the minimum 3% Inflation Adjustment, adjusted by the Volume Adjustment, reduced by the Previously Settled States Reduction, and further adjusted by the other adjustments described below. Each SPM has Annual Payment obligations under the MSA (separate from the payment obligations of the OPMs) according to its market share. However, any SPM that became a party to the MSA within 90 days after it became effective pays only if its market share exceeds the higher of its 1998 market share or 125% of its 1997 market share (such higher share, the "**Base Share**").

"**Relative Market Share**" is defined as an OPM's percentage share of the number of cigarettes shipped by all OPMs in or to the 50 states, the District of Columbia and Puerto Rico (defined hereafter as the "**United States**"), as measured by the OPM's reports of shipments to Management Science Associates, Inc. ("**MSAI**") (or any successor acceptable to all the OPMs and a majority of the attorneys general of the Settling States who are also members of the NAAG executive committee). The term "**cigarette**" is defined in the MSA to mean any product that contains nicotine, is intended to be burned, contains tobacco and is likely to be offered to, or purchased by, consumers as a cigarette and includes "roll-your-own" tobacco.

The base amounts shown in the table above are subject to the following adjustments applied in the following order:

- the Inflation Adjustment,
- the Volume Adjustment,
- the Previously Settled States Reduction,
- the Non-Settling States Reduction,
- the NPM Adjustment,
- the Offset for Miscalculated or Disputed Payments,
- the Litigating Releasing Parties Offset, and
- the Offset for Claims-Over.

Application of these adjustments resulted in a material reduction of the Commonwealth Annual Payments due to the Commonwealth under the MSA from the scheduled base amounts for the years 2000 through 2017, as discussed below under the caption "—Payments Made to Date".

Strategic Contribution Payments

The OPMs were required to make Strategic Contribution Payments on April 15 of each year from 2008 through 2017. Most of the PMs made the Strategic Contribution Payments due April 15 in each of the years 2008

through 2017. The base amount of each Strategic Contribution Payment was $861 million. The respective portion of the base amount applicable to each OPM was calculated by multiplying the base amount by the OPM's Relative Market Share during the preceding calendar year. The SPMs were required to make Strategic Contribution Payments if their Market Share increased above their respective Base Shares. See "—Subsequent Participating Manufacturers" below.

The base amounts of the Strategic Contribution Payments were subject to the adjustments as described in "—Annual Payments" above, except for the Previously Settled States Reduction, which was not applicable to Strategic Contribution Payments. Application of the adjustments resulted in a material reduction of the Strategic Contribution Payments due to the Commonwealth under the MSA from the scheduled base amount for the years 2000 through 2017, as discussed below under the caption "—Payments Made to Date." No Strategic Contribution Payments were due after the 2017 Strategic Contribution Payment. Strategic Contribution Payments are not transferred by the Commonwealth and are not available to the Authority. Any payment received by the Commonwealth that represents an adjustment to a prior Strategic Contribution Payment will not be available to the Authority.

Adjustments to Payments

The base amounts of the Annual Payments are, and the Initial Payments and Strategic Contribution Payments were, subject to certain adjustments to be applied sequentially and in accordance with formulas contained in the MSA.

Inflation Adjustment

The base amounts of the Annual Payments are, and the base amounts of the Strategic Contribution Payments were, increased each year to account for inflation. The increase in each year will be 3% or a percentage equal to the percentage increase in the Consumer Price Index (the "**CPI**") (or such other similar measures as may be agreed to by the Settling States and the PMs) for the preceding year, whichever is greater (the "**Inflation Adjustment**"). The inflation adjustment percentages are compounded annually on a cumulative basis beginning in 1999 and were first applied in 2000.

Volume Adjustment

Each of the Annual Payments is, and each of the Initial Payments and Strategic Contribution Payments was, increased or decreased by an adjustment which accounts for fluctuations in the number of cigarettes shipped by the OPMs in or to the United States (the "**Volume Adjustment**").

If the aggregate number of cigarettes shipped in or to the United States by the OPMs in any given year (the "**Actual Volume**") is greater than 475,656,000,000 cigarettes (the "**Base Volume**"), the base amount allocable to the OPMs is adjusted to equal the base amount (in the case of Annual Payments and Strategic Contribution Payments, after application of the Inflation Adjustment) multiplied by a ratio, the numerator of which is the Actual Volume and the denominator of which is the Base Volume.

If the Actual Volume in a given year is less than the Base Volume, the base amount due from the OPMs (in the case of Annual Payments and Strategic Contribution Payments, after application of the Inflation Adjustment) is decreased by 98% of the percentage by which the Actual Volume is less than the Base Volume, multiplied by such base amount. If, however, the aggregate operating income of the OPMs from sales of cigarettes in the United States during the year (the "**Actual Operating Income**") is greater than $7,195,340,000, as adjusted for inflation in accordance with the Inflation Adjustment (the "**Base Operating Income**"), all or a portion of the volume reduction is added back (the "**Income Adjustment**"). The amount by which the Actual Operating Income of the OPMs exceeds the Base Operating Income is multiplied by the percentage of the allocable shares under the MSA represented by Settling States in which State-Specific Finality has been reached and divided by four, then added to the payment due. However, in no case will the amount added back due to the increase in operating income exceed the amount deducted due to the decrease in domestic volume. Any add-back due to an increase in Actual Operating Income will be allocated among the OPMs on a Pro Rata basis in accordance with their respective increases in Actual Operating Income over 1997 Base Operating Income.

Certain PMs and Settling States were in dispute regarding whether the "roll-your-own" tobacco conversion for OPMs of 0.0325 ounces for one individual cigarette should continue to be used for purposes of calculating the downward Volume Adjustments to the MSA payments (as Settling States contended), or, rather, a 0.09 ounce conversion (as PMs contended). Forty-three jurisdictions (including the Commonwealth) entered into arbitration, and in an award dated January 21, 2013, the arbitration panel held that the MSA Auditor is to use the 0.0325 ounce conversion method for OPMs for purposes of roll-your-own tobacco.

Previously Settled States Reduction

The base amounts of the Annual Payments (as adjusted by the Inflation Adjustment and the Volume Adjustment, if any) are subject to a reduction reflecting the four states that had settled with the OPMs prior to the adoption of the MSA (Mississippi, Florida, Texas and Minnesota) (the "**Previously Settled States Reduction**"). The Previously Settled States Reduction reduces by 12.4500000% each applicable payment on or before December 31, 2007, by 12.2373756% each applicable payment between January 1, 2008 and December 31, 2017, and by 11.0666667% each applicable payment on or after January 1, 2018. The SPMs are not entitled to any reduction pursuant to the Previously Settled States Reduction. Initial Payments and Strategic Contribution Payments were not subject to the Previously Settled States Reduction.

PSS Credit Amendment. Most of the Settling States have executed documentation approving an amendment to the MSA that would allow SPMs to elect to receive a reduction in their MSA payments in an amount equal to a percentage (100% or a lesser percentage, depending on the SPM's election and the number of years the amendment has been in effect) of the fees paid to Previously Settled States pursuant to state legislation in the Previously Settled States requiring tobacco product manufacturers that did not sign onto the Previously Settled State Settlements to pay a fee to such Previously Settled States (the "**PSS Credit Amendment**"). The PSS Credit Amendment would also provide for certain increases in the electing SPMs' MSA payments. Three Previously Settled States impose a fee on tobacco product manufacturers that did not sign onto the applicable state's Previously Settled State Settlement ($0.50 per pack of 20 cigarettes in Minnesota, $0.27, adjusted for inflation, per pack of 20 cigarettes in Mississippi, and $0.55 per pack of 20 cigarettes in Texas; see APPENDIX E—"CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY—Regulatory Issues—*Excise Taxes*" for a discussion of litigation relating to the Texas fee). The Commonwealth agreed to the PSS Credit Amendment on November 19, 2008 and reaffirmed on December 18, 2009. The PSS Credit Amendment is not currently in effect, because by its terms it will only take effect if and when all Settling States having aggregate Allocable Shares equal to at least 99.937049% (the equivalent of the aggregate Allocable Share of the 46 states that are Settling States), and all OPMs and Commonwealth Brands, Inc., have executed the PSS Credit Amendment. No assurance can be given as to if or when the PSS Credit Amendment will take effect. Further, no assurance can be given as to whether the PSS Credit Amendment, if and when it takes effect, will reduce the amount of Pledged Annual Payments available to the Authority to pay debt service on the Series 2018 Bonds. See "BONDHOLDERS' RISKS—Other Risks Relating to the MSA and Related Statutes—Amendments, Waivers and Termination" and "—Reliance on State Enforcement of the MSA; State Impairment."

Non-Settling States Reduction

In the event that the MSA terminates as to any Settling State, the remaining Annual Payments, if any, due from the PMs shall be reduced to account for the absence of such state. This adjustment has no effect on the amounts to be collected by states which remain a party to the MSA, and the reduction is therefore not detailed.

Non-Participating Manufacturers Adjustment

The "**NPM Adjustment**" under the MSA is based upon market share increases, measured by domestic sales of cigarettes by NPMs, and operates to reduce the payments of the PMs under the MSA in the event that the PMs incur losses in market share to NPMs during a calendar year as a result of the MSA.

Under the MSA, three conditions must be met in order to trigger an NPM Adjustment: (1) the aggregate market share of the PMs in any year must fall more than 2% below the aggregate market share held by those same PMs in 1997, (2) a nationally recognized firm of economic consultants must determine that the disadvantages experienced as a result of the provisions of the MSA were a significant factor contributing to the market share loss for the year in question, and (3) the Settling States in question must be proven to not have diligently enforced their Model

Statutes. Once a significant factor determination in favor of the PMs for a particular year has been made by an economic consulting firm, or the states' agreement not to contest that the disadvantages of the MSA were a significant factor contributing to the PMs' collective loss of market share in a particular year has become effective (as occurred with respect to certain years discussed below under "*—Term Sheet Non-Signatories' Ongoing NPM Adjustment Claims*"), a PM has the right under the MSA to pay the disputed amount of the NPM Adjustment for that year into the MSA's Disputed Payments Account or withhold it altogether. The NPM Adjustment, after conclusion of the applicable arbitration regarding diligent enforcement for the relevant sales year, is applied to the subsequent year's Annual Payment and Strategic Contribution Payment and the decrease in total funds available as a result of the NPM Adjustment is then allocated on a Pro Rata basis among those Settling States that have been found (i) to not diligently enforce their Qualifying Statutes, or (ii) to have enacted the Model Statute or a Qualifying Statute that is declared invalid or unenforceable by a court of competent jurisdiction.

According to OPM SEC filings, certain PMs, including the OPMs, and the Settling States entered into three separate agreements (covering sales years 2007 to 2009, 2010 to 2012, and 2013 to 2014, respectively) wherein the Settling States would not contest that the disadvantages of the MSA were a significant factor contributing to the Market Share loss experienced by the PMs in those years. The stipulation pertaining to each of the years covered by the agreements became effective in February of the year a final determination by the firm of independent economic consultants would otherwise have been expected if the issue had been arbitrated on the merits. Pursuant to such agreements, the parties agreed that all the conditions for the NPM Adjustment were met for 2014 on February 1, 2017, permitting those PMs, including the OPMs, to deposit their portion of the 2014 NPM Adjustment into the Disputed Payments Account in April 2017.

An arbitration panel determined that the Commonwealth and five other states (two of which subsequently joined the NPM Adjustment Settlement Term Sheet) did not diligently enforce their respective Qualifying Statutes during 2003 and accordingly were subject to the 2003 NPM Adjustment. The Commonwealth and certain other Settling States are currently in arbitration regarding the 2004 NPM Adjustment. If the Commonwealth is again determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute in 2004 or a subsequent sales year, the amount of the NPM Adjustment applied to the Commonwealth following such determination could be as great as the amount of the Commonwealth Annual Payments that were otherwise payable to the Commonwealth relating to such sales year, plus applicable interest, if any. See "—NPM Adjustment Claims—*2003 NPM Adjustment Claims*," "*—2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award*" and "*—Term Sheet Non-Signatories' Ongoing NPM Adjustment Claims*" below.

The 1997 market share percentage for the PMs, less 2%, is defined in the MSA as the "Base Aggregate Participating Manufacturer Market Share". If the PMs' actual aggregate market share is between 0% and 16 ⅔% less than the Base Aggregate Participating Manufacturer Market Share, the amounts paid by the PMs would be decreased by three times the percentage decrease in the PMs' actual aggregate market share. If, however, the aggregate market share loss from the Base Aggregate Participating Manufacturer Market Share is greater than 16 ⅔%, the NPM Adjustment will be calculated as follows:

$$\text{NPM Adjustment} = 50\% + [50\% / (\text{Base Aggregate Participating Manufacturer Market Share} - 16\tfrac{2}{3}\%)] \times [\text{market share loss} - 16\tfrac{2}{3}\%]$$

Regardless of how the NPM Adjustment is calculated, it is always subtracted from, and may not exceed, the total Annual Payments and Strategic Contribution Payments due from the PMs in any given year. The NPM Adjustment for any given year for a specific state cannot exceed the amount of Annual Payments and Strategic Contribution Payments due to such state. The NPM Adjustment applies only to the Annual Payments and Strategic Contribution Payments, and does not apply at all if the number of cigarettes shipped in or to the United States in the year prior to the year in which the payment is due by all manufacturers that were PMs prior to December 7, 1998 exceeds the number of cigarettes shipped in or to the United States by all such PMs in 1997.

The NPM Adjustment is also state-specific, in that a Settling State may avoid or mitigate the effects of an NPM Adjustment by enacting and diligently enforcing the Model Statute or a Qualifying Statute. Any Settling State that adopts and diligently enforces the Model Statute or a Qualifying Statute is exempt from the NPM Adjustment.

The decrease in total funds available due to the NPM Adjustment is allocated on a pro rata basis among those Settling States that either (i) did not enact and diligently enforce the Model Statute or Qualifying Statute, or (ii) enacted the Model Statute or a Qualifying Statute that is declared invalid or unenforceable by a court of competent jurisdiction. The practical effect of a decision by a PM to claim an NPM Adjustment for a given year and pay its portion of the amount of such claimed NPM Adjustment into the DPA, or withhold payment of such amount, would be to reduce the payments to all Settling States on a pro rata basis until a resolution is reached regarding the diligent enforcement dispute for all Settling States for such year, or until a settlement is reached for some or all such disputes for such year (such as in the NPM Adjustment Settlement Term Sheet discussed below). If the PMs make a claim for an NPM Adjustment for any particular sales year and a state is determined to be one of a few states (or the only state) not to have diligently enforced its Model Statute or Qualifying Statute in such sales year, the amount of the NPM Adjustment applied to such state following such determination could be as great as the amount of Annual Payments and Strategic Contribution Payments that were otherwise payable to such state relating to such sales year, plus applicable interest, if any. See "—NPM Adjustment Claims" below.

If a Settling State enacts and diligently enforces a Qualifying Statute that is the Model Statute but it is declared invalid or unenforceable by a court of competent jurisdiction, the NPM Adjustment for any given year will not exceed 65% of the amount of such state's allocated payment for the subsequent year. If a Qualifying Statute that is not the Model Statute is held invalid or unenforceable, however, such state is not entitled to any protection from the NPM Adjustment. Moreover, if a state adopts the Model Statute or a Qualifying Statute but then repeals it or amends it in such fashion that it is no longer a Qualifying Statute, then such state will no longer be entitled to any protection from the NPM Adjustment. At all times, a state's protection from the NPM Adjustment is conditioned upon the diligent enforcement of its Model Statute or Qualifying Statute, as the case may be. See "BONDHOLDERS' RISKS—Payment Decreases Under the Terms of the MSA" above and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—MSA Provisions Relating to Model/Qualifying Statutes" below. See also "—Most Favored Nation Provisions". For a discussion of the Commonwealth's Qualifying Statute, Complementary Legislation and enforcement framework, see "COMMONWEALTH LAWS RELATING TO THE MSA" below.

Offset for Miscalculated or Disputed Payments

If the MSA Auditor receives notice of a miscalculation of an Annual Payment or a Strategic Contribution Payment made by a PM within four years, the MSA Auditor will recalculate the payment and make provisions for rectifying the error (the "**Offset for Miscalculated or Disputed Payments**"). There are no time limits specified for recalculations although the MSA Auditor is required to determine amounts promptly. Disputes as to determinations by the MSA Auditor may be submitted to binding arbitration governed by the Federal Arbitration Act. In the event that mispayments have been made, they will be corrected through payments with interest (in the event of underpayments) or withholdings with interest (in the event of overpayments). Interest will be at the prime rate, except where a party fails to pay undisputed amounts or fails to provide necessary information readily available to it, in which case a penalty rate of prime plus 3% applies. If a PM disputes any required payment, it must determine whether any portion of the payment is undisputed and pay that amount for disbursement to the Settling States. The disputed portion may be paid into the Disputed Payments Account pending resolution of the dispute, or may be withheld. Failure to pay such disputed amounts into the Disputed Payments Account can result in liability for interest at the penalty rate if the disputed amount was in fact properly due and owing. See "BONDHOLDERS' RISKS—Payment Decreases Under the Terms of the MSA".

Litigating Releasing Parties Offset

If any Releasing Party initiates litigation against a PM for any of the claims released in the MSA, the PM may be entitled to an offset against such PM's payment obligation under the MSA (the "**Litigating Releasing Parties Offset**"). A defendant PM may offset dollar-for-dollar any amount paid in settlement, stipulated judgment or litigated judgment against the amount to be collected by the applicable Settling State under the MSA only if the PM has taken all ordinary and reasonable measures to defend that action fully and only if any settlement or stipulated judgment was consented to by the state attorney general. The Litigating Releasing Parties Offset is state-specific. Any reduction in MSA payments as a result of the Litigating Releasing Parties Offset would apply only to the Settling State of the Releasing Party.

Offset for Claims-Over

If a Releasing Party pursues and collects on a released claim against an NPM or a retailer, supplier or distributor arising from the sale or distribution of tobacco products of any NPM or the supply of component parts of tobacco products to any NPM (collectively, the "**Non-Released Parties**"), and the Non-Released Party in turn successfully pursues a claim for contribution or indemnification against a Released Party (as defined herein), the Releasing Party must (i) reduce or credit against any judgment or settlement such Releasing Party obtains against the Non-Released Party the full amount of any judgment or settlement such Non-Released Party may obtain against the Released Party, and (ii) obtain from such Non-Released Party for the benefit of such Released Party a satisfaction in full of such Non-Released Party's judgment or settlement against the Released Party. In the event that such reduction or satisfaction in full does not fully relieve the Released Party of its duty to pay to the Non-Released Party, the PM is entitled to a dollar-for-dollar offset from its payment to the applicable Settling State (the "**Offset for Claims-Over**"). For purposes of the Offset for Claims-Over, any person or entity that is enumerated in the definition of Releasing Party set forth above is treated as a Releasing Party without regard to whether the applicable attorney general had the power to release claims of such person or entity. The Offset for Claims-Over is state-specific and would apply only to MSA payments owed to the Settling State of the Releasing Party.

Subsequent Participating Manufacturers

SPMs are obligated to make Annual Payments (and were obligated to make Strategic Contribution Payments), which are made at the same times as the corresponding payments to be made by OPMs. Such payments for SPMs are calculated differently, however, from such payments for OPMs. Each SPM's payment obligation is determined according to its market share if, and only if, its "**Market Share**" (defined in the MSA to mean a manufacturer's share, expressed as a percentage, of the total number of cigarettes sold in the United States in a given year, as measured by excise taxes (or similar taxes, in the case of Puerto Rico)), for the year preceding the payment exceeds its Base Share. If an SPM executes the MSA after February 22, 1999 (*i.e.*, 90 days after the effective date of the MSA), its Base Share, is deemed to be zero. Fourteen of the current 52 SPMs signed the MSA on or before the February 22, 1999 deadline, according to NAAG.

For each Annual Payment, each SPM is required to pay an amount equal to the base amount of the Annual Payment owed by the OPMs, collectively, adjusted for the Volume Adjustment described above but prior to any other adjustments, reductions or offsets, multiplied by (i) the difference between that SPM's Market Share for the preceding year and its Base Share, divided by (ii) the aggregate Market Share of the OPMs for the preceding year. Other than the application of the Volume Adjustment, payments by the SPMs are also subject to the same adjustments (including the Inflation Adjustment), reductions and offsets as are the payments made by the OPMs, with the exception of the Previously Settled States Reduction.

Because the Annual Payments to be made by the SPMs are calculated in a manner different from the calculations for Annual Payments to be made by the OPMs, a change in market share between the OPMs and the SPMs could cause the amount of Annual Payments required to be made by the PMs in the aggregate to be greater or less than the amount that would be payable if their market share remained the same. In certain circumstances, an increase in the market share of the SPMs could increase the aggregate amount of Annual Payments because the Annual Payments to be made by the SPMs are not adjusted for the Previously Settled States Reduction. However, in other circumstances, an increase in the market share of the SPMs could decrease the aggregate amount of Annual Payments because the SPMs are not required to make any Annual Payments unless their market share increases above their Base Share, or because of the manner in which the Inflation Adjustment is applied to each SPM's payments.

Certain PMs and Settling States were in dispute regarding whether the payment obligations of one SPM (Liggett Group LLC) should continue to be determined based on the "net" number of cigarettes on which federal excise tax is paid (as Settling States contended), or, rather, an "adjusted gross" number of cigarettes (as PMs contended). Forty-three jurisdictions (including the Commonwealth) entered into arbitration, and in an award dated January 21, 2013, the arbitration panel held that the MSA Auditor is to use the market share for Liggett Group LLC on a net basis, but increase that calculation by a specified factor to avoid unfairness given the gross basis used for Liggett Group LLC in the MSA Auditor's March 30, 2000 calculation.

Payments Made to Date

As required, the OPMs made all of the Initial Payments due in the years 1998 to 2003 (the last year such payments were due), and most PMs made the Strategic Contribution Payments due in the years 2008 to 2017 (the last year such payments were due). Most PMs have made Annual Payments each year since 2000, the first year that Annual Payments were due. The MSA Escrow Agent has disbursed to the Commonwealth its allocable portions thereof and certain other amounts under the MSA. Under the MSA, the computation of Annual Payments by the MSA Auditor is confidential and may not be used for purposes other than those stated in the MSA. The Authority's sole sources of information regarding the computation and amount of such payments are the reports and accountings furnished to it by the Commonwealth.

The following table sets forth for each of the preceding 10 years the base amount of Commonwealth Annual Payments allocable to the Commonwealth pursuant to the MSA, and the amounts actually received in such year, as described below. The amounts actually received may reflect adjustments attributable to prior years' payments.

Year[(1)]	**Base Payment Allocable to the Commonwealth**[(2)(4)]	**Actual Receipts**[(3)(4)]
2008 Annual Payment	$467,736,838	$356,155,973
2009 Annual Payment	467,736,838	392,753,620
2010 Annual Payment	467,736,838	326,849,929
2011 Annual Payment	467,736,838	309,880,586
2012 Annual Payment	467,736,838	316,021,614
2013 Annual Payment	467,736,838	315,825,343
2014 Annual Payment	467,736,838	182,603,382
2015 Annual Payment	467,736,838	331,548,810
2016 Annual Payment	467,736,838	317,603,879
2017 Annual Payment	467,736,838	347,910,335

(1) Annual Payments are due from the PMs on April 15 of the applicable calendar year (payment year) pursuant to the MSA. Actual receipts are listed as of June 30 of each year.

(2) Rounded. The Commonwealth Annual Payments consist of the Commonwealth's 5.7468588% share of Annual Payments under the MSA.

(3) Rounded. Reflects adjustments, including the NPM Adjustment. Amounts are set forth to the best of the Commonwealth's knowledge. Any adjustment is reflected in the period in which it was actually made.

(4) See "—2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award."

The terms of the MSA relating to such payments and various adjustments thereto are described above under the captions "—Annual Payments", "—Strategic Contribution Payments" and "—Adjustments to Payments". One or more of the PMs are disputing or have disputed the calculations of some of the Annual Payments for the years 2000 through 2017 and Strategic Contribution Payments for the years 2008 through 2017, as described further herein. In addition, subsequent revisions in the information delivered to the MSA Auditor (on which the MSA Auditor's calculations of the Annual Payments and Strategic Contribution Payments are based) have in the past and may in the future result in a recalculation of the payments shown above. Such revisions may also result in routine recalculation of future payments. No assurance can be given as to the magnitude of any such recalculation and such recalculation could trigger the Offset for Miscalculated or Disputed Payments.

Most Favored Nation Provisions

In the event that any non-foreign governmental entity other than the federal government should reach a settlement of released claims with PMs that provides more favorable terms to the governmental entity than does the MSA to the Settling States, the terms of the MSA will be modified to match those of the more favorable settlement. Only the non-economic terms may be considered for comparison.

In the event that any Settling State should reach a settlement of released claims with NPMs that provides more favorable terms to the NPMs than the MSA does to the PMs, or relieves in any respect the obligation of any PM to make payments under the MSA, the terms of the MSA will be deemed modified to match the NPM settlement or such payment terms, but only with respect to the particular Settling State. In no event will the adjustments discussed in this paragraph modify the MSA with regard to other Settling States. See "BONDHOLDERS' RISKS—Payment Decreases Under the Terms of the MSA."

State-Specific Finality and Final Approval

The MSA provides that payments could not be disbursed to the individual Settling States until the occurrence of each of two events: State-Specific Finality and Final Approval.

"**State-Specific Finality**" means, with respect to an individual Settling State, that (i) such state has settled its pending or potential litigation against the tobacco companies with a consent decree, which decree has been approved and entered by a court within the Settling State and (ii) the time for all appeals against the consent decree has expired. All Settling States have achieved State-Specific Finality. State-Specific Finality for the Commonwealth was achieved on January 13, 1999, in the Court of Common Pleas, Philadelphia County, in the action entitled *Commonwealth of Pennsylvania v. Philip Morris Incorporated, et al*.

"**Final Approval**" marks the approval of the MSA by the Settling States and means the earlier of (i) the date on which at least 80% of the Settling States, both in terms of number and dollar volume entitlement to the proceeds of the MSA, have reached State-Specific Finality, or (ii) June 30, 2000. Final Approval was achieved on November 12, 1999, when 80% of the Settling States by number and dollar volume achieved State-Specific Finality.

Disbursement of Funds from Escrow

The MSA Auditor makes all calculations necessary to determine the amounts to be paid by each PM, as well as the amounts to be disbursed to each of the Settling States. Not less than 40 days prior to the date on which any payment is due, the MSA Auditor must provide copies of the disbursement calculations to all parties to the MSA, who must within 30 days prior to the date on which such payment is due advise the other parties if it questions or challenges the calculations. The final calculation is due from the MSA Auditor not less than 15 days prior to the payment due date. The calculation is subject to further adjustments if previously missing information is received. In the event of a challenge to the calculations, the non-challenged part of a payment shall be processed in the normal course. Challenges will be submitted to binding arbitration. The information provided by the MSA Auditor to the Commonwealth with respect to calculations of amounts to be paid by PMs is confidential under the terms of the MSA and may not be disclosed to the Authority or the Bondholders.

Disbursement of the funds by the MSA Escrow Agent from the escrow accounts shall occur within ten business days of receipt of the particular funds. The MSA Escrow Agent will disburse the funds due to, or as directed by, each Settling State in accordance with instructions received from that state.

Advertising and Marketing Restrictions; Educational Programs

The MSA prohibits the PMs from certain advertising, marketing and other activities that may promote the sale of cigarettes and smokeless tobacco products ("**Tobacco Products**"). Under the MSA, the PMs are generally prohibited from targeting persons under 18 years of age within the Settling States in the advertising, promotion or marketing of Tobacco Products and from taking any action to initiate, maintain or increase smoking by underage persons within the Settling States. Specifically, the PMs may not: (i) use any cartoon characters in advertising, promoting, packaging or labeling Tobacco Products; (ii) distribute any free samples of Tobacco Products except in a restricted facility where the operator thereof is able to ensure that no underage persons are present; or (iii) provide to any underage person any item in exchange for the purchase of Tobacco Products or for the furnishing of proofs-of-purchase coupons. The PMs are also prohibited from placing any new outdoor and transit advertising, and are committed to remove any existing outdoor and transit advertising for Tobacco Products in the Settling States. Other examples of prohibited activities include, subject to limited exceptions: (i) the sponsorship of any athletic, musical, artistic or other social or cultural event in exchange for the use of tobacco brand names as part of the event;

(ii) the making of payments to anyone to use, display, make reference to or use as a prop any Tobacco Product or item bearing a tobacco brand name in any motion picture, television show, theatrical production, music performance, commercial film or video game; and (iii) the sale or distribution in the Settling States of any non-tobacco items containing tobacco brand names or selling messages.

In addition, the OPMs have agreed under the MSA to provide funding for the organization and operation of a charitable foundation (the "**Foundation**") and educational programs to be operated within the Foundation. The main purpose of the Foundation will be to support programs to reduce the use of Tobacco Products by underage persons and to prevent diseases associated with the use of Tobacco Products. Each OPM may be required to pay its Relative Market Share of $300,000,000 on April 15 of each year on and after 2004 (as may be adjusted) in perpetuity if, during the year preceding the year when payment is due, the sum of the Market Shares of the OPMs equals or exceeds 99.05%. The Foundation may also be funded by contributions made by other entities.

Remedies upon the Failure of a PM to Make a Payment

Each PM is obligated to pay when due the undisputed portions of the total amount calculated as due from it by the MSA Auditor's final calculation. Failure to pay such portion shall render the PM liable for interest thereon from the date such payment is due to (but not including) the date paid at the prime rate published from time to time by The Wall Street Journal or, in the event The Wall Street Journal is no longer published or no longer publishes such rate, an equivalent successor reference rate determined by the MSA Auditor, plus three percentage points. In addition, any Settling State may bring an action in court to enforce the terms of the MSA. Before initiating such proceeding, the Settling State is required to provide thirty (30) days' written notice to the attorney general of each Settling State, to NAAG and to each PM of its intent to initiate proceedings.

Termination of MSA

The MSA is terminated as to a Settling State if (i) the MSA or consent decree in that jurisdiction is disapproved by a court and the time for an appeal has expired, the appeal is dismissed or the disapproval is affirmed, or (ii) the representations and warranties of the attorney general of that jurisdiction relating to the ability to release claims are breached or not effectively given. In addition, in the event that a PM enters bankruptcy and fails to perform its financial obligations under the MSA, the Settling States, by vote of at least 75% of the Settling States, both in terms of number and of entitlement to the proceeds of the MSA, may terminate certain financial obligations of that particular manufacturer under the MSA, although this provision may not be enforceable. See "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS—Bankruptcy of a PM."

The MSA provides that if it is terminated, then the statute of limitations with respect to released claims will be tolled from the date the Settling State signed the MSA until the later of the time permitted by applicable law or one year from the date of termination and the parties will jointly move for the reinstatement of the claims and actions dismissed pursuant to the MSA. The parties will return to the positions they were in prior to the execution of the MSA.

Severability

By its terms, most of the major provisions of the MSA are not severable from its other terms. If a court materially modifies, renders unenforceable or finds unlawful any non-severable provision, the attorneys general of the Settling States and the OPMs are to attempt to negotiate substitute terms. If any OPM does not agree to the substitute terms, the MSA terminates in all Settling States affected by the court's ruling.

Amendments and Waivers

The MSA may be amended by all of the PMs affected by the amendment and by all of the Settling States affected by the amendment. The terms of any amendment will not be enforceable against any PM or Settling State which is not a party to the amendment. Any waiver will be effective only against the parties to such waiver and only with respect to the breach specifically waived.

MSA Provisions Relating to Model/Qualifying Statutes

General

The MSA sets forth the schedule and calculation of payments to be made by OPMs to the Settling States. As described above, the Annual Payments are subject to, among other adjustments and reductions, the NPM Adjustment, which may reduce the amount of money that a Settling State receives pursuant to the MSA. The NPM Adjustment will reduce payments of a PM if such PM experiences certain losses of market share in the United States in a particular year as a result of participation in the MSA and any of the Settling States fail to prove that they have diligently enforced their Qualifying Statutes in such year.

Settling States may eliminate or mitigate the effect of the NPM Adjustment by taking certain actions, including the adoption and diligent enforcement of a statute, law, regulation or rule (a "**Qualifying Statute**") which eliminates the cost disadvantages that PMs experience in relation to NPMs as a result of the provisions of the MSA. "Qualifying Statute", as defined in Section IX(d)(2)(E) of the MSA, means a statute, regulation, law, and/or rule adopted by a Settling State that "effectively and fully neutralizes the cost disadvantages that PMs experience vis-à-vis NPMs within such Settling State as a result of the provisions of the MSA". Exhibit T to the MSA sets forth a model form of Qualifying Statute (a "**Model Statute**") that will qualify as a Qualifying Statute so long as the statute is enacted without modification or addition (except for particularized state procedural or technical requirements) and is not enacted in conjunction with any other legislative or regulatory proposal. The Commonwealth has enacted the Model Statute, which is a Qualifying Statute. The MSA also provides a procedure by which a Settling State may enact a statute that is not the Model Statute and receive a determination from a nationally recognized firm of economic consultants that such statute is a Qualifying Statute. See "BONDHOLDERS' RISKS—Payment Decreases under the Terms of the MSA" and "BONDHOLDERS' RISKS—If Litigation Challenging the MSA, the Qualifying Statutes and Related Legislation Were Successful, Payments under the MSA Might be Suspended or Terminated".

If a Settling State continuously has a Qualifying Statute in full force and effect and diligently enforces the provisions of such statute, the MSA states that the payments allocated to such Settling State will not be subject to a reduction due to the NPM Adjustment. Furthermore, the MSA dictates that the aggregate amount of the NPM Adjustment is to be allocated, in a pro rata manner, among all Settling States that do not adopt and diligently enforce a Qualifying Statute. In addition, if the NPM Adjustment allocated to a particular Settling State exceeds its allocated payment that excess is to be reallocated equally among the remaining Settling States that have not adopted and diligently enforced a Qualifying Statute. Thus, Settling States that do not adopt and diligently enforce a Qualifying Statute will receive reduced allocated payments if an NPM Adjustment is in effect. The MSA provides an economic incentive for most states to adopt and diligently enforce a Qualifying Statute.

The MSA provides that if a Settling State enacts a Qualifying Statute that is the Model Statute and uses its best efforts to keep the Model Statute in effect, but a court invalidates the statute, then, although that state remains subject to the NPM Adjustment, the NPM Adjustment is limited to no more, on a yearly basis, than 65% of the amount of such state's allocated payment (including reallocations described above). The determination from a nationally recognized firm of economic consultants that a statute constitutes a Qualifying Statute is subject to reconsideration in certain circumstances and such statute may later be deemed not to constitute a Qualifying Statute. In the event that a Qualifying Statute that is not the Model Statute is invalidated or declared unenforceable by a court, or, upon reconsideration by a nationally recognized firm of economic consultants, is determined not to be a Qualifying Statute, the Settling State that adopted such statute will become fully subject to the NPM Adjustment. Moreover, if a state adopts the Model Statute or a Qualifying Statute but then repeals it or amends it in such fashion that it is no longer a Qualifying Statute, then such state will no longer be entitled to any protection from the NPM Adjustment. At all times, a state's protection from the NPM Adjustment is conditioned upon the diligent enforcement of its Model Statute or Qualifying Statute, as the case may be. See "—NPM Adjustment Claims" below and "COMMONWEALTH LAWS RELATED TO THE MSA" herein.

Summary of the Model Statute

One of the objectives of the MSA (as set forth in the Findings and Purpose section of the Model Statute) is to shift the financial burdens of cigarette smoking from the Settling States to the tobacco product manufacturers. The Model Statute provides that any tobacco manufacturer who does not join the MSA would be subject to the provisions of the Model Statute because, as provided under the MSA,

> [i]t would be contrary to the policy of the state if tobacco product manufacturers who determine not to enter into such a settlement could use a resulting cost advantage to derive large, short-term profits in the years before liability may arise without ensuring that the state will have an eventual source of recovery from them if they are proven to have acted culpably. It is thus in the interest of the state to require that such manufacturers establish a reserve fund to guarantee a source of compensation and to prevent such manufacturers from deriving large, short-term profits and then becoming judgment-proof before liability may arise.

Accordingly, pursuant to the Model Statute, a tobacco manufacturer that is an NPM under the MSA must deposit an amount for each cigarette that constitutes a "unit sold" into an escrow account (which amount increases on a yearly basis, as set forth in the Model Statute).

The amounts deposited into the escrow accounts by the NPMs may only be used in limited circumstances. Although the NPM receives the interest or other appreciation on such funds, the principal may only be released (i) to pay a judgment or settlement on any claim of the type that would have been released by the MSA brought against such NPM by the applicable Settling State or any Releasing Party located within such state; (ii) with respect to Settling States that have enacted and have in effect Allocable Share Release Amendments (described in the next paragraph), to the extent that the NPM establishes that the amount it was required to deposit into the escrow account was greater than the total payments that such NPM would have been required to make if it had been a PM under the MSA (as determined before certain adjustments or offsets) or, with respect to Settling States that do not have in effect such Allocable Share Release Amendments, to the extent that the NPM establishes that the amount it was required to deposit into the escrow account was greater than such state's allocable share of the total payments that such NPM would have been required to make if it had been a PM under the MSA (as determined before certain adjustments or offsets); or (iii) 25 years after the date that the funds were placed into escrow (less any amounts paid out pursuant to (i) or (ii)).

The Model Statute, in its original form, required an NPM to make escrow deposits approximately in the amount that the NPM would have had to pay to all of the states had it been a PM and further authorized the NPM to obtain from the applicable Settling State the release of the amount by which the escrow deposit in that state exceeded that state's allocable share of the total payments that the NPM would have made as a PM. In recent years legislation has been enacted in the Commonwealth and all other Settling States, except Missouri[*], to amend the Qualifying or Model Statutes in those states by eliminating the reference to the allocable share and limiting the possible release an NPM may obtain under the Model Statute to the excess above the total payment that the NPM would have paid for its cigarettes had it been a PM (each an "**Allocable Share Release Amendment**"). NAAG has endorsed these legislative efforts. A majority of the PMs, including all OPMs, have indicated their agreement in writing that in the event a Settling State enacts legislation substantially in the form of the model Allocable Share Release Amendment, such Settling State's previously enacted Model Statute or Qualifying Statute will continue to constitute the Model Statute or a Qualifying Statute within the meaning of the MSA.

If the NPM fails to place funds into escrow as required by the applicable Qualifying Statute, the attorney general of the applicable Settling State may bring a civil action on behalf of the state against the NPM. If a court finds that an NPM violated the statute, it may impose civil penalties in the following amounts: (i) an amount not to exceed 5% of the amount improperly withheld from escrow per day of the violation and in an amount not to exceed 100% of the original amount improperly withheld from escrow; (ii) in the event of a knowing violation, an amount not to exceed

[*] The Missouri Attorney General reported February 8, 2016 that Missouri had negotiated with the PMs to resolve Missouri's dispute with the PMs with respect to the NPM Adjustment for years 2003-2014, contingent upon the Missouri legislature adopting an Allocable Share Release Amendment. However, the Missouri legislature failed to adopt an Allocable Share Release Amendment by the April 15, 2016 deadline in the agreement negotiated by the Missouri Attorney General.

15% of the amount improperly withheld from escrow per day of the violation and in an amount not to exceed 300% of the original amount improperly withheld from escrow; and (iii) in the event of a second knowing violation, the court may prohibit the NPM from selling cigarettes to consumers within such state (whether directly or through a distributor, retailer or similar intermediary) for a period not to exceed two years.

NPMs include foreign tobacco manufacturers that intend to sell cigarettes in the United States that do not themselves engage in an activity in the United States but may not include the wholesalers of such cigarettes. NPMs also include Native American tobacco manufacturers that manufacture and sell, directly or through other Native American retailers, cigarettes to consumers from their own or other Native American reservations and who assert their rights under various treaties and agreements with the United States and with states to manufacture and sell the cigarettes free of state and local taxes and, generally, free from the constraints and burdens of state and local laws. Enforcement of the Model Statute against any of such manufacturers may be difficult. See "COMMONWEALTH LAWS RELATED TO THE MSA."

Complementary Legislation

Most of the Settling States (including the Commonwealth) have passed legislation (often termed "**Complementary Legislation**") to further ensure that NPMs are making escrow payments required by the states' respective Qualifying Statutes, as well as other legislation to assist in the regulation of tobacco sales. See "COMMONWEALTH LAWS RELATED TO THE MSA—Pennsylvania Complementary Legislation."

All of the OPMs and other PMs have provided written assurances that the Settling States have no duty to enact Complementary Legislation, that the failure to enact such legislation will not be used in determining whether a Settling State has diligently enforced its Qualifying Statute pursuant to the terms of the MSA, and that diligent enforcement obligations under the MSA shall not apply to the Complementary Legislation. In addition, the written assurances contain an agreement that the Complementary Legislation will not constitute an amendment to a Settling State's Qualifying Statute. However, a determination that a Settling State's Complementary Legislation is invalid may make enforcement of its Qualifying Statute more difficult.

NPM Adjustment Claims

Settlement of 1999 through 2002 NPM Adjustment Claims

In June 2003, the OPMs, certain SPMs and the Settling States settled all NPM Adjustment claims for the payment years 1999 through 2002, subject, however, under limited circumstances, to the reinstatement of a PM's right to an NPM Adjustment for the payment years 2001 and 2002. In connection therewith, such PMs and the Settling States agreed prospectively that PMs claiming an NPM Adjustment for any year will not make such a deposit into the Disputed Payments Account or withhold payment with respect thereto unless and until the selected economic consultants determine that the disadvantages of the MSA were a significant factor contributing to the Market Share loss giving rise to the alleged NPM Adjustment. If the selected economic consultants make such a "significant factor" determination regarding a year for which one or more PMs have claimed an NPM Adjustment, such PMs may, in fact, either make a deposit into the Disputed Payments Account or withhold payment reflecting the claimed NPM Adjustment. As discussed below under "*—Term Sheet Non-Signatories' Ongoing NPM Adjustment Claims*," the Settling States have since agreed that no "significant factor" determination will be necessary for certain years.

NPM Adjustment Claims for 2003 Onward, Generally

According to NAAG, one or more of the PMs are disputing or have disputed the calculations of some Annual Payments and Strategic Contribution Payments, totaling over $12 billion, for the sales years 2003 through 2016 (payment years 2004 through 2017) as part of the NPM Adjustment. No provision of the MSA attempts to define what activities, if undertaken by a Settling State, would constitute diligent enforcement. Furthermore, the MSA does not explicitly state which party bears the burden of proving or disproving whether a Settling State has diligently enforced its Qualifying Statute, or whether any diligent enforcement dispute would be resolved in state courts or through arbitration. As discussed further below, the Commonwealth had been a contested state in the 2003 NPM Adjustment

dispute and was determined by the Arbitration Panel not to have diligently enforced its Qualifying Statute during sales year 2003 and was thus subject to the 2003 NPM Adjustment.

The Commonwealth and certain other Settling States are currently in arbitration regarding the 2004 NPM Adjustment. No assurance can be given as to the outcome of any pending or future arbitration regarding NPM Adjustment claims. If the Commonwealth is determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute with respect to a sales year, the amount of the NPM Adjustment applied to the Commonwealth following such determination could be as great as the amount of the Commonwealth Annual Payments that were otherwise payable to the Commonwealth relating to such sales year, plus applicable interest, if any. The Commonwealth's Attorney General's office maintains that the Commonwealth has been and is diligently enforcing its Qualifying Statute. The Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions contain an assumption that the Commonwealth has diligently enforced and will diligently enforce its Qualifying Statute from and after sales year 2004 and therefore that the Commonwealth will not be subject to the NPM Adjustment. No assurance can be given that the assumptions underlying the Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions will be consistent with future events. If the assumptions are not realized and future NPM Adjustments, withholdings or Disputed Payments are taken against MSA payments to the Commonwealth, it could have a material adverse effect on the payments by PMs under the MSA, and could have a material adverse effect on the amount and/or timing of Pledged Annual Payments available to the Authority to pay debt service on the Bonds.

2003 NPM Adjustment Claims

An independent economic consulting firm, jointly selected by the MSA parties, determined that the disadvantages of the MSA were a significant factor contributing to the PMs' collective loss of market share for 2003. Following the "significant factor" determination with respect to 2003, each of 38 Settling States filed a declaratory judgment action in state court seeking a declaration that such Settling State diligently enforced its Qualifying Statute during 2003. The OPMs and SPMs responded to these actions by filing motions to compel arbitration in accordance with the terms of the MSA, including motions to compel arbitration in 11 states and territories that did not file declaratory judgment actions. According to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, with one exception (Montana), the courts have ruled that the states' claims of diligent enforcement are to be submitted to arbitration. The Montana Supreme Court ruled that Montana did not agree to arbitrate the question of whether it diligently enforced a Qualifying Statute and that diligent enforcement claims of that state must be litigated in state court, rather than in arbitration. Subsequently, in June 2012, Montana and the PMs reached an agreement whereby the PMs agreed not to contest Montana's claim that it diligently enforced the Qualifying Statute during 2003 and therefore Montana would not be subject to the 2003 NPM Adjustment.

The MSA provides that arbitration, if required by the MSA, will be governed by the United States Federal Arbitration Act. The decision of an arbitration panel under the Federal Arbitration Act may only be overturned under limited circumstances, including a showing of a manifest disregard of the law by the panel.

The OPMs and approximately 25 other PMs entered into an agreement regarding arbitration with 45 states and territories concerning the 2003 NPM Adjustment. The agreement effectively provided for a partial liability reduction for the 2003 NPM Adjustment for states that entered into the agreement by January 30, 2009 and are determined in the arbitration not to have diligently enforced a Qualifying Statute during 2003. Based on the number of states that entered into the agreement by January 30, 2009 (45), the partial liability reduction for those states is 20%. This partial liability reduction would be effectuated by the PMs jointly reimbursing such states 20% of their respective amounts of the NPM Adjustment. The selection of a three-judge panel arbitrating the 2003 NPM Adjustment claims (the "**Arbitration Panel**") was completed in July 2010.

Following the completion of discovery, the PMs determined to continue to contest the 2003 diligent enforcement claims of 33 states (including the Commonwealth), the District of Columbia and Puerto Rico and to no longer contest such claims by 12 other states and four U.S. territories (the "**non-contested states**"). Eighteen of these contested states, the District of Columbia and Puerto Rico, as well as two non-contested states, subsequently entered into the NPM Adjustment Settlement Term Sheet with the OPMs and certain of the SPMs as discussed below under "*—NPM Adjustment Settlement and Award*", leaving 15 states (including the Commonwealth) contested in the 2003 NPM Adjustment arbitration proceedings. A common issues hearing was held in April 2012 and state-specific

evidentiary hearings began in May 2012 and were completed in May 2013. The decisions of the Arbitration Panel with regard to those 15 states (including the Commonwealth) and their enforcement in 2003 of their Qualifying Statutes are discussed below under "*—2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award*." Several of those 15 states subsequently joined the NPM Adjustment Settlement Term Sheet, as discussed below.

NPM Adjustment Settlement and Award

On December 17, 2012, terms of a settlement agreement (the "**NPM Adjustment Settlement Term Sheet**") were agreed to by 19 jurisdictions, the OPMs and certain SPMs regarding claims related to the 2003 through 2012 NPM Adjustments and the determination of subsequent NPM Adjustments. The 19 jurisdictions that signed the NPM Adjustment Settlement Term Sheet on December 17, 2012 were Alabama, Arizona, Arkansas, California, the District of Columbia, Georgia, Kansas, Louisiana, Michigan, Nebraska, Nevada, New Hampshire, New Jersey, North Carolina, Puerto Rico, Tennessee, Virginia, West Virginia and Wyoming. In April 2013, Oklahoma joined the NPM Adjustment Settlement Term Sheet; in May 2013, Connecticut and South Carolina joined the NPM Adjustment Settlement Term Sheet; in June 2014, Kentucky and Indiana joined the NPM Adjustment Settlement Term Sheet (on modified terms); and in April 2017, Rhode Island and Oregon joined the NPM Adjustment Settlement Term Sheet, bringing the total number of jurisdictions that have joined the settlement to 26. The Commonwealth has not signed onto the NPM Adjustment Settlement Term Sheet. Such jurisdictions that joined the NPM Adjustment Settlement Term Sheet are collectively referred to herein as the "**Term Sheet Signatories**," which term, where appropriate, includes any additional jurisdictions that subsequently sign the NPM Adjustment Settlement Term Sheet. Additional jurisdictions were permitted to join the settlement up to the end date of the last individual state-specific diligent enforcement hearings, although with potentially different and potentially less favorable payment obligations than those detailed in the NPM Adjustment Settlement Term Sheet. After such time, additional jurisdictions may join the settlement only if the signatory PMs, in their sole discretion, agree.

The NPM Adjustment Settlement Term Sheet was subject to approval by the Arbitration Panel. On March 12, 2013, the Arbitration Panel issued its Stipulated Partial Settlement and Award (the "**NPM Adjustment Stipulated Partial Settlement and Award**"). In the NPM Adjustment Stipulated Partial Settlement and Award, the Arbitration Panel, as a threshold matter, ruled that it had jurisdiction (i) to enter the NPM Adjustment Stipulated Partial Settlement and Award, (ii) to rule on the objections of those jurisdictions that did not join the settlement (the "**Term Sheet Non-Signatories**") (including the Commonwealth), (iii) to determine how the 2003 NPM Adjustment Settlement would be allocated among the Term Sheet Non-Signatories in light of the settlement and (iv) to incorporate and direct the MSA Auditor to implement the provisions of the NPM Adjustment Settlement Term Sheet, including as they pertain to years beyond 2003.

In the NPM Adjustment Stipulated Partial Settlement and Award, the Arbitration Panel specifically directed the MSA Auditor (i) to release approximately $1.76 billion (plus accumulated earnings thereon) from the Disputed Payments Account to the Term Sheet Signatories, allocating such released amount among the Term Sheet Signatories as they directed in connection with the April 2013 MSA payment and (ii) to apply a credit in the aggregate amount of approximately $1.65 billion to the OPMs' MSA payments, allocating such credit among the OPMs as they directed with 50% of the credit applied against the April 2013 MSA payment and 12.5% to be applied against each of the April 2014 through 2017 MSA payments. Under the NPM Adjustment Settlement Term Sheet, parallel provisions exist for SPMs, which stipulated a credit of approximately $31 million to the SPMs' April 2013 MSA payments.

While not ruling on years subsequent to the 2003 NPM Adjustment, the Arbitration Panel ruled that the reduction of the 2003 NPM Adjustment, in light of the NPM Adjustment Stipulated Partial Settlement and Award (for purposes of allocating the 2003 NPM Adjustment to the Term Sheet Non-Signatories), would be on a *pro rata* basis: the dollar amount of the 2003 NPM Adjustment would be reduced by a percentage equal to the aggregate allocable share of the Term Sheet Signatories. In addition, the Arbitration Panel directed the MSA Auditor to treat the Term Sheet Signatories as not being subject to the 2003 NPM Adjustment, resulting in a reallocation of the Term Sheet Signatories' share of the 2003 NPM Adjustment among those Term Sheet Non-Signatories that are found not to have diligently enforced their Qualifying Statutes during 2003. This framework would create an incentive for Term Sheet Non-Signatories to contest the diligent enforcement of Term Sheet Signatories for years 2004 onward. The Arbitration Panel concluded that the NPM Adjustment Settlement Term Sheet and the NPM Adjustment Stipulated Partial Settlement and Award do not legally prejudice or adversely affect the Term Sheet Non-Signatories, but that, should a

Term Sheet Non-Signatory found by the Arbitration Panel to be non-diligent have a good faith belief that the *pro rata* reduction method did not adequately compensate it for a Term Sheet Signatory's removal from the reallocation pool, its relief, if any, is by appeal to its individual MSA state court. The Term Sheet Non-Signatories that were found to be non-diligent, including the Commonwealth, filed motions in their MSA state courts objecting to the *pro rata* reduction method; see "—2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award" below for a discussion of such motions. The Arbitration Panel further concluded that neither the NPM Adjustment Stipulated Partial Settlement and Award nor the NPM Adjustment Settlement Term Sheet constitutes an amendment to the MSA that would require the consent of any Term Sheet Non-Signatory.

Beginning in 2013, there is a state-specific adjustment that applies to sales of SET-paid NPM cigarettes ("**SET-Paid NPM Sales**"). "**SET**" consists of state cigarette excise tax or other state tax on the distribution or sale of cigarettes (other than a state or local sales tax that is applicable to consumer products generally and is not in lieu of an excise tax) and, after 2014, any excise or other tax imposed by a state or federally recognized tribe on the distribution or sale of cigarettes. For SET-Paid NPM Sales of "**non-compliant NPM cigarettes**" (defined in the NPM Adjustment Settlement Term Sheet, with certain exceptions, as any cigarette sale for which escrow is not deposited, either by payment by the NPM or by collection upon a bond), the adjustment of PM payments due from signatory PMs is three times the per-cigarette escrow deposit rate contained in the Model Statute for the year of the sale, including the inflation adjustment in the statute. There is a proportional adjustment for each signatory SPM in proportion to the size of its MSA payment for that year. A Term Sheet Signatory will not be subject to this revised adjustment (thus, creating a safe harbor) if (i) escrow was deposited on at least 96% of all NPM cigarettes sold in the Term Sheet Signatory jurisdiction during that year on which SET was paid, or (ii) the number of SET-paid NPM cigarettes sold in the Term Sheet Signatory jurisdiction during that year on which escrow was not deposited did not exceed 2 million cigarettes.

Non-SET-Paid NPM Sales ("**Non-SET-Paid NPM Sales**") will be handled as to the Term Sheet Signatories per the terms of the MSA, with the following adjustments. A data clearinghouse (the "**Data Clearinghouse**") will calculate the total FET-paid NPM volume in the Settling States and nationwide. "**FET**" means the federal excise tax. Beginning in 2016, for Non-SET-Paid NPM Sales, the total NPM Adjustment liability, if any, of each Term Sheet Signatory under the original formula for a year would be reduced by a percentage specified in the NPM Adjustment Settlement Term Sheet. The NPM Adjustment Settlement Term Sheet also provides that, except in certain cases, the PMs will not withhold payments or pay into the Disputed Payments Account based on a dispute arising out of the revised NPM Adjustment as set forth in the NPM Adjustment Settlement Term Sheet.

2003 NPM Adjustment Arbitration Results and Disputes Concerning the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award

On September 11, 2013, the Arbitration Panel released its decisions in connection with the 2003 NPM Adjustment disputes with respect to each of the fifteen contested states that were Term Sheet Non-Signatories. The Arbitration Panel determined that nine states diligently enforced their respective Qualifying Statutes during 2003, and that the Commonwealth and five other states (Indiana, Kentucky, Maryland, Missouri and New Mexico), which have an aggregate allocable share of approximately 14.68%, did not diligently enforce their respective Qualifying Statutes during 2003. The Arbitration Panel determined that the NPM Adjustment amounts applicable to states that were determined to have diligently enforced their respective Qualifying Statutes, as well as the jurisdictions that were either not contested or were determined to be diligent in other proceedings, would not be applied to those states but would be reallocated to the states found non-diligent.

The Arbitration Panel's decisions regarding 2003 diligent enforcement defined diligent enforcement as "an ongoing and intentional consideration of the requirements of a Settling State's Qualifying Statute, and a significant attempt by the Settling State to meet those requirements, taking into account a Settling State's competing laws and policies that may conflict with its MSA contractual obligations." The Arbitration Panel stated that it considered various factors in deciding whether or not a state met the diligent enforcement standard, including, (i) the state's collection rate of amounts to be deposited by NPMs into escrow accounts, (ii) the lawsuits filed or pursued against NPMs by the state, (iii) whether the state gathered reliable data, (iv) the resources the state allocated to enforcement, (v) whether the state prevented non-compliant NPMs from future sales, (vi) legislation enacted by the state, (vii) actions short of legislation taken by the state, and (viii) efforts made to be aware of NAAG and other states'

enforcement efforts. The Arbitration Panel stated that such factors were not listed in their order of importance nor were they necessarily given equal weight. The Arbitration Panel stated that where certain terms defined in the Model Statute were disputed, the Arbitration Panel relied on the plain meaning of the defined terms and did not penalize states for a rational interpretation of the terms in enforcing their Qualifying Statutes. The Arbitration Panel stated that it did not penalize states that provided rational reasons for implementing policies and legislation with respect to enforcement of their Qualifying Statutes, finding that a good faith effort to address an issue where there is no evidence of intentional escrow evasion was an indication of diligent enforcement. The Arbitration Panel also stated that although the Settling States are required under the MSA to diligently enforce their Qualifying Statutes, the Settling States are not required "to elevate those obligations above other statutory or rational policy considerations."

Prior to any diligence finding, most Term Sheet Non-Signatories, including the Commonwealth and the other five states that were later found to be non-diligent, disputed the NPM Adjustment Settlement Term Sheet and Stipulated Partial Settlement and Award. As an initial step, on March 13, 2013, the Office of the Attorney General of the State of Illinois sent a letter, on behalf of itself and 23 other Term Sheet Non-Signatories (to which letter several additional Term Sheet Non-Signatories later joined), to the MSA Auditor, affirming their position that the Arbitration Panel lacked jurisdiction and that the NPM Adjustment Stipulated Partial Settlement and Award was inconsistent with the terms of the MSA, and informing the MSA Auditor that they objected to and would contest any action by the MSA Auditor to release funds from the Disputed Payments Account or to reallocate the 2003 NPM Adjustment under the terms of the NPM Adjustment Stipulated Partial Settlement and Award. Subsequently, motions were filed by the Commonwealth and other Term Sheet Non-Signatories in their respective MSA courts to vacate and/or modify the NPM Adjustment Stipulated Partial Settlement and Award. Two of the states (Colorado and Ohio) also unsuccessfully sought to preliminarily enjoin the implementation of the NPM Adjustment Stipulated Partial Settlement and Award (but the MSA Auditor carried out the implementation of the NPM Adjustment Stipulated Partial Settlement and Award over the objections of the Term Sheet Non-Signatories, as discussed above).

In the Commonwealth, the state court entered an order that modified the judgment reduction method that had been adopted by the Arbitration Panel: the state court ruled that the states that signed the NPM Adjustment Settlement Term Sheet and had been contested in the 2003 NPM Adjustment arbitration would be deemed non-diligent for purposes of calculating the Commonwealth's share of the 2003 NPM Adjustment, resulting in a partial reduction of the Commonwealth's share of the 2003 NPM Adjustment allocation. Upon appeal, in April 2015, the intermediate appellate court in the Commonwealth upheld the trial court ruling. The Commonwealth Supreme Court declined to take the PMs' appeal of that ruling. The defendant PMs filed a petition for writ of certiorari with the U.S. Supreme Court in April 2016, which was denied in October 2016.

The status of the motions filed by the other five states that were determined by the Arbitration Panel in the 2003 NPM Adjustment dispute not to have diligently enforced their Qualifying Statutes in sales year 2003, is as follows. Indiana and Kentucky joined the NPM Adjustment Settlement Term Sheet in 2014 and those states stayed any further proceedings on their motions. Similar to the Commonwealth, the state court in Missouri entered an order that modified the judgment reduction method that had been adopted by the Arbitration Panel, which order reduced Missouri's share of the NPM Adjustment allocation. Upon appeal, in September 2015, the intermediate appellate court in Missouri reversed the trial court ruling. Missouri appealed that ruling to the Missouri Supreme Court, and on February 14, 2017, the Supreme Court of Missouri issued a ruling affirming the trial court decision and overturning the intermediate appellate court decision. The Missouri Supreme Court's decision found in part that the Arbitration Panel exceeded its authority by deeming the Term Sheet Signatories diligent for purposes of reallocation and applying the pro rata judgment reduction. The Supreme Court of Missouri, in its February 14, 2017 decision, also denied Missouri's motion to order the PMs to arbitrate the question of Missouri's diligent enforcement in a single-state arbitration for 2004. In addition, Missouri had negotiated a settlement with PMs regarding the NPM Adjustment but failed to consummate that settlement because the Missouri legislature did not adopt an Allocable Share Release Amendment by the April 15, 2016 deadline that had been a condition to the settlement. In Maryland, that state's motion challenging the judgment reduction method adopted by the Arbitration Panel was denied by its state court. Upon appeal, in October 2015, the intermediate appellate court in Maryland reversed the trial court, the effect of which was to reduce Maryland's share of the NPM Adjustment allocation. The Maryland Supreme Court declined to take the PMs' appeal of that ruling. The PMs filed a petition for writ of certiorari with the U.S. Supreme Court in June 2016, which was denied in October 2016. Lastly, the New Mexico court granted that state's motion challenging the judgment reduction method that had been adopted by the Arbitration Panel, thereby reducing that state's share of the NPM Adjustment allocation. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended

September 30, 2017, Philip Morris appealed the New Mexico trial court's decision regarding the pro rata judgment reduction but, in March 2017, the trial court ruled that, notwithstanding the pendency of the appeal, Philip Morris must return the applicable portion of the NPM Adjustment, which it did, and, in September 2017, voluntarily dismissed its appeal.

Term Sheet Non-Signatories' Ongoing NPM Adjustment Claims

For 2003-2014, all conditions for the NPM Adjustment were met, either by determination or agreement among the parties, and, in April 2017, the parties agreed that all the conditions for the NPM Adjustment will have been met for 2015 on February 1, 2018, for 2016 on February 1, 2019, and for 2017 on February 1, 2020, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

The 2004 NPM Adjustment proceeding (including with respect to the Commonwealth) is currently pending before two separate arbitration panels, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. The two arbitration panels have two arbitrators in common. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, Missouri had obtained an order from the Missouri court of appeals for a separate state specific arbitration of the diligent enforcement issue, but on appeal, the Missouri Supreme Court in February 2017 ordered Missouri to participate in the nationwide arbitration of the 2004 NPM Adjustment. In addition, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, in December 2015 a Wisconsin trial court ruled that Wisconsin must arbitrate its claim of diligent enforcement for 2004. As a result of those decisions, Missouri and Wisconsin joined the 2004 multi-state diligent enforcement arbitration. Furthermore, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, the PMs informed the arbitration panels in June 2017 that they no longer contest Alaska's and Massachusetts' diligent enforcement claims for 2004. The arbitration panels' decisions with respect to the contested jurisdictions as to 2004 diligent enforcement are not expected until late 2018 or after, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. No assurance can be given that the Commonwealth will be determined by the relevant arbitration panel to have diligently enforced its Qualifying Statute for sales year 2004. If the Commonwealth is again determined to be one of a few states (or the only state) not to have diligently enforced its Qualifying Statute in 2004 or a subsequent sales year, the amount of the NPM Adjustment applied to the Commonwealth following such determination could be as great as the amount of the Commonwealth Annual Payments that were otherwise payable to the Commonwealth relating to such sales year, plus applicable interest, if any.

Certain Term Sheet Non-Signatories are not currently part of the pending 2004 NPM Adjustment arbitration. Montana obtained a ruling from the Montana Supreme Court that the issue of diligent enforcement under the MSA must be heard before that state's MSA court. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, Montana filed a motion in March 2017 for a declaratory order from its state court stating that Montana diligently enforced its escrow statute during 2004, but no hearings have yet been held by the Montana state court to determine whether Montana diligently enforced during 2004. In addition, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, a New Mexico trial court in November 2016 ruled that New Mexico must arbitrate its diligent enforcement claim for 2004 in multi-state arbitration, but New Mexico is appealing that ruling and has not yet joined the multi-state arbitration.

According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, proceedings regarding diligent enforcement claims for 2005 and subsequent years have not yet been scheduled, and no assurance can be given as to when proceedings for 2005 and subsequent years will be scheduled or the precise form those proceedings will take. Altria stated in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 that the availability and amount of any NPM Adjustment for 2004 and subsequent years for Term Sheet Non-Signatories will not be finally determined in the near term.

Altria stated in its Form 8-K filed with the SEC on February 1, 2018 that it continues to pursue the NPM Adjustments against jurisdictions that have not signed onto settlements (such as the Commonwealth).

Other Settlements

In October 2015, New York State entered into a settlement agreement with the OPMs and certain SPMs pursuant to which the 2004-2014 NPM Adjustment disputes were settled with respect to New York and pursuant to which a methodology for the NPM Adjustments for sales years 2015 onward is determined for such state, involving an adjustment for NPM cigarettes on which New York SET is paid, and credits to PMs for tribal NPM sales.

No prediction can be given as to whether or when any other Term Sheet Non-Signatories will enter into settlements with respect to their NPM Adjustment disputes, what form those settlements may take, or what effect, if any, such settlements will have on Term Sheet Non-Signatories such as the Commonwealth.

The above information concerning other states and other state court decisions has been obtained from sources that the Authority and the Commonwealth believe to be reliable, but the Authority and the Commonwealth take no responsibility for the accuracy thereof.

COMMONWEALTH LAWS RELATED TO THE MSA

Pennsylvania Qualifying Statute

The General Assembly enacted a Qualifying Statute, cited as the Tobacco Settlement Agreement Act, P.L. 394, No. 54, codified as 35 P.S. Section 5671 *et seq.*, which became effective on June 22, 2000. By letter dated April 18, 2000, counsel to the OPMs confirmed that the OPMs will not dispute that the Commonwealth Qualifying Statute constitutes the Model Statute under the MSA. By Public Law 870, No. 114, effective November 19, 2004, the Commonwealth adopted the Allocable Share Release Amendment.

Pennsylvania Complementary Legislation

Pursuant to the provisions of the Tobacco Product Manufacturer Directory Act, Act of December 30, 2003, P.L. 441, No. 64, codified as 35 P.S. Section 5702.101.101 *et seq.*, as amended (the "**Commonwealth's Complementary Legislation**"), the Attorney General is required to develop and publish a directory of all tobacco product manufacturers and their brand families that have provided a current and accurate certification as hereinafter described. Every tobacco product manufacturer whose cigarettes are sold in the Commonwealth whether directly or through a distributor, retailer or similar intermediary is required to execute and deliver on a form prescribed by the Attorney General of the Commonwealth a certification to the Attorney General, annually, no later than the thirtieth day of April each year, certifying under penalty of perjury that as of the date of the certification, the tobacco product manufacturer either (i) is a participating manufacturer under the MSA or (ii) is in full compliance with the Commonwealth's Complementary Legislation and the Tobacco Settlement Agreement Act. In the case of a nonparticipating manufacturer, the certification shall include a statement that the nonparticipating manufacturer is registered to do business in the Commonwealth or has appointed a resident agent of service and provided notice of such registration or appointment, and has established and maintains a qualified escrow fund and has executed a qualified escrow agreement approved by the Attorney General. In addition, pursuant to the Commonwealth's Complementary Legislation, it is unlawful for any person to: (i) affix a tax stamp to a package of cigarettes belonging to a tobacco product manufacturer or brand family that is not included in the directory; (ii) sell, offer, distribute or possess for sale in the Commonwealth cigarettes belonging to a tobacco product manufacturer or brand family that is not included in the directory; or (iii) acquire, hold, own, possess, transport, import or cause to be imported cigarettes that the person knows or should know are intended for distribution or sale in the Commonwealth in violation of clause (i). Any cigarettes that have been sold, offered for sale or possessed for sale in the Commonwealth in violation of the Commonwealth's Complementary Legislation, shall be subject to seizure and forfeiture. In addition to or in lieu of any other civil or criminal penalty, if the Department of Revenue determines that a cigarette stamping agent has violated the Commonwealth's Complementary Legislation, the Department may revoke or suspend the license of the agent and may also assess a civil penalty in an amount not to exceed 500% of the retail value of the cigarettes sold. In addition, if a court determines that a person has violated the Commonwealth's Complementary Legislation, the court shall order any profits, gain, gross receipts or other benefit from the violation to be disgorged and paid to the Commonwealth.

Statutory Enforcement Framework and Enforcement Agencies

Commonwealth Statutory Enforcement Provisions. The Commonwealth's statutory framework for enforcing laws relating to the manufacture, distribution, sale, possession and taxation of cigarettes within the Commonwealth of Pennsylvania includes the:

- Pennsylvania Qualifying Statute,
- The Commonwealth's Complementary Legislation,
- Clean Indoor Air Act, Act of June 13, 2008, P.L. 182. No. 27, which prohibits smoking in enclosed public places and workplaces, with certain exceptions,
- Act of July 10, 2002, P.L. 789, No. 112, proscribing the sale of tobacco products to minors,
- Cigarette Fire Safety and Firefighter Protection Act, Act of July 4, 2008, No. 42, as amended, 35 P.S. §§1254.1-1254.1,
- Tax laws applicable to tobacco products, including 72 P.S. §201-A et seq., and
- Criminal laws applicable to sale of tobacco products, including 18 P.C. §6305.

Federal Laws. In addition to Commonwealth laws, rules and regulations, Commonwealth enforcement agencies have certain shared enforcement powers under various federal laws relating to tobacco control, including the Jenkins Act (regulating and restricting the mail order and internet sales of tobacco and other controlled products), the Family Smoking Prevention and Tobacco Control Act of 2009 ("**FSPTCA**") (amending the FDA's Food, Drug and Cosmetics Act) and the Prevention of All Cigarette Trafficking ("**PACT**") Act of 2010.

This statutory enforcement framework is administered and enforced in the Commonwealth by the state Department of Revenue, Office of Attorney General, Department of Health, State and municipal police, and the State Fire Commissioner. Federal laws pertaining to tobacco are enforced by various federal agencies, including the Department of Homeland Security and the Federal Bureau of Investigation, the Food and Drug Administration, the Department of Health and Human Services, and the Department of Agriculture. State agencies participate in coordinated enforcement efforts where overlapping jurisdiction applies.

Absence of Tribal Reservations. There are no federally recognized Native American reservation lands located within the borders of the Commonwealth. Accordingly, unlike some other states, the Commonwealth does not experience off-reservation Tribal sales of cigarettes within the Commonwealth from reservations located within its borders.

SUMMARY OF THE TOBACCO CONSUMPTION REPORT

The following is a brief summary of the Tobacco Consumption Report, a copy of which is attached hereto as APPENDIX D. This summary does not purport to be complete and the Tobacco Consumption Report should be read in its entirety for an understanding of the assumptions on which it is based and the conclusions it reaches. The Tobacco Consumption Report forecasts future United States domestic cigarette consumption. The MSA payments are based in part on cigarettes shipped in and to the United States. Cigarette shipments and cigarette consumption may not match as a result of various factors such as inventory adjustments, but are substantially the same when compared over a period of time.

General

IHS Global Inc. ("**IHS Global**") has prepared a report dated February 13, 2018 on the consumption of cigarettes in the United States from 2017 through 2038 entitled, "*A Forecast of U.S. Cigarette Consumption (2017-2038) for the Commonwealth Financing Authority*" ("**Tobacco Consumption Report**"). IHS Global provided the

following description to the Authority for use in this Official Statement: "IHS Global is an internationally recognized econometric and forecasting firm with over 600 economists located in more than 30 countries. IHS Global is a subsidiary of IHS Markit, Inc., a publicly traded company on the NASDAQ (NASDAQ: INFO). IHS Markit is a leading source of information, insight and advisory services in the areas of finance, economics, energy, chemicals, technology, transportation, healthcare, geopolitical risk, sustainability and supply chain management."

IHS Global has developed an econometric model of cigarette consumption in the United States based on historical United States data between 1965 and 2016, and what IHS Global describes as widely accepted economic principles and IHS Global's experience in building econometric forecasting models. IHS Global considered the impact of demographics, cigarette prices, disposable income, employment and unemployment, industry advertising expenditures, the future effect of the incidence of smoking among underage youth, and qualitative variables that captured the impact of anti-smoking regulations, legislation, health warnings, and the availability of alternative tobacco and nicotine products. After determining which variables were effective in building this cigarette consumption model (including real cigarette prices, real per capita disposable personable income, the impact of workplace smoking restrictions, stricter restrictions on smoking in public places, and the trend over time in individual behavior and preferences), IHS Global employed standard multivariate regression analysis to determine the nature of the economic relationship between these variables and per capita cigarette consumption in the United States.

IHS Global's model, coupled with its long-term forecast of the United States economy, was then used to project total United States cigarette consumption from 2017 through 2038 (the "**Tobacco Consumption Forecast**"). The Tobacco Consumption Forecast indicates that the total consumption of cigarettes in the United States is projected to fall annually at a rate of 2.9% from 2017 through 2038, resulting in a forecast of total U.S. cigarette consumption in 2038 to be 134.2 billion cigarettes (a 48% decline from the 2016 level), as set forth in the Tobacco Consumption Report. According to IHS Global, the assumptions on which the Tobacco Consumption Forecast is based are reasonable.

Historical Cigarette Consumption

The U.S. Department of Agriculture, which has compiled data on cigarette consumption since 1900, reports that consumption (which is defined as taxable United States consumer sales, plus shipments to overseas armed forces, ship stores, Puerto Rico and other United States possessions, and small tax-exempt categories, as reported by the Bureau of Alcohol, Tobacco, Firearms and Explosives) grew from 2.5 billion in 1900 to a peak of 640 billion in 1981. Following the release of the Surgeon General's Report in 1964, cigarette consumption continued to increase at an average annual rate of 1.2% between 1965 and 1981. Between 1981 and 1990, however, U.S. cigarette consumption declined at an average annual rate of 2.2%. From 1990 to 1998, the average annual rate of decline in cigarette consumption was 1.5%; but for 1998 the decline increased to 3.1% and increased further to 6.5% for 1999. These declines are correlated with large price increases in 1998 and 1999 following the MSA and the Previously Settled States Settlements. In 2000 and 2001, the rate of decline moderated, to 1.2%. Coincident with a large number of state excise tax increases, the rate of decline accelerated in 2002 and 2003 to an average annual rate of 3.0%. The decline moderated for the next four years, through 2007, averaging 2.3%. The rate of decline accelerated dramatically in 2008 through 2010 (due to indoor smoking bans, recession and the increases in the federal and state excise taxes), before finally decelerating in 2011 and 2012. In 2013 the decline sharpened to nearly 5%. This decline has been attributed by the industry to a weak economy, the rapid increase in usage of electronic cigarettes, and to an unfavorable comparison with a surprisingly strong 2012. In addition, some of the decline was due to a reduction in wholesale inventories late in the year, some of which was reversed in 2014. In 2015, cigarette shipment declines stopped, and manufacturers reported increased shipments for most of the year. Cigarette shipment decline resumed in 2016.

Factors Affecting Cigarette Consumption

Most empirical studies have found a common set of variables that are relevant in building a model of cigarette demand. These conventional analyses usually evaluate one or more of the following factors: (i) general population growth, (ii) price increases, (iii) changes in disposable income, (iv) youth consumption, (v) trend over time, (vi) workplace smoking bans, (vii) smoking bans in public places, (viii) nicotine dependence, and (ix) health warnings. While some of these factors were not found to have a measurable impact on changes in demand for cigarettes, all of these factors are thought to affect smoking in some manner and to be incorporated into current levels of consumption.

IHS Global's analysis includes a time trend variable in order to capture the impact of changing health trends and the effects of other such variables, which are difficult to quantify.

COMMONWEALTH ANNUAL PAYMENTS METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS

Introduction

The following discussion describes the methodology and assumptions used to calculate projections of the amount of Commonwealth Annual Payments (the "**Commonwealth Annual Payments Projection Methodology and Assumptions** "), as well as the methodology and assumptions used to calculate debt service coverage on the Series 2018 Bonds (the "**Bond Structuring Assumptions**").

The assumptions set forth herein are only assumptions and no guarantee can be made as to the ultimate outcome of certain events assumed herein. Actual results will differ from those assumed, and any such difference could have a material effect on the receipt of Revenues. See "BONDHOLDERS' RISKS" and "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments" herein. The discussions are followed by tables of projected Commonwealth Annual Payments.

In projecting the amount of Commonwealth Annual Payments, (a) the forecast of cigarette consumption in the U.S. developed by IHS Global as described in the Tobacco Consumption Report is assumed to represent actual cigarette shipments measured pursuant to the MSA for the years covered by the report, and (b) such forecast is applied to calculate Annual Payments to be made by the PMs pursuant to the MSA. See "BONDHOLDERS' RISKS—Risks Relating to the Tobacco Consumption Report" herein. The calculation of payments required to be made was performed in accordance with the terms of the MSA; however, as described below, certain further assumptions were made with respect to shipments of cigarettes in the U.S. and the applicability to such payments of certain adjustments and offsets set forth in the MSA. Such further assumptions may differ materially from the actual information utilized by the MSA Auditor in calculating payments due under the MSA.

It was assumed, among other things described below, that:

- the PMs make all payments required to be made by them pursuant to the MSA,
- the aggregate Market Share of the OPMs remains constant throughout the forecast period at 84.41447%, based on the NAAG-reported market share for OPMs in sales year 2016 (measuring roll-your-own shipments at 0.0325 ounces per cigarette conversion rate), and
- the aggregate Market Share of the SPMs remains constant at 8.72350%, based on the NAAG-reported market share for SPMs in sales year 2016 (measuring roll-your-own shipments at 0.09 ounces per cigarette conversion rate).

Commonwealth Annual Payments Projection Methodology and Assumptions

Cigarette Shipments under the MSA

In applying the consumption forecast from the Tobacco Consumption Report, it was assumed that U.S. consumption forecasted by IHS Global was equal to the number of cigarettes shipped in and to the U.S., the District of Columbia and Puerto Rico, which, when adjusted by the aggregate OPM Market Share, is the number used to determine the Volume Adjustment. The Tobacco Consumption Report states that the quantities of cigarettes shipped and cigarettes consumed may not match at any given point in time as a result of various factors, such as inventory adjustments, but are substantially the same when compared over a period of time. IHS Global's forecast for U.S. cigarette consumption is set forth in the Tobacco Consumption Report in "APPENDIX D—TOBACCO CONSUMPTION REPORT." The Tobacco Consumption Report contains a discussion of the assumptions underlying the projections of cigarette consumption contained therein. No assurance can be given that future consumption will

be consistent with that projected in the Tobacco Consumption Report. See "BONDHOLDERS' RISKS—Risks Relating to the Tobacco Consumption Report."

Annual Payments

In accordance with the Commonwealth Annual Payments Projection Methodology and Assumptions, the anticipated amounts of Annual Payments for the years 2018-2038 to be made by the OPMs were calculated by applying the adjustments applicable to the base amounts of Annual Payments set out in the MSA, in order, as described below. The anticipated amounts of Annual Payments for the years 2018-2038 to be made by the SPMs were calculated by (i) multiplying the base amounts of Annual Payments by the Adjusted SPM Market Share (as described below) and (ii) then applying the adjustments applicable to the Annual Payments set out in the MSA, in order, as described below.

Inflation Adjustment. First, the Inflation Adjustment was applied to the schedule of base amounts for the Annual Payments set forth in the MSA. The inflation adjustment rate is compounded annually at the greater of 3.0% or the percentage increase in the actual Consumer Price Index for all Urban Consumers ("**CPI-U**") in the prior calendar year as published by the Bureau of Labor Statistics (released each January). The calculations of Annual Payments for the years 2018-2038 assumes the minimum Inflation Adjustment Percentage provided in the MSA of 3.0% in every year since inception, except for calendar years 2000, 2004, 2005, and 2007 where the actual percentage increases in CPI-U of approximately 3.387%, 3.256%, 3.416%, and 4.081%, respectively, were used. Thereafter, the annual Inflation Adjustment Percentage was assumed to be the 3.0% minimum provided in the MSA. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments–*Inflation Adjustment*" for a description of the formula used to calculate the Inflation Adjustment.

Volume Adjustment. Next, the Annual Payments calculated for the years 2018-2038 in each case after application of the Inflation Adjustment were adjusted for the Volume Adjustment by multiplying the forecast for U.S. cigarette consumption contained in the Tobacco Consumption Report by the assumed aggregate OPM Market Share of the OPMs (84.41447% as described above). No add-back or benefit was assumed from any Income Adjustment. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Adjustments to Payments–*Volume Adjustment*" for a description of the formula used to calculate the Volume Adjustment.

Previously Settled States Reduction. Next, amounts calculated for each year after application of the Inflation Adjustment and the Volume Adjustment were reduced by the Previously Settled States Reduction, which applies only to the payments owed by the OPMs. The Previously Settled States Reduction is not applicable to Annual Payments owed by the SPMs. The Previously Settled States Reduction is 11.0666667% for each year.

Non-Settling States Reduction. The Non-Settling States Reduction was not applied to the Annual Payments because such reduction has no effect on the amount of payments to be received by states that remain parties to the MSA. Thus, the Commonwealth Annual Payments Projection Methodology and Assumptions include an assumption that the Commonwealth will remain a party to the MSA.

NPM Adjustment. Pursuant to the MSA, the NPM Adjustment will not apply to the Annual Payments payable to any state that enacts and diligently enforces a Qualifying Statute so long as such statute is not held to be unenforceable. The PMs have disputed Annual Payments attributable to sales years 2003 through 2016 and a portion of such payments have either been withheld or deposited in the Disputed Payments Account in each year since 2006. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Payments Made to Date." The Bond Structuring Assumptions assume that the Commonwealth has diligently enforced and will diligently enforce a Qualifying Statute that is not held to be unenforceable. Therefore, the NPM Adjustment is assumed not to reduce Annual Payments throughout the period forecasted in the Tobacco Consumption Report. For a discussion of the Commonwealth's Qualifying Statute, see "COMMONWEALTH LAWS RELATED TO THE MSA."

Offset for Miscalculated or Disputed Payments. The Commonwealth Annual Payments Projection Methodology and Assumptions include an assumption that there will be no adjustments to the Annual Payments due to miscalculated or disputed payments.

Litigating Releasing Parties Offset. The Commonwealth Annual Payments Projection Methodology and Assumptions include an assumption that the Litigating Releasing Parties Offset will have no effect on payments.

Offset for Claims-Over. The Commonwealth Annual Payments Projection Methodology and Assumptions include an assumption that the Offset for Claims-Over will have no effect on payments.

Subsequent Participating Manufacturers. The Commonwealth Annual Payments Projection Methodology and Assumptions treat the SPMs as a single manufacturer having executed the MSA on or prior to February 22, 1998 for purposes of calculating Annual Payments under Section IX(i) of the MSA. Further, the Market Share (as defined in the MSA) of the SPMs remains constant at 8.72350% (measuring roll your own cigarettes at 0.09 ounces per cigarette conversion rate) as described above. Because the 8.72350% Market Share exceeds the greater of (i) the SPM's 1998 Market Share or (ii) 125% of its 1997 Market Share, the SPMs are assumed to make Annual Payments in each year. For purposes of calculating Annual Payments owed by the SPMs, their aggregate adjusted Market Share ("**Adjusted SPM Market Share**") is equal to (y) the SPM Market Share (assumed at 8.72350%) less the Base Share (assumed at 3.493414%) divided by (z) the aggregate Market Share of the OPMs at 84.63826% (measuring roll your own cigarettes at 0.09 ounces per cigarette conversion rate), or 6.17934%.

Projection of Commonwealth Annual Payments to be Received by the Commonwealth

The following tables show the projections of total Commonwealth Annual Payments through the year 2038, calculated in accordance with the Commonwealth Annual Payments Projection Methodology and Assumptions and utilizing the base case forecast from the Tobacco Consumption Report.

Projection of Commonwealth Annual Payments

Sales Year	Payment Year	IHS Global Consumption Decline Forecast	IHS Global Forecast of Cigarette Consumption	Estimated OPM Consumption	Base Annual Payment	Inflation Adjustment	Volume Adjustment	Previously Settled State's Reduction	Total Adjusted Annual Payments by OPMs	Commonwealth Allocable Share	OPM Annual Payments to the Commonwealth	SPM Annual Payments to the Commonwealth	Total Commonwealth Annual Payments
2017	2018	-3.585%	250,855,486,472	211,758,329,371	9,000,000,000	$7,111,589,400	($8,760,059,149)	($813,569,350)	$6,537,960,901	5.7468588%	$375,727,381	$26,106,603	$401,833,985
2018	2019	-3.566%	241,909,528,620	204,206,646,464	9,000,000,000	7,594,937,100	(9,281,058,683)	(809,402,547)	6,504,475,870	5.7468588%	373,803,044	25,972,895	399,775,939
2019	2020	-3.495%	233,455,183,456	197,069,955,802	9,000,000,000	8,092,785,600	(9,810,819,782)	(805,870,886)	6,476,094,932	5.7468588%	372,172,031	25,859,567	398,031,599
2020	2021	-3.360%	225,609,985,750	190,447,473,738	9,000,000,000	8,605,569,600	(10,345,361,750)	(803,463,005)	6,456,744,846	5.7468588%	371,060,009	25,782,301	396,842,310
2021	2022	-3.282%	218,206,253,813	184,197,652,663	9,000,000,000	9,133,736,400	(10,889,223,021)	(801,726,150)	6,442,787,229	5.7468588%	370,257,885	25,726,567	395,984,452
2022	2023	-3.141%	211,351,637,953	178,411,365,015	9,000,000,000	9,677,748,600	(11,438,567,691)	(801,136,023)	6,438,044,886	5.7468588%	369,985,349	25,707,630	395,692,980
2023	2024	-3.016%	204,977,040,456	173,030,282,323	9,000,000,000	10,238,081,400	(11,995,011,997)	(801,566,350)	6,441,503,053	5.7468588%	370,184,085	25,721,439	395,905,524
2024	2025	-2.881%	199,071,360,891	168,045,034,218	9,000,000,000	10,815,223,500	(12,558,387,653)	(803,089,836)	6,453,746,011	5.7468588%	370,887,671	25,770,326	396,657,997
2025	2026	-2.776%	193,545,094,693	163,380,065,896	9,000,000,000	11,409,679,800	(13,131,302,428)	(805,473,765)	6,472,903,607	5.7468588%	371,988,631	25,846,824	397,835,455
2026	2027	-2.706%	188,307,825,374	158,959,052,758	9,000,000,000	12,021,970,500	(13,716,723,861)	(808,447,297)	6,496,799,342	5.7468588%	373,361,885	25,942,242	399,304,126
2027	2028	-2.666%	183,288,243,501	154,721,799,324	9,000,000,000	12,652,629,300	(14,317,254,258)	(811,781,507)	6,523,593,535	5.7468588%	374,901,709	26,049,233	400,950,942
2028	2029	-2.663%	178,407,257,455	150,601,540,822	9,000,000,000	13,302,207,900	(14,936,095,592)	(815,183,098)	6,550,929,210	5.7468588%	376,472,652	26,158,387	402,631,038
2029	2030	-2.677%	173,630,869,591	146,569,578,321	9,000,000,000	13,971,274,200	(15,575,003,236)	(818,520,656)	6,577,750,308	5.7468588%	378,014,022	26,265,485	404,279,508
2030	2031	-2.684%	168,971,448,375	142,636,352,597	9,000,000,000	14,660,412,300	(16,233,989,518)	(821,857,457)	6,604,565,325	5.7468588%	379,555,044	26,372,560	405,927,604
2031	2032	-2.681%	164,440,910,670	138,811,923,205	9,000,000,000	15,370,224,300	(16,913,034,612)	(825,262,328)	6,631,927,360	5.7468588%	381,127,501	26,481,819	407,609,320
2032	2033	-2.680%	160,034,454,860	135,092,236,887	9,000,000,000	16,101,331,200	(17,612,795,248)	(828,731,315)	6,659,804,638	5.7468588%	382,729,569	26,593,135	409,322,704
2033	2034	-2.749%	155,634,984,005	131,378,446,883	9,000,000,000	16,854,371,100	(18,339,005,557)	(831,700,456)	6,683,665,087	5.7468588%	384,100,795	26,688,412	410,789,207
2034	2035	-2.769%	151,325,533,385	127,740,646,982	9,000,000,000	17,630,001,900	(19,088,767,474)	(834,563,279)	6,706,671,147	5.7468588%	385,422,921	26,780,277	412,203,198
2035	2036	-2.776%	147,124,394,901	124,194,278,196	9,000,000,000	18,428,902,200	(19,861,843,455)	(837,421,170)	6,729,637,575	5.7468588%	386,742,769	26,871,984	413,614,753
2036	2037	-2.802%	143,002,248,319	120,714,590,006	9,000,000,000	19,251,769,500	(20,660,242,787)	(840,128,959)	6,751,397,754	5.7468588%	387,993,296	26,958,874	414,952,170
2037	2038	-2.819%	138,971,191,990	117,311,795,171	9,000,000,000	20,099,322,900	(21,484,060,437)	(842,755,715)	6,772,506,748	5.7468588%	389,206,400	27,043,164	416,249,564

Bond Structuring Assumptions

Delivery Date

The Series 2018 Bonds are assumed to be delivered on February 20, 2018.

Issue Size

The Series 2018 Bonds are being issued in a principal amount sufficient, together with net issuance premium, to: (i) fund a deposit in the General Fund of the Commonwealth equal to $1,500,000,000 to provide General Fund budgetary relief, (ii) pay capitalized interest on the Series 2018 Bonds to June 1, 2019 and (iii) pay the costs of issuance incurred in connection with the issuance of the Series 2018 Bonds.

Maturities; Fixed Amortization

The schedules of stated maturity dates of the Series 2018 Bonds are set forth on the inside cover page hereof.

Interest Rates

The Series 2018 Bonds bear interest at the rates shown on the inside cover page hereof. Interest is calculated on the basis of a 360-day year consisting of twelve 30-day months.

Interest Earnings

The Bond Structuring Assumptions assume that the Trustee will receive the Commonwealth Annual Payments ten days after April 15 in 2019 and each year thereafter. Earnings are assumed at 0% per annum on the Pledged Annual Payments from the date of receipt by the Trustee until the applicable Payment Date.

Miscellaneous

The Commonwealth Annual Payments Projection Methodology and Assumptions and Bond Structuring Assumptions assume that no Event of Default occurs, and that no Refunding Bonds are issued. It is further assumed that all Payment Dates occur on the first day of each June and December, whether or not such date is a Business Day.

CONTINUING DISCLOSURE AGREEMENT

The Authority and the Commonwealth, acting through the Office of the Budget, will enter into a Continuing Disclosure Agreement (the "**Disclosure Agreement**") for the benefit of the holders of the Series 2018 Bonds pursuant to which they will agree to send certain financial information and operating data to the MSRB via EMMA annually and to provide notice to the MSRB via EMMA of certain events, pursuant to the requirements of Section (b)(5)(i) of Securities and Exchange Commission Rule 15c2-12 (17 C.F.R. § 240.15c2-12) (the "**Rule**"). The proposed form of the Continuing Disclosure Agreement is attached hereto as APPENDIX H.

A failure by the Authority or the Commonwealth to comply with the Disclosure Agreement will not constitute a default or Event of Default under the Indenture, and the holders of the Series 2018 Bonds will have only the remedies set forth in the Disclosure Agreement itself. Nevertheless, a failure to comply must be reported in accordance with the Rule and may be expected to be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Series 2018 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series 2018 Bonds and their market price.

The Authority has agreed to provide notice of certain events under the Rule with respect to its previously issued bonds. The Authority failed to file event notices with respect to certain bond rating changes related to third-party bond insurers and certain recalibrations of its underlying ratings, including a credit rating upgrade by Moody's on October 7, 2016, from A2 to A1, a credit rating upgrade by S&P on March 18, 2014 from A to AA- and a credit

rating downgrade by S&P on June 26, 2017 from AA- to A. As of the date hereof, the Authority has filed the above-referenced rating change event notices with EMMA.

The Commonwealth failed to file, as a continuing disclosure filing, certain of the Commonwealth's operating information (the "**Operating Information**") for fiscal years ending June 30, 2011 through and including June 30, 2015 in accordance with its outstanding continuing disclosure undertakings. However, such Operating Information may be found in official statements of the Commonwealth, as filed on EMMA, in each year from 2011 through 2015. The Authority, on behalf of itself and the Commonwealth, has filed a notice with EMMA giving notice of such status, and such notice was not timely filed.

The Commonwealth filed on EMMA on October 20, 2017, a notice dated such date, relative to its failure to have made timely installment payments due on October 1, 2017, relating to the following obligations: Taxable Installment Purchase Certificates of Participation, Series 2010C (Qualified Energy Conservation Bonds – Direct Pay) (Commonwealth of Pennsylvania – Department of General Services); - Taxable Installment Purchase Certificates of Participation, Series 2010D (Build America Bonds – Direct Pay) (Commonwealth of Pennsylvania – Department of General Services); and Taxable Installment Purchase Certificates of Participation, Series 2010H (Build America Bonds – Direct Pay) (Commonwealth of Pennsylvania – Department of General Services). Such notice was not timely filed. Payment for the above-referenced Series 2010H Certificates of Participation was made on October 13, 2017, and payments for the above-referenced Series 2010C and Series 2010D Certificates of Participation were made on October 13, 2017.

LITIGATION

Except as described in the following paragraph, there is no litigation pending or, to the best knowledge of the Authority, threatened in any court (either in Commonwealth or federal court) to restrain or enjoin the issuance or delivery of the Series 2018 Bonds or questioning the creation, organization or existence of the Authority, the validity or enforceability of the Acts, the Transfer Agreement, the Indenture, the Series 2018 Bonds, the Service Agreement, the transfer of the Pledged Annual Payments and Article II Payments by the Commonwealth to the Authority, or to the Trustee, as the Authority's assignee, the proceedings for the authorization, execution, authentication and delivery of the Series 2018 Bonds or the validity of the Series 2018 Bonds. For a discussion of legal matters, including certain pending litigation involving the MSA and the PMs, see "BONDHOLDERS' RISKS," "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS" and APPENDIX E – "CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY."

On January 19, 2018, a Complaint was filed in the Pennsylvania Commonwealth Court (*Phantom Fireworks Showrooms, LLC et al. v. Tom Wolf, Governor of the Commonwealth of Pennsylvania et al.*, No. 21 MD 2018) (the "**Phantom Fireworks Case**"). In the Complaint, the petitioners challenge, among other things, the constitutionality of Act 43, which act includes Tax Reform Code Article XXVIII, which Article, among other things, authorizes the issuance of the Bonds. For a further description of the Phantom Fireworks Case, see the description after the second paragraph under the heading "LITIGATION" on page A-55 of APPENDIX A. Also see "BONDHOLDERS' RISKS - The Phantom Fireworks Case" and the description below under "Opinion Relating to Pending Litigation."

Opinion Relating to Pending Litigation

The Commonwealth of Pennsylvania (the "Commonwealth") has retained Greenberg Traurig, LLP, Philadelphia, Pennsylvania, as special counsel to the Commonwealth to deliver an opinion as described below.

On the issuance date of the Series 2018 Bonds, Greenberg Traurig, LLP will deliver an opinion (the "**Opinion**"), based on the facts, assumptions and qualifications set forth therein, and on a reasoned analysis of judicial decisions and Pennsylvania statutes in effect on the date of the Opinion, that it is such firm's opinion that (i) under Section 1524(b) of the Authority Act, the Series 2018 Bonds are conclusively presumed to be fully authorized and issued under the laws of the Commonwealth, and any person (including the Commonwealth and the Authority) is estopped from questioning their validity, sale, execution or delivery by the Authority and (ii) the finding of unconstitutionality of Act 43 by a court of competent jurisdiction would not affect the validity of the Series 2018

Bonds and the sources of payment and security therefor, if a court were properly presented with the facts and properly applying current applicable law.

The Opinion does not address the validity of the Series 2018 Bonds, nor does the Opinion express any opinion with respect to the merits of the Phantom Fireworks Case or the potential outcome of the Phantom Fireworks Case. Investors should be aware that the rendering of the Opinion, as is the case with any legal opinion, is not a guarantee of what a court would hold; rather it is an informed judgment as to a specific question of law. Thus, the Opinion is not a prediction of what a court would actually hold, but an opinion as to the decision a court would reach if the issues were properly presented to it and the court followed existing legal precedents applicable to the subject matter of the Opinion. It is not possible to predict with certainty the outcome of any judicial proceeding.

To Greenberg Traurig, LLP's knowledge, there is no directly controlling statute or judicial precedent. Accordingly, the Opinion is not based on directly controlling precedent but rather on what Greenberg Traurig, LLP believes to be a sound analysis of the jurisprudence that exists on the date of the Opinion.

There are a number of inherent limitations in an opinion of this nature, including the pervasive equitable powers and discretionary judgment of a judge reviewing the facts and circumstances as they may exist at a future time, the interplay of facts, circumstances, relationships and other considerations, some of which may not now exist.

The Opinion only relates to the Series 2018 Bonds issued on the date of issuance thereof and is limited in all respects to the laws of the Commonwealth. Greenberg Traurig LLP expresses no opinion regarding the MSA. Greenberg Traurig, LLP assumes no responsibility as to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction.

The Opinion is rendered pursuant to the Commonwealth's request and is solely for the addressees use and may only be relied upon by the addressees, their successors and assigns. The addressees do not include the purchasers of the Bonds. The Opinion may not be relied upon for any other purpose or relied upon by, or furnished or quoted to, any other person or entity for any purpose. The Opinion speaks only on the date thereof and is based on Greenberg Traurig, LLP's understandings and assumptions as to present facts, and on Greenberg Traurig, LLP's review of the facts set forth therein and the application of the law of the Commonwealth as the same exist on the date thereof. Greenberg Traurig, LLP undertakes no obligation to update or supplement the Opinion after the date thereof for the benefit of any person or entity with respect to any facts or circumstances that may hereafter come to Greenberg Traurig, LLP's attention or any changes in facts or law that may hereafter occur or take effect. See "LEGAL CONSIDERATIONS RELATING TO PLEDGED ANNUAL PAYMENTS – No Assurance as to the Outcome of Litigation or Arbitration Proceedings."

TAX MATTERS

Federal

Exclusion of Interest From Gross Income. In the opinion of Co-Bond Counsel, under existing statutes, regulations, rulings and court decisions, interest on the Series 2018 Bonds, including interest in the form of original issue discount, will not be includible in gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the Authority with the requirements of the Code. Interest on the Series 2018 Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax on individuals.

In rendering its opinion, Co-Bond Counsel has assumed compliance by the Authority with its covenants contained in the Indenture and the representations and covenants in the Tax Compliance Agreement executed by the Authority on the date of issuance of the Series 2018 Bonds relating to actions to be taken or caused to be taken, by the Authority after the issuance of the Series 2018 Bonds necessary to effect or maintain the exclusion from gross income of the interest on the Series 2018 Bonds for federal income tax purposes. These covenants and representations relate to, *inter alia*, the use and investment of proceeds of the Series 2018 Bonds and the rebate to the United States Department of Treasury of specified arbitrage earnings, if any. Failure to comply with such covenants could result in the interest on the Series 2018 Bonds becoming includible in gross income for federal income tax purposes from the date of issuance of the Series 2018 Bonds.

Original Issue Discount. The initial public offering price of the June 1, 2039 maturity of the Series 2018 Bonds (the "Discount Bond") is less than the principal amount payable on the Discount Bond at maturity. The difference between the initial public offering price at which a substantial amount of the Discount Bond was first sold and the principal amount payable at maturity of the Discount Bond constitutes original issue discount. The appropriate portion of the original issue discount allocable to the original and each subsequent owner of the Discount Bond will be treated for federal income tax purposes as interest not includible in gross income of the holders thereof for federal income tax purposes to the same extent as stated interest on the Discount Bond.

Under the Code, original issue discount on the Discount Bond accrues on the basis of economic accrual. The basis of an initial purchaser of a Discount Bond acquired at the initial public offering price of the Discount Bond will be increased by the amount of such accrued discount.

Owners of the Discount Bond should consult their own tax advisors with respect to the to the determination for federal income tax purposes of the original issue discount properly accruable with respect to the Discount Bond and the tax accounting treatment of accrued interest.

Other Federal Tax Matters. Ownership or disposition of the Series 2018 Bonds may result in other federal tax consequences to certain taxpayers, including, without limitation, certain S corporations, foreign corporations with branches in the United States, holders of an interest in a financial asset securitization investment trust, property and casualty insurance companies, individuals who otherwise qualify for the earned income credit and taxpayers who have an initial basis in the Series 2018 Bonds greater or less than the principal amount thereof, individual recipients of Social Security or Railroad Retirement benefits, and taxpayers, including banks, thrift institutions and other financial institutions subject to Section 265 of the Code, who may be deemed to have incurred or continued indebtedness to purchase or to carry the Series 2018 Bonds.

Co-Bond Counsel is not rendering any opinion as to any federal tax matters other than those described under the caption "Exclusion of Interest From Gross Income" above and expressly stated in the Proposed Forms of Opinion of Co-Bond Counsel included as APPENDIX G to this Official Statement. Purchasers of the Series 2018 Bonds should consult their independent tax advisors with regard to all federal tax matters.

Pennsylvania

In the opinion of Co-Bond Counsel, under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof, interest on the Series 2018 Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax, and the Series 2018 Bonds are exempt from personal property taxes in Pennsylvania; however, under the laws of the Commonwealth of Pennsylvania, as enacted and construed on the date hereof, any profits, gains or income derived from the sale, exchange or other disposition of the Series 2018 Bonds will be subject to Pennsylvania taxes and local taxes within the Commonwealth.

Other

The Series 2018 Bonds and the interest thereon may be subject to state or local taxes in jurisdictions other than the Commonwealth of Pennsylvania under applicable state or local tax laws.

Purchasers of the Series 2018 Bonds should consult their independent tax advisors with regard to all state and local tax matters that may affect them.

COMMONWEALTH NOT LIABLE ON THE SERIES 2018 BONDS

THE SERIES 2018 BONDS SHALL BE LIMITED OBLIGATIONS OF THE AUTHORITY AND SHALL NOT CONSTITUTE NOR GIVE RISE TO ANY CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY. THE SERIES 2018 BONDS SHALL NOT CONSTITUTE A DEBT OR LIABILITY OF, AND SHALL NOT BE PAYABLE BY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF

OR INTEREST ON THE SERIES 2018 BONDS, NOR SHALL THE AUTHORITY BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THE SERIES 2018 BONDS EXCEPT FROM THE REVENUES AND FUNDS OF THE AUTHORITY PLEDGED FOR THE PAYMENT THEREOF UNDER THE INDENTURE. THE PAYMENTS MADE BY THE COMMONWEALTH UNDER THE TRANSFER AGREEMENT AND THE SERVICE AGREEMENT SHALL BE SUBJECT TO THE APPROPRIATION OF FUNDS FOR SUCH PURPOSE BY THE GENERAL ASSEMBLY. THERE CAN BE NO ASSURANCE THAT SUCH FUNDS WILL BE APPROPRIATED BY THE COMMONWEALTH AS REQUIRED TO TIMELY MAKE SUCH PAYMENTS. THE AUTHORITY HAS NO TAXING POWER.

RATINGS

S&P has assigned a rating of "A" (stable outlook) to the Series 2018 Bonds. Moody's has assigned a rating of "A1" (stable outlook) to the Series 2018 Bonds. Fitch has assigned a rating of "A+" (negative outlook) to the Series 2018 Bonds.

S&P and Moody's have also assigned the Insured Bonds (the Series 2018 Bonds stated to mature on June 1, 2039) ratings of "AA" (stable outlook) and "A2" (stable outlook), respectively, with the understanding that upon delivery of the Insured Bonds, the policy guaranteeing the payment when due of principal of and interest on the Insured Bonds will be issued by AGM.

According to the Rating Agencies' reports on the Series 2018 Bonds, the ratings reflect the appropriation obligation of the Commonwealth. Accordingly, although the Series 2018 Bonds are structured to be self-supporting from Pledged Annual Payments, there is no reflection of the security of the Pledged Annual Payments or its risks in the ratings. Ratings reflect only the view of the Rating Agencies, and an explanation of the significance of such ratings may be obtained from the Rating Agency furnishing the same. There is no assurance that any initial rating assigned to the Series 2018 Bonds will continue for any given period of time or that such rating will not be revised downward, suspended or withdrawn entirely by the Rating Agency furnishing the same. Any such downward revision, suspension or withdrawal of a rating may have an adverse effect on the availability of a market for or the market price of the Series 2018 Bonds. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

LEGAL INVESTMENTS

The Authority Act provides that the Series 2018 Bonds are securities in which all of the following (in Pennsylvania) may properly and legally invest funds, including capital, deposits or other funds in their control or belonging to them: government agencies; insurance companies; trust companies; banking associations, banking corporations and savings banks; investment companies; executors, trustees and other fiduciaries; and trustees of any retirement, pension or annuity fund or system of the Commonwealth. The Authority Act also provides that the Series 2018 Bonds are securities which may be properly and legally deposited and received by a government agency for any purpose for which the deposit of bonds or other obligations of the Commonwealth are authorized by law.

UNDERWRITING

The Underwriters listed on the cover page of this Official Statement (the "**Underwriters**") have agreed, subject to certain conditions, to purchase the Series 2018 Bonds from the Authority for a purchase price of $1,595,880,411.39 (representing the principal amount of the Series 2018 Bonds, plus net original issue premium of $115,258,732.85 and less an underwriting discount of $6,548,321.46). The Underwriters will be obligated to purchase all Series 2018 Bonds if any such Series 2018 Bonds are purchased.

The Series 2018 Bonds may be offered and sold to certain dealers (including dealers depositing the Series 2018 Bonds into investment trusts) and institutional purchasers at prices lower than such public offering prices, and such public offering prices may be changed, from time to time, by the Underwriters.

In addition, certain of the Underwriters may have entered into distribution agreements with other broker-dealers (that have not been designated by the Authority as Underwriters) for the distribution of the Series 2018

Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

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

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and activity trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may be at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve the Series 2018 Bonds.

Jefferies LLC, an underwriter of the Series 2018 Bonds, has entered into an agreement (the "Jefferies Agreement") with E*TRADE Securities LLC ("E*TRADE") for the retail distribution of municipal securities. Pursuant to the Jefferies Agreement, Jefferies LLC will sell the Bonds to E*TRADE and will share a portion of its selling concession compensation with E*TRADE.

Morgan Stanley & Co. LLC, an underwriter of the Series 2018 Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC (the "Morgan Stanley Distribution Agreement"). As part of this distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2018 Bonds.

LEGAL MATTERS

Eckert Seamans Cherin & Mellott, LLC, Philadelphia, Pennsylvania, and Ahmad Zaffarese LLC, Philadelphia, Pennsylvania, as Co-Bond Counsel to the Authority, will render the opinions with respect to the validity of the Series 2018 Bonds in substantially the form set forth in APPENDIX G hereto.

Certain legal matters will be passed upon for the Authority by its counsel, Stradley Ronon Stevens & Young, LLP, Philadelphia, Pennsylvania. Certain legal matters will be passed upon for the Office of the Budget by its Office of Chief Counsel. Certain legal matters will be passed upon for the Underwriters by McNees Wallace & Nurick LLC, Lancaster, Pennsylvania, and Orrick, Herrington & Sutcliffe LLP, New York, New York, as Co-Underwriters' Counsel.

CERTAIN RELATIONSHIPS

Eckert Seamans Cherin & Mellott, LLC presently, and from time to time, represents the Commonwealth and its agencies in unrelated matters. Ahmad Zaffarese LLC presently, and from time to time, represents the Commonwealth and its agencies in unrelated matters. In addition to its present representation of the Authority, Stradley, Ronon, Stevens & Young, LLP presently, and from time to time, also represents the General Assembly of the Commonwealth, the Commonwealth and the Commonwealth's agencies in unrelated matters. McNees Wallace & Nurick LLC presently, and from time to time, also represents the General Assembly of the Commonwealth, the Commonwealth and the Commonwealth's agencies in unrelated matters. Orrick, Herrington & Sutcliffe LLP presently, and from time to time, represents the Commonwealth in unrelated matters.

OTHER PARTIES

Co-Financial Advisors

PFM Financial Advisors LLC and Phoenix Capital Partners (the "**Co-Financial Advisors**"), have been retained to act as financial advisors for the Authority in connection with the issuance of the Series 2018 Bonds.

The following sentence has been provided by the Co-Financial Advisors. Although the Co-Financial Advisors have assisted in the preparation of this Official Statement, 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 this Official Statement.

IHS Global

IHS Global has been retained by the Authority as an independent econometric expert. The Tobacco Consumption Report attached as APPENDIX D hereto is included herein in reliance on IHS Global as experts in such matters. IHS Global's fees for acting as the Authority's independent econometric consultant are not contingent upon the issuance of the Series 2018 Bonds. The Tobacco Consumption Report should be read in its entirety.

COMMONWEALTH FINANCING AUTHORITY

By: *_/s/ Scott Dunkelberger_*
Scott Dunkelberger
Executive Director

February 13, 2018

APPENDIX A

FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH

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FINANCIAL AND OTHER INFORMATION RELATING TO THE COMMONWEALTH

The Commonwealth is organized into three separate branches of government — executive, legislative and judicial — as defined in the Pennsylvania 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 which 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 & 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 upon reaching negotiation impasse. 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 which 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 contract term.

Table 4
Filled Salaried Positions and Employees
Under the Governor's Jurisdiction[(a)]
2012-2016

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
2012	75,540	74,336	60,911	80.6
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

(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, 2016 State Government Workforce Statistics.

COMMONWEALTH GOVERNMENT AND FISCAL ADMINISTRATION

The government of the Commonwealth 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. He 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.

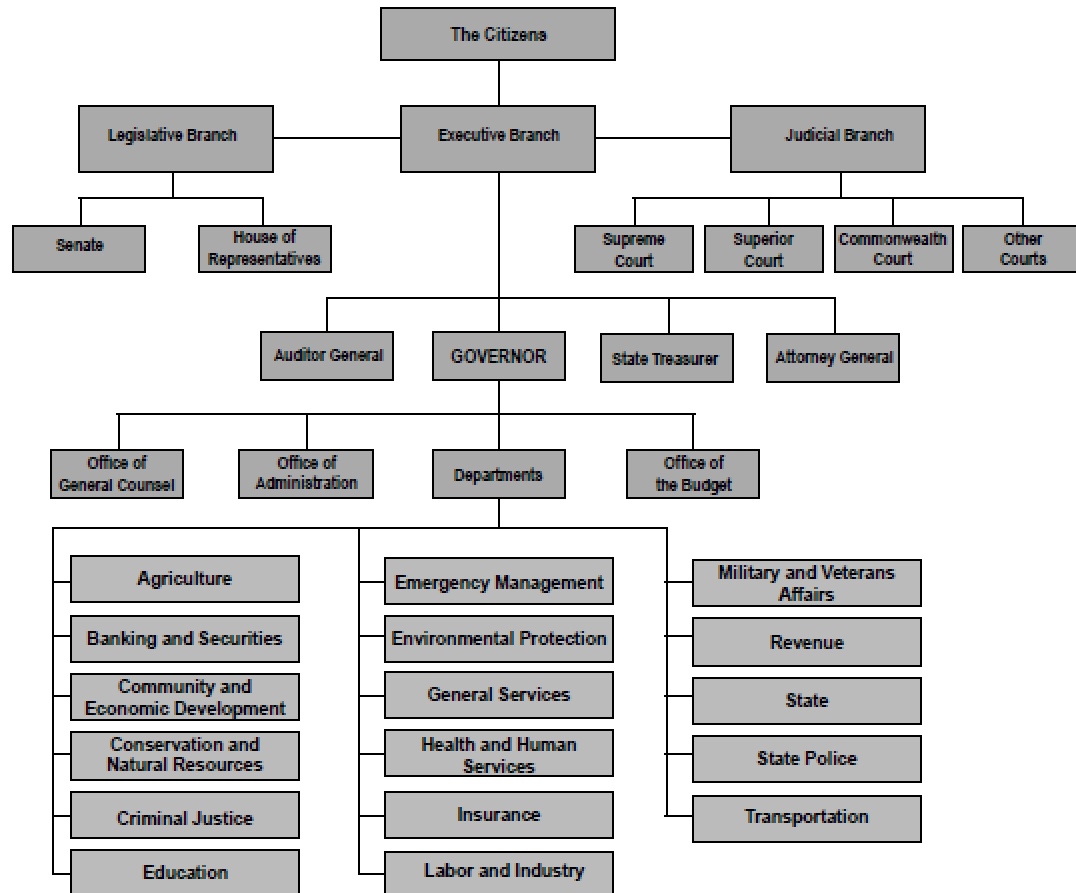
The Auditor General is charged with making audits of completed financial transactions. The Department of the Auditor General is under the Auditor General's direct jurisdiction.

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 2017" refers to the fiscal year ended on June 30, 2017.

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 the economic forecasting company 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, shares 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 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 centralized 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 ensure 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 departments under the Governor's jurisdiction and performance audits of state and federal programs.

COMMONWEALTH FINANCIAL STRUCTURE AND PROCEDURES

The Pennsylvania 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 (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 2017 refers to the fiscal year ended June 30, 2017.)

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 fund 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 fund financial reporting requires a modified accrual basis of accounting for governmental funds, while proprietary and fiduciary funds are reported on the accrual basis of accounting.

Fund financial statements of the Commonwealth prepared under GAAP differ from those traditionally prepared on a budgetary basis for several reasons. Among other differences, the GAAP fund financial statements (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 Budget & Financial Reports section of the Office of the Budget's web site - www.budget.state.pa.us - and such CAFRs are 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 September 30, 2017, the Budget Stabilization Reserve Fund had a balance of $477,000. The fiscal year 2017 enacted budget again suspended the 25% transfers of the Commonwealth's unappropriated balance to the Budget Stabilization Reserve Fund for fiscal year 2017; such suspension has occurred in each of the fiscal years 2008 through 2017.

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. Since July 11, 2017, the legislature and the administration have been working on a revenue package to balance the fiscal year 2018 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, consolidating agencies, and potentially not allocating $600 million in funding for several state-related colleges and universities.

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. DGS will use the proceeds of the $200 million payment from MRE Funding to pay its operational and other expenses in fiscal year 2018.

No assurances can be made that any or all of 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. 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) the Financial Reports 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 of the Commonwealth Financing Authority 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 fund-by-fund; 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.

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.

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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 State Employee's Retirement System (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 below (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

Financial Results for Fiscal Years 2013-2017

The following five-year table presents information on a GAAP basis taken from the most recent 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 the 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 the 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 the 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.

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. (See "Table 8" herein).

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 and was due primarily 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 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 $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" herein).

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.

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 transfer to Rainy Day Fund from 2015-16 and 2016-17.

Fiscal Year 2017 Financial Results

GAAP Basis. At June 30, 2017, the General Fund reported a fund balance 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.

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 Governor's Budget Office web page 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 via Act 42 of 2017. 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 changes 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 November 30, 2017 were approximately 0.2 percent above the fiscal year 2018 enacted budget estimate and General Fund collections totaled $11.4 billion, which is $26.1 million above the enacted budget estimate. Total tax revenue was $47.2 million, or 0.4 percent above the enacted budget estimate while Personal Income tax revenue was $10.4 million, or 0.2 percent above the enacted budget estimate and Sales and Use tax was $23.6 million, or 0.6 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 is 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 receivable which is directly related to an increase in tax revenues. The other is a $31 million increase in federal funds receivable for highway & safety projects.

Total expenditures and other uses increased by $155.8 million during the fiscal year ended June 30, 2017; representing an 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 costs resulted 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 the 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 at June 30, 2013 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 of 2017, signed into law October 30, 2017, 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*

(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, on the next page, 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. Together 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. Beginning with fiscal year 2008, the transfer to the Keystone Recreation, Park and Conservation Fund of a portion of this tax is 15 percent of such tax, after having changed several times over the previous ten years.

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 2012-2016
(in Thousands)

	School Year Ended June 30				
	2012	**2013**	**2014**	**2015**	**2016**
Elementary Schools					
Public………….	930	927	926	924	919
Nonpublic……..	166	161	160	159	157
Secondary Schools					
Public………….	833	828	824	815	813
Nonpublic……..	76	74	73	73	73
Total Schools					
Public…………	1,763	1,755	1,750	1,739	1,732
Nonpublic…….	242	235	233	232	230
Total………………	2,005	1,990	1,983	1,971	1,962

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.

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Table 14
Full-Time Equivalent Enrollment at State-Supported
Institutions of Higher Education
School Years 2012-2016
(In Thousands)

	School Year Ended June 30				
	2012	**2013**	**2014**	**2015**	**2016**
State System of Higher Education..	110	107	104	102	100
State-Related Universities………..	157	161	161	164	166
Community Colleges……………..	104	98	95	91	87
Total……………………………	371	366	360	357	353

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 proposed 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 highway 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 public-private partnership initiative to replace 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 P3 program costs 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 milestones are achieved 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 an aggregate debt limit of 1.75 times the annual average tax revenues of the preceding five fiscal years, 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 Oustanding
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	11,409.0
2015	12,074.9
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).

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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%

(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 Fund[(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 a constitutional limit on debt.

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. As of December 13, 2017, the Commonwealth has $600 million outstanding. It is anticipated that the Commonwealth will 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 September 30, 2017, 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 Table 19 projection.

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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..........................	$550	$560	$570	$580	$590
Furniture and Equipment..........................	10	10	10	10	10
Transportation Assistance..........................	175	175	175	175	175
Redevelopment Assistance..........................	100	200	270	275	280
Flood Control..........................	0	0	0	0	0
Highway and Bridge Projects..........................	0	0	0	0	0
Special Purpose:					
Pennvest — 1988, 1992 & 2008 Referenda......	0	0	0	0	0
Water and Wastewater Referendum[a]	0	0	0	0	0
Growing Greener II Referendum[a]..............	0	0	0	0	0
Total Projected Issuance..........................	$835	$945	$1,025	$1,040	$1,055
Principal Retirement[c]	$705.5	$798.7	$810.0	$843.1	$882.5

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 June 30, 2017, PHFA had $2,813.1 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 6/30/17)
(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 appropriation 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 Correction, 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. 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 were 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, PEDFA (defined below) 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 (defined below) 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 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 August 31, 2017, 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 2017-18 is estimated to be $95.621 million (net of debt service in the estimated amount of $56.1 million supported by transfers from the Pennsylvania Gaming and Economic Development Tourism Fund (the "PA GEDTF Funds")). The Commonwealth's fiscal year 2016-17 budget appropriated $95.614 million in funds from the Commonwealth's General Fund to the CFA and $56.279 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 $758.185 million 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, expects to issue Tobacco Master Settlement Payment Revenue Bonds, (the "Tobacco Bonds") 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 State Employees' Retirement System ("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	235,454	257,080	492,534	129,622	104,632	234,254
2018	244,121	257,080	501,201	131,584	104,632	236,216
2019	251,784	257,080	508,864	133,379	104,632	238,011
2020	258,479	257,080	515,559	134,935	104,632	239,567
2021	264,422	257,080	521,502	136,291	104,632	240,923
2022	269,740	257,080	526,820	137,410	104,632	242,042

(a) PSERS data as of June 30, 2016, 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 secretary of the Pennsylvania School Boards Association, one member appointed by the Governor, six elected members (five from among PSERS members and one from among school board members in Pennsylvania) and two members each from the Senate and 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.state.pa.us 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 new 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 new PSERS members who enroll 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% 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.

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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.state.pa.us 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** **10 years of service but NOT age 62/:** 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** **10 years of service but NOT age 62/:** 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

* Please note - PSERS Alternative Hybrid Early retirement milestone should be age 55/25 years of service. The Age 62 Early Retirement Reduction section - the last "or" for the Hybrid plan and the Alternative Hybrid are for SERS only. 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 and 2016 investment performance was 3.43 percent, 7.96 percent, 14.91 percent, 3.04 percent and 1.29 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.

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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 Position[b]	Fiduciary Net Position[c]
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

(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 on a market value basis under GASB 67 is 51.84%.

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

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

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

Table 25
Projected Employer Contribution Rates

Fiscal Year[a]	PSERS[b]	SERS[c]
2018	32.57%	32.80%
2019	34.18	32.80
2020	35.53	32.70
2021	35.95	32.20
2022	36.40	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 7/1/2013 to 6/30/2016.
[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 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 the Pennsylvania Economic Development Financing Authority ("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 the Commission. The DRJTBC had $729.2 million in bonds outstanding as of June 30, 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 June 30, 2017.

Pennsylvania Economic Development Financing Authority ("PEDFA"). The 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 $6,496.1 million of debt outstanding as of June 30, 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 June 30, 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 $4,995.4 million in bonds outstanding as of June 30, 2017.

Pennsylvania Higher Educational Facilities Authority ("PHEFA"). The PHEFA is a public corporation of the Commonwealth established to finance college facilities. As of June 30, 2017, the PHEFA had $5,920.8 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 $266.8 million in revenue bond debt outstanding on June 30, 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 $71.1 million of revenue bonds outstanding as of June 30, 2017.

Pennsylvania Turnpike Commission ("PTC"). The PTC operates the Pennsylvania Turnpike System ("System"). Its outstanding indebtedness, $11,536.2 million as of June 30, 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 $2,828.2 million of revenue bonds outstanding as of June 30, 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 2016 through 2020 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 cases up to $250,000 per incident. Damages in excess of $250,000 are paid from departmental and agency operating and program appropriations.

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 Commonwealth Financing Authority. 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. The Commonwealth is evaluating the fireworks sellers' lawsuit and the Commonwealth's response to the fireworks sellers' claims, and plans to vigorously defend Act 43 before the court. The Commonwealth has engaged outside counsel to represent the Governor and other Executive Branch officials, and the outside counsel expects to file a responsive pleading to the petition for review on or about February 21, 2018.

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

In this matter, Plaintiffs challenge the Commonwealth's fiscal year 2017-18 budget. Petitioners claim that the fiscal year 2017-18 budget violates numerous provisions of the Pennsylvania 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. This matter was filed on September 19, 2017, and the Executive Office defendants will be responding to the complaint.

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. The Petitioners seek a declaration that: (1) Governor Wolf, Treasurer Torsella and/or Auditor General DePasquale violated the PA 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 PA Constitution by appropriating funds in excess of anticipated revenues.

Pennsylvania Professional Liability Joint Underwriting Association v. Wolf, No. 1:17-CV-2401 (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 enjoining 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 Court has indicated that the case will proceed on an expedited basis and that it will establish a trial date by separate order.

Pennsylvania Department of Education v. Secretary, United States Department of Education (3rd Cir).

On March 10, 2016, the United States Court of Appeals for the Third Circuit affirmed the Findings of the Secretary of the United States Department of Education (USDE), which found that the Pennsylvania Department of Education (PDE) is liable to USDE in the amount of $7,186,222. PDE's alleged liability stems from the USDE's audit of the School District of Philadelphia (SDP) for fiscal year 2005-2006, which identified $138.8 million in adverse findings resulting from inadequate controls over federal expenditures. Of this total, $7.2 million remains at issue.

PDE appealed the USDE's audit findings to the USDE office of administrative law judge (ALJ), asserting (1) that the statute of limitations barred USDE from seeking $5.3 million in contract and personnel costs that were obligated more than five years before the issuance of the Program Determination Letter; and (2) that the doctrine of equitable offset permitted SDP to offset the remaining liability with proven costs related to other activities that would have been eligible costs under the federal programs during the audit year, but which were paid for with non-federal funds.

The ALJ issued a decision sustaining the total remaining liability of $7,186,222 against PDE. PDE appealed this Decision to the U.S. Secretary of Education (Secretary) on March 31, 2014. On December 29, 2014, the Secretary affirmed that PDE remained liable for $7,186,222 and concluded that the underlying violations as described by the OIG's Audit Report and the March 2011 PDL did not warrant an equitable remedy, noting that PDE had "failed to produce any evidence" in support of the disallowed expenditures. This equitable remedy was based on the underlying circumstances and was within the trier of fact's discretion and was consistent with dicta from prior cases. Therefore, the Secretary denied equitable offset without consideration of PDE's evidence of available offsetting costs or substantial corrective actions.

PDE subsequently appealed to the United States Court of Appeals for the Third Circuit, which denied PDE's petition for review and affirmed the Secretary's Decision, thus affirming that PDE remains liable to USDE in

the amount of $7,186,222. PDE filed a Petition for Certiorari with the United States Supreme Court. The Petition was denied on October 3, 2016.

United States of America v. Com. of Pa., 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 is scheduled to begin on December 11, 2017.

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"), as-applied to the facts of *Nextel*, violated the Uniformity Clause of the Pennsylvania Constitution, a decision that could negatively affect the Commonwealth's tax revenues.

The sole issue in the case was whether the NOL Deduction violated the Uniformity Clause. The Uniformity Clause provides: "All taxes shall be uniform, upon the same class of subjects, within the territorial limits of the authority levying the tax . . . ."

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.

The Court held that the NOL Deduction creates different classes of taxpayers based solely upon the amount of their income. The Court reasoned that the NOL Deduction favored "small taxpayers" (those with $3 million or less in taxable income) over "large taxpayers" (those with taxable income in excess of $3 million). The Court stated the only factor that distinguishes between these two classes of taxpayers is the amount of taxable income. Taxpayers with $3 million or less in taxable income could offset up to 100% of their taxable income through the NOL Deduction, because the statute allows a greater of 12.5% of taxable income or $3 million deduction. Taxpayers with more than $3 million in taxable income in the tax year at issue (2007), however, could not offset up to 100% of their taxable income. In fact, the Court noted the higher the taxable income of the taxpayer, the lower the percentage of taxable income the taxpayer could offset through the NOL Deduction.

The NOL Deduction for the tax year at issue allows some taxpayers to reduce their taxable income to $0 and, as a result, pay no tax. The same provision also prevents other taxpayers from reducing their taxable income to $0 and, as a result, causes these affected taxpayers to pay at least some CNI tax.

The Court held that a classification based solely on income amount cannot withstand scrutiny under the Uniformity Clause. Although the Uniformity Clause does not require absolute equality and perfect uniformity in taxation, the legislature cannot treat similarly-situated taxpayers differently, unless the classification is based upon some legitimate distinction between the classes that provides a non-arbitrary and "reasonable and just" basis for the difference in treatment. In this case, the court found that the classification was based upon "[a] pretended classification, that is based solely on a difference in quantity of precisely the same kind of property, is necessarily

unjust, arbitrary, and illegal." Thus, in this case distinguishing between taxpayers based upon their taxable income is impermissible.

The Court rejected the Commonwealth's claim that the General Assembly had sound budgetary reasons for imposing the NOL Deduction limitations and that justification should satisfy the differences created by the NOL Deduction. Accordingly, 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). Instead, the Court stated the violation caused by the NOL Deduction can be remedied in one of two ways:

- require other corporate taxpayers whose NOL Deductions were not limited to pay more tax for the tax year at issue; or,
- require this taxpayer whose NOL Deduction was limited to pay less tax than other taxpayers for the tax year at issue because it could not use all its NOL Deduction.

Given these two choices, the Court stated the only practical solution was to require the taxpayer in this case to pay less. Thus, the Court essentially allowed the taxpayer to apply all of its NOL Deductions in the tax year at issue. Thus, after applying the taxpayer's entire NOL, it has no tax liability and is entitled to a refund of the approximately $4 million it had previously paid.

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.

Muscarella v. Commonwealth of PA (Commonwealth Court).

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 (Pennsylvania Commonwealth Court).

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. Presently, the Petition for Review has been filed along with an Answer and New Matter.

East Coast Vapor, LLC v. Department of Revenue (Pennsylvania Commonwealth Court).

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. Presently, a Petition for Review has been filed along with an Answer and New Matter.

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. Fact discovery is closed and partial dispositive motions are pending. 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. Commw. 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 that 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.

Sonny O v. Dallas (U.S.D.C., M.D. Pa.).

This was a class action alleging that the Department of Human Services failed to adequately provide appropriate therapy to autistic children under the age of 21. The court approved a settlement agreement to resolve

this matter after holding a fairness hearing in June 2016. The settlement agreement required the Department to pay $170,000 in attorneys' fees and to implement agreed upon programmatic changes. The programmatic changes are currently being implemented by the Department.

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 (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 million or more.

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 PA 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 state's total population. The population of Pennsylvania, 12.8 million people in 2016, 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 2012 to 2016 and the age distribution of the population for 2016.

Population Trends
Pennsylvania, Middle Atlantic Region and the United States
2012-2016

	Total Population (in thousands)			Total Population as a % of 2012 base		
As of July 1	PA	Middle Atlantic Region[a]	United States	PA	Middle Atlantic Region[a]	United States
2012....	12,772	41,248	317,633	100%	100%	100%
2013....	12,781	41,354	319,798	100%	100%	101%
2014....	12,791	41,434	322,098	100%	100%	101%
2015....	12,792	41,475	324,370	100%	101%	102%
2016....	12,784	41,474	326,539	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 2016 increased at an average annual rate of 0.69 percent compared with a 1.27 percent rate for the Middle Atlantic region and 1.84 percent rate for the U.S. The following table shows employment trends from 2012 through 2016.

Non-Agricultural Establishment Employment Trends
Pennsylvania, Middle Atlantic Region and the United States
2012-2016

	Total Establishment Employment (thousands)			Total Establishment Employment as a % of 2012 base		
Calendar Year	PA	Middle Atlantic Region [(a)]	U.S.	PA	Middle Atlantic Region [(a)]	U.S.
2012................	5,726	18,412	134,171	100%	100%	100%
2013................	5,740	18,608	136,379	100%	101%	102%
2014................	5,788	18,853	138,937	101%	102%	104%
2015................	5,834	19,108	141,813	102%	104%	106%
2016................	5,887	19,364	144,306	103%	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 2016. Consequently, manufacturing employment constitutes a diminished share of total employment within the Commonwealth. Manufacturing, contributing 9 percent of 2016 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 2016, the services sector accounted for 50 percent of all non-agricultural employment while the trade sector accounted for 15 percent. The following table shows trends in employment by sector for Pennsylvania from 2012 through 2016.

Non-Agricultural Establishment Employment by Sector
Pennsylvania
2012-2016
(in thousands)

	Calendar Year									
	2012		2013		2014		2015		2016	
	Employees	%	Employees	%	Employees	%	Employees	%	Employees	%
Manufacturing:										
Durable	347.6	6%	346.1	6%	346.7	6%	346.0	6%	335.3	6%
Non-Durable	219.7	4%	218.5	4%	220.9	4%	221.6	4%	223.0	4%
Total Manufacturing	567.3	10%	564.6	10%	567.6	10%	567.6	10%	558.3	9%
Non-Manufacturing:										
Trade (a)	853.7	15%	852.5	15%	855.2	15%	856.3	15%	853.6	15%
Finance (b)	309.4	5%	313.1	5%	315.3	5%	316.3	5%	316.7	5%
Services (c)	2,758.0	48%	2,783.2	48%	2,817.9	49%	2,855.2	49%	2,915.2	50%
Government	732.3	13%	720.4	13%	711.1	12%	704.6	12%	704.6	12%
Utilities	244.1	4%	246.8	4%	254.2	4%	265.4	5%	274.5	5%
Construction	224.3	4%	223.9	4%	228.8	4%	235.3	4%	238.9	4%
Mining	37.1	1%	36.0	1%	37.7	1%	33.9	1%	24.9	0%
Total Non-Manufacturing	5,158.9	90%	5,175.8	90%	5,220.2	90%	5,266.9	90%	5,328.3	91%
Total Employees (d) (e)	5,726.1	100%	5,740.4	100%	5,787.8	100%	5,834.5	100%	5,886.6	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

The following table presents the percentages of non-agricultural employment in various sectors in Pennsylvania and the United States in 2016.

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

	2016 Calendar Year	
	Pennsylvania	United States
Manufacturing	9.5%	8.6%
Trade (a)	14.5	15.0
Finance (b)	5.4	5.7
Services	49.5	46.3
Government	12.0	15.4
Utilities (c)	4.7	3.5
Construction	4.1	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 2016. The following table shows trends in manufacturing employment by industry for Pennsylvania from 2012 through 2016.

Manufacturing Establishment Employment by Industry
Pennsylvania
2012-2016
(In Thousands)

	Calendar Year									
	2012	**%**	**2013**	**%**	**2014**	**%**	**2015**	**%**	**2016**	**%**
Durable Goods:										
Primary Metals......................................	39.7	7.0	39.4	7.0	38.9	6.9	37.7	6.6	35.3	6.3
Fabricated Metals..................................	81.7	14.4	80.8	14.3	81.1	14.3	81.6	14.4	79.2	14.2
Machinery (excluding electrical)	48.8	8.6	48.5	8.6	48.1	8.5	47.0	8.3	43.8	7.8
Electrical Equipment..............................	26.0	4.6	26.0	4.6	26.0	4.6	26.0	4.6	26.1	4.7
Transportation Equipment......................	39.1	6.9	38.9	6.9	39.0	6.9	39.4	6.9	36.7	6.6
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............................	97.2	17.1	97.4	17.2	98.5	17.4	99.2	17.5	99.1	17.8
Total Durable Goods..................................	347.6	61.3	346.1	61.3	346.7	61.1	346.0	61.0	335.3	60.1
Non-Durable Goods:										
Pharmaceutical/Medicine.......................	19	3.3	17.9	3.2	17.5	3.1	17.7	3.1	17.8	3.2
Food Products......................................	67.1	11.8	67.8	12.0	69.6	12.3	69.6	12.3	69.9	12.5
Chemical Products.................................	41.2	7.3	40.6	7.2	39.9	7.0	40.1	7.1	40	7.2
Printing and Publishing...........................	25.5	4.5	24.8	4.4	24.7	4.4	24.3	4.3	24.3	4.4
Plastics/Rubber Products.......................	35.2	6.2	35.3	6.3	36.1	6.4	37.1	6.5	38.5	6.9
Other Non-Durable Goods...................	31.7	5.6	32.1	5.7	33.1	5.8	32.8	5.8	32.5	5.8
Total Non-Durable Goods..........................	219.7	38.7	218.5	38.7	220.9	38.9	221.6	39.0	223.0	39.9
Total Manufacturing Employees (a)............	567.3	100.0	564.6	100.0	567.6	100.0	567.6	100.0	558.3	100.0

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

Unemployment

During 2016, Pennsylvania had an annual unemployment rate of 5.4 percent. This represents a significant drop since 2012 when the unemployment rate was 7.8 percent. The following table represents the annual unemployment rate in Pennsylvania, the Middle Atlantic Region, and the United States from 2012 through 2016.

Annual Average Unemployment Rate
Pennsylvania, Middle Atlantic Region and the United States
2012-2016

Calendar Year	PA	Middle Atlantic Region[(a)]	United States
2012...........................	7.8%	8.5%	8.2%
2013...........................	7.4	7.8	7.4
2014...........................	5.8	6.3	6.2
2015...........................	5.3	5.5	5.3
2016...........................	5.4	5.1	4.9

(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
4th Quarter, 2016

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

Source: Pennsylvania Department of Labor & Industry

Personal Income

Personal income in the Commonwealth for 2016 was $656 billion, an increase of 3 percent over the previous year. During the same period, national personal income increased by 4 percent. Based on the 2016 personal income estimates, per capita income was at $51,275 in the commonwealth compared to per capita income in the United States of $49,571. The following tables represent annual personal income data and per capita income from 2012 through 2016.

Personal Income
Pennsylvania, Mideast Region and the United States
2012-2016

	Total Personal Income Dollars in Millions			Total Personal Income As a % of 2012 Base		
Year	PA	Mideast Region [(a)]	U.S. [(b)]	PA	Mideast Region [(a)]	U.S. [(b)]
2012	586,000	2,527,000	13,904,485,000	0%	0%	0%
2013	589,000	2,552,000	14,068,960,000	1%	1%	1%
2014	614,000	2,661,000	14,801,624,000	5%	5%	6%
2015	637,000	2,766,000	15,463,981,000	9%	9%	11%
2016	656,000	2,851,000	16,017,781,000	12%	13%	15%

[(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
2012-2016

	Per Capita Income			As a % of U.S.	
Calendar Year	PA	Mideast Region [a]	U.S.	PA	Mideast Region [a]
2012................................	45,867	51,882	44,267	104%	117%
2013................................	46,113	52,191	44,462	104%	117%
2014................................	47,955	54,241	46,414	103%	117%
2015................................	49,745	56,238	48,112	103%	117%
2016................................	51,275	59,334	49,571	103%	120%

[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.

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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 $19.29 for manufacturing and production workers is below the national average of $20.43 for 2016. The following table presents the average hourly wage rates for 2012 through 2016.

Average Hourly Wages
Production Workers on Manufacturing Payrolls
Pennsylvania and the United States
2012-2016

Calendar Year	PA	U.S.
2012	$ 18.26	$ 19.08
2013	19.16	19.30
2014	19.02	19.56
2015	18.95	19.91
2016	19.29	20.43

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.

APPENDIX B-1

FORM OF TRANSFER AGREEMENT

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TRANSFER AGREEMENT

By and Between the

COMMONWEALTH FINANCING AUTHORITY,
as Transferee

and

THE COMMONWEALTH OF PENNSYLVANIA,
as Transferor

Dated as of February 1, 2018

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This TRANSFER AGREEMENT, dated as of February 1, 2018, between the **COMMONWEALTH FINANCING AUTHORITY**, an instrumentality of the Commonwealth of Pennsylvania and a body corporate and politic (the "Authority"), and the **COMMONWEALTH OF PENNSYLVANIA** (the "Commonwealth"), acting by and through the Office of the Budget of the Commonwealth (the "Office" or OB").

WHEREAS, the Authority has been created under 64 Pa.C.S. Section 1501 et seq. ("Authority Act") and its purposes and powers have been supplemented by amendments to the Act of March 4, 1971 (P.L. 6, No. 2) known as the Tax Reform Code ("Tax Reform Code"), contained in the Act of October 30, 2017, P.L. 672, No. 43, which added Article XXVIII to the Tax Reform Code (the Authority Act, together with the supplementary provisions contained in Article XXVIII of the Tax Reform Code being hereinafter referred to collectively as the "Acts"); and

WHEREAS, the Authority has been authorized and given the duty in Article XXVIII of the Tax Reform Code to issue bonds under Section 2802 and Section 2803 of the Tax Reform Code, the proceeds of which shall be used to fund a deposit to the General Fund of the Commonwealth and to fund other financing costs and reserves, including capitalized interest, as provided in Article XXVIII of the Tax Reform Code; and

WHEREAS, as provided in Article XXVIII of the Tax Reform Code, principal of and interest on bonds issued by the Authority under Article XXVIII of the Tax Reform Code shall be secured by and payable from annual payments received by the Commonwealth under Section IX(c)(1) of the Master Settlement Agreement in the annual amounts certified by the Secretary pursuant to Section 2804(a)(2) of Article XXVIII (net of amounts held in the Debt Service Account by the Trustee) as set forth on Exhibit A annexed to this Transfer Agreement and made a part hereof (the "Pledged Annual Payments"); and

WHEREAS, the Commonwealth wishes to transfer to the Authority all of its right, title and interest in and to the Pledged Annual Payments in consideration of the Authority's issuance of such bonds, and the deposit by the Authority of the net proceeds of such bonds in the General Fund of the Commonwealth as provided in Article XXVIII; and

WHEREAS, the Authority will issue its Tobacco Master Settlement Payment Revenue Bonds, Series 2018 (the "2018 Bonds") in a principal amount not to exceed the amount necessary to yield net proceeds of $1.5 billion to fund such deposit; and

WHEREAS, the deposit of the net proceeds of the Bonds in the General Fund of the Commonwealth shall constitute full consideration for the right, title and interest in and to the Pledged Annual Payments being transferred to the Authority by the Commonwealth; and

WHEREAS, capitalized terms used herein and not otherwise defined shall have the meanings ascribed thereto in the definitions contained in the Acts or in the Indenture, as applicable;

NOW THEREFORE, in consideration of the premises and the mutual covenants herein contained and intending to be legally bound hereby, the parties hereto hereby agree as follows:

ARTICLE I

Definitions

SECTION 1.01. Definitions. Whenever used in this Transfer Agreement, the following words and phrases, unless the context otherwise requires, shall have the following meanings:

"Bond Insurer" means Assured Guaranty Municipal Corp., a New York stock insurance company, or any successor thereto or assignee thereof.

"Bondholders" or **"Holders"** means the registered owners of Outstanding Bonds.

"Bonds" means the 2018 Bonds and any refunding bonds issued under the Article XXVIII of Tax Reform Code and the Indenture.

"Closing Date" means the date of original issuance of the Bonds by the Authority and payment by the underwriters for the Bonds.

"Financing Costs" means (i) costs of issuance, (ii) the capitalization of interest, and (iii) Other Financing Obligations as defined in the Indenture.

"Indenture" means the Trust Indenture, dated as of February 1, 2018, by and between the Authority and the Trustee, as amended, supplemented and in effect from time to time.

"Lien" means a security interest, lien, charge, pledge, or encumbrance of any kind, attaching to the interest of the Commonwealth or the Authority in and to the Pledged Annual Payments.

"Master Settlement Agreement" or **"MSA"** means the Master Settlement Agreement identified in Article XXVIII of the Tax Reform Code.

"Opinion of Counsel" means one or more written opinions of counsel who may be an employee of or counsel to the Commonwealth or the Authority, which counsel shall be acceptable to the Trustee.

"Rating Agency" means each nationally recognized statistical rating organization that has, at the request of the Authority, a rating in effect for any of the Bonds.

"Service Agreement" means the Service Agreement by and between the Authority and the Commonwealth, dated as of February 1, 2018, relating to the Bonds, as amended or supplemented and in effect from time to time.

"Transfer Agreement" means this Transfer Agreement, dated as of February 1, 2018, as the same may be amended or supplemented and in effect from time to time.

"Tax Code" means the Internal Revenue Code of 1986, as amended.

"Transaction Counsel" or **"Bond Counsel"** means a nationally recognized bond counsel as may be selected by the Authority for a specific purpose hereunder.

"Transaction Documents" means this Transfer Agreement, the Indenture and the Service Agreement.

"Trustee" means the Bank of New York Mellon Trust Company, N.A., its successors in interest and any successor trustee under the Indenture.

SECTION 1.02. Other Definitional Provisions. (a) Capitalized terms used herein (including in the preambles hereto) and not otherwise defined herein or in the Acts shall have the meanings ascribed to them in the Indenture.

(b) All terms defined in this Transfer Agreement shall have the defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein.

(c) The words "hereof", "herein", "hereunder" and words of similar import when used in this Sale Agreement shall refer to this Transfer Agreement as a whole and not to any particular provision of this Transfer Agreement; Article and Section references contained in this Transfer Agreement are references to Articles and Sections in or to this Transfer Agreement unless otherwise specified; and the term "including" shall mean "including without limitation."

(d) The definitions contained in this Transfer Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

(e) Any agreement, instrument or statute defined or referred to herein or in any instrument or certificate delivered in connection herewith means such agreement, instrument or statute as from time to time amended, modified or supplemented and includes (in the case of agreements or instruments) references to all attachments thereto and instruments incorporated therein; references to a person are also to its permitted successors and assigns.

ARTICLE II

Conveyance of Pledged Annual Payments

SECTION 2.01. Conveyance of Pledged Annual Payments. (a) The Commonwealth does hereby transfer, set over and convey to the Authority, as of the Closing Date, without recourse (subject to certain continuing obligations herein) in accordance with and subject to the terms of this Transfer Agreement, all of the right, title and interest of the Commonwealth on the Closing Date in and to the Pledged Annual Payments (when transferred to the Tobacco Revenue Bond Debt Service Account). As consideration for such transfer and conveyance of the Pledged Annual Payments by the Commonwealth to the Authority, the Authority does hereby promise to pay and otherwise convey to the Commonwealth, without recourse, on the Closing Date, the proceeds (net

of the Financing Costs) of the Bonds in accordance with and subject to the terms of the Indenture, Authority Act and Article XXVIII of the Tax Reform Code for deposit in the General Fund.

(b) Upon execution and delivery of this Transfer Agreement, the sale, transfer and conveyance of the right to receive the Pledged Annual Payments shall for all purposes be an absolute conveyance of all right, title, and interest of the Commonwealth therein and not a pledge or other security interest for any borrowing, is and shall be valid, binding and enforceable in accordance with the terms of this Transfer Agreement and the Indenture, and shall not be subject to disavowal, disaffirmance, cancellation, or avoidance by reason of insolvency of any party, lack of consideration, or any other fact, occurrence or rule of law.

(c) The right of the Authority to receive the Pledged Annual Payments, on and after the Closing Date, is and shall be valid, binding and enforceable.

(d) From and after the Closing Date all Pledged Annual Payments made to the Commonwealth shall be paid to the Trustee in accordance with the provisions of this Transfer Agreement and the Service Agreement and as provided in Section 2805 of the Tax Reform Code and Section 4.01(a)(i) hereof. The Trustee shall immediately deposit such Pledged Annual Payments as required by the Indenture.

SECTION 2.02. Benefits Provided. The Commonwealth shall cooperate with the Authority to the full extent permitted by law, including the Acts, and by the MSA, to assure receipt by the Authority of all of the Pledged Annual Payments when and as due in accordance with the true intent and meaning of this Transfer Agreement.

SECTION 2.03. Third Party Beneficiaries. The provisions of this Transfer Agreement are solely for the benefit of the Commonwealth, the Authority, the Trustee, as assignee of the Authority, and the Bond Insurer and are not intended for the benefit of and shall not be construed to create rights in any other parties. Nothing in this Transfer Agreement, whether express or implied, shall be construed to give any entity any legal or equitable right, remedy or claim under or in respect of this Transfer Agreement or any representations, covenants, conditions or provisions contained herein.

ARTICLE III

The Commonwealth

SECTION 3.01. Representations of the Commonwealth. The Commonwealth, as transferor, makes the following representations on which the Authority is deemed to have relied in acquiring the Pledged Annual Payments. The representations speak as of the Closing Date, and shall survive the transfer of the Pledged Annual Payments to the Authority and the pledge thereof to the Trustee pursuant to the Indenture.

(a) Power and Authority. The Secretary is duly authorized by the Acts to transfer, set over, assign and sell the Pledged Annual Payments on behalf of the Commonwealth to the Authority. The Commonwealth has full power and authority to execute and deliver this Transfer

Agreement and to carry out its terms; and the Commonwealth has duly authorized such transfer and conveyance to the Authority by all necessary action; and the execution, delivery and performance of this Transfer Agreement has been duly authorized by the Commonwealth by all necessary action.

(b) Binding Obligation. This Transfer Agreement has been duly executed and delivered by the Commonwealth and, assuming the due authorization, execution and delivery of this Transfer Agreement by the Authority, constitutes a legal, valid and binding obligation of the Commonwealth enforceable in accordance with its terms.

(c) No Consents. No consent, approval, authorization, order, registration or qualification of or with any court or governmental agency or body is required for the consummation of the transactions contemplated by this Transfer Agreement, except for those which have been obtained and are in full force and effect.

(d) No Violation. The transfer of the Pledged Annual Payments and the consummation of the transactions contemplated by Article XXVIII of the Tax Reform Code and the Transaction Documents and the fulfillment of the terms hereof and thereof do not, to the Commonwealth's knowledge, in any material way conflict with, result in any material breach by the Commonwealth of any of the material terms and provisions of, nor constitute (with or without notice or lapse of time) a material default by the Commonwealth under any indenture, agreement or other instrument to which the Commonwealth is a party (including the MSA) or by which it shall be bound; nor violate any law or, to the Commonwealth's knowledge, any order, rule or regulation applicable to the Commonwealth of any court or of any federal or state regulatory body, administrative agency or other governmental instrumentality having jurisdiction over the Commonwealth.

(e) No Proceedings. To the Commonwealth's knowledge, except as previously disclosed to the Authority, there are no proceedings or investigations pending against the Commonwealth, before any court, regulatory body, administrative agency or other governmental instrumentality having jurisdiction over the Commonwealth: (i) asserting the invalidity of any of the Transaction Documents or the Bonds, (ii) seeking to prevent the issuance of the Bonds or the consummation of any of the transactions contemplated by any of the Transaction Documents, or (iii) seeking any determination or ruling that would affect the validity or enforceability of any of the Transaction Documents, the Acts, or the Bonds.

(f) Title to Pledged Annual Payments. The Commonwealth is the sole owner of the Pledged Annual Payments. On and after the Closing Date, (i) the Commonwealth shall have no right, title or interest in or to the Pledged Annual Payments, and (ii) the Pledged Annual Payments shall be the property of the Authority, and not of the Commonwealth, and shall be owned, received, held and disbursed by the Authority, without further appropriation (after their transfer to the Tobacco Bond Debt Service Account). Pursuant to this Transfer Agreement and the Service Agreement, the Pledged Annual Payments shall be paid directly to the Trustee as provided in Section 4.01(a)(i) hereof and the Trustee shall deposit the Pledged Annual Payments in the Revenue Account and shall promptly, and in no event later than five Business Days after receipt thereof, transfer the Pledged Annual Payments in accordance with the Indenture.

(g) Absence of Liens on Pledged Annual Payments. The Commonwealth has not sold, transferred, assigned, set over or otherwise conveyed any right, title or interest of any kind whatsoever in all or any portion of the Pledged Annual Payments except to the Authority as provided in Article XXVIII of the Tax Reform Code and herein, nor has the Commonwealth created, or to its knowledge permitted the creation of, any Lien thereon. The Commonwealth warrants that the Pledged Annual Payments are being transferred to the Authority free and clear of Liens.

(h) Assignment to Trustee. The Commonwealth acknowledges that the Authority will assign to the Trustee for the benefit of the Bondholders all of its right, title and interest in and to the Pledged Annual Payments and its rights in and to this Transfer Agreement.

SECTION 3.02. Limitation on Liability. (a) The Commonwealth and any officer or employee or agent of the Commonwealth may rely in good faith on the advice of counsel or on any document of any kind, prima facie properly executed and submitted by any person respecting any matters arising hereunder. The Commonwealth shall not be under any obligation to appear in, prosecute or defend any legal action that shall not be related to its obligations under this Transfer Agreement, and that in its opinion may involve it in any expense or liability.

(b) None of the Commonwealth, the Authority, or any officer, member, employee, or agent of the Commonwealth or the Authority, while acting within the scope of their authority, shall be subject to any personal liability resulting from exercising or carrying out of any of the Commonwealth's or the Authority's duties, purposes or powers or any of their respective rights or obligations under the Transaction Documents.

ARTICLE IV

Covenants of the Commonwealth

SECTION 4.01. Protection of Title; Non-Impairment Covenant. (a) In accordance with the Authority Act and Article XXVIII of the Tax Reform Code, the Commonwealth agrees with the Authority, and the Authority is authorized to include such agreement in the Indenture for the benefit of the owners of the Bonds, that the Commonwealth shall (i) as required by Section 2805(a) of the Tax Reform Code, acting through the State Treasurer, transfer all Pledged Annual Payments when received to the Tobacco Revenue Bond Debt Service Account and shall direct the State Treasurer to transfer such amounts directly to the Trustee, as the assignee of the Authority, (ii) enforce its right to collect all Pledged Annual Payments due under the MSA; provided, that nothing in the Acts, the Transfer Agreement or the Indenture shall be construed to preclude the Commonwealth's regulation of smoking, smoking cessation activities and laws, and taxation and regulation of the sale of cigarettes or the like or to restrict the right of the Commonwealth to amend, modify, repeal or otherwise alter statutes imposing or relating to the taxes, and (iii) not amend, supersede or cancel the MSA in any way that would materially and adversely affect the amount of Pledged Annual Payments or the rights of the Authority thereto. Notwithstanding these agreements by the Commonwealth, nothing in the Transfer Agreement, in the Service Agreement, in the Indenture, in the Bonds or in Article XXVIII of the Tax Reform Code shall be construed or interpreted to limit or impair the authority or discretion of the Attorney General to administer and

enforce provisions of the MSA or to direct, control and settle any litigation or arbitration proceeding arising from or relating to the MSA.

(b) Upon request of the Authority or the Trustee, the Commonwealth will execute and deliver such further instruments and do such further acts as the parties reasonably agree are reasonably necessary or proper to carry out more effectively the purposes of this Transfer Agreement.

SECTION 4.02. Refunding Bonds. If and when refunding bonds are issued pursuant to the Indenture and the Office shall have approved the issuance of such refunding bonds (if such approval is then required by the Acts or the Indenture), the Authority shall provide the Office with a revised debt service schedule that will include the payment dates for the Bonds that continue to be Outstanding and the refunding bonds that are then being issued, and the Secretary shall then issue and certify a revised schedule of Pledged Annual Payments which shall immediately replace Exhibit "A" annexed hereto without the necessity for any further act or deed.

ARTICLE V

Covenants of the Authority

SECTION 5.01. Further Actions. Upon request of the Commonwealth or the Trustee, the Authority will execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purposes of this Transfer Agreement. The Authority shall, as soon as practicable, pay to the Commonwealth any amounts due to the Commonwealth that are received by the Authority in error.

SECTION 5.02. Bonds Not Debt of Commonwealth. NO BOND OF THE AUTHORITY SHALL CONSTITUTE A DEBT OR LIABILITY OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION OR PROVISION OR A CHARGE AGAINST THE GENERAL CREDIT OR TAXING POWERS OF ANY OF THEM. NO OWNER OF ANY BOND SHALL HAVE THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE COMMONWEALTH TO PAY ANY PRINCIPAL INSTALLMENT OF, REDEMPTION PREMIUM, IF ANY, OR INTEREST ON THE BONDS. THE AUTHORITY HAS NO TAXING POWER.

SECTION 5.03. Restriction on Bankruptcy. The Authority has no authority to file a voluntary petition, under or become a debtor or bankrupt under, the Federal Bankruptcy Code or any other federal or State bankruptcy, insolvency, or moratorium law or statute and neither any public officer nor any organization, entity, or other person can authorize the Authority to become a debtor or bankrupt under the Federal Bankruptcy Code or any other federal or State bankruptcy, insolvency or moratorium law or statute.

SECTION 5.04. Limitation on Liability. The Authority and any member, officer or employee or agent of the Authority may rely in good faith on the advice of counsel or on any document of any kind, prima facie properly executed and submitted by any person respecting any matters arising hereunder. The Authority shall not be under any obligation to appear in, prosecute

or defend any legal action that shall not be related to its obligations under this Transfer Agreement, and that in its opinion may involve it in any expense or liability.

ARTICLE VI

Miscellaneous

SECTION 6.01. Amendment. Except as otherwise provided in Section 4.01(b), after issuance of the Bonds, this Transfer Agreement may be amended by the Commonwealth and the Authority with the consent of the Trustee, but without the consent of any of the Bondholders: (a) to cure any ambiguity; (b) to correct or supplement any provisions in this Transfer Agreement; (c) to correct or amplify the description of the Pledged Annual Payments; (d) to add additional covenants for the benefit of the Authority; or (e) for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions in this Transfer Agreement that shall not adversely affect in any material respect the provisions of the Bonds.

Except as otherwise provided in the preceding paragraph, this Transfer Agreement may also be amended from time to time by the Commonwealth and the Authority with the consent of a Majority in Interest of the Bonds for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Transfer Agreement or of modifying in any manner the rights of the Bondholders; but no such amendment shall reduce the portion of the outstanding principal amount of the Bonds, the Holders of which are required to consent to any such amendment, without the consent of the Holders of all the Outstanding Bonds.

It shall not be necessary for the consent of Bondholders pursuant to this Section to approve the particular form of any proposed amendment or consent, but it shall be sufficient if such consent shall approve the substance thereof.

Prior to the execution of any amendment to this Transfer Agreement, the Trustee shall be entitled to receive and conclusively rely upon an Opinion of Counsel stating that the execution of such amendment is authorized or permitted by this Transfer Agreement. Without the prior written consent of the Trustee, no amendment, supplement or other modification of this Transfer Agreement shall be entered into or be effective if such amendment, supplement or modification affects the Trustee's own rights, duties or immunities under this Transfer Agreement or the Indenture.

SECTION 6.02. Notices. All demands, notices and communications upon or to the Commonwealth, the Authority, or the Trustee under this Sale Agreement shall be in writing, personally delivered or mailed by certified mail, return receipt requested, and shall be deemed to have been duly given upon receipt

(a) in the case of the Commonwealth: Commonwealth of Pennsylvania
Office of the Budget
19th Floor
Harristown 2
335 Market Street
Harrisburg PA 17101
Attention: Secretary

(b) in the case of the Authority: Commonwealth Financing Authority
c/o Department of Community
and Economic Development
400 North Street, 4th Floor
Harrisburg, PA 17120
Attention: Executive Director

(c) in the case of the Trustee: The Bank of New York Mellon Trust
Company, N.A.
500 Ross Street, 12th Floor
Pittsburgh, PA 15262

(d) in the case of the Bond Insurer Assured Guaranty Municipal Corp.
1633 Broadway
New York, NY 10019
Attention: Managing Director – Surveillance
Re: Policy No. 218746-N

As to each of the foregoing, at such other address as shall be designated by written notice to the other parties.

SECTION 6.03. Limitations on Rights of Others. The provisions of this Transfer Agreement are solely for the benefit of the Commonwealth, the Authority, and the Trustee, as assignee of the Authority for the benefit of the Bondholders, and nothing in this Transfer Agreement, whether express or implied, shall be construed to give to any other person any legal or equitable right, remedy or claim under or in respect of this Transfer Agreement or any covenants, conditions or provisions contained herein.

SECTION 6.04. Severability. Any provision of this Transfer Agreement that is prohibited or unenforceable shall be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof.

SECTION 6.05. Separate Counterparts. This Transfer Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

SECTION 6.06. Headings. The headings of the various Articles and Sections herein are for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

SECTION 6.08. Governing Law. This Transfer Agreement shall be construed in accordance with the laws of the Commonwealth, without reference to its conflict of law provisions, and the obligations, rights and remedies of the parties hereunder shall be determined in accordance with such laws.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Transfer Agreement to be executed by their duly authorized officers and their corporate seals to be hereunto affixed and duly attested, as of the day and year first above written.

COMMONWEALTH FINANCING AUTHORITY

By: ____________________________________
Executive Director

Attest:

____
Secretary

COMMONWEALTH OF PENNSYLVANIA,
acting through the Office of the Budget

By: ____________________________________
Secretary of the Budget

Attest:

____
Chief Counsel, Office of the Budget

EXHIBIT A

PLEDGED ANNUAL PAYMENTS

Pledged Annual Payments Pursuant to Section 2804(a)(1)
of the Tax Reform Code[1]

Master Settlement Agreement Annual Payment Due April 15	Amount[2]
2019	$115,336,900.00
2020	115,338,650.00
2021	115,337,400.00
2022	115,337,650.00
2023	115,338,400.00
2024	115,338,400.00
2025	115,336,150.00
2026	115,339,900.00
2027	115,337,150.00
2028	115,340,650.00
2029	115,337,150.00
2030	115,338,650.00
2031	115,336,150.00
2032	115,335,650.00
2033	115,337,400.00
2034	115,336,150.00
2035	115,336,400.00
2035	115,337,800.00
2037	115,336,400.00
2038	115,336,000.00

[1] Amounts paid to the Trustee shall be net of amounts then held in the Debt Service Account derived from interest income.
[2] Net of interest due on the Bonds on June 1, 2018, December 1, 2018 and June 1, 2019, which has been funded with proceeds of the Bonds deposited in the Capitalized Interest Subaccount of the Debt Service Fund held under the Indenture.

APPENDIX B-2

FORM OF SERVICE AGREEMENT

SERVICE AGREEMENT

BETWEEN

COMMONWEALTH FINANCING AUTHORITY

AND

THE COMMONWEALTH OF PENNSYLVANIA

Relating to the Tobacco Master Settlement Payment Revenue Bonds issued under Article XXVIII of the Tax Reform Code, added by the Act of October 30, 2017, P.L. 672, No. 43

Dated as of February 1, 2018

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Exhibit "B" – Pledged Article II Revenues Pursuant to Section 2804(c)(1) of the Tax Reform Code

SERVICE AGREEMENT

This **SERVICE AGREEMENT** dated as of February 1, 2018 (the "Service Agreement"), between the **COMMONWEALTH FINANCING AUTHORITY** (the "Authority"), an instrumentality of the Commonwealth of Pennsylvania and a body corporate and politic organized and existing under Pennsylvania law, and the **COMMONWEALTH OF PENNSYLVANIA** (the "Commonwealth"), acting by and through the Office of the Budget ("Office" or "OB").

WITNESSETH

WHEREAS, the Authority was created pursuant to 64 Pa.C.S. Section 1501 *et seq.* (as amended from time to time, the "Authority Act") for the purpose of, among other things, providing financial assistance for certain programs; and

WHEREAS, the purposes, powers and duties of the Authority have been supplemented by amendments to the Act of March 4, 1971 (P.L. 6, No. 2) known as the Tax Reform Code ("Tax Reform Code"), contained in the Act of October 30, 2017, P.L. 672, No. 43, which added Article XXVIII to the Tax Reform Code (the Authority Act, together with the supplementary provisions contained in Article XXVIII of the Tax Reform Code, being hereinafter referred to collectively as the "Acts"); and

WHEREAS, the Authority has been authorized and given the duty in Article XXVIII of the Tax Reform Code to issue its Tobacco Master Settlement Payment Revenue Bonds under Sections 2802 and 2803 of the Tax Reform Code (the "Bonds"), the proceeds of which shall be used to fund a deposit to the General Fund of the Commonwealth and to fund other financing costs and capitalized interest, as provided in Article XXVIII of the Tax Reform Code; and

WHEREAS, as provided in Article XXVIII of the Tax Reform Code, principal of and interest on the Bonds shall be secured by and payable from annual payments received by the Commonwealth under Section IX(c)(i) of the Master Settlement Agreement ("Annual Payments") in the annual amounts certified by the Secretary pursuant to Section 2804(a)(2) of the Tax Reform Code, as set forth on Exhibit "A" annexed to this Service Agreement and made a part hereof, which amounts are pledged to payment of principal of and interest on the Bonds in Section 2804(a)(1) of the Tax Reform Code (the "Pledged Annual Payments"); and

WHEREAS, in order to provide for the issuance, authentication and delivery of the Bonds, to establish and declare the terms and conditions upon which the Bonds and Refunding Bonds (as provided in Section 2803 of the Tax Reform Code) are to be issued and secured, the Authority has authorized the execution and delivery of a Trust Indenture (the "Indenture") dated as of February 1, 2018 between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"); and

WHEREAS, the Authority and the Commonwealth have executed and delivered a Transfer Agreement, dated as of February 1, 2018 ("Transfer Agreement"), pursuant to which the

Commonwealth has conveyed to the Authority all of the Commonwealth's right, title and interest in and to the Pledged Annual Payments; and

WHEREAS, Obligations will be paid by the Office pursuant to this Service Agreement under which the Office agrees to seek appropriations from the General Assembly to pay service charges sufficient to pay all Obligations under the Indenture and the Authority Administrative Expenses (collectively, "Service Charges") and to cause such appropriations to be paid directly to the Authority or its assignee; and

WHEREAS, Bond Payment Obligations under the Indenture are to be paid from the following sources:

(1) from the Pledged Annual Payments consisting of amounts of Annual Payments pledged under Section 2804(a)(1) of the Tax Reform Code and certified by the Secretary under Section 2804(a)(2) of the Tax Reform Code, all as set forth on Exhibit "A" annexed hereto and made a part hereof, which Pledged Annual Payments are not subject to appropriation under Section 1713-A.1 of the Act of April 9, 1929 (P.L. 343, No. 176), as amended and supplemented, known as the Fiscal Code, 72 P.S. Section 1 et seq. (the "Fiscal Code"); and

(2) from Article II Revenues pledged under Section 2804(c)(1) of the Tax Reform Code and certified by the Secretary under Section 2804(c)(2) of the Tax Reform Code, in the maximum annual amounts necessary to supplement the Pledged Annual Payments ("Pledged Article II Revenues"), which Pledged Article II Revenues are set forth on Exhibit "B" annexed hereto and made a part hereof; provided that the transfer of Article II Revenues (hereinafter defined) is subject to the timing of the transfers of Article II Revenues to the CFA Restricted Revenue Account (defined below) for the payment of indebtedness of the Authority issued for programs of the Authority which programs were existing on October 30, 2017 ("Existing Program Bonds"); and

WHEREAS, the Pledged Annual Payments will be deposited upon receipt by the Commonwealth in the Tobacco Settlement Fund of the Commonwealth and immediately transferred to the Tobacco Revenue Bond Debt Service Account established in the State Treasury as a restricted account in the General Fund (the "Tobacco Revenue Bond Debt Service Account") pursuant to Section 2805(a) of the Tax Reform Code, and shall then be transferred to the Trustee to make payments of principal and interest on the Bonds as provided in the Transfer Agreement and the Indenture, and

WHEREAS, the Pledged Article II Revenues are to be paid from a continuing appropriation for debt service to supplement the Pledged Annual Payments from general revenues of the Commonwealth collected under Article II of the Tax Reform Code ("Article II Revenues") and transferred to the Tobacco Revenue Bond Debt Service Account, subject to the timing of transfers of Article II Revenues for the Existing Program Bonds to the CFA Restricted Revenue Account established in Section 1753.1-E of the Fiscal Code as a restricted account in the General Fund (the "CFA Restricted Revenue Account"), such Section 1753.1-E of the Fiscal Code providing a continuing appropriation for debt service on the Existing Program Bonds; and

WHEREAS, pursuant to Section 1511 of the Authority Act, the Authority is an independent authority and an instrumentality of the Commonwealth and a body corporate and politic; and

WHEREAS, pursuant to Section 1513(a)(8) of the Authority Act, the Authority may enter into contracts, which are necessary or appropriate for carrying on the business of the Authority; and

WHEREAS, pursuant to Section 1521(d) of the Authority Act and Article XXVIII of the Tax Reform Code, the Authority and Office, respectively, may not be made responsible for the payment of obligations of the Authority except for funds appropriated by the Commonwealth to the Authority for repayment of Obligations; and

WHEREAS, in order to implement the continuing appropriation of Article II Revenues with respect to outstanding indebtedness of the Authority under Section 1753.1-E of the Fiscal Code, the Authority, the Office, the Commonwealth's Treasury Department ("Treasury"), the Department of Education and the Department of Community and Economic Development have entered into a Letter Agreement, dated as of October 6, 2016, as amended and in effect from time to time (the "Existing Program Bonds Letter Agreement"); and

WHEREAS, the Authority, the Commonwealth's Treasury Department and the Office have entered into an Agreement, dated February 20, 2018 (the "Tobacco Revenue Bond Letter Agreement"), to implement, *inter alia*, the continuing appropriation provisions of Section 2809 of the Tax Reform Code and Section 1753.1- E of the Fiscal Code; and

WHEREAS, under Article XXVIII of the Tax Reform Code, the Authority is permitted to incur costs and expenses (as defined in the Indenture, "Other Financing Obligations") and the Authority and the Office may enter into a Service Agreement pursuant to Section 2806 of the Tax Reform Code providing for, *inter alia*, the payment by the Office of Service Charges sufficient to pay in full Other Financing Obligations, subject to and dependent upon approval by the Authority and the appropriation of funds by the General Assembly to the Office for the payment of any Service Charges;

NOW, THEREFORE, in consideration of the mutual agreements hereinafter contained, the parties hereto, intending to be legally bound hereby agree as follows:

1. Definitions.

Capitalized terms defined in the foregoing recitals and clauses shall have the meanings ascribed thereto. All other capitalized terms used herein and not otherwise defined herein or in the Act, shall have the meanings ascribed thereto in the Indenture.

2. Term.

The Term of this Service Agreement shall commence on February 20, 2018, and shall end on the later of: (i) close of business on June 1, 2039 or (ii) the date on which there are no longer any Obligations Outstanding; provided, however, that the term of this Service Agreement shall be

automatically extended without the necessity for any further act or deed, for such time as may be necessary to accomplish any of the following purposes, plus thirty (30) days:

(a) To enable the Authority to comply with any covenant, condition, term or provision of any agreement to which it is a party, with respect to any Bonds, or

(b) To enable the Office or the Authority to comply with any covenant, condition, term or provision of the Indenture (including, but not limited to, the obligation to make payments on any Obligation), or any other agreement or contract entered into by such party with the consent of the other party.

Either party hereto shall, at the request of the other party hereto (or at the request of the Trustee, which request the Trustee is not obligated hereby to make), enter into such written instrument or instruments as are required in order to memorialize and carry out the effect and intent of this section, notwithstanding that the foregoing provisions are intended to be fully effective without doing so.

3. Authority Undertaking; Payment of Service Charges by the Office.

(a) In accordance with Section 2802(c) of the Tax Reform Code, the Authority shall issue the Bonds for the purpose set forth in Section 2802(b) of the Tax Reform Code.

(b) The Office covenants that it will seek appropriations from the General Assembly in amounts sufficient to pay the Service Charges and to cause such appropriations to be paid directly to the Authority or its assignee. The Office further covenants that it will use its best efforts to have the Governor of the Commonwealth request the General Assembly to include in the Office's annual budget an amount for payment of the Service Charges when due pursuant to subsection 3(c) below, equal to the aggregate amount specified in the Service Charge Estimate (hereinafter defined) for the fiscal year of the Office covered by such budget request.

(c) The Office shall pay or cause to be paid to the Trustee, as assignee of the Authority (for deposit in the Revenue Account as set forth in Section 4 hereof), as Service Charges hereunder, subject to the appropriation by the General Assembly of sufficient funds to pay such Service Charges, an aggregate amount equal to the sum of the following amounts:

(i) no later than May 1 of each year, commencing on May 1, 2019, the amount of the Pledged Annual Payments as set forth on Exhibit "A" annexed hereto net of any amount then held in the Debt Service Account under the Indenture;

(ii) no later than November 15 and May 15 of each year, commencing November 15, 2019, the amount, if any, of the Pledged Article II Revenues necessary to supplement any deficiency in the Pledged Annual Payment received in such year so that the Trustee, as assignee of the Authority, receives an amount equal to the full amount of the Pledged Annual Payment for such year net of any amount then held in the Pledged Article II Revenues/Other Appropriated Funds Subaccount of the Debt Service Account under the Indenture; and

(iii) as required to make timely payment thereof, the amount necessary to be provided by the Authority in order to enable the Trustee to make the full amount of any payment when due (and any cumulative amounts which remain unpaid) on Other Financing Obligations;

(d) So long as Section 2809 of the Tax Reform Code is in effect and provides for payment of Pledged Annual Payments and Pledged Article II Revenues: (i) the Office shall comply with all terms of the Tobacco Revenue Bond Letter Agreement in order to make such payments from the Tobacco Revenue Bond Debt Service Account; and (ii) having sought the appropriations as set forth in Section 3(b) hereof, the continuing appropriations contained in Sections 2805 and 2809 of the Tax Reform Code shall constitute receipt of the appropriations requested for the Service Charges pursuant to Section 3(b) and Subsections (c)(i) and (ii) hereof and shall satisfy the Office's obligations thereunder with respect to such Service Charges. The Authority agrees to be bound by and comply with all the terms of the Tobacco Revenue Bond Letter Agreement and the Existing Program Bonds Letter Agreement.

(e) In order to enable the General Assembly to appropriate sufficient funds to allow the Office to pay the Service Charges when they come due hereunder, the Office agrees that no later than February 1, of each Commonwealth fiscal year commencing with the fiscal year ending June 30, 2018 (or, if the final day of the Commonwealth's fiscal year changes to a day other than June 30, then no later than one hundred fifty (150) days prior to the beginning of each of the Commonwealth's subsequent fiscal years), the Office shall establish during the Term of this Service Agreement the estimated amounts of the Service Charges for the following fiscal year, consisting of the amounts listed on Exhibit "A" and an amount equal to the estimated Other Financing Obligations and Authority Administrative Expenses (the "Service Charge Estimate"); provided however, that if the Office shall fail to establish such Service Charge Estimate on or prior to the last date specified above, then it shall conclusively be deemed that the Service Charge payments to be made in the next following fiscal year shall be the same as the amount of the Service Charge payments to be made in the current fiscal year. The Office shall consult with the Authority on the amount of Service Charge payments due hereunder in the applicable fiscal year, including, without limitation, the amounts due for the Other Financing Obligations and Authority Administrative Expenses.

(f) In the event that the Service Charges paid hereunder for any fiscal year shall exceed the actual Service Charges paid to the Trustee and the Authority during such fiscal year, then the Authority shall cause the Trustee to accumulate and hold such excess in the Surplus Account under the Indenture in accordance with any requirements of the Tax Compliance Agreement, and such excess and interest earned thereon (except any such interest which is required to be transferred to the Rebate Fund) shall be applied as a credit against the next year's Service Charges.

(g) The Secretary covenants that, if any section of the Act of October 30, 2017, P.L. 672, No. 43 affecting the validity and enforceability of the Bonds or the sources of payment and security therefor is held by a court of competent jurisdiction in an order whose effect has not been stayed, to be unconstitutional or otherwise invalid, and the effect of such decision is to make the Bonds invalid, the Secretary will use his best efforts to request legislation to be introduced in the General Assembly, which legislation would reauthorize Article XXVIII of the Tax Reform Code, in a manner which would cause the Bonds to remain valid and entitled to the sources of payment and

security therefor. The covenant contained in this paragraph shall survive the termination of this Service Agreement.

(h) The Office's obligation to pay the Service Charges hereunder shall survive the termination of this Service Agreement and shall otherwise continue in full force and effect until all of the Obligations have been paid or provided for as required by the Indenture and the lien of the Indenture has been discharged. Subject to the appropriation of funds for Service Charges hereunder by the General Assembly as set forth in subsection (c) above, the obligation of the Office to pay the Service Charges shall be absolute and unconditional, and the Service Charges shall be paid without notice or demand (unless notice or demand is expressly provided for in this Service Agreement), counterclaim, set-off, defense, abatement, suspension or deferment, and without deduction, diminution or reduction of any kind or amount or for any reason. Without in any way limiting the foregoing, the obligations and liabilities of the Office hereunder to pay the Service Charges shall in no way be released, reduced, discharged or otherwise affected by reason of:

(i) Any payment made on behalf of the Office by reason of the Office's failure to meet one or more of its obligations hereunder;

(ii) Any bankruptcy, insolvency, reorganization, composition, adjustment, dissolution, liquidation or other like proceeding relating to the Authority, or any action taken with respect to this Service Agreement by any trustee or receiver of the Authority, or by any court, in any such proceeding;

(iii) Any claim (whether by way of set-off, recoupment, counterclaim or otherwise) which the Commonwealth, the Office or anyone else has or might have against the Authority under this Service Agreement, the Indenture or otherwise;

(iv) Any failure on the part of the Authority to perform or comply with any of the terms of this Service Agreement or any other agreement with the Office or the Commonwealth, or of the Indenture or any agreement to which the Authority is a party;

(v) Any failure of the Authority or the Trustee to perform or observe any agreement or covenant, whether express or implied, or any duty, liability or obligation arising out of or connected with this Service Agreement, the Indenture or the Bonds;

(vi) Any failure of consideration, failure of title or commercial frustration of purpose;

(vii) Any change in the tax or other laws of the United States of America or of any state or other governmental authority;

(viii) Any determination that interest on any Tax-Exempt Bond is includable in the gross income of the Holder of such Tax-Exempt Bond for purposes of federal income taxation;

(ix) Any event or circumstance (whether legal, financial, or otherwise) that adversely affects the Pledged Article II Revenues, the Tobacco Settlement Fund, the Tobacco Revenue Bond Debt Service Account, and/or the adequacy of the balances of the funds held in such Fund or Account for purposes of paying Bond Payment Obligations; and

(x) Any other occurrence whatsoever, whether similar or dissimilar to the foregoing and whether or not either or both of the Office and the Authority shall have notice or knowledge of any of the foregoing.

(i) Time shall be of the essence in this Service Agreement with respect to the Office's obligations under this Service Agreement.

4. Assignment of Service Charges to Trustee; Bond Insurer is Third-Party Beneficiary.

(a) Contemporaneously with the execution and delivery hereof, the Authority is executing and delivering the Indenture and is thereby selling, assigning, transferring, setting over and pledging unto the Trustee (for the benefit and security of the Holders of the Bonds and Other Financing Obligations) all of the Authority's right, title and interest in and to the Service Charges payable to the Authority hereunder (other than the Service Charges constituting Authority Administrative Expenses) in order to secure the payment of the principal of and interest on Bonds and Other Financing Obligations to be issued or incurred pursuant to the Indenture, and the Trustee shall be a third party beneficiary of this Service Agreement. The Office hereby consents to the provisions of the immediately preceding sentence, including the assignment of the Service Charges payable (other than the Service Charges constituting Authority Administrative Expenses) by it hereunder to the Trustee, and agrees to make all payments of the Service Charges (other than the Service Charge constituting Authority Administrative Expenses) directly to the Trustee (on behalf of the Authority) unless and until the Office receives written notification from the Authority that such assignment has been terminated. Payment of the Service Charges shall be made to the Trustee at the following address: The Bank of New York Mellon Trust Company, N.A., 500 Ross Street, 12th Floor, Pittsburgh, PA 15262 Attn: CFA Tobacco Administrator, unless and until such address for payment shall be changed by written notice from the Trustee, or by wire transfer to an account designated by the Trustee. The Authority, for itself, its successors and assigns, agrees for the benefit of the Office (and the Indenture shall so require) that the Trustee will deposit the Service Charges (other than the Service Charge constituting Authority Administrative Expenses) and other monies (if any) received by it from the Office hereunder in the Revenue Account, or to be used in the manner specified in the Indenture for the payment of the Bond Payment Obligations on Outstanding Bonds and Other Financing Obligations and for any other purposes permitted by the Indenture and this Service Agreement; provided that this sentence shall not preclude the deposit or retention of such monies in reserve funds (or other similar funds and accounts) established under the Indenture pending the payment of the Bonds and Other Financing Obligations. The Authority shall not withhold, or instruct the Office to withhold, from the Trustee, any amount of funds for Administrative Expenses greater than the amount of Administrative Expenses submitted as part of the Service Charge Estimate pursuant to Section 3 hereof for the fiscal year in question.

(b) The Bond Insurer shall be a third-party beneficiary of this Service Agreement.

5. Termination of Obligation to Pay Service Charges.

If and when there are sufficient funds available to the Trustee, within the funds held by the Trustee for such purposes, to make the full payments of the Bond Payment Obligations and all Other Financing Obligations under the Indenture, the Office shall be relieved of making any further payments of the Service Charges; and from and after such time, the Authority may elect, on not less than ten (10) days prior written notice to the Office and the Trustee, to terminate this Service Agreement.

6. Issuance of Refunding Bonds.

If and when Refunding Bonds are issued pursuant to the Indenture and the Office shall have approved the issuance of such Refunding Bonds (if such approval is then required by the Authority Act, Article XXVIII of the Tax Reform Code or the Indenture), the Authority shall provide the Office with a revised debt service schedule that will include the payment dates for the Bonds that continue to be Outstanding and the Refunding Bonds that are then being issued, and the Secretary shall then issue and certify revised schedules of Pledged Annual Payments and Pledged Article II Revenues which shall immediately replace Exhibits "A" and "B" annexed hereto without the necessity for any further act or deed.

7. Federal Tax Covenants.

(a) The Authority and the Office hereby covenant that the Authority and the Office shall at all times do and perform all acts and things necessary and desirable in order to assure that interest paid on the Bonds shall, for purposes of federal income taxation, be and remain excludable from the gross income of the Holders thereof and that the Authority and the Office will refrain from doing or performing any act or thing that will cause such interest not to be so excludable.

(b) The Authority and the Office hereby covenant that the Authority and the Office will not make any investment or other use of the "proceeds" (as that term is defined in Section 148 of the Code) of the Bonds, which would cause the Bonds to be "arbitrage bonds" (as that term is defined in Section 148 of the Code), and that the Authority and the Office will comply with the requirements of such Code Section and regulations throughout the term of the Bonds.

(c) The Authority and the Office hereby covenant that the Authority and the Office will comply with the requirements of the Tax Compliance Agreement, including, without limitation the calculation by the Office of "Available Amounts" as defined in the Code and as provided in the Tax Compliance Agreement.

(d) The provisions of this Section shall survive the termination of this Service Agreement.

8. Representations of the Authority.

The Authority represents, covenants and agrees that, as of the date of this Service Agreement: (a) it has full right, power and authority to execute this Service Agreement for the Term and on the conditions herein contained; and (b) it has full right, power and authority to perform all of its obligations and duties hereunder.

9. Representations of the Office of the Budget.

The Office represents, covenants and agrees that, as of the date of this Service Agreement: (a) it has full right, power and authority to execute this Service Agreement for the Term and on the conditions herein contained, and to perform all of its obligations and duties hereunder; and (b) the Office's execution and delivery hereof and performance of its obligations hereunder have been duly authorized, are the legal, valid and binding obligations of the Office (enforceable in accordance with their terms) and do not conflict with or constitute a breach under any law, regulation, ruling, order or instrument by which the Office is bound or to which the Office or its properties are subject.

10. Covenants of the Office of the Budget.

The Secretary covenants that, until the Office is no longer obligated to pay the Service Charges under this Service Agreement, and whether or not Section 2809 of the Tax Reform Code provides a continuing appropriation for the applicable Service Charges, the Secretary will use his best efforts to cause to be included in the annual budget submitted by the Governor of the Commonwealth to the General Assembly an amount for payment of the Service Charges when due pursuant to Section 3(c) hereof, equal to the aggregate amount specified in the Service Charge Estimate for the fiscal year covered by such budget request. If such annual budget is not passed by June 30 of such fiscal year, the Secretary covenants to use his best efforts to include Service Charges (or any portion thereof which is not provided for by a continuing appropriation) in a supplemental appropriation unless the Service Charge is payable from a continuing appropriation that remains in full force and effect.

During any fiscal year of the Commonwealth, beginning July 1, 2018, or thereafter if: as of the 30th calendar day preceding the next Service Charge payment date pursuant to Section 3(c) hereof the annual budget of the Commonwealth passed for the then current fiscal year (together with any applicable continuing appropriations) does not contain an appropriation for the full amount of the Service Charges due on such next Service Charge payment date pursuant to Section 3(c) hereof; so long as the continuing appropriation for debt service is in effect for Bond Payment Obligations pursuant to Section 2809 of the Tax Reform Code on any Service Charge payment date pursuant to Section 3(c) hereof, there are inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay the full amount of the Service Charges related to Bond Payment Obligations due on such payment date as a consequence of any event or circumstance (whether legal, financial or otherwise, including, without limitation, insufficient receipts of Pledged Annual Payments and Pledged Article II Revenues); or at any time, Section 2809 of the Tax Reform Code or the source of Article II Revenues is repealed or modified so that it is reasonably expected that there will be inadequate funds available in the Tobacco Revenue Bond Debt Service Account to pay when due in such fiscal year the full amount of any Service Charges related to Bond Payment Obligations; then,

in each case, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

In addition, so long as the continuing appropriation for debt service on Bonds in Section 2809 of the Tax Reform Code is in effect, if any deposit into the Tobacco Revenue Bond Debt Service Account required under the Tobacco Revenue Bond Letter Agreement is not made in full within five (5) days of the date when due: (i) the Authority shall immediately inform the Secretary of the failure to make such a deposit; and (ii) if such failure is not cured within thirty (30) days of such notice to the Secretary, the Secretary covenants to use his best efforts to include the amount required to pay the Service Charges on the next Service Charge payment date (net of any amount then available in the Tobacco Revenue Bond Debt Service Account for such payment) in a supplemental appropriation.

11. The Secretary's Certificate.

The Office agrees that, at any time and from time to time, within thirty (30) days after written request from the Authority or the Trustee to do so, which request the Trustee is not obligated hereby to make, the Office will execute, acknowledge and deliver to the entity making the request a certificate to the effect that this Service Agreement is unmodified and in full force and effect (or if there have been modifications, that it is in full force and effect as modified and stating the modifications), and the dates on which the Service Charges have been paid in advance, if any, and stating whether or not to the knowledge of the signer of such certificate the Authority or the Office is in default in the performance of any covenant, agreement or condition contained in this Service Agreement and, if so, specifying each such default of which the signer has knowledge, it being intended that any such Certificate delivered pursuant to this Section may be relied upon by any prospective transferee of the Authority's interest in this Service Agreement.

12. Defaults and Remedies.

(a) Except as is otherwise provided in subsection (d) below, (i) if the Office fails to pay the full amount of the Service Charges when due hereunder; or (ii) if the Office fails to comply with its obligations set forth in Section 6 hereof; or (iii) if the Office fails to perform any other covenant, condition or agreement hereunder within thirty (30) days after the Authority or the Trustee has given the Office written notice requiring the same to be performed; or (iv) if the Commonwealth shall be adjudicated as bankrupt, or shall make an assignment for the benefit of creditors or shall file a bill in equity or otherwise initiate proceedings for the appointment of a receiver of the Commonwealth's assets, or shall file any proceeding in bankruptcy or for reorganization or an arrangement under any applicable federal or state law; or (v) if any proceeding in bankruptcy or for the appointment of a receiver shall be instituted by any creditor of the Commonwealth under any applicable federal or state law, and such proceeding has not been terminated within sixty (60) days after its institution (the occurrence of any such event constituting an event of default and a breach under this Service Agreement), then and in addition to any other rights or remedies the Authority may have under this Service Agreement and at law and in equity, the Authority shall have the following rights:

(i) To recover from the Office all monies that are not paid when due, together with interest on the unpaid balance, at the rate of interest payable on the Bonds, between the date when each such sum is due and the date on which the Office actually pays such sum and interest thereon; and

(ii) To obtain specific performance of the Office's obligations under this Service Agreement and the Tobacco Revenue Bond Letter Agreement.

(b) No right or remedy herein conferred upon or reserved to the Authority is intended to be exclusive of any other right or remedy herein or by law or in equity provided, but each shall be cumulative and in addition to every other right or remedy given herein or now or hereafter existing at law, in equity or by statute.

(c) No waiver by the Authority of any breach by the Office of any of the Office's obligations, agreements or covenants herein shall be a waiver of any subsequent breach or of any obligation, agreement or covenant, nor shall any forbearance by the Authority to seek a remedy for any breach by the Office be a waiver by the Authority of any rights and remedies with respect to such or any subsequent breach.

(d) Notwithstanding any provision of subsection (a) above to the contrary, it shall not be a default hereunder if and to the extent that a failure to pay Service Charges occurs because the General Assembly has not appropriated sufficient money in the Office's annual budget or pursuant to a continuing appropriation for this purpose to enable the Office to pay such Service Charges, even though the annual budget request of the Office submitted to the General Assembly for this purpose did include sufficient funds to pay such Service Charges in full.

13. Governing Law.

This Service Agreement shall be construed according to and governed by the laws of the Commonwealth of Pennsylvania without regard to conflict of laws principles thereof.

14. Notices.

All notices required or authorized to be given by the Authority or the Office pursuant to this Service Agreement shall be in writing and shall be sent by registered or certified mail, postage prepaid, or by a nationally recognized commercial overnight delivery service guaranteeing next-day delivery, to the following addresses:

(a) To the Authority, to:

Commonwealth Financing Authority
Department of Community and Economic Development Commonwealth
Keystone Building
400 North Street, 4th Floor Harrisburg, PA 17120
Attention: Scott Dunkelberger, Executive Director

with a copy to its Chief Counsel, at the same address

(b) To the Office of the Budget to:

19th Floor, Harristown 2
333 Market Street
Harrisburg, PA 17101
Attention: Secretary

with a copy to its Chief Counsel at the same address

(c) To the Trustee, to:

the address as specified by the Indenture

(d) To the Bond Insurer, to:

the address as specified by the Indenture

or to such other addresses as may, from time-to-time, be furnished to the parties, effective upon the receipt of notice thereof given as set forth above.

15. Cooperation in Filing Reports.

The Office agrees that it will cooperate with the Authority in the preparation and filing of any information, report or other document with respect to the Bonds or any series of Bonds which may at any time be required, in the judgment of the Authority to be filed with the Internal Revenue Service pursuant to federal income tax laws.

16. Amendments and Supplements.

Except as is otherwise provided in Section 7 hereof, this Service Agreement may be amended or supplemented only by an instrument in writing signed by both of the parties hereto and, if required by the Indenture (including but not limited to Section __ thereof) approved or consented to by any or all of the Trustee and the Bondholders. The parties hereto hereby agree to provide the Rating Agencies with a copy of any such amendment or supplement.

17. Provisions Separate.

In the event that any provision hereof (other than Sections 3 and 17 hereof) shall be held to be invalid, such invalidity shall not affect any other provision hereof, and the remaining provisions hereof shall be construed and enforced as if such invalid provision had not been contained herein.

18. Execution in Counterparts.

This Service Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, and all of which shall together constitute one and the same instrument. This Service Agreement shall become binding when any one or more counterparts hereof individually or taken together, shall bear the signatures of the Authority and the Office.

19. Exhibits.

All Exhibits to this Service Agreement are incorporated in this Service Agreement and constitute a part hereof.

20. Descriptive Headings.

Descriptive headings of the several Sections of this Service Agreement and the Table of Contents are intended for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

21. Binding Effect. Permitted Assigns.

This Service Agreement shall be binding upon and shall inure to the sole benefit of the parties hereto, their respective successors and permitted assigns, and the Trustee, as assignee of the Authority and for the benefit of the Holders of the Bonds. No party may assign any of its rights or delegate any of its obligations hereunder if such action would be in violation of the Indenture, without the consent of the other party and the Trustee, and any such purported assignment or delegation shall be void.

22. Miscellaneous.

Each and every covenant and agreement contained herein is, and shall be construed to be, a separate and independent covenant and agreement. All rights and remedies given or granted to either party in this Service Agreement are cumulative, nonexclusive and in addition to any and all rights and remedies that such party may have or be given at law in equity or otherwise. No failure by either party to insist upon strict performance of this Service Agreement or to exercise any remedy upon the occurrence of an event of default (as set forth in Section 12 of this Service Agreement) shall constitute a waiver of such default, or a waiver or modification of any provision of this Service Agreement, and, likewise, no prior course of dealing between the parties hereto shall constitute a waiver of such default or waiver or modification of any provision of this Service Agreement. Upon the occurrence of a default, the Authority or the Office, as the case may be, may exercise any one or more of the remedies available to it separately or concurrently and as often as required to enforce the other party's obligations. In addition to the other remedies provided in this Service Agreement, the Authority and the Office shall each be entitled to the restraint, by injunction, of the violation (or the attempted or threatened violation) by the other party of any of the covenants, conditions or provisions of this Service Agreement, and to a decree compelling specific performance of any such covenants, conditions or provisions. This Service Agreement constitutes the entire agreement of the parties with

respect to the Service Charges and may not be changed, modified or terminated except in accordance herewith.

IN WITNESS WHEREOF, the parties have caused this Service Agreement to be executed by their duly authorized officers and their corporate seals to be hereunto affixed and duly attested, as of the day and year first above written.

COMMONWEALTH FINANCING AUTHORITY

By:______________________________________
Executive Director

Attest

____
Secretary

COMMONWEALTH OF PENNSYLVANIA,
acting through the Office of the Budget

By:______________________________________
Secretary of the Budget

Attest:

____
Chief Counsel, Office of the Budget

EXHIBIT "A"

Pledged Annual Payments Pursuant to Section 2804(a)(1)
of the Tax Reform Code[1]

Master Settlement Agreement Annual Payment Due April 15	Amount[2]
2019	$115,336,900.00
2020	115,338,650.00
2021	115,337,400.00
2022	115,337,650.00
2023	115,338,400.00
2024	115,338,400.00
2025	115,336,150.00
2026	115,339,900.00
2027	115,337,150.00
2028	115,340,650.00
2029	115,337,150.00
2030	115,338,650.00
2031	115,336,150.00
2032	115,335,650.00
2033	115,337,400.00
2034	115,336,150.00
2035	115,336,400.00
2035	115,337,800.00
2037	115,336,400.00
2038	115,336,000.00

[1] Amounts paid to the Trustee shall be net of amounts then held in the Debt Service Account under the Indenture derived from interest income.
[2] Net of interest due on the Bonds on June 1, 2018, December 1, 2018 and June 1, 2019, which has been funded with proceeds of the Bonds deposited in the Capitalized Interest Subaccount of the Debt Service Fund held under the Indenture.

EXHIBIT "B"

Pledged Article II Revenues Pursuant to Section 2804(c)(1) of the Tax Reform Code[1]

Fiscal Year Ending June 30	Amount[2]
2020	$115,336,900.00
2021	115,338,650.00
2022	115,337,400.00
2023	115,337,650.00
2024	115,338,400.00
2025	115,338,400.00
2026	115,336,150.00
2027	115,339,900.00
2028	115,337,150.00
2029	115,340,650.00
2030	115,337,150.00
2031	115,338,650.00
2032	115,336,150.00
2033	115,335,650.00
2034	115,337,400.00
2035	115,336,150.00
2036	115,336,400.00
2037	115,337,800.00
2038	115,336,400.00
2039	115,336,000.00

[1] Maximum Amounts. The amount payable each year shall be net of amounts then held in the Debt Service Account established under the Indenture.
[2] Net of interest due on the Bonds on June 1, 2018, December 1, 2018 and June 1, 2019, which has been funded with proceeds of the Bonds deposited in the Capitalized Interest Subaccount of the Debt Service Fund held under the Indenture.

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APPENDIX C

MASTER SETTLEMENT AGREEMENT

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MASTER SETTLEMENT AGREEMENT

July 2014 Printing

MASTER SETTLEMENT AGREEMENT

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MASTER SETTLEMENT AGREEMENT

This Master Settlement Agreement is made by the undersigned Settling State officials (on behalf of their respective Settling States) and the undersigned Participating Manufacturers to settle and resolve with finality all Released Claims against the Participating Manufacturers and related entities as set forth herein. This Agreement constitutes the documentation effecting this settlement with respect to each Settling State, and is intended to and shall be binding upon each Settling State and each Participating Manufacturer in accordance with the terms hereof.

I. RECITALS

WHEREAS, more than 40 States have commenced litigation asserting various claims for monetary, equitable and injunctive relief against certain tobacco product manufacturers and others as defendants, and the States that have not filed suit can potentially assert similar claims;

WHEREAS, the Settling States that have commenced litigation have sought to obtain equitable relief and damages under state laws, including consumer protection and/or antitrust laws, in order to further the Settling States' policies regarding public health, including policies adopted to achieve a significant reduction in smoking by Youth;

WHEREAS, defendants have denied each and every one of the Settling States' allegations of unlawful conduct or wrongdoing and have asserted a number of defenses to the Settling States' claims, which defenses have been contested by the Settling States;

WHEREAS, the Settling States and the Participating Manufacturers are committed to reducing underage tobacco use by discouraging such use and by preventing Youth access to Tobacco Products;

WHEREAS, the Participating Manufacturers recognize the concern of the tobacco grower community that it may be adversely affected by the potential reduction in tobacco consumption resulting from this settlement, reaffirm their commitment to work cooperatively to address concerns about the potential adverse economic impact on such community, and will, within 30 days after the MSA Execution Date, meet with the political leadership of States with grower communities to address these economic concerns;

WHEREAS, the undersigned Settling State officials believe that entry into this Agreement and uniform consent decrees with the tobacco industry is necessary in order to further the Settling States' policies designed to reduce Youth smoking, to promote the public health and to secure monetary payments to the Settling States; and

WHEREAS, the Settling States and the Participating Manufacturers wish to avoid the further expense, delay, inconvenience, burden and uncertainty of continued litigation (including appeals from any verdicts), and, therefore, have agreed to settle their respective lawsuits and potential claims pursuant to terms which will achieve for the Settling States and their citizens significant funding for the advancement of public health, the implementation of important tobacco-related public health measures, including the enforcement of the mandates and restrictions related to such measures, as well as funding for a national Foundation dedicated to significantly reducing the use of Tobacco Products by Youth;

NOW, THEREFORE, BE IT KNOWN THAT, in consideration of the implementation of tobacco-related health measures and the payments to be made by the Participating Manufacturers, the release and discharge of all claims by the Settling States, and such other consideration as described herein, the sufficiency of which is hereby acknowledged, the Settling States and the Participating Manufacturers, acting by and through their authorized agents, memorialize and agree as follows:

II. DEFINITIONS

(a) "Account" has the meaning given in the Escrow Agreement.

(b) "Adult" means any person or persons who are not Underage.

(c) "Adult-Only Facility" means a facility or restricted area (whether open-air or enclosed) where the operator ensures or has a reasonable basis to believe (such as by checking identification as required under state law, or by checking the identification of any person appearing to be under the age of 27) that no Underage person is present. A facility or restricted area need not be permanently restricted to Adults in order to constitute an Adult-Only Facility, provided that the operator ensures or has a reasonable basis to believe that no Underage person is present during the event or time period in question.

(d) "Affiliate" means a person who directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control with, another person. Solely for purposes of this definition, the terms "owns," "is owned" and "ownership" mean ownership of an equity interest, or the equivalent thereof, of 10 percent or more, and the term "person" means an individual, partnership, committee, association, corporation or any other organization or group of persons.

(e) "Agreement" means this Master Settlement Agreement, together with the exhibits hereto, as it may be amended pursuant to subsection XVIII(j).

(f) "Allocable Share" means the percentage set forth for the State in question as listed in Exhibit A hereto, without regard to any subsequent alteration or modification of such State's percentage share agreed to by or among any States; or, solely for the purpose of calculating payments under subsection IX(c)(2) (and corresponding payments under subsection IX(i)), the percentage disclosed for the State in question pursuant to subsection IX(c)(2)(A) prior to June 30, 1999, without regard to any subsequent alteration or modification of such State's percentage share agreed to by or among any States.

(g) "Allocated Payment" means a particular Settling State's Allocable Share of the sum of all of the payments to be made by the Original Participating Manufacturers in the year in question pursuant to subsections IX(c)(1) and IX(c)(2), as such payments have been adjusted, reduced and allocated pursuant to clause "First" through the first sentence of clause "Fifth" of subsection IX(j), but before application of the other offsets and adjustments described in clauses "Sixth" through "Thirteenth" of subsection IX(j).

(h) "Bankruptcy" means, with respect to any entity, the commencement of a case or other proceeding (whether voluntary or involuntary) seeking any of (1) liquidation, reorganization, rehabilitation, receivership, conservatorship, or other relief with respect to such entity or its debts under any bankruptcy, insolvency or similar law now or hereafter in effect; (2) the appointment of a trustee, receiver, liquidator, custodian or similar official of such entity or any substantial part of its business or property; (3) the consent of such entity to any of the relief described in (1) above or to the appointment of any official described in (2) above in any such case or other proceeding involuntarily commenced

against such entity; or (4) the entry of an order for relief as to such entity under the federal bankruptcy laws as now or hereafter in effect. Provided, however, that an involuntary case or proceeding otherwise within the foregoing definition shall not be a "Bankruptcy" if it is or was dismissed within 60 days of its commencement.

(i) "Brand Name" means a brand name (alone or in conjunction with any other word), trademark, logo, symbol, motto, selling message, recognizable pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any domestic brand of Tobacco Products. Provided, however, that the term "Brand Name" shall not include the corporate name of any Tobacco Product Manufacturer that does not after the MSA Execution Date sell a brand of Tobacco Products in the States that includes such corporate name.

(j) "Brand Name Sponsorship" means an athletic, musical, artistic, or other social or cultural event as to which payment is made (or other consideration is provided) in exchange for use of a Brand Name or Names (1) as part of the name of the event or (2) to identify, advertise, or promote such event or an entrant, participant or team in such event in any other way. Sponsorship of a single national or multi-state series or tour (for example, NASCAR (including any number of NASCAR races)), or of one or more events within a single national or multi-state series or tour, or of an entrant, participant, or team taking part in events sanctioned by a single approving organization (e.g., NASCAR or CART), constitutes one Brand Name Sponsorship. Sponsorship of an entrant, participant, or team by a Participating Manufacturer using a Brand Name or Names in an event that is part of a series or tour that is sponsored by such Participating Manufacturer or that is part of a series or tour in which any one or more events are sponsored by such Participating

Manufacturer does not constitute a separate Brand Name Sponsorship. Sponsorship of an entrant, participant, or team by a Participating Manufacturer using a Brand Name or Names in any event (or series of events) not sponsored by such Participating Manufacturer constitutes a Brand Name Sponsorship. The term "Brand Name Sponsorship" shall not include an event in an Adult-Only Facility.

(k) "Business Day" means a day which is not a Saturday or Sunday or legal holiday on which banks are authorized or required to close in New York, New York.

(l) "Cartoon" means any drawing or other depiction of an object, person, animal, creature or any similar caricature that satisfies any of the following criteria:

(1) the use of comically exaggerated features;

(2) the attribution of human characteristics to animals, plants or other objects, or the similar use of anthropomorphic technique; or

(3) the attribution of unnatural or extrahuman abilities, such as imperviousness to pain or injury, X-ray vision, tunneling at very high speeds or transformation.

The term "Cartoon" includes "Joe Camel," but does not include any drawing or other depiction that on July 1, 1998, was in use in any State in any Participating Manufacturer's corporate logo or in any Participating Manufacturer's Tobacco Product packaging.

(m) "Cigarette" means any product that contains nicotine, is intended to be burned or heated under ordinary conditions of use, and consists of or contains (1) any roll of tobacco wrapped in paper or in any substance not containing tobacco; or (2) tobacco, in any form, that is functional in the product, which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or

purchased by, consumers as a cigarette; or (3) any roll of tobacco wrapped in any substance containing tobacco which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette described in clause (1) of this definition. The term "Cigarette" includes "roll-your-own" (i.e., any tobacco which, because of its appearance, type, packaging, or labeling is suitable for use and likely to be offered to, or purchased by, consumers as tobacco for making cigarettes). Except as provided in subsections II(z) and II(mm), 0.0325 ounces of "roll-your-own" tobacco shall constitute one individual "Cigarette."

(n) "Claims" means any and all manner of civil (i.e., non-criminal): claims, demands, actions, suits, causes of action, damages (whenever incurred), liabilities of any nature including civil penalties and punitive damages, as well as costs, expenses and attorneys' fees (except as to the Original Participating Manufacturers' obligations under section XVII), known or unknown, suspected or unsuspected, accrued or unaccrued, whether legal, equitable, or statutory.

(o) "Consent Decree" means a state-specific consent decree as described in subsection XIII(b)(1)(B) of this Agreement.

(p) "Court" means the respective court in each Settling State to which this Agreement and the Consent Decree are presented for approval and/or entry as to that Settling State.

(q) "Escrow" has the meaning given in the Escrow Agreement.

(r) "Escrow Agent" means the escrow agent under the Escrow Agreement.

(s) "Escrow Agreement" means an escrow agreement substantially in the form of Exhibit B.

(t) "Federal Tobacco Legislation Offset" means the offset described in section X.

(u) "Final Approval" means the earlier of:

(1) the date by which State-Specific Finality in a sufficient number of Settling States has occurred; or

(2) June 30, 2000.

For the purposes of this subsection (u), "State-Specific Finality in a sufficient number of Settling States" means that State-Specific Finality has occurred in both:

(A) a number of Settling States equal to at least 80% of the total number of Settling States; and

(B) Settling States having aggregate Allocable Shares equal to at least 80% of the total aggregate Allocable Shares assigned to all Settling States.

Notwithstanding the foregoing, the Original Participating Manufacturers may, by unanimous written agreement, waive any requirement for Final Approval set forth in subsections (A) or (B) hereof.

(v) "Foundation" means the foundation described in section VI.

(w) "Independent Auditor" means the firm described in subsection XI(b).

(x) "Inflation Adjustment" means an adjustment in accordance with the formulas for inflation adjustments set forth in Exhibit C.

(y) "Litigating Releasing Parties Offset" means the offset described in subsection XII(b).

(z) "Market Share" means a Tobacco Product Manufacturer's respective share (expressed as a percentage) of the total number of individual Cigarettes sold in the fifty United States, the District of Columbia and Puerto Rico during the applicable calendar year, as measured by excise taxes collected by the federal government and, in the case of sales in Puerto Rico, arbitrios de cigarillos collected by the Puerto Rico taxing authority. For purposes of the definition and determination of "Market Share" with respect to calculations under subsection IX(i), 0.09 ounces of "roll your own" tobacco shall constitute one individual Cigarette; for purposes of the definition and determination of "Market Share" with respect to all other calculations, 0.0325 ounces of "roll your own" tobacco shall constitute one individual Cigarette.

(aa) "MSA Execution Date" means November 23, 1998.

(bb) "NAAG" means the National Association of Attorneys General, or its successor organization that is directed by the Attorneys General to perform certain functions under this Agreement.

(cc) "Non-Participating Manufacturer" means any Tobacco Product Manufacturer that is not a Participating Manufacturer.

(dd) "Non-Settling States Reduction" means a reduction determined by multiplying the amount to which such reduction applies by the aggregate Allocable Shares of those States that are not Settling States on the date 15 days before such payment is due.

(ee) "Notice Parties" means each Participating Manufacturer, each Settling State, the Escrow Agent, the Independent Auditor and NAAG.

(ff) "NPM Adjustment" means the adjustment specified in subsection IX(d).

(gg) "NPM Adjustment Percentage" means the percentage determined pursuant to subsection IX(d).

(hh) "Original Participating Manufacturers" means the following: Brown & Williamson Tobacco Corporation, Lorillard Tobacco Company, Philip Morris Incorporated and R.J. Reynolds Tobacco Company, and the respective successors of each of the foregoing. Except as expressly provided in this Agreement, once an entity becomes an Original Participating Manufacturer, such entity shall permanently retain the status of Original Participating Manufacturer.

(ii) "Outdoor Advertising" means (1) billboards, (2) signs and placards in arenas, stadiums, shopping malls and Video Game Arcades (whether any of the foregoing are open air or enclosed) (but not including any such sign or placard located in an Adult-Only Facility), and (3) any other advertisements placed (A) outdoors, or (B) on the inside surface of a window facing outward. Provided, however, that the term "Outdoor Advertising" does not mean (1) an advertisement on the outside of a Tobacco Product manufacturing facility; (2) an individual advertisement that does not occupy an area larger than 14 square feet (and that neither is placed in such proximity to any other such advertisement so as to create a single "mosaic"-type advertisement larger than 14 square feet, nor functions solely as a segment of a larger advertising unit or series), and that is placed (A) on the outside of any retail establishment that sells Tobacco Products (other than solely through a vending machine), (B) outside (but on the property of) any such establishment, or (C) on the inside surface of a window facing outward in any such establishment; (3) an advertisement inside a retail establishment that sells Tobacco

Products (other than solely through a vending machine) that is not placed on the inside surface of a window facing outward; or (4) an outdoor advertisement at the site of an event to be held at an Adult-Only Facility that is placed at such site during the period the facility or enclosed area constitutes an Adult-Only Facility, but in no event more than 14 days before the event, and that does not advertise any Tobacco Product (other than by using a Brand Name to identify the event).

(jj) "Participating Manufacturer" means a Tobacco Product Manufacturer that is or becomes a signatory to this Agreement, provided that (1) in the case of a Tobacco Product Manufacturer that is not an Original Participating Manufacturer, such Tobacco Product Manufacturer is bound by this Agreement and the Consent Decree (or, in any Settling State that does not permit amendment of the Consent Decree, a consent decree containing terms identical to those set forth in the Consent Decree) in all Settling States in which this Agreement and the Consent Decree binds Original Participating Manufacturers (provided, however, that such Tobacco Product Manufacturer need only become bound by the Consent Decree in those Settling States in which the Settling State has filed a Released Claim against it), and (2) in the case of a Tobacco Product Manufacturer that signs this Agreement after the MSA Execution Date, such Tobacco Product Manufacturer, within a reasonable period of time after signing this Agreement, makes any payments (including interest thereon at the Prime Rate) that it would have been obligated to make in the intervening period had it been a signatory as of the MSA Execution Date. "Participating Manufacturer" shall also include the successor of a Participating Manufacturer. Except as expressly provided in this Agreement, once an entity becomes a Participating Manufacturer such entity shall permanently retain the

status of Participating Manufacturer. Each Participating Manufacturer shall regularly report its shipments of Cigarettes in or to the fifty United States, the District of Columbia and Puerto Rico to Management Science Associates, Inc. (or a successor entity as set forth in subsection (mm)). Solely for purposes of calculations pursuant to subsection IX(d), a Tobacco Product Manufacturer that is not a signatory to this Agreement shall be deemed to be a "Participating Manufacturer" if the Original Participating Manufacturers unanimously consent in writing.

(kk) "Previously Settled States Reduction" means a reduction determined by multiplying the amount to which such reduction applies by 12.4500000%, in the case of payments due in or prior to 2007; 12.2373756%, in the case of payments due after 2007 but before 2018; and 11.0666667%, in the case of payments due in or after 2018.

(ll) "Prime Rate" shall mean the prime rate as published from time to time by the Wall Street Journal or, in the event the Wall Street Journal is no longer published or no longer publishes such rate, an equivalent successor reference rate determined by the Independent Auditor.

(mm) "Relative Market Share" means an Original Participating Manufacturer's respective share (expressed as a percentage) of the total number of individual Cigarettes shipped in or to the fifty United States, the District of Columbia and Puerto Rico by all the Original Participating Manufacturers during the calendar year immediately preceding the year in which the payment at issue is due (regardless of when such payment is made), as measured by the Original Participating Manufacturers' reports of shipments of Cigarettes to Management Science Associates, Inc. (or a successor entity acceptable to both the Original Participating Manufacturers and a majority of those Attorneys General

who are both the Attorney General of a Settling State and a member of the NAAG executive committee at the time in question). A Cigarette shipped by more than one Participating Manufacturer shall be deemed to have been shipped solely by the first Participating Manufacturer to do so. For purposes of the definition and determination of "Relative Market Share," 0.09 ounces of "roll your own" tobacco shall constitute one individual Cigarette.

(nn) "Released Claims" means:

(1) for past conduct, acts or omissions (including any damages incurred in the future arising from such past conduct, acts or omissions), those Claims directly or indirectly based on, arising out of or in any way related, in whole or in part, to (A) the use, sale, distribution, manufacture, development, advertising, marketing or health effects of, (B) the exposure to, or (C) research, statements, or warnings regarding, Tobacco Products (including, but not limited to, the Claims asserted in the actions identified in Exhibit D, or any comparable Claims that were, could be or could have been asserted now or in the future in those actions or in any comparable action in federal, state or local court brought by a Settling State or a Releasing Party (whether or not such Settling State or Releasing Party has brought such action)), except for claims not asserted in the actions identified in Exhibit D for outstanding liability under existing licensing (or similar) fee laws or existing tax laws (but not excepting claims for any tax liability of the Tobacco-Related Organizations or of any Released Party with respect to such Tobacco-Related Organizations, which claims are covered by the release and covenants set forth in this Agreement);

(2) for future conduct, acts or omissions, only those monetary Claims directly or indirectly based on, arising out of or in any way related to, in whole or in part, the use of or exposure to Tobacco Products manufactured in the ordinary course of business, including without limitation any future Claims for reimbursement of health care costs allegedly associated with the use of or exposure to Tobacco Products.

(oo) "Released Parties" means all Participating Manufacturers, their past, present and future Affiliates, and the respective divisions, officers, directors, employees, representatives, insurers, lenders, underwriters, Tobacco-Related Organizations, trade associations, suppliers, agents, auditors, advertising agencies, public relations entities, attorneys, retailers and distributors of any Participating Manufacturer or of any such Affiliate (and the predecessors, heirs, executors, administrators, successors and assigns of each of the foregoing). Provided, however, that "Released Parties" does not include any person or entity (including, but not limited to, an Affiliate) that is itself a Non-Participating Manufacturer at any time after the MSA Execution Date, unless such person or entity becomes a Participating Manufacturer.

(pp) "Releasing Parties" means each Settling State and any of its past, present and future agents, officials acting in their official capacities, legal representatives, agencies, departments, commissions and divisions; and also means, to the full extent of the power of the signatories hereto to release past, present and future claims, the following: (1) any Settling State's subdivisions (political or otherwise, including, but not limited to, municipalities, counties, parishes, villages, unincorporated districts and hospital districts), public entities, public instrumentalities and public educational

institutions; and (2) persons or entities acting in a parens patriae, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or any other capacity, whether or not any of them participate in this settlement, (A) to the extent that any such person or entity is seeking relief on behalf of or generally applicable to the general public in such Settling State or the people of the State, as opposed solely to private or individual relief for separate and distinct injuries, or (B) to the extent that any such entity (as opposed to an individual) is seeking recovery of health-care expenses (other than premium or capitation payments for the benefit of present or retired state employees) paid or reimbursed, directly or indirectly, by a Settling State.

(qq) "Settling State" means any State that signs this Agreement on or before the MSA Execution Date. Provided, however, that the term "Settling State" shall not include (1) the States of Mississippi, Florida, Texas and Minnesota; and (2) any State as to which this Agreement has been terminated.

(rr) "State" means any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Northern Marianas.

(ss) "State-Specific Finality" means, with respect to the Settling State in question:

(1) this Agreement and the Consent Decree have been approved and entered by the Court as to all Original Participating Manufacturers, or, in the event of an appeal from or review of a decision of the Court to withhold its approval and entry of this Agreement and the Consent Decree, by the court hearing such appeal or conducting such review;

(2) entry by the Court has been made of an order dismissing with prejudice all claims against Released Parties in the action as provided herein; and

(3) the time for appeal or to seek review of or permission to appeal ("Appeal") from the approval and entry as described in subsection (1) hereof and entry of such order described in subsection (2) hereof has expired; or, in the event of an Appeal from such approval and entry, the Appeal has been dismissed, or the approval and entry described in (1) hereof and the order described in subsection (2) hereof have been affirmed in all material respects by the court of last resort to which such Appeal has been taken and such dismissal or affirmance has become no longer subject to further Appeal (including, without limitation, review by the United States Supreme Court).

(tt) "Subsequent Participating Manufacturer" means a Tobacco Product Manufacturer (other than an Original Participating Manufacturer) that: (1) is a Participating Manufacturer, and (2) is a signatory to this Agreement, regardless of when such Tobacco Product Manufacturer became a signatory to this Agreement. "Subsequent Participating Manufacturer" shall also include the successors of a Subsequent Participating Manufacturer. Except as expressly provided in this Agreement, once an entity becomes a Subsequent Participating Manufacturer such entity shall permanently retain the status of Subsequent Participating Manufacturer, unless it agrees to assume the obligations of an Original Participating Manufacturer as provided in subsection XVIII(c).

(uu) "Tobacco Product Manufacturer" means an entity that after the MSA Execution Date directly (and not exclusively through any Affiliate):

(1) manufactures Cigarettes anywhere that such manufacturer intends to be sold in the States, including Cigarettes intended to be sold in the States through an importer (except where such importer is an Original Participating Manufacturer that will be responsible for the payments under this Agreement with respect to such Cigarettes as a result of the provisions of subsections II(mm) and that pays the taxes specified in subsection II(z) on such Cigarettes, and provided that the manufacturer of such Cigarettes does not market or advertise such Cigarettes in the States);

(2) is the first purchaser anywhere for resale in the States of Cigarettes manufactured anywhere that the manufacturer does not intend to be sold in the States; or

(3) becomes a successor of an entity described in subsection (1) or (2) above.

The term "Tobacco Product Manufacturer" shall not include an Affiliate of a Tobacco Product Manufacturer unless such Affiliate itself falls within any of subsections (1) - (3) above.

(vv) "Tobacco Products" means Cigarettes and smokeless tobacco products.

(ww) "Tobacco-Related Organizations" means the Council for Tobacco Research-U.S.A., Inc., The Tobacco Institute, Inc. ("TI"), and the Center for Indoor Air Research, Inc. ("CIAR") and the successors, if any, of TI or CIAR.

(xx) "Transit Advertisements" means advertising on or within private or public vehicles and all advertisements placed at, on or within any bus stop, taxi stand, transportation waiting area, train station, airport or any similar location. Notwithstanding

the foregoing, the term "Transit Advertisements" does not include (1) any advertisement placed in, on or outside the premises of any retail establishment that sells Tobacco Products (other than solely through a vending machine) (except if such individual advertisement (A) occupies an area larger than 14 square feet; (B) is placed in such proximity to any other such advertisement so as to create a single "mosaic"-type advertisement larger than 14 square feet; or (C) functions solely as a segment of a larger advertising unit or series); or (2) advertising at the site of an event to be held at an Adult-Only Facility that is placed at such site during the period the facility or enclosed area constitutes an Adult-Only Facility, but in no event more than 14 days before the event, and that does not advertise any Tobacco Product (other than by using a Brand Name to identify the event).

(yy) "Underage" means younger than the minimum age at which it is legal to purchase or possess (whichever minimum age is older) Cigarettes in the applicable Settling State.

(zz) "Video Game Arcade" means an entertainment establishment primarily consisting of video games (other than video games intended primarily for use by persons 18 years of age or older) and/or pinball machines.

(aaa) "Volume Adjustment" means an upward or downward adjustment in accordance with the formula for volume adjustments set forth in Exhibit E.

(bbb) "Youth" means any person or persons under 18 years of age.

III. PERMANENT RELIEF

(a) Prohibition on Youth Targeting. No Participating Manufacturer may take any action, directly or indirectly, to target Youth within any Settling State in the advertising,

promotion or marketing of Tobacco Products, or take any action the primary purpose of which is to initiate, maintain or increase the incidence of Youth smoking within any Settling State.

(b) Ban on Use of Cartoons. Beginning 180 days after the MSA Execution Date, no Participating Manufacturer may use or cause to be used any Cartoon in the advertising, promoting, packaging or labeling of Tobacco Products.

(c) Limitation of Tobacco Brand Name Sponsorships.

(1) Prohibited Sponsorships. After the MSA Execution Date, no Participating Manufacturer may engage in any Brand Name Sponsorship in any State consisting of:

(A) concerts; or

(B) events in which the intended audience is comprised of a significant percentage of Youth; or

(C) events in which any paid participants or contestants are Youth; or

(D) any athletic event between opposing teams in any football, basketball, baseball, soccer or hockey league.

(2) Limited Sponsorships.

(A) No Participating Manufacturer may engage in more than one Brand Name Sponsorship in the States in any twelve-month period (such period measured from the date of the initial sponsored event).

(B) Provided, however, that

(i) nothing contained in subsection (2)(A) above shall require a Participating Manufacturer to breach or terminate any sponsorship contract in existence as of August 1, 1998 (until the earlier of (x) the current term of any existing contract, without regard to any renewal or option that may be exercised by such Participating Manufacturer or (y) three years after the MSA Execution Date); and

(ii) notwithstanding subsection (1)(A) above, Brown & Williamson Tobacco Corporation may sponsor either the GPC country music festival or the Kool jazz festival as its one annual Brand Name Sponsorship permitted pursuant to subsection (2)(A) as well as one Brand Name Sponsorship permitted pursuant to subsection (2)(B)(i).

(3) Related Sponsorship Restrictions. With respect to any Brand Name Sponsorship permitted under this subsection (c):

(A) advertising of the Brand Name Sponsorship event shall not advertise any Tobacco Product (other than by using the Brand Name to identify such Brand Name Sponsorship event);

(B) no Participating Manufacturer may refer to a Brand Name Sponsorship event or to a celebrity or other person in such an event in its advertising of a Tobacco Product;

(C) nothing contained in the provisions of subsection III(e) of this Agreement shall apply to actions taken by any Participating Manufacturer

in connection with a Brand Name Sponsorship permitted pursuant to the provisions of subsections (2)(A) and (2)(B)(i); the Brand Name Sponsorship permitted by subsection (2)(B)(ii) shall be subject to the restrictions of subsection III(e) except that such restrictions shall not prohibit use of the Brand Name to identify the Brand Name Sponsorship;

(D) nothing contained in the provisions of subsections III(f) and III(i) shall apply to apparel or other merchandise: (i) marketed, distributed, offered, sold, or licensed at the site of a Brand Name Sponsorship permitted pursuant to subsections (2)(A) or (2)(B)(i) by the person to which the relevant Participating Manufacturer has provided payment in exchange for the use of the relevant Brand Name in the Brand Name Sponsorship or a third-party that does not receive payment from the relevant Participating Manufacturer (or any Affiliate of such Participating Manufacturer) in connection with the marketing, distribution, offer, sale or license of such apparel or other merchandise; or (ii) used at the site of a Brand Name Sponsorship permitted pursuant to subsection (2)(A) or (2)(B)(i) (during such event) that are not distributed (by sale or otherwise) to any member of the general public; and

(E) nothing contained in the provisions of subsection III(d) shall: (i) apply to the use of a Brand Name on a vehicle used in a Brand Name Sponsorship; or (ii) apply to Outdoor Advertising advertising the Brand Name Sponsorship, to the extent that such Outdoor Advertising is placed at the site of a Brand Name Sponsorship no more than 90 days before the

start of the initial sponsored event, is removed within 10 days after the end of the last sponsored event, and is not prohibited by subsection (3)(A) above.

(4) Corporate Name Sponsorships. Nothing in this subsection (c) shall prevent a Participating Manufacturer from sponsoring or causing to be sponsored any athletic, musical, artistic, or other social or cultural event, or any entrant, participant or team in such event (or series of events) in the name of the corporation which manufactures Tobacco Products, provided that the corporate name does not include any Brand Name of domestic Tobacco Products.

(5) Naming Rights Prohibition. No Participating Manufacturer may enter into any agreement for the naming rights of any stadium or arena located within a Settling State using a Brand Name, and shall not otherwise cause a stadium or arena located within a Settling State to be named with a Brand Name.

(6) Prohibition on Sponsoring Teams and Leagues. No Participating Manufacturer may enter into any agreement pursuant to which payment is made (or other consideration is provided) by such Participating Manufacturer to any football, basketball, baseball, soccer or hockey league (or any team involved in any such league) in exchange for use of a Brand Name.

(d) Elimination of Outdoor Advertising and Transit Advertisements. Each Participating Manufacturer shall discontinue Outdoor Advertising and Transit Advertisements advertising Tobacco Products within the Settling States as set forth herein.

(1) Removal. Except as otherwise provided in this section, each Participating Manufacturer shall remove from within the Settling States within 150 days after the MSA Execution Date all of its (A) billboards (to the extent that such billboards constitute Outdoor Advertising) advertising Tobacco Products; (B) signs and placards (to the extent that such signs and placards constitute Outdoor Advertising) advertising Tobacco Products in arenas, stadiums, shopping malls and Video Game Arcades; and (C) Transit Advertisements advertising Tobacco Products.

(2) Prohibition on New Outdoor Advertising and Transit Advertisements. No Participating Manufacturer may, after the MSA Execution Date, place or cause to be placed any new Outdoor Advertising advertising Tobacco Products or new Transit Advertisements advertising Tobacco Products within any Settling State.

(3) Alternative Advertising. With respect to those billboards required to be removed under subsection (1) that are leased (as opposed to owned) by any Participating Manufacturer, the Participating Manufacturer will allow the Attorney General of the Settling State within which such billboards are located to substitute, at the Settling State's option, alternative advertising intended to discourage the use of Tobacco Products by Youth and their exposure to second-hand smoke for the remaining term of the applicable contract (without regard to any renewal or option term that may be exercised by such Participating Manufacturer). The Participating Manufacturer will bear the cost of the lease through the end of such remaining term. Any other costs associated with such alternative advertising will be borne by the Settling State.

(4) Ban on Agreements Inhibiting Anti-Tobacco Advertising. Each Participating Manufacturer agrees that it will not enter into any agreement that prohibits a third party from selling, purchasing or displaying advertising discouraging the use of Tobacco Products or exposure to second-hand smoke. In the event and to the extent that any Participating Manufacturer has entered into an agreement containing any such prohibition, such Participating Manufacturer agrees to waive such prohibition in such agreement.

(5) Designation of Contact Person. Each Participating Manufacturer that has Outdoor Advertising or Transit Advertisements advertising Tobacco Products within a Settling State shall, within 10 days after the MSA Execution Date, provide the Attorney General of such Settling State with the name of a contact person to whom the Settling State may direct inquiries during the time such Outdoor Advertising and Transit Advertisements are being eliminated, and from whom the Settling State may obtain periodic reports as to the progress of their elimination.

(6) Adult-Only Facilities. To the extent that any advertisement advertising Tobacco Products located within an Adult-Only Facility constitutes Outdoor Advertising or a Transit Advertisement, this subsection (d) shall not apply to such advertisement, provided such advertisement is not visible to persons outside such Adult-Only Facility.

(e) Prohibition on Payments Related to Tobacco Products and Media. No Participating Manufacturer may, beginning 30 days after the MSA Execution Date, make, or cause to be made, any payment or other consideration to any other person or entity to

use, display, make reference to or use as a prop any Tobacco Product, Tobacco Product package, advertisement for a Tobacco Product, or any other item bearing a Brand Name in any motion picture, television show, theatrical production or other live performance, live or recorded performance of music, commercial film or video, or video game ("Media"); provided, however, that the foregoing prohibition shall not apply to (1) Media where the audience or viewers are within an Adult-Only Facility (provided such Media are not visible to persons outside such Adult-Only Facility); (2) Media not intended for distribution or display to the public; or (3) instructional Media concerning non-conventional cigarettes viewed only by or provided only to smokers who are Adults.

(f) Ban on Tobacco Brand Name Merchandise. Beginning July 1, 1999, no Participating Manufacturer may, within any Settling State, market, distribute, offer, sell, license or cause to be marketed, distributed, offered, sold or licensed (including, without limitation, by catalogue or direct mail), any apparel or other merchandise (other than Tobacco Products, items the sole function of which is to advertise Tobacco Products, or written or electronic publications) which bears a Brand Name. Provided, however, that nothing in this subsection shall (1) require any Participating Manufacturer to breach or terminate any licensing agreement or other contract in existence as of June 20, 1997 (this exception shall not apply beyond the current term of any existing contract, without regard to any renewal or option term that may be exercised by such Participating Manufacturer); (2) prohibit the distribution to any Participating Manufacturer's employee who is not Underage of any item described above that is intended for the personal use of such an employee; (3) require any Participating Manufacturer to retrieve, collect or otherwise recover any item that prior to the MSA Execution Date was marketed, distributed,

offered, sold, licensed, or caused to be marketed, distributed, offered, sold or licensed by such Participating Manufacturer; (4) apply to coupons or other items used by Adults solely in connection with the purchase of Tobacco Products; or (5) apply to apparel or other merchandise used within an Adult-Only Facility that is not distributed (by sale or otherwise) to any member of the general public.

(g) Ban on Youth Access to Free Samples. After the MSA Execution Date, no Participating Manufacturer may, within any Settling State, distribute or cause to be distributed any free samples of Tobacco Products except in an Adult-Only Facility. For purposes of this Agreement, a "free sample" does not include a Tobacco Product that is provided to an Adult in connection with (1) the purchase, exchange or redemption for proof of purchase of any Tobacco Products (including, but not limited to, a free offer in connection with the purchase of Tobacco Products, such as a "two-for-one" offer), or (2) the conducting of consumer testing or evaluation of Tobacco Products with persons who certify that they are Adults.

(h) Ban on Gifts to Underage Persons Based on Proofs of Purchase. Beginning one year after the MSA Execution Date, no Participating Manufacturer may provide or cause to be provided to any person without sufficient proof that such person is an Adult any item in exchange for the purchase of Tobacco Products, or the furnishing of credits, proofs-of-purchase, or coupons with respect to such a purchase. For purposes of the preceding sentence only, (1) a driver's license or other government-issued identification (or legible photocopy thereof), the validity of which is certified by the person to whom the item is provided, shall by itself be deemed to be a sufficient form of proof of age; and (2) in the case of items provided (or to be redeemed) at retail establishments, a

Participating Manufacturer shall be entitled to rely on verification of proof of age by the retailer, where such retailer is required to obtain verification under applicable federal, state or local law.

(i) Limitation on Third-Party Use of Brand Names. After the MSA Execution Date, no Participating Manufacturer may license or otherwise expressly authorize any third party to use or advertise within any Settling State any Brand Name in a manner prohibited by this Agreement if done by such Participating Manufacturer itself. Each Participating Manufacturer shall, within 10 days after the MSA Execution Date, designate a person (and provide written notice to NAAG of such designation) to whom the Attorney General of any Settling State may provide written notice of any such third-party activity that would be prohibited by this Agreement if done by such Participating Manufacturer itself. Following such written notice, the Participating Manufacturer will promptly take commercially reasonable steps against any such non-de minimis third-party activity. Provided, however, that nothing in this subsection shall require any Participating Manufacturer to (1) breach or terminate any licensing agreement or other contract in existence as of July 1, 1998 (this exception shall not apply beyond the current term of any existing contract, without regard to any renewal or option term that may be exercised by such Participating Manufacturer); or (2) retrieve, collect or otherwise recover any item that prior to the MSA Execution Date was marketed, distributed, offered, sold, licensed or caused to be marketed, distributed, offered, sold or licensed by such Participating Manufacturer.

(j) Ban on Non-Tobacco Brand Names. No Participating Manufacturer may, pursuant to any agreement requiring the payment of money or other valuable

consideration, use or cause to be used as a brand name of any Tobacco Product any nationally recognized or nationally established brand name or trade name of any non-tobacco item or service or any nationally recognized or nationally established sports team, entertainment group or individual celebrity. Provided, however, that the preceding sentence shall not apply to any Tobacco Product brand name in existence as of July 1, 1998. For the purposes of this subsection, the term "other valuable consideration" shall not include an agreement between two entities who enter into such agreement for the sole purpose of avoiding infringement claims.

(k) Minimum Pack Size of Twenty Cigarettes. No Participating Manufacturer may, beginning 60 days after the MSA Execution Date and through and including December 31, 2001, manufacture or cause to be manufactured for sale in any Settling State any pack or other container of Cigarettes containing fewer than 20 Cigarettes (or, in the case of roll-your-own tobacco, any package of roll-your-own tobacco containing less than 0.60 ounces of tobacco). No Participating Manufacturer may, beginning 150 days after the MSA Execution Date and through and including December 31, 2001, sell or distribute in any Settling State any pack or other container of Cigarettes containing fewer than 20 Cigarettes (or, in the case of roll-your-own tobacco, any package of roll-your-own tobacco containing less than 0.60 ounces of tobacco). Each Participating Manufacturer further agrees that following the MSA Execution Date it shall not oppose, or cause to be opposed (including through any third party or Affiliate), the passage by any Settling State of any legislative proposal or administrative rule applicable to all Tobacco Product Manufacturers and all retailers of Tobacco Products prohibiting the manufacture and sale of any pack or other container of Cigarettes containing fewer than 20 Cigarettes

(or, in the case of roll-your-own tobacco, any package of roll-your-own tobacco containing less than 0.60 ounces of tobacco).

(l) Corporate Culture Commitments Related to Youth Access and Consumption. Beginning 180 days after the MSA Execution Date each Participating Manufacturer shall:

(1) promulgate or reaffirm corporate principles that express and explain its commitment to comply with the provisions of this Agreement and the reduction of use of Tobacco Products by Youth, and clearly and regularly communicate to its employees and customers its commitment to assist in the reduction of Youth use of Tobacco Products;

(2) designate an executive level manager (and provide written notice to NAAG of such designation) to identify methods to reduce Youth access to, and the incidence of Youth consumption of, Tobacco Products; and

(3) encourage its employees to identify additional methods to reduce Youth access to, and the incidence of Youth consumption of, Tobacco Products.

(m) Limitations on Lobbying. Following State-Specific Finality in a Settling State:

(1) No Participating Manufacturer may oppose, or cause to be opposed (including through any third party or Affiliate), the passage by such Settling State (or any political subdivision thereof) of those state or local legislative proposals or administrative rules described in Exhibit F hereto intended by their terms to reduce Youth access to, and the incidence of Youth consumption of, Tobacco Products. Provided, however, that the foregoing does not prohibit any Participating Manufacturer from (A) challenging enforcement of, or suing for

declaratory or injunctive relief with respect to, any such legislation or rule on any grounds; (B) continuing, after State-Specific Finality in such Settling State, to oppose or cause to be opposed, the passage during the legislative session in which State-Specific Finality in such Settling State occurs of any specific state or local legislative proposals or administrative rules introduced prior to the time of State-Specific Finality in such Settling State; (C) opposing, or causing to be opposed, any excise tax or income tax provision or user fee or other payments relating to Tobacco Products or Tobacco Product Manufacturers; or (D) opposing, or causing to be opposed, any state or local legislative proposal or administrative rule that also includes measures other than those described in Exhibit F.

(2) Each Participating Manufacturer shall require all of its officers and employees engaged in lobbying activities in such Settling State after State-Specific Finality, contract lobbyists engaged in lobbying activities in such Settling State after State-Specific Finality, and any other third parties who engage in lobbying activities in such Settling State after State-Specific Finality on behalf of such Participating Manufacturer ("lobbyist" and "lobbying activities" having the meaning such terms have under the law of the Settling State in question) to certify in writing to the Participating Manufacturer that they:

(A) will not support or oppose any state, local or federal legislation, or seek or oppose any governmental action, on behalf of the Participating Manufacturer without the Participating Manufacturer's express authorization (except where such advance express authorization is not reasonably practicable);

(B) are aware of and will fully comply with this Agreement and all laws and regulations applicable to their lobbying activities, including, without limitation, those related to disclosure of financial contributions. Provided, however, that if the Settling State in question has in existence no laws or regulations relating to disclosure of financial contributions regarding lobbying activities, then each Participating Manufacturer shall, upon request of the Attorney General of such Settling State, disclose to such Attorney General any payment to a lobbyist that the Participating Manufacturer knows or has reason to know will be used to influence legislative or administrative actions of the state or local government relating to Tobacco Products or their use. Disclosures made pursuant to the preceding sentence shall be filed in writing with the Office of the Attorney General on the first day of February and the first day of August of each year for any and all payments made during the six month period ending on the last day of the preceding December and June, respectively, with the following information: (1) the name, address, telephone number and e-mail address (if any) of the recipient; (2) the amount of each payment; and (3) the aggregate amount of all payments described in this subsection (2)(B) to the recipient in the calendar year; and

(C) have reviewed and will fully abide by the Participating Manufacturer's corporate principles promulgated pursuant to this Agreement when acting on behalf of the Participating Manufacturer.

(3) No Participating Manufacturer may support or cause to be supported (including through any third party or Affiliate) in Congress or any other forum legislation or rules that would preempt, override, abrogate or diminish such Settling State's rights or recoveries under this Agreement. Except as specifically provided in this Agreement, nothing herein shall be deemed to restrain any Settling State or Participating Manufacturer from advocating terms of any national settlement or taking any other positions on issues relating to tobacco.

(n) Restriction on Advocacy Concerning Settlement Proceeds. After the MSA Execution Date, no Participating Manufacturer may support or cause to be supported (including through any third party or Affiliate) the diversion of any proceeds of this settlement to any program or use that is neither tobacco-related nor health-related in connection with the approval of this Agreement or in any subsequent legislative appropriation of settlement proceeds.

(o) Dissolution of The Tobacco Institute, Inc., the Council for Tobacco Research-U.S.A., Inc. and the Center for Indoor Air Research, Inc.

(1) The Council for Tobacco Research-U.S.A., Inc. ("CTR") (a not-for-profit corporation formed under the laws of the State of New York) shall, pursuant to the plan of dissolution previously negotiated and agreed to between the Attorney General of the State of New York and CTR, cease all operations and be dissolved in accordance with the laws of the State of New York (and with the preservation of all applicable privileges held by any member company of CTR).

(2) The Tobacco Institute, Inc. ("TI") (a not-for-profit corporation formed under the laws of the State of New York) shall, pursuant to a plan of dissolution to

be negotiated by the Attorney General of the State of New York and the Original Participating Manufacturers in accordance with Exhibit G hereto, cease all operations and be dissolved in accordance with the laws of the State of New York and under the authority of the Attorney General of the State of New York (and with the preservation of all applicable privileges held by any member company of TI).

(3) Within 45 days after Final Approval, the Center for Indoor Air Research, Inc. ("CIAR") shall cease all operations and be dissolved in a manner consistent with applicable law and with the preservation of all applicable privileges (including, without limitation, privileges held by any member company of CIAR).

(4) The Participating Manufacturers shall direct the Tobacco-Related Organizations to preserve all records that relate in any way to issues raised in smoking-related health litigation.

(5) The Participating Manufacturers may not reconstitute CTR or its function in any form.

(6) The Participating Manufacturers represent that they have the authority to and will effectuate subsections (1) through (5) hereof.

(p) Regulation and Oversight of New Tobacco-Related Trade Associations.

(1) A Participating Manufacturer may form or participate in new tobacco-related trade associations (subject to all applicable laws), provided such associations agree in writing not to act in any manner contrary to any provision of this Agreement. Each Participating Manufacturer agrees that if any new tobacco-

related trade association fails to so agree, such Participating Manufacturer will not participate in or support such association.

(2) Any tobacco-related trade association that is formed or controlled by one or more of the Participating Manufacturers after the MSA Execution Date shall adopt by-laws governing the association's procedures and the activities of its members, board, employees, agents and other representatives with respect to the tobacco-related trade association. Such by-laws shall include, among other things, provisions that:

(A) each officer of the association shall be appointed by the board of the association, shall be an employee of such association, and during such officer's term shall not be a director of or employed by any member of the association or by an Affiliate of any member of the association;

(B) legal counsel for the association shall be independent, and neither counsel nor any member or employee of counsel's law firm shall serve as legal counsel to any member of the association or to a manufacturer of Tobacco Products that is an Affiliate of any member of the association during the time that it is serving as legal counsel to the association; and

(C) minutes describing the substance of the meetings of the board of directors of the association shall be prepared and shall be maintained by the association for a period of at least five years following their preparation.

(3) Without limitation on whatever other rights to access they may be permitted by law, for a period of seven years from the date any new tobacco-related trade association is formed by any of the Participating Manufacturers after the MSA Execution Date the antitrust authorities of any Settling State may, for the purpose of enforcing this Agreement, upon reasonable cause to believe that a violation of this Agreement has occurred, and upon reasonable prior written notice (but in no event less than 10 Business Days):

(A) have access during regular office hours to inspect and copy all relevant non-privileged, non-work-product books, records, meeting agenda and minutes, and other documents (whether in hard copy form or stored electronically) of such association insofar as they pertain to such believed violation; and

(B) interview the association's directors, officers and employees (who shall be entitled to have counsel present) with respect to relevant, non-privileged, non-work-product matters pertaining to such believed violation.

Documents and information provided to Settling State antitrust authorities shall be kept confidential by and among such authorities, and shall be utilized only by the Settling States and only for the purpose of enforcing this Agreement or the criminal law. The inspection and discovery rights provided to the Settling States pursuant to this subsection shall be coordinated so as to avoid repetitive and excessive inspection and discovery.

(q) Prohibition on Agreements to Suppress Research. No Participating Manufacturer may enter into any contract, combination or conspiracy with any other

Tobacco Product Manufacturer that has the purpose or effect of: (1) limiting competition in the production or distribution of information about health hazards or other consequences of the use of their products; (2) limiting or suppressing research into smoking and health; or (3) limiting or suppressing research into the marketing or development of new products. Provided, however, that nothing in this subsection shall be deemed to (1) require any Participating Manufacturer to produce, distribute or otherwise disclose any information that is subject to any privilege or protection; (2) preclude any Participating Manufacturer from entering into any joint defense or joint legal interest agreement or arrangement (whether or not in writing), or from asserting any privilege pursuant thereto; or (3) impose any affirmative obligation on any Participating Manufacturer to conduct any research.

(r) Prohibition on Material Misrepresentations. No Participating Manufacturer may make any material misrepresentation of fact regarding the health consequences of using any Tobacco Product, including any tobacco additives, filters, paper or other ingredients. Nothing in this subsection shall limit the exercise of any First Amendment right or the assertion of any defense or position in any judicial, legislative or regulatory forum.

IV. PUBLIC ACCESS TO DOCUMENTS

(a) After the MSA Execution Date, the Original Participating Manufacturers and the Tobacco-Related Organizations will support an application for the dissolution of any protective orders entered in each Settling State's lawsuit identified in Exhibit D with respect only to those documents, indices and privilege logs that have been produced as of the MSA Execution Date to such Settling State and (1) as to which defendants have made

no claim, or have withdrawn any claim, of attorney-client privilege, attorney work-product protection, common interest/joint defense privilege (collectively, "privilege"), trade-secret protection, or confidential or proprietary business information; and (2) that are not inappropriate for public disclosure because of personal privacy interests or contractual rights of third parties that may not be abrogated by the Original Participating Manufacturers or the Tobacco-Related Organizations.

(b) Notwithstanding State-Specific Finality, if any order, ruling or recommendation was issued prior to September 17, 1998 rejecting a claim of privilege or trade-secret protection with respect to any document or documents in a lawsuit identified in Exhibit D, the Settling State in which such order, ruling or recommendation was made may, no later than 45 days after the occurrence of State-Specific Finality in such Settling State, seek public disclosure of such document or documents by application to the court that issued such order, ruling or recommendation and the court shall retain jurisdiction for such purposes. The Original Participating Manufacturers and Tobacco-Related Organizations do not consent to, and may object to, appeal from or otherwise oppose any such application for disclosure. The Original Participating Manufacturers and Tobacco-Related Organizations will not assert that the settlement of such lawsuit has divested the court of jurisdiction or that such Settling State lacks standing to seek public disclosure on any applicable ground.

(c) The Original Participating Manufacturers will maintain at their expense their Internet document websites accessible through "TobaccoResolution.com" or a similar website until June 30, 2010. The Original Participating Manufacturers will maintain the

documents that currently appear on their respective websites and will add additional documents to their websites as provided in this section IV.

(d) Within 180 days after the MSA Execution Date, each Original Participating Manufacturer and Tobacco-Related Organization will place on its website copies of the following documents, except as provided in subsections IV(e) and IV(f) below:

(1) all documents produced by such Original Participating Manufacturer or Tobacco-Related Organization as of the MSA Execution Date in any action identified in Exhibit D or any action identified in section 2 of Exhibit H that was filed by an Attorney General. Among these documents, each Original Participating Manufacturer and Tobacco-Related Organization will give the highest priority to (A) the documents that were listed by the State of Washington as trial exhibits in the State of Washington v. American Tobacco Co., et al., No. 96-2-15056-8 SEA (Wash. Super. Ct., County of King); and (B) the documents as to which such Original Participating Manufacturer or Tobacco-Related Organization withdrew any claim of privilege as a result of the re-examination of privilege claims pursuant to court order in State of Oklahoma v. R.J. Reynolds Tobacco Company, et al., CJ-96-2499-L (Dist. Ct., Cleveland County);

(2) all documents that can be identified as having been produced by, and copies of transcripts of depositions given by, such Original Participating Manufacturer or Tobacco-Related Organization as of the MSA Execution Date in the litigation matters specified in section 1 of Exhibit H; and

(3) all documents produced by such Original Participating Manufacturer or Tobacco-Related Organization as of the MSA Execution Date and listed by the

plaintiffs as trial exhibits in the litigation matters specified in section 2 of Exhibit H.

(e) Unless copies of such documents are already on its website, each Original Participating Manufacturer and Tobacco-Related Organization will place on its website copies of documents produced in any production of documents that takes place on or after the date 30 days before the MSA Execution Date in any federal or state court civil action concerning smoking and health. Copies of any documents required to be placed on a website pursuant to this subsection will be placed on such website within the later of 45 days after the MSA Execution Date or within 45 days after the production of such documents in any federal or state court action concerning smoking and health. This obligation will continue until June 30, 2010. In placing such newly produced documents on its website, each Original Participating Manufacturer or Tobacco-Related Organization will identify, as part of its index to be created pursuant to subsection IV(h), the action in which it produced such documents and the date on which such documents were added to its website.

(f) Nothing in this section IV shall require any Original Participating Manufacturer or Tobacco-Related Organization to place on its website or otherwise disclose documents that: (1) it continues to claim to be privileged, a trade secret, confidential or proprietary business information, or that contain other information not appropriate for public disclosure because of personal privacy interests or contractual rights of third parties; or (2) continue to be subject to any protective order, sealing order or other order or ruling that prevents or limits a litigant from disclosing such documents.

(g) Oversized or multimedia records will not be required to be placed on the Website, but each Original Participating Manufacturers and Tobacco-Related Organizations will make any such records available to the public by placing copies of them in the document depository established in The State of Minnesota, et al. v. Philip Morris Incorporated, et al., C1-94-8565 (County of Ramsey, District Court, 2d Judicial Cir.).

(h) Each Original Participating Manufacturer will establish an index and other features to improve searchable access to the document images on its website, as set forth in Exhibit I.

(i) Within 90 days after the MSA Execution Date, the Original Participating Manufacturers will furnish NAAG with a project plan for completing the Original Participating Manufacturers' obligations under subsection IV(h) with respect to documents currently on their websites and documents being placed on their websites pursuant to subsection IV(d). NAAG may engage a computer consultant at the Original Participating Manufacturers' expense for a period not to exceed two years and at a cost not to exceed $100,000. NAAG's computer consultant may review such plan and make recommendations consistent with this Agreement. In addition, within 120 days after the completion of the Original Participating Manufacturers' obligations under subsection IV(d), NAAG's computer consultant may make final recommendations with respect to the websites consistent with this Agreement. In preparing these recommendations, NAAG's computer consultant may seek input from Settling State officials, public health organizations and other users of the websites.

(j) The expenses incurred pursuant to subsection IV(i), and the expenses related to documents of the Tobacco-Related Organizations, will be severally shared among the Original Participating Manufacturers (allocated among them according to their Relative Market Shares). All other expenses incurred under this section will be borne by the Original Participating Manufacturer that incurs such expense.

V. TOBACCO CONTROL AND UNDERAGE USE LAWS

Each Participating Manufacturer agrees that following State-Specific Finality in a Settling State it will not initiate, or cause to be initiated, a facial challenge against the enforceability or constitutionality of such Settling State's (or such Settling State's political subdivisions') statutes, ordinances and administrative rules relating to tobacco control enacted prior to June 1, 1998 (other than a statute, ordinance or rule challenged in any lawsuit listed in Exhibit M).

VI. ESTABLISHMENT OF A NATIONAL FOUNDATION

(a) Foundation Purposes. The Settling States believe that a comprehensive, coordinated program of public education and study is important to further the remedial goals of this Agreement. Accordingly, as part of the settlement of claims described herein, the payments specified in subsections VI(b), VI(c), and IX(e) shall be made to a charitable foundation, trust or similar organization (the "Foundation") and/or to a program to be operated within the Foundation (the "National Public Education Fund"). The purposes of the Foundation will be to support (1) the study of and programs to reduce Youth Tobacco Product usage and Youth substance abuse in the States, and (2) the study of and educational programs to prevent diseases associated with the use of Tobacco Products in the States.

(b) Base Foundation Payments. On March 31, 1999, and on March 31 of each subsequent year for a period of nine years thereafter, each Original Participating Manufacturer shall severally pay its Relative Market Share of $25,000,000 to fund the Foundation. The payments to be made by each of the Original Participating Manufacturers pursuant to this subsection (b) shall be subject to no adjustments, reductions, or offsets, and shall be paid to the Escrow Agent (to be credited to the Subsection VI(b) Account), who shall disburse such payments to the Foundation only upon the occurrence of State-Specific Finality in at least one Settling State.

(c) National Public Education Fund Payments.

(1) Each Original Participating Manufacturer shall severally pay its Relative Market Share of the following base amounts on the following dates to the Escrow Agent for the benefit of the Foundation's National Public Education Fund to be used for the purposes and as described in subsections VI(f)(1), VI(g) and VI(h) below: $250,000,000 on March 31, 1999; $300,000,000 on March 31, 2000; $300,000,000 on March 31, 2001; $300,000,000 on March 31, 2002; and $300,000,000 on March 31, 2003, as such amounts are modified in accordance with this subsection (c). The payment due on March 31, 1999 pursuant to this subsection (c)(1) is to be credited to the Subsection VI(c) Account (First). The payments due on or after March 31, 2000 pursuant to this subsection VI(c)(1) are to be credited to the Subsection VI(c) Account (Subsequent).

(2) The payments to be made by the Original Participating Manufacturers pursuant to this subsection (c), other than the payment due on March 31, 1999, shall

be subject to the Inflation Adjustment, the Volume Adjustment and the offset for miscalculated or disputed payments described in subsection XI(i).

(3) The payment made pursuant to this subsection (c) on March 31, 1999 shall be disbursed by the Escrow Agent to the Foundation only upon the occurrence of State-Specific Finality in at least one Settling State. Each remaining payment pursuant to this subsection (c) shall be disbursed by the Escrow Agent to the Foundation only when State-Specific Finality has occurred in Settling States having aggregate Allocable Shares equal to at least 80% of the total aggregate Allocable Shares assigned to all States that were Settling States as of the MSA Execution Date.

(4) In addition to the payments made pursuant to this subsection (c), the National Public Education Fund will be funded (A) in accordance with subsection IX(e), and (B) through monies contributed by other entities directly to the Foundation and designated for the National Public Education Fund ("National Public Education Fund Contributions").

(5) The payments made by the Original Participating Manufacturers pursuant to this subsection (c) and/or subsection IX(e) and monies received from all National Public Education Fund Contributions will be deposited and invested in accordance with the laws of the state of incorporation of the Foundation.

(d) Creation and Organization of the Foundation. NAAG, through its executive committee, will provide for the creation of the Foundation. The Foundation shall be organized exclusively for charitable, scientific, and educational purposes within the meaning of Internal Revenue Code section 501(c)(3). The organizational documents of

the Foundation shall specifically incorporate the provisions of this Agreement relating to the Foundation, and will provide for payment of the Foundation's administrative expenses from the funds paid pursuant to subsection VI(b) or VI(c). The Foundation shall be governed by a board of directors. The board of directors shall be comprised of eleven directors. NAAG, the National Governors' Association ("NGA"), and the National Conference of State Legislatures ("NCSL") shall each select from its membership two directors. These six directors shall select the five additional directors. One of these five additional directors shall have expertise in public health issues. Four of these five additional directors shall have expertise in medical, child psychology, or public health disciplines. The board of directors shall be nationally geographically diverse.

(e) Foundation Affiliation. The Foundation shall be formally affiliated with an educational or medical institution selected by the board of directors.

(f) Foundation Functions. The functions of the Foundation shall be:

(1) carrying out a nationwide sustained advertising and education program to (A) counter the use by Youth of Tobacco Products, and (B) educate consumers about the cause and prevention of diseases associated with the use of Tobacco Products;

(2) developing and disseminating model advertising and education programs to counter the use by Youth of substances that are unlawful for use or purchase by Youth, with an emphasis on reducing Youth smoking; monitoring and testing the effectiveness of such model programs; and, based on the information received from such monitoring and testing, continuing to develop and disseminate revised versions of such model programs, as appropriate;

(3) developing and disseminating model classroom education programs and curriculum ideas about smoking and substance abuse in the K-12 school system, including specific target programs for special at-risk populations; monitoring and testing the effectiveness of such model programs and ideas; and, based on the information received from such monitoring and testing, continuing to develop and disseminate revised versions of such model programs or ideas, as appropriate;

(4) developing and disseminating criteria for effective cessation programs; monitoring and testing the effectiveness of such criteria; and continuing to develop and disseminate revised versions of such criteria, as appropriate;

(5) commissioning studies, funding research, and publishing reports on factors that influence Youth smoking and substance abuse and developing strategies to address the conclusions of such studies and research;

(6) developing other innovative Youth smoking and substance abuse prevention programs;

(7) providing targeted training and information for parents;

(8) maintaining a library open to the public of Foundation-funded studies, reports and other publications related to the cause and prevention of Youth smoking and substance abuse;

(9) tracking and monitoring Youth smoking and substance abuse, with a focus on the reasons for any increases or failures to decrease Youth smoking and

substance abuse and what actions can be taken to reduce Youth smoking and substance abuse;

(10) receiving, controlling, and managing contributions from other entities to further the purposes described in this Agreement; and

(11) receiving, controlling, and managing such funds paid by the Participating Manufacturers pursuant to subsections VI(b) and VI(c) above.

(g) Foundation Grant-Making. The Foundation is authorized to make grants from the National Public Education Fund to Settling States and their political subdivisions to carry out sustained advertising and education programs to (1) counter the use by Youth of Tobacco Products, and (2) educate consumers about the cause and prevention of diseases associated with the use of Tobacco Products. In making such grants, the Foundation shall consider whether the Settling State or political subdivision applying for such grant:

(1) demonstrates the extent of the problem regarding Youth smoking in such Settling State or political subdivision;

(2) either seeks the grant to implement a model program developed by the Foundation or provides the Foundation with a specific plan for such applicant's intended use of the grant monies, including demonstrating such applicant's ability to develop an effective advertising/education campaign and to assess the effectiveness of such advertising/education campaign;

(3) has other funds readily available to carry out a sustained advertising and education program to (A) counter the use by Youth of Tobacco Products, and (B) educate consumers about the cause and prevention of diseases associated with the use of Tobacco Products; and

(4) is a Settling State that has not severed this section VI from its settlement with the Participating Manufacturers pursuant to subsection VI(i) below, or is a political subdivision in such a Settling State.

(h) Foundation Activities. The Foundation shall not engage in, nor shall any of the Foundation's money be used to engage in, any political activities or lobbying, including, but not limited to, support of or opposition to candidates, ballot initiatives, referenda or other similar activities. The National Public Education Fund shall be used only for public education and advertising regarding the addictiveness, health effects, and social costs related to the use of tobacco products and shall not be used for any personal attack on, or vilification of, any person (whether by name or business affiliation), company, or governmental agency, whether individually or collectively. The Foundation shall work to ensure that its activities are carried out in a culturally and linguistically appropriate manner. The Foundation's activities (including the National Public Education Fund) shall be carried out solely within the States. The payments described in subsections VI(b) and VI(c) above are made at the direction and on behalf of Settling States. By making such payments in such manner, the Participating Manufacturers do not undertake and expressly disclaim any responsibility with respect to the creation, operation, liabilities, or tax status of the Foundation or the National Public Education Fund.

(i) Severance of this Section. If the Attorney General of a Settling State determines that such Settling State may not lawfully enter into this section VI as a matter of applicable state law, such Attorney General may sever this section VI from its settlement with the Participating Manufacturers by giving written notice of such

severance to each Participating Manufacturer and NAAG pursuant to subsection XVIII(k) hereof. If any Settling State exercises its right to sever this section VI, this section VI shall not be considered a part of the specific settlement between such Settling State and the Participating Manufacturers, and this section VI shall not be enforceable by or in such Settling State. The payment obligation of subsections VI(b) and VI(c) hereof shall apply regardless of a determination by one or more Settling States to sever section VI hereof; provided, however, that if all Settling States sever section VI hereof, the payment obligations of subsections (b) and (c) hereof shall be null and void. If the Attorney General of a Settling State that severed this section VI subsequently determines that such Settling State may lawfully enter into this section VI as a matter of applicable state law, such Attorney General may rescind such Settling State's previous severance of this section VI by giving written notice of such rescission to each Participating Manufacturer and NAAG pursuant to subsection XVIII(k). If any Settling State rescinds such severance, this section VI shall be considered a part of the specific settlement between such Settling State and the Participating Manufacturers (including for purposes of subsection (g)(4)), and this section VI shall be enforceable by and in such Settling State.

VII. ENFORCEMENT

(a) Jurisdiction. Each Participating Manufacturer and each Settling State acknowledge that the Court: (1) has jurisdiction over the subject matter of the action identified in Exhibit D in such Settling State and over each Participating Manufacturer; (2) shall retain exclusive jurisdiction for the purposes of implementing and enforcing this Agreement and the Consent Decree as to such Settling State; and (3) except as provided in subsections IX(d), XI(c) and XVII(d) and Exhibit O, shall be the only court to which

disputes under this Agreement or the Consent Decree are presented as to such Settling State. Provided, however, that notwithstanding the foregoing, the Escrow Court (as defined in the Escrow Agreement) shall have exclusive jurisdiction, as provided in section 15 of the Escrow Agreement, over any suit, action or proceeding seeking to interpret or enforce any provision of, or based on any right arising out of, the Escrow Agreement.

(b) Enforcement of Consent Decree. Except as expressly provided in the Consent Decree, any Settling State or Released Party may apply to the Court to enforce the terms of the Consent Decree (or for a declaration construing any such term) with respect to alleged violations within such Settling State. A Settling State may not seek to enforce the Consent Decree of another Settling State; provided, however, that nothing contained herein shall affect the ability of any Settling State to (1) coordinate state enforcement actions or proceedings, or (2) file or join any amicus brief. In the event that the Court determines that any Participating Manufacturer or Settling State has violated the Consent Decree within such Settling State, the party that initiated the proceedings may request any and all relief available within such Settling State pursuant to the Consent Decree.

(c) Enforcement of this Agreement.

(1) Except as provided in subsections IX(d), XI(c), XVII(d) and Exhibit O, any Settling State or Participating Manufacturer may bring an action in the Court to enforce the terms of this Agreement (or for a declaration construing any such term ("Declaratory Order")) with respect to disputes, alleged violations or alleged breaches within such Settling State.

(2) Before initiating such proceedings, a party shall provide 30 days' written notice to the Attorney General of each Settling State, to NAAG, and to each Participating Manufacturer of its intent to initiate proceedings pursuant to this subsection. The 30-day notice period may be shortened in the event that the relevant Attorney General reasonably determines that a compelling time-sensitive public health and safety concern requires more immediate action.

(3) In the event that the Court determines that any Participating Manufacturer or Settling State has violated or breached this Agreement, the party that initiated the proceedings may request an order restraining such violation or breach, and/or ordering compliance within such Settling State (an "Enforcement Order").

(4) If an issue arises as to whether a Participating Manufacturer has failed to comply with an Enforcement Order, the Attorney General for the Settling State in question may seek an order for interpretation or for monetary, civil contempt or criminal sanctions to enforce compliance with such Enforcement Order.

(5) If the Court finds that a good-faith dispute exists as to the meaning of the terms of this Agreement or a Declaratory Order, the Court may in its discretion determine to enter a Declaratory Order rather than an Enforcement Order.

(6) Whenever possible, the parties shall seek to resolve an alleged violation of this Agreement by discussion pursuant to subsection XVIII(m) of this Agreement. In addition, in determining whether to seek an Enforcement Order, or in determining whether to seek an order for monetary, civil contempt or criminal

sanctions for any claimed violation of an Enforcement Order, the Attorney General shall give good-faith consideration to whether the Participating Manufacturer that is claimed to have violated this Agreement has taken appropriate and reasonable steps to cause the claimed violation to be cured, unless such party has been guilty of a pattern of violations of like nature.

(d) Right of Review. All orders and other judicial determinations made by any court in connection with this Agreement or any Consent Decree shall be subject to all available appellate review, and nothing in this Agreement or any Consent Decree shall be deemed to constitute a waiver of any right to any such review.

(e) Applicability. This Agreement and the Consent Decree apply only to the Participating Manufacturers in their corporate capacity acting through their respective successors and assigns, directors, officers, employees, agents, subsidiaries, divisions, or other internal organizational units of any kind or any other entities acting in concert or participation with them. The remedies, penalties and sanctions that may be imposed or assessed in connection with a breach or violation of this Agreement or the Consent Decree (or any Declaratory Order or Enforcement Order issued in connection with this Agreement or the Consent Decree) shall only apply to the Participating Manufacturers, and shall not be imposed or assessed against any employee, officer or director of any Participating Manufacturer, or against any other person or entity as a consequence of such breach or violation, and the Court shall have no jurisdiction to do so.

(f) Coordination of Enforcement. The Attorneys General of the Settling States (through NAAG) shall monitor potential conflicting interpretations by courts of different States of this Agreement and the Consent Decrees. The Settling States shall use their best

efforts, in cooperation with the Participating Manufacturers, to coordinate and resolve the effects of such conflicting interpretations as to matters that are not exclusively local in nature.

(g) Inspection and Discovery Rights. Without limitation on whatever other rights to access they may be permitted by law, following State-Specific Finality in a Settling State and for seven years thereafter, representatives of the Attorney General of such Settling State may, for the purpose of enforcing this Agreement and the Consent Decree, upon reasonable cause to believe that a violation of this Agreement or the Consent Decree has occurred, and upon reasonable prior written notice (but in no event less than 10 Business Days): (1) have access during regular office hours to inspect and copy all relevant non-privileged, non-work-product books, records, meeting agenda and minutes, and other documents (whether in hard copy form or stored electronically) of each Participating Manufacturer insofar as they pertain to such believed violation; and (2) interview each Participating Manufacturer's directors, officers and employees (who shall be entitled to have counsel present) with respect to relevant, non-privileged, non-work-product matters pertaining to such believed violation. Documents and information provided to representatives of the Attorney General of such Settling State pursuant to this section VII shall be kept confidential by the Settling States, and shall be utilized only by the Settling States and only for purposes of enforcing this Agreement, the Consent Decree and the criminal law. The inspection and discovery rights provided to such Settling State pursuant to this subsection shall be coordinated through NAAG so as to avoid repetitive and excessive inspection and discovery.

VIII. CERTAIN ONGOING RESPONSIBILITIES OF THE SETTLING STATES

(a) Upon approval of the NAAG executive committee, NAAG will provide coordination and facilitation for the implementation and enforcement of this Agreement on behalf of the Attorneys General of the Settling States, including the following:

(1) NAAG will assist in coordinating the inspection and discovery activities referred to in subsections III(p)(3) and VII(g) regarding compliance with this Agreement by the Participating Manufacturers and any new tobacco-related trade associations.

(2) NAAG will convene at least two meetings per year and one major national conference every three years for the Attorneys General of the Settling States, the directors of the Foundation and three persons designated by each Participating Manufacturer. The purpose of the meetings and conference is to evaluate the success of this Agreement and coordinate efforts by the Attorneys General and the Participating Manufacturers to continue to reduce Youth smoking.

(3) NAAG will periodically inform NGA, NCSL, the National Association of Counties and the National League of Cities of the results of the meetings and conferences referred to in subsection (a)(2) above.

(4) NAAG will support and coordinate the efforts of the Attorneys General of the Settling States in carrying out their responsibilities under this Agreement.

(5) NAAG will perform the other functions specified for it in this Agreement, including the functions specified in section IV.

(b) Upon approval by the NAAG executive committee to assume the responsibilities outlined in subsection VIII(a) hereof, each Original Participating Manufacturer shall cause to be paid, beginning on December 31, 1998, and on December 31 of each year thereafter through and including December 31, 2007, its Relative Market Share of $150,000 per year to the Escrow Agent (to be credited to the Subsection VIII(b) Account), who shall disburse such monies to NAAG within 10 Business Days, to fund the activities described in subsection VIII(a).

(c) The Attorneys General of the Settling States, acting through NAAG, shall establish a fund ("The States' Antitrust/Consumer Protection Tobacco Enforcement Fund") in the form attached as Exhibit J, which will be maintained by such Attorneys General to supplement the Settling States' (1) enforcement and implementation of the terms of this Agreement and the Consent Decrees, and (2) investigation and litigation of potential violations of laws with respect to Tobacco Products, as set forth in Exhibit J. Each Original Participating Manufacturer shall on March 31, 1999, severally pay its Relative Market Share of $50,000,000 to the Escrow Agent (to be credited to the Subsection VIII(c) Account), who shall disburse such monies to NAAG upon the occurrence of State-Specific Finality in at least one Settling State. Such funds will be used in accordance with the provisions of Exhibit J.

IX. PAYMENTS

(a) All Payments Into Escrow. All payments made pursuant to this Agreement (except those payments made pursuant to section XVII) shall be made into escrow pursuant to the Escrow Agreement, and shall be credited to the appropriate Account established pursuant to the Escrow Agreement. Such payments shall be disbursed to the

beneficiaries or returned to the Participating Manufacturers only as provided in section XI and the Escrow Agreement. No payment obligation under this Agreement shall arise (1) unless and until the Escrow Court has approved and retained jurisdiction over the Escrow Agreement or (2) if such approval is reversed (unless and until such reversal is itself reversed). The parties agree to proceed as expeditiously as possible to resolve any issues that prevent approval of the Escrow Agreement. If any payment (other than the first initial payment under subsection IX(b)) is delayed because the Escrow Agreement has not been approved, such payment shall be due and payable (together with interest at the Prime Rate) within 10 Business Days after approval of the Escrow Agreement by the Escrow Court.

(b) Initial Payments. On the second Business Day after the Escrow Court approves and retains jurisdiction over the Escrow Agreement, each Original Participating Manufacturer shall severally pay to the Escrow Agent (to be credited to the Subsection IX(b) Account (First)) its Market Capitalization Percentage (as set forth in Exhibit K) of the base amount of $2,400,000,000. On January 10, 2000, each Original Participating Manufacturer shall severally pay to the Escrow Agent its Relative Market Share of the base amount of $2,472,000,000. On January 10, 2001, each Original Participating Manufacturer shall severally pay to the Escrow Agent its Relative Market Share of the base amount of $2,546,160,000. On January 10, 2002, each Original Participating Manufacturer shall severally pay to the Escrow Agent its Relative Market Share of the base amount of $2,622,544,800. On January 10, 2003, each Original Participating Manufacturer shall severally pay to the Escrow Agent its Relative Market Share of the base amount of $2,701,221,144. The payments pursuant to this subsection (b) due on or

after January 10, 2000 shall be credited to the Subsection IX(b) Account (Subsequent). The foregoing payments shall be modified in accordance with this subsection (b). The payments made by the Original Participating Manufacturers pursuant to this subsection (b) (other than the first such payment) shall be subject to the Volume Adjustment, the Non-Settling States Reduction and the offset for miscalculated or disputed payments described in subsection XI(i). The first payment due under this subsection (b) shall be subject to the Non-Settling States Reduction, but such reduction shall be determined as of the date one day before such payment is due (rather than the date 15 days before).

(c) Annual Payments and Strategic Contribution Payments.

(1) On April 15, 2000 and on April 15 of each year thereafter in perpetuity, each Original Participating Manufacturer shall severally pay to the Escrow Agent (to be credited to the Subsection IX(c)(1) Account) its Relative Market Share of the base amounts specified below, as such payments are modified in accordance with this subsection (c)(1):

Year	Base Amount
2000	$4,500,000,000
2001	$5,000,000,000
2002	$6,500,000,000
2003	$6,500,000,000
2004	$8,000,000,000
2005	$8,000,000,000
2006	$8,000,000,000
2007	$8,000,000,000
2008	$8,139,000,000
2009	$8,139,000,000
2010	$8,139,000,000
2011	$8,139,000,000
2012	$8,139,000,000
2013	$8,139,000,000
2014	$8,139,000,000
2015	$8,139,000,000
2016	$8,139,000,000
2017	$8,139,000,000
2018 and each year thereafter	$9,000,000,000

The payments made by the Original Participating Manufacturers pursuant to this subsection (c)(1) shall be subject to the Inflation Adjustment, the Volume Adjustment, the Previously Settled States Reduction, the Non-Settling States Reduction, the NPM Adjustment, the offset for miscalculated or disputed payments described in subsection XI(i), the Federal Tobacco Legislation Offset, the Litigating Releasing Parties Offset, and the offsets for claims over described in subsections XII(a)(4)(B) and XII(a)(8).

(2) On April 15, 2008 and on April 15 of each year thereafter through 2017, each Original Participating Manufacturer shall severally pay to the Escrow Agent (to be credited to the Subsection IX(c)(2) Account) its Relative Market Share of the base amount of $861,000,000, as such payments are modified in accordance with this subsection (c)(2). The payments made by the Original

Participating Manufacturers pursuant to this subsection (c)(2) shall be subject to the Inflation Adjustment, the Volume Adjustment, the NPM Adjustment, the offset for miscalculated or disputed payments described in subsection XI(i), the Federal Tobacco Legislation Offset, the Litigating Releasing Parties Offset, and the offsets for claims over described in subsections XII(a)(4)(B) and XII(a)(8). Such payments shall also be subject to the Non-Settling States Reduction; provided, however, that for purposes of payments due pursuant to this subsection (c)(2) (and corresponding payments by Subsequent Participating Manufacturers under subsection IX(i)), the Non-Settling States Reduction shall be derived as follows: (A) the payments made by the Original Participating Manufacturers pursuant to this subsection (c)(2) shall be allocated among the Settling States on a percentage basis to be determined by the Settling States pursuant to the procedures set forth in Exhibit U, and the resulting allocation percentages disclosed to the Escrow Agent, the Independent Auditor and the Original Participating Manufacturers not later than June 30, 1999; and (B) the Non-Settling States Reduction shall be based on the sum of the Allocable Shares so established pursuant to subsection (c)(2)(A) for those States that were Settling States as of the MSA Execution Date and as to which this Agreement has terminated as of the date 15 days before the payment in question is due.

(d) Non-Participating Manufacturer Adjustment.

(1) Calculation of NPM Adjustment for Original Participating Manufacturers. To protect the public health gains achieved by this Agreement, certain payments made pursuant to this Agreement shall be subject to an NPM

Adjustment. Payments by the Original Participating Manufacturers to which the NPM Adjustment applies shall be adjusted as provided below:

(A) Subject to the provisions of subsections (d)(1)(C), (d)(1)(D) and (d)(2) below, each Allocated Payment shall be adjusted by subtracting from such Allocated Payment the product of such Allocated Payment amount multiplied by the NPM Adjustment Percentage. The "NPM Adjustment Percentage" shall be calculated as follows:

(i) If the Market Share Loss for the year immediately preceding the year in which the payment in question is due is less than or equal to 0 (zero), then the NPM Adjustment Percentage shall equal zero.

(ii) If the Market Share Loss for the year immediately preceding the year in which the payment in question is due is greater than 0 (zero) and less than or equal to 16 2/3 percentage points, then the NPM Adjustment Percentage shall be equal to the product of (x) such Market Share Loss and (y) 3 (three).

(iii) If the Market Share Loss for the year immediately preceding the year in which the payment in question is due is greater than 16 2/3 percentage points, then the NPM Adjustment Percentage shall be equal to the sum of (x) 50 percentage points and (y) the product of (*1*) the Variable Multiplier and (*2*) the result of such Market Share Loss minus 16 2/3 percentage points.

(B) Definitions:

(i) "Base Aggregate Participating Manufacturer Market Share" means the result of (x) the sum of the applicable Market Shares (the applicable Market Share to be that for 1997) of all present and former Tobacco Product Manufacturers that were Participating Manufacturers during the entire calendar year immediately preceding the year in which the payment in question is due minus (y) 2 (two) percentage points.

(ii) "Actual Aggregate Participating Manufacturer Market Share" means the sum of the applicable Market Shares of all present and former Tobacco Product Manufacturers that were Participating Manufacturers during the entire calendar year immediately preceding the year in which the payment in question is due (the applicable Market Share to be that for the calendar year immediately preceding the year in which the payment in question is due).

(iii) "Market Share Loss" means the result of (x) the Base Aggregate Participating Manufacturer Market Share minus (y) the Actual Aggregate Participating Manufacturer Market Share.

(iv) "Variable Multiplier" equals 50 percentage points divided by the result of (x) the Base Aggregate Participating Manufacturer Market Share minus (y) 16 2/3 percentage points.

(C) On or before February 2 of each year following a year in which there was a Market Share Loss greater than zero, a nationally recognized firm of economic consultants (the "Firm") shall determine whether the disadvantages experienced as a result of the provisions of this Agreement were a significant factor contributing to the Market Share Loss for the year in question. If the Firm determines that the disadvantages experienced as a result of the provisions of this Agreement were a significant factor contributing to the Market Share Loss for the year in question, the NPM Adjustment described in subsection IX(d)(1) shall apply. If the Firm determines that the disadvantages experienced as a result of the provisions of this Agreement were not a significant factor contributing to the Market Share Loss for the year in question, the NPM Adjustment described in subsection IX(d)(1) shall not apply. The Original Participating Manufacturers, the Settling States, and the Attorneys General for the Settling States shall cooperate to ensure that the determination described in this subsection (1)(C) is timely made. The Firm shall be acceptable to (and the principals responsible for this assignment shall be acceptable to) both the Original Participating Manufacturers and a majority of those Attorneys General who are both the Attorney General of a Settling State and a member of the NAAG executive committee at the time in question (or in the event no such firm or no such principals shall be acceptable to such parties, National Economic Research Associates, Inc., or its successors by merger, acquisition or otherwise ("NERA"), acting

through a principal or principals acceptable to such parties, if such a person can be identified and, if not, acting through a principal or principals identified by NERA, or a successor firm selected by the CPR Institute for Dispute Resolution). As soon as practicable after the MSA Execution Date, the Firm shall be jointly retained by the Settling States and the Original Participating Manufacturers for the purpose of making the foregoing determination, and the Firm shall provide written notice to each Settling State, to NAAG, to the Independent Auditor and to each Participating Manufacturer of such determination. The determination of the Firm with respect to this issue shall be conclusive and binding upon all parties, and shall be final and non-appealable. The reasonable fees and expenses of the Firm shall be paid by the Original Participating Manufacturers according to their Relative Market Shares. Only the Participating Manufacturers and the Settling States, and their respective counsel, shall be entitled to communicate with the Firm with respect to the Firm's activities pursuant to this subsection (1)(C).

(D) No NPM Adjustment shall be made with respect to a payment if the aggregate number of Cigarettes shipped in or to the fifty United States, the District of Columbia and Puerto Rico in the year immediately preceding the year in which the payment in question is due by those Participating Manufacturers that had become Participating Manufacturers prior to 14 days after the MSA Execution Date is greater than the aggregate number of Cigarettes shipped in or to the fifty United States, the

District of Columbia, and Puerto Rico in 1997 by such Participating Manufacturers (and any of their Affiliates that made such shipments in 1997, as demonstrated by certified audited statements of such Affiliates' shipments, and that do not continue to make such shipments after the MSA Execution Date because the responsibility for such shipments has been transferred to one of such Participating Manufacturers). Measurements of shipments for purposes of this subsection (D) shall be made in the manner prescribed in subsection II(mm); in the event that such shipment data is unavailable for any Participating Manufacturer for 1997, such Participating Manufacturer's shipment volume for such year shall be measured in the manner prescribed in subsection II(z).

(2) Allocation among Settling States of NPM Adjustment for Original Participating Manufacturers.

(A) The NPM Adjustment set forth in subsection (d)(1) shall apply to the Allocated Payments of all Settling States, except as set forth below.

(B) A Settling State's Allocated Payment shall not be subject to an NPM Adjustment: (i) if such Settling State continuously had a Qualifying Statute (as defined in subsection (2)(E) below) in full force and effect during the entire calendar year immediately preceding the year in which the payment in question is due, and diligently enforced the provisions of such statute during such entire calendar year; or (ii) if such Settling State enacted the Model Statute (as defined in subsection (2)(E) below) for the first time during the calendar year immediately preceding the year in

which the payment in question is due, continuously had the Model Statute in full force and effect during the last six months of such calendar year, and diligently enforced the provisions of such statute during the period in which it was in full force and effect.

(C) The aggregate amount of the NPM Adjustments that would have applied to the Allocated Payments of those Settling States that are not subject to an NPM Adjustment pursuant to subsection (2)(B) shall be reallocated among all other Settling States pro rata in proportion to their respective Allocable Shares (the applicable Allocable Shares being those listed in Exhibit A), and such other Settling States' Allocated Payments shall be further reduced accordingly.

(D) This subsection (2)(D) shall apply if the amount of the NPM Adjustment applied pursuant to subsection (2)(A) to any Settling State plus the amount of the NPM Adjustments reallocated to such Settling State pursuant to subsection (2)(C) in any individual year would either (i) exceed such Settling State's Allocated Payment in that year, or (ii) if subsection (2)(F) applies to the Settling State in question, exceed 65% of such Settling State's Allocated Payment in that year. For each Settling State that has an excess as described in the preceding sentence, the excess amount of NPM Adjustment shall be further reallocated among all other Settling States whose Allocated Payments are subject to an NPM Adjustment and that do not have such an excess, pro rata in proportion to their respective Allocable Shares, and such other Settling States' Allocated

Payments shall be further reduced accordingly. The provisions of this subsection (2)(D) shall be repeatedly applied in any individual year until either (i) the aggregate amount of NPM Adjustments has been fully reallocated or (ii) the full amount of the NPM Adjustments subject to reallocation under subsection (2)(C) or (2)(D) cannot be fully reallocated in any individual year as described in those subsections because (x) the Allocated Payment in that year of each Settling State that is subject to an NPM Adjustment and to which subsection (2)(F) does not apply has been reduced to zero, and (y) the Allocated Payment in that year of each Settling State to which subsection (2)(F) applies has been reduced to 35% of such Allocated Payment.

(E) A "Qualifying Statute" means a Settling State's statute, regulation, law and/or rule (applicable everywhere the Settling State has authority to legislate) that effectively and fully neutralizes the cost disadvantages that the Participating Manufacturers experience vis-à-vis Non-Participating Manufacturers within such Settling State as a result of the provisions of this Agreement. Each Participating Manufacturer and each Settling State agree that the model statute in the form set forth in Exhibit T (the "Model Statute"), if enacted without modification or addition (except for particularized state procedural or technical requirements) and not in conjunction with any other legislative or regulatory proposal, shall constitute a Qualifying Statute. Each Participating Manufacturer agrees to support the enactment of such Model

Statute if such Model Statute is introduced or proposed (i) without modification or addition (except for particularized procedural or technical requirements), and (ii) not in conjunction with any other legislative proposal.

(F) If a Settling State (i) enacts the Model Statute without any modification or addition (except for particularized state procedural or technical requirements) and not in conjunction with any other legislative or regulatory proposal, (ii) uses its best efforts to keep the Model Statute in full force and effect by, among other things, defending the Model Statute fully in any litigation brought in state or federal court within such Settling State (including litigating all available appeals that may affect the effectiveness of the Model Statute), and (iii) otherwise complies with subsection (2)(B), but a court of competent jurisdiction nevertheless invalidates or renders unenforceable the Model Statute with respect to such Settling State, and but for such ruling the Settling State would have been exempt from an NPM Adjustment under subsection (2)(B), then the NPM Adjustment (including reallocations pursuant to subsections (2)(C) and (2)(D)) shall still apply to such Settling State's Allocated Payments but in any individual year shall not exceed 65% of the amount of such Allocated Payments.

(G) In the event a Settling State proposes and/or enacts a statute, regulation, law and/or rule (applicable everywhere the Settling State has authority to legislate) that is not the Model Statute and asserts that such

statute, regulation, law and/or rule is a Qualifying Statute, the Firm shall be jointly retained by the Settling States and the Original Participating Manufacturers for the purpose of determining whether or not such statute, regulation, law and/or rule constitutes a Qualifying Statute. The Firm shall make the foregoing determination within 90 days of a written request to it from the relevant Settling State (copies of which request the Settling State shall also provide to all Participating Manufacturers and the Independent Auditor), and the Firm shall promptly thereafter provide written notice of such determination to the relevant Settling State, NAAG, all Participating Manufacturers and the Independent Auditor. The determination of the Firm with respect to this issue shall be conclusive and binding upon all parties, and shall be final and non-appealable; provided, however, (i) that such determination shall be of no force and effect with respect to a proposed statute, regulation, law and/or rule that is thereafter enacted with any modification or addition; and (ii) that the Settling State in which the Qualifying Statute was enacted and any Participating Manufacturer may at any time request that the Firm reconsider its determination as to this issue in light of subsequent events (including, without limitation, subsequent judicial review, interpretation, modification and/or disapproval of a Settling State's Qualifying Statute, and the manner and/or the effect of enforcement of such Qualifying Statute). The Original Participating Manufacturers shall severally pay their Relative Market Shares of the reasonable fees and expenses of the Firm. Only the

Participating Manufacturers and Settling States, and their respective counsel, shall be entitled to communicate with the Firm with respect to the Firm's activities pursuant to this subsection (2)(G).

(H) Except as provided in subsection (2)(F), in the event a Qualifying Statute is enacted within a Settling State and is thereafter invalidated or declared unenforceable by a court of competent jurisdiction, otherwise rendered not in full force and effect, or, upon reconsideration by the Firm pursuant to subsection (2)(G) determined not to constitute a Qualifying Statute, then such Settling State's Allocated Payments shall be fully subject to an NPM Adjustment unless and until the requirements of subsection (2)(B) have been once again satisfied.

(3) Allocation of NPM Adjustment among Original Participating Manufacturers. The portion of the total amount of the NPM Adjustment to which the Original Participating Manufacturers are entitled in any year that can be applied in such year consistent with subsection IX(d)(2) (the "Available NPM Adjustment") shall be allocated among them as provided in this subsection IX(d)(3).

(A) The "Base NPM Adjustment" shall be determined for each Original Participating Manufacturer in such year as follows:

(i) For those Original Participating Manufacturers whose Relative Market Shares in the year immediately preceding the year in which the NPM Adjustment in question is applied exceed or are

equal to their respective 1997 Relative Market Shares, the Base NPM Adjustment shall equal 0 (zero).

(ii) For those Original Participating Manufacturers whose Relative Market Shares in the year immediately preceding the year in which the NPM Adjustment in question is applied are less than their respective 1997 Relative Market Shares, the Base NPM Adjustment shall equal the result of (x) the difference between such Original Participating Manufacturer's Relative Market Share in such preceding year and its 1997 Relative Market Share multiplied by both (y) the number of individual Cigarettes (expressed in thousands of units) shipped in or to the United States, the District of Columbia and Puerto Rico by all the Original Participating Manufacturers in such preceding year (determined in accordance with subsection II(mm)) and (z) $20 per each thousand units of Cigarettes (as this number is adjusted pursuant to subsection IX(d)(3)(C) below).

(iii) For those Original Participating Manufacturers whose Base NPM Adjustment, if calculated pursuant to subsection (ii) above, would exceed $300 million (as this number is adjusted pursuant to subsection IX(d)(3)(C) below), the Base NPM Adjustment shall equal $300 million (or such adjusted number, as provided in subsection IX(d)(3)(C) below).

(B) The share of the Available NPM Adjustment each Original Participating Manufacturer is entitled to shall be calculated as follows:

(i) If the Available NPM Adjustment the Original Participating Manufacturers are entitled to in any year is less than or equal to the sum of the Base NPM Adjustments of all Original Participating Manufacturers in such year, then such Available NPM Adjustment shall be allocated among those Original Participating Manufacturers whose Base NPM Adjustment is not equal to 0 (zero) pro rata in proportion to their respective Base NPM Adjustments.

(ii) If the Available NPM Adjustment the Original Participating Manufacturers are entitled to in any year exceeds the sum of the Base NPM Adjustments of all Original Participating Manufacturers in such year, then (x) the difference between such Available NPM Adjustment and such sum of the Base NPM Adjustments shall be allocated among the Original Participating Manufacturers pro rata in proportion to their Relative Market Shares (the applicable Relative Market Shares to be those in the year immediately preceding such year), and (y) each Original Participating Manufacturer's share of such Available NPM Adjustment shall equal the sum of *(1)* its Base NPM Adjustment for such year, and *(2)* the amount allocated to such Original Participating Manufacturer pursuant to clause (x).

(iii) If an Original Participating Manufacturer's share of the Available NPM Adjustment calculated pursuant to subsection IX(d)(3)(B)(i) or IX(d)(3)(B)(ii) exceeds such Original Participating Manufacturer's payment amount to which such NPM Adjustment applies (as such payment amount has been determined pursuant to step B of clause "Seventh" of subsection IX(j)), then *(1)* such Original Participating Manufacturer's share of the Available NPM Adjustment shall equal such payment amount, and *(2)* such excess shall be reallocated among the other Original Participating Manufacturers pro rata in proportion to their Relative Market Shares.

(C) Adjustments:

(i) For calculations made pursuant to this subsection IX(d)(3) (if any) with respect to payments due in the year 2000, the number used in subsection IX(d)(3)(A)(ii)(z) shall be $20 and the number used in subsection IX(d)(3)(A)(iii) shall be $300 million. Each year thereafter, both these numbers shall be adjusted upward or downward by multiplying each of them by the quotient produced by dividing (x) the average revenue per Cigarette of all the Original Participating Manufacturers in the year immediately preceding such year, by (y) the average revenue per Cigarette of all the Original Participating Manufacturers in the year immediately preceding such immediately preceding year.

(ii) For purposes of this subsection, the average revenue per Cigarette of all the Original Participating Manufacturers in any year shall equal (x) the aggregate revenues of all the Original Participating Manufacturers from sales of Cigarettes in the fifty United States, the District of Columbia and Puerto Rico after Federal excise taxes and after payments pursuant to this Agreement and the tobacco litigation Settlement Agreements with the States of Florida, Mississippi, Minnesota and Texas (as such revenues are reported to the United States Securities and Exchange Commission ("SEC") for such year (either independently by the Original Participating Manufacturer or as part of consolidated financial statements reported to the SEC by an Affiliate of the Original Participating Manufacturers) or, in the case of an Original Participating Manufacturer that does not report income to the SEC, as reported in financial statements prepared in accordance with United States generally accepted accounting principles and audited by a nationally recognized accounting firm), divided by (y) the aggregate number of the individual Cigarettes shipped in or to the United States, the District of Columbia and Puerto Rico by all the Original Participating Manufacturers in such year (determined in accordance with subsection II(mm)).

(D) In the event that in the year immediately preceding the year in which the NPM Adjustment in question is applied both (x) the Relative

Market Share of Lorillard Tobacco Company (or of its successor) ("Lorillard") was less than or equal to 20.0000000%, and (y) the number of individual Cigarettes shipped in or to the United States, the District of Columbia and Puerto Rico by Lorillard (determined in accordance with subsection II(mm)) (for purposes of this subsection (D), "Volume") was less than or equal to 70 billion, Lorillard's and Philip Morris Incorporated's (or its successor's) ("Philip Morris") shares of the Available NPM Adjustment calculated pursuant to subsections (3)(A)-(C) above shall be further reallocated between Lorillard and Philip Morris as follows (this subsection (3)(D) shall not apply in the year in which either of the two conditions specified in this sentence is not satisfied):

(i) Notwithstanding subsections (A)-(C) of this subsection (d)(3), but subject to further adjustment pursuant to subsections (D)(ii) and (D)(iii) below, Lorillard's share of the Available NPM Adjustment shall equal its Relative Market Share of such Available NPM Adjustment (the applicable Relative Market Share to be that in the year immediately preceding the year in which such NPM Adjustment is applied). The dollar amount of the difference between the share of the Available NPM Adjustment Lorillard is entitled to pursuant to the preceding sentence and the share of the Available NPM Adjustment it would be entitled to in the same year pursuant to subsections (d)(3)(A)-(C) shall be reallocated to Philip Morris and used to decrease or increase, as the case may be,

Philip Morris's share of the Available NPM Adjustment in such year calculated pursuant to subsections (d)(3)(A)-(C).

(ii) In the event that in the year immediately preceding the year in which the NPM Adjustment in question is applied either (x) Lorillard's Relative Market Share was greater than 15.0000000% (but did not exceed 20.0000000%), or (y) Lorillard's Volume was greater than 50 billion (but did not exceed 70 billion), or both, Lorillard's share of the Available NPM Adjustment calculated pursuant to subsection (d)(3)(D)(i) shall be reduced by a percentage equal to the greater of (*1*) 10.0000000% for each percentage point (or fraction thereof) of excess of such Relative Market Share over 15.0000000% (if any), or (*2*) 2.5000000% for each billion (or fraction thereof) of excess of such Volume over 50 billion (if any). The dollar amount by which Lorillard's share of the Available NPM Adjustment is reduced in any year pursuant to this subsection (D)(ii) shall be reallocated to Philip Morris and used to increase Philip Morris's share of the Available NPM Adjustment in such year.

(iii) In the event that in any year a reallocation of the shares of the Available NPM Adjustment between Lorillard and Philip Morris pursuant to this subsection (d)(3)(D) results in Philip Morris's share of the Available NPM Adjustment in such year exceeding the greater of (x) Philip Morris's Relative Market Share

of such Available NPM Adjustment (the applicable Relative Market Share to be that in the year immediately preceding such year), or (y) Philip Morris's share of the Available NPM Adjustment in such year calculated pursuant to subsections (d)(3)(A)-(C), Philip Morris's share of the Available NPM Adjustment in such year shall be reduced to equal the greater of (x) or (y) above. In such instance, the dollar amount by which Philip Morris's share of the Available NPM Adjustment is reduced pursuant to the preceding sentence shall be reallocated to Lorillard and used to increase Lorillard's share of the Available NPM Adjustment in such year.

(iv) In the event that either Philip Morris or Lorillard is treated as a Non-Participating Manufacturer for purposes of this subsection IX(d)(3) pursuant to subsection XVIII(w)(2)(A), this subsection (3)(D) shall not be applied, and the Original Participating Manufacturers' shares of the Available NPM Adjustment shall be determined solely as described in subsections (3)(A)-(C).

(4) NPM Adjustment for Subsequent Participating Manufacturers. Subject to the provisions of subsection IX(i)(3), a Subsequent Participating Manufacturer shall be entitled to an NPM Adjustment with respect to payments due from such Subsequent Participating Manufacturer in any year during which an NPM Adjustment is applicable under subsection (d)(1) above to payments due

from the Original Participating Manufacturers. The amount of such NPM Adjustment shall equal the product of (A) the NPM Adjustment Percentage for such year multiplied by (B) the sum of the payments due in the year in question from such Subsequent Participating Manufacturer that correspond to payments due from Original Participating Manufacturers pursuant to subsection IX(c) (as such payment amounts due from such Subsequent Participating Manufacturer have been adjusted and allocated pursuant to clauses "First" through "Fifth" of subsection IX(j)). The NPM Adjustment to payments by each Subsequent Participating Manufacturer shall be allocated and reallocated among the Settling States in a manner consistent with subsection (d)(2) above.

(e) Supplemental Payments. Beginning on April 15, 2004, and on April 15 of each year thereafter in perpetuity, in the event that the sum of the Market Shares of the Participating Manufacturers that were Participating Manufacturers during the entire calendar year immediately preceding the year in which the payment in question would be due (the applicable Market Share to be that for the calendar year immediately preceding the year in which the payment in question would be due) equals or exceeds 99.0500000%, each Original Participating Manufacturer shall severally pay to the Escrow Agent (to be credited to the Subsection IX(e) Account) for the benefit of the Foundation its Relative Market Share of the base amount of $300,000,000, as such payments are modified in accordance with this subsection (e). Such payments shall be utilized by the Foundation to fund the national public education functions of the Foundation described in subsection VI(f)(1), in the manner described in and subject to the provisions of subsections VI(g) and VI(h). The payments made by the Original Participating

Manufacturers pursuant to this subsection shall be subject to the Inflation Adjustment, the Volume Adjustment, the Non-Settling States Reduction, and the offset for miscalculated or disputed payments described in subsection XI(i).

(f) Payment Responsibility. The payment obligations of each Participating Manufacturer pursuant to this Agreement shall be the several responsibility only of that Participating Manufacturer. The payment obligations of a Participating Manufacturer shall not be the obligation or responsibility of any Affiliate of such Participating Manufacturer. The payment obligations of a Participating Manufacturer shall not be the obligation or responsibility of any other Participating Manufacturer. Provided, however, that no provision of this Agreement shall waive or excuse liability under any state or federal fraudulent conveyance or fraudulent transfer law. Any Participating Manufacturer whose Market Share (or Relative Market Share) in any given year equals zero shall have no payment obligations under this Agreement in the succeeding year.

(g) Corporate Structures. Due to the particular corporate structures of R.J. Reynolds Tobacco Company ("Reynolds") and Brown & Williamson Tobacco Corporation ("B&W") with respect to their non-domestic tobacco operations, Reynolds and B&W shall be severally liable for their respective shares of each payment due pursuant to this Agreement up to (and their liability hereunder shall not exceed) the full extent of their assets used in and earnings derived from, the manufacture and/or sale in the States of Tobacco Products intended for domestic consumption, and no recourse shall be had against any of their other assets or earnings to satisfy such obligations.

(h) Accrual of Interest. Except as expressly provided otherwise in this Agreement, any payment due hereunder and not paid when due (or payments requiring

the accrual of interest under subsection XI(d)) shall accrue interest from and including the date such payment is due until (but not including) the date paid at the Prime Rate plus three percentage points.

(i) Payments by Subsequent Participating Manufacturers.

(1) A Subsequent Participating Manufacturer shall have payment obligations under this Agreement only in the event that its Market Share in any calendar year exceeds the greater of *(1)* its 1998 Market Share or *(2)* 125 percent of its 1997 Market Share (subject to the provisions of subsection (i)(4)). In the year following any such calendar year, such Subsequent Participating Manufacturer shall make payments corresponding to those due in that same following year from the Original Participating Manufacturers pursuant to subsections VI(c) (except for the payment due on March 31, 1999), IX(c)(1), IX(c)(2) and IX(e). The amounts of such corresponding payments by a Subsequent Participating Manufacturer are in addition to the corresponding payments that are due from the Original Participating Manufacturers and shall be determined as described in subsections (2) and (3) below. Such payments by a Subsequent Participating Manufacturer shall (A) be due on the same dates as the corresponding payments are due from Original Participating Manufacturers; (B) be for the same purpose as such corresponding payments; and (C) be paid, allocated and distributed in the same manner as such corresponding payments.

(2) The base amount due from a Subsequent Participating Manufacturer on any given date shall be determined by multiplying (A) the corresponding base amount due on the same date from all of the Original Participating Manufacturers

(as such base amount is specified in the corresponding subsection of this Agreement and is adjusted by the Volume Adjustment (except for the provisions of subsection (B)(ii) of Exhibit E), but before such base amount is modified by any other adjustments, reductions or offsets) by (B) the quotient produced by dividing (i) the result of (x) such Subsequent Participating Manufacturer's applicable Market Share (the applicable Market Share being that for the calendar year immediately preceding the year in which the payment in question is due) minus (y) the greater of *(1)* its 1998 Market Share or *(2)* 125 percent of its 1997 Market Share, by (ii) the aggregate Market Shares of the Original Participating Manufacturers (the applicable Market Shares being those for the calendar year immediately preceding the year in which the payment in question is due).

(3) Any payment due from a Subsequent Participating Manufacturer under subsections (1) and (2) above shall be subject (up to the full amount of such payment) to the Inflation Adjustment, the Non-Settling States Reduction, the NPM Adjustment, the offset for miscalculated or disputed payments described in subsection XI(i), the Federal Tobacco Legislation Offset, the Litigating Releasing Parties Offset and the offsets for claims over described in subsections XII(a)(4)(B) and XII(a)(8), to the extent that such adjustments, reductions or offsets would apply to the corresponding payment due from the Original Participating Manufacturers. Provided, however, that all adjustments and offsets to which a Subsequent Participating Manufacturer is entitled may only be applied against payments by such Subsequent Participating Manufacturer, if any, that are due within 12 months after the date on which the Subsequent Participating

Manufacturer becomes entitled to such adjustment or makes the payment that entitles it to such offset, and shall not be carried forward beyond that time even if not fully used.

(4) For purposes of this subsection (i), the 1997 (or 1998, as applicable) Market Share (and 125 percent thereof) of those Subsequent Participating Manufacturers that either (A) became a signatory to this Agreement more than 60[1] days after the MSA Execution Date or (B) had no Market Share in 1997 (or 1998, as applicable), shall equal zero.

(j) Order of Application of Allocations, Offsets, Reductions and Adjustments. The payments due under this Agreement shall be calculated as set forth below. The "base amount" referred to in clause "First" below shall mean (1) in the case of payments due from Original Participating Manufacturers, the base amount referred to in the subsection establishing the payment obligation in question; and (2) in the case of payments due from a Subsequent Participating Manufacturer, the base amount referred to in subsection (i)(2) for such Subsequent Participating Manufacturer. In the event that a particular adjustment, reduction or offset referred to in a clause below does not apply to the payment being calculated, the result of the clause in question shall be deemed to be equal to the result of the immediately preceding clause. (If clause "First" is inapplicable, the result of clause "First" will be the base amount of the payment in question prior to any offsets, reductions or adjustments.)

First: the Inflation Adjustment shall be applied to the base amount of the payment being calculated;

1. Replace "60" with "90" pursuant to Amendment 1

Second: the Volume Adjustment (other than the provisions of subsection (B)(iii) of Exhibit E) shall be applied to the result of clause "First";

Third: the result of clause "Second" shall be reduced by the Previously Settled States Reduction;

Fourth: the result of clause "Third" shall be reduced by the Non-Settling States Reduction;

Fifth: in the case of payments due under subsections IX(c)(1) and IX(c)(2), the results of clause "Fourth" for each such payment due in the calendar year in question shall be apportioned among the Settling States pro rata in proportion to their respective Allocable Shares, and the resulting amounts for each particular Settling State shall then be added together to form such Settling State's Allocated Payment. In the case of payments due under subsection IX(i) that correspond to payments due under subsections IX(c)(1) or IX(c)(2), the results of clause "Fourth" for all such payments due from a particular Subsequent Participating Manufacturer in the calendar year in question shall be apportioned among the Settling States pro rata in proportion to their respective Allocable Shares, and the resulting amounts for each particular Settling State shall then be added together. (In the case of all other payments made pursuant to this Agreement, this clause "Fifth" is inapplicable.);

Sixth: the NPM Adjustment shall be applied to the results of clause "Fifth" pursuant to subsections IX(d)(1) and (d)(2) (or, in the case of payments due from the Subsequent Participating Manufacturers, pursuant to subsection IX(d)(4));

Seventh: in the case of payments due from the Original Participating Manufacturers to which clause "Fifth" (and therefore clause "Sixth") does not apply, the

result of clause "Fourth" shall be allocated among the Original Participating Manufacturers according to their Relative Market Shares. In the case of payments due from the Original Participating Manufacturers to which clause "Fifth" applies: (A) the Allocated Payments of all Settling States determined pursuant to clause "Fifth" (prior to reduction pursuant to clause "Sixth") shall be added together; (B) the resulting sum shall be allocated among the Original Participating Manufacturers according to their Relative Market Shares and subsection (B)(iii) of Exhibit E hereto (if such subsection is applicable); (C) the Available NPM Adjustment (as determined pursuant to clause "Sixth") shall be allocated among the Original Participating Manufacturers pursuant to subsection IX(d)(3); (D) the respective result of step (C) above for each Original Participating Manufacturer shall be subtracted from the respective result of step (B) above for such Original Participating Manufacturer; and (E) the resulting payment amount due from each Original Participating Manufacturer shall then be allocated among the Settling States in proportion to the respective results of clause "Sixth" for each Settling State. The offsets described in clauses "Eighth" through "Twelfth" shall then be applied separately against each Original Participating Manufacturer's resulting payment shares (on a Settling State by Settling State basis) according to each Original Participating Manufacturer's separate entitlement to such offsets, if any, in the calendar year in question. (In the case of payments due from Subsequent Participating Manufacturers, this clause "Seventh" is inapplicable.)

Eighth: the offset for miscalculated or disputed payments described in subsection XI(i) (and any carry-forwards arising from such offset) shall be applied to the results of clause "Seventh" (in the case of payments due from the Original Participating

Manufacturers) or to the results of clause "Sixth" (in the case of payments due from Subsequent Participating Manufacturers);

Ninth: the Federal Tobacco Legislation Offset (including any carry-forwards arising from such offset) shall be applied to the results of clause "Eighth";

Tenth: the Litigating Releasing Parties Offset (including any carry-forwards arising from such offset) shall be applied to the results of clause "Ninth";

Eleventh: the offset for claims over pursuant to subsection XII(a)(4)(B) (including any carry-forwards arising from such offset) shall be applied to the results of clause "Tenth";

Twelfth: the offset for claims over pursuant to subsection XII(a)(8) (including any carry-forwards arising from such offset) shall be applied to the results of clause "Eleventh"; and

Thirteenth: in the case of payments to which clause "Fifth" applies, the Settling States' allocated shares of the payments due from each Participating Manufacturer (as such shares have been determined in step (E) of clause "Seventh" in the case of payments from the Original Participating Manufacturers or in clause "Sixth" in the case of payments from the Subsequent Participating Manufacturers, and have been reduced by clauses "Eighth" through "Twelfth") shall be added together to state the aggregate payment obligation of each Participating Manufacturer with respect to the payments in question. (In the case of a payment to which clause "Fifth" does not apply, the aggregate payment obligation of each Participating Manufacturer with respect to the payment in question shall be stated by the results of clause "Eighth.")

X. EFFECT OF FEDERAL TOBACCO-RELATED LEGISLATION

(a) If federal tobacco-related legislation is enacted after the MSA Execution Date and on or before November 30, 2002, and if such legislation provides for payment(s) by any Original Participating Manufacturer (whether by settlement payment, tax or any other means), all or part of which are actually made available to a Settling State ("Federal Funds"), each Original Participating Manufacturer shall receive a continuing dollar-for-dollar offset for any and all amounts that are paid by such Original Participating Manufacturer pursuant to such legislation and actually made available to such Settling State (except as described in subsections (b) and (c) below). Such offset shall be applied against the applicable Original Participating Manufacturer's share (determined as described in step E of clause "Seventh" of subsection IX(j)) of such Settling State's Allocated Payment, up to the full amount of such Original Participating Manufacturer's share of such Allocated Payment (as such share had been reduced by adjustment, if any, pursuant to the NPM Adjustment and has been reduced by offset, if any, pursuant to the offset for miscalculated or disputed payments). Such offset shall be made against such Original Participating Manufacturer's share of the first Allocated Payment due after such Federal Funds are first available for receipt by such Settling State. In the event that such offset would in any given year exceed such Original Participating Manufacturer's share of such Allocated Payment: (1) the offset to which such Original Participating Manufacturer is entitled under this section in such year shall be the full amount of such Original Participating Manufacturer's share of such Allocated Payment, and (2) all amounts not offset by reason of subsection (1) shall carry forward and be offset in the following year(s) until all such amounts have been offset.

(b) The offset described in subsection (a) shall apply only to that portion of Federal Funds, if any, that are either unrestricted as to their use, or restricted to any form of health care or to any use related to tobacco (including, but not limited to, tobacco education, cessation, control or enforcement) (other than that portion of Federal Funds, if any, that is specifically applicable to tobacco growers or communities dependent on the production of tobacco or Tobacco Products). Provided, however, that the offset described in subsection (a) shall not apply to that portion of Federal Funds, if any, whose receipt by such Settling State is conditioned upon or appropriately allocable to:

(1) the relinquishment of rights or benefits under this Agreement (including the Consent Decree); or

(2) actions or expenditures by such Settling State, unless:

(A) such Settling State chooses to undertake such action or expenditure;

(B) such actions or expenditures do not impose significant constraints on public policy choices; or

(C) such actions or expenditures are both: (i) related to health care or tobacco (including, but not limited to, tobacco education, cessation, control or enforcement) and (ii) do not require such Settling State to expend state matching funds in an amount that is significant in relation to the amount of the Federal Funds made available to such Settling State.

(c) Subject to the provisions of subsection IX(i)(3), Subsequent Participating Manufacturers shall be entitled to the offset described in this section X to the extent that

they are required to pay Federal Funds that would give rise to an offset under subsections (a) and (b) if paid by an Original Participating Manufacturer.

(d) Nothing in this section X shall (1) reduce the payments to be made to the Settling States under this Agreement other than those described in subsection IX(c) (or corresponding payments under subsection IX(i)) of this Agreement; or (2) alter the Allocable Share used to determine each Settling State's share of the payments described in subsection IX(c) (or corresponding payments under subsection IX(i)) of this Agreement. Nothing in this section X is intended to or shall reduce the total amounts payable by the Participating Manufacturers to the Settling States under this Agreement by an amount greater than the amount of Federal Funds that the Settling States could elect to receive.

XI. CALCULATION AND DISBURSEMENT OF PAYMENTS

(a) Independent Auditor to Make All Calculations.

(1) Beginning with payments due in the year 2000, an Independent Auditor shall calculate and determine the amount of all payments owed pursuant to this Agreement, the adjustments, reductions and offsets thereto (and all resulting carry-forwards, if any), the allocation of such payments, adjustments, reductions, offsets and carry-forwards among the Participating Manufacturers and among the Settling States, and shall perform all other calculations in connection with the foregoing (including, but not limited to, determining Market Share, Relative Market Share, Base Aggregate Participating Manufacturer Market Share and Actual Aggregate Participating Manufacturer Market Share). The Independent Auditor shall promptly collect all information necessary to make

such calculations and determinations. Each Participating Manufacturer and each Settling State shall provide the Independent Auditor, as promptly as practicable, with information in its possession or readily available to it necessary for the Independent Auditor to perform such calculations. The Independent Auditor shall agree to maintain the confidentiality of all such information, except that the Independent Auditor may provide such information to Participating Manufacturers and the Settling States as set forth in this Agreement. The Participating Manufacturers and the Settling States agree to maintain the confidentiality of such information.

(2) Payments due from the Original Participating Manufacturers prior to January 1, 2000 (other than the first payment due pursuant to subsection IX(b)) shall be based on the 1998 Relative Market Shares of the Original Participating Manufacturers or, if the Original Participating Manufacturers are unable to agree on such Relative Market Shares, on their 1997 Relative Market Shares specified in Exhibit Q.

(b) Identity of Independent Auditor. The Independent Auditor shall be a major, nationally recognized, certified public accounting firm jointly selected by agreement of the Original Participating Manufacturers and those Attorneys General of the Settling States who are members of the NAAG executive committee, who shall jointly retain the power to replace the Independent Auditor and appoint its successor. Fifty percent of the costs and fees of the Independent Auditor (but in no event more than $500,000 per annum), shall be paid by the Fund described in Exhibit J hereto, and the balance of such costs and fees shall be paid by the Original Participating Manufacturers, allocated among

them according to their Relative Market Shares. The agreement retaining the Independent Auditor shall provide that the Independent Auditor shall perform the functions specified for it in this Agreement, and that it shall do so in the manner specified in this Agreement.

(c) Resolution of Disputes. Any dispute, controversy or claim arising out of or relating to calculations performed by, or any determinations made by, the Independent Auditor (including, without limitation, any dispute concerning the operation or application of any of the adjustments, reductions, offsets, carry-forwards and allocations described in subsection IX(j) or subsection XI(i)) shall be submitted to binding arbitration before a panel of three neutral arbitrators, each of whom shall be a former Article III federal judge. Each of the two sides to the dispute shall select one arbitrator. The two arbitrators so selected shall select the third arbitrator. The arbitration shall be governed by the United States Federal Arbitration Act.

(d) General Provisions as to Calculation of Payments.

(1) Not less than 90 days prior to the scheduled due date of any payment due pursuant to this Agreement ("Payment Due Date"), the Independent Auditor shall deliver to each other Notice Party a detailed itemization of all information required by the Independent Auditor to complete its calculation of (A) the amount due from each Participating Manufacturer with respect to such payment, and (B) the portion of such amount allocable to each entity for whose benefit such payment is to be made. To the extent practicable, the Independent Auditor shall specify in such itemization which Notice Party is requested to produce which information. Each Participating Manufacturer and each Settling State shall use its

best efforts to promptly supply all of the required information that is within its possession or is readily available to it to the Independent Auditor, and in any event not less than 50 days prior to such Payment Due Date. Such best efforts obligation shall be continuing in the case of information that comes within the possession of, or becomes readily available to, any Settling State or Participating Manufacturer after the date 50 days prior to such Payment Due Date.

(2) Not less than 40 days prior to the Payment Due Date, the Independent Auditor shall deliver to each other Notice Party (A) detailed preliminary calculations ("Preliminary Calculations") of the amount due from each Participating Manufacturer and of the amount allocable to each entity for whose benefit such payment is to be made, showing all applicable offsets, adjustments, reductions and carry-forwards and setting forth all the information on which the Independent Auditor relied in preparing such Preliminary Calculations, and (B) a statement of any information still required by the Independent Auditor to complete its calculations.

(3) Not less than 30 days prior to the Payment Due Date, any Participating Manufacturer or any Settling State that disputes any aspect of the Preliminary Calculations (including, but not limited to, disputing the methodology that the Independent Auditor employed, or the information on which the Independent Auditor relied, in preparing such calculations) shall notify each other Notice Party of such dispute, including the reasons and basis therefor.

(4) Not less than 15 days prior to the Payment Due Date, the Independent Auditor shall deliver to each other Notice Party a detailed recalculation (a "Final

Calculation") of the amount due from each Participating Manufacturer, the amount allocable to each entity for whose benefit such payment is to be made, and the Account to which such payment is to be credited, explaining any changes from the Preliminary Calculation. The Final Calculation may include estimates of amounts in the circumstances described in subsection (d)(5).

(5) The following provisions shall govern in the event that the information required by the Independent Auditor to complete its calculations is not in its possession by the date as of which the Independent Auditor is required to provide either a Preliminary Calculation or a Final Calculation.

(A) If the information in question is not readily available to any Settling State, any Original Participating Manufacturer or any Subsequent Participating Manufacturer, the Independent Auditor shall employ an assumption as to the missing information producing the minimum amount that is likely to be due with respect to the payment in question, and shall set forth its assumption as to the missing information in its Preliminary Calculation or Final Calculation, whichever is at issue. Any Original Participating Manufacturer, Subsequent Participating Manufacturer or Settling State may dispute any such assumption employed by the Independent Auditor in its Preliminary Calculation in the manner prescribed in subsection (d)(3) or any such assumption employed by the Independent Auditor in its Final Calculation in the manner prescribed in subsection (d)(6). If the missing information becomes available to the Independent Auditor prior to the Payment Due Date, the Independent

Auditor shall promptly revise its Preliminary Calculation or Final Calculation (whichever is applicable) and shall promptly provide the revised calculation to each Notice Party, showing the newly available information. If the missing information does not become available to the Independent Auditor prior to the Payment Due Date, the minimum amount calculated by the Independent Auditor pursuant to this subsection (A) shall be paid on the Payment Due Date, subject to disputes pursuant to subsections (d)(6) and (d)(8) and without prejudice to a later final determination of the correct amount. If the missing information becomes available to the Independent Auditor after the Payment Due Date, the Independent Auditor shall calculate the correct amount of the payment in question and shall apply any overpayment or underpayment as an offset or additional payment in the manner described in subsection (i).

(B) If the information in question is readily available to a Settling State, Original Participating Manufacturer or Subsequent Participating Manufacturer, but such Settling State, Original Participating Manufacturer or Subsequent Participating Manufacturer does not supply such information to the Independent Auditor, the Independent Auditor shall base the calculation in question on its best estimate of such information, and shall show such estimate in its Preliminary Calculation or Final Calculation, whichever is applicable. Any Original Participating Manufacturer, Subsequent Participating Manufacturer or Settling State (except the entity that withheld the information) may dispute such estimate

employed by the Independent Auditor in its Preliminary Calculation in the manner prescribed in subsection (d)(3) or such estimate employed by the Independent Auditor in its Final Calculation in the manner prescribed in subsection (d)(6). If the withheld information is not made available to the Independent Auditor more than 30 days prior to the Payment Due Date, the estimate employed by the Independent Auditor (as revised by the Independent Auditor in light of any dispute filed pursuant to the preceding sentence) shall govern the amounts to be paid on the Payment Due Date, subject to disputes pursuant to subsection (d)(6) and without prejudice to a later final determination of the correct amount. In the event that the withheld information subsequently becomes available, the Independent Auditor shall calculate the correct amount and shall apply any overpayment or underpayment as an offset or additional payment in the manner described in subsection (i).

(6) Not less than five days prior to the Payment Due Date, each Participating Manufacturer and each Settling State shall deliver to each Notice Party a statement indicating whether it disputes the Independent Auditor's Final Calculation and, if so, the disputed and undisputed amounts and the basis for the dispute. Except to the extent a Participating Manufacturer or a Settling State delivers a statement indicating the existence of a dispute by such date, the amounts set forth in the Independent Auditor's Final Calculation shall be paid on the Payment Due Date. Provided, however, that (A) in the event that the Independent Auditor revises its Final Calculation within five days of the Payment

Due Date as provided in subsection (5)(A) due to receipt of previously missing information, a Participating Manufacturer or Settling State may dispute such revision pursuant to the procedure set forth in this subsection (6) at any time prior to the Payment Due Date; and (B) prior to the date four years after the Payment Due Date, neither failure to dispute a calculation made by the Independent Auditor nor actual agreement with any calculation or payment to the Escrow Agent or to another payee shall waive any Participating Manufacturer's or Settling State's rights to dispute any payment (or the Independent Auditor's calculations with respect to any payment) after the Payment Due Date. No Participating Manufacturer and no Settling State shall have a right to raise any dispute with respect to any payment or calculation after the date four years after such payment's Payment Due Date.

(7) Each Participating Manufacturer shall be obligated to pay by the Payment Due Date the undisputed portion of the total amount calculated as due from it by the Independent Auditor's Final Calculation. Failure to pay such portion shall render the Participating Manufacturer liable for interest thereon as provided in subsection IX(h) of this Agreement, in addition to any other remedy available under this Agreement.

(8) As to any disputed portion of the total amount calculated to be due pursuant to the Final Calculation, any Participating Manufacturer that by the Payment Due Date pays such disputed portion into the Disputed Payments Account (as defined in the Escrow Agreement) shall not be liable for interest thereon even if the amount disputed was in fact properly due and owing. Any

Participating Manufacturer that by the Payment Due Date does not pay such disputed portion into the Disputed Payments Account shall be liable for interest as provided in subsection IX(h) if the amount disputed was in fact properly due and owing.

(9) On the same date that it makes any payment pursuant to this Agreement, each Participating Manufacturer shall deliver a notice to each other Notice Party showing the amount of such payment and the Account to which such payment is to be credited.

(10) On the first Business Day after the Payment Due Date, the Escrow Agent shall deliver to each other Notice Party a statement showing the amounts received by it from each Participating Manufacturer and the Accounts credited with such amounts.

(e) General Treatment of Payments. The Escrow Agent may disburse amounts from an Account only if permitted, and only at such time as permitted, by this Agreement and the Escrow Agreement. No amounts may be disbursed to a Settling State other than funds credited to such Settling State's State-Specific Account (as defined in the Escrow Agreement). The Independent Auditor, in delivering payment instructions to the Escrow Agent, shall specify: the amount to be paid; the Account or Accounts from which such payment is to be disbursed; the payee of such payment (which may be an Account); and the Business Day on which such payment is to be made by the Escrow Agent. Except as expressly provided in subsection (f) below, in no event may any amount be disbursed from any Account prior to Final Approval.

(f) Disbursements and Charges Not Contingent on Final Approval. Funds may be disbursed from Accounts without regard to the occurrence of Final Approval in the following circumstances and in the following manner:

(1) Payments of Federal and State Taxes. Federal, state, local or other taxes imposed with respect to the amounts credited to the Accounts shall be paid from such amounts. The Independent Auditor shall prepare and file any tax returns required to be filed with respect to the escrow. All taxes required to be paid shall be allocated to and charged against the Accounts on a reasonable basis to be determined by the Independent Auditor. Upon receipt of written instructions from the Independent Auditor, the Escrow Agent shall pay such taxes and charge such payments against the Account or Accounts specified in those instructions.

(2) Payments to and from Disputed Payments Account. The Independent Auditor shall instruct the Escrow Agent to credit funds from an Account to the Disputed Payments Account when a dispute arises as to such funds, and shall instruct the Escrow Agent to credit funds from the Disputed Payments Account to the appropriate payee when such dispute is resolved with finality. The Independent Auditor shall provide the Notice Parties not less than 10 Business Days prior notice before instructing the Escrow Agent to disburse funds from the Disputed Payments Account.

(3) Payments to a State-Specific Account. Promptly following the occurrence of State-Specific Finality in any Settling State, such Settling State and the Original Participating Manufacturers shall notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each

Notice Party of such State-Specific Finality and of the portions of the amounts in the Subsection IX(b) Account (First), Subsection IX(b) Account (Subsequent), Subsection IX(c)(1) Account and Subsection IX(c)(2) Account, respectively (as such Accounts are defined in the Escrow Agreement), that are at such time held in such Accounts for the benefit of such Settling State, and which are to be transferred to the appropriate State-Specific Account for such Settling State. If neither the Settling State in question nor any Participating Manufacturer disputes such amounts or the occurrence of such State-Specific Finality by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct the Escrow Agent to make such transfer. If the Settling State in question or any Participating Manufacturer disputes such amounts or the occurrence of such State-Specific Finality by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (f)(3), the Independent Auditor shall promptly instruct the Escrow Agent to credit the amount disputed to the Disputed Payments Account and the undisputed portion to the appropriate State-Specific Account. No amounts may be transferred or credited to a State-Specific Account for the benefit of any State as to which State-Specific Finality has not occurred or as to which this Agreement has terminated.

(4) Payments to Parties other than Particular Settling States.

(A) Promptly following the occurrence of State-Specific Finality in one Settling State, such Settling State and the Original Participating Manufacturers shall notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of the occurrence of State-Specific Finality in at least one Settling State and of the amounts held in the Subsection VI(b) Account, Subsection VI(c) Account (First), and Subsection VIII(c) Account (as such Accounts are defined in the Escrow Agreement), if any. If neither any of the Settling States nor any of the Participating Manufacturers disputes such amounts or disputes the occurrence of State-Specific Finality in one Settling State, by notice delivered to each Notice Party not later than ten Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct the Escrow Agent to disburse the funds held in such Accounts to the Foundation or to the Fund specified in subsection VIII(c), as appropriate. If any Settling State or Participating Manufacturer disputes such amounts or the occurrence of such State-Specific Finality by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (4)(A), the Independent Auditor shall promptly instruct the Escrow Agent to credit the amounts disputed to the Disputed

Payments Account and to disburse the undisputed portion to the Foundation or to the Fund specified in subsection VIII(c), as appropriate.

(B) The Independent Auditor shall instruct the Escrow Agent to disburse funds on deposit in the Subsection VIII(b) Account and Subsection IX(e) Account (as such Accounts are defined in the Escrow Agreement) to NAAG or to the Foundation, as appropriate, within 10 Business Days after the date on which such amounts were credited to such Accounts.

(C) Promptly following the occurrence of State-Specific Finality in Settling States having aggregate Allocable Shares equal to at least 80% of the total aggregate Allocable Shares assigned to all States that were Settling States as of the MSA Execution Date, the Settling States and the Original Participating Manufacturers shall notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of the occurrence of such State-Specific Finality and of the amounts held in the Subsection VI(c) Account (Subsequent) (as such Account is defined in the Escrow Agreement), if any. If neither any of the Settling States nor any of the Participating Manufacturers disputes such amounts or disputes the occurrence of such State-Specific Finality, by notice delivered to each Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct the Escrow Agent to disburse the funds held in such Account to the

Foundation. If any Settling State or Participating Manufacturer disputes such amounts or the occurrence of such State-Specific Finality by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (4)(C), the Independent Auditor shall promptly instruct the Escrow Agent to credit the amounts disputed to the Disputed Payments Account and to disburse the undisputed portion to the Foundation.

(5) Treatment of Payments Following Termination.

(A) As to amounts held for Settling States. Promptly upon the termination of this Agreement with respect to any Settling State (whether or not as part of the termination of this Agreement as to all Settling States) such State or any Participating Manufacturer shall notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of such termination and of the amounts held in the Subsection IX(b) Account (First), the Subsection IX(b) Account (Subsequent), the Subsection IX(c)(1) Account, the Subsection IX(c)(2) Account, and the State-Specific Account for the benefit of such Settling State. If neither the State in question nor any Participating Manufacturer disputes such amounts or the occurrence of such termination by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct

the Escrow Agent to transfer such amounts to the Participating Manufacturers (on the basis of their respective contributions of such funds). If the State in question or any Participating Manufacturer disputes the amounts held in the Accounts or the occurrence of such termination by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (5)(A), the Independent Auditor shall promptly instruct the Escrow Agent to transfer the amount disputed to the Disputed Payments Account and the undisputed portion to the Participating Manufacturers (on the basis of their respective contributions of such funds).

(B) As to amounts held for others. If this Agreement is terminated with respect to all of the Settling States, the Original Participating Manufacturers shall promptly notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of such termination and of the amounts held in the Subsection VI(b) Account, the Subsection VI(c) Account (First), the Subsection VIII(b) Account, the Subsection VIII(c) Account and the Subsection IX(e) Account. If neither any such State nor any Participating Manufacturer disputes such amounts or the occurrence of such termination by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct

the Escrow Agent to transfer such amounts to the Participating Manufacturers (on the basis of their respective contributions of such funds). If any such State or any Participating Manufacturer disputes the amounts held in the Accounts or the occurrence of such termination by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (5)(B), the Independent Auditor shall promptly instruct the Escrow Agent to credit the amount disputed to the Disputed Payments Account and transfer the undisputed portion to the Participating Manufacturers (on the basis of their respective contribution of such funds).

(C) As to amounts held in the Subsection VI(c) Account (Subsequent). If this Agreement is terminated with respect to Settling States having aggregate Allocable Shares equal to more than 20% of the total aggregate Allocable Shares assigned to those States that were Settling States as of the MSA Execution Date, the Original Participating Manufacturers shall promptly notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of such termination and of the amounts held in the Subsection VI(c) Account (Subsequent) (as defined in the Escrow Agreement). If neither any such State with respect to which this Agreement has terminated nor any Participating Manufacturer disputes such amounts or the occurrence of such termination by notice delivered to

each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the preceding sentence, the Independent Auditor shall promptly instruct the Escrow Agent to transfer such amounts to the Participating Manufacturers (on the basis of their respective contributions of such funds). If any such State or any Participating Manufacturer disputes the amounts held in the Account or the occurrence of such termination by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of the notice described in the second sentence of this subsection (5)(C), the Independent Auditor shall promptly instruct the Escrow Agent to credit the amount disputed to the Disputed Payments Account and transfer the undisputed portion to the Participating Manufacturers (on the basis of their respective contribution of such funds).

(6) Determination of amounts paid or held for the benefit of each individual Settling State. For purposes of subsections (f)(3), (f)(5)(A) and (i)(2), the portion of a payment that is made or held for the benefit of each individual Settling State shall be determined: (A) in the case of a payment credited to the Subsection IX(b) Account (First) or the Subsection IX(b) Account (Subsequent), by allocating the results of clause "Eighth" of subsection IX(j) among those Settling States who were Settling States at the time that the amount of such payment was calculated, pro rata in proportion to their respective Allocable Shares; and (B) in the case of a payment credited to the Subsection IX(c)(1) Account or the Subsection IX(c)(2) Account, by the results of clause "Twelfth" of

subsection IX(j) for each individual Settling State. Provided, however, that, solely for purposes of subsection (f)(3), the Settling States may by unanimous agreement agree on a different method of allocation of amounts held in the Accounts identified in this subsection (f)(6).

(g) Payments to be Made Only After Final Approval. Promptly following the occurrence of Final Approval, the Settling States and the Original Participating Manufacturers shall notify the Independent Auditor of such occurrence. The Independent Auditor shall promptly thereafter notify each Notice Party of the occurrence of Final Approval and of the amounts held in the State-Specific Accounts. If neither any of the Settling States nor any of the Participating Manufacturers disputes such amounts, disputes the occurrence of Final Approval or claims that this Agreement has terminated as to any Settling State for whose benefit the funds are held in a State-Specific Account, by notice delivered to each Notice Party not later than 10 Business Days after delivery by the Independent Auditor of such notice of Final Approval, the Independent Auditor shall promptly instruct the Escrow Agent to disburse the funds held in the State-Specific Accounts to (or as directed by) the respective Settling States. If any Notice Party disputes such amounts or the occurrence of Final Approval, or claims that this Agreement has terminated as to any Settling State for whose benefit the funds are held in a State-Specific Account, by notice delivered to each other Notice Party not later than 10 Business Days after delivery by the Independent Auditor of such notice of Final Approval, the Independent Auditor shall promptly instruct the Escrow Agent to credit the amounts disputed to the Disputed Payments Account and to disburse the undisputed portion to (or as directed by) the respective Settling States.

(h) Applicability to Section XVII Payments. This section XI shall not be applicable to payments made pursuant to section XVII; provided, however, that the Independent Auditor shall be responsible for calculating Relative Market Shares in connection with such payments, and the Independent Auditor shall promptly provide the results of such calculation to any Original Participating Manufacturer or Settling State that requests it do so.

(i) Miscalculated or Disputed Payments.

(1) Underpayments.

(A) If information becomes available to the Independent Auditor not later than four years after a Payment Due Date, and such information shows that any Participating Manufacturer was instructed to make an insufficient payment on such date ("original payment"), the Independent Auditor shall promptly determine the additional payment owed by such Participating Manufacturer and the allocation of such additional payment among the applicable payees. The Independent Auditor shall then reduce such additional payment (up to the full amount of such additional payment) by any adjustments or offsets that were available to the Participating Manufacturer in question against the original payment at the time it was made (and have not since been used) but which such Participating Manufacturer was unable to use against such original payment because such adjustments or offsets were in excess of such original payment (provided that any adjustments or offsets used against such additional payment shall reduce on a dollar-for-dollar basis any

remaining carry-forward held by such Participating Manufacturer with respect to such adjustment or offset). The Independent Auditor shall then add interest at the Prime Rate (calculated from the Payment Due Date in question) to the additional payment (as reduced pursuant to the preceding sentence), except that where the additional payment owed by a Participating Manufacturer is the result of an underpayment by such Participating Manufacturer caused by such Participating Manufacturer's withholding of information as described in subsection (d)(5)(B), the applicable interest rate shall be that described in subsection IX(h). The Independent Auditor shall promptly give notice of the additional payment owed by the Participating Manufacturer in question (as reduced and/or increased as described above) to all Notice Parties, showing the new information and all calculations. Upon receipt of such notice, any Participating Manufacturer or Settling State may dispute the Independent Auditor's calculations in the manner described in subsection (d)(3), and the Independent Auditor shall promptly notify each Notice Party of any subsequent revisions to its calculations. Not more than 15 days after receipt of such notice (or, if the Independent Auditor revises its calculations, not more than 15 days after receipt of the revisions), any Participating Manufacturer and any Settling State may dispute the Independent Auditor's calculations in the manner prescribed in subsection (d)(6). Failure to dispute the Independent Auditor's calculations in this manner shall constitute agreement with the Independent Auditor's

calculations, subject to the limitations set forth in subsection (d)(6). Payment of the undisputed portion of an additional payment shall be made to the Escrow Agent not more than 20 days after receipt of the notice described in this subsection (A) (or, if the Independent Auditor revises its calculations, not more than 20 days after receipt of the revisions). Failure to pay such portion shall render the Participating Manufacturer liable for interest thereon as provided in subsection IX(h). Payment of the disputed portion shall be governed by subsection (d)(8).

(B) To the extent a dispute as to a prior payment is resolved with finality against a Participating Manufacturer: (i) in the case where the disputed amount has been paid into the Disputed Payments Account pursuant to subsection (d)(8), the Independent Auditor shall instruct the Escrow Agent to transfer such amount to the applicable payee Account(s); (ii) in the case where the disputed amount has not been paid into the Disputed Payments Account and the dispute was identified prior to the Payment Due Date in question by delivery of a statement pursuant to subsection (d)(6) identifying such dispute, the Independent Auditor shall calculate interest on the disputed amount from the Payment Due Date in question (the applicable interest rate to be that provided in subsection IX(h)) and the allocation of such amount and interest among the applicable payees, and shall provide notice of the amount owed (and the identity of the payor and payees) to all Notice Parties; and (iii) in all other cases, the

procedure described in subsection (ii) shall apply, except that the applicable interest rate shall be the Prime Rate.

(2) Overpayments.

(A) If a dispute as to a prior payment is resolved with finality in favor of a Participating Manufacturer where the disputed amount has been paid into the Disputed Payments Account pursuant to subsection (d)(8), the Independent Auditor shall instruct the Escrow Agent to transfer such amount to such Participating Manufacturer.

(B) If information becomes available to the Independent Auditor not later than four years after a Payment Due Date showing that a Participating Manufacturer made an overpayment on such date, or if a dispute as to a prior payment is resolved with finality in favor of a Participating Manufacturer where the disputed amount has been paid but not into the Disputed Payments Account, such Participating Manufacturer shall be entitled to a continuing dollar-for-dollar offset as follows:

(i) offsets under this subsection (B) shall be applied only against eligible payments to be made by such Participating Manufacturer after the entitlement to the offset arises. The eligible payments shall be: in the case of offsets arising from payments under subsection IX(b) or IX(c)(1), subsequent payments under any of such subsections; in the case of offsets arising from payments under subsection IX(c)(2), subsequent payments under such subsection or, if no subsequent payments are to be made

under such subsection, subsequent payments under subsection IX(c)(1); in the case of offsets arising from payments under subsection IX(e), subsequent payments under such subsection or subsection IX(c); in the case of offsets arising from payments under subsection VI(c), subsequent payments under such subsection or, if no subsequent payments are to be made under such subsection, subsequent payments under any of subsection IX(c)(1), IX(c)(2) or IX(e); in the case of offsets arising from payments under subsection VIII(b), subsequent payments under such subsection or, if no subsequent payments are to be made under such subsection, subsequent payments under either subsection IX(c)(1) or IX(c)(2); in the case of offsets arising from payments under subsection VIII(c), subsequent payments under either subsection IX(c)(1) or IX(c)(2); and, in the case of offsets arising from payments under subsection IX(i), subsequent payments under such subsection (consistent with the provisions of this subsection (B)(i)).

(ii) in the case of offsets to be applied against payments under subsection IX(c), the offset to be applied shall be apportioned among the Settling States pro rata in proportion to their respective shares of such payments, as such respective shares are determined pursuant to step E of clause "Seventh" (in the case of payments due from the Original Participating Manufacturers) or

clause "Sixth" (in the case of payments due from the Subsequent Participating Manufacturers) of subsection IX(j) (except where the offset arises from an overpayment applicable solely to a particular Settling State).

(iii) the total amount of the offset to which a Participating Manufacturer shall be entitled shall be the full amount of the overpayment it made, together with interest calculated from the time of the overpayment to the Payment Due Date of the first eligible payment against which the offset may be applied. The applicable interest rate shall be the Prime Rate (except that, where the overpayment is the result of a Settling State's withholding of information as described in subsection (d)(5)(B), the applicable interest rate shall be that described in subsection IX(h)).

(iv) an offset under this subsection (B) shall be applied up to the full amount of the Participating Manufacturer's share (in the case of payments due from Original Participating Manufacturers, determined as described in the first sentence of clause "Seventh" of subsection IX(j) (or, in the case of payments pursuant to subsection IX(c), step D of such clause)) of the eligible payment in question, as such payment has been adjusted and reduced pursuant to clauses "First" through "Sixth" of subsection IX(j), to the extent each such clause is applicable to the payment in question. In the event that the offset to which a Participating Manufacturer is entitled under

this subsection (B) would exceed such Participating Manufacturer's share of the eligible payment against which it is being applied (or, in the case where such offset arises from an overpayment applicable solely to a particular Settling State, the portion of such payment that is made for the benefit of such Settling State), the offset shall be the full amount of such Participating Manufacturer's share of such payment and all amounts not offset shall carry forward and be offset against subsequent eligible payments until all such amounts have been offset.

(j) Payments After Applicable Condition. To the extent that a payment is made after the occurrence of all applicable conditions for the disbursement of such payment to the payee(s) in question, the Independent Auditor shall instruct the Escrow Agent to disburse such payment promptly following its deposit.

XII. SETTLING STATES' RELEASE, DISCHARGE AND COVENANT

(a) Release.

(1) Upon the occurrence of State-Specific Finality in a Settling State, such Settling State shall absolutely and unconditionally release and forever discharge all Released Parties from all Released Claims that the Releasing Parties directly, indirectly, derivatively or in any other capacity ever had, now have, or hereafter can, shall or may have.

(2) Notwithstanding the foregoing, this release and discharge shall not apply to any defendant in a lawsuit settled pursuant to this Agreement (other than

a Participating Manufacturer) unless and until such defendant releases the Releasing Parties (and delivers to the Attorney General of the applicable Settling State a copy of such release) from any and all Claims of such defendant relating to the prosecution of such lawsuit.

(3) Each Settling State (for itself and for the Releasing Parties) further covenants and agrees that it (and the Releasing Parties) shall not after the occurrence of State-Specific Finality sue or seek to establish civil liability against any Released Party based, in whole or in part, upon any of the Released Claims, and further agrees that such covenant and agreement shall be a complete defense to any such civil action or proceeding.

(4) (A) Each Settling State (for itself and for the Releasing Parties) further agrees that, if a Released Claim by a Releasing Party against any person or entity that is not a Released Party (a "non-Released Party") results in or in any way gives rise to a claim-over (on any theory whatever other than a claim based on an express written indemnity agreement) by such non-Released Party against any Released Party [(and such Released Party gives notice to the applicable Settling State within 30 days of the service of such claim-over (or within 30 days after the MSA Execution Date, whichever is later) and prior to entry into any settlement of such claim-over)][2] the Releasing Party: (i) shall reduce or credit against any judgment or settlement such Releasing Party may obtain against such non-Released Party the full amount of any judgment or settlement such non-Released Party may obtain against the Released Party on such claim-over; and (ii) shall, as part of any settlement with such non-Released Party, obtain from

2. Parenthetical replaced pursuant to Amendment 3

such non-Released Party for the benefit of such Released Party a satisfaction in full of such non-Released Party's judgment or settlement against the Released Party.

(B) Each Settling State further agrees that in the event that the provisions of subsection (4)(A) do not fully eliminate any and all liability of any Original Participating Manufacturer (or of any person or entity that is a Released Party by virtue of its relation to any Original Participating Manufacturer) with respect to claims-over (on any theory whatever other than a claim based on an express written indemnity agreement) by any non-Released Party to recover in whole or in part any liability (whether direct or indirect, or whether by way of settlement [(to the extent that such Released Party has given notice to the applicable Settling State within 30 days of the service of such claim-over (or within 30 days after the MSA Execution Date, whichever is later) and prior to entry into any settlement of such claim-over)][3] judgment or otherwise) of such non-Released Party to any Releasing Party arising out of any Released Claim, such Original Participating Manufacturer shall receive a continuing dollar-for-dollar offset for any amounts paid by such Original Participating Manufacturer (or by any person or entity that is a Released Party by virtue of its relation to such Original Participating Manufacturer) on any such liability against such Original Participating Manufacturer's share (determined as described in step E of clause "Seventh" of subsection IX(j)) of the applicable Settling State's Allocated Payment, up to the full amount of such Original Participating Manufacturer's share of such Allocated Payment each year, until all such amounts paid on such liability have been offset.

3. Parenthetical replaced pursuant to Amendment 3

In the event that the offset under this subsection (4) with respect to a particular Settling State would in any given year exceed such Original Participating Manufacturer's share of such Settling State's Allocated Payment (as such share had been reduced by adjustment, if any, pursuant to the NPM Adjustment, and has been reduced by offsets, if any, pursuant to the offset for miscalculated or disputed payments, the Federal Tobacco Legislation Offset and the Litigating Releasing Parties Offset): (i) the offset to which such Original Participating Manufacturer is entitled under this subsection in such year shall be the full amount of such Original Participating Manufacturer's share of such Allocated Payment; and (ii) all amounts not offset by reason of subsection (i) shall carry forward and be offset in the following year(s) until all such amounts have been offset.

(C) Each Settling State further agrees that, subject to the provisions of section IX(i)(3), each Subsequent Participating Manufacturer shall be entitled to the offset described in subsection (B) above to the extent that it (or any person or entity that is a Released Party by virtue of its relationship with such Subsequent Participating Manufacturer) has paid on liability that would give rise to an offset under such subsection if paid by an Original Participating Manufacturer.

(5) This release and covenant shall not operate to interfere with a Settling State's ability to enforce as against any Participating Manufacturer the provisions of this Agreement, or with the Court's ability to enter the Consent Decree or to maintain continuing jurisdiction to enforce such Consent Decree pursuant to the terms thereof. Provided, however, that neither subsection III(a) or III(r) of this

Agreement nor subsection V(A) or V(I) of the Consent Decree shall create a right to challenge the continuation, after the MSA Execution Date, of any advertising content, claim or slogan (other than use of a Cartoon) that was not unlawful prior to the MSA Execution Date.

(6) The Settling States do not purport to waive or release any claims on behalf of Indian tribes.

(7) The Settling States do not waive or release any criminal liability based on federal, state or local law.

(8) Notwithstanding the foregoing (and the definition of Released Parties), this release and covenant shall not apply to retailers, suppliers or distributors to the extent of any liability arising from the sale or distribution of Tobacco Products of, or the supply of component parts of Tobacco Products to, any non-Released Party.

(A) Each Settling State (for itself and for the Releasing Parties) agrees that, if a claim by a Releasing Party against a retailer, supplier or distributor that would be a Released Claim but for the operation of the preceding sentence results in or in any way gives rise to a claim-over (on any theory whatever) by such retailer, supplier or distributor against any Released Party[(and such Released Party gives notice to the applicable Settling State within 30 days of the service of such claim-over (or within 30 days after the MSA Execution Date, whichever is later) and prior to entry into any settlement of such claim-over)][4] the Releasing Party: (i) shall reduce or credit against any judgment or settlement such Releasing

4. Parenthetical replaced pursuant to Amendment 3

Party may obtain against such retailer, supplier or distributor the full amount of any judgment or settlement such retailer, supplier or distributor may obtain against the Released Party on such claim-over; and (ii) shall, as part of any settlement with such retailer, supplier or distributor, obtain from such retailer, supplier or distributor for the benefit of such Released Party a satisfaction in full of such retailer's, supplier's or distributor's judgment or settlement against the Released Party.

(B) Each Settling State further agrees that in the event that the provisions of subsection (8)(A) above do not fully eliminate any and all liability of any Original Participating Manufacturer (or any person or entity that is a Released Party by virtue of its relationship to an Original Participating Manufacturer) with respect to claims-over (on any theory whatever) by any such retailer, supplier or distributor to recover in whole or in part any liability (whether direct or indirect, or whether by way of settlement [(to the extent that such Released Party has given notice to the applicable Settling State within 30 days of the service of such claim-over (or within 30 days after the MSA Execution Date, whichever is later) and prior to entry into any settlement of such claim-over)][5] judgment or otherwise) of such retailer, supplier or distributor to any Releasing Party arising out of any claim that would be a Released Claim but for the operation of the first sentence of this subsection (8), such Original Participating Manufacturer shall receive a continuing dollar-for-dollar offset for any amounts paid by such Original Participating Manufacturer

5. Parenthetical replaced pursuant to Amendment 3

(or by any person or entity that is a Released Party by virtue of its relation to such Original Participating Manufacturer) on any such liability against such Original Participating Manufacturer's share (determined as described in step E of clause "Seventh" of subsection IX(j)) of the applicable Settling State's Allocated Payment, up to the full amount of such Original Participating Manufacturer's share of such Allocated Payment each year, until all such amounts paid on such liability have been offset. In the event that the offset under this subsection (8) with respect to a particular Settling State would in any given year exceed such Original Participating Manufacturer's share of such Settling State's Allocated Payment (as such share had been reduced by adjustment, if any, pursuant to the NPM Adjustment, and has been reduced by offsets, if any, pursuant to the offset for miscalculated or disputed payments, the Federal Tobacco Legislation Offset, the Litigating Releasing Parties Offset and the offset for claims-over under subsection XII(a)(4)(B)): (i) the offset to which such Original Participating Manufacturer is entitled under this subsection in such year shall be the full amount of such Original Participating Manufacturer's share of such Allocated Payment; and (ii) all amounts not offset by reason of clause (i) shall carry forward and be offset in the following year(s) until all such amounts have been offset.

(C) Each Settling State further agrees that, subject to the provisions of subsection IX(i)(3), each Subsequent Participating Manufacturer shall be entitled to the offset described in subsection (B)

above to the extent that it (or any person or entity that is a Released Party by virtue of its relationship with such Subsequent Participating Manufacturer) has paid on liability that would give rise to an offset under such subsection if paid by an Original Participating Manufacturer.

(9) Notwithstanding any provision of law, statutory or otherwise, which provides that a general release does not extend to claims which the creditor does not know or suspect to exist in its favor at the time of executing the release, which if known by it must have materially affected its settlement with the debtor, the releases set forth in this section XII release all Released Claims against the Released Parties, whether known or unknown, foreseen or unforeseen, suspected or unsuspected, that the Releasing Parties may have against the Released Parties, and the Releasing Parties understand and acknowledge the significance and consequences of waiver of any such provision and hereby assume full responsibility for any injuries, damages or losses that the Releasing Parties may incur.

(b) Released Claims Against Released Parties. [If a Releasing Party (or any person or entity enumerated in subsection II(pp), without regard to the power of the Attorney General to release claims of such person or entity) nonetheless attempts to maintain a Released Claim against a Released Party, such Released Party shall give written notice of such potential claim to the Attorney General of the applicable Settling State within 30 days of receiving notice of such potential claim (or within 30 days after the MSA Execution Date, whichever is later) (unless such potential claim is being maintained by such Settling State).][6] The Released Party may offer the release and

6. Sentence replaced pursuant to Amendment 3

covenant as a complete defense. If it is determined at any point in such action that the release of such claim is unenforceable or invalid for any reason (including, but not limited to, lack of authority to release such claim), the following provisions shall apply:

(1) The Released Party shall take all ordinary and reasonable measures to defend the action fully. The Released Party may settle or enter into a stipulated judgment with respect to the action at any time in its sole discretion, but in such event the offset described in subsection (b)(2) or (b)(3) below shall apply only if the Released Party obtains the relevant Attorney General's consent to such settlement or stipulated judgment, which consent shall not be unreasonably withheld. The Released Party shall not be entitled to the offset described in subsection (b)(2) or (b)(3) below if such Released Party failed to take ordinary and reasonable measures to defend the action fully.

(2) The following provisions shall apply where the Released Party is an Original Participating Manufacturer (or any person or entity that is a Released Party by virtue of its relationship with an Original Participating Manufacturer):

(A) In the event of a settlement or stipulated judgment, the settlement or stipulated amount shall give rise to a continuing offset as such amount is actually paid against the full amount of such Original Participating Manufacturer's share (determined as described in step E of clause "Seventh" of subsection IX(j)) of the applicable Settling State's Allocated Payment until such time as the settlement or stipulated amount is fully credited on a dollar-for-dollar basis.

(B) Judgments (other than a default judgment) against a Released Party in such an action shall, upon payment of such judgment, give rise to an immediate and continuing offset against the full amount of such Original Participating Manufacturer's share (determined as described in subsection (A)) of the applicable Settling State's Allocated Payment, until such time as the judgment is fully credited on a dollar-for-dollar basis.

(C) Each Settling State reserves the right to intervene in such an action (unless such action was brought by the Settling State) to the extent authorized by applicable law in order to protect the Settling State's interest under this Agreement. Each Participating Manufacturer agrees not to oppose any such intervention.

(D) In the event that the offset under this subsection (b)(2) with respect to a particular Settling State would in any given year exceed such Original Participating Manufacturer's share of such Settling State's Allocated Payment (as such share had been reduced by adjustment, if any, pursuant to the NPM Adjustment, and has been reduced by offsets, if any, pursuant to the Federal Tobacco Legislation Offset and the offset for miscalculated or disputed payments): (i) the offset to which such Original Participating Manufacturer is entitled under this subsection (2) in such year shall be the full amount of such Original Participating Manufacturer's share of such Allocated Payment; and (ii) all amounts not offset by reason of clause (i) shall carry forward and be offset in the following year(s) until all such amounts have been offset.

(3) The following provisions shall apply where the Released Party is a Subsequent Participating Manufacturer (or any person or entity that is a Released Party by virtue of its relationship with a Subsequent Participating Manufacturer): Subject to the provisions of subsection IX(i)(3), each Subsequent Participating Manufacturer shall be entitled to the offset as described in subsections (2)(A)-(C) above against payments it otherwise would owe under section IX(i) to the extent that it (or any person or entity that is a Released Party by virtue of its relationship with such Subsequent Participating Manufacturer) has paid on a settlement, stipulated judgment or judgment that would give rise to an offset under such subsections if paid by an Original Participating Manufacturer.

XIII. CONSENT DECREES AND DISMISSAL OF CLAIMS

(a) Within 10 days after the MSA Execution Date (or, as to any Settling State identified in the Additional States provision of Exhibit D, concurrently with the filing of its lawsuit), each Settling State and each Participating Manufacturer that is a party in any of the lawsuits identified in Exhibit D shall jointly move for a stay of all proceedings in such Settling State's lawsuit with respect to the Participating Manufacturers and all other Released Parties (except any proceeding seeking public disclosure of documents pursuant to subsection IV(b)). Such stay of a Settling State's lawsuit shall be dissolved upon the earlier of the occurrence of State-Specific Finality or termination of this Agreement with respect to such Settling State pursuant to subsection XVIII(u)(1).

(b) Not later than December 11, 1998 (or, as to any Settling State identified in the Additional States provision of Exhibit D, concurrently with the filing of its lawsuit):

(1) each Settling State that is a party to a lawsuit identified in Exhibit D and each Participating Manufacturer will:

(A) tender this Agreement to the Court in such Settling State for its approval; and

(B) tender to the Court in such Settling State for entry a consent decree conforming to the model consent decree attached hereto as Exhibit L (revisions or changes to such model consent decree shall be limited to the extent required by state procedural requirements to reflect accurately the factual setting of the case in question, but shall not include any substantive revision to the duties or obligations of any Settling State or Participating Manufacturer, except by agreement of all Original Participating Manufacturers); and

(2) each Settling State shall seek entry of an order of dismissal of claims dismissing with prejudice all claims against the Participating Manufacturers and any other Released Party in such Settling State's action identified in Exhibit D. Provided, however, that the Settling State is not required to seek entry of such an order in such Settling State's action against such a Released Party (other than a Participating Manufacturer) unless and until such Released Party has released the Releasing Parties (and delivered to the Attorney General of such Settling State a copy of such release) (which release shall be effective upon the occurrence of State-Specific Finality in such Settling State, and shall recite that in the event this Agreement is terminated with respect to such Settling State pursuant to subsection XVIII(u)(1) the Released Party agrees that the order of dismissal shall be null and

void and of no effect) from any and all Claims of such Released Party relating to the prosecution of such action as provided in subsection XII(a)(2).

XIV. PARTICIPATING MANUFACTURERS' DISMISSAL OF RELATED LAWSUITS

(a) Upon State-Specific Finality in a Settling State, each Participating Manufacturer will dismiss without prejudice (and without costs and fees) the lawsuit(s) listed in Exhibit M pending in such Settling State in which the Participating Manufacturer is a plaintiff. Within 10 days after the MSA Execution Date, each Participating Manufacturer and each Settling State that is a party in any of the lawsuits listed in Exhibit M shall jointly move for a stay of all proceedings in such lawsuit. Such stay of a lawsuit against a Settling State shall be dissolved upon the earlier of the occurrence of State-Specific Finality in such Settling State or termination of this Agreement with respect to such Settling State pursuant to subsection XVIII(u)(1).

(b) Upon State-Specific Finality in a Settling State, each Participating Manufacturer will release and discharge any and all monetary Claims against such Settling State and any of such Settling State's officers, employees, agents, administrators, representatives, officials acting in their official capacity, agencies, departments, commissions, divisions and counsel relating to or in connection with the lawsuit(s) commenced by the Attorney General of such Settling State identified in Exhibit D.

(c) Upon State-Specific Finality in a Settling State, each Participating Manufacturer will release and discharge any and all monetary Claims against all subdivisions (political or otherwise, including, but not limited to, municipalities, counties, parishes, villages, unincorporated districts and hospital districts) of such

Settling State, and any of their officers, employees, agents, administrators, representatives, officials acting in their official capacity, agencies, departments, commissions, divisions and counsel arising out of Claims that have been waived and released with continuing full force and effect pursuant to section XII of this Agreement.

XV. VOLUNTARY ACT OF THE PARTIES

The Settling States and the Participating Manufacturers acknowledge and agree that this Agreement is voluntarily entered into by each Settling State and each Participating Manufacturer as the result of arm's-length negotiations, and each Settling State and each Participating Manufacturer was represented by counsel in deciding to enter into this Agreement. Each Participating Manufacturer further acknowledges that it understands that certain provisions of this Agreement may require it to act or refrain from acting in a manner that could otherwise give rise to state or federal constitutional challenges and that, by voluntarily consenting to this Agreement, it (and the Tobacco-Related Organizations (or any trade associations formed or controlled by any Participating Manufacturer)) waives for purposes of performance of this Agreement any and all claims that the provisions of this Agreement violate the state or federal constitutions. Provided, however, that nothing in the foregoing shall constitute a waiver as to the entry of any court order (or any interpretation thereof) that would operate to limit the exercise of any constitutional right except to the extent of the restrictions, limitations or obligations expressly agreed to in this Agreement or the Consent Decree.

XVI. CONSTRUCTION

(a) No Settling State or Participating Manufacturer shall be considered the drafter of this Agreement or any Consent Decree, or any provision of either, for the purpose of

any statute, case law or rule of interpretation or construction that would or might cause any provision to be construed against the drafter.

(b) Nothing in this Agreement shall be construed as approval by the Settling States of any Participating Manufacturer's business organizations, operations, acts or practices, and no Participating Manufacturer may make any representation to the contrary.

XVII. RECOVERY OF COSTS AND ATTORNEYS' FEES

[(a) The Original Participating Manufacturers agree that, with respect to any Settling State in which the Court has approved this Agreement and the Consent Decree, they shall severally reimburse the following "Governmental Entities": (1) the office of the Attorney General of such Settling State; (2) the office of the governmental prosecuting authority for any political subdivision of such Settling State with a lawsuit pending against any Participating Manufacturer as of July 1, 1998 (as identified in Exhibit N) that has released such Settling State and such Participating Manufacturer(s) from any and all Released Claims (a "Litigating Political Subdivision"); and (3) other appropriate agencies of such Settling State and such Litigating Political Subdivision, for reasonable costs and expenses incurred in connection with the litigation or resolution of claims asserted by or against the Participating Manufacturers in the actions set forth in Exhibits D, M and N; provided that such costs and expenses are of the same nature as costs and expenses for which the Original Participating Manufacturers would reimburse their own counsel or agents (but not including costs and expenses relating to lobbying activities).][7]

7. Subsection (a) replaced pursuant to Amendment 14

[(b) The Original Participating Manufacturers further agree severally to pay the Governmental Entities in any Settling State in which State-Specific Finality has occurred an amount sufficient to compensate such Governmental Entities for time reasonably expended by attorneys and paralegals employed in such offices in connection with the litigation or resolution of claims asserted against or by the Participating Manufacturers in the actions identified in Exhibits D, M and N (but not including time relating to lobbying activities), such amount to be calculated based upon hourly rates equal to the market rate in such Settling State for private attorneys and paralegals of equivalent experience and seniority.][8]

[(c) Such Governmental Entities seeking payment pursuant to subsection (a) and/or (b) shall provide the Original Participating Manufacturers with an appropriately documented statement of all costs, expenses and attorney and paralegal time for which payment is sought, and, solely with respect to payments sought pursuant to subsection (b), shall do so no earlier than the date on which State-Specific Finality occurs in such Settling State. All amounts to be paid pursuant to subsections (a) and (b) shall be subject to reasonable verification if requested by any Original Participating Manufacturer; provided, however, that nothing contained in this subsection (c) shall constitute, cause, or require the performance of any act that would constitute any waiver (in whole or in part) of any attorney-client privilege, work product protection or common interest/joint prosecution privilege. All such amounts to be paid pursuant to subsections (a) and (b) shall be subject to an aggregate cap of $150 million for all Settling States, shall be paid promptly following submission of the appropriate documentation (and the completion of any verification process), shall be paid separately and apart from any other amounts due

8. Subsection (b) replaced pursuant to Amendment 14

pursuant to this Agreement, and shall be paid severally by each Original Participating Manufacturer according to its Relative Market Share. All amounts to be paid pursuant to subsection (b) shall be paid to such Governmental Entities in the order in which State-Specific Finality has occurred in such Settling States (subject to the $150 million aggregate cap).][9]

(d) The Original Participating Manufacturers agree that, upon the occurrence of State-Specific Finality in a Settling State, they will severally pay reasonable attorneys' fees to the private outside counsel, if any, retained by such Settling State (and each Litigating Political Subdivision, if any, within such Settling State) in connection with the respective actions identified in Exhibits D, M and N and who are designated in Exhibit S for each Settling State by the relevant Attorney General (and for each Litigating Political Subdivision, as later certified in writing to the Original Participating Manufacturers by the relevant governmental prosecuting authority of each Litigating Political Subdivision) as having been retained by and having represented such Settling State (or such Litigating Political Subdivision), in accordance with the terms described in the Model Fee Payment Agreement attached as Exhibit O.

XVIII. MISCELLANEOUS

(a) Effect of Current or Future Law. If any current or future law includes obligations or prohibitions applying to Tobacco Product Manufacturers related to any of the provisions of this Agreement, each Participating Manufacturer shall comply with this Agreement unless compliance with this Agreement would violate such law.

9. Subsection (c) replaced pursuant to Amendment 14

(b) Limited Most-Favored Nation Provision.

(1) If any Participating Manufacturer enters into any future settlement agreement of other litigation comparable to any of the actions identified in Exhibit D brought by a non-foreign governmental plaintiff other than the federal government ("Future Settlement Agreement"):

(A) before October 1, 2000, on overall terms more favorable to such governmental plaintiff than the overall terms of this Agreement (after due consideration of relevant differences in population or other appropriate factors), then, unless a majority of the Settling States determines that the overall terms of the Future Settlement Agreement are not more favorable than the overall terms of this Agreement, the overall terms of this Agreement will be revised so that the Settling States will obtain treatment with respect to such Participating Manufacturer at least as relatively favorable as the overall terms provided to any such governmental plaintiff; provided, however, that as to economic terms this Agreement shall not be revised based on any such Future Settlement Agreement if such Future Settlement Agreement is entered into after: (i) the impaneling of the jury (or, in the event of a non-jury trial, the commencement of trial) in such litigation or any severed or bifurcated portion thereof; or (ii) any court order or judicial determination relating to such litigation that (x) grants judgment (in whole or in part) against such Participating Manufacturer; or (y) grants injunctive or other relief that affects the assets or on-going business activities of such Participating

Manufacturer in a manner other than as expressly provided for in this Agreement; or

(B) on or after October 1, 2000, on non-economic terms more favorable to such governmental plaintiff than the non-economic terms of this Agreement, and such Future Settlement Agreement includes terms that provide for the implementation of non-economic tobacco-related public health measures different from those contained in this Agreement, then this Agreement shall be revised with respect to such Participating Manufacturer to include terms comparable to such non-economic terms, unless a majority of the Settling States elects against such revision.

(2) If any Settling State resolves by settlement Claims against any Non-Participating Manufacturer after the MSA Execution Date comparable to any Released Claim, and such resolution includes overall terms that are more favorable to such Non-Participating Manufacturer than the terms of this Agreement (including, without limitation, any terms that relate to the marketing or distribution of Tobacco Products and any term that provides for a lower settlement cost on a per pack sold basis), then the overall terms of this Agreement will be revised so that the Original Participating Manufacturers will obtain, with respect to that Settling State, overall terms at least as relatively favorable (taking into account, among other things, all payments previously made by the Original Participating Manufacturers and the timing of any payments) as those obtained by such Non-Participating Manufacturer pursuant to such resolution of Claims. [The foregoing shall include but not be limited: (a) to the treatment by any Settling

State of a Future Affiliate, as that term is defined in agreements between any of the Settling States and Brooke Group Ltd., Liggett & Myers Inc. and/or Liggett Group, Inc. ("Liggett"), whether or not such Future Affiliate is merged with, or its operations combined with, Liggett or any Affiliate thereof; and (b) to any application of the terms of any such agreement (including any terms subsequently negotiated pursuant to any such agreement) to a brand of Cigarettes (or tobacco-related assets) as a result of the purchase by or sale to Liggett of such brand or assets or as a result of any combination of ownership among Liggett and any entity that manufactures Tobacco Products.][10] Provided, however, that revision of this Agreement pursuant to this subsection (2) shall not be required by virtue of the subsequent entry into this Agreement by a Tobacco Product Manufacturer that has not become a Participating Manufacturer as of the MSA Execution Date. Notwithstanding the provisions of subsection XVIII(j), the provisions of this subsection XVIII(b)(2) may be waived by (and only by) unanimous agreement of the Original Participating Manufacturers.

(3) The parties agree that if any term of this Agreement is revised pursuant to subsection (b)(l) or (b)(2) above and the substance of such term before it was revised was also a term of the Consent Decree, each affected Settling State and each affected Participating Manufacturer shall jointly move the Court to amend the Consent Decree to conform the terms of the Consent Decree to the revised terms of the Agreement.

(4) If at any time any Settling State agrees to relieve, in any respect, any Participating Manufacturer's obligation to make the payments as provided in this

10. Sentence (starting on page 128, 2 lines from bottom) deleted pursuant to Amendment 2

Agreement, then, with respect to that Settling State, the terms of this Agreement shall be revised so that the other Participating Manufacturers receive terms as relatively favorable.

(c) Transfer of Tobacco Brands. No Original Participating Manufacturer may sell or otherwise transfer or permit the sale or transfer of any of its Cigarette brands, Brand Names, Cigarette product formulas or Cigarette businesses (other than a sale or transfer of Cigarette brands or Brand Names to be sold, product formulas to be used, or Cigarette businesses to be conducted, by the acquiror or transferee exclusively outside of the States) to any person or entity unless such person or entity is an Original Participating Manufacturer or prior to the sale or acquisition agrees to assume the obligations of an Original Participating Manufacturer with respect to such Cigarette brands, Brand Names, Cigarette product formulas or businesses. No Participating Manufacturer may sell or otherwise transfer any of its Cigarette brands, Brand Names, Cigarette product formulas or Cigarette businesses (other than a sale or transfer of Cigarette brands or Brand Names to be sold, Cigarette product formulas to be used, or businesses to be conducted, by the acquiror or transferee exclusively outside of the States) to any person or entity unless such person or entity is or becomes prior to the sale or acquisition a Participating Manufacturer. In the event of any such sale or transfer of a Cigarette brand, Brand Name, Cigarette product formula or Cigarette business by a Participating Manufacturer to a person or entity that within 180 days prior to such sale or transfer was a Non-Participating Manufacturer, the Participating Manufacturer shall certify to the Settling States that it has determined that such person or entity has the capability to perform the obligations under this Agreement. Such certification shall not survive beyond one year

following the date of any such transfer. Each Original Participating Manufacturer certifies and represents that, except as provided in Exhibit R, it (or a wholly owned Affiliate) exclusively owns and controls in the States the Brand Names of those Cigarettes that it currently manufactures for sale (or sells) in the States and that it has the capacity to enter into an effective agreement concerning the sale or transfer of such Brand Names pursuant to this subsection XVIII(c). Nothing in this Agreement is intended to create any right for a State to obtain any Cigarette product formula that it would not otherwise have under applicable law.

(d) Payments in Settlement. All payments to be made by the Participating Manufacturers pursuant to this Agreement are in settlement of all of the Settling States' antitrust, consumer protection, common law negligence, statutory, common law and equitable claims for monetary, restitutionary, equitable and injunctive relief alleged by the Settling States with respect to the year of payment or earlier years, except that no part of any payment under this Agreement is made in settlement of an actual or potential liability for a fine, penalty (civil or criminal) or enhanced damages or is the cost of a tangible or intangible asset or other future benefit.

(e) No Determination or Admission. This Agreement is not intended to be and shall not in any event be construed or deemed to be, or represented or caused to be represented as, an admission or concession or evidence of (1) any liability or any wrongdoing whatsoever on the part of any Released Party or that any Released Party has engaged in any of the activities barred by this Agreement; or (2) personal jurisdiction over any person or entity other than the Participating Manufacturers. Each Participating Manufacturer specifically disclaims and denies any liability or wrongdoing whatsoever

with respect to the claims and allegations asserted against it by the Attorneys General of the Settling States and the Litigating Political Subdivisions. Each Participating Manufacturer has entered into this Agreement solely to avoid the further expense, inconvenience, burden and risk of litigation.

(f) Non-Admissibility. The settlement negotiations resulting in this Agreement have been undertaken by the Settling States and the Participating Manufacturers in good faith and for settlement purposes only, and no evidence of negotiations or discussions underlying this Agreement shall be offered or received in evidence in any action or proceeding for any purpose. Neither this Agreement nor any public discussions, public statements or public comments with respect to this Agreement by any Settling State or Participating Manufacturer or its agents shall be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to this Agreement.

(g) Representations of Parties. Each Settling State and each Participating Manufacturer hereby represents that this Agreement has been duly authorized and, upon execution, will constitute a valid and binding contractual obligation, enforceable in accordance with its terms, of each of them. The signatories hereto on behalf of their respective Settling States expressly represent and warrant that they have the authority to settle and release all Released Claims of their respective Settling States and any of their respective Settling States' past, present and future agents, officials acting in their official capacities, legal representatives, agencies, departments, commissions and divisions, and that such signatories are aware of no authority to the contrary. It is recognized that the Original Participating Manufacturers are relying on the foregoing representation and

warranty in making the payments required by and in otherwise performing under this Agreement. The Original Participating Manufacturers shall have the right to terminate this Agreement pursuant to subsection XVIII(u) as to any Settling State as to which the foregoing representation and warranty is breached or not effectively given.

(h) Obligations Several, Not Joint. All obligations of the Participating Manufacturers pursuant to this Agreement (including, but not limited to, all payment obligations) are intended to be, and shall remain, several and not joint.

(i) Headings. The headings of the sections and subsections of this Agreement are not binding and are for reference only and do not limit, expand or otherwise affect the contents or meaning of this Agreement.

(j) Amendment and Waiver. This Agreement may be amended by a written instrument executed by all Participating Manufacturers affected by the amendment and by all Settling States affected by the amendment. The terms of any such amendment shall not be enforceable in any Settling State that is not a signatory to such amendment. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving party or parties. The waiver by any party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other party.

(k) Notices. All notices or other communications to any party to this Agreement shall be in writing (including, but not limited to, facsimile,[11] telex, telecopy or similar writing) and shall be given at the addresses specified in Exhibit P (as it may be amended to reflect any additional Participating Manufacturer that becomes a party to this

11. Add "electronic mail" before "facsimile" pursuant to Amendment 26

Agreement after the MSA Execution Date). Any Settling State or Participating Manufacturer may change or add the name and address of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this subsection.

(l) Cooperation. Each Settling State and each Participating Manufacturer agrees to use its best efforts and to cooperate with each other to cause this Agreement and the Consent Decrees to become effective, to obtain all necessary approvals, consents and authorizations, if any, and to execute all documents and to take such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Settling State and each Participating Manufacturer agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Decree by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Decrees. Each Settling State shall use its best efforts to cause State-Specific Finality to occur as to such Settling State.

(m) Designees to Discuss Disputes. Within 14 days after the MSA Execution Date, each Settling State's Attorney General and each Participating Manufacturer shall provide written notice of its designation of a senior representative to discuss with the other signatories to this Agreement any disputes and/or other issues that may arise with respect to this Agreement. Each Settling State's Attorney General shall provide such notice of the name, address and telephone number of the person it has so designated to each Participating Manufacturer and to NAAG. Each Participating Manufacturer shall provide such notice of the name, address and telephone number of the person it has so

designated to each Settling State's Attorney General, to NAAG and to each other Participating Manufacturer.

(n) Governing Law. This Agreement (other than the Escrow Agreement) shall be governed by the laws of the relevant Settling State, without regard to the conflict of law rules of such Settling State. The Escrow Agreement shall be governed by the laws of the State in which the Escrow Court is located, without regard to the conflict of law rules of such State.

(o) Severability.

(1) Sections VI, VII, IX, X, XI, XII, XIII, XIV, XVI, XVIII(b), (c), (d), (e), (f), (g), (h), (o), (p), (r), (s), (u), (w), (z), (bb), (dd), and Exhibits A, B, and E hereof ("Nonseverable Provisions") are not severable, except to the extent that severance of section VI is permitted by Settling States pursuant to subsection VI(i) hereof. The remaining terms of this Agreement are severable, as set forth herein.

(2) If a court materially modifies, renders unenforceable, or finds to be unlawful any of the Nonseverable Provisions, the NAAG executive committee shall select a team of Attorneys General (the "Negotiating Team") to attempt to negotiate an equivalent or comparable substitute term or other appropriate credit or adjustment (a "Substitute Term") with the Original Participating Manufacturers. In the event that the court referred to in the preceding sentence is located in a Settling State, the Negotiating Team shall include the Attorney General of such Settling State. The Original Participating Manufacturers shall have no obligation to agree to any Substitute Term. If any Original Participating

Manufacturer does not agree to a Substitute Term, this Agreement shall be terminated in all Settling States affected by the court's ruling. The Negotiating Team shall submit any proposed Substitute Term negotiated by the Negotiating Team and agreed to by all of the Original Participating Manufacturers to the Attorneys General of all of the affected Settling States for their approval. If any affected Settling State does not approve the proposed Substitute Term, this Agreement in such Settling State shall be terminated.

(3) If a court materially modifies, renders unenforceable, or finds to be unlawful any term of this Agreement other than a Nonseverable Provision:

(A) The remaining terms of this Agreement shall remain in full force and effect.

(B) Each Settling State whose rights or obligations under this Agreement are affected by the court's decision in question (the "Affected Settling State") and the Participating Manufacturers agree to negotiate in good faith a Substitute Term. Any agreement on a Substitute Term reached between the Participating Manufacturers and the Affected Settling State shall not modify or amend the terms of this Agreement with regard to any other Settling State.

(C) If the Affected Settling State and the Participating Manufacturers are unable to agree on a Substitute Term, then they will submit the issue to non-binding mediation. If mediation fails to produce agreement to a Substitute Term, then that term shall be severed and the remainder of this Agreement shall remain in full force and effect.

(4) If a court materially modifies, renders unenforceable, or finds to be unlawful any portion of any provision of this Agreement, the remaining portions of such provision shall be unenforceable with respect to the affected Settling State unless a Substitute Term is arrived at pursuant to subsection (o)(2) or (o)(3) hereof, whichever is applicable.

(p) Intended Beneficiaries. No portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not a Settling State or a Released Party. No Settling State may assign or otherwise convey any right to enforce any provision of this Agreement.

(q) Counterparts. This Agreement may be executed in counterparts. Facsimile or photocopied signatures shall be considered as valid signatures as of the date affixed, although the original signature pages shall thereafter be appended.

(r) Applicability. The obligations and duties of each Participating Manufacturer set forth herein are applicable only to actions taken (or omitted to be taken) within the States. This subsection (r) shall not be construed as extending the territorial scope of any obligation or duty set forth herein whose scope is otherwise limited by the terms hereof.

(s) Preservation of Privilege. Nothing contained in this Agreement or any Consent Decree, and no act required to be performed pursuant to this Agreement or any Consent Decree, is intended to constitute, cause or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection or common interest/joint defense privilege, and each Settling State and each Participating Manufacturer agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

(t) Non-Release. Except as otherwise specifically provided in this Agreement, nothing in this Agreement shall limit, prejudice or otherwise interfere with the rights of any Settling State or any Participating Manufacturer to pursue any and all rights and remedies it may have against any Non-Participating Manufacturer or other non-Released Party.

(u) Termination.

(1) Unless otherwise agreed to by each of the Original Participating Manufacturers and the Settling State in question, in the event that (A) State-Specific Finality in a Settling State does not occur in such Settling State on or before December 31, 2001; or (B) this Agreement or the Consent Decree has been disapproved by the Court (or, in the event of an appeal from or review of a decision of the Court to approve this Agreement and the Consent Decree, by the court hearing such appeal or conducting such review), and the time to Appeal from such disapproval has expired, or, in the event of an Appeal from such disapproval, the Appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such Appeal has been taken and such dismissal or disapproval has become no longer subject to further Appeal (including, without limitation, review by the United States Supreme Court); or (C) this Agreement is terminated in a Settling State for whatever reason (including, but not limited to, pursuant to subsection XVIII(o) of this Agreement), then this Agreement and all of its terms (except for the non-admissibility provisions hereof, which shall continue in full force and effect) shall be canceled and terminated with respect to

such Settling State, and it and all orders issued by the courts in such Settling State pursuant hereto shall become null and void and of no effect.

(2) If this Agreement is terminated with respect to a Settling State for whatever reason, then (A) the applicable statute of limitation or any similar time requirement shall be tolled from the date such Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that the parties shall be in the same position with respect to the statute of limitation as they were at the time such Settling State filed its action, and (B) the parties shall jointly move the Court for an order reinstating the actions and claims dismissed pursuant to sections XIII and XIV hereof, with the effect that the parties shall be in the same position with respect to those actions and claims as they were at the time the action or claim was stayed or dismissed.

(v) Freedom of Information Requests. Upon the occurrence of State-Specific Finality in a Settling State, each Participating Manufacturer will withdraw in writing any and all requests for information, administrative applications, and proceedings brought or caused to be brought by such Participating Manufacturer pursuant to such Settling State's freedom of information law relating to the subject matter of the lawsuits identified in Exhibit D.

(w) Bankruptcy. The following provisions shall apply if a Participating Manufacturer both enters Bankruptcy and at any time thereafter is not timely performing its financial obligations as required under this Agreement:

(1) In the event that both a number of Settling States equal to at least 75% of the total number of Settling States and Settling States having aggregate Allocable Shares equal to at least 75% of the total aggregate Allocable Shares assigned to all Settling States deem (by written notice to the Participating Manufacturers other than the bankrupt Participating Manufacturer) that the financial obligations of this Agreement have been terminated and rendered null and void as to such bankrupt Participating Manufacturer (except as provided in subsection (A) below) due to a material breach by such Participating Manufacturer, whereupon, with respect to all Settling States:

(A) all agreements, all concessions, all reductions of Releasing Parties' Claims, and all releases and covenants not to sue, contained in this Agreement shall be null and void as to such Participating Manufacturer. Provided, however, that (i) all reductions of Releasing Parties' Claims, and all releases and covenants not to sue, contained in this Agreement shall remain in full force and effect as to all persons or entities (other than the bankrupt Participating Manufacturer itself or any person or entity that, as a result of the Bankruptcy, obtains domestic tobacco assets of such Participating Manufacturer (unless such person or entity is itself a Participating Manufacturer)) who (but for the first sentence of this subsection (A)) would otherwise be Released Parties by virtue of their relationship with the bankrupt Participating Manufacturer; and (ii) in the event a Settling State asserts any Released Claim against a bankrupt Participating Manufacturer after the termination of this Agreement with

respect to such Participating Manufacturer as described in this subsection (1) and receives a judgment, settlement or distribution arising from such Released Claim, then the amount of any payments such Settling State has previously received from such Participating Manufacturer under this Agreement shall be applied against the amount of any such judgment, settlement or distribution (provided that in no event shall such Settling State be required to refund any payments previously received from such Participating Manufacturer pursuant to this Agreement);

(B) the Settling States shall have the right to assert any and all claims against such Participating Manufacturer in the Bankruptcy or otherwise without regard to any limits otherwise provided in this Agreement (subject to any and all defenses against such claims);

(C) the Settling States may exercise all rights provided under the federal Bankruptcy Code (or other applicable bankruptcy law) with respect to their Claims against such Participating Manufacturer, including the right to initiate and complete police and regulatory actions against such Participating Manufacturer pursuant to the exceptions to the automatic stay set forth in section 362(b) of the Bankruptcy Code (provided, however, that such Participating Manufacturer may contest whether the Settling State's action constitutes a police and regulatory action); and

(D) to the extent that any Settling State is pursuing a police and regulatory action against such Participating Manufacturer as described in subsection (1)(C), such Participating Manufacturer shall not request or

support a request that the Bankruptcy court utilize the authority provided under section 105 of the Bankruptcy Code to impose a discretionary stay on the Settling State's action. The Participating Manufacturers further agree that they will not request, seek or support relief from the terms of this Agreement in any proceeding before any court of law (including the federal bankruptcy courts) or an administrative agency or through legislative action, including (without limitation) by way of joinder in or consent to or acquiescence in any such pleading or instrument filed by another.

(2) Whether or not the Settling States exercise the option set forth in subsection (1) (and whether or not such option, if exercised, is valid and enforceable):

(A) In the event that the bankrupt Participating Manufacturer is an Original Participating Manufacturer, such Participating Manufacturer shall continue to be treated as an Original Participating Manufacturer for all purposes under this Agreement except (i) such Participating Manufacturer shall be treated as a Non-Participating Manufacturer (and not as an Original Participating Manufacturer or Participating Manufacturer) for all purposes with respect to subsections IX(d)(1), IX(d)(2) and IX(d)(3) (including, but not limited to, that the Market Share of such Participating Manufacturer shall not be included in Base Aggregate Participating Manufacturer Market Share or Actual Aggregate Participating Manufacturer Market Share, and that such Participating Manufacturer's

volume shall not be included for any purpose under subsection IX(d)(1)(D)); (ii) such Participating Manufacturer's Market Share shall not be included as that of a Participating Manufacturer for the purpose of determining whether the trigger percentage specified in subsection IX(e) has been achieved (provided that such Participating Manufacturer shall be treated as an Original Participating Manufacturer for all other purposes with respect to such subsection); (iii) for purposes of subsection (B)(iii) of Exhibit E, such Participating Manufacturer shall continue to be treated as an Original Participating Manufacturer, but its operating income shall be recalculated by the Independent Auditor to reflect what such income would have been had such Participating Manufacturer made the payments that would have been due under this Agreement but for the Bankruptcy; (iv) for purposes of subsection XVIII(c), such Participating Manufacturer shall not be treated as an Original Participating Manufacturer or as a Participating Manufacturer to the extent that after entry into Bankruptcy it becomes the acquiror or transferee of Cigarette brands, Brand Names, Cigarette product formulas or Cigarette businesses of any Participating Manufacturer (provided that such Participating Manufacturer shall continue to be treated as an Original Participating Manufacturer and Participating Manufacturer for all other purposes under such subsection); and (v) as to any action that by the express terms of this Agreement requires the unanimous agreement of all Original Participating Manufacturers.

(B) In the event that the bankrupt Participating Manufacturer is a Subsequent Participating Manufacturer, such Participating Manufacturer shall continue to be treated as a Subsequent Participating Manufacturer for all purposes under this Agreement except (i) such Participating Manufacturer shall be treated as a Non-Participating Manufacturer (and not as a Subsequent Participating Manufacturer or Participating Manufacturer) for all purposes with respect to subsections IX(d)(1), (d)(2) and (d)(4) (including, but not limited to, that the Market Share of such Participating Manufacturer shall not be included in Base Aggregate Participating Manufacturer Market Share or Actual Aggregate Participating Manufacturer Market Share, and that such Participating Manufacturer's volume shall not be included for any purpose under subsection IX(d)(1)(D)); (ii) such Participating Manufacturer's Market Share shall not be included as that of a Participating Manufacturer for the purpose of determining whether the trigger percentage specified in subsection IX(e) has been achieved (provided that such Participating Manufacturer shall be treated as a Subsequent Participating Manufacturer for all other purposes with respect to such subsection); and (iii) for purposes of subsection XVIII(c), such Participating Manufacturer shall not be treated as a Subsequent Participating Manufacturer or as a Participating Manufacturer to the extent that after entry into Bankruptcy it becomes the acquiror or transferee of Cigarette brands, Brand Names, Cigarette product formulas or Cigarette businesses of any Participating Manufacturer

(provided that such Participating Manufacturer shall continue to be treated as a Subsequent Participating Manufacturer and Participating Manufacturer for all other purposes under such subsection).

(C) Revision of this Agreement pursuant to subsection XVIII(b)(2) shall not be required by virtue of any resolution on an involuntary basis in the Bankruptcy of Claims against the bankrupt Participating Manufacturer.

(x) Notice of Material Transfers. Each Participating Manufacturer shall provide notice to each Settling State at least 20 days before consummating a sale, transfer of title or other disposition, in one transaction or series of related transactions, of assets having a fair market value equal to five percent or more (determined in accordance with United States generally accepted accounting principles) of the consolidated assets of such Participating Manufacturer.

(y) Entire Agreement. This Agreement (together with any agreements expressly contemplated hereby and any other contemporaneous written agreements) embodies the entire agreement and understanding between and among the Settling States and the Participating Manufacturers relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral, and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

(z) Business Days. Any obligation hereunder that, under the terms of this Agreement, is to be performed on a day that is not a Business Day shall be performed on the first Business Day thereafter.

(aa) Subsequent Signatories. With respect to a Tobacco Product Manufacturer that signs this Agreement after the MSA Execution Date, the timing of obligations under this Agreement (other than payment obligations, which shall be governed by subsection II(jj)) shall be negotiated to provide for the institution of such obligations on a schedule not more favorable to such subsequent signatory than that applicable to the Original Participating Manufacturers.

(bb) Decimal Places. Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

(cc) Regulatory Authority. Nothing in section III of this Agreement is intended to affect the legislative or regulatory authority of any local or State government.

(dd) Successors. In the event that a Participating Manufacturer ceases selling a brand of Tobacco Products in the States that such Participating Manufacturer owned in the States prior to July 1, 1998, and an Affiliate of such Participating Manufacturer thereafter and after the MSA Execution Date intentionally sells such brand in the States, such Affiliate shall be considered to be the successor of such Participating Manufacturer with respect to such brand. Performance by any such successor of the obligations under this Agreement with respect to the sales of such brand shall be subject to court-ordered specific performance.

(ee) Export Packaging. Each Participating Manufacturer shall place a visible indication on each pack of Cigarettes it manufactures for sale outside of the fifty United States and the District of Columbia that distinguishes such pack from packs of Cigarettes it manufactures for sale in the fifty United States and the District of Columbia.

(ff) Actions Within Geographic Boundaries of Settling States. To the extent that any provision of this Agreement expressly prohibits, restricts, or requires any action to be taken "within" any Settling State or the Settling States, the relevant prohibition, restriction, or requirement applies within the geographic boundaries of the applicable Settling State or Settling States, including, but not limited to, Indian country or Indian trust land within such geographic boundaries.

(gg) Notice to Affiliates. Each Participating Manufacturer shall give notice of this Agreement to each of its Affiliates.

IN WITNESS WHEREOF, each Settling State and each Participating Manufacturer, through their fully authorized representatives, have agreed to this Agreement.

EXHIBIT A

STATE ALLOCATION PERCENTAGES

State	Percentage
Alabama	1.6161308%
Alaska	0.3414187%
Arizona	1.4738845%
Arkansas	0.8280661%
California	12.7639554%
Colorado	1.3708614%
Connecticut	1.8565373%
Delaware	0.3954695%
D.C.	0.6071183%
Florida	0.0000000%
Georgia	2.4544575%
Hawaii	0.6018650%
Idaho	0.3632632%
Illinois	4.6542472%
Indiana	2.0398033%
Iowa	0.8696670%
Kansas	0.8336712%
Kentucky	1.7611586%
Louisiana	2.2553531%
Maine	0.7693505%
Maryland	2.2604570%
Massachusetts	4.0389790%
Michigan	4.3519476%
Minnesota	0.0000000%
Mississippi	0.0000000%
Missouri	2.2746011%
Montana	0.4247591%
Nebraska	0.5949833%
Nevada	0.6099351%
New Hampshire	0.6659340%
New Jersey	3.8669963%
New Mexico	0.5963897%
New York	12.7620310%
North Carolina	2.3322850%
North Dakota	0.3660138%
Ohio	5.0375098%
Oklahoma	1.0361370%
Oregon	1.1476582%
Pennsylvania	5.7468588%
Rhode Island	0.7189054%
South Carolina	1.1763519%
South Dakota	0.3489458%
Tennessee	2.4408945%
Texas	0.0000000%
Utah	0.4448869%
Vermont	0.4111851%
Virginia	2.0447451%
Washington	2.0532582%
West Virginia	0.8864604%
Wisconsin	2.0720390%
Wyoming	0.2483449%
American Samoa	0.0152170%
N. Mariana Isld.	0.0084376%
Guam	0.0219371%
U.S. Virgin Isld.	0.0173593%
Puerto Rico	1.1212774%
Total	100.0000000%

EXHIBIT B

FORM OF ESCROW AGREEMENT

This Escrow Agreement is entered into as of ______________, 1998 by the undersigned State officials (on behalf of their respective Settling States), the undersigned Participating Manufacturers and ____________________ as escrow agent (the "Escrow Agent").

WITNESSETH:

WHEREAS, the Settling States and the Participating Manufacturers have entered into a settlement agreement entitled the "Master Settlement Agreement" (the "Agreement"); and

WHEREAS, the Agreement requires the Settling States and the Participating Manufacturers to enter into this Escrow Agreement.

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1. *Appointment of Escrow Agent.*

The Settling States and the Participating Manufacturers hereby appoint ______________________ to serve as Escrow Agent under this Agreement on the terms and conditions set forth herein, and the Escrow Agent, by its execution hereof, hereby accepts such appointment and agrees to perform the duties and obligations of the Escrow Agent set forth herein. The Settling States and the Participating Manufacturers agree that the Escrow Agent appointed under the terms of this Escrow Agreement shall be the Escrow Agent as defined in, and for all purposes of, the Agreement.

SECTION 2. *Definitions.*

(a) Capitalized terms used in this Escrow Agreement and not otherwise defined herein shall have the meaning given to such terms in the Agreement.

(b) "Escrow Court" means the court of the State of New York to which the Agreement is presented for approval, or such other court as agreed to by the Original Participating Manufacturers and a majority of those Attorneys General who are both the Attorney General of a Settling State and a member of the NAAG executive committee at the time in question.

SECTION 3. *Escrow and Accounts.*

(a) All funds received by the Escrow Agent pursuant to the terms of the Agreement shall be held and disbursed in accordance with the terms of this Escrow Agreement. Such funds and any earnings thereon shall constitute the "Escrow" and shall

be held by the Escrow Agent separate and apart from all other funds and accounts of the Escrow Agent, the Settling States and the Participating Manufacturers.

(b) The Escrow Agent shall allocate the Escrow among the following separate accounts (each an "Account" and collectively the "Accounts"):

Subsection VI(b) Account
Subsection VI(c) Account (First)
Subsection VI(c) Account (Subsequent)
Subsection VIII(b) Account
Subsection VIII(c) Account
Subsection IX(b) Account (First)
Subsection IX(b) Account (Subsequent)
Subsection IX(c)(1) Account
Subsection IX(c)(2) Account
Subsection IX(e) Account
Disputed Payments Account
State-Specific Accounts with respect to each Settling State in which State-Specific Finality occurs.

(c) All amounts credited to an Account shall be retained in such Account until disbursed therefrom in accordance with the provisions of this Escrow Agreement pursuant to (i) written instructions from the Independent Auditor; or (ii) written instructions from all of the following: all of the Original Participating Manufacturers; all of the Subsequent Participating Manufacturers that contributed to such amounts in such Account; and all of the Settling States (collectively, the "Escrow Parties"). In the event of a conflict, instructions pursuant to clause (ii) shall govern over instructions pursuant to clause (i).

(d) On the first Business Day after the date any payment is due under the Agreement, the Escrow Agent shall deliver to each other Notice Party a written statement showing the amount of such payment (or indicating that no payment was made, if such is the case), the source of such payment, the Account or Accounts to which such payment has been credited, and the payment instructions received by the Escrow Agent from the Independent Auditor with respect to such payment.

(e) The Escrow Agent shall comply with all payment instructions received from the Independent Auditor unless before 11:00 a.m. (New York City time) on the scheduled date of payment it receives written instructions to the contrary from all of the Escrow Parties, in which event it shall comply with such instructions.

(f) On the first Business Day after disbursing any funds from an Account, the Escrow Agent shall deliver to each other Notice Party a written statement showing the amount disbursed, the date of such disbursement and the payee of the disbursed funds.

SECTION 4. *Failure of Escrow Agent to Receive Instructions.*

In the event that the Escrow Agent fails to receive any written instructions contemplated by this Escrow Agreement, the Escrow Agent shall be fully protected in refraining from taking any action required under any section of this Escrow Agreement other than Section 5 until such written instructions are received by the Escrow Agent.

SECTION 5. *Investment of Funds by Escrow Agent.*

The Escrow Agent shall invest and reinvest all amounts from time to time credited to the Accounts in either (i) direct obligations of, or obligations the principal and interest on which are unconditionally guaranteed by, the United States of America; (ii) repurchase agreements fully collateralized by securities described in clause (i) above; (iii) money market accounts maturing within 30 days of the acquisition thereof and issued by a bank or trust company organized under the laws of the United States of America or of any of the 50 States thereof (a "United States Bank") and having combined capital, surplus and undistributed profits in excess of $500,000,000; or (iv) demand deposits with any United States Bank having combined capital, surplus and undistributed profits in excess of $500,000,000. To the extent practicable, monies credited to any Account shall be invested in such a manner so as to be available for use at the times when monies are expected to be disbursed by the Escrow Agent and charged to such Account. Obligations purchased as an investment of monies credited to any Account shall be deemed at all times to be a part of such Account and the income or interest earned, profits realized or losses suffered with respect to such investments (including, without limitation, any penalty for any liquidation of an investment required to fund a disbursement to be charged to such Account), shall be credited or charged, as the case may be, to, such Account and shall be for the benefit of, or be borne by, the person or entity entitled to payment from such Account. In choosing among the investment options described in clauses (i) through (iv) above, the Escrow Agent shall comply with any instructions received from time to time from all of the Escrow Parties. In the absence of such instructions, the Escrow Agent shall invest such sums in accordance with clause (i) above. With respect to any amounts credited to a State-Specific Account, the Escrow Agent shall invest and reinvest all amounts credited to such Account in accordance with the law of the applicable Settling State to the extent such law is inconsistent with this Section 5.

SECTION 6. *Substitute Form W-9; Qualified Settlement Fund.*

Each signatory to this Escrow Agreement shall provide the Escrow Agent with a correct taxpayer identification number on a substitute Form W-9 or if it does not have such a number, a statement evidencing its status as an entity exempt from back-up withholding, within 30 days of the date hereof (and, if it supplies a Form W-9, indicate thereon that it is not subject to backup withholding). The escrow established pursuant to this Escrow Agreement is intended to be treated as a Qualified Settlement Fund for federal tax purposes pursuant to Treas. Reg. § 1.468B-1. The Escrow Agent shall comply

with all applicable tax filing, payment and reporting requirements, including, without limitation, those imposed under Treas. Reg. § 1.468B, and if requested to do so shall join in the making of the relation-back election under such regulation.

SECTION 7. *Duties and Liabilities of Escrow Agent.*

The Escrow Agent shall have no duty or obligation hereunder other than to take such specific actions as are required of it from time to time under the provisions of this Escrow Agreement, and it shall incur no liability hereunder or in connection herewith for anything whatsoever other than any liability resulting from its own gross negligence or willful misconduct. The Escrow Agent shall not be bound in any way by any agreement or contract between the Participating Manufacturers and the Settling States (whether or not the Escrow Agent has knowledge thereof) other than this Escrow Agreement, and the only duties and responsibilities of the Escrow Agent shall be the duties and obligations specifically set forth in this Escrow Agreement.

SECTION 8. *Indemnification of Escrow Agent.*

The Participating Manufacturers shall indemnify, hold harmless and defend the Escrow Agent from and against any and all losses, claims, liabilities and reasonable expenses, including the reasonable fees of its counsel, which it may suffer or incur in connection with the performance of its duties and obligations under this Escrow Agreement, except for those losses, claims, liabilities and expenses resulting solely and directly from its own gross negligence or willful misconduct.

SECTION 9. *Resignation of Escrow Agent.*

The Escrow Agent may resign at any time by giving written notice thereof to the other parties hereto, but such resignation shall not become effective until a successor Escrow Agent, selected by the Original Participating Manufacturers and the Settling States, shall have been appointed and shall have accepted such appointment in writing. If an instrument of acceptance by a successor Escrow Agent shall not have been delivered to the resigning Escrow Agent within 90 days after the giving of such notice of resignation, the resigning Escrow Agent may, at the expense of the Participating Manufacturers (to be shared according to their pro rata Market Shares), petition the Escrow Court for the appointment of a successor Escrow Agent.

SECTION 10. *Escrow Agent Fees and Expenses.*

The Participating Manufacturers shall pay to the Escrow Agent its fees as set forth in Appendix A hereto as amended from time to time by agreement of the Original Participating Manufacturers and the Escrow Agent. The Participating Manufacturers shall pay to the Escrow Agent its reasonable fees and expenses, including all reasonable expenses, charges, counsel fees, and other disbursements incurred by it or by its attorneys, agents and employees in the performance of its duties and obligations under

this Escrow Agreement. Such fees and expenses shall be shared by the Participating Manufacturers according to their pro rata Market Shares.

SECTION 11. *Notices.*

All notices, written instructions or other communications to any party or other person hereunder shall be given in the same manner as, shall be given to the same person as, and shall be effective at the same time as provided in subsection XVIII(k) of the Agreement.

SECTION 12. *Setoff; Reimbursement.*

The Escrow Agent acknowledges that it shall not be entitled to set off against any funds in, or payable from, any Account to satisfy any liability of any Participating Manufacturer. Each Participating Manufacturer that pays more than its pro rata Market Share of any payment that is made by the Participating Manufacturers to the Escrow Agent pursuant to Section 8, 9 or 10 hereof shall be entitled to reimbursement of such excess from the other Participating Manufacturers according to their pro rata Market Shares of such excess.

SECTION 13. *Intended Beneficiaries; Successors.*

No persons or entities other than the Settling States, the Participating Manufacturers and the Escrow Agent are intended beneficiaries of this Escrow Agreement, and only the Settling States, the Participating Manufacturers and the Escrow Agent shall be entitled to enforce the terms of this Escrow Agreement. Pursuant to the Agreement, the Settling States have designated NAAG and the Foundation as recipients of certain payments; for all purposes of this Escrow Agreement, the Settling States shall be the beneficiaries of such payments entitled to enforce payment thereof. The provisions of this Escrow Agreement shall be binding upon and inure to the benefit of the parties hereto and, in the case of the Escrow Agent and Participating Manufacturers, their respective successors. Each reference herein to the Escrow Agent or to a Participating Manufacturer shall be construed as a reference to its successor, where applicable.

SECTION 14. *Governing Law.*

This Escrow Agreement shall be construed in accordance with and governed by the laws of the State in which the Escrow Court is located, without regard to the conflicts of law rules of such state.

SECTION 15. *Jurisdiction and Venue.*

The parties hereto irrevocably and unconditionally submit to the continuing exclusive jurisdiction of the Escrow Court for purposes of any suit, action or proceeding seeking to interpret or enforce any provision of, or based on any right arising out of, this Escrow Agreement, and the parties hereto agree not to commence any such suit, action or

proceeding except in the Escrow Court. The parties hereto hereby irrevocably and unconditionally waive any objection to the laying of venue of any such suit, action or proceeding in the Escrow Court and hereby further irrevocably waive and agree not to plead or claim in the Escrow Court that any such suit, action or proceeding has been brought in an inconvenient forum.

SECTION 16. *Amendments.*

This Escrow Agreement may be amended only by written instrument executed by all of the parties hereto that would be affected by the amendment. The waiver of any rights conferred hereunder shall be effective only if made in a written instrument executed by the waiving party. The waiver by any party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent or contemporaneous, of this Escrow Agreement, nor shall such waiver be deemed to be or construed as a waiver by any other party.

SECTION 17. *Counterparts.*

This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Delivery by facsimile of a signed counterpart shall be deemed delivery for purposes of acknowledging acceptance hereof; however, an original executed Escrow Agreement must promptly thereafter be delivered to each party.

SECTION 18. *Captions.*

The captions herein are included for convenience of reference only and shall be ignored in the construction and interpretation hereof.

SECTION 19. *Conditions to Effectiveness.*

This Escrow Agreement shall become effective when each party hereto shall have signed a counterpart hereof. The parties hereto agree to use their best efforts to seek an order of the Escrow Court approving, and retaining continuing jurisdiction over, the Escrow Agreement as soon as possible, and agree that such order shall relate back to, and be deemed effective as of, the date this Escrow Agreement became effective.

SECTION 20. *Address for Payments.*

Whenever funds are under the terms of this Escrow Agreement required to be disbursed to a Settling State, a Participating Manufacturer, NAAG or the Foundation, the Escrow Agent shall disburse such funds by wire transfer to the account specified by such payee by written notice delivered to all Notice Parties in accordance with Section 11 hereof at least five Business Days prior to the date of payment. Whenever funds are under the terms of this Escrow Agreement required to be disbursed to any other person or entity, the Escrow Agent shall disburse such funds to such account as shall have been

specified in writing by the Independent Auditor for such payment at least five Business Days prior to the date of payment.

SECTION 21. *Reporting.*

The Escrow Agent shall provide such information and reporting with respect to the escrow as the Independent Auditor may from time to time request.

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement as of the day and year first hereinabove written.

[signature blocks]

APPENDIX A

Schedule Of Fees And Expenses

EXHIBIT C

FORMULA FOR CALCULATING INFLATION ADJUSTMENTS

(1) Any amount that, in any given year, is to be adjusted for inflation pursuant to this Exhibit (the "Base Amount") shall be adjusted upward by adding to such Base Amount the Inflation Adjustment.

(2) The Inflation Adjustment shall be calculated by multiplying the Base Amount by the Inflation Adjustment Percentage applicable in that year.

(3) The Inflation Adjustment Percentage applicable to payments due in the year 2000 shall be equal to the greater of 3% or the CPI%. For example, if the Consumer Price Index for December 1999 (as released in January 2000) is 2% higher than the Consumer Price Index for December 1998 (as released in January 1999), then the CPI% with respect to a payment due in 2000 would be 2%. The Inflation Adjustment Percentage applicable in the year 2000 would thus be 3%.

(4) The Inflation Adjustment Percentage applicable to payments due in any year after 2000 shall be calculated by applying each year the greater of 3% or the CPI% on the Inflation Adjustment Percentage applicable to payments due in the prior year. Continuing the example in subsection (3) above, if the CPI% with respect to a payment due in 2001 is 6%, then the Inflation Adjustment Percentage applicable in 2001 would be 9.1800000% (an additional 6% applied on the 3% Inflation Adjustment Percentage applicable in 2000), and if the CPI% with respect to a payment due in 2002 is 4%, then the Inflation Adjustment Percentage applicable in 2002 would be 13.5472000% (an additional 4% applied on the 9.1800000% Inflation Adjustment Percentage applicable in 2001).

(5) "Consumer Price Index" means the Consumer Price Index for All Urban Consumers as published by the Bureau of Labor Statistics of the U.S. Department of Labor (or other similar measures agreed to by the Settling States and the Participating Manufacturers).

(6) The "CPI%" means the actual total percent change in the Consumer Price Index during the calendar year immediately preceding the year in which the payment in question is due.

(7) Additional Examples.

(A) Calculating the Inflation Adjustment Percentages:

Payment Year	Hypothetical CPI%	Percentage to be applied on the Inflation Adjustment Percentage for the prior year (i.e., the greater of 3% or the CPI%)	Inflation Adjustment Percentage
2000	2.4%	3.0%	3.0000000%
2001	2.1%	3.0%	6.0900000%
2002	3.5%	3.5%	9.8031500%
2003	3.5%	3.5%	13.6462603%
2004	4.0%	4.0%	18.1921107%
2005	2.2%	3.0%	21.7378740%
2006	1.6%	3.0%	25.3900102%

(B) Applying the Inflation Adjustment:

Using the hypothetical Inflation Adjustment Percentages set forth in section (7)(A):

- -- the subsection IX(c)(1) base payment amount for 2002 of $6,500,000,000 as adjusted for inflation would equal $7,137,204,750;
- -- the subsection IX(c)(1) base payment amount for 2004 of $8,000,000,000 as adjusted for inflation would equal $9,455,368,856;
- -- the subsection IX(c)(1) base payment amount for 2006 of $8,000,000,000 as adjusted for inflation would equal $10,031,200,816.

EXHIBIT D

LIST OF LAWSUITS

1. Alabama
Blaylock et al. v. American Tobacco Co. et al., Circuit Court, Montgomery County, No. CV-96-1508-PR

2. Alaska
State of Alaska v. Philip Morris, Inc., et al., Superior Court, First Judicial District of Juneau, No. 1JU-97915 CI (Alaska)

3. Arizona
State of Arizona v. American Tobacco Co., Inc., et al., Superior Court, Maricopa County, No. CV-96-14769 (Ariz.)

4. Arkansas
State of Arkansas v. The American Tobacco Co., Inc., et al., Chancery Court, 6th Division, Pulaski County, No. IJ 97-2982 (Ark.)

5. California
People of the State of California et al. v. Philip Morris, Inc., et al., Superior Court, Sacramento County, No. 97-AS-30301

6. Colorado
State of Colorado et al., v. R.J. Reynolds Tobacco Co., et al., District Court, City and County of Denver, No. 97CV3432 (Colo.)

7. Connecticut
State of Connecticut v. Philip Morris, et al., Superior Court, Judicial District of Waterbury No. X02 CV96-0148414S (Conn.)

8. Georgia
State of Georgia et al. v. Philip Morris, Inc., et al., Superior Court, Fulton County, No. CA E-61692 (Ga.)

9. Hawaii
State of Hawaii v. Brown & Williamson Tobacco Corp., et al., Circuit Court, First Circuit, No. 97-0441-01 (Haw.)

10. Idaho
State of Idaho v. Philip Morris, Inc., et al., Fourth Judicial District, Ada County, No. CVOC 9703239D (Idaho)

11. Illinois
People of the State of Illinois v. Philip Morris et al., Circuit Court of Cook County, No. 96-L13146 (Ill.)

12. Indiana
State of Indiana v. Philip Morris, Inc., et al., Marion County Superior Court, No. 49D 07-9702-CT-000236 (Ind.)

13. Iowa
State of Iowa v. R.J. Reynolds Tobacco Company et al., Iowa District Court, Fifth Judicial District, Polk County, No. CL71048 (Iowa)

14. Kansas
State of Kansas v. R.J. Reynolds Tobacco Company, et al., District Court of Shawnee County, Division 2, No. 96-CV-919 (Kan.)

15. Louisiana
Ieyoub v. The American Tobacco Company, et al., 14th Judicial District Court, Calcasieu Parish, No. 96-1209 (La.)

16. Maine
State of Maine v. Philip Morris, Inc., et al., Superior Court, Kennebec County, No. CV 97-134 (Me.)

17. Maryland
Maryland v. Philip Morris Incorporated, et al., Baltimore City Circuit Court, No. 96-122017-CL211487 (Md.)

18. Massachusetts
Commonwealth of Massachusetts v. Philip Morris Inc., et al., Middlesex Superior Court, No. 95-7378 (Mass.)

19. Michigan
Kelley v. Philip Morris Incorporated, et al., Ingham County Circuit Court, 30th Judicial Circuit, No. 96-84281-CZ (Mich.)

20. Missouri
State of Missouri v. American Tobacco Co., Inc. et al., Circuit Court, City of St. Louis, No. 972-1465 (Mo.)

21. Montana
State of Montana v. Philip Morris, Inc., et al., First Judicial Court, Lewis and Clark County, No. CDV 9700306-14 (Mont.)

22. Nebraska
State of Nebraska v. R.J. Reynolds Tobacco Co., et al., District Court, Lancaster County, No. 573277 (Neb.)

23. Nevada
Nevada v. Philip Morris, Incorporated, et al., Second Judicial Court, Washoe County, No. CV97-03279 (Nev.)

24. New Hampshire
New Hampshire v. R.J. Reynolds, Tobacco Co., et al., New Hampshire Superior Court, Merrimack County, No. 97-E-165 (N.H.)

25. New Jersey
State of New Jersey v. R.J. Reynolds Tobacco Company, et al., Superior Court, Chancery Division, Middlesex County, No. C-254-96 (N.J.)

26. New Mexico
State of New Mexico, v. The American Tobacco Co., et al., First Judicial District Court, County of Santa Fe, No. SF-1235 c (N.M.)

27. New York State
State of New York et al. v. Philip Morris, Inc., et al., Supreme Court of the State of New York, County of New York, No. 400361/97 (N.Y.)

28. Ohio
State of Ohio v. Philip Morris, Inc., et al., Court of Common Pleas, Franklin County, No. 97CVH055114 (Ohio)

29. Oklahoma
State of Oklahoma, et al. v. R.J. Reynolds Tobacco Company, et al., District Court, Cleveland County, No. CJ-96-1499-L (Okla.)

30. Oregon
State of Oregon v. The American Tobacco Co., et al., Circuit Court, Multnomah County, No. 9706-04457 (Or.)

31. Pennsylvania
Commonwealth of Pennsylvania v. Philip Morris, Inc., et al., Court of Common Pleas, Philadelphia County, April Term 1997, No. 2443

32. Puerto Rico
Rossello, et al. v. Brown & Williamson Tobacco Corporation, et al., U.S. District Court, Puerto Rico, No. 97-1910JAF

33. Rhode Island
State of Rhode Island v. American Tobacco Co., et al., Rhode Island Superior Court, Providence, No. 97-3058 (R.I.)

34. South Carolina
State of South Carolina v. Brown & Williamson Tobacco Corporation, et al., Court of Common Pleas, Fifth Judicial Circuit, Richland County, No. 97-CP-40-1686 (S.C.)

35. South Dakota
State of South Dakota, et al. v. Philip Morris, Inc., et al., Circuit Court, Hughes County, Sixth Judicial Circuit, No. 98-65 (S.D.)

36. Utah
State of Utah v. R.J. Reynolds Tobacco Company, et al., U.S. District Court, Central Division, No. 96 CV 0829W (Utah)

37. Vermont
State of Vermont v. Philip Morris, Inc., et al., Chittenden Superior Court, Chittenden County, No. 744-97 (Vt.) and 5816-98 (Vt.)

38. Washington
State of Washington v. American Tobacco Co. Inc., et al., Superior Court of Washington, King County, No. 96-2-1505608SEA (Wash.)

39. West Virginia
McGraw, et al. v. The American Tobacco Company, et al., Kanawha County Circuit Court, No. 94-1707 (W. Va.)

40. Wisconsin
State of Wisconsin v. Philip Morris Inc., et al., Circuit Court, Branch 11, Dane County, No. 97-CV-328 (Wis.)

Additional States

For each Settling State not listed above, the lawsuit or other legal action filed by the Attorney General or Governor of such Settling State against Participating Manufacturers in the Court in such Settling State prior to 30 days after the MSA Execution Date asserting Released Claims.

EXHIBIT E

FORMULA FOR CALCULATING VOLUME ADJUSTMENTS

Any amount that by the terms of the Master Settlement Agreement is to be adjusted pursuant to this Exhibit E (the "Applicable Base Payment") shall be adjusted in the following manner:

(A) In the event the aggregate number of Cigarettes shipped in or to the fifty United States, the District of Columbia, and Puerto Rico by the Original Participating Manufacturers in the Applicable Year (as defined hereinbelow) (the "Actual Volume") is greater than 475,656,000,000 Cigarettes (the "Base Volume"), the Applicable Base Payment shall be multiplied by the ratio of the Actual Volume to the Base Volume.

(B) In the event the Actual Volume is less than the Base Volume,

i. The Applicable Base Payment shall be reduced by subtracting from it the amount equal to such Applicable Base Payment multiplied both by 0.98 and by the result of (i) 1(one) minus (ii) the ratio of the Actual Volume to the Base Volume.

ii. Solely for purposes of calculating volume adjustments to the payments required under subsection IX(c)(1), if a reduction of the Base Payment due under such subsection results from the application of subparagraph (B)(i) of this Exhibit E, but the Original Participating Manufacturers' aggregate operating income from sales of Cigarettes for the Applicable Year in the fifty United States, the District of Columbia, and Puerto Rico (the "Actual Operating Income") is greater than $7,195,340,000 (the "Base Operating Income") (such Base Operating Income being adjusted upward in accordance with the formula for inflation adjustments set forth in Exhibit C hereto beginning December 31, 1996 to be applied for each year after 1996) then the amount by which such Base Payment is reduced by the application of subsection (B)(i) shall be reduced (but not below zero) by the amount calculated by multiplying (i) a percentage equal to the aggregate Allocable Shares of the Settling States in which State-Specific Finality has occurred by (ii) 25% of such increase in such operating income. For purposes of this Exhibit E, "operating income from sales of Cigarettes" shall mean operating income from sales of Cigarettes in the fifty United States, the District of Columbia, and Puerto

Rico: (a) before goodwill amortization, trademark amortization, restructuring charges and restructuring related charges, minority interest, net interest expense, non-operating income and expense, general corporate expenses and income taxes; and (b) excluding extraordinary items, cumulative effect of changes in method of accounting and discontinued operations -- all as such income is reported to the United States Securities and Exchange Commission ("SEC") for the Applicable Year (either independently by the Participating Manufacturer or as part of consolidated financial statements reported to the SEC by an Affiliate of such Participating Manufacturer) or, in the case of an Original Participating Manufacturer that does not report income to the SEC, as reported in financial statements prepared in accordance with U.S. generally accepted accounting principles and audited by a nationally recognized accounting firm. For years subsequent to 1998, the determination of the Original Participating Manufacturers' aggregate operating income from sales of Cigarettes shall not exclude any charges or expenses incurred or accrued in connection with this Agreement or any prior settlement of a tobacco and health case and shall otherwise be derived using the same principles as were employed in deriving such Original Participating Manufacturers' aggregate operating income from sales of Cigarettes in 1996.

iii. Any increase in a Base Payment pursuant to subsection (B)(ii) above shall be allocated among the Original Participating Manufacturers in the following manner:

(1) only to those Original Participating Manufacturers whose operating income from sales of Cigarettes in the fifty United States, the District of Columbia and Puerto Rico for the year for which the Base Payment is being adjusted is greater than their respective operating income from such sales of Cigarettes (including operating income from such sales of any of their Affiliates that do not continue to have such sales after the MSA Execution Date) in 1996 (as increased for inflation as provided in Exhibit C hereto beginning December 31, 1996 to be applied for each year after 1996); and

(2) among the Original Participating Manufacturers described in paragraph (1) above in proportion to the ratio of (x) the increase in the operating income from sales of Cigarettes (as described in paragraph (1)) of the Original Participating Manufacturer in question, to (y) the aggregate increase in the operating income from sales of Cigarettes (as described in

paragraph (1)) of those Original Participating Manufacturers described in paragraph (1) above.

(C) "Applicable Year" means the calendar year immediately preceding the year in which the payment at issue is due, regardless of when such payment is made.

(D) For purposes of this Exhibit, shipments shall be measured as provided in subsection II(mm).

EXHIBIT F

POTENTIAL LEGISLATION NOT TO BE OPPOSED

1. Limitations on Youth access to vending machines.
2. Inclusion of cigars within the definition of tobacco products.
3. Enhancement of enforcement efforts to identify and prosecute violations of laws prohibiting retail sales to Youth.
4. Encouraging or supporting use of technology to increase effectiveness of age-of-purchase laws, such as, without limitation, the use of programmable scanners, scanners to read drivers' licenses, or use of other age/ID data banks.
5. Limitations on promotional programs for non-tobacco goods using tobacco products as prizes or give-aways.
6. Enforcement of access restrictions through penalties on Youth for possession or use.
7. Limitations on tobacco product advertising in or on school facilities, or wearing of tobacco logo merchandise in or on school property.
8. Limitations on non-tobacco products which are designed to look like tobacco products, such as bubble gum cigars, candy cigarettes, etc.

EXHIBIT G

OBLIGATIONS OF THE TOBACCO INSTITUTE UNDER THE MASTER SETTLEMENT AGREEMENT

(a) Upon court approval of a plan of dissolution The Tobacco Institute ("TI") will:

(1) Employees. Promptly notify and arrange for the termination of the employment of all employees; provided, however, that TI may continue to engage any employee who is (A) essential to the wind-down function as set forth in section (g) herein; (B) reasonably needed for the sole purpose of directing and supporting TI's defense of ongoing litigation; or (C) reasonably needed for the sole purpose of performing the Tobacco Institute Testing Laboratory's (the "TITL") industry-wide cigarette testing pursuant to the Federal Trade Commission (the "FTC") method or any other testing prescribed by state or federal law as set forth in section (h) herein.

(2) Employee Benefits. Fund all employee benefit and pension programs; provided, however, that unless ERISA or other federal or state law prohibits it, such funding will be accomplished through periodic contributions by the Original Participating Manufacturers, according to their Relative Market Shares, into a trust or a like mechanism, which trust or like mechanism will be established within 90 days of court approval of the plan of dissolution. An opinion letter will be appended to the dissolution plan to certify that the trust plan is not inconsistent with ERISA or employee benefit pension contracts.

(3) Leases. Terminate all leaseholds at the earliest possible date pursuant to the leases; provided, however, that TI may retain or lease anew such space (or lease other space) as needed for its wind-down activities, for TITL testing as described herein, and for subsequent litigation defense activities. Immediately upon execution of this Agreement, TI will provide notice to each of its landlords of its desire to terminate its lease with such landlord, and will request that the landlord take all steps to re-lease the premises at the earliest possible date consistent with TI's performance of its obligations hereunder. TI will vacate such leasehold premises as soon as they are re-leased or on the last day of wind-down, whichever occurs first.

(b) Assets/Debts. Within 60 days after court approval of a plan of dissolution, TI will provide to the Attorney General of New York and append to the dissolution plan a description of all of its assets, its debts, tax claims against it, claims of state and federal governments against it, creditor claims against it, pending litigation in which it is a party and notices of claims against it.

(c) Documents. Subject to the privacy protections provided by New York Public Officers Law §§ 91-99, TI will provide a copy of or otherwise make available to the State of New York all documents in its possession, excluding those that TI continues to claim to be subject to any attorney-client privilege, attorney work product protection, common interest/joint defense privilege or any other applicable privilege (collectively, "privilege") after the re-examination of privilege claims pursuant to court order in State of Oklahoma v. R.J. Reynolds Tobacco Company, et al., CJ-96-2499-L (Dist. Ct., Cleveland County) (the "Oklahoma action"):

(1) TI will deliver to the Attorney General of the State of New York a copy of the privilege log served by it in the Oklahoma action. Upon a written request by the Attorney General, TI will deliver an updated version of its privilege log, if any such updated version exists.

(2) The disclosure of any document or documents claimed to be privileged will be governed by section IV of this Agreement.

(3) At the conclusion of the document production and privilege logging process, TI will provide a sworn affidavit that all documents in its possession have been made available to the Attorney General of New York except for documents claimed to be privileged, and that any privilege logs that already exist have been made available to the Attorney General.

(d) Remaining Assets. On mutual agreement between TI and the Attorney General of New York, a not-for-profit health or child welfare organization will be named as the beneficiary of any TI assets that remain after lawful transfers of assets and satisfaction of TI's employee benefit obligations and any other debts, liabilities or claims.

(e) Defense of Litigation. Pursuant to Section 1006 of the New York Not-for-Profit Corporations Law, TI will have the right to continue to defend its litigation interests with respect to any claims against it that are pending or threatened now or that are brought or threatened in the future. TI will retain sole discretion over all litigation decisions, including, without limitation, decisions with respect to asserting any privileges or defenses, having privileged communications and creating privileged documents, filing pleadings, responding to discovery requests, making motions, filing affidavits and briefs, conducting party and non-party discovery, retaining expert witnesses and consultants,

preparing for and defending itself at trial, settling any claims asserted against it, intervening or otherwise participating in litigation to protect interests that it deems significant to its defense, and otherwise directing or conducting its defense. Pursuant to existing joint defense agreements, TI may continue to assist its current or former members in defense of any litigation brought or threatened against them. TI also may enter into any new joint defense agreement or agreements that it deems significant to its defense of pending or threatened claims. TI may continue to engage such employees as reasonably needed for the sole purpose of directing and supporting its defense of ongoing litigation. As soon as TI has no litigation pending against it, it will dissolve completely and will cease all functions consistent with the requirements of law.

(f) No public statement. Except as necessary in the course of litigation defense as set forth in section (e) above, upon court approval of a plan of dissolution, neither TI nor any of its employees or agents acting in their official capacity on behalf of TI will issue any statements, press releases, or other public statement concerning tobacco.

(g) Wind-down. After court approval of a plan of dissolution, TI will effectuate wind-down of all activities (other than its defense of litigation as described in section (e) above) expeditiously, and in no event later than 180 days after the date of court approval of the plan of dissolution. TI will provide monthly status reports to the Attorney General of New York regarding the progress of wind-down efforts and work remaining to be done with respect to such efforts.

(h) TITL. Notwithstanding any other provision of this Exhibit G or the dissolution plan, TI may perform TITL industry-wide cigarette testing pursuant to the FTC method or any other testing prescribed by state or federal law until such function is

transferred to another entity, which transfer will be accomplished as soon as practicable but in no event more than 180 days after court approval of the dissolution plan.

(i) Jurisdiction. After the filing of a Certificate of Dissolution, pursuant to Section 1004 of the New York Not-for-Profit Corporation Law, the Supreme Court for the State of New York will have continuing jurisdiction over the dissolution of TI and the winding-down of TI's activities, including any litigation-related activities described in subsection (e) herein.

(j) No Determination or Admission. The dissolution of TI and any proceedings taken hereunder are not intended to be and shall not in any event be construed as, deemed to be, or represented or caused to be represented by any Settling State as, an admission or concession or evidence of any liability or any wrongdoing whatsoever on the part of TI, any of its current or former members or anyone acting on their behalf. TI specifically disclaims and denies any liability or wrongdoing whatsoever with respect to the claims and allegations asserted against it by the Attorneys General of the Settling States.

(k) Court Approval. The Attorney General of the State of New York and the Original Participating Manufacturers will prepare a joint plan of dissolution for submission to the Supreme Court of the State of New York, all of the terms of which will be agreed on and consented to by the Attorney General and the Original Participating Manufacturers consistent with this schedule. The Original Participating Manufacturers and their employees, as officers and directors of TI, will take whatever steps are necessary to execute all documents needed to develop such a plan of dissolution and to submit it to the court for approval. If any court makes any material change to any term or

provision of the plan of dissolution agreed upon and consented to by the Attorney General and the Original Participating Manufacturers, then:

(1) the Original Participating Manufacturers may, at their election, nevertheless proceed with the dissolution plan as modified by the court; or

(2) if the Original Participating Manufacturers elect not to proceed with the court-modified dissolution plan, the Original Participating Manufacturers will be released from any obligations or undertakings under this Agreement or this schedule with respect to TI; provided, however, that the Original Participating Manufacturers will engage in good faith negotiations with the New York Attorney General to agree upon the term or terms of the dissolution plan that the court may have modified in an effort to agree upon a dissolution plan that may be resubmitted for the court's consideration.

EXHIBIT H

DOCUMENT PRODUCTION

Section 1.

(a) Philip Morris Companies, Inc., et al., v. American Broadcasting Companies, Inc., et al., At Law No. 760CL94X00816-00 (Cir. Ct., City of Richmond)

(b) Harley-Davidson v. Lorillard Tobacco Co., No. 93-947 (S.D.N.Y.)

(c) Lorillard Tobacco Co. v. Harley-Davidson, No. 93-6098 (E.D. Wis.)

(d) Brown & Williamson v. Jacobson and CBS, Inc., No. 82-648 (N.D. Ill.)

(e) The FTC investigations of tobacco industry advertising and promotion as embodied in the following cites:

1. 46 FTC 706
2. 48 FTC 82
3. 46 FTC 735
4. 47 FTC 1393
5. 108 F. Supp. 573
6. 55 FTC 354
7. 56 FTC 96
8. 79 FTC 255
9. 80 FTC 455
10. Investigation #8023069
11. Investigation #8323222

Each Original Participating Manufacturer and Tobacco-Related Organization will conduct its own reasonable inquiry to determine what documents or deposition testimony, if any, it produced or provided in the above-listed matters.

Section 2.

(a) State of Washington v. American Tobacco Co., et al., No. 96-2-15056-8 SEA (Wash. Super. Ct., County of King)

(b) In re Mike Moore, Attorney General, ex rel, State of Mississippi Tobacco Litigation, No. 94-1429 (Chancery Ct., Jackson, Miss.)

(c) State of Florida v. American Tobacco Co., et al., No. CL 95-1466 AH (Fla. Cir. Ct., 15th Judicial Cir., Palm Beach Co.)

(d) State of Texas v. American Tobacco Co., et al., No. 5-96CV-91 (E.D. Tex.)

(e) Minnesota v. Philip Morris et al., No. C-94-8565 (Minn. Dist. Ct., County of Ramsey)

(f) Broin v. R.J. Reynolds, No. 91-49738 CA (22) (11th Judicial Ct., Dade County, Florida)

EXHIBIT I

INDEX AND SEARCH FEATURES FOR DOCUMENT WEBSITE

(a) Each Original Participating Manufacturer and Tobacco-Related Organization will create and maintain on its website, at its expense, an enhanced, searchable index, as described below, using Alta-Vista or functionally comparable software, for all of the documents currently on its website and all documents being placed on its website pursuant to section IV of this Agreement.

(b) The searchable indices of documents on these websites will include:

(1) all of the information contained in the 4(b) indices produced to the State Attorneys General (excluding fields specific only to the Minnesota action other than "request number");

(2) the following additional fields of information (or their substantial equivalent) to the extent such information already exists in an electronic format that can be incorporated into such an index:

Document ID	Master ID
Other Number	Document Date
Primary Type	Other Type
Person Attending	Person Noted
Person Author	Person Recipient
Person Copied	Person Mentioned
Organization Author	Organization Recipient
Organization Copied	Organization Mentioned
Organization Attending	Organization Noted
Physical Attachment 1	Physical Attachment 2
Characteristics	File Name
Site	Area
Verbatim Title	Old Brand
Primary Brand	Mentioned Brand
Page Count	

(c) Each Original Participating Manufacturer and Tobacco-Related Organization will add, if not already available, a user-friendly document retrieval feature on the Website consisting of a "view all pages" function with enhanced image viewer capability that will enable users to choose to view and/or print either "all pages" for a specific document or "page-by-page".

(d) Each Original Participating Manufacturer and Tobacco-Related Organizations will provide at its own expense to NAAG a copy set in electronic form of its website document images and its accompanying subsection IV(h) index in ASCII-delimited form for all of the documents currently on its website and all of the documents described in subsection IV(d) of this Agreement. The Original Participating Manufacturers and Tobacco-Related Organizations will not object to any subsequent distribution and/or reproduction of these copy sets.

EXHIBIT J [12]

TOBACCO ENFORCEMENT FUND PROTOCOL

The States' Antitrust/Consumer Protection Tobacco Enforcement Fund ("Fund") is established by the Attorneys General of the Settling States, acting through NAAG, pursuant to section VIII(c) of the Agreement. The following shall be the primary and mandatory protocol for the administration of the Fund.

Section A
Fund Purpose

Section 1

The monies to be paid pursuant to section VIII(c) of the Agreement shall be placed by NAAG in a new and separate interest bearing account, denominated the States' Antitrust/ Consumer Protection Tobacco Enforcement Fund, which shall not then or thereafter be commingled with any other funds or accounts. However, nothing herein shall prevent deposits into the account so long as monies so deposited are then lawfully committed for the purpose of the Fund as set forth herein.

Section 2

The NAAG Executive Committee ("Executive Committee") shall determine disbursements from the account, using the process described herein.

Section 3

The purpose of the Fund is: (1) to enforce and implement the terms of the Agreement, in particular, by partial payment of the monetary costs of the Independent Auditor as contemplated by the Agreement; and (2) to provide monetary assistance to the various states' attorneys general: (A) to investigate and/or litigate suspected violations of the Agreement and/or Consent Decree; (B) to investigate and/or litigate suspected violations of state and/or federal antitrust or consumer protection laws with respect to the manufacture, use, marketing and sales of tobacco products; and (C) to enforce the Qualifying Statute ("Qualifying Actions"). The Executive Committee shall entertain requests only from a Qualified Applicant for disbursement from the fund for a Qualifying Action ("Grant Application"). "Qualified Applicant" means a Settling State, a group of Settling States, or NAAG.

Section B
Administration Standards Relative to Grant Applications

Section 1

The Executive Committee shall not entertain any Grant Application to pay salaries or ordinary expenses of regular employees of any Attorney General's office.

[12] This Copy of Exhibit J reflects amendments approved in January 2013 by a majority vote of the Settling States Pursuant to Section C.1. of Exhibit J

Section 2

A majority vote of the members of the Executive Committee shall be required to approve any Grant Application.

Section 3

The decision of the Executive Committee shall be final and non-appealable.

Section 4

The Executive Director ofNAAG shall annually report to the Attorneys General on the requests for funds from the Fund and the actions of the Executive Committee upon the requests.

Section 5

When a Grant Application to the Fund is made by an Attorney General who is then a member of the Executive Committee, such member will be temporarily replaced on the Committee, but only for the determination of such Grant Application. The President ofNAAG shall designate an Attorney General to replace the Attorney General so disqualified, in order to consider the application.

Section 6

The Fund shall be managed jointly by the following entities and employees ofNAAG: the Executive Committee, the Executive Director and the Controller. The Fund shall be managed pursuant to the written investment policy statement established and maintained by NAAG. The Fund shall be regularly reported on NAAG financial statements and subject to annual audit.

Section 7

Withdrawals from and checks drawn on the Fund will require at least two of three authorized signatures. The three persons so authorized shall be the Executive Director, the Deputy Executive Director, and the Director of Finance ofNAAG.

Section 8

The Executive Committee shall meet in person or telephonically as necessary to determine whether a grant is sought for assistance with a Qualifying Action and whether and to what extent the Grant Application is accepted. The Executive Director ofNAAG shall designate the times for such meetings, so that a response is made to the Grant Application as expeditiously as practicable.

Section 9

The Executive Committee may issue a grant from the Fund only when the Applicant certifies that the monies will be used in connection with a Qualifying Action, to wit: (A) to investigate and/or litigate suspected violations of the Agreement and/or Consent Decree; (B) to

investigate and/or litigate suspected violations of state and/or federal antitrust or consumer protection laws with respect to the manufacture, use, marketing and sales of tobacco products; and (C) to enforce the Qualifying Statute. The Applicant shall further certify that the entire grant of monies from the Fund will be used to pay for such investigation and/or litigation. The Grant Application shall describe the nature and scope of the intended action and use of the funds which may be granted. "Applicant" means the Attorney(s) General of the Settling State(s) submitting the Grant Application or the Executive Director of NAAG, if the Grant Application is submitted by NAAG.

Section 10

To the extent permitted by law, each Attorney General whose Grant Application is favorably acted upon shall promise to pay back to the Fund all of the amounts received from the Fund in the event the state is successful in litigation or settlement of a Qualifying Action. In the event that the monetary recovery, if any, obtained is not sufficient to pay back the entire amount of the grant, the Attorney General shall pay back as much as is permitted by the recovery. In all instances where monies are granted, the Attorney General(s) receiving monies shall provide an accounting to NAAG of all disbursements received from the Fund no later than the 30th of June next following such disbursement.

Section 11

In addition to the repayments to the Fund contemplated in the preceding section, the Executive Committee may deposit in the Fund any other monies lawfully committed for the precise purpose of the Fund as set forth in section A(3) above. For example, the Executive Committee may at its discretion accept for deposit in the Fund a foundation grant or court-ordered award for state antitrust and/or consumer protection enforcement as long as the monies so deposited become part of and subject to the same rules, purposes and limitations of the Fund.

Section 12

The Executive Committee shall be the sole and final arbiter of all Grant Applications and of the amount awarded for each such application, if any.

Section 13

The Executive Committee shall endeavor to maintain the Fund for as long a term as is consistent with the purpose of the Fund.

Section C
Grant Application Procedures

Section 1

This Protocol shall be transmitted to the Attorneys General within 90 days after the MSA Execution Date. It may not be amended unless by recommendation of the Executive Committee and majority vote of the Settling States. NAAG will notify the Settling States of any amendments promptly and will transmit yearly to the attorneys general a statement of the Fund

balance and a summary of deposits to and withdrawals from the Fund in the previous calendar or fiscal year.

Section 2

Grant Applications must be in writing and must be signed by the Attorney(s) General of the submitting state(s) or the Executive Director of NAAG, if the Grant Application is submitted by NAAG.

Section 3

Grant Applications must include the following:

(A) A description of the contemplated/pending action, including the scope of the alleged violation and the area (state/regional/multi-state) likely to be affected by the suspected offending conduct.

(B) A statement whether the action is actively and currently pursued by any other Attorney General or other prosecuting authority.

(C) A description of the purposes for which the monies sought will be used.

(D) The amount requested.

(E) A directive as to how disbursements from the Fund should be made, e.g., either directly to a supplier of services (consultants, experts, witnesses, and the like), to the Attorney General's office directly, or in the case of multi-state action, to one or more Attorneys General's offices designated as a recipient of the monies.

(F) In the case of a Grant Application by a Settling State or group of Settling States, a statement that the applicant Attorney(s) General will, to the extent permitted by law, pay back to the Fund all, or as much as is possible, of the monies received, upon receipt of any monetary recovery obtained in the contemplated/pending litigation or settlement of the action.

(G) A certification that no part of the grant monies will be used to pay the salaries or ordinary expenses of any regular employee of the office of the applicant(s) and that the grant will be used solely to pay for the stated purpose.

(H) A certification that an accounting will be provided to NAAG of all monies received by the applicant, as defined in Section B, Section 9, by no later than the 30th of June next following any receipt of such monies.

Section 4

All Grant Applications shall be submitted to the NAAG office at the following address: National Association of Attorneys General, 2030 M Street, N.W., 8th Floor, Washington, D.C. 20036.

Section 5

The Executive Committee will endeavor to act upon all complete and properly submitted Grant Applications within 30 days of receipt of said applications.

Section D
Other Disbursements from the Fund

Section 1

To enforce and implement the terms ofthe Agreement, the Executive Committee shall direct disbursements from the Fund to comply with the partial payment obligations set forth in section XI of the Agreement relative to costs of the Independent Auditor. A report of such disbursements shall be included in the accounting given pursuant to section C(1) above.

Section E
Administrative Costs

Section 1

NAAG shall receive from the Fund on July 1, 1999 and on July 1 of each year thereafter an administrative fee of $100,000 for its administrative costs in performing its duties under the Protocol and this Agreement. The Executive Committee may adjust the amount of the administrative fee in extraordinary circumstances.

EXHIBIT K

MARKET CAPITALIZATION PERCENTAGES

Philip Morris Incorporated	68.0000000%
Brown & Williamson Tobacco Corporation	17.9000000%
Lorillard Tobacco Company	7.3000000%
R.J. Reynolds Tobacco Company	6.8000000%
Total	100.0000000%

EXHIBIT L

MODEL CONSENT DECREE

IN THE [XXXXXX] COURT OF THE STATE OF [XXXXXX]
IN AND FOR THE COUNTY OF [XXXXX]

STATE OF [XXXXXXXXXXX], Plaintiff, v. [XXXXXX XXXXX XXXX], et al., Defendants.	CAUSE NO. XXXXXX CONSENT DECREE AND FINAL JUDGMENT

WHEREAS, Plaintiff, the State of [name of Settling State], commenced this action on [date], [by and through its Attorney General [name]], pursuant to [her/his/its] common law powers and the provisions of [state and/or federal law];

WHEREAS, the State of [name of Settling State] asserted various claims for monetary, equitable and injunctive relief on behalf of the State of [name of Settling State] against certain tobacco product manufacturers and other defendants;

WHEREAS, Defendants have contested the claims in the State's complaint [and amended complaints, if any] and denied the State's allegations [and asserted affirmative defenses];

WHEREAS, the parties desire to resolve this action in a manner which appropriately addresses the State's public health concerns, while conserving the parties' resources, as well as those of the Court, which would otherwise be expended in litigating a matter of this magnitude; and

WHEREAS, the Court has made no determination of any violation of law, this Consent Decree and Final Judgment being entered prior to the taking of any testimony and without trial or final adjudication of any issue of fact or law;

NOW, THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED, AS FOLLOWS:

I. JURISDICTION AND VENUE

This Court has jurisdiction over the subject matter of this action and over each of the Participating Manufacturers. Venue is proper in this [county/district].

II. DEFINITIONS

The definitions set forth in the Agreement (a copy of which is attached hereto) are incorporated herein by reference.

III. APPLICABILITY

A. This Consent Decree and Final Judgment applies only to the Participating Manufacturers in their corporate capacity acting through their respective successors and assigns, directors, officers, employees, agents, subsidiaries, divisions, or other internal organizational units of any kind or any other entities acting in concert or participation with them. The remedies, penalties and sanctions that may be imposed or assessed in connection with a violation of this Consent Decree and Final Judgment (or any order issued in connection herewith) shall only apply to the Participating Manufacturers, and shall not be imposed or assessed against any employee, officer or director of any Participating Manufacturer, or against any other person or entity as a consequence of such violation, and there shall be no jurisdiction under this Consent Decree and Final Judgment to do so.

B. This Consent Decree and Final Judgment is not intended to and does not vest standing in any third party with respect to the terms hereof. No portion of this Consent Decree and Final Judgment shall provide any rights to, or be enforceable by, any person or entity other than the State of [name of Settling State] or a Released Party. The State of [name of Settling State] may not assign or otherwise convey any right to enforce any provision of this Consent Decree and Final Judgment.

IV. VOLUNTARY ACT OF THE PARTIES

The parties hereto expressly acknowledge and agree that this Consent Decree and Final Judgment is voluntarily entered into as the result of arm's-length negotiation, and all parties hereto were represented by counsel in deciding to enter into this Consent Decree and Final Judgment.

V. INJUNCTIVE AND OTHER EQUITABLE RELIEF

Each Participating Manufacturer is permanently enjoined from:

A. Taking any action, directly or indirectly, to target Youth within the State of [name of Settling State] in the advertising, promotion or marketing of Tobacco Products, or taking any action the primary purpose of which is to initiate, maintain or increase the incidence of Youth smoking within the State of [name of Settling State].

B. After 180 days after the MSA Execution Date, using or causing to be used within the State of [name of Settling State] any Cartoon in the advertising, promoting, packaging or labeling of Tobacco Products.

C. After 30 days after the MSA Execution Date, making or causing to be made any payment or other consideration to any other person or entity to use, display, make reference to or use as a prop within the State of [name of Settling State] any Tobacco Product, Tobacco Product package, advertisement for a Tobacco Product, or any other item bearing a Brand Name in any Media; provided, however, that the foregoing prohibition shall not apply to (1) Media where the audience or viewers are within an Adult-Only Facility (provided such Media are not visible to persons outside such Adult-Only Facility); (2) Media not intended for distribution or display to the public; (3) instructional Media concerning non-conventional cigarettes viewed only by or provided only to smokers who are Adults; and (4) actions taken by any Participating Manufacturer in connection with a Brand Name Sponsorship permitted pursuant to subsections III(c)(2)(A) and III(c)(2)(B)(i) of the Agreement, and use of a Brand Name to identify a Brand Name Sponsorship permitted by subsection III(c)(2)(B)(ii).

D. Beginning July 1, 1999, marketing, distributing, offering, selling, licensing or causing to be marketed, distributed, offered, sold, or licensed (including, without limitation, by catalogue or direct mail), within the State of [name of Settling State], any apparel or other merchandise (other than Tobacco Products, items the sole function of which is to advertise Tobacco Products, or written or electronic publications) which bears a Brand Name. Provided, however, that nothing in this section shall (1) require any Participating Manufacturer to breach or terminate any licensing agreement or other contract in existence as of June 20, 1997 (this exception shall not apply beyond the current term of any existing contract, without regard to any renewal or option term that may be exercised by such Participating Manufacturer); (2) prohibit the distribution to any Participating Manufacturer's employee who is not Underage of any item described above that is intended for the personal use of such an employee; (3) require any Participating Manufacturer to retrieve, collect or otherwise recover any item that prior to the MSA Execution Date was marketed, distributed, offered, sold, licensed or caused to be marketed, distributed, offered, sold or licensed by such Participating Manufacturer; (4) apply to coupons or other items used by Adults solely in connection with the purchase of Tobacco Products; (5) apply to apparel or other merchandise used within an Adult-Only Facility that is not distributed (by sale or otherwise) to any member of the general public; or (6) apply to apparel or other merchandise (a) marketed, distributed, offered, sold, or licensed at the site of a Brand Name Sponsorship permitted pursuant to subsection III(c)(2)(A) or III(c)(2)(B)(i) of the Agreement by the person to which the relevant Participating Manufacturer has provided payment in exchange for the use of the relevant Brand Name in the Brand Name Sponsorship or a third-party that does not receive payment from the relevant Participating Manufacturer (or any Affiliate of such Participating Manufacturer) in connection with the marketing, distribution, offer, sale or license of such apparel or other merchandise, or (b) used at the site of a Brand Name Sponsorship permitted pursuant to subsections III(c)(2)(A) or III(c)(2)(B)(i) of the Agreement (during such event) that are not distributed (by sale or otherwise) to any member of the general public.

E. After the MSA Execution Date, distributing or causing to be distributed within the State of [name of Settling State] any free samples of Tobacco Products except in an Adult-Only Facility. For purposes of this Consent Decree and Final Judgment, a "free sample" does not include a Tobacco Product that is provided to an Adult in connection with (1) the purchase, exchange or redemption for proof of purchase of any Tobacco Products (including, but not limited to, a free offer in connection with the purchase of Tobacco Products, such as a "two-for-one" offer), or (2) the conducting of consumer testing or evaluation of Tobacco Products with persons who certify that they are Adults.

F. Using or causing to be used as a brand name of any Tobacco Product pursuant to any agreement requiring the payment of money or other valuable consideration, any nationally recognized or nationally established brand name or trade name of any non-tobacco item or service or any nationally recognized or nationally established sports team, entertainment group or individual celebrity. Provided, however, that the preceding sentence shall not apply to any Tobacco Product brand name in existence as of July 1, 1998. For the purposes of this provision, the term "other valuable consideration" shall not include an agreement between two entities who enter into such agreement for the sole purpose of avoiding infringement claims.

G. After 60 days after the MSA Execution Date and through and including December 31, 2001, manufacturing or causing to be manufactured for sale within the State of [name of Settling State] any pack or other container of Cigarettes containing fewer than 20 Cigarettes (or, in the case of roll-your-own tobacco, any package of roll-your-own tobacco containing less than 0.60 ounces of tobacco); and, after 150 days after the MSA Execution Date and through and including December 31, 2001, selling or distributing within the State of [name of Settling State] any pack or other container of Cigarettes containing fewer than 20 Cigarettes (or, in the case of roll-your-own tobacco, any package of roll-your-own tobacco containing less than 0.60 ounces of tobacco).

H. Entering into any contract, combination or conspiracy with any other Tobacco Product Manufacturer that has the purpose or effect of: (1) limiting competition in the production or distribution of information about health hazards or other consequences of the use of their products; (2) limiting or suppressing research into smoking and health; or (3) limiting or suppressing research into the marketing or development of new products. Provided, however, that nothing in the preceding sentence shall be deemed to (1) require any Participating Manufacturer to produce, distribute or otherwise disclose any information that is subject to any privilege or protection; (2) preclude any Participating Manufacturer from entering into any joint defense or joint legal interest agreement or arrangement (whether or not in writing), or from asserting any privilege pursuant thereto; or (3) impose any affirmative obligation on any Participating Manufacturer to conduct any research.

I. Making any material misrepresentation of fact regarding the health consequences of using any Tobacco Product, including any tobacco additives, filters, paper or other ingredients. Provided, however, that nothing in the preceding sentence shall limit the exercise of any First Amendment right or the assertion of any defense or position in any judicial, legislative or regulatory forum.

VI. MISCELLANEOUS PROVISIONS

A. Jurisdiction of this case is retained by the Court for the purposes of implementing and enforcing the Agreement and this Consent Decree and Final Judgment and enabling the continuing proceedings contemplated herein. Whenever possible, the State of [name of Settling State] and the Participating Manufacturers shall seek to resolve any issue that may exist as to compliance with this Consent Decree and Final Judgment by discussion among the appropriate designees named pursuant to subsection XVIII(m) of the Agreement. The State of [name of Settling State] and/or any Participating Manufacturer may apply to the Court at any time for further orders and directions as may be necessary or appropriate for the implementation and enforcement of this Consent Decree and Final Judgment. Provided, however, that with regard to subsections V(A) and V(I) of this Consent Decree and Final Judgment, the Attorney General shall issue a cease and desist demand to the Participating Manufacturer that the Attorney General believes is in violation of either of such sections at least ten Business Days before the Attorney General applies to the Court for an order to enforce such subsections, unless the Attorney General reasonably determines that either a compelling time-sensitive public health and safety concern requires more immediate action or the Court has previously issued an Enforcement Order to the Participating Manufacturer in question for the same or a substantially similar action or activity. For any claimed violation of this Consent Decree and Final Judgment, in determining whether to seek an order for monetary, civil contempt or criminal sanctions for any claimed violation, the Attorney General shall give good-faith consideration to whether: (1) the Participating Manufacturer that is claimed to have committed the violation has taken appropriate and reasonable steps to cause the claimed violation to be cured, unless that party has been guilty of a pattern of violations of like nature; and (2) a legitimate, good-faith dispute exists as to the meaning of the terms in question of this Consent Decree and Final Judgment. The Court in any case in its discretion may determine not to enter an order for monetary, civil contempt or criminal sanctions.

B. This Consent Decree and Final Judgment is not intended to be, and shall not in any event be construed as, or deemed to be, an admission or concession or evidence of (1) any liability or any wrongdoing whatsoever on the part of any Released Party or that any Released Party has engaged in any of the activities barred by this Consent Decree and Final Judgment; or (2) personal jurisdiction over any person or entity other than the Participating Manufacturers. Each Participating Manufacturer specifically disclaims and denies any liability or wrongdoing whatsoever with respect to the claims and allegations asserted against it in this action, and has stipulated to the entry of this Consent Decree and Final Judgment solely to avoid the further expense, inconvenience, burden and risk of litigation.

C. Except as expressly provided otherwise in the Agreement, this Consent Decree and Final Judgment shall not be modified (by this Court, by any other court or by any other means) unless the party seeking modification demonstrates, by clear and convincing evidence, that it will suffer irreparable harm from new and unforeseen conditions. Provided, however, that the provisions of sections III, V, VI and VII of this Consent Decree and Final Judgment shall in no event be subject to modification without the consent of the State of [name of Settling State] and all affected Participating Manufacturers. In the event that any of the sections of this Consent

Decree and Final Judgment enumerated in the preceding sentence are modified by this Court, by any other court or by any other means without the consent of the State of [name of Settling State] and all affected Participating Manufacturers, then this Consent Decree and Final Judgment shall be void and of no further effect. Changes in the economic conditions of the parties shall not be grounds for modification. It is intended that the Participating Manufacturers will comply with this Consent Decree and Final Judgment as originally entered, even if the Participating Manufacturers' obligations hereunder are greater than those imposed under current or future law (unless compliance with this Consent Decree and Final Judgment would violate such law). A change in law that results, directly or indirectly, in more favorable or beneficial treatment of any one or more of the Participating Manufacturers shall not support modification of this Consent Decree and Final Judgment.

D. In any proceeding which results in a finding that a Participating Manufacturer violated this Consent Decree and Final Judgment, the Participating Manufacturer or Participating Manufacturers found to be in violation shall pay the State's costs and attorneys' fees incurred by the State of [name of Settling State] in such proceeding.

E. The remedies in this Consent Decree and Final Judgment are cumulative and in addition to any other remedies the State of [name of Settling State] may have at law or equity, including but not limited to its rights under the Agreement. Nothing herein shall be construed to prevent the State from bringing an action with respect to conduct not released pursuant to the Agreement, even though that conduct may also violate this Consent Decree and Final Judgment. Nothing in this Consent Decree and Final Judgment is intended to create any right for [name of Settling State] to obtain any Cigarette product formula that it would not otherwise have under applicable law.

F. No party shall be considered the drafter of this Consent Decree and Final Judgment for the purpose of any statute, case law or rule of interpretation or construction that would or might cause any provision to be construed against the drafter. Nothing in this Consent Decree and Final Judgment shall be construed as approval by the State of [name of Settling State] of the Participating Manufacturers' business organizations, operations, acts or practices, and the Participating Manufacturers shall make no representation to the contrary.

G. The settlement negotiations resulting in this Consent Decree and Final Judgment have been undertaken in good faith and for settlement purposes only, and no evidence of negotiations or discussions underlying this Consent Decree and Final Judgment shall be offered or received in evidence in any action or proceeding for any purpose. Neither this Consent Decree and Final Judgment nor any public discussions, public statements or public comments with respect to this Consent Decree and Final Judgment by the State of [name of Settling State] or any Participating Manufacturer or its agents shall be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to this Consent Decree and Final Judgment.

H. All obligations of the Participating Manufacturers pursuant to this Consent Decree and Final Judgment (including, but not limited to, all payment obligations) are, and shall remain, several and not joint.

I. The provisions of this Consent Decree and Final Judgment are applicable only to actions taken (or omitted to be taken) within the States. Provided, however, that the preceding sentence shall not be construed as extending the territorial scope of any provision of this Consent Decree and Final Judgment whose scope is otherwise limited by the terms thereof.

J. Nothing in subsection V(A) or V(I) of this Consent Decree shall create a right to challenge the continuation, after the MSA Execution Date, of any advertising content, claim or slogan (other than use of a Cartoon) that was not unlawful prior to the MSA Execution Date.

K. If the Agreement terminates in this State for any reason, then this Consent Decree and Final Judgment shall be void and of no further effect.

VII. FINAL DISPOSITION

A. The Agreement, the settlement set forth therein, and the establishment of the escrow provided for therein are hereby approved in all respects, and all claims are hereby dismissed with prejudice as provided therein.

B. The Court finds that the person[s] signing the Agreement have full and complete authority to enter into the binding and fully effective settlement of this action as set forth in the Agreement. The Court further finds that entering into this settlement is in the best interests of the State of [name of Settling State].

LET JUDGMENT BE ENTERED ACCORDINGLY

DATED this _____ day of _____________, 1998.

EXHIBIT M

LIST OF PARTICIPATING MANUFACTURERS' LAWSUITS AGAINST THE SETTLING STATES

1. Philip Morris, Inc., et al. v. Margery Bronster, Attorney General of the State of Hawaii, In Her Official Capacity, Civ. No. 96-00722HG, United States District Court for the District of Hawaii

2. Philip Morris, Inc., et al. v. Bruce Botelho, Attorney General of the State of Alaska, In His Official Capacity, Civ. No. A97-0003CV, United States District Court for the District of Alaska

3. Philip Morris, Inc., et al. v. Scott Harshbarger, Attorney General of the Commonwealth of Massachusetts, In His Official Capacity, Civ. No. 95-12574-GAO, United States District Court for the District of Massachusetts

4. Philip Morris, Inc., et al. v. Richard Blumenthal, Attorney General of the State of Connecticut, In His Official Capacity, Civ. No. 396CV01221 (PCD), United States District Court for the District of Connecticut

5. Philip Morris, et al. v. William H. Sorrell, et al., No. 1:98-ev-132, United States District Court for the District of Vermont

EXHIBIT N

LITIGATING POLITICAL SUBDIVISIONS

1. City of New York, et al. v. The Tobacco Institute, Inc. et al., Supreme Court of the State of New York, County of New York, Index No. 406225/96

2. County of Erie v. The Tobacco Institute, Inc. et al., Supreme Court of the State of New York, County of Erie, Index No. I 1997/359

3. County of Los Angeles v. R.J. Reynolds Tobacco Co. et al., San Diego Superior Court, No. 707651

4. The People v. Philip Morris, Inc. et al., San Francisco Superior Court, No. 980864

5. County of Cook v. Philip Morris, Inc. et al., Circuit Court of Cook County, Ill., No. 97-L-4550

EXHIBIT O

MODEL STATE FEE PAYMENT AGREEMENT

This STATE Fee Payment Agreement (the "STATE Fee Payment Agreement") is entered into as of _________, _____ between and among the Original Participating Manufacturers and STATE Outside Counsel (as defined herein), to provide for payment of attorneys' fees pursuant to Section XVII of the Master Settlement Agreement (the "Agreement").

WITNESSETH:

WHEREAS, the State of STATE and the Original Participating Manufacturers have entered into the Agreement to settle and resolve with finality all Released Claims against the Released Parties, including the Original Participating Manufacturers, as set forth in the Agreement; and

WHEREAS, Section XVII of the Agreement provides that the Original Participating Manufacturers shall pay reasonable attorneys' fees to those private outside counsel identified in Exhibit S to the Agreement, pursuant to the terms hereof;

NOW, THEREFORE, BE IT KNOWN THAT, in consideration of the mutual agreement of the State of STATE and the Original Participating Manufacturers to the terms of the Agreement and of the mutual agreement of STATE Outside Counsel and the Original Participating Manufacturers to the terms of this STATE Fee Payment Agreement, and such other consideration described herein, the Original Participating Manufacturers and STATE Outside Counsel agree as follows:

SECTION 1. *Definitions*.

All definitions contained in the Agreement are incorporated by reference herein, except as to terms specifically defined herein.

(a) "*Action*" means the lawsuit identified in Exhibit D, M or N to the Agreement that has been brought by or against the State of STATE [or Litigating Political Subdivision].

(b) "*Allocated Amount*" means the amount of any Applicable Quarterly Payment allocated to any Private Counsel (including STATE Outside Counsel) pursuant to section 17 hereof.

(c) "*Allocable Liquidated Share*" means, in the event that the sum of all Payable Liquidated Fees of Private Counsel as of any date specified in section 8 hereof exceeds the Applicable Liquidation Amount for any payment described therein, a percentage share of the Applicable Liquidation Amount equal to the proportion of (i) the amount of the Payable Liquidated Fee of STATE Outside Counsel to (ii) the sum of Payable Liquidated Fees of all Private Counsel.

(d) "*Applicable Liquidation Amount*" means, for purposes of the payments described in section 8 hereof—

(i) for the payment described in subsection (a) thereof, $125 million;

(ii) for the payment described in subsection (b) thereof, the difference between (A) $250 million and (B) the sum of all amounts paid in satisfaction of all Payable Liquidated Fees of Outside Counsel pursuant to subsection (a) thereof;

(iii) for the payment described in subsection (c) thereof, the difference between (A) $250 million and (B) the sum of all amounts paid in satisfaction of all Payable Liquidated Fees of Outside Counsel pursuant to subsections (a) and (b) thereof;

(iv) for the payment described in subsection (d) thereof, the difference between (A) $250 million and (B) the sum of all amounts paid in satisfaction of all Payable Liquidated Fees of Outside Counsel pursuant to subsections (a), (b) and (c) thereof;

(v) for the payment described in subsection (e) thereof, the difference between (A) $250 million and (B) the sum of all amounts paid in satisfaction of all Payable Liquidated Fees of Outside Counsel pursuant to subsections (a), (b), (c) and (d) thereof;

(vi) for each of the first, second and third quarterly payments for any calendar year described in subsection (f) thereof, $62.5 million; and

(vii) for each of the fourth calendar quarterly payments for any calendar year described in subsection (f) thereof, the difference between (A) $250 million and (B) the sum of all amounts paid in satisfaction of all Payable Liquidated Fees of Outside Counsel with respect to the preceding calendar quarters of the calendar year.

(e) "*Application*" means a written application for a Fee Award submitted to the Panel, as well as all supporting materials (which may include video recordings of interviews).

(f) "*Approved Cost Statement*" means both (i) a Cost Statement that has been accepted by the Original Participating Manufacturers; and (ii) in the event that a Cost Statement submitted by STATE Outside Counsel is disputed, the determination by arbitration pursuant to subsection (b) of section 19 hereof as to the amount of the reasonable costs and expenses of STATE Outside Counsel.

(g) *"Cost Statement"* means a signed and attested statement of reasonable costs and expenses of Outside Counsel for any action identified on Exhibit D, M or N to the Agreement that has been brought by or against a Settling State or Litigating Political Subdivision.

(h) *"Designated Representative"* means the person designated in writing, by each person or entity identified in Exhibit S to the Agreement [by the Attorney General of the State of STATE or as later certified in writing by the governmental prosecuting authority of the Litigating Political Subdivision], to act as their agent in receiving payments from the Original Participating Manufacturers for the benefit of STATE Outside Counsel pursuant to sections 8, 16 and 19 hereof, as applicable.

(i) *"Director"* means the Director of the Private Adjudication Center of the Duke University School of Law or such other person or entity as may be chosen by agreement of the Original Participating Manufacturers and the Committee described in the second sentence of paragraph (b)(ii) of section 11 hereof.

(j) *"Eligible Counsel"* means Private Counsel eligible to be allocated a part of a Quarterly Fee Amount pursuant to section 17 hereof.

(k) *"Federal Legislation"* means federal legislation that imposes an enforceable obligation on Participating Defendants to pay attorneys' fees with respect to Private Counsel.

(l) *"Fee Award"* means any award of attorneys' fees by the Panel in connection with a Tobacco Case.

(m) *"Liquidated Fee"* means an attorneys' fee for Outside Counsel for any action identified on Exhibit D, M or N to the Agreement that has been brought by or against a Settling State or Litigating Political Subdivision, in an amount agreed upon by the Original Participating Manufacturers and such Outside Counsel.

(n) *"Outside Counsel"* means all those Private Counsel identified in Exhibit S to the Agreement.

(o) *"Panel"* means the three-member arbitration panel described in section 11 hereof.

(p) *"Party"* means (i) STATE Outside Counsel and (ii) an Original Participating Manufacturer.

(q) *"Payable Cost Statement"* means the unpaid amount of a Cost Statement as to which all conditions precedent to payment have been satisfied.

(r) *"Payable Liquidated Fee"* means the unpaid amount of a Liquidated Fee as to which all conditions precedent to payment have been satisfied.

(s) *"Previously Settled States"* means the States of Mississippi, Florida and Texas.

(t) *"Private Counsel"* means all private counsel for all plaintiffs in a Tobacco Case (including STATE Outside Counsel).

(u) *"Quarterly Fee Amount"* means, for purposes of the quarterly payments described in sections 16, 17 and 18 hereof —

(i) for each of the first, second and third calendar quarters of any calendar year beginning with the first calendar quarter of 1999 and ending with the third calendar quarter of 2008, $125 million;

(ii) for each fourth calendar quarter of any calendar year beginning with the fourth calendar quarter of 1999 and ending with the fourth calendar quarter of 2003, the sum of (A) $125 million and (B) the difference, if any, between (*1*) $375 million and (*2*) the sum of all amounts paid in satisfaction of all Fee Awards of Private Counsel during such calendar year, if any;

(iii) for each fourth calendar quarter of any calendar year beginning with the fourth calendar quarter of 2004 and ending with the fourth calendar quarter of 2008, the sum of (A) $125 million; (B) the difference between (*1*) $375 million; and (*2*) the sum of all amounts paid in satisfaction of all Fee Awards of Private Counsel during such calendar year, if any; and (C) the difference, if any, between (*1*) $250 million and (*2*) the product of (*a*) .2 (two tenths) and (*b*) the sum of all amounts paid in satisfaction of all Liquidated Fees of Outside Counsel pursuant to section 8 hereof, if any;

(iv) for each of the first, second and third calendar quarters of any calendar year beginning with the first calendar quarter of 2009, $125 million; and

(v) for each fourth calendar quarter of any calendar year beginning with the fourth calendar quarter of 2009, the sum of (A) $125 million and (B) the difference, if any, between (*1*) $375 million and (*2*) the sum of all amounts paid in satisfaction of all Fee Awards of Private Counsel during such calendar year, if any.

(v) *"Related Persons"* means each Original Participating Manufacturer's past, present and future Affiliates, divisions, officers, directors, employees, representatives, insurers, lenders, underwriters, Tobacco-Related Organizations, trade associations, suppliers, agents, auditors, advertising agencies, public relations entities, attorneys, retailers and distributors (and the predecessors, heirs, executors, administrators, successors and assigns of each of the foregoing).

(w) *"State of STATE"* means the [applicable Settling State or the Litigating Political Subdivision], any of its past, present and future agents, officials acting in their

official capacities, legal representatives, agencies, departments, commissions and subdivisions.

(x) "*STATE Outside Counsel*" means all persons or entities identified in Exhibit S to the Agreement by the Attorney General of State of STATE [or as later certified by the office of the governmental prosecuting authority for the Litigating Political Subdivision] as having been retained by and having represented the STATE in connection with the Action, acting collectively by unanimous decision of all such persons or entities.

(y) "*Tobacco Case*" means any tobacco and health case (other than a non-class action personal injury case brought directly by or on behalf of a single natural person or the survivor of such person or for wrongful death, or any non-class action consolidation of two or more such cases).

(z) "*Unpaid Fee*" means the unpaid portion of a Fee Award.

SECTION 2. *Agreement to Pay Fees.*

The Original Participating Manufacturers will pay reasonable attorneys' fees to STATE Outside Counsel for their representation of the State of STATE in connection with the Action, as provided herein and subject to the *Code of Professional Responsibility* of the American Bar Association. Nothing herein shall be construed to require the Original Participating Manufacturers to pay any attorneys' fees other than (i) a Liquidated Fee or a Fee Award and (ii) a Cost Statement, as provided herein, nor shall anything herein require the Original Participating Manufacturers to pay any Liquidated Fee, Fee Award or Cost Statement in connection with any litigation other than the Action.

SECTION 3. *Exclusive Obligation of the Original Participating Manufacturers.*

The provisions set forth herein constitute the entire obligation of the Original Participating Manufacturers with respect to payment of attorneys' fees of STATE Outside Counsel (including costs and expenses) in connection with the Action and the exclusive means by which STATE Outside Counsel or any other person or entity may seek payment of fees by the Original Participating Manufacturers or Related Persons in connection with the Action. The Original Participating Manufacturers shall have no obligation pursuant to Section XVII of the Agreement to pay attorneys' fees in connection with the Action to any counsel other than STATE Outside Counsel, and they shall have no other obligation to pay attorneys' fees to or otherwise to compensate STATE Outside Counsel, any other counsel or representative of the State of STATE or the State of STATE itself with respect to attorneys' fees in connection with the Action.

SECTION 4. *Release.*

(a) Each person or entity identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the office of the governmental prosecuting authority for the Litigating Political Subdivision] hereby irrevocably releases

the Original Participating Manufacturers and all Related Persons from any and all claims that such person or entity ever had, now has or hereafter can, shall or may have in any way related to the Action (including but not limited to any negotiations related to the settlement of the Action). Such release shall not be construed as a release of any person or entity as to any of the obligations undertaken herein in connection with a breach thereof.

(b) In the event that STATE Outside Counsel and the Original Participating Manufacturers agree upon a Liquidated Fee pursuant to section 7 hereof, it shall be a precondition to any payment by the Original Participating Manufacturers to the Designated Representative pursuant to section 8 hereof that each person or entity identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the office of the governmental prosecuting authority for the Litigating Political Subdivision] shall have irrevocably released all entities represented by STATE Outside Counsel in the Action, as well as all persons acting by or on behalf of such entities (including the Attorney General [or the office of the governmental prosecuting authority] and each other person or entity identified on Exhibit S to the Agreement by the Attorney General [or the office of the governmental prosecuting authority]) from any and all claims that such person or entity ever had, now has or hereafter can, shall or may have in any way related to the Action (including but not limited to any negotiations related to the settlement of the Action). Such release shall not be construed as a release of any person or entity as to any of the obligations undertaken herein in connection with a breach thereof.

SECTION 5. *No Effect on STATE Outside Counsel's Fee Contract.*

The rights and obligations, if any, of the respective parties to any contract between the State of STATE and STATE Outside Counsel shall be unaffected by this STATE Fee Payment Agreement except (a) insofar as STATE Outside Counsel grant the release described in subsection (b) of section 4 hereof; and (b) to the extent that STATE Outside Counsel receive any payments in satisfaction of a Fee Award pursuant to section 16 hereof, any amounts so received shall be credited, on a dollar-for-dollar basis, against any amount payable to STATE Outside Counsel by the State of STATE [or the Litigating Political Subdivision] under any such contract.

SECTION 6. *Liquidated Fees.*

(a) In the event that the Original Participating Manufacturers and STATE Outside Counsel agree upon the amount of a Liquidated Fee, the Original Participating Manufacturers shall pay such Liquidated Fee, pursuant to the terms hereof.

(b) The Original Participating Manufacturers' payment of any Liquidated Fee pursuant to this STATE Fee Payment Agreement shall be subject to (i) satisfaction of the conditions precedent stated in section 4 and paragraph (c)(ii) of section 7 hereof; and (ii) the payment schedule and the annual and quarterly aggregate national caps specified in

sections 8 and 9 hereof, which shall apply to all payments made with respect to Liquidated Fees of all Outside Counsel.

SECTION 7. *Negotiation of Liquidated Fees.*

(a) If STATE Outside Counsel seek to be paid a Liquidated Fee, the Designated Representative shall so notify the Original Participating Manufacturers. The Original Participating Manufacturers may at any time make an offer of a Liquidated Fee to the Designated Representative in an amount set by the unanimous agreement, and at the sole discretion, of the Original Participating Manufacturers and, in any event, shall collectively make such an offer to the Designated Representative no more than 60 Business Days after receipt of notice by the Designated Representative that STATE Outside Counsel seek to be paid a Liquidated Fee. The Original Participating Manufacturers shall not be obligated to make an offer of a Liquidated Fee in any particular amount. Within ten Business Days after receiving such an offer, STATE Outside Counsel shall either accept the offer, reject the offer or make a counteroffer.

(b) The national aggregate of all Liquidated Fees to be agreed to by the Original Participating Manufacturers in connection with the settlement of those actions indicated on Exhibits D, M and N to the Agreement shall not exceed one billion two hundred fifty million dollars ($1,250,000,000).

(c) If the Original Participating Manufacturers and STATE Outside Counsel agree in writing upon a Liquidated Fee —

(i) STATE Outside Counsel shall not be eligible for a Fee Award;

(ii) such Liquidated Fee shall not become a Payable Liquidated Fee until such time as (A) State-Specific Finality has occurred in the State of STATE; (B) each person or entity identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the office of the governmental prosecuting authority of the Litigating Political Subdivision] has granted the release described in subsection (b) of section 4 hereof; and (C) notice of the events described in subparagraphs (A) and (B) of this paragraph has been provided to the Original Participating Manufacturers.

(iii) payment of such Liquidated Fee pursuant to sections 8 and 9 hereof (together with payment of costs and expenses pursuant to section 19 hereof), shall be STATE Outside Counsel's total and sole compensation by the Original Participating Manufacturers in connection with the Action.

(d) If the Original Participating Manufacturers and STATE Outside Counsel do not agree in writing upon a Liquidated Fee, STATE Outside Counsel may submit an Application to the Panel for a Fee Award to be paid as provided in sections 16, 17 and 18 hereof.

SECTION 8. *Payment of Liquidated Fee.*

In the event that the Original Participating Manufacturers and STATE Outside Counsel agree in writing upon a Liquidated Fee, and until such time as the Designated Representative has received payments in full satisfaction of such Liquidated Fee —

(a) On February 1, 1999, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee before January 15, 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel, (ii) $5 million or (iii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel as of January 15, 1999 exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

(b) On August 1, 1999, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee on or after January 15, 1999 and before July 15, 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel, (ii) $5 million or (iii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel that became Payable Liquidated Fees on or after January 15, 1999 and before July 15, 1999 exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

(c) On December 15, 1999, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee on or after July 15, 1999 and before December 1, 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel, (ii) $5 million or (iii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel that became Payable Liquidated Fees on or after July 15, 1999 and before December 1, 1999 exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

(d) On December 15, 1999, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee before December 1, 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel, or (ii) $5 million or (iii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel that become Payable Liquidated Fees before December 1, 1999 exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

(e) On December 15, 1999, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee before December 1, 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel or (ii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel that became

Payable Liquidated Fees before December 1, 1999 exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

(f) On the last day of each calendar quarter, beginning with the first calendar quarter of 2000 and ending with the fourth calendar quarter of 2003, if the Liquidated Fee of STATE Outside Counsel became a Payable Liquidated Fee at least 15 Business Days prior to the last day of each such calendar quarter, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the lesser of (i) the Payable Liquidated Fee of STATE Outside Counsel or (ii) in the event that the sum of all Payable Liquidated Fees of all Outside Counsel as of the date 15 Business Days prior to the date of the payment in question exceeds the Applicable Liquidation Amount, the Allocable Liquidated Share of STATE Outside Counsel.

SECTION 9. *Limitations on Payments of Liquidated Fees.*

Notwithstanding any other provision hereof, all payments by the Original Participating Manufacturers with respect to Liquidated Fees shall be subject to the following:

(a) Under no circumstances shall the Original Participating Manufacturers be required to make any payment that would result in aggregate national payments of Liquidated Fees:

(i) during 1999, totaling more than $250 million;

(ii) with respect to any calendar quarter beginning with the first calendar quarter of 2000 and ending with the fourth calendar quarter of 2003, totaling more than $62.5 million, except to the extent that a payment with respect to any prior calendar quarter of any calendar year did not total $62.5 million; or

(iii) with respect to any calendar quarter after the fourth calendar quarter of 2003, totaling more than zero.

(b) The Original Participating Manufacturers' obligations with respect to the Liquidated Fee of STATE Outside Counsel, if any, shall be exclusively as provided in this STATE Fee Payment Agreement, and notwithstanding any other provision of law, such Liquidated Fee shall not be entered as or reduced to a judgment against the Original Participating Manufacturers or considered as a basis for requiring a bond or imposing a lien or any other encumbrance.

SECTION 10. *Fee Awards.*

(a) In the event that the Original Participating Manufacturers and STATE Outside Counsel do not agree in writing upon a Liquidated Fee as described in section 7 hereof, the Original Participating Manufacturers shall pay, pursuant to the terms hereof, the Fee Award awarded by the Panel to STATE Outside Counsel.

(b) The Original Participating Manufacturers' payment of any Fee Award pursuant to this STATE Fee Payment Agreement shall be subject to the payment schedule and the annual and quarterly aggregate national caps specified in sections 17 and 18 hereof, which shall apply to:

(i) all payments of Fee Awards in connection with an agreement to pay fees as part of the settlement of any Tobacco Case on terms that provide for payment by the Original Participating Manufacturers or other defendants acting in agreement with the Original Participating Manufacturers (collectively, "Participating Defendants") of fees with respect to any Private Counsel, subject to an annual cap on payment of all such fees; and

(ii) all payments of attorneys' fees (other than fees for attorneys of Participating Defendants) pursuant to Fee Awards for activities in connection with any Tobacco Case resolved by operation of Federal Legislation.

SECTION 11. *Composition of the Panel.*

(a) The first and the second members of the Panel shall both be permanent members of the Panel and, as such, will participate in the determination of all Fee Awards. The third Panel member shall not be a permanent Panel member, but instead shall be a state-specific member selected to determine Fee Awards on behalf of Private Counsel retained in connection with litigation within a single state. Accordingly, the third, state-specific member of the Panel for purposes of determining Fee Awards with respect to litigation in the State of STATE shall not participate in any determination as to any Fee Award with respect to litigation in any other state (unless selected to participate in such determinations by such persons as may be authorized to make such selections under other agreements).

(b) The members of the Panel shall be selected as follows:

(i) The first member shall be the natural person selected by Participating Defendants.

(ii) The second member shall be the person jointly selected by the agreement of Participating Defendants and a majority of the committee described in the fee payment agreements entered in connection with the settlements of the Tobacco Cases brought by the Previously Settled States. In the event that the person so selected is unable or unwilling to continue to serve, a replacement for such member shall be selected by agreement of the Original Participating Manufacturers and a majority of the members of a committee composed of the following members: Joseph F. Rice, Richard F. Scruggs, Steven W. Berman, Walter Umphrey, one additional representative, to be selected in the sole discretion of NAAG, and two representatives of Private Counsel in Tobacco Cases, to be selected at the sole discretion of the Original Participating Manufacturers.

(iii) The third, state-specific member for purposes of determining Fee Awards with respect to litigation in the State of STATE shall be a natural person selected by STATE Outside Counsel, who shall notify the Director and the Original Participating Manufacturers of the name of the person selected.

SECTION 12. *Application of STATE Outside Counsel.*

(a) STATE Outside Counsel shall make a collective Application for a single Fee Award, which shall be submitted to the Director. Within five Business Days after receipt of the Application by STATE Outside Counsel, the Director shall serve the Application upon the Original Participating Manufacturers and the STATE. The Original Participating Manufacturers shall submit all materials in response to the Application to the Director by the later of (i) 60 Business Days after service of the Application upon the Original Participating Manufacturers by the Director, (ii) five Business Days after the date of State-Specific Finality in the State of STATE or (iii) five Business Days after the date on which notice of the name of the third, state-specific panel member described in paragraph (b)(iii) of section 11 hereof has been provided to the Director and the Original Participating Manufacturers.

(b) The Original Participating Manufacturers may submit to the Director any materials that they wish and, notwithstanding any restrictions or representations made in any other agreements, the Original Participating Manufacturers shall be in no way constrained from contesting the amount of the Fee Award requested by STATE Outside Counsel. The Director, the Panel, the State of STATE, the Original Participating Manufacturers and STATE Outside Counsel shall preserve the confidentiality of any attorney work-product materials or other similar confidential information that may be submitted.

(c) The Director shall forward the Application of STATE Outside Counsel, as well as all written materials relating to such Application that have been submitted by the Original Participating Manufacturers pursuant to subsection (b) of this section, to the Panel within five Business Days after the later of (i) the expiration of the period for the Original Participating Manufacturers to submit such materials or (ii) the earlier of (A) the date on which the Panel issues a Fee Award with respect to any Application of other Private Counsel previously forwarded to the Panel by the Director or (B) 30 Business Days after the forwarding to the Panel of the Application of other Private Counsel most recently forwarded to the Panel by the Director. The Director shall notify the Parties upon forwarding the Application (and all written materials relating thereto) to the Panel.

(d) In the event that either Party seeks a hearing before the Panel, such Party may submit a request to the Director in writing within five Business Days after the forwarding of the Application of STATE Outside Counsel to the Panel by the Director, and the Director shall promptly forward the request to the Panel. If the Panel grants the request, it shall promptly set a date for hearing, such date to fall within 30 Business Days after the date of the Panel's receipt of the Application.

SECTION 13. *Panel Proceedings.*

The proceedings of the Panel shall be conducted subject to the terms of this Agreement and of the Protocol of Panel Procedures attached as an Appendix hereto.

SECTION 14. *Award of Fees to STATE Outside Counsel.*

The members of the Panel will consider all relevant information submitted to them in reaching a decision as to a Fee Award that fairly provides for full reasonable compensation of STATE Outside Counsel. In considering the amount of the Fee Award, the Panel shall not consider any Liquidated Fee agreed to by any other Outside Counsel, any offer of or negotiations relating to any proposed liquidated fee for STATE Outside Counsel or any Fee Award that already has been or yet may be awarded in connection with any other Tobacco Case. The Panel shall not be limited to an hourly-rate or lodestar analysis in determining the amount of the Fee Award of STATE Outside Counsel, but shall take into account the totality of the circumstances. The Panel's decisions as to the Fee Award of STATE Outside Counsel shall be in writing and shall report the amount of the fee awarded (with or without explanation or opinion, at the Panel's discretion). The Panel shall determine the amount of the Fee Award to be paid to STATE Outside Counsel within the later of 30 calendar days after receiving the Application (and all related materials) from the Director or 15 Business Days after the last date of any hearing held pursuant to subsection (d) of section 12 hereof. The Panel's decision as to the Fee Award of STATE Outside Counsel shall be final, binding and non-appealable.

SECTION 15. *Costs of Arbitration.*

All costs and expenses of the arbitration proceedings held by the Panel, including costs, expenses and compensation of the Director and of the Panel members (but not including any costs, expenses or compensation of counsel making applications to the Panel), shall be borne by the Original Participating Manufacturers in proportion to their Relative Market Shares.

SECTION 16. *Payment of Fee Award of STATE Outside Counsel.*

On or before the tenth Business Day after the last day of each calendar quarter beginning with the first calendar quarter of 1999, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the Allocated Amount for STATE Outside Counsel for the calendar quarter with respect to which such quarterly payment is being made (the "Applicable Quarter").

SECTION 17. *Allocated Amounts of Fee Awards.*

The Allocated Amount for each Private Counsel with respect to any payment to be made for any particular Applicable Quarter shall be determined as follows:

(a) The Quarterly Fee Amount shall be allocated equally among each of the three months of the Applicable Quarter. The amount for each such month shall be allocated among those Private Counsel retained in connection with Tobacco Cases settled before or during such month (each such Private Counsel being an "Eligible Counsel" with respect to such monthly amount), each of which shall be allocated a portion of each such monthly amount up to (or, in the event that the sum of all Eligible Counsel's respective Unpaid Fees exceeds such monthly amount, in proportion to) the amount of such Eligible Counsel's Unpaid Fees. The monthly amount for each month of the calendar quarter shall be allocated among those Eligible Counsel having Unpaid Fees, without regard to whether there may be Eligible Counsel that have not yet been granted or denied a Fee Award as of the last day of the Applicable Quarter. The allocation of subsequent Quarterly Fee Amounts for the calendar year, if any, shall be adjusted, as necessary, to account for any Eligible Counsel that are granted Fee Awards in a subsequent quarter of such calendar year, as provided in paragraph (b)(ii) of this section.

(b) In the event that the amount for a given month is less than the sum of the Unpaid Fees of all Eligible Counsel:

> (i) in the case of the first quarterly allocation for any calendar year, such monthly amount shall be allocated among all Eligible Counsel for such month in proportion to the amounts of their respective Unpaid Fees.
>
> (ii) in the case of a quarterly allocation after the first quarterly allocation, the Quarterly Fee Amount shall be allocated among only those Private Counsel, if any, that were Eligible Counsel with respect to any monthly amount for any prior quarter of the calendar year but were not allocated a proportionate share of such monthly amount (either because such Private Counsel's applications for Fee Awards were still under consideration as of the last day of the calendar quarter containing the month in question or for any other reason), until each such Eligible Counsel has been allocated a proportionate share of all such prior monthly payments for the calendar year (each such share of each such Eligible Counsel being a "Payable Proportionate Share"). In the event that the sum of all Payable Proportionate Shares exceeds the Quarterly Fee Amount, the Quarterly Fee Amount shall be allocated among such Eligible Counsel on a monthly basis in proportion to the amounts of their respective Unpaid Fees (without regard to whether there may be other Eligible Counsel with respect to such prior monthly amounts that have not yet been granted or denied a Fee Award as of the last day of the Applicable Quarter). In the event that the sum of all Payable Proportionate Shares is less than the Quarterly Fee Amount, the amount by which the Quarterly Fee Amount exceeds the sum of all such Payable Proportionate Shares shall be allocated among each month of the calendar quarter, each such monthly amount to be allocated among those Eligible Counsel having Unpaid Fees in proportion to the amounts of their respective Unpaid Fees (without regard to whether there may be Eligible Counsel that have not yet been granted or denied a Fee Award as of the last day of the Applicable Quarter).

(c) Adjustments pursuant to subsection (b)(ii) of this section 17 shall be made separately for each calendar year. No amounts paid in any calendar year shall be subject to refund, nor shall any payment in any given calendar year affect the allocation of payments to be made in any subsequent calendar year.

SECTION 18. *Credits to and Limitations on Payment of Fee Awards.*

Notwithstanding any other provision hereof, all payments by the Original Participating Manufacturers with respect to Fee Awards shall be subject to the following:

(a) Under no circumstances shall the Original Participating Manufacturers be required to make payments that would result in aggregate national payments and credits by Participating Defendants with respect to all Fee Awards of Private Counsel:

> (i) during any year beginning with 1999, totaling more than the sum of the Quarterly Fee Amounts for each calendar quarter of the calendar year, excluding certain payments with respect to any Private Counsel for 1998 that are paid in 1999; and
>
> (ii) during any calendar quarter beginning with the first calendar quarter of 1999, totaling more than the Quarterly Fee Amount for such quarter, excluding certain payments with respect to any Private Counsel for 1998 that are paid in 1999.

(b) The Original Participating Manufacturers' obligations with respect to the Fee Award of STATE Outside Counsel, if any, shall be exclusively as provided in this STATE Fee Payment Agreement, and notwithstanding any other provision of law, such Fee Award shall not be entered as or reduced to a judgment against the Original Participating Manufacturers or considered as a basis for requiring a bond or imposing a lien or any other encumbrance.

SECTION 19. *Reimbursement of Outside Counsel's Costs.*

(a) The Original Participating Manufacturers shall reimburse STATE Outside Counsel for reasonable costs and expenses incurred in connection with the Action, provided that such costs and expenses are of the same nature as costs and expenses for which the Original Participating Manufacturers ordinarily reimburse their own counsel or agents. Payment of any Approved Cost Statement pursuant to this STATE Fee Payment Agreement shall be subject to (i) the condition precedent of approval of the Agreement by the Court for the State of STATE and (ii) the payment schedule and the aggregate national caps specified in subsection (c) of this section, which shall apply to all payments made with respect to Cost Statements of all Outside Counsel.

(b) In the event that STATE Outside Counsel seek to be reimbursed for reasonable costs and expenses incurred in connection with the Action, the Designated Representative shall submit a Cost Statement to the Original Participating Manufacturers.

Within 30 Business Days after receipt of any such Cost Statement, the Original Participating Manufacturers shall either accept the Cost Statement or dispute the Cost Statement, in which event the Cost Statement shall be subject to a full audit by examiners to be appointed by the Original Participating Manufacturers (in their sole discretion). Any such audit will be completed within 120 Business Days after the date the Cost Statement is received by the Original Participating Manufacturers. Upon completion of such audit, if the Original Participating Manufacturers and STATE Outside Counsel cannot agree as to the appropriate amount of STATE Outside Counsel's reasonable costs and expenses, the Cost Statement and the examiner's audit report shall be submitted to the Director for arbitration before the Panel or, in the event that STATE Outside Counsel and the Original Participating Manufacturers have agreed upon a Liquidated Fee pursuant to section 7 hereof, before a separate three-member panel of independent arbitrators, to be selected in a manner to be agreed to by STATE Outside Counsel and the Original Participating Manufacturers, which shall determine the amount of STATE Outside Counsel's reasonable costs and expenses for the Action. In determining such reasonable costs and expenses, the members of the arbitration panel shall be governed by the Protocol of Panel Procedures attached as an Appendix hereto. The amount of STATE Outside Counsel's reasonable costs and expenses determined pursuant to arbitration as provided in the preceding sentence shall be final, binding and non-appealable.

(c) Any Approved Cost Statement of STATE Outside Counsel shall not become a Payable Cost Statement until approval of the Agreement by the Court for the State of STATE. Within five Business Days after receipt of notification thereof by the Designated Representative, each Original Participating Manufacturer shall severally pay to the Designated Representative its Relative Market Share of the Payable Cost Statement of STATE Outside Counsel, subject to the following —

(i) All Payable Cost Statements of Outside Counsel shall be paid in the order in which such Payable Cost Statements became Payable Cost Statements.

(ii) Under no circumstances shall the Original Participating Manufacturers be required to make payments that would result in aggregate national payments by Participating Defendants of all Payable Cost Statements of Private Counsel in connection with all of the actions identified in Exhibits D, M and N to the Agreement, totaling more than $75 million for any given year.

(iii) Any Payable Cost Statement of Outside Counsel not paid during the year in which it became a Payable Cost Statement as a result of paragraph (ii) of this subsection shall become payable in subsequent years, subject to paragraphs (i) and (ii), until paid in full.

(d) The Original Participating Manufacturers' obligations with respect to reasonable costs and expenses incurred by STATE Outside Counsel in connection with the Action shall be exclusively as provided in this STATE Fee Payment Agreement, and

notwithstanding any other provision of law, any Approved Cost Statement determined pursuant to subsection (b) of this section (including any Approved Cost Statement determined pursuant to arbitration before the Panel or the separate three-member panel of independent arbitrators described therein) shall not be entered as or reduced to a judgment against the Original Participating Manufacturers or considered as a basis for requiring a bond or imposing a lien or any other incumbrance.

SECTION 20. *Distribution of Payments among STATE Outside Counsel.*

(a) All payments made to the Designated Representative pursuant to this STATE Fee Payment Agreement shall be for the benefit of each person or entity identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the governmental prosecuting authority of the Litigating Political Subdivision], each of which shall receive from the Designated Representative a percentage of each such payment in accordance with the fee sharing agreement, if any, among STATE Outside Counsel (or any written amendment thereto).

(b) The Original Participating Manufacturers shall have no obligation, responsibility or liability with respect to the allocation among those persons or entities identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the governmental prosecuting authority of the Litigating Political Subdivision], or with respect to any claim of misallocation, of any amounts paid to the Designated Representative pursuant to this STATE Fee Payment Agreement.

SECTION 21. *Calculations of Amounts.*

All calculations that may be required hereunder shall be performed by the Original Participating Manufacturers, with notice of the results thereof to be given promptly to the Designated Representative. Any disputes as to the correctness of calculations made by the Original Participating Manufacturers shall be resolved pursuant to the procedures described in Section XI(c) of the Agreement for resolving disputes as to calculations by the Independent Auditor.

SECTION 22. *Payment Responsibility.*

(a) Each Original Participating Manufacturer shall be severally liable for its share of all payments pursuant to this STATE Fee Payment Agreement. Under no circumstances shall any payment due hereunder or any portion thereof become the joint obligation of the Original Participating Manufacturers or the obligation of any person other than the Original Participating Manufacturer from which such payment is originally due, nor shall any Original Participating Manufacturer be required to pay a portion of any such payment greater than its Relative Market Share.

(b) Due to the particular corporate structures of R. J. Reynolds Tobacco Company ("Reynolds") and Brown & Williamson Tobacco Corporation ("Brown & Williamson") with respect to their non-domestic tobacco operations, Reynolds and

Brown & Williamson shall each be severally liable for its respective share of each payment due pursuant to this STATE Fee Payment Agreement up to (and its liability hereunder shall not exceed) the full extent of its assets used in, and earnings and revenues derived from, its manufacture and sale in the United States of Tobacco Products intended for domestic consumption, and no recourse shall be had against any of its other assets or earnings to satisfy such obligations.

SECTION 23. *Termination.*

In the event that the Agreement is terminated with respect to the State of STATE pursuant to Section XVIII(u) of the Agreement (or for any other reason) the Designated Representative and each person or entity identified in Exhibit S to the Agreement by the Attorney General of the State of STATE [or as certified by the governmental prosecuting authority of the Litigating Political Subdivision] shall immediately refund to the Original Participating Manufacturers all amounts received under this STATE Fee Payment Agreement.

SECTION 24. *Intended Beneficiaries.*

No provision hereof creates any rights on the part of, or is enforceable by, any person or entity that is not a Party or a person covered by either of the releases described in section 4 hereof, except that sections 5 and 20 hereof create rights on the part of, and shall be enforceable by, the State of STATE. Nor shall any provision hereof bind any non-signatory or determine, limit or prejudice the rights of any such person or entity.

SECTION 25. *Representations of Parties.*

The Parties hereto hereby represent that this STATE Fee Payment Agreement has been duly authorized and, upon execution, will constitute a valid and binding contractual obligation, enforceable in accordance with its terms, of each of the Parties hereto.

SECTION 26. *No Admission.*

This STATE Fee Payment Agreement is not intended to be and shall not in any event be construed as, or deemed to be, an admission or concession or evidence of any liability or wrongdoing whatsoever on the part of any signatory hereto or any person covered by either of the releases provided under section 4 hereof. The Original Participating Manufacturers specifically disclaim and deny any liability or wrongdoing whatsoever with respect to the claims released under section 4 hereof and enter into this STATE Fee Payment Agreement for the sole purposes of memorializing the Original Participating Manufacturers' rights and obligations with respect to payment of attorneys' fees pursuant to the Agreement and avoiding the further expense, inconvenience, burden and uncertainty of potential litigation.

SECTION 27. *Non-admissibility.*

This STATE Fee Payment Agreement having been undertaken by the Parties hereto in good faith and for settlement purposes only, neither this STATE Fee Payment Agreement nor any evidence of negotiations relating hereto shall be offered or received in evidence in any action or proceeding other than an action or proceeding arising under this STATE Fee Payment Agreement.

SECTION 28. *Amendment and Waiver.*

This STATE Fee Payment Agreement may be amended only by a written instrument executed by the Parties. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party. The waiver by any Party of any breach hereof shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent or contemporaneous, of this STATE Fee Payment Agreement.

SECTION 29. *Notices.*

All notices or other communications to any party hereto shall be in writing (including but not limited to telex, facsimile or similar writing) and shall be given to the notice parties listed on Schedule A hereto at the addresses therein indicated. Any Party hereto may change the name and address of the person designated to receive notice on behalf of such Party by notice given as provided in this section including an updated list conformed to Schedule A hereto.

SECTION 30. *Governing Law.*

This STATE Fee Payment Agreement shall be governed by the laws of the State of STATE without regard to the conflict of law rules of such State.

SECTION 31. *Construction.*

None of the Parties hereto shall be considered to be the drafter hereof or of any provision hereof for the purpose of any statute, case law or rule of interpretation or construction that would or might cause any provision to be construed against the drafter hereof.

SECTION 32. *Captions.*

The captions of the sections hereof are included for convenience of reference only and shall be ignored in the construction and interpretation hereof.

SECTION 33. *Execution of STATE Fee Payment Agreement.*

This STATE Fee Payment Agreement may be executed in counterparts. Facsimile or photocopied signatures shall be considered valid signatures as of the date

hereof, although the original signature pages shall thereafter be appended to this STATE Fee Payment Agreement.

SECTION 34. *Entire Agreement of Parties.*

This STATE Fee Payment Agreement contains an entire, complete and integrated statement of each and every term and provision agreed to by and among the Parties with respect to payment of attorneys' fees by the Original Participating Manufacturers in connection with the Action and is not subject to any condition or covenant, express or implied, not provided for herein.

IN WITNESS WHEREOF, the Parties hereto, through their fully authorized representatives, have agreed to this STATE Fee Payment Agreement as of this __th day of ________, 1998.

[SIGNATURE BLOCK]

APPENDIX
to MODEL FEE PAYMENT AGREEMENT

PROTOCOL OF PANEL PROCEEDINGS

This Protocol of procedures has been agreed to between the respective parties to the STATE Fee Payment Agreement, and shall govern the arbitration proceedings provided for therein.

SECTION 1. *Definitions.*

All definitions contained in the STATE Fee Payment Agreement are incorporated by reference herein.

SECTION 2. *Chairman.*

The person selected to serve as the permanent, neutral member of the Panel as described in paragraph (b)(ii) of section 11 of the STATE Fee Payment Agreement shall serve as the Chairman of the Panel.

SECTION 3. *Arbitration Pursuant to Agreement.*

The members of the Panel shall determine those matters committed to the decision of the Panel under the STATE Fee Payment Agreement, which shall govern as to all matters discussed therein.

SECTION 4. *ABA Code of Ethics.*

Each of the members of the Panel shall be governed by the *Code of Ethics for Arbitrators in Commercial Disputes* prepared by the American Arbitration Association and the American Bar Association (the "*Code of Ethics*") in conducting the arbitration proceedings pursuant to the STATE Fee Payment Agreement, subject to the terms of the STATE Fee Payment Agreement and this Protocol. Each of the party-appointed members of the Panel shall be governed by Canon VII of the *Code of Ethics*. No person may engage in any *ex parte* communications with the permanent, neutral member of the Panel selected pursuant to paragraph (b)(ii) of section 11, in keeping with Canons I, II and III of the *Code of Ethics*.

SECTION 5. *Additional Rules and Procedures.*

The Panel may adopt such rules and procedures as it deems necessary and appropriate for the discharge of its duties under the STATE Fee Payment Agreement and this Protocol, subject to the terms of the STATE Fee Payment Agreement and this Protocol.

SECTION 6. *Majority Rule.*

In the event that the members of the Panel are not unanimous in their views as to any matter to be determined by them pursuant to the STATE Fee Payment Agreement or this Protocol, the determination shall be decided by a vote of a majority of the three members of the Panel.

SECTION 7. *Application for Fee Award and Other Materials.*

(a) The Application of STATE Outside Counsel and any materials submitted to the Director relating thereto (collectively, "submissions") shall be forwarded by the Director to each of the members of the Panel in the manner and on the dates specified in the STATE Fee Payment Agreement.

(b) All materials submitted to the Director by either Party (or any other person) shall be served upon all Parties. All submissions required to be served on any Party shall be deemed to have been served as of the date on which such materials have been sent by either (i) hand delivery or (ii) facsimile and overnight courier for priority next-day delivery.

(c) To the extent that the Panel believes that information not submitted to the Panel may be relevant for purposes of determining those matters committed to the decision of the Panel under the terms of the STATE Fee Payment Agreement, the Panel shall request such information from the Parties.

SECTION 8. *Hearing.*

Any hearing held pursuant to section 12 of the STATE Fee Payment Agreement shall not take place other than in the presence of all three members of the Panel upon notice and an opportunity for the respective representatives of the Parties to attend.

SECTION 9. *Miscellaneous.*

(a) Each member of the Panel shall be compensated for his services by the Original Participating Manufacturers on a basis to be agreed to between such member and the Original Participating Manufacturers.

(b) The members of the Panel shall refer all media inquiries regarding the arbitration proceeding to the respective Parties to the STATE Fee Payment Agreement and shall refrain from any comment as to the arbitration proceedings to be conducted pursuant to the STATE Fee Payment Agreement during the pendency of such arbitration proceedings, in keeping with Canon IV(B) of the *Code of Ethics*.

EXHIBIT P

NOTICES

NAAG	Executive Director 750 First Street, N.E. Suite 1100 Washington, DC 20002	PHO: (202) 326-6053 FAX: (202) 408-6999
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For Philip Morris Incorporated:

Martin J. Barrington
Philip Morris Incorporated
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With a copy to:

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Wachtell, Lipton, Rosen & Katz
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Phone: 212-403-1000
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For R.J. Reynolds Tobacco Company:

Charles A. Blixt
General Counsel
R.J. Reynolds Tobacco Company
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With a copy to:

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For Brown & Williamson Tobacco Corporation:

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With a copy to:

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For Lorillard Tobacco Company:

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For Liggett Group Inc.

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With a copy to:

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For Commonwealth Brands, Inc.

John Poling
Commonwealth Brands, Inc.
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Bowling Green, Kentucky 42102

With a copy to:

William Jay Hunter, Jr.
Middleton & Reutlinger
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Louisville, Kentucky 40202

EXHIBIT Q

1996 AND 1997 DATA

(1) 1996 Operating Income

Original Participating Manufacturer	Operating Income
Brown & Williamson Tobacco Corp.	$801,640,000
Lorillard Tobacco Co.	$719,100,000
Philip Morris Inc.	$4,206,600,000
R.J. Reynolds Tobacco Co.	$1,468,000,000
Total (Base Operating Income)	$7,195,340,000

(2) 1997 volume (as measured by shipments of Cigarettes)

Original Participating Manufacturer	Number of Cigarettes
Brown & Williamson Tobacco Corp.*	78,911,000,000
Lorillard Tobacco Co.	42,288,000,000
Philip Morris Inc.	236,203,000,000
R.J. Reynolds Tobacco Co.	118,254,000,000
Total (Base Volume)	475,656,000,000

(3) 1997 volume (as measured by excise taxes)

Original Participating Manufacturer	Number of Cigarettes
Brown & Williamson Tobacco Corp.*	78,758,000,000
Lorillard Tobacco Co.	42,315,000,000
Philip Morris Inc.	236,326,000,000
R.J. Reynolds Tobacco Co.	119,099,000,000

* The volume includes 2,847,595 pounds of "roll your own" tobacco converted into the number of Cigarettes using 0.0325 ounces per Cigarette conversion factor.

EXHIBIT R

EXCLUSION OF CERTAIN BRAND NAMES

Brown & Williamson Tobacco Corporation

GPC
State Express 555
Riviera

Philip Morris Incorporated

Players
B&H
Belmont
Mark Ten
Viscount
Accord
L&M
Lark
Rothman's
Best Buy
Bronson
F&L
Genco
GPA
Gridlock
Money
No Frills
Generals
Premium Buy
Shenandoah
Top Choice

Lorillard Tobacco Company

None

R.J. Reynolds Tobacco Company

Best Choice
Cardinal
Director's Choice
Jacks
Rainbow

Scotch Buy
Slim Price
Smoker Friendly
Valu Time
Worth

EXHIBIT S

DESIGNATION OF OUTSIDE COUNSEL

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State of Alabama v. Philip Morris, et al., No. CV-98-2941-GR, pending in the Circuit Court of Montgomery County.
Blaylock et al. v. American Tobacco Co. et al., Circuit Court, Montgomery County, No. CV-96-1508-PR.
The State case has been consolidated with Blaylock and both cases will be settled pursuant to the Master Settlement Agreement.

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EXHIBIT T

MODEL STATUTE

Section __. Findings and Purpose.[1]

(a) Cigarette smoking presents serious public health concerns to the State and to the citizens of the State. The Surgeon General has determined that smoking causes lung cancer, heart disease and other serious diseases, and that there are hundreds of thousands of tobacco-related deaths in the United States each year. These diseases most often do not appear until many years after the person in question begins smoking.

(b) Cigarette smoking also presents serious financial concerns for the State. Under certain health-care programs, the State may have a legal obligation to provide medical assistance to eligible persons for health conditions associated with cigarette smoking, and those persons may have a legal entitlement to receive such medical assistance.

(c) Under these programs, the State pays millions of dollars each year to provide medical assistance for these persons for health conditions associated with cigarette smoking.

(d) It is the policy of the State that financial burdens imposed on the State by cigarette smoking be borne by tobacco product manufacturers rather than by the State to the extent that such manufacturers either determine to enter into a settlement with the State or are found culpable by the courts.

(e) On _______, 1998, leading United States tobacco product manufacturers entered into a settlement agreement, entitled the "Master Settlement Agreement," with the State. The Master Settlement Agreement obligates these manufacturers, in return for a release of past, present and certain future claims against them as described therein, to pay substantial sums to the State (tied in part to their volume of sales); to fund a national foundation devoted to the interests of public health; and to make substantial changes in their advertising and marketing practices and corporate culture, with the intention of reducing underage smoking.

(f) It would be contrary to the policy of the State if tobacco product manufacturers who determine not to enter into such a settlement could use a resulting cost advantage to derive large, short-term profits in the years before liability may arise without ensuring that the State will have an eventual source of recovery from them if they are proven to have acted culpably. It is thus in the interest of the State to require that such

[1] [A State may elect to delete the "findings and purposes" section in its entirety. Other changes or substitutions with respect to the "findings and purposes" section (except for particularized state procedural or technical requirements) will mean that the statute will no longer conform to this model.]

manufacturers establish a reserve fund to guarantee a source of compensation and to prevent such manufacturers from deriving large, short-term profits and then becoming judgment-proof before liability may arise.

Section __. Definitions.

(a) "Adjusted for inflation" means increased in accordance with the formula for inflation adjustment set forth in Exhibit C to the Master Settlement Agreement.

(b) "Affiliate" means a person who directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control with, another person. Solely for purposes of this definition, the terms "owns," "is owned" and "ownership" mean ownership of an equity interest, or the equivalent thereof, of ten percent or more, and the term "person" means an individual, partnership, committee, association, corporation or any other organization or group of persons.

(c) "Allocable share" means Allocable Share as that term is defined in the Master Settlement Agreement.

(d) "Cigarette" means any product that contains nicotine, is intended to be burned or heated under ordinary conditions of use, and consists of or contains (1) any roll of tobacco wrapped in paper or in any substance not containing tobacco; or (2) tobacco, in any form, that is functional in the product, which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette; or (3) any roll of tobacco wrapped in any substance containing tobacco which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette described in clause (1) of this definition. The term "cigarette" includes "roll-your-own" (i.e., any tobacco which, because of its appearance, type, packaging, or labeling is suitable for use and likely to be offered to, or purchased by, consumers as tobacco for making cigarettes). For purposes of this definition of "cigarette," 0.09 ounces of "roll-your-own" tobacco shall constitute one individual "cigarette."

(e) "Master Settlement Agreement" means the settlement agreement (and related documents) entered into on _______, 1998 by the State and leading United States tobacco product manufacturers.

(f) "Qualified escrow fund" means an escrow arrangement with a federally or State chartered financial institution having no affiliation with any tobacco product manufacturer and having assets of at least $1,000,000,000 where such arrangement requires that such financial institution hold the escrowed funds' principal for the benefit of releasing parties and prohibits the tobacco product manufacturer placing the funds into escrow from using, accessing or directing the use of the funds' principal except as consistent with section ___(b)-(c) of this Act.

(g) "Released claims" means Released Claims as that term is defined in the Master Settlement Agreement.

(h) "Releasing parties" means Releasing Parties as that term is defined in the Master Settlement Agreement.

(i) "Tobacco Product Manufacturer" means an entity that after the date of enactment of this Act directly (and not exclusively through any affiliate):

(1) manufactures cigarettes anywhere that such manufacturer intends to be sold in the United States, including cigarettes intended to be sold in the United States through an importer (except where such importer is an original participating manufacturer (as that term is defined in the Master Settlement Agreement) that will be responsible for the payments under the Master Settlement Agreement with respect to such cigarettes as a result of the provisions of subsections II(mm) of the Master Settlement Agreement and that pays the taxes specified in subsection II(z) of the Master Settlement Agreement, and provided that the manufacturer of such cigarettes does not market or advertise such cigarettes in the United States);

(2) is the first purchaser anywhere for resale in the United States of cigarettes manufactured anywhere that the manufacturer does not intend to be sold in the United States; or

(3) becomes a successor of an entity described in paragraph (1) or (2).

The term "Tobacco Product Manufacturer" shall not include an affiliate of a tobacco product manufacturer unless such affiliate itself falls within any of (1) - (3) above.

(j) "Units sold" means the number of individual cigarettes sold in the State by the applicable tobacco product manufacturer (whether directly or through a distributor, retailer or similar intermediary or intermediaries) during the year in question, as measured by excise taxes collected by the State on packs (or "roll-your-own" tobacco containers) bearing the excise tax stamp of the State. The [fill in name of responsible state agency] shall promulgate such regulations as are necessary to ascertain the amount of State excise tax paid on the cigarettes of such tobacco product manufacturer for each year.

Section __. Requirements.

Any tobacco product manufacturer selling cigarettes to consumers within the State (whether directly or through a distributor, retailer or similar intermediary or intermediaries) after the date of enactment of this Act shall do one of the following:

(a) become a participating manufacturer (as that term is defined in section II(jj) of the Master Settlement Agreement) and generally perform its financial obligations under the Master Settlement Agreement; or

(b) (1) place into a qualified escrow fund by April 15 of the year following the year in question the following amounts (as such amounts are adjusted for inflation) --

1999: $.0094241 per unit sold after the date of enactment of this Act;[2]

2000: $.0104712 per unit sold after the date of enactment of this Act;[3]

for each of 2001 and 2002: $.0136125 per unit sold after the date of enactment of this Act;

for each of 2003 through 2006: $.0167539 per unit sold after the date of enactment of this Act;

for each of 2007 and each year thereafter: $.0188482 per unit sold after the date of enactment of this Act.

(2) A tobacco product manufacturer that places funds into escrow pursuant to paragraph (1) shall receive the interest or other appreciation on such funds as earned. Such funds themselves shall be released from escrow only under the following circumstances --

(A) to pay a judgment or settlement on any released claim brought against such tobacco product manufacturer by the State or any releasing party located or residing in the State. Funds shall be released from escrow under this subparagraph (i) in the order in which they were placed into escrow and (ii) only to the extent and at the time necessary to make payments required under such judgment or settlement;

[(B) to the extent that a tobacco product manufacturer establishes that the amount it was required to place into escrow in a particular year was greater than the State's allocable share of the total payments that such manufacturer would have been required to make in that year under the Master Settlement Agreement (as determined pursuant to section IX(i)(2) of the Master Settlement Agreement, and before any of the adjustments or offsets described in section IX(i)(3) of that Agreement other than the Inflation Adjustment) had it been a participating

[2] [All per unit numbers subject to verification]

[3] [The phrase "after the date of enactment of this Act" would need to be included only in the calendar year in which the Act is enacted.]

manufacturer, the excess shall be released from escrow and revert back to such tobacco product manufacturer;] or[13]

(C) to the extent not released from escrow under subparagraphs (A) or (B), funds shall be released from escrow and revert back to such tobacco product manufacturer twenty-five years after the date on which they were placed into escrow.

(3) Each tobacco product manufacturer that elects to place funds into escrow pursuant to this subsection shall annually certify to the Attorney General [or other State official] that it is in compliance with this subsection. The Attorney General [or other State official] may bring a civil action on behalf of the State against any tobacco product manufacturer that fails to place into escrow the funds required under this section. Any tobacco product manufacturer that fails in any year to place into escrow the funds required under this section shall --

(A) be required within 15 days to place such funds into escrow as shall bring it into compliance with this section. The court, upon a finding of a violation of this subsection, may impose a civil penalty [to be paid to the general fund of the state] in an amount not to exceed 5 percent of the amount improperly withheld from escrow per day of the violation and in a total amount not to exceed 100 percent of the original amount improperly withheld from escrow;

(B) in the case of a knowing violation, be required within 15 days to place such funds into escrow as shall bring it into compliance with this section. The court, upon a finding of a knowing violation of this subsection, may impose a civil penalty [to be paid to the general fund of the state] in an amount not to exceed 15 percent of the amount improperly withheld from escrow per day of the violation and in a total amount not to exceed 300 percent of the original amount improperly withheld from escrow; and

(C) in the case of a second knowing violation, be prohibited from selling cigarettes to consumers within the State (whether directly or through a distributor, retailer or similar intermediary) for a period not to exceed 2 years.

Each failure to make an annual deposit required under this section shall constitute a separate violation.[4]

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[4] [A State may elect to include a requirement that the violator also pay the State's costs and attorney's fees incurred during a successful prosecution under this paragraph (3).]

13. (b)(2)(B) replaced (Allocable Share Amendment) pursuant to Amendment 21

EXHIBIT U

STRATEGIC CONTRIBUTION FUND PROTOCOL

The payments made by the Participating Manufacturers pursuant to section IX(c)(2) of the Agreement ("Strategic Contribution Fund") shall be allocated among the Settling States pursuant to the process set forth in this Exhibit U.

Section 1

A panel committee of three former Attorneys General or former Article III judges ("Allocation Committee") shall be established to determine allocations of the Strategic Contribution Fund, using the process described herein. Two of the three members of the Allocation Committee shall be selected by the NAAG executive committee. Those two members shall choose the third Allocation Committee member. The Allocation Committee shall be geographically and politically diverse.

Section 2

Within 60 days after the MSA Execution Date, each Settling State will submit an itemized request for funds from the Strategic Contribution Fund, based on the criteria set forth in Section 4 of this Exhibit U.

Section 3

The Allocation Committee will determine the appropriate allocation for each Settling State based on the criteria set forth in Section 4 below. The Allocation Committee shall make its determination based upon written documentation.

Section 4

The criteria to be considered by the Allocation Committee in its allocation decision include each Settling State's contribution to the litigation or resolution of state tobacco litigation, including, but not limited to, litigation and/or settlement with tobacco product manufacturers, including Liggett and Myers and its affiliated entities.

Section 5

Within 45 days after receiving the itemized requests for funds from the Settling States, the Allocation Committee will prepare a preliminary decision allocating the Strategic Contribution Fund payments among the Settling States who submitted itemized requests for funds. All Allocation Committee decisions must be by majority vote. Each Settling State will have 30 days to submit comments on or objections to the draft decision. The Allocation Committee will issue a final decision allocating the Strategic Contribution Fund payments within 45 days.

Section 6

The decision of the Allocation Committee shall be final and non-appealable.

Section 7

The expenses of the Allocation Committee, in an amount not to exceed $100,000, will be paid from disbursements from the Subsection VIII(c) Account.

Exhibit U

May 21, 1999 Final Decision of Strategic Contribution Fund Allocation Committee

State Allocation Percentages

State	Percentage
Alabama	0.7549361%
Alaska	1.7118798%
Arizona	3.0553024%
Arkansas	0.7549361%
California	5.1730408%
Colorado	2.3544100%
Connecticut	3.3131372%
D.C.	0.7549361%
Delaware	0.7549361%
Georgia	0.9363477%
Hawaii	2.3645190%
Idaho	0.7549361%
Illinois	2.7169243%
Indiana	2.6499166%
Iowa	2.7210212%
Kansas	1.8502336%
Kentucky	0.7549361%
Louisiana	2.6279206%
Maine	1.3281978%
Maryland	3.2884290%
Massachusetts	4.8113027%
Michigan	2.5771774%
Missouri	1.5514860%
Montana	1.0447501%
Nebraska	0.7549361%
Nevada	1.0303306%
New Hampshire	0.8989628%
New Jersey	2.8469526%
New Mexico	0.9959277%
New York	5.4873402%
North Carolina	1.9423049%
North Dakota	1.7388123%
Ohio	2.7819695%
Oklahoma	3.1196696%
Oregon	2.4160580%
Pennsylvania	3.2572691%
Rhode Island	1.0954758%
South Carolina	1.3322130%
South Dakota	0.7549361%
Tennessee	0.7549361%
Utah	1.8257711%
Vermont	1.8175127%
Virginia	0.7549361%
Washington	5.7647432%
West Virginia	2.2774408%
Wisconsin	2.6176864%
Wyoming	0.7549361%
American Samoa	0.1800232%
N. Mariana Island	0.1800232%
Guam	0.1800232%
U.S. Virgin Islands	0.1800232%
Puerto Rico	1.6531733%

APPENDIX D

TOBACCO CONSUMPTION REPORT

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A Forecast of U.S. Cigarette Consumption (2017-2038) for the Commonwealth Financing Authority

Submitted to:

Commonwealth Financing Authority

Prepared by:

IHS Global Inc.

February 13, 2018

James Diffley
Executive Director

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1700 Market Street, Suite 3112
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Executive Summary

IHS Global Insight has developed a cigarette consumption model based on historical U.S. data between 1965 and 2016. This econometric model, coupled with our long-term forecast of the U.S. economy, has been used to project total U.S. cigarette consumption from 2017 through 2048. Our forecast indicates that total consumption in 2038 will be 134.2 billion cigarettes (or 135.0 billion including roll-your-own ("RYO") tobacco equivalents), a 48% decline from the 2016 level. From 2017 through 2038 the average annual rate of decline is projected to be approximately 2.9%.

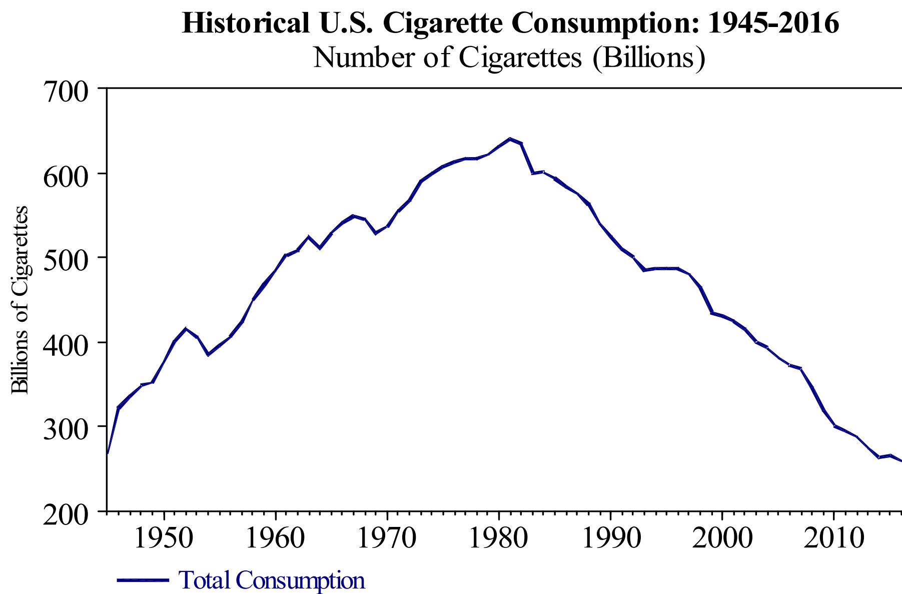
Our model was constructed based on widely accepted economic principles and IHS Global Insight's considerable experience in building econometric forecasting models. A review of the economic research literature indicates that our model is consistent with the prevalent consensus among economists concerning cigarette demand. We considered the impact of demographics, cigarette prices, disposable income, employment and unemployment, industry advertising expenditures, the future effect of the incidence of smoking amongst underage youth, and qualitative variables that captured the impact of anti-smoking regulations, legislation, health warnings, and the availability of alternative tobacco and nicotine products. After extensive analysis, we found the following variables to be effective in building an empirical model of per capita cigarette consumption: real cigarette prices, real per capita disposable personal income, the impact of workplace smoking restrictions first instituted widely in the 1980s, the stricter restrictions on smoking in public places instituted over the last decade, and the trend over time in individual behavior and preferences. This forecast is based on reasonable assumptions regarding the future paths of these factors.

Disclaimer

The forecasts included in this report, including, but not limited to, those regarding future cigarette consumption, are estimates, which have been prepared on the basis of certain assumptions and hypotheses. No representation or warranty of any kind is or can be made with respect to the accuracy or completeness of, and no representation or warranty should be inferred from, these forecasts. The cigarette consumption forecast contained in this report is based upon assumptions as to future events and, accordingly, is subject to varying degrees of uncertainty. Some assumptions inevitably will not materialize and, additionally, unanticipated events and circumstances may occur. Therefore, for example, actual cigarette consumption inevitably will vary from the forecasts included in this report and the variations may be material and adverse.

Cigarette Use in the United States

People have used tobacco products for centuries. Tobacco was first brought to Europe from America in the late 15th century and became America's major cash crop in the 17th and 18th centuries[1]. Prior to 1900, tobacco was most frequently used in pipes, cigars, and snuff. With the widespread production of manufactured cigarettes (as opposed to hand-rolled cigarettes) in the United States in the early 20th century, cigarette consumption expanded dramatically. Consumption is defined as taxable U.S. consumer sales, plus shipments to overseas armed forces, ship stores, Puerto Rico, and other U.S. possessions, and small tax-exempt categories[2] as reported by the Bureau of Alcohol, Tobacco, Firearms, and Explosives. The USDA, which compiled data on cigarette consumption between 1900 and 2007, reports that consumption grew from 2.5 billion cigarettes in 1900 to a peak of 640 billion in 1981[3]. Consumption declined in the 1980s, 1990s, and 2000s, reaching a level of 465 billion cigarettes in 1998 and decreased to less than 400 billion cigarettes in 2003[4] and under 300 billion in 2011[5]. Cigarette consumption has now declined through three decades, reversing four decades of increases from the 1940s.



[1] *Source*: "Tobacco Timeline," Gene Borio (1998).

[2] Bureau of Alcohol, Tobacco, Firearms, and Explosives reports as categories such as transfer to export warehouses, use of the U.S., and personal consumption/experimental.

[3] *Source*: "Tobacco Situation and Outlook", U.S. Department of Agriculture-Economic Research Service, September 1999 (USDA-ERS).

[4] *Source*: USDA-ERS. April 2005.

[5] *Source*: US Tobacco and Tax Bureau, MSAI

While the historical trend in consumption prior to 1981 was increasing, there was a decline in cigarette consumption of 9.8% during the Great Depression between 1931 and 1932. Notwithstanding, this steep decline, consumption rapidly increased after 1932, exceeding previous levels by 1934. Following the release of the Surgeon General's Report in 1964, cigarette consumption continued to increase at an average annual rate of 1.2% between 1965 and 1981. Between 1981 and 1990, however, U.S. cigarette consumption declined at an average annual rate of 2.2%. From 1990 to 1998, the average annual rate of decline in cigarette consumption was 1.5%; but for 1998 the decline increased to 3.1% and increased further to 6.5% for 1999. These declines are correlated with large price increases in 1998 and 1999 following the Master Settlement Agreement ("MSA") and previously settled states agreements. In 2000 and 2001, the rate of decline moderated, to 1.2%. In the early part of the decade, coincident with a large number of state excise tax increases, the rate of decline accelerated in 2002 and 2003 to an annual rate of 3.0%. The decline moderated for the next four years, through 2007, averaging 2.3%.

The rate of decline accelerated dramatically beginning in 2008, with a 3.8% decline in the number of cigarettes (including RYO equivalents to cigarettes as defined by the MSA at 0.0325 ounces of loose tobacco per cigarette) for that year, 9.1% in 2009, and 6.4% in 2010.

There was a confluence of factors which led to the dramatically reduced consumption in 2009. First, indoor smoking bans spread rapidly across the country in the latter half of the decade. We now estimate that their impact on decreased smoking and cigarette consumption was approximately 6 billion cigarettes in 2009. Second, the latter months of 2008 saw a very deep recession. Our model projects that, given the lower realized levels of household income in 2009, consumption was negatively impacted by about 8 billion cigarettes. Third, the increase in the federal excise tax to $1.01 per pack, effective April 1, 2009 decreased cigarette demand by about 10 billion in 2009 according to our model of price elasticity. Fourth, the acceleration of state excise tax increases, prompted by the recession, similarly reduced consumption by a further 4 billion.

The consumption decline finally decelerated to 2.8% in 2011 and 2.0% in 2012. In 2013 the decline sharpened to nearly 5%. This decline has been attributed by the industry to a weak economy, the rapid increase in usage of electronic cigarettes ("e-cigarettes"), and to an unfavorable comparison with a surprisingly strong 2012. In addition, some of the decline was due to a reduction in wholesale inventories late in the year, part of which was reversed in 2014.

Full year 2014 shipments reported by Management Science Associates, Inc. ("MSAI") were 3.2% lower than 2013, with actual consumption net of the inventory change estimated to be down 3.4%. The National Association of Attorneys General ("NAAG"), in its report for 2015 MSA Payments, reported shipments of 264.2 billion cigarettes (part of 265.8 including RYO).

In 2015 cigarette shipment declines stopped, and indeed manufacturers reported increased shipments for most of the year. The Alcohol and Tobacco Tax and Trade Bureau ("TTB") reported that shipments of 267.0 billion cigarettes exceeded the 2014 level by 1.7%, while NAAG ultimately certified an increase of 1.9% to 269.1 billion. But RAI, in its 2015 earnings release, indicated that MSAI estimated total industry shipments at 264.3 billion cigarettes, a 0.1% increase from 2014. In 2016 reported shipments were much less divergent, with MSAI reporting 258.0 billion and NAAG 258.6 billion, a decline of 3.96% from its higher 2015 estimate. The decline rate per MSAI was 2.4%.

The following table sets forth United States domestic cigarette consumption, with and without roll-your-own equivalents, for the nineteen years ended December 31, 2016. The data in this table vary from statistics on cigarette shipments in the United States. While this Report is based on consumption, payments made under the MSA dated November 23, 1998 between certain cigarette manufacturers and certain settling states are computed based in part on shipments in or to the fifty United States, the District of Columbia and Puerto Rico. The quantities of cigarettes shipped and cigarettes consumed may not match at any given point in time as a result of various factors such as inventory adjustments, but are substantially the same when compared over a period of time.

[6] *Source:* National Association of Attorneys General, USDA-ERS, estimates by IHS Global. USDA estimates for 2004, 2005, and 2006 diverge significantly from estimates based on independent data from the industry and from the US Tobacco and Tax Bureau. In 2004, the manufacturers report domestic shipments of 394.5 billion, and the TTB reports a total of 397.7 billion. These contrast with a USDA estimate of 388 billion. In 2005, the manufacturers report 381.7 billion, TTB reports 381.1 billion, and USDA 376 billion. In 2006, the manufacturers report 372.5 billion, TTB reports 380.9 billion, and USDA 372 billion. The USDA has discontinued this service, publishing its final report on October 24, 2007.

U.S. Cigarette Consumption

Year Ended December 31,	Consumption (Billions of Cigarettes)	Percentage Change	Consumption (Billions of Cigarettes with roll-your-own equivalents)	Percentage Change
2016	259	-3.89	260	-3.96
2015	269	1.84	271	1.91
2014	264	-3.76	266	-3.83
2013	275	-4.76	276	-4.86
2012	288	-1.79	291	-1.90
2011	294	-2.57	296	-2.75
2010	301	-5.52	305	-6.36
2009	319	-8.03	325	-9.09
2008	348	-4.35	358	-3.79
2007	368	-2.28	372	-4.97
2006	377	-1.93	391	0.26
2005	384	-2.69	390	-3.51
2004	395	-1.28	404	0.09
2003	400	-3.66	404	-3.30
2002	415	-2.35	418	-2.68
2001	425	-1.16	429	-1.51
2000	430	-1.15	436	-1.30
1999	435	-6.45	442	
1998	465	-3.13		

The U.S. Cigarette Industry

The domestic cigarette market is an oligopoly in which, according to MSAI, the two leading manufacturers, Altria and Reynolds American, accounted for 76.5% of U.S. shipments in 2015. In 2014, prior to the purchase of Lorillard by Reynolds American, the three manufacturers accounted for, according to the NAAG, 84.7% of U.S. shipments in 2014. (The acquisition of Lorillard coincided with a sale of certain Lorillard and Reynolds brands to Imperial Tobacco).

On October 21, 2017, British American Tobacco ("BAT") completed its acquisition of Reynolds American. BAT does not separately report US market share, but NAAG reports that the Original Participating Manufacturers ("OPMs") share in 2016 was 84.4%, down from 84.5% in 2015. The market share of the leading manufacturers has declined from over 96% in 1998 due to inroads by smaller manufacturers and importers following the MSA and other state settlement agreements.

In 2017 NAAG determined that total shipments by the remaining OPMs, which is the basis for the computation of MSA payments, in 2016 equaled 220.8 billion, down from 226.2 billion in 2015, a 2.4% decline.

The United States government has raised revenue through tobacco taxes since the Civil War. Although the federal excise taxes have risen throughout the years, excise taxes as a percentage of total federal revenue have fallen from 3.4% in 1950 to approximately 0.4% prior to the 2009 federal excise tax increase. In fiscal year 2016, the federal government received $14.5 billion in excise tax revenue from tobacco sales. In addition, state governments also raised significant revenues from excise taxes ($18.0 billion in 2016). Cigarette sales constitute the majority of revenues, which also include revenues from sales of cigars and other tobacco products.

Survey of the Economic Literature on Smoking

Many organizations have conducted studies on U.S. cigarette consumption. These studies have utilized a variety of methods to estimate levels of smoking, including interviews and/or written questionnaires. Although these studies have tended to produce varying estimates of consumption levels due to a number of factors—including different survey methods and different definitions of smoking—taken together, such studies provide a general approximation of consumption levels and trends. Set forth below is a brief summary of some of the more recent studies on cigarette consumption levels.

Incidence of Smoking

Approximately 38 million American adults were current smokers in 2016, representing approximately 15.5% of the population age 18 and older, a decline from 16.8% in 2014, 17.8% in 2013, and 19.4% in 2010, according to a Centers for Disease Control and Prevention ("CDC") study released in 2018. The National Health Interview Survey defines "current smokers" as those persons who have smoked at least 100 cigarettes in

their lifetime and who smoked every day or some days at the time of the survey. Although the percentage of adults who smoke (incidence) declined from 42.4% in 1965 to 25.5% in 1990 and 24.1% in 1998, the incidence rate has declined relatively slowly since 1998. The decline accelerated between 2002 and 2004, when the incidence rate dropped from 22.5% to 20.9%, but remained as high as 20.6% in 2009. The 2014 CDC report also indicated that the percentage of smokers who smoked less than 30 cigarettes per day had declined from 12.6% in 2005 to 7.0%. In 2018 the CDC added that the proportion of daily smokers was 76.1% in 2016, which declined from 80.8% in 2005. And the mean number of cigarettes smoked per day declined from 2005 (16.7) to 2016 (14.1). Among daily smokers the percentage of ever smokers who quit smoking increased from 50.8% to 59.0%.

A recent trend, likely influenced by extensive indoor smoking bans in the U.S., is growing numbers of "light smokers", those who smoke just a few cigarettes per day. Thus, the decline in the overall prevalence of smoking has slowed while the rate of decline of the volume of cigarettes consumed has accelerated. In a similar fashion, e-cigarettes have replaced cigarette consumption in locations subject to indoor smoking bans, to the extent that e-cigarettes are not similarly excluded (see p 13 below).

Youth Smoking

Certain studies have focused in whole or in part on youth cigarette consumption. Surveys of youth typically define a "current smoker" as a person who has smoked a cigarette on one or more of the 30 days preceding the survey. The CDC's Youth Risk Behavior Surveillance System ("YRBSS") estimated that from 1991 to 1999 incidence among high school students (grades 9 through 12) rose from 27.5% to 34.8%, representing an increase of 26.5%. By 2003, incidence had fallen to 21.9%, a decline of 37.1% over four years. The rate of decline has continued, though at a slower pace. By 2011, the prevalence was 18.1%.[7] It declined to 15.7% in 2013 and 10.8% in 2015.

According to the Monitoring the Future Study, a school-based study of cigarette consumption and drug use conducted by the Institute for Social Research at the University of Michigan, smoking incidence over the prior 30 days among eighth, and twelfth graders was, for the fourth consecutive year, lower in 2017 than in 2016, continuing trends that began in 1996. Smoking incidence in all grades has been below 1991 levels since 2001 for eighth graders and 2002 for tenth and twelfth graders.

Prevalence of Cigarette Use Among 8th, 10th, and 12th Graders

Grade	1991 (%)	2015 (%)	2016 (%)	2017 (%)	'91-'16 Change (%)
8th	14.3	3.6	2.6	1.9	-86.7%
10th	20.8	6.3	4.9	5.0	-76.0%
12th	28.3	11.4	10.5	9.7	-65.7%

[7] *Source*: CDC. Morbidity and Mortality Weekly Report. "Quitting Smoking Among Adults – United States, 2000-2015". January,2017.

The Study also reports that marijuana use among teens exceeds tobacco use. A number of states have, or are considering, relaxing the legal prohibition on marijuana use. The effects of legalized marijuana on cigarettes were studied in Australia following the country's marijuana legalization. The study concluded that marijuana was, if anything, complementary to cigarette smoking, and was more likely to result in an increase in tobacco use rather than a reduction. However, a recent study published in the journal, Addictive Behaviors, found that one of the chemical compounds found in marijuana can decrease the craving for nicotine and hence potentially help smokers quit tobacco use.

The 2013 National Survey on Drug Use and Health (formerly called National Household Survey on Drug Abuse) conducted by the Substance Abuse and Mental Health Services Administration of the United States Department of Health and Human Services ("SAMHSA") estimated that approximately 55.8 million Americans age 12 and older were current cigarette smokers (defined by this survey to mean they had smoked cigarettes at least once during the 30 days prior to the interview). The survey found that an estimated 5.6% of youths ages 12 to 17 were current cigarette smokers in 2013, down from 8.4% in 2010 and 13.0% in 2002. In 2016 the survey indicated that the percentage of youths ages 12 to 17 who were current smokers declined to 3.4% from 4.2% in 2015.

The CDC reported on June 16, 2017 that the National Youth Tobacco Survey found that in 2016 the prevalence of tobacco product use among middle and high school students was 7.2% and 20.2%, respectively. For cigarettes the prevalence was 2.2% and 8.0%, respectively, falling from 2.3% and 9.3% in 2015. While cigarette use is substantially lower than the Survey indicated in 2011, overall tobacco use is not, as 11.3% of high school students reported using e-cigarettes in the past 30 days. Notably, e-cigarette use for middle school students declined to 4.3% from 5.3% in 2015.

In most of the nation the minimum legal age to purchase cigarettes is 18. In 2013, New York City increased that age to 21, and the Campaign for Tobacco-Free Kids now reports that at least five states and 270 localities have also raised the minimum legal age to 21. Hawaii became the first state to raise its legal age to 21 on January 1, 2016, and California's legislation to do the same went into effect on June 9, 2016. In 2017, Maine, Oregon and New Jersey did the same, while Alabama, Alaska, and Utah set the age at 19. A similar proposal to raise the smoking age to 21 has also been introduced in at least twenty-four states. In November 2017, US Congresswoman Diana DeGette introduced the Tobacco to 21 Act (H.R.4273), a bicameral legislation that would prohibit the sale of tobacco products to anyone under age 21.

Approximately 90% of smokers indicate that they began smoking before the age of 19. In March 2015 the Institute of Medicine of the National Academies published a study, "Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products" which concluded that there would be a 3 percent decrease in prevalence of tobacco use if the minimum legal age was raised to 19, and a 12 percent decrease if raised to 21.

Price Elasticity of Cigarette Demand

The price elasticity of demand reflects the impact of changes in price on the demand for a product. Based on recent research studies, cigarette price elasticities have generally fallen between an interval of -0.3 to -0.5, meaning as the price of cigarettes increases by 1.0%, the quantity demanded decreases by 0.3% to 0.5%. A few researchers have estimated price elasticity as high as -1.23. Research focused on youth smoking has found price elasticity levels of up to -1.41.

Two studies published by the National Bureau of Economic Research also examine the price elasticity of youth smoking. In their study on youth smoking in the United States, Gruber and Zinman estimate an elasticity of smoking participation (defined as smoking any cigarettes in the past 30 days) of –0.67 for high school seniors in the period from 1991 to 1997.[8] The study's findings state that the decrease in cigarette prices in the early 1990's can explain 26% of the upward trend in youth smoking during that time period. The study also found that price has little effect on the smoking habits of younger teens (8th grade through 11th grade), but that youth access restrictions have a significant impact on limiting the extent to which younger teens smoke. Tauras and Chaloupka also found an inverse relationship between price and cigarette consumption among high school seniors.[9] Their estimates imply that a 1% increase in the real price of cigarettes will result in an increase in the probability of smoking cessation for high school senior males and females of 1.12% and 1.19%, respectively. A study utilizing more recent data, from 1975 to 2003, by Grossman, estimated an elasticity of smoking participation of just -0.12.[10] Nevertheless it concludes that price increases subsequent to the 1998 MSA explain almost the entire 12% drop in youth smoking over that time.

In another study, Czart et al. (2001) looked at several factors which they felt could influence smoking among college students. These factors included price, school policies regarding tobacco use on campus, parental education levels, student income, student marital status, sorority/fraternity membership, and state policies regarding smoking. The authors considered two ways in which smoking behavior could be affected: (1) smoking participation; and (2) the amount of cigarettes consumed per smoker. The results of the study suggest that, (1) the average estimated price elasticity of smoking participation is –0.26, and (2), the average conditional demand elasticity is –0.62. These results indicate that a 1% increase in cigarette prices, will reduce smoking participation among college

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[8] *Source*: Gruber, Jonathon and Zinman, Jonathon. "Youth Smoking in the U.S.:Evidence and Implications". Working Paper No. W7780. National Bureau of Economic Research. 2000.

[9] Source: Tauras, John A. and Chaloupka, Frank, J.. "Determinants of Smoking Cessation: An Analysis of Young Adult Men and Women". Working Paper No. W7262. National Bureau of Economic Research. 1999.

[10] Michael Grossman. "Individual Behaviors and Substance Use: The Role of Price". Working Paper No. W10948. National Bureau of Economic Research. December 2004.

students by 0.26% and will reduce the level of smoking among current college students by 0.62%.[11]

Tauras et al. (2001) conducted a study that looked at the effects of price on teenage smoking initiation.[12] The authors used data from the Monitoring the Future study which examines smoking habits, among other things, of 8th, 10th, and 12th graders. They defined smoking initiation in three different ways: smoking any cigarettes in the last 30 days, smoking at least one to five cigarettes per day on average, or smoking at least one-half of a pack per day on average. The results suggest that the estimated price elasticities of initiation are –0.27 for any smoking, -0.81 for smoking at least one to five cigarettes, and –0.96 for smoking at least one-half of a pack of cigarettes. These results above indicate that a 10% increase in the price of cigarettes will decrease the probability of smoking initiation between approximately 3% and 10%, depending on the definition of initiation. In a related study, Powell et al. (2003) estimated a price elasticity of youth smoking participation of –0.46.[13]

In conclusion, economic research suggests the demand for cigarettes is relatively price inelastic, with an elasticity generally found to be between -0.3 and -0.5.

Nicotine Replacement Products

In January 2017, the CDC released the results of a study on quitting smoking[14]. It found that, in 2015, 68.0% of smokers wanted to stop smoking, 55.4% had made a quit attempt in the past year, 7.4% had recently quit, 57.2% had been advised by a health professional to quit, and 31.2% had used counseling and/or medications when they tried to quit.

Nicotine replacement products, such as Nicorette Gum and Nicoderm patches, are used to aid those who are attempting to quit smoking. Before 1996, these products were only available with a doctor's prescription. Currently, they are available as over-the-counter products. Many researchers now recommend that those trying to quit smoking use a variety of these methods in combination.

A study, by Hu et al., (2000) examines the effects of nicotine replacement products on cigarette consumption in the United States.[15] Among other things, the study found that, "a 0.076% reduction in cigarette consumption is associated with the availability of nicotine patches after 1992." In 2002, the Food and Drug Administration ("FDA") approved the

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[11] Czart et al. "The impact of prices and control policies on cigarette smoking among college students". Contemporary Economic Policy. Western Economic Association. Copyright April 2001.

[12] Tauras et al. "Effects of Price and Access Laws on Teenage Smoking Initiation: A National Longitudinal Analysis". University of Chicago Press. Copyright 2001.

[13] Powell et al. "Peer Effects, Tobacco Control Policies, and Youth Smoking Behavior". Impacteen. February 2003.

[7] *Source*: CDC. Morbidity and Mortality Weekly Report. "Quitting Smoking Among Adults – United States, 2000-2015". January 2017.

[15] Hu et al. "Cigarette consumption and sales of nicotine replacement products". TC Online. Tobacco Control. Summer 2000. http:\\tc.bmjjournals.com.

Commit lozenge for over-the-counter sale. This product is similar to the gum and patch nicotine replacement products. NicoBloc, a liquid applied to cigarettes to block tar and nicotine from being inhaled, is another cessation product on the market since 2003. It has been available for purchase without a prescription since October 2015, and a wholesale distribution marketing campaign is underway. Zyban is a non-nicotine cessation drug that has been available since 2000. It has been shown to be effective when combined with intensive behavioral support.[16]

In 2006, the FDA approved varenicline, a Pfizer product marketed as Chantix, for use as a prescription medicine. It is intended to satisfy nicotine cravings without being pleasurable or addictive. The drug binds to the same brain receptor as nicotine. Tests indicate that it is more effective as a cessation aid than Zyban. Pfizer introduced Chantix with a novel marketing program, GETQUIT, an integrated consumer support system which emphasizes personalized treatment advice with regular phone and e-mail contact. The drug debuted with strong sales in 2007, but suffered a reversal the following year due to safety concerns. It has since seen increased sales and marketing success. Free & Clear, a provider of tobacco treatment services, reported in June 2008, that Chantix has achieved higher average quit rates than Zyban, patches, gum, and lozenges. Though Pfizer reported additional positive results in 2009, the FDA required that Pfizer update the Chantix label with the most restrictive, "Black Box", safety labeling describing the risks. But the FDA does conclude: "The Agency continues to believe that the drug's benefits outweigh the risks and the current warnings in the Chantix label are appropriate." These warnings include changes in behavior, hostility, agitation, depressed mood, and suicidal thoughts or actions, as well as serious skin reactions and heart and blood vessel problems. Nevertheless, the FDA said on October 24, 2011 that it will continue to evaluate the risks of mood changes and other psychiatric events associated with its use. In March 2013, researchers at the University of Texas M.D. Anderson Cancer Center reported a better quitting experience with varenicline than other treatments. In September 2013 researchers in a Pfizer sponsored study concluded that the drug does help some patients, already suffering from depression or mood disorders to quit smoking without worsening their depression or anxiety symptoms. In September 2016 however, a preliminary review by the FDA expressed doubts about the trial. The FDA, in December 2016, announced that the Black Box labeling is no longer required, as the risk of serious side effects is lower than previously suspected. Also, in October 2013 researchers at the University of Bristol reported in the British Medical Journal that cessation drugs do not increase suicide risk. This was followed by a 2015 study in Sweden which reached the same conclusion. In January 2016, a study concluded that the relative effectiveness of Chantix was equal to that of nicotine patches.

In September 2011, the New England Journal of Medicine reported positive smoking cessation efficacy and safety tests for Cytisine, an inexpensive cessation aid long sold in Eastern Europe as Tabex.

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[16] Roddy, Elin. "Bupropion and Other Non-nicotine Pharmacotherapies". *British Medical Journal.* 28 February 2004.

In 2011, the FDA cleared an Investigational New Drug Application to conduct a Phase II-B trial of X-22, a smoking cessation kit of very low nicotine cigarettes made by the 22nd Century Group. The company has continued its development plans, and in 2016 the New Zealand Medical Journal recommend the low-nicotine cigarettes as a smoking reduction tool.

In 2012, a team from Weill Cornell Medical College reported the development of an anti-nicotine vaccine using a genetically engineered virus. The vaccine was successful when tested in mice, though it will take several years before it can be tested in humans. More recently, in January 2015, a team from the Scripps Research Institute reported in the Journal of Medicinal Chemistry that a new vaccine design had yielded positive results and recommended its further development. In October 2015, Invion Limited completed a successful Phase 2 trial of INV102 (Nadolol), an inhaled respiratory drug for smoking cessation. The company has requested that the FDA move this drug to Phase 3 development.

Also in 2015, early phase drug development was reported by the Scripps Research Institute. They have discovered an enzyme, NicA2, which they hope will destroy nicotine in the body, serving as an alternative to other smoking cessation aids.

It is expected that products such as these will continue to be developed and that their introduction and use will contribute to the continued trend decline in smoking. Our forecast includes a strong negative trend in smoking rates which incorporates the influence of these factors.

Further aiding sales of these products is the decision by 45 state Medicaid programs to offer cessation benefits to Medicaid beneficiaries. Additionally, at least ten states (California, Colorado, Maryland, New Jersey, New Mexico, New York, North Dakota, Oregon, Rhode Island, and Vermont) have established minimum standards for private insurance coverage of cessation products and services. In October 2010, Medicare coverage was expanded to provide cessation counseling to seniors without tobacco-related disease. Recent research indicates this benefits expansion increased cessation product prescriptions by 36%.[17] The Affordable Care Act now mandates that new private health insurance plans cover tobacco cessation, and effective January 2014, that tobacco cessation medications can no longer be excluded from state Medicaid coverage. Recent research found that the Medicaid expansion may have increased smoking cessation among low-income adults.[18]

Electronic Cigarettes

E-cigarettes, which are not subject to the MSA, have also gained in popularity in recent years. 2015 sales in the US have been estimated to be over $3 billion, though growth is

[17] MacLean, Pesko, Hill, National Bureau of Economic Research. Working Paper No. 3450. May 2017.
[18] Jonathan W. Koma, et al. Medical Care. Oct 2017

slowing after years of rapid gains. The National Health Survey of the CDC reports that in 2016, 15.4% of adults had tried e-cigs and 3.2% were current users. In June 2016, the CDC released the YRBSS survey results indicating that 45% of high school students had tried e-cigarettes and only 32% in 2015, had tried cigarettes. In April 2016, it's the CDC's National Youth Tobacco Survey found that e-cigarette use among high school students had increased to 16% in 2015, from 1.5% in 2011. It was 5.3% among middle school students in 2015.

On the one hand, e-cigarettes are alternatives to cigarettes, as smokers cope with indoor and outdoor bans. On the other hand they are cessation devices whose nicotine content can be controlled. Their role in smoking, and smoking cessation, is ambiguous. When they can be used as a cessation device to wean a smoker away from cigarettes they serve as a substitute for cigarettes, and therefore result in lower cigarette consumption. Alternatively, in the presence of indoor smoking bans, they can also allow smokers to maintain a nicotine habit or addiction indoors, offsetting some of the bans' effectiveness in reducing smoking and consumption of cigarettes. In this case e-cigarettes are complements to cigarettes. Indoor smoking restrictions have reduced the consumption of cigarettes and created a demand for e-cigarettes. But e-cigarettes themselves do not further reduce consumption except to the extent that they are substitutes for cigarette usage. Nevertheless, a 2013 study in the United Kingdom found that 76% of e-cigarette users said they started using their devices to replace cigarettes entirely. Results of a trial in Italy, published by the journal Plos One in June 2013, found that 8.7% of e-cigarette users stopped smoking cigarettes. In September 2013, The Lancet published a New Zealand study which concluded that smoking cessation attempts using e-cigarettes were at least as effective as those using nicotine patches. (In a sample, the quit rate after six months with e-cigarettes was 7.3%, versus 5.8% with patches). By 2016, the scientific consensus was that e-cigarette use was associated with quit attempts by smokers.[19] Others also conclude that youth use of e-cigarettes is unlikely to increase the ranks of future cigarette smokers.[20] In 2017 research concluded that the substantial increase in e-cigarette use among US adult smokers this decade was associated with a statistically significant increase in the smoking cessation rate at the population level.[21]

In terms of price, e-cigarettes are a less expensive alternative for the consumer, as they are not taxed as cigarettes. However, Minnesota has imposed a 95% tax on the wholesale cost, North Carolina in 2014 added a 5 cent per milliliter tax on liquid nicotine, and the District of Columbia, Kansas, and Louisiana added millimeter taxes in 2015. Though smoking habits vary, a 5 cent/mL tax is approximately equivalent to a 2.5 cent tax per pack of cigarettes. A cartridge and battery for an e-cigarette would cost less than half as much as an equivalent pack of cigarettes in an average tax state.

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[19] Zhu SH,et al, "E-cigarette use and associated changes in population smoking cessation: evidence from US current population surveys, BMJ 2017;358:j3262,

[20] L.T. Kozlowski, K.E. Warner / Drug and Alcohol Dependence xxx (2017) xxx–xxx

[21] Zhu, hu-Hong et al. BMJ 2017;358:j3262

Researchers have reported several safety concerns with the products, including concerns on the variability in delivered nicotine content. In March 2016, the U.S. Department of Transportation implemented a ban on e-cigarettes on all flights to and from the U.S., a prohibition already enacted by Amtrak on its trains. The states of California, Connecticut, Delaware, Hawaii, Maine, New Jersey, New York, North Dakota, Oregon, Utah, and Vermont prohibit e-cigarette use in workplaces, restaurants, and bars. Arkansas, Colorado, New Hampshire, and Oklahoma restrict e-cig use at state workplaces and school grounds. Based on data from the American Nonsmokers' Rights Foundation ("ANRF"), there are e-cigarette restrictions at indoor smoke-free venues in 710 localities in the US. In 2014, Chicago, New York, and San Francisco extended public places smoking bans to include e-cigarettes. In September 2013 forty state attorneys general sent a letter to the FDA urging the agency to regulate e-cigarettes in the same way it regulates tobacco products. In 2014, the state of Rhode Island banned e-cig sales to those under 18 years of age.

In 2010, the U.S. Court of Appeals for the District of Columbia Circuit ruled that the FDA could not regulate e-cigarettes as a drug, rather it must regulate them as tobacco products. On May 5, 2016, the FDA released its final rule which subjects manufactures, importers and/or retailers of e-cigarettes and certain other tobacco related products to the same regulations applicable to cigarettes, cigarette tobacco, roll-your-own tobacco and smokeless tobacco, with respect to the following; (i) enforcement action against product determined to be adulterated or misbranded; (ii) required submission of ingredient listing and reporting; (iii) required registration of tobacco product manufacturing establishments and product listing; (iv) prohibition against sale and distribution of products with modified risk descriptors (e.g. "light", "low" or "mild") and claims unless authorized by the FDA; (v) placing health warnings on product packages and advertisements; (vi) prohibition on the distribution of free samples; and (vii) premarket review requirements. In addition, the final rule established additional restriction for e-cigarettes and certain other tobacco products, as follows: (i) restriction on sales to persons under the age of 18 and requiring age verification; (ii) prohibition of sales in vending machines unless in adult-only facilities; and (iii) prohibition against free samples.

On July 28, 2017, FDA Commissioner Scott Gottlieb announced that new regulations would not be imposed on e-cigarettes at this time, stating that electronic products may have a positive role to play in reducing the harmful effects of nicotine addiction.

In August 2013, the Consumer Advocates for Smoke-free Alternatives Association released a study it funded by the Drexel University School of Public Health. It found that chemicals in e-cigarettes pose no health concern for users or bystanders. In August 2014, the American Health Association backed the use of e-cigarettes as a last resort (after other cessation methods) to help smokers quit.

A New Product - Heat not Burn

Altria plans to market IQOS, a tobacco product as being less harmful than traditional cigarette. The product, developed by Philip Morris International ("PMI"), heats tobacco

without burning, and is already on sale in over a dozen internationals markets, including Japan, Switzerland and Italy. In Japan, IQOS sales have expanded rapidly since launching nationwide last summer and now account for about 10% of the overall cigarette market. The product's advantage over e-cigarettes is that, unlike the latter, it delivers a "throat-hit" sensation like combustible cigarettes. The FDA has begun the scientific review of PMI's Modified Risk Tobacco Product Application for its IQOS device.

Different from e-cigarettes, the electronic device is used with mini tobacco sticks as opposed to a nicotine-laced liquid. These are then placed into the device before being heated, rather than burned, which is claimed to make them less harmful because they aren't burning the tobacco. The concept behind 'Heat-not-Burn' is that heating tobacco, rather than burning it, reduces or eliminates the formation of many of the harmful compounds that are produced at the high temperatures associated with combustion. However, concerns have been raised in the scientific community that IQOS and heat-not-burn products still pose a significant health risk to users.

Similarly, BAT's Glo includes a heating device for disposable, tobacco-packed "sticks" that look and feel like ordinary cigarettes. Altria has stated that it expects the tobacco sticks to be considered as cigarettes for purposes of the MSA computations.

Workplace Restrictions

In their 1996 study on the effect of workplace smoking bans on cigarette consumption, Evans, Farrelly, and Montgomery found that between 1986 and 1993 smoking participation rates among workers fell 2.6% more than non-workers.[22] Their results suggest that workplace smoking bans reduce smoking prevalence by 5% and reduce consumption by smokers by nearly 10%. The authors also found a positive correlation between hours worked and the impact on smokers in workplaces that have smoking bans. The more hours per day a smoker spent working in a smoking restricted environment, the greater the decline in the quantity of cigarettes that smoker consumed.

Factors Affecting Cigarette Consumption

Most empirical studies have found a common set of variables that are relevant in building a model of cigarette demand. These conventional analyses usually evaluate one or more of the following factors: (i) general population growth, (ii) price increases, (iii) changes in disposable income, (iv) youth consumption, (v) trend over time, (vi) workplace smoking bans, (vii) smoking bans in public places, (viii) nicotine dependence and (ix) health warnings. While some of these factors were not found to have a measurable impact

[22] *Source*: Evans, William N.; Farrelly, Matthew C.; and Montgomery, Edward. "Do Workplace Smoking Bans Reduce Smoking*?"*. Working Paper No. W5567, National Bureau of Economic Research, 1996.

on changes in demand for cigarettes, all of these factors are thought to affect smoking in some manner and to be incorporated into current levels of consumption.

Price Elasticity of Demand. Based on recent conventional research studies cigarette price elasticities have generally fallen between an interval of -0.3 to -0.5. IHS Global's multivariate regression analysis using U.S. data from 1965 to 2016 shows that the long-run price elasticity of consumption for the entire population is -0.33; meaning a 1.0% increase in the price of cigarettes decreases consumption by 0.33%.

In 1998, the average nominal price of a pack of cigarettes in the U.S. was $2.20. This increased to $2.88 per pack in 1999, representing a nominal growth of 30.9% from 1998. During 1999, consumption declined by 6.45%. This was primarily due to a $0.45 per pack increase in November 1998 which was intended to offset the costs of the MSA and agreements with previously settled states.

Over the next several years, the cigarette manufacturers continued to increase wholesale prices, and state excise taxes rose dramatically across the nation. By 2008, the weighted average state excise tax was $1.23 per pack and cigarette prices averaged $5 per pack.

The 2008-2009 recession and its stress on state budget revenues prompted acceleration in excise tax increases, as sixteen states increased taxes, resulting in an average tax of $1.34 at the end of 2009. In 2010, Hawaii, New Mexico, New York, South Carolina, Utah, and Washington, raised excise taxes. In 2011, excise tax increases went into effect in Connecticut, again in Hawaii, and in Vermont. In 2012, Illinois and Rhode Island raised cigarette excise taxes by $1.00 and $0.04 per pack per pack, respectively.

In 2013, Cook County, Illinois increased its cigarette excise tax by $1.00 per pack, and in November of that year, Chicago increased its excise tax by $0.50 to push city, county, and state taxes in Chicago to $7.17 per pack. Also in 2013, cigarette excise tax increases were enacted in Minnesota, by $1.60 per pack, Massachusetts, by $1.00 per pack, Oregon, by $0.13 per pack, and New Hampshire, by $0.10 per pack. Puerto Rico also enacted plans to increase its excise taxes in 2014 and 2015. New York City now sets a minimum retail price of a pack of cigarettes at $13.00, and prohibits the use of coupons and promotions to discount that price. In September 2014, the City of Philadelphia enacted a $2.00 per pack tax.

The increases in New Hampshire and Oregon were the only state excise tax increases in 2014, bringing the average state cigarette excise tax rate in December 2014 to $1.53. Eight states also raised cigarette taxes in 2015: Alabama by $0.25 per pack, Connecticut by $0.25, Kansas by $0.50, Louisiana by $0.32, Nevada by $1.00, Ohio by $0.35, Rhode Island by $0.25, and Vermont by $0.33.

In 2016, the excise tax was increased in Minnesota, by $0.10, and Oregon, by $0.01, on January 1, in Louisiana, by $0.22 on April 1, and in Connecticut, by $0.25 and in West Virginia, by $0.65, on July 1. The Pennsylvania budget enacted on July 14 increased its excise tax by $1.00 per pack effective August 1. Excise tax increases are under

consideration in Illinois and New Mexico. In November 2016 a ballot initiative for excise tax increases passed in California ($2.00, effective April 2017). The average state cigarette excise tax increased from $1.63 to $1.89 in 2017, following increases in California, Delaware, Oklahoma. and Rhode Island.

The federal excise tax had remained constant, at $0.39 per pack, from 2002 until 2009 when the U.S. Congress adopted legislation which raised the tax by $0.62, to $1.01, effective April 1, 2009. As a result, the total state and federal excise tax now equals an average of $2.90 in the U.S.

Purchases of roll-your-own cigarette tobacco were discouraged by 2009 legislation that substantially raised its excise tax. However, the excise tax changes also had the effect of encouraging the use of pipe tobacco, combined with the availability of roll-your-own machines to circumvent the higher excise taxes. Legislation introduced by Senator Richard Durbin on January 31, 2013, and most recently in September 2017, the Tobacco Tax Equity Act, would similarly equalize federal excise tax rates on all tobacco products.

During much of the period following the MSA, the major manufacturers refrained from wholesale price increases and actively pursued extensive promotional and dealer and retailer discounting programs which served to hold down retail prices. They did this in part due to the state tax increases, but primarily to maintain their market share from its erosion by a deep discount segment which grew rapidly following the MSA. The major manufacturers were finally successful in stemming the increase in the deep discount market share, which stabilized in 2004. The major manufacturers have raised prices or reduced discounts and promotions in each year since 2004. In 2014, for instance, Altria raised its brands' prices by $0.13, and in May 2015, and again in May 2016, the major manufacturers increased prices by $0.06 per pack. In 2017, the manufacturers raised prices by $0.08 in March, and in September, by $0.10 per pack. In December 2017, the average price, including excise taxes, was $8.54 per pack, a 6.6% increase over a year ago.

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Over the longer term, our forecast expects price increases to continue to exceed the general rate of inflation due to increases in the manufacturers' prices as well as further increases in excise taxes.

Premium brands are typically $1.00 to $2.00 more expensive per pack than discount brands, allowing a margin for consumers to switch to less costly discount brands in the event of price increases. The availability of cigarette outlets on Indian reservations, where some sales are typically exempt from taxes, provides another opportunity for consumers to reduce the cost of smoking. Similarly, Internet sales of cigarettes initially grew rapidly, though credit card companies and shippers including the U.S. Postal Service have now put significant restrictions on shipping of cigarettes, and the federal government has enacted the Prevent All Cigarette Trafficking ("PACT") Act which requires the collection of all applicable taxes on Internet and mail-order cigarette shipments. Under the MSA, volume adjustments to payments are based on the quantity (and not the price or type) of cigarettes shipped. The availability of lower price alternatives lessens the negative impact

of price increases on cigarettes volume, but it may negatively impact MSA receipts if non-participating manufacturers gain sales.

***Changes in Disposable Income*e**. Analyses from many conventional models also include the effect of real personal disposable income. Most studies have found cigarette consumption in the United States increases as disposable income increases.[23] However, a few studies found cigarette consumption decreases as disposable income increases.[24] Based on our multivariate regression analysis, the income elasticity of consumption is 0.27, meaning a 1.0% increase in real disposable income per capita increases per capita cigarette consumption by 0.27%. In normal periods of economic growth, this factor contributes a positive impact to cigarette demand, offsetting some of the negative impacts previously discussed. However, with the recession of 2008-2009, this factor also impacted cigarette demand and consumption in a negative way.

Youth Consumption. The number of teenagers who smoke is another likely determinant of future adult consumption. While this variable has been largely ignored in empirical studies of cigarette consumption,[25] almost all adult smokers first use cigarettes by high school, and very little first use occurs after age 20.[26] One study examines the effects of youth smoking on future adult smoking.[27] The study found that between 25% and 50% of any increase or decrease in youth smoking would persist into adulthood. According to the study, several factors may alter future correlation between youth and adult smoking: there are better means for quitting smoking than in the past, and there are more workplace bans in effect that those who are currently in their teen years will face as they age.

We have compiled U.S. data from the CDC that measures the incidence of smoking in the 12-17 age group as the percentage of the population in this category that first become daily smokers. This percentage, after falling since the early 1970s, began to increase in 1990 and increased through the decade. We assume that this recent trend peaked in the late 1990s and youth smoking has resumed its long term decline.

In 2012, the Surgeon General issued a report, "Preventing Tobacco Use among Youth and Young Adults." Among its major conclusions were, 1) that prevention efforts must focus on both adolescents and young adults, 2) that advertising and promotional activities by tobacco companies have been shown to cause the onset and continuation of smoking among youth, 3) that after years of steady progress, declines in tobacco use by the young have slowed, and 4) that coordinated, multi-component interventions that combine mass media campaigns, price increases, school-based programs, and community wide smoke-free policies and norms are effective in reducing tobacco use. Also in 2012, the CDC produced a mass-media advertising campaign featuring graphic descriptions of the

[23] Ippolito, et al.; Fuji.
[24] Wasserman, et al.; Townsend et al.
[25] Except for those such as Wasserman, et al. that studied the price elasticity for different age groups.
[26] *Source*: Surgeon General's 1994 Report, "Preventing Tobacco Use Among Young People."
[27] *Source*: Gruber, Jonathon and Zinman, Jonathon. "Youth Smoking in the U.S.:Evidence and Implications". Working Paper No. W7780, National Bureau of Economic Research, 2000.
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adverse health effects of smoking. In August 2012, the CDC declared the campaign a major success, as the agency concluded that the ads helped to double the amount of calls to their telephone quit line. New CDC campaigns, with graphic adverse health images began in March 2013, and again in July 2014. In September 2013, the CDC announced survey results which concluded that cessation attempts increased from 31.1% to 34.8% of smokers who had seen the graphic ads, which the CDC extrapolated to 100,000 sustained quitters, approximately 0.25% of US smokers. In 2001, Canada began requiring cigarette labels to include large graphic depictions of adverse health consequences of smoking. Early research suggested that these warnings have some effectiveness, as one-fifth of the participants in a survey reported smoking less as a result of the labels.[28] In November 2013, the journal Tobacco Control published research from the University of Illinois at Chicago which concluded that the FDA has underestimated the impact of graphic labels. Examining the experience in Canada, the researchers concluded that graphic warning labels reduced smoking rates in Canada by 3% to 5%.[29] In 2015 the Rand Corporation reported results of a convenience store experiment where cigarette displays were hidden from view. The researchers found that teen smoking susceptibility was reduced by 11% by the hidden placement.

In December 2014, research was published on the effectiveness of youth-targeted anti-smoking public service announcements. It was found that a 100-ad increase in the yearly volume of ads was associated with a 0.1 percentage point drop in youth smoking rates in the following year. A 2016 study determined that smoke-free laws in workplaces are associated with a lower prevalence of youth smoking.[30] It estimated that youth smoking initiation declined by 34%.

Trend Over Time. Since 1964 there has been a significant decline in adult per capita cigarette consumption. The Surgeon General’s health warning (1964) and numerous subsequent health warnings, together with the increased health awareness of the population over the past thirty years, may have contributed to decreases in cigarette consumption levels. If, as we assume, the awareness of the adult population continues to change in this way, overall consumption of cigarettes will decline gradually over time. Our analysis includes a time trend variable in order to capture the impact of these changing health trends and the effects of other such variables, which are difficult to quantify.

Health Warnings. Categorical variables also have been used to capture the effect of different time periods on cigarette consumption. For example, some researchers have identified the United States Surgeon General's Report in 1964 and subsequent mandatory health warnings on cigarette packages as turning points in public attitudes and knowledge

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[28] Hammond, Fong, McDonald, Brown, and Cameron. "Graphic Canadian Warning Labels and Adverse Outcomes: Evidence from Canadian Smokers". *American Journal of Public Health.* August 2004.

[29] Huang J, Chaloupka FJ, Fong GT. Cigarette graphic warning labels and smoking prevalence in Canada: a critical examination and reformulation of the FDA regulatory impact analysis. Tobacco Control 2013.

[30] Song, Dutra, Nielands, Glantz. Association of Smoke-Free Laws with Lower Percentages of New and Current Smokers Among Adolescents and Young Adults. Journal of American Medical Association, 2015:169.

of the health effects of smoking. The Cigarette Labeling and Advertising Act of 1965 required a health warning to be placed on all cigarette packages sold in the United States beginning January 1, 1966. The Public Health Smoking Act of 1969 required all cigarette packages sold in the United States to carry an updated version of the warning, stating that it was a Surgeon General's warning, beginning November 1, 1970. The Comprehensive Smoking Education Act of 1984 led to even more specific health warnings on cigarette packages. The Family Smoking Prevention and Tobacco Control Act of 2009 requires that cigarette packages have larger and more visible graphic health warnings. Regulations that were to go into effect in September 2012 mandated that a series of nine graphic health warnings must appear on the upper portion of the front and rear panels of each cigarette package and comprise at least the top 50 percent of these panels. Five manufacturers challenged the implementation of these new warnings on First Amendment grounds, and on November 7, 2011 a federal judge issued a preliminary injunction blocking the FDA requirement. The judge ruled that the labels were not factual, but rather, "…calculated to provoke the viewer to quit…." In 2012, a federal judge in Washington blocked the new requirement, while an appeals court in Ohio ruled to uphold parts of the Act. In March 2013, the Attorney General decided not to ask the U.S. Supreme Court to review the case. Instead, the FDA announced on March 19, 2013 that it would undertake research to support new rulemaking. On April 22, 2013, the Supreme Court upheld the provisions of the 2009 law, allowing the FDA to develop and implement new graphic warning labels.

The FDA has yet to implement requirements for new labels. In October 2016, eight public health groups, including the American Academy of Pediatrics, the American Cancer Society, the American Heart Association, and the American Lung Association, filed suit in federal court to force the FDA to issue final rules requiring graphic warnings on cigarette packs and advertising.

At least six states - Alabama, Georgia, Idaho, Kentucky, South Carolina, and West Virginia - charge higher health insurance premiums to state employee smokers than non-smokers, and many states have implemented legislation that allows employers to provide incentives to employees who do not smoke. Several large corporations, including Meijer Inc., Gannett Co., American Financial Group Inc., JP Morgan Chase, PepsiCo Inc., Northwest Airlines, Safeway, Tribune Co., and Whirlpool, are now charging smokers higher premiums.

In September 2014, CVS Caremark ceased selling cigarettes at its nationwide chain of more than 7,600 pharmacy stores. A bill was introduced in California in 2016 which would permit tobacco sales only in retail stores for which more than 60% of their revenue came from the sale of tobacco products.

Smoking Bans in Public Places. Beginning in the 1970s, numerous states passed laws banning smoking in public places as well as private workplaces. In 2003, Alabama joined the other 49 states and the District of Columbia in requiring smoke-free indoor air to some degree or in some public places.

The most comprehensive bans, extending to restaurants and bars, have been enacted since 1998 in 39 states and a number of large cities. Restrictions to all workplaces, restaurants, and bars cover 58.4% of the U.S population, according to the ANRF. In 2012 North Dakota became the most recent state to adopt these bans in public places. In 2015, smoking ban legislation was introduced in Kentucky, and New Orleans passed an ordinance banning smoking in bars and casinos.

The ANRF documents clean indoor air ordinances by local governments throughout the U.S. As of January 2, 2018, there were 4,936 municipalities with indoor smoking restrictions. Of these, 1,183 local governments required non-hospitality workplaces to be 100% smoke-free, while 1,272 governments required 100% smoke-free conditions in restaurants, and 1,136 required the same for bars. The number of such ordinances has grown rapidly in the past two decades. Ordinances completely restricting smoking in restaurants and bars have generally appeared in the past decade. In 1993 only 13 municipalities prohibited all smoking in restaurants, and 6 in bars.[31]

Based on the regression analysis using data from 1965 to 2015, the restrictions on workplace smoking that proliferated in the 1980s appear to have an independent effect on per capita cigarette consumption. We estimate that the restrictions instituted beginning in the late 1970s have reduced smoking by about 2%. Nevertheless, the timing of the restrictions within and across states makes such statistical identification difficult. Bauer, et al. estimated that U.S. workers in smoke-free workplaces from 1993 to 2001 decreased their average daily consumption by 2.6 cigarettes.[32] Research in Canada, by the Ontario Tobacco Research Unit, concluded that consumption drops in workplaces where smoking is banned by almost five cigarettes per person per day. Tauras, in a study based on a large survey of smokers, found that the more restrictive smoke-free air laws decrease average smoking but have little influence on prevalence.[33] The study predicted that moving from no smoking restrictions at all to the most restrictive bans reduces average smoking from 5% to 8%. In September 2015, the American Medical Association published research examining 11 years of smoke-free laws which concluded that they are associated with a lower prevalence of smoking among adolescents and young adults.[34]

The extension of the indoor bans to restaurants and bars in the last decade began largely in the Northeast and did not appear, in our econometric analysis, to have a significant independent impact on smoking there. Nevertheless, with data available from later in the decade across a wider geography, econometric analysis reveals that the bans did have a significant impact, and we have added a variable quantifying the effect in our consumption model.

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[31] *Source:* American Nonsmokers' Rights Foundation. http://www.no-smoke.org. July 2013.

[32] Bauer, Hyland, Li, Steger, and Cummings. "A Longitudinal Assessment of the Impact of Smoke-Free Worksite Policies on Tobacco Use". American Journal of Public Health. June 2005

[33] Tauras, John A. "Smoke-Free Air Laws, Cigarette Prices, and Adult Cigarette Demand" Economic Inquiry, April 2006.

[34] Song, Dutra, Neilands, and Glantz. "Association of Smoke-Free Laws with Lower Percentages of New and Current Smokers Among Adolescents and Young Adults". JAMA Pediatrics. September 2015

The first extensive outdoor smoking restrictions were instituted in March 2006 in Calabasas, California. The cities of Los Angeles and Oakland, Contra Costa County, and the California municipalities of Belmont, Beverly Hills, Campbell, Concord, Dublin, El Cajon, Emeryville, Hayward, Loma Linda, Santa Cruz, San Rafael, Santa Monica, and Walnut Creek have also established extensive outdoor restrictions, as have Boulder, Colorado, and Davis County and the City of Murray in Utah. In 2007, San Diego City and Los Angeles, Santa Cruz and San Mateo Counties banned smoking at beaches and parks, joining over 30 other Southern California cities in prohibiting smoking on the beach. In 2011, the New York City Council approved a bill to ban smoking in all city parks, beaches and pedestrian plazas. That ban went into effect on May 23, 2011. In January 2014, a smoking ban went into effect in Boston's parks, and on Hawaii's beaches. A bill was introduced in 2016 in California to ban smoking on all state beaches. It passed the legislature, but was vetoed by the Governor. According to ANRF, as of July 2016, 1,531 municipalities prohibit smoking in city parks, and 317 municipalities mandate smoke-free city beaches.

Additional restrictions are being placed in residential units as well. First, many hotels, including the Marriott, Sheraton, and Westin chains have adopted completely smoke-free room standards. And multi-family residential buildings have been increasingly subject to restrictions, beginning in 2008 in the California cities of Belmont and Calabasas, approved ordinances restricting smoking anywhere in the city except for single-family detached homes. Alameda, Oakland, Pasadena, Santa Monica, and Thousand Oaks are among eight other California cities with such extensive bans. In September 2011, Sonoma County imposed a similar ban, effective June 2012. In August 2011, the California Legislature passed legislation enabling landlords to ban smoking in residential rental units. In June 2012, the Towbes Group of Santa Barbara became the largest apartment portfolio, with 2,000 units, to impose a smoking ban. In April 2013, California Assembly Bill 746 was defeated; it would have prohibited smoking in, and within 20 feet of entrances of, condominiums, duplexes, and apartment units throughout the state. A similar bill has also been introduced in Massachusetts.

New York City's first non-smoking apartment building opened in late 2009. Many landlords and condominium associations in California and New York City, have also established smoke-free apartment policies. In 2013 Related Companies, which manages 40,000 rental units across the country, announced a ban on smoking for all new tenants. In July 2011, the San Antonio Housing Authority announced a ban, effective in January 2012, on smoking in its 6,175 rental units. Similar bans went into effect in 2012 for public housing in Boston and Minneapolis. The US Department of Housing and Urban Development in November 2015 announced plans to make all public housing smoke-free. The proposal would cover about 940,000 units. The plan went into effect in February 2017, and will be fully implemented by July 2018. ANRF reports that there are 530 municipalities in the US that have enacted laws prohibiting smoking in all multi-unit housing.

New Jersey has prohibited smoking in college dormitories since 2005. At least 1,736 colleges nationwide now prohibit smoking everywhere on campus. In 2013 the California

and Louisiana state college and university systems banned tobacco use, joining Arkansas and Oklahoma with no-smoking restrictions at public colleges and universities, and Iowa, which prohibits smoking at all colleges and universities. Twenty states have banned smoking, indoors and outdoors, at state prisons. Since February 2015, smoking has been prohibited in all federal prisons. Arkansas, California, Louisiana, Maine, Puerto Rico, Texas, Virginia, and Rockland County, NY prohibit smoking in a car where there are children present, and similar legislation has been proposed in Alabama, Connecticut, Florida, Illinois, Maryland, New York, Ohio, Oregon, Utah, Vermont, Virginia, and other states.

In June 2006, the Office of The Surgeon General released a report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke". It is a comprehensive review of health effects of involuntary exposure to tobacco smoke. It concludes definitively that secondhand smoke causes disease and adverse respiratory effects. It also concludes that policies creating completely smoke-free environments are the most economical and efficient approaches to providing protection to non-smokers. We expect that the report will strengthen arguments in favor of further smoking restrictions across the country. Further ammunition for activists for smoke-free environments was provided by the California Environmental Protection Agency Air Resources Board, which in 2006 declared environmental tobacco smoke to be a toxic air contaminant.

Smokeless Tobacco Products. Unlike e-cigarettes, smokeless tobacco products have been available for centuries. As cigarette consumption expanded in the last century, the use of smokeless products declined. Chewing tobacco and snuff are the most significant components. Snuff is a ground or powdered form of tobacco that is placed under the lip to dissolve. It delivers nicotine effectively to the body. Moist snuff is both smoke-free and potentially spit-free. Chewing tobacco and dry snuff consumption had been declining in the U.S. into this century, but moist snuff consumption has increased at an annual rate of more than 5% since 2002. Snuff is now being marketed to adult cigarette smokers as an alternative to cigarettes. UST (purchased by Altria in 2009), was the largest producer of moist smokeless tobacco, and explicitly targeted adult smoker conversion in its growth strategy over the last decade. As with e-cigarettes, the leading cigarette manufacturers soon added smokeless products to their offerings, responding to both the proliferation of indoor smoking bans and to a perception that smokeless use is a less harmful mode of tobacco and nicotine usage than cigarettes. Philip Morris USA now markets Marlboro Snus and Reynolds American offers Camel Snus. On December 18, 2017, Reynolds American announced that the FDA accepted, and filed for substantive review, Modified Risk Tobacco Product applications covering Camel Snus, thus requesting FDA authorization to market Camel Snus as a modified risk tobacco product.

In 2014, according to SAMHSA's National Survey on Drug Use & Health, 3.3% of adults used smokeless tobacco products. Among young adults, who had been more likely to use smokeless products, 2.0% used smokeless tobacco. A Massachusetts survey in 2011 found that in snus test markets 29% of male smokers aged 18-24 had tried snus products.

Advocates of the use of snuff as part of a harm reduction strategy, point to Sweden, where "snus", a moist snuff manufactured by Swedish Match, use has increased sharply since 1970, and cigarette smoking incidence among males has declined to levels well below that of other countries. A review of the literature on the Swedish experience concludes that snus, relative to cigarettes, delivers lower concentrations of some harmful chemicals, and does not appear to cause cancer or respiratory diseases. They conclude that snus use appears to have contributed to the unusually low rates of smoking among Swedish men.[35] The Sweden experience is unique, even with respect to its Northern European neighbors, and it is not clear whether it could be replicated elsewhere. A May 2008 study using data from the 2000 National Health Interview Survey reported that U.S. men who used smokeless tobacco as a smoking cessation method achieved significantly higher quit rates than those who used other cessation aids.[36] A 2009 study concluded however that young males who used smokeless tobacco products were more likely to be concurrent smokers.[37] Public health advocates in the U.S. emphasize that smokeless use results in both nicotine dependence and increased risks of oral cancer, among other health concerns. Snuff use is also often criticized as a gateway to cigarette use.

Nicotine Dependence. Nicotine is widely believed to be an addictive substance. The Surgeon General[38] and the American Medical Association[39] (AMA) both conclude that nicotine is an addictive drug that produces dependence. The American Psychiatric Association has determined that cigarette smoking causes nicotine dependence in smokers and nicotine withdrawal in those who stop smoking. The American Medical Association Council on Scientific Affairs found that one-third to one-half of all people who experiment with smoking become smokers.

Regulation. Since June 22, 2009, when President Obama signed the Family Smoking Prevention and Tobacco Control Act, the FDA has had broad authority over the sale, distribution, and advertising of tobacco products. Such legislation significantly restricts tobacco marketing and sales to youth, requires the disclosure of cigarette ingredients, bigger and bolder health warnings, and bans labels thought to be deceptive, such as "light", and "low-tar" from cigarettes.

A significant issue before the FDA is the role of menthol cigarettes. It has been argued that menthol flavoring serves as an inducement to youth smoking and that its prevalence is especially high among minority groups, raising a call for a ban on its manufacture and

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[35] Foulds, Ramstrom, Burke, and Fagerstrom. "Effect of Smokeless Tobacco (Snus) on Smoking and Public Health in Sweden". Tobacco Control. Vol. 12, 2003.

[36] Rodu and Phillips, "Switching to Smokeless Tobacco as a Smoking Cessation Method: Evidence form the 2000 National Health Interview Survey". Harm Reduction Journal. 23 May 2008.

[37] Tomar, Alpert, and Connolly, "Patterns of Dual Use of Cigarettes and Smokeless Tobacco among US Males: Findings from National Surveys". Tobacco Control. 11 December 2009.

[38] *Source:* Surgeon General’s 1988 Report, “The Health Consequences of Smoking – Nicotine Addiction”.

[39] *Source*: Council on Scientific Affairs, “Reducing the Addictiveness of Cigarettes," Report to the AMA House of Delegates, June 1998.

sale. In an August 2016 letter, the African American Tobacco Control Leadership Council asked President Obama to direct the FDA to issue a proposed rule to remove all flavored tobacco products, including mentholated cigarettes, from the marketplace. Menthol cigarette sales represent approximately 30% of total cigarette sales. Moreover, menthol smoking rates among young adults have increased during the past decade. In September 2012 the American Journal of Public Health published the first peer-reviewed data on menthol smokers. It reported the results of a national survey of those smokers showing that nearly 40% of menthol smokers say they would quit smoking if menthol cigarettes were no longer available. While an outright ban would no doubt prompt a significant number of these smokers to switch to other brands, any significant amount of quitting as a result would have a large negative effect on total consumption and sales. This survey suggests that the effect might be as large as a 12% reduction in cigarette consumption. In 2011, the FDA's Tobacco Products Scientific Advisory Committee ("TPSAC") determined that menthol use is most prevalent among younger smokers and among African Americans. It concludes that the availability of menthol cigarettes more likely than not: 1) increases experimentation and regular smoking, 2) increases the likelihood and degree of addiction in youth smokers and, 3) results in lower likelihood of smoking cessation success in African Americans. The FDA, in July 2013, released its review, "Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol Versus Nonmenthol Cigarettes". It concluded that menthol in cigarettes is likely to be associated with: 1) altered physiological responses to tobacco smoke, 2) increased dependence, 3) reduced success in smoking cessation, and 4) increased smoking initiation by youth. Though the report did not constitute a decision about regulatory action, the FDA did conclude that it is likely that menthol cigarettes pose a public health risk above that seen with nonmenthol cigarettes. In August 2013, the American Academy of Family Physicians advocated a menthol ban in an open letter to the FDA and in November 2013, twenty-five state attorneys general asked U.S. public health regulators to ban menthol cigarettes. No regulatory action was taken in 2014 or 2015, though in 2017 the San Francisco City Council banned the sale of menthol cigarettes beginning in 2018. In February 2018, legislation was introduced in New Jersey which would ban menthol cigarette sales in that state.

Whether FDA regulation will result in a significantly faster rate of decline of smoking in the U.S. cannot be determined at this time. But it clearly does have that potential to do so if regulators take an aggressive and effective approach towards that goal. One of the most profound actions it is empowered to take is to mandate the reduction of nicotine levels in cigarettes. It will surely study the issue, perhaps opting to phase out nicotine, the addictive factor in cigarettes, over some time period. In a recent 6-week study, reduced-nicotine cigarettes versus standard-nicotine cigarettes reduced nicotine exposure, dependence, and the number of cigarettes smoked.[40] Other research has also concluded that smokers of reduced nicotine products do not increase the number of cigarettes smoked to compensate for the reduction per cigarette.[41]

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[40] Eric C. Donny, Ph.D., et al. N Engl J Med 2015; 373:1340-1349October 1, 2015DOI: 0.1056/NEJMsa1502403

[41] Neal L Benowitz1 and Jack E Henningfield[2]Tob Control. 2013 May; 22(Suppl 1): i14–i17. doi: 10.1136/tobaccocontrol-2012-050860

The smaller manufacturers believe, on the other hand, that FDA regulation will strengthen the role of the major producers, as the regulation raises costs of compliance and narrows price gaps of discount cigarettes. In October 2011, the FDA and the U.S. National Institutes of Health announced a national study of the effects of new tobacco regulation on smokers. The study will examine, by following more than 40,000 smokers, susceptibility to tobacco use, use patterns, resulting health problems, and will evaluate how regulations affect tobacco-related attitudes and behaviors. Initial data, on the first wave of data collection, began to be published in 2017. In January 2013, a state legislator in Oregon took an unprecedented step in cigarette regulation by introducing a bill which would make nicotine a controlled substance, requiring a doctor's prescription.

Research has indicated, and our model incorporates, a negative impact on cigarette consumption due to tobacco tax increases, and a negative trend decline in levels of smoking since the Surgeon General's 1964 warning, subsequent anti-smoking initiatives, and regulations which restrict smoking. Our model and forecast acknowledges the efficacy of these activities in reducing smoking and assumes that the effectiveness of such anti-smoking efforts will continue.

Plain packaging, absent brand names has also been used as a tobacco control policy. Australia, in 2001 introduced plain-packaging requirements. A recent study concluded that a significant decline in smoking prevalence followed the introduction of plain packaging (3.7% over 2001-2013), after adjusting for the impact of other tobacco control measures.[42]

As the prevalence of smoking declines, it is likely that the achievement of further declines will require either a greater level of spending, or more effective programs. This is the common economic principle of diminishing returns**.**

An Empirical Model of Cigarette Consumption

An econometric model is a set of mathematical equations which statistically best describes the available historical data. It can be applied, with assumptions on the projected path of independent explanatory variables, to predict the future path of the dependent variable being studied, in this case adult per capita cigarette consumption. After extensive analysis of available data measuring all of the above-mentioned factors which influence smoking, we found the following variables to be effective in building an empirical model of adult per capita cigarette consumption for the United States:

1) the real price of cigarettes
2) the level of real disposable income per capita
3) the impact of restrictions on smoking in public places
4) the trend over time in individual behavior and preferences

[42] Dietheim P. Farley T. "Refuting tobacco-industry funded research: empirical data shoes a decline in smoking prevalence following the introduction of plain packaging in Australia". Tobacco Prevention & Cessation. 2015; 1 November.

We used the tools of standard multivariate regression analysis to determine the nature of the economic relationship between these variables and adult per capita cigarette consumption in the U.S. Then, using that relationship, along with IHS Global Insight's standard population growth forecast, we projected actual cigarette consumption (in billions of cigarettes) out to 2028. It should also be noted that since our entire dataset incorporates the effect of the Surgeon General's health warning (1964), the impact of that variable is also accounted for in the forecast. Similarly the effect of nicotine dependence is incorporated into our entire dataset and influences the trend decline.

Using U.S. data from 1965 through 2016 on the variables described above, we developed the following regression equation.

log (per capita consumption) = 54.1

- 0.024 * trend

- 0.223 * log (cigarette price)

- 0.104 * log (cigarette price last year)

+ 0.274 * log (per capita disposable income)

- 0.001 * percentage of U.S. with strong indoor smoking ban

- 0.002 * percentage of U.S. with strong indoor smoking ban last year.

This model has an R-square in excess of 0.99, meaning that it explains more than 99 percent of the variation in U.S. adult per capita cigarette consumption over the 1965 to 2016 period. In terms of explanatory power this indicates a very strong model with a high level of statistical significance.

According to the regression equation specified above, cigarette consumption per capita (CPC) displays a trend decline of 2.4% per year. The trend reflects the impact of a systematic change in the underlying data that is **not** explained by the included explanatory variables. In the case of cigarette consumption, the systematic change is in public attitudes toward smoking. The trend may also reflect the cumulative impact of health warnings, advertising restrictions, and other variables which are statistically insignificant when viewed in isolation. Some of the impact of the availability of e-cigarettes may be captured here, though it is also captured in the indoor smoking ban terms. This trend, primarily due to an increase in the health-conscious proportion of the population averse to smoking, would by itself account for 90.3% of the variation in consumption. This coefficient is estimated such that a statistical confidence interval of 95% for its value is from 0.0195 to 0.0269 (1.95% to 2.69%). This implies that there is a probability of 5% that the trend rate of decline is outside this range.

Forecast Assumptions

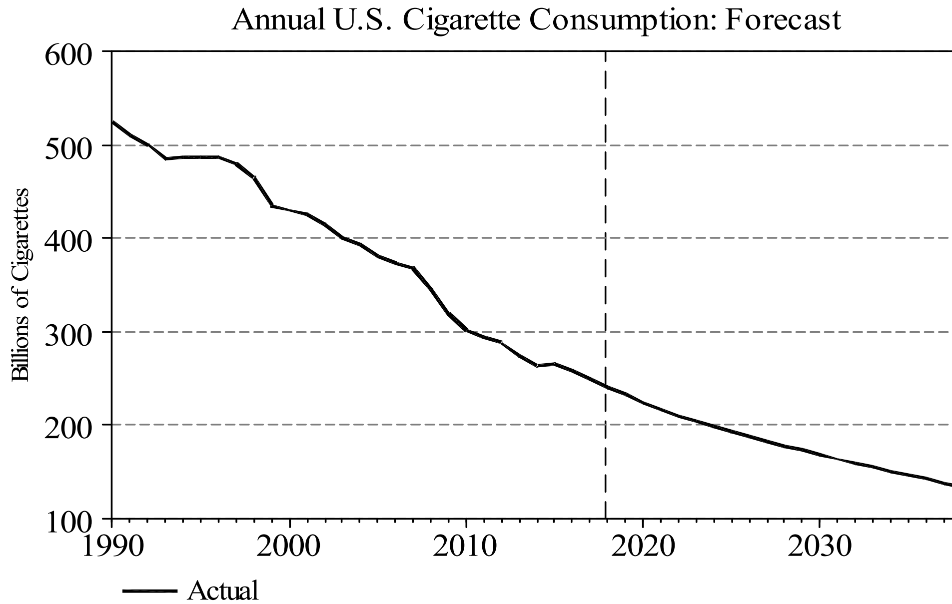
Our forecast is based on assumptions regarding the future path of the explanatory variables in the regression equation. Projections of U.S. population and real per capita personal disposable income are standard IHS Global forecasts. Annual population growth is projected to average 0.7%, and real per capita personal disposable income is projected to increase over the long term at just over 2.1% per year.

The projection of the real price of cigarettes is based upon its past behavior with an adjustment for the shock to prices due to the MSA and other state settlement agreements and subsequent excise tax increases. Cigarette prices increased dramatically in November 1998, as manufacturers raised prices by $0.45 per pack. Subsequent increases by the manufacturers and numerous federal and state hikes in excise taxes brought prices to an average of $3.84 per pack in 2004, to $4.04 in 2005, to $4.18 in 2006, $4.47 in 2007, $4.75 in 2008, and to $5.99 in 2009, $6.62 in 2010, $6.85 in 2011, $7.00 in 2012, $7.19 in 2013, $7.40 in 2014, $7.60 in 2015, and $7.89 in 2016. Our forecast assumptions have incorporated price increases in excess of general inflation to offset excise and other taxes. Relative to other goods, cigarette prices will rise by an average of 1.9% per year over the long term. The average real increase over the 30 years ending 1998 was 1.48% per year.

In addition, we assume that the prevalence of indoor and outdoor restrictions on smoking will continue to increase. It is assumed that by 2020, 100% of states and municipalities will completely restrict smoking in workplaces, restaurants and bars. At the same time, outdoor and residential restrictions will proliferate over this and the following decades. These bans are assumed to be as effective in reducing smoking as the indoor bans.

Forecast of Cigarette Consumption

The graph below illustrates total actual and projected cigarette consumption in the United States.



In addition to the expected trend decline in cigarette consumption, the sharp upward shock to cigarette prices in late 1998 and 1999 contributed to a 6.5% reduction in consumption in 1999. The rate of decline moderated considerably in the following years, averaging 2.1% from 1999 to 2007, before accelerating sharply in 2008.

The economic downturn in the US in 2008 turned into the deepest since the 1930s, with sharply negative effects on household disposable income. At the same time, a rapid increase in gasoline and energy prices significantly reduced the discretionary spending of consumers. In addition, cigarette price increases continued, the federal excise tax was raised dramatically, and indoor smoking bans continued to proliferate. Consumption fell by nearly 4% in 2008 and by over 9% in 2009. Cigarette shipment declines moderated after 2010, and in 2012 the rate of decline was slightly less than 2%. (Roll-your-own tobacco had represented as much as 3% of tobacco volume under the MSA, but has declined in volume by over 70% since 2008, after federal excise taxes were substantially increased.)

In 2013, shipments reported by MSAI were 4.6% lower than in 2012. For the full year, US Tobacco and Tax Bureau (TTB) reported shipments 4.8% lower than in 2012. Weak per capita disposable income growth was responsible for part of the decline. In addition, the manufacturers reported that wholesale inventories declined by 1.4 billion cigarettes during the year.

In 2014, MSAI estimated shipments of 264.6 billion cigarettes, a 3.2% decline from 2013. The decline in consumption of cigarettes was somewhat greater, however, as inventories were rebuilt by 0.7 billion cigarettes to offset the 2013 decline. TTB has reported that 2014 shipments declined 4.1% compared with 2013. In its report for the 2015 MSA payments, NAAG estimated 264.2 billion cigarettes in 2014 (265.8 billion when including RYO).

For 2015, RAI reported that MSAI estimated industry shipments of 264.3 billion, a 0.1% decline from 2014. TTB reported shipments for the year to be 267.0 billion, an increase of 1.67% from 2014. The dramatic decline in oil prices, and hence gasoline prices, was coincident with higher than expected cigarette sales, most notably in convenience stores, who reported increased sales during 2015.

RAI in its 2016 fourth quarter report indicated that industry shipments declined 1.8% from 2015. After adjusting for inventory movement, TTB data for the year indicated a 3.5% decline, and NAAG certified that in 2017.

As of their third quarter 2017 reports, the manufacturers cite a 3.3% decline from 2016. TTB reported shipments through three quarters of 191.5 billion cigarettes, a 2.4% decrease from the same period in 2016. However, its preliminary report on January 10 2018, estimated shipments through November 2017 to be 4.36% below the same period in 2016. In February, Altria reported estimates that industry shipments declined by 4% for the full year.

Over the longer term, our model includes estimates of the negative impact of indoor smoking bans, which we anticipate will ultimately be enacted in all states. For instance, in 2011, legislation to establish indoor bans in Texas and Louisiana made significant advances before being defeated. We also assume that stringent restrictions on smoking will continue to be enacted, including their gradual extension to outdoor public places, as well as to private indoor residential spaces such as multi-family housing.

From 2017 through 2038 the average annual rate of decline is projected to be 2.9%.

Forecast U.S. Consumption of Cigarettes

	Total Consumption	Decline Rate	Consumption including Roll-Your-Own	Decline Rate
	(billions)	*(%)*	*(billions)*	*(%)*
2011	293.5	-2.6%	296.2	-2.8%
2012	288.3	-1.8%	290.5	-1.9%
2013	274.5	-4.8%	276.4	-4.9%
2014	264.2	-3.8%	265.8	-3.8%
2015	269.1	1.8%	270.9	1.9%
2016	258.6	-3.9%	260.2	-4.0%
FORECAST				
2017	249.4	-3.6%	250.9	-3.6%
2018	240.5	-3.6%	241.9	-3.6%
2019	232.1	-3.5%	233.5	-3.5%
2020	224.3	-3.4%	225.6	-3.4%
2021	216.9	-3.3%	218.2	-3.3%
2022	210.1	-3.1%	211.4	-3.1%
2023	203.7	-3.0%	205.0	-3.0%
2024	197.9	-2.9%	199.1	-2.9%
2025	192.4	-2.8%	193.5	-2.8%
2026	187.2	-2.7%	188.3	-2.7%
2027	182.2	-2.7%	183.3	-2.7%
2028	177.3	-2.7%	178.4	-2.7%
2029	172.6	-2.7%	173.6	-2.7%
2030	168.0	-2.7%	169.0	-2.7%
2031	163.5	-2.7%	164.4	-2.7%
2032	159.1	-2.7%	160.0	-2.7%
2033	154.7	-2.7%	155.6	-2.7%
2034	150.4	-2.8%	151.3	-2.8%
2035	146.2	-2.8%	147.1	-2.8%
2036	142.1	-2.8%	143.0	-2.8%
2037	138.1	-2.8%	139.0	-2.8%
2038	134.2	-2.8%	135.0	-2.8%

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APPENDIX E

CERTAIN INFORMATION RELATING TO THE DOMESTIC TOBACCO INDUSTRY

The following description of the domestic tobacco industry has been compiled from certain publicly available documents of the tobacco companies and their current or former parent companies, certain publicly available analyses of the tobacco industry, and other public sources. Certain of those companies currently file annual, quarterly and certain other reports with the SEC. Such reports are available on the SEC's website (www.sec.gov) and upon request from the SEC's Investor Information Service, 100 F Street, NE, Washington, D.C. 20549 (phone: (800) SEC-0330 or (202) 551-8090; e-mail: publicinfo@sec.gov). The following information does not, nor is it intended to, provide a comprehensive description of the domestic tobacco industry, the business, legal and regulatory environment of the participants therein, or the financial performance or capability of such participants. Although the Authority has no independent knowledge of any facts indicating that the following information is inaccurate in any material respect, the Authority has not independently verified this information and cannot and does not warrant the accuracy or completeness of this information. To the extent that reports submitted to the MSA Auditor by the PMs pursuant to the requirements of the MSA provide information that is pertinent to the following discussion, including market share information, the Attorney General of the Commonwealth has not consented to the release of such information pursuant to the confidentiality provisions of the MSA. Prospective investors in the Series 2018 Bonds should conduct their own independent investigations of the domestic tobacco industry to determine if an investment in the Series 2018 Bonds is consistent with their investment objectives.

MSA payments are computed based in part on cigarette shipments in or to the 50 states of the United States, the District of Columbia and Puerto Rico. The quantities of cigarettes shipped and cigarettes consumed within the 50 states of the United States, the District of Columbia and Puerto Rico may not match at any given point in time as a result of various factors, such as inventory adjustments, but are substantially the same when compared over a period of time.

Retail market share information, based upon shipments or sales as reported by the OPMs for purposes of their filings with the SEC, may be different from Relative Market Share for purposes of the MSA and the respective obligations of the PMs to contribute to Annual Payments. The Relative Market Share information reported is confidential under the MSA, except to the extent reported by NAAG. See "SUMMARY OF THE MASTER SETTLEMENT AGREEMENT—Overview of Payments by the Participating Manufacturers; MSA Escrow Agent" and "—Annual Payments". Additionally, aggregate market share information, based upon shipments as reported by OPMs and reflected in the chart below entitled "Manufacturers' Domestic Market Share of Cigarettes" is different from that utilized in the bond structuring assumptions. See "PLEDGED ANNUAL PAYMENTS PROJECTION METHODOLOGY AND BOND STRUCTURING ASSUMPTIONS."

Certain information included in this Official Statement has been updated to reflect information from Altria's Form 8-K filed with the SEC on February 1, 2018.

Industry Overview

According to publicly available documents of the OPMs, at year-end 2016 the OPMs collectively accounted for approximately 83.7% of the domestic cigarette retail industry, as discussed in "Industry Market Share" below. The market for cigarettes in the U.S. divides generally into premium and discount sales.

Philip Morris USA Inc. ("**Philip Morris**"), a wholly-owned subsidiary of Altria Group, Inc. ("**Altria**"), is the largest tobacco company in the U.S. Prior to a name change on January 27, 2003, Altria was named Philip Morris Companies Inc. In its Form 8-K filed with the SEC on February 1, 2018, Altria reported that Philip Morris's domestic cigarette market share for calendar year 2017 was 50.7%, compared to 51.1% for calendar year 2016 (based on retail sales data from IRI/MSAI, a tracking service that uses a sample of stores and certain wholesale shipments to project market share and depict share trends). In its Form 10-K filed with the SEC for calendar year 2016, Altria reported that Philip Morris's domestic cigarette market share for calendar year 2016 was 51.4%, compared to its reported domestic market share of 51.3% for calendar year 2015. Philip Morris's major premium brands are Marlboro, Virginia Slims and Parliament (with Marlboro representing approximately 85.7% of Philip Morris's domestic cigarette shipment volume during calendar year 2017, according to Altria's Form 8-K filed with the SEC on February 1, 2018).

Marlboro is also the largest selling cigarette brand in the U.S., with approximately 43.3% and 43.7% of the U.S. domestic retail share for calendar year 2017 and calendar year 2016, respectively, according to Altria's Form 8-K filed with the SEC on February 1, 2018, and has been the world's largest-selling cigarette brand since 1972. Philip Morris's principal discount brands are Basic and L&M. In 2009, Altria acquired UST LLC, whose subsidiary, U.S. Smokeless Tobacco Company LLC ("**UST**"), is the leading producer of smokeless tobacco in the U.S.

R.J. Reynolds Tobacco Company ("**Reynolds Tobacco**") is the second-largest tobacco company in the U.S. Reynolds Tobacco is a wholly-owned subsidiary of Reynolds American Inc. ("**Reynolds American**"), which in turn is a wholly-owned subsidiary of British American Tobacco p.l.c. ("**BAT**") following BAT's acquisition on July 25, 2017 of the approximately 58% of Reynolds American stock not then owned by BAT. As a result of the acquisition by BAT, Reynolds American no longer files quarterly or annual reports with the SEC. BAT is subject to applicable SEC reporting obligations as a foreign private issuer. BAT is responsible for Reynolds Tobacco's payment obligations under the MSA as a result of the acquisition of Reynolds Tobacco's parent company Reynolds American. In an earlier merger, in June 2015, Reynolds American acquired Lorillard, Inc., the parent company of Lorillard Tobacco Company ("**Lorillard**"), the then third-largest tobacco company in the U.S., with Reynolds Tobacco continuing as the surviving entity. In yet an earlier merger, in July 2004, the U.S. operations of Brown & Williamson Tobacco Corporation ("**B&W**") (the then third-largest tobacco company in the U.S.) were combined with Reynolds Tobacco. In its Form 10-Q filed with the SEC for the six-month period ended June 30, 2017 (which, on account of the acquisition by BAT, is the final periodic report filed by Reynolds American with the SEC), Reynolds American reported that Reynolds Tobacco's domestic retail cigarette market share at June 30, 2017 was 32.1% (based on shipments to retail outlets and information submitted by wholesale locations and processed and managed by MSAI). In its Form 10-K filed with the SEC for the calendar year 2016, Reynolds American reported that Reynolds Tobacco's domestic retail cigarette market share at December 31, 2016 and December 31, 2015 was 32.3%. Reynolds Tobacco's major premium brands are Newport (which it acquired in the 2015 merger with Lorillard) and Camel, and its discount brands include Pall Mall and Doral. BAT, through Reynolds American, is also the parent company of American Snuff Company, LLC, the second-largest smokeless tobacco products manufacturer in the U.S., and Santa Fe Natural Tobacco Company, Inc. ("**Santa Fe Natural Tobacco Company**"), an SPM that manufactures a super-premium cigarette brand.

Contemporaneous with the 2015 merger of Lorillard, Inc. into Reynolds American, Imperial Tobacco Group PLC ("**Imperial Tobacco**") (through its subsidiary ITG Brands, LLC, an SPM under the MSA) purchased Reynolds Tobacco's Kool, Salem and Winston cigarette brands, Lorillard, Inc.'s Maverick cigarette brand and blu eCig electronic cigarette brand, and other assets. Imperial Tobacco is listed on the London Stock Exchange and does not file quarterly or annual reports with the SEC. According to Imperial Tobacco's announcement released November 7, 2017 containing preliminary results for the fiscal year ended September 30, 2017, Imperial Tobacco's market share in the U.S. tobacco market at fiscal year-end 2017 was 8.9% (representing a decrease from 9.2% at fiscal year-end 2016), making it the third-largest tobacco company in the U.S. market. Imperial Tobacco's annual report containing final results for the fiscal year ended September 30, 2017 did not disclose market share in the U.S. tobacco market. In accordance with Section XVIII(c) of the MSA, which states that "[n]o Original Participating Manufacturer may sell or otherwise transfer or permit the sale or transfer of any of its Cigarette brands, Brand Names, Cigarette product formulas or Cigarette businesses … to any person or entity unless such person or entity is an Original Participating Manufacturer or prior to the sale or acquisition agrees to assume the obligations of an Original Participating Manufacturer with respect to such Cigarette brands, Brand Names, Cigarette product formulas or businesses," the OPM payment obligations under the MSA with respect to the cigarette brands, brand names, cigarette product formulas and businesses acquired by Imperial Tobacco from Reynolds Tobacco and Lorillard have been assumed and continued by Imperial Tobacco. Imperial Tobacco also is the parent company of Commonwealth Brands, Inc. ("**CBI**"), an SPM under the MSA, which markets deep discount brands in the U.S., including USA Gold, Sonoma and Fortuna.

Based on the domestic retail market shares discussed above, the remaining share of the U.S. retail cigarette market in 2017 was held by a number of other cigarette manufacturers, including Liggett Group LLC ("**Liggett**") (the operating successor to the Liggett & Myers Tobacco Company) and Vector Tobacco Inc. ("**Vector Tobacco**"), each SPMs under the MSA and each wholly-owned subsidiaries of Vector Group Ltd. ("**Vector Group Ltd.**"). In its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, Vector Group Ltd. reported that the domestic market share of its subsidiaries Liggett and Vector Tobacco in the calendar year 2016 was 3.3%, measured by MSAI shipment volume data, and that all of Vector Group Ltd.'s tobacco sales in 2017 and 2016 were in the discount category. Vector Group Ltd. reported in its Form 10-Q filed with the SEC for the nine-month period ended

September 30, 2017 that Liggett and Vector Tobacco are required to make payments under the MSA to the extent such companies' market shares exceed approximately 1.65% and approximately 0.28%, respectively, of the U.S. cigarette market (with the MSA payment obligations based on each respective company's incremental market share above the aforementioned minimum thresholds). Vector Group Ltd.'s brands include Pyramid, Eagle 20's, Grand Prix and Liggett Select.

Industry Market Share

The following table sets forth the approximate comparative market share positions of the leading producers of cigarettes in the U.S. tobacco industry. Lorillard is included for historical comparison. Individual domestic manufacturers' market shares presented below are derived from the publicly available documents of the respective manufacturers and, as a result of differing methodologies used by the manufacturers to calculate market share, may not be accurate.

Manufacturers' Domestic Market Share of Cigarettes[1]

	Calendar Year					
Manufacturer	2011	2012	2013	2014	2015	2016
Philip Morris	49.0%	49.8%	50.7%	50.9%	51.3%	51.4%
Reynolds Tobacco[2]	27.4	26.5	26.0	26.5	32.0	32.3
Imperial Tobacco[3]	----	----	----	----	9.5	9.2
Lorillard[4]	14.1	14.4	14.9	15.1	----	----
Other[5]	9.5	9.3	8.4	7.5	7.2	7.1

[1] Aggregate market share as reported above is different from that utilized in the Commonwealth Annual Payments Projection Methodology and Assumptions. In addition, aggregate market share for a given year is as reported in SEC filings for such year and has not been restated due to changes in reporting for subsequent years, if any, or otherwise. Shipments to retail outlets as reported by MSAI do not reflect actual consumer sales and do not track all volume and trade channels, and accordingly, the data may overstate or understate actual market share.

[2] Reynolds Tobacco's market share for 2014 and prior years is based on market share information prior to the merger with Lorillard. Reynolds Tobacco's 2015 market share assumes that cigarette brands acquired in the merger were part of Reynolds Tobacco's portfolio for the entire period, and also reflects for that entire period the divestiture of assets to Imperial Tobacco.

[3] As of fiscal year-end September 30. According to Imperial Tobacco's annual report for its fiscal year ended September 30, 2015, the 2015 amount shown reflects the combined performance of U.S. operations before and after the acquisition of the above-described assets of Reynolds Tobacco and Lorillard, which occurred in such fiscal year. For fiscal years 2014 and prior, Imperial Tobacco is included in "Other".

[4] Lorillard utilized MSAI market share data in its SEC reports. MSAI divides the cigarette market into two price segments, the premium price segment and the discount or reduced price segment. MSAI's information relating to unit sales volume and market share of certain of the smaller, primarily deep discount, cigarette manufacturers is based on estimates derived by MSAI.

[5] The market share specified in "Other" has been determined by subtracting the total market share percentages of Philip Morris, Reynolds Tobacco, Imperial Tobacco and Lorillard as reported in their publicly available documents from 100%. Results may not be accurate and may not total 100% due to rounding and the differing sources and methodologies utilized to calculate market share.

Cigarette Shipment Trends

According to NAAG data, domestic U.S. cigarette shipments over the past 10 reported sales years were approximately as set forth in the table below.

Sales Year	Overall No. of Cigarettes (in billions) (with 0.0325 oz. RYO conversion)	% Change From Prior Year (with 0.0325 oz. RYO conversion)[1]	OPM No. of Cigarettes (in billions) (with 0.0325 oz. RYO conversion)	% Change From Prior Year (with 0.0325 oz. RYO conversion)[1]
2016	260.183	(3.96)%	220.818	(2.39)%
2015	270.903	1.91	226.214	(0.15)
2014	265.819	(3.83)	226.553	(3.53)
2013	276.403	(4.86)	234.841	(4.34)
2012	290.520	(1.90)	245.486	(1.99)
2011	296.159	(2.75)	250.461	(3.09)
2010	304.547	(6.36)	258.440	(3.96)
2009	325.226	(9.09)	269.095	(10.35)
2008	357.738	(3.79)	300.161	(3.92)
2007	371.833	(4.96)	312.411	(4.50)

[1] Percentage change calculated after rounding of shipment volume.

According to data from the U.S. Department of Treasury, Alcohol and Tobacco Tax and Trade Bureau (the "**TTB**"), the overall quantity of cigarettes shipped domestically (not including a conversion for roll-your-own tobacco) for the past 10 calendar years was approximately as set forth in the table below.

Calendar Year	No. of Cigarettes (in billions)	Percent Change From Prior Year[1]
2016	257.419	(3.89)%
2015	267.835	1.95
2014	262.704	(4.05)
2013	273.787	(4.77)
2012	287.487	(1.80)
2011	292.769	(2.57)
2010	300.489	(5.52)
2009	318.029	(8.20)
2008	346.419	(4.22)
2007	361.665	(5.01)

[1] Percentage change calculated after rounding of shipment volume.

According to Altria in its Form 8-K filed with the SEC on February 1, 2018, total cigarette industry volumes declined by an estimated 4% in calendar year 2017.

The MSA payments are calculated in part on shipments by the OPMs in or to the U.S., rather than total industry shipments (as shown in the tables above), and rather than consumption. The information in the foregoing tables, which has been obtained from publicly available documents but has not been independently verified, may differ materially from the amounts used by the MSA Auditor for calculating Annual Payments and Strategic Contribution Payments under the MSA.

Physical Plant, Raw Materials, Distribution and Competition

The production facilities of the OPMs tend to be highly concentrated. Material damage to these facilities could materially impact overall cigarette production. A prolonged interruption in the manufacturing operations of the

cigarette manufacturers could have a material adverse effect on the ability of the cigarette manufacturers to effectively operate their respective businesses. In addition, shifts in crops (such as those driven by economic conditions and adverse weather patterns), government mandated prices, economic trade sanctions, geopolitical instability and production control programs may increase or decrease the cost or reduce the supply or quality of tobacco and other agricultural products used to manufacture tobacco products. Any significant change in the price, quality or availability of tobacco leaf or other agricultural products used to manufacture tobacco products could restrict the cigarette manufacturers' ability to continue marketing existing products.

Cigarette manufacturers sell tobacco products to wholesalers (including distributors), large retail organizations, including chain stores, and the armed services. However, certain stores have ceased the sale of tobacco products. The retail chain store Target reportedly stopped selling tobacco products in 1996. In September 2014, the national pharmacy chain CVS reportedly stopped selling all cigarettes and other tobacco products in all its stores (following a February 2014 announcement), citing that such sales were inconsistent with its mission. CVS recently reported that a year after it stopped selling cigarettes, cigarette sales across all retailers have dropped in 13 states where it has sizable market share. A group of U.S. Attorneys General have pressured large retail stores with pharmacies to take similar action, and in April 2014 several members of Congress called on these retailers to stop selling cigarettes and other items containing tobacco. According to the American Nonsmokers' Rights Foundation ("**ANRF**"), as of October 2, 2017, 168 municipalities have tobacco-free pharmacy laws. In addition, Costco has also reportedly removed tobacco products from a majority of its U.S. locations, according to news reports in March 2016. Cigarette manufacturers and their affiliates and licensees also market cigarettes and other tobacco products worldwide, directly or through export sales organizations and other entities with which they have contractual arrangements.

The domestic market for cigarettes is highly competitive. Competition is primarily based on a brand's price, including the level of discounting and other promotional activities, positioning, product attributes and packaging, consumer loyalty, advertising, retail display, quality and taste. Promotional activities include, in certain instances, allowances, the distribution of incentive items, price reductions and other discounts. Considerable marketing support, merchandising display and competitive pricing are generally necessary to maintain or improve a brand's market position. Increased selling prices and taxes on cigarettes have resulted in additional price sensitivity of cigarettes at the consumer level and in a proliferation of discounts and of brands in the discount segment of the market. According to the Tobacco Consumption Report, premium brands are typically $1.00 to $2.00 more expensive per pack than discount brands, allowing a margin for consumers to switch to less costly discount brands in the event of price increases.

The tobacco products of the cigarette manufacturers and their affiliates and licensees are advertised and promoted through various media, although television and radio advertising of cigarettes is prohibited in the U.S. The domestic tobacco manufacturers have agreed to additional marketing restrictions in the U.S. as part of the MSA and other settlement agreements. They are still permitted, however, to conduct advertising campaigns in magazines, at retail cigarette locations, in direct mail campaigns targeted at adult smokers, and in other adult media.

E-Cigarettes and Vapor Products

Numerous manufacturers have recently developed (or acquired) and are marketing "electronic cigarettes" (or "e-cigarettes"), which, while not tobacco products, are battery powered devices in the shape of a cigarette that vaporize liquid nicotine, which is then inhaled by the consumer. Because they do not contain, burn or heat tobacco, the manufacturers (and certain states) do not deem e-cigarettes to constitute "cigarettes" within the meaning of the MSA. Electronic nicotine products also include devices called "vaporizers", which are larger, customizable devices. They have larger batteries and cartridges, hold more liquid, produce larger vapor clouds and last longer. They allow users to mix and match hardware and refill cartridges with liquid bought in bulk, so that they generally are cheaper than e-cigarettes. As discussed below, in May 2016, the U.S. Food and Drug Administration ("**FDA**") released its final rule which subjects manufacturers, importers and/or retailers of e-cigarettes, other vapor products and certain other tobacco related products to the same and additional regulations applicable to cigarettes, cigarette tobacco, roll-your-own tobacco and smokeless tobacco. However, e-cigarettes and vapor products are currently not subject to the advertising restrictions to which tobacco products are subject. According to the American Lung Association, there are nearly 500 brands and 7,700 flavors of e-cigarettes on the market.

The parent companies of each of the OPMs have launched e-cigarette brands. Reynolds American markets the e-cigarette product VUSE and introduced its VUSE Fob power unit, which offers an on-device display with information about battery and cartridge levels, in March 2016, and began national distribution of its VUSE Vibe high-volume cartridge and closed-tank system, with a stronger and longer-lasting battery, in November 2016. Altria's subsidiary Nu Mark LLC introduced e-vapor products under the "MarkTen" brand in 2013 and expanded MarkTen nationally during 2014. MarkTen is an e-cigarette that can be reused with a separate battery recharging kit and additional cartridges in both tobacco and menthol flavors. In April 2014, Altria, through its Nu Mark subsidiary, acquired the e-vapor business of Green Smoke, Inc., an e-cigarette maker that sells both disposable and reusable products. In April 2012 Lorillard, Inc. acquired the blu eCigs brand, which it sold to Imperial Tobacco contemporaneously with the Lorillard, Inc. merger into Reynolds American in 2015. In addition, Vector Group Ltd.'s subsidiary Zoom E-Cigs LLC rolled out its Zoom e-cigarette brand nationally 2014.

Altria, through its subsidiaries, has also developed alternative cigarettes, Accord and iQOS, in which the tobacco is electronically heated rather than burned. According to news reports, in December 2016 Philip Morris International Inc. filed a modified risk tobacco product application with the FDA to market iQOS in the U.S. as a "less harmful" tobacco product than traditional cigarettes and in March 2017 filed the corresponding pre-market tobacco production application with the FDA. Altria has stated that it considers iQOS and other products in which tobacco is heated rather than burned as "tobacco products" under the MSA.

E-cigarette and vapor product sales were an estimated $3.5 billion in 2015 and $4 billion in 2016, according to news reports. Altria reported in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 that its subsidiaries believe that a significant number of adult tobacco consumers switch between tobacco categories, use multiple forms of tobacco products and try innovative tobacco products, such as e-vapor products and that, although the e-vapor category grew rapidly from 2012 through 2015, the category has slowed since that time. Altria's subsidiary Nu Mark believes that the e-vapor category will continue to be dynamic as adult tobacco consumers explore a variety of tobacco product options, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. In September 2017, Philip Morris International announced that it would contribute approximately $80 million each year for the following 12 years to a non-profit organization called the Foundation for a Smoke-Free World, to fund research on smoke-free alternatives, among other things.

The CDC in September 2014 reported results of a survey that indicated that in 2013 approximately 8.5% of the adult population (representing approximately two-and-a-half times the 2010 estimates), and 36.5% of smokers (representing approximately four times the 2010 estimates), had tried e-cigarettes at some time. In January 2016 the CDC reported that in 2014 approximately 2.4 million middle and high school students were users of electronic cigarettes in the preceding 30 days. The CDC also reported that 16% of high school students used e-cigarettes in 2015 (compared to 1.5% in 2011). The CDC in June 2016 released survey results showing that 45% of high school students had tried e-cigarettes in 2015, compared with only 32% who had tried cigarettes. In December 2014 the University of Michigan's Survey for Research Center ("**UMSRC**") reported its findings that e-cigarette use exceeded traditional cigarette smoking among teens in 2014. In December 2015, the UMSRC reported its findings that in 2015, a substantially higher percentage of adolescents used e-cigarettes in the last 30 days than had smoked regular cigarettes and that cigarette smoking among teens continued a decades-long decline in 2015 and reached the lowest levels recorded since annual tracking began over 40 years ago. In addition, it has been reported that increases in taxes on traditional cigarettes have caused an increase in the sale of e-cigarettes. According to the Tobacco Consumption Report, certain sources have shown that e-cigarette use is associated with quit attempts by smokers; that youth use of e-cigarettes is unlikely to increase the number of future cigarette smokers; and that the substantial increase in e-cigarette use among U.S. adult smokers this decade was associated with a statistically significant increase in the smoking cessation rate at the population level.

On May 5, 2016, the FDA released final rules that extend its regulatory authority to electronic cigarettes and certain other tobacco products under the FSPTCA (following an April 25, 2014 release of proposed rules). The rules ban sales of e-cigarettes and other vapor products, cigars, hookah tobacco, pipe tobacco and other products to people under 18, effective August 2016. The rules also require new health warnings for these products, and manufacturers must seek FDA permission to continue marketing all such products launched since 2007 (comprising virtually all of the market), as discussed below under "—Regulatory Issues—FSPTCA". Manufacturers have a grace period to submit their product information to the FDA. In addition, the rules require that product manufacturers register with the FDA and report product and ingredient listings; only make direct and implied claims of reduced risk if the FDA

confirms that scientific evidence supports the claim and that marketing the product will benefit public health as a whole; not distribute free samples; and not sell products in vending machines, unless in a facility that never admits youth. The rules do not restrict flavored products, online sales or advertising for e-cigarettes and vapor products. Various manufacturers have sued the FDA over the final rules.

On March 2, 2016, the U.S. Department of Transportation announced a final rule that explicitly bans the use of e-cigarettes and other vaping devices on commercial flights and applies to all scheduled flights of U.S. and foreign carriers involving transportation in, to, and from the U.S.; the U.S. Court of Appeals District of Columbia Circuit upheld the rule in July 2017. On January 28, 2016, President Obama signed the Child Nicotine Poisoning Prevention Act into law which requires containers for liquid nicotine used in e-cigarettes to have child-proof packaging.

Electronic cigarettes are currently not subject to federal excise taxes. For a description of state taxes imposed on vapor products, see "—Regulatory Issues—Excise Taxes" below.

Certain legislation has been passed by states and localities restricting the use and sale of electronic cigarettes and other vapor products. According to ANRF as of October 2, 2017, ten U.S. states and two territories (California, Connecticut, Delaware, Hawaii, Maine, New Jersey, North Dakota, Oregon, Utah, Vermont, the Northern Mariana Islands and Puerto Rico) and 688 municipalities have banned the use of e-cigarettes in smoke-free venues, and 15 states have restricted e-cigarette use in other venues. In addition, New York State enacted a law effective November 2017 that bans e-cigarettes and other vapor products from anywhere traditional cigarettes are already prohibited. On December 19, 2013, the New York City Council approved legislation that prohibits the use of e-cigarettes in indoor public places and in places of employment (where smoking of traditional cigarettes is prohibited), and on January 3, 2017 a New York appellate panel affirmed the constitutionality of the ban. Chicago, Los Angeles, San Francisco and Philadelphia passed similar legislation in 2014.

In December 2014, Representatives Henry Waxman and Frank Pallone and Senator Dick Durbin sent letters to 29 Attorneys General urging them to classify e-cigarettes as cigarettes under the MSA in order to prevent e-cigarette companies from targeting youth and getting them addicted to their products. In February 2015, eight Attorneys General sent a response letter stating their position that the MSA does not cover e-cigarettes.

Smokeless Tobacco Products

Smokeless tobacco products, which are not "cigarettes" within the meaning of the MSA, have been available for centuries. Chewing tobacco and snuff are the most significant components of this market segment. Snuff is a ground or powdered form of tobacco that is placed under the lip to dissolve. It delivers nicotine effectively to the body. Moist snuff, including "snus" (originated in Sweden), is both smoke-free and potentially spit-free. As cigarette consumption expanded in the last century, the use of smokeless products declined. Recently, however, the industry has expanded its smokeless tobacco products in response to the general decline in cigarette consumption, the proliferation of smoking bans and the perception that smokeless use is a less harmful mode of tobacco and nicotine usage than cigarettes. Snuff, for example, is now being marketed to adult cigarette smokers as an alternative to cigarettes. UST, the largest producer of moist smokeless tobacco (and a subsidiary of Altria, Philip Morris's parent company), which manufactures Copenhagen and Skoal smokeless products, among others, is explicitly targeting adult smoker conversion in its growth strategy. In 2006, the OPMs entered the market of smokeless tobacco products, including Philip Morris's introduction of Taboka, a snuff product, and Reynolds American's introduction of Camel snus. Philip Morris also markets Marlboro snus and Marlboro Smokeless Tobacco Stick. In October 2007, Altria announced that it would accelerate the development of snuff and less-harmful cigarettes to counter a decline in smoking. In 2009 Reynolds American began testing dissolvable tobacco products Camel Sticks (a twisted, dissolvable stick made of tobacco), Camel Orbs (dissolvable tobacco tablets) and Camel Strips (dissolvable tobacco strips), but in recent years has scaled back marketing of these products. In January 2012, Altria announced that it entered into an agreement with Okono, an affiliate of Fertin Pharma, a Danish maker of nicotine chewing gum, to develop non-combustible tobacco products. In May 2012, Altria announced that its subsidiary Nu Mark LLC introduced Verve nicotine discs, a mint-flavored, chewable, disposable tobacco product that contains tobacco-derived nicotine.

As a result of these efforts, smokeless tobacco products have been increasing market share of tobacco products overall at the expense of the market share captured by cigarettes. Sales of moist snuff products increased by 65.6% between 2005 and 2011, according to an October 2012 report by the National Center for Biotechnology

Information. According to Altria's Form 8-K filed with the SEC on February 1, 2018, its subsidiary UST estimates that its smokeless products shipment volume declined approximately 2% over calendar year 2017 and that the smokeless products category volume was essentially unchanged over the six months ended December 31, 2017. According to Altria's Form 8-K filed with the SEC on February 1, 2018, smokeless tobacco products accounted for approximately 8.7% of Altria's tobacco product net revenues for calendar year 2017, compared with approximately 8.2% for calendar year 2016. A June 2014 report by the CDC found that smokeless tobacco use among U.S. workers has remained relatively steady since 2005, with 2.7% of U.S. workers using smokeless tobacco products in 2005 and 3.0% of U.S. workers using smokeless tobacco products in 2010, while cigarette use has declined since 2005. The U.S. Department of Health and Human Services reports that 3.5% of all adults use smokeless tobacco.

For a description of federal and state taxes imposed on smokeless tobacco products, see "—Regulatory Issues—Excise Taxes" below.

On June 10, 2014, Swedish Match submitted an application to the FDA to (i) authorize under the FDA's premarket tobacco application pathway the marketing and sale of updated versions of eight of its snus products under the "General" brand name and (ii) approve the snus products as a "modified risk tobacco product" ("**MRTP**") allowing the manufacturer to alter or remove certain warning labels from its packages and to make claims that its products present a lower risk than cigarettes. The FDA announced in November 2015 that it had for the first time authorized the marketing of a new tobacco product through the premarket tobacco application process by granting Swedish Match's application with respect to the marketing and sale of its snus products. In December 2016 the FDA denied Swedish Match's request to remove one of the required warning statements for eight snus products under the "General" brand name, and the FDA provided recommendations related to Swedish Match's other requests and provided an opportunity for Swedish Match to amend its MRTP applications.

Smoking Cessation Products

A variety of smoking cessation products and services have been developed to assist individuals to quit smoking. While some studies have shown that smokers who use a smoking cessation product to help them quit smoking are more likely to relapse, other studies have shown that these products and programs are effective, and that excise taxes and smoking restrictions and related tobacco regulation drive additional expenditures to the smoking cessation market. The smoking cessation industry is broadly divided into two segments, counseling services (*e.g.*, individual, group, or telephone), and pharmacological treatments (both prescription and over-the-counter). Several large pharmaceutical companies, including GlaxoSmithKline, Johnson & Johnson, Novartis and Pfizer are significant participants in the smoking cessation market. The FDA has approved a variety of smoking cessation products and these products include prescription medicine, such as Nicotrol, Chantix, and Zyban, as well as over-the-counter products such as skin patches, lozenges and chewing gum. Alternative therapies, such as psychotherapy and hypnosis, are also in use and available to individuals.

Private health insurance carriers are increasing premiums on smokers, which often are passed on by the employer to the smoker-employee. Certain of these and other health insurance policies, including Medicaid and Medicare, cover various forms of smoking cessation treatments, making smoking cessation treatments more affordable for covered smokers.

Results of a study by the CDC released in October 2015 found that in 2013, approximately two-thirds of smokers had made a quit attempt in the past year (although state proportions ranged from 56.2% to 76.4%). The CDC in January 2017 released the results of a study of quitting smoking, which found that in 2015, 68.0% of smokers wanted to stop smoking, 55.4% had made a quit attempt in the past year, 7.4% had recently quit, 57.2% had been advised by a health professional to quit, and 31.2% had used counseling and/or medications when they tried to quit. According to the CDC, the smoking rate for adults in the United States fell to 16.8% in 2014 and 15.8% in 2016. It is possible that many former smokers were aided by smoking cessation products.

Gray Market

A price differential (principally resulting from differing tax rates) exists between cigarettes manufactured for sale abroad and cigarettes manufactured for U.S. sale. Such differential increases as excise taxes in the U.S. are increased. Consequently, a domestic gray market has developed for cigarettes that are manufactured for sale abroad,

but instead are diverted for domestic sales at substantially lower prices that compete with cigarettes manufactured for domestic sale. The U.S. federal government and all states, except Massachusetts, have enacted legislation prohibiting the sale and distribution of gray market cigarettes. Smuggling activities and other illicit trade in cigarettes can adversely impact the sale of cigarettes by PMs, and certain PMs engage in a variety of initiatives to help prevent illicit trade and have taken legal action against certain distributors and retailers who engage in such illicit trade practices.

Regulatory Issues

Regulatory Restrictions and Legislative Initiatives

The tobacco industry is subject to a wide range of laws and regulations regarding the marketing, sale, taxation and use of tobacco products imposed by local, state, federal and foreign governments. Various state governments have adopted or are considering, among other things, legislation and regulations that would increase their excise taxes on cigarettes, restrict displays and advertising of tobacco products, establish ignition propensity standards for cigarettes, raise the minimum age to possess or purchase tobacco products, ban the sale of "flavored" cigarette brands, require the disclosure of ingredients used in the manufacture of tobacco products, impose restrictions on smoking in public and private areas, and restrict the sale of tobacco products directly to consumers or other unlicensed recipients, including over the Internet. Several states charge higher health insurance premiums to state employee smokers than non-smokers, and a number of states have implemented legislation that allows employers to provide incentives to employees who do not smoke. Federal law currently allows insurance companies to charge smokers up to 50% higher premiums than non-smokers, and several large corporations are now charging smokers higher premiums.

Federal Regulation

During the past five decades, various laws affecting the cigarette industry have been enacted. Since 1966, federal law has required a warning statement on cigarette packaging. Since 1971, television and radio advertising of cigarettes has been prohibited in the U.S. Cigarette advertising in other media in the U.S. is required to include information with respect to the "tar" and nicotine yield of cigarettes, as well as a warning statement. In 1984, Congress enacted the Comprehensive Smoking Education Act. Among other things, the Smoking Education Act established an interagency committee on smoking and health that is charged with carrying out a program to inform the public of any dangers to human health presented by cigarette smoking; required a series of four health warnings to be printed on cigarette packages and advertising on a rotating basis; increased type size and area of the warning required in cigarette advertisements; and required that cigarette manufacturers provide annually, on a confidential basis, a list of ingredients added to tobacco in the manufacture of cigarettes to the Secretary of Health and Human Services.

In 1992, the federal Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act was signed into law. This act required states to adopt a law prohibiting any manufacturer, retailer, or distributor of tobacco products to sell or distribute any such product to any individual under the age of 18 and to establish a system to monitor, report and reduce the illegal sale of tobacco products to minors in order to continue receiving federal funding for mental health and drug abuse programs. Federal law prohibits smoking in scheduled passenger aircraft, and the U.S. Interstate Commerce Commission has banned smoking on buses transporting passengers interstate. Certain common carriers have imposed additional restrictions on passenger smoking. On March 31, 2010, President Obama signed into law the Prevent All Cigarette Trafficking (PACT) Act. This legislation, among other things, restricts the sale of tobacco products directly to consumers or unlicensed recipients, including over the Internet, through expanded reporting requirements, requirements for delivery and sales, and penalties.

FSPTCA

The federal Family Smoking Prevention and Tobacco Control Act of 2009 ("**FSPTCA**") (amending the FDA's Food, Drug and Cosmetics Act) ("**FD&C Act**"), signed by President Obama on June 22, 2009, grants the FDA authority to regulate tobacco products. Among other provisions, the FSPTCA:

- establishes a Tobacco Products Scientific Advisory Committee ("**TPSAC**") to, among other things, evaluate the issues surrounding the use of menthol as a flavoring or ingredient in cigarettes;

- grants the FDA the regulatory authority to consider and impose broad additional restrictions through a rule making process, including a ban on the use of menthol in cigarettes upon a finding that such a prohibition would be appropriate for the public health;

- imposes restrictions on the advertising, promotion, sale and distribution of tobacco products, including at retail;

- requires larger and more severe health warnings on cigarette packs and cartons;

- bans the use of descriptors on tobacco products, such as "low tar", "mild" and "light", when used as descriptors of modified risk unless expressly authorized by the FDA;

- requires the disclosure of ingredients and additives to consumers;

- requires pre-market approval by the FDA for claims made with respect to reduced risk or reduced exposure products;

- allows the FDA to require the reduction of nicotine or any other compound in cigarettes;

- allows the FDA to mandate the use of reduced risk technologies in conventional cigarettes;

- permits inconsistent state regulation of the advertising or promotion of cigarettes and eliminates the existing federal preemption of such regulation; and

- allows the FDA to subject tobacco products that are modified or first introduced into the market after March 22, 2011 to application and premarket review and authorization requirements (the "**New Product Application Process**") if the FDA does not find them to be "substantially equivalent" to products commercially marketed as of February 15, 2007, and to deny any such new product application thus preventing the distribution and sale of any product affected by such denial.

Since the passage of the FSPTCA, the FDA has taken the following actions, among others:

- established the collection of user fees from the tobacco industry;

- created and staffed the TPSAC;

- selected the Director of the Center for Tobacco Products;

- announced and began enforcing a ban on fruit, candy or clove flavored cigarettes (menthol is currently exempted from this ban);

- issued guidance on registration and product listing;

- issued final rules on tobacco marketing, including restricting access and marketing of cigarettes and smokeless tobacco products to youth;

- issued a prohibition on misleading marketing terms ("Light," "Low," and "Mild") for tobacco products;

- is considering new graphic warnings to appear on cigarette packages and in cigarette advertisements;

- required warning labels for smokeless tobacco products;

- authorized the sale and marketing of new tobacco products and rejected applications to introduce certain new tobacco products into the market;
- issued its final rule subjecting e-cigarettes and certain other tobacco products to FDA regulation (as discussed under "—E-Cigarettes and Vapor Products" above); and
- is considering the issues surrounding the presence of menthol and the level of nicotine in cigarettes.

Marketing Rule. As required by the FSPTCA, the FDA re-promulgated in March 2010 a wide range of advertising and promotion restrictions in substantially the same form as regulations that were previously adopted in 1996 (but never imposed on tobacco manufacturers due to a United States Supreme Court ruling). This marketing ruling banned the use of color and graphics in tobacco product labeling and advertising (which ban was ruled to be unenforceable, as described under "*–FSPTCA Litigation*" below); prohibits the sale of cigarettes and smokeless tobacco to underage persons; restricts the use of non-tobacco trade and brand names on cigarettes and smokeless tobacco products (the FDA is currently not issuing enforcement actions with regard to this restriction, as described under "*–FSPTCA Litigation*" below); requires the sale of cigarettes and smokeless tobacco in direct, face-to-face transactions; prohibits sampling of cigarettes and prohibits sampling of smokeless tobacco products except in qualified adult-only facilities; prohibits gifts or other items in exchange for buying cigarettes or smokeless tobacco products; prohibits the sale or distribution of items such as hats and tee shirts with tobacco brands or logos; and prohibits brand name sponsorship of any athletic, musical, artistic or other social or cultural event, or any entry or team in any event. Except as noted above, the marketing ruling took effect in June 2010.

Warnings. Pursuant to requirements of the FSPTCA, the FDA issued a proposed rule in November 2010 to modify the required warnings that appear on cigarette packages and in cigarette advertisements. The proposed new warnings consisted of nine new textual warning statements accompanied by color pictures depicting the negative health consequences of smoking. The proposed warnings would appear on the upper portion of the front and rear panels of each cigarette package and comprise at least the top 50% of these panels, and would also appear in each cigarette advertisement and occupy at least 20% of the advertisement and be located at the top of the advertisement. The FDA took public comments on the proposed rule through January 2011, and in June 2011, the FDA unveiled nine new graphic health warnings that were required to appear on cigarette packages and advertisements no later than September 2012. As discussed below under "*–FSPTCA Litigation*," five tobacco companies in August 2011 filed a complaint against the FDA in the U.S. District Court for the District of Columbia challenging the FDA's rule requiring new textual and graphic warning labels on cigarette packaging and advertisements. The district court enjoined the FDA from enforcing the rule, the appellate court affirmed the district court's decision invalidating the graphic warning rule, and the FDA did not seek further review. The FDA has announced that it would undertake research to support a new rulemaking on different warning labels consistent with the FSPTCA and would propose a new graphic warnings rule in the future.

Dissolvable Tobacco Products. In July 2010, the TPSAC conducted hearings on the impact of dissolvable tobacco products on public health. A report on these hearings was submitted to the FDA in 2011 and remains subject to continuing TPSAC hearings. Written comments regarding dissolvable tobacco products were submitted to the TPSAC ahead of its January 2012 meeting, at which the TPSAC continued its discussions of issues related to the nature and impact of dissolvable tobacco products on public health. The TPSAC's final report released to the FDA in March 2012 found that dissolvable tobacco products would reduce health risks compared to smoking cigarettes, but also have the potential to increase the number of tobacco users. The TPSAC could not reach any overall judgment as to whether or not the consequence of dissolvable tobacco products would be an increase or decrease in the number of people who successfully quit smoking. The FDA will consider the report and recommendations and determine what future action, if any, is warranted with respect to dissolvable tobacco products. There is no timeline or statutory requirement for the FDA to act on the TPSAC's recommendations.

Menthol. The TPSAC and the Menthol Report Subcommittee held meetings throughout 2010 and 2011 to consider the issues surrounding the use of menthol in cigarettes. At its March 2011 meeting, TPSAC presented its report and recommendations on menthol, which included that menthol likely increases experimentation and regular smoking, menthol likely increases the likelihood and degree of addiction for youth smokers, non-white menthol smokers (particularly African-Americans) are less likely to quit smoking and are less responsive to certain cessation

medications, and consumers continue to believe that smoking menthol cigarettes is less harmful than smoking non-menthol cigarettes as a result of the cigarette industry's historical marketing. TPSAC's overall recommendation to the FDA was that "removal of menthol cigarettes from the marketplace would benefit public health in the United States." At the July 2011 meeting, TPSAC considered revisions to its report, and the voting members unanimously approved the final report for submission to the FDA with no change in its recommendation. On July 23, 2013, the FDA released its Independent Preliminary Scientific Evaluation of the Public Health Effects of Menthol Versus Non-menthol Cigarettes (the "**Preliminary Evaluation**") for public comment, and issued an Advance Notice of Proposed Rulemaking seeking additional information to help the FDA make informed decisions about menthol in cigarettes. The Preliminary Evaluation found that although there is little evidence to suggest menthol cigarettes are more toxic than regular cigarettes, the mint flavor of menthol masks the harshness of tobacco, which makes it easier to become addicted and harder to quit, and increases smoking initiation among youth. The FDA concluded that menthol cigarettes likely pose a public health risk above that seen with non-menthol cigarettes. During the public comment period, the FDA was to consider all comments, data and research submitted to determine what regulatory action, if any, with respect to menthol cigarettes is appropriate, including the establishment of product standards. In the meantime the FDA will conduct and support research on the differences between menthol and non-menthol cigarettes as they relate to menthol's likely impact on smoking cessation. The FDA is allowed to rely on the TPSAC's report but is not required to follow the TPSAC's recommendations, and the FDA has not yet taken any action with respect to menthol use. See "*FSPTCA Litigation*" below for a description of litigation regarding the composition of the TPSAC and reliance upon the menthol report.

On November 8, 2013, twenty-seven states (including the Commonwealth) sent a letter to the FDA in support of a ban on menthol-flavored cigarettes. Any ban or material limitation on the use of menthol in cigarettes could materially adversely affect the results of operations, cash flow and financial condition of the PMs, especially with respect to the *Newport* brand mentholated cigarettes, which is owned by BAT through its subsidiary Reynolds American (following the Reynolds American merger with Lorillard, Inc.). According to a report by the Federal Trade Commission released in 2016, menthol cigarettes made up 31% of the U.S. cigarette market in 2013.

Pre-Market Review for New and Modified Products. The FSPTCA imposes restrictions on marketing new and modified tobacco products, requiring FDA review in order for a manufacturer to begin marketing a new product or continue marketing a modified product. Unless a manufacturer can demonstrate that its products are "substantially equivalent" to products commercially marketed as of February 15, 2007, the FDA could require the removal of such products or subject them to the new product application process and, if any such new product applications are denied, prevent the continued distribution and sale of such products. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, a new tobacco product applications would need to demonstrate that the marketing of the product would be appropriate for the protection of the public health, and it is uncertain how the FDA will interpret the requirements for obtaining a new tobacco product marketing order (although, as noted below, the FDA has indicated its intention to issue appropriate regulations to clarify the requirements).

According to FDA guidance issued in January 2011, for cigarettes, cigarette tobacco and smokeless tobacco products modified or first introduced into the market between February 15, 2007 and March 22, 2011 for which a manufacturer submitted substantial equivalence reports that the FDA determines are not "substantially equivalent" to products commercially marketed as of February 15, 2007, the FDA could require the removal of such products from the marketplace. In its May 2016 final rule on e-cigarettes and other vapor products, the FDA left the "grandfather" date of February 15, 2007 in place for e-cigarettes and e-vapor products. For e-cigarettes and other vapor products modified or first introduced into the market between February 15, 2007 and August 8, 2016, if a manufacturer submits substantial equivalence reports for products that the FDA determines are not "substantially equivalent" to products commercially marketed as of February 15, 2007, or rejects a new tobacco product application submitted by a manufacturer, the FDA could require the removal of such products from the marketplace. Few, if any, e-cigarettes were on the market as of February 15, 2007, and thousands of such products subsequently entered into commerce. To address this issue, the FDA established a compliance policy regarding its premarket review requirements for all products (such as e-cigarettes and other vapor products) deemed by the May 2016 final rule to be tobacco products that are not grandfathered products but were on the market as of August 8, 2016. The FDA will allow such products to remain on the market so long as the manufacturer has filed the appropriate premarket tobacco application ("**PMTA**") by a specific deadline. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, in August 2017 the FDA extended the filing deadlines for combustible non-cigarette products, such as cigars and pipe tobacco, to August 8, 2021, and for non-combustible products, such as e-cigarettes, other vapor

products and oral nicotine products, to August 8, 2022. The FDA will permit manufacturers to continue to market such products until the FDA renders a decision on the applicable substantial equivalence report or new tobacco product application.

In addition, modifications to currently-marketed products, including modifications that result from, for example, a supplier being unable to maintain the consistency required in ingredients or a manufacturer being unable to obtain the ingredients with the required specifications, can trigger the FDA's pre-market review process described above.

In March 2015 and September 2015, the FDA issued draft guidance that announced that certain label changes and changes to the quantity of tobacco products in a package would each require submission of substantial equivalence reports and authorization from the FDA prior to marketing tobacco products with such changes, even when the tobacco product itself is not changed. As discussed under "—*FSPTCA Litigation*" below, in response to a legal challenge from the tobacco manufacturers, the United States District Court for the District of Columbia found that labeling changes do not require a substantial equivalence review, but product quantity changes require a substantial equivalence review. In December 2016, the FDA issued a revised final guidance document entitled, "Demonstrating the Substantial Equivalence of a New Tobacco Product: Response to Frequently Asked Questions (Edition 3)" as a result of the court decision.

Since the FSPTCA's enactment, the FDA has received thousands of applications for products that tobacco companies claimed were "substantially equivalent" to ones already on the market. The FDA began announcing decisions on substantial equivalence reports in 2013. The FDA announced on June 25, 2013 that it approved the applications and authorized the sale of two new non-menthol Newport cigarettes that were made by Lorillard (after determining that the cigarettes, while slightly different than previous products, would not pose new health issues) and rejected four other new tobacco products, based on new health concerns raised by some ingredients and a lack of detail about product design. It was the first instance of a federal agency rejecting an application by a tobacco manufacturer to bring a new tobacco product to the market based on the product's threat to public health. Four additional tobacco products were rejected by the FDA on August 28, 2013 because they were found to be "not substantially equivalent" to the predicate products to which they were compared, and in September 2013 four roll-your-own products were approved for marketing and sale by the FDA because the products were determined to be "substantially equivalent" to the predicate products to which they were compared. In February 2014, the FDA issued orders to prevent the further sale and distribution of four of the "not substantially equivalent" tobacco products that were currently on the market, marking the first time the FDA has used its authority to order a tobacco manufacturer to stop selling and distributing currently available tobacco products. In August 2014, the FDA ordered a tobacco product manufacturer to stop selling and distributing seven dissolvable tobacco products because they were not substantially equivalent to predicate products. Altria reported in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 that there remain a significant number of substantial equivalence reports for which the FDA has not announced decisions, that it is not possible to predict how long reviews by the FDA of substantial equivalence reports or new tobacco product applications will take, and that a "not substantially equivalent" determination or denial of a new tobacco product application could have a material adverse impact on its business, cash flows or financial position.

As noted below, as part of the FDA's July 2017 announcement regarding a regulatory plan for tobacco and nicotine, the FDA reported that it plans to develop foundational regulations to provide clarity and predictability to the tobacco product submission process, to include regulations outlining the information that the FDA expects to be provided in PMTAs, modified risk tobacco product applications, and substantial equivalence reports, as well as finalized guidance on PMTA reviews.

Modified Risk Products. The FSPTCA bans the use of descriptors on tobacco products such as "low tar", "mild" and "light" when used as descriptors of modified risk unless expressly authorized by the FDA. On March 30, 2012 the FDA issued draft guidance on preparing and submitting applications for modified risk tobacco products pursuant to the FSPTCA.

On August 27, 2015, the FDA sent a warning letter to Reynolds American's subsidiary Santa Fe Natural Tobacco Company, claiming that its use of the terms "Natural" and "Additive Free" in the product labeling and advertising for Natural American Spirit cigarettes violates the modified risk tobacco products provision of the FSPTCA. The FDA stated that in order for such terms to be used, these cigarettes must have an FDA modified-risk

tobacco product order, which requires scientific evidence in order to legally make those claims. Following discussions between the parties, on January 23, 2017 the FDA and Santa Fe Natural Tobacco Company reached an agreement whereby, among other things, Santa Fe Natural Tobacco Company committed to phasing out use of the terms "Natural" and "Additive Free" from product labeling and advertising for Natural American Spirit cigarettes on an established timeframe, but it may continue to use the term "Natural" in the Natural American Spirit brand name and trademarks.

In July 2016, the Department of Justice, on behalf of the FDA, informed Altria's subsidiary John Middleton Co. ("**Middleton**") that the FDA does not intend to bring an enforcement action against Middleton for the use of the term "mild" in the trademark "Black & Mild" (Middleton's principal cigar brand), according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

Product Constituents and Product Standards. On March 30, 2012 the FDA issued draft guidance on the reporting of harmful and potentially harmful constituents in tobacco products and tobacco smoke pursuant to the FSPTCA. In January 2017, the FDA proposed a product standard for N-nitrosonornicotine (NNN) levels in finished smokeless tobacco products, and according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, the FDA extended the comment period in March 2017 and acknowledged what it described as a typographical error in a formula it used in documentation supporting the proposed rule.

Regulatory Plan for Tobacco and Nicotine. On July 28, 2017, the FDA announced its intent to develop a comprehensive plan for tobacco and nicotine regulation that recognizes the continuum of risk for nicotine delivery. The FDA reported that it plans to publish an Advance Notice of Proposed Rulemaking ("**ANPRM**") to seek public input regarding the potential health benefits and possible adverse effects of lowering the level of nicotine in cigarettes. As part of the comprehensive plan, the FDA also announced its intent to issue ANPRMs requesting public stakeholder input on the impact of flavors (including menthol) in increased initiation among youth and young adults as well as assisting adult smokers to switch to potentially less harmful forms of nicotine delivery. The FDA also noted its plans to develop product standards to protect against known public health risks such as issues with electronic nicotine delivery systems batteries and concerns about children's exposure to liquid nicotine. The FDA also reported that it plans to develop foundational regulations to provide clarity and predictability to the tobacco product submission process, to include regulations outlining the information that the FDA expects to be provided in PMTAs, Modified Risk Tobacco Product applications, and substantial equivalence reports, as well as finalized guidance on PMTA reviews (including how the FDA intends to review new product applications for e-cigarettes and other vapor products). The FDA did not provide a timeline for publication for the ANPRM documents or the commencement of regulatory activities related to the comprehensive nicotine policy.

On a going-forward basis, various provisions under the FSPTCA and regulations to be issued thereunder will become effective and will:

- require manufacturers to test ingredients and constituents identified by the FDA and disclose this information to the public;
- prohibit use of tobacco containing a pesticide chemical residue at a level greater than allowed under Federal law;
- establish "good manufacturing practices" to be followed at tobacco manufacturing facilities;
- authorize the FDA to place more severe restrictions on the advertising, marketing and sale of tobacco products;
- permit inconsistent state regulation of labeling and advertising and eliminate the existing federal preemption of such regulation;
- authorize the FDA to require the reduction of nicotine (though not to zero) and the reduction or elimination of other constituents; and
- grant the FDA the regulatory authority to impose broad additional restrictions.

As noted above, the FSPTCA imposes "user fees" on tobacco product manufacturers and importers to pay for the cost of regulation and other matters. The quarterly fees are allocated first among tobacco product categories subject to FDA regulation and then among manufacturers and importers within certain categories based on their market share. The fees are also subject to adjustment for several factors, including inflation, market share and industry volume. In addition, the FDA has a number of investigatory and enforcement tools available as discussed herein under "—*Federal Regulation*." Altria reported in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 that compliance with the FSPTCA's regulatory requirements has resulted and will continue to result in additional costs and that although the amount of additional compliance and related costs has not been material in any given quarter or year to date period, such compliance could become material, either individually or in the aggregate, to one or more of its tobacco subsidiaries.

FSPTCA Litigation

Tobacco manufacturers have filed suit regarding certain provisions of the FSPTCA and actions taken thereunder. In August 2009, a group of tobacco manufacturers (including Reynolds Tobacco and Lorillard) and a tobacco retailer filed a complaint against the U.S. government in the U.S. District Court for the Western District of Kentucky, *Commonwealth Brands, Inc. v. U.S.*, 678 F.Supp.2d 512, in which they asserted that various provisions of the FSPTCA violate their free speech rights under the First Amendment, constitute an unlawful taking under the Fifth Amendment, and are an infringement on their Fifth Amendment due process rights. Plaintiffs sought a preliminary injunction and a judgment declaring the challenged provisions unconstitutional. Both plaintiffs and the government filed motions for summary judgment and on November 5, 2009, the district court denied certain plaintiffs' motion for preliminary injunction as to the modified risk tobacco products provision of the FSPTCA and in January 2010 granted partial summary judgment to plaintiffs on their claims that the ban on color and graphics in advertising and the ban on statements implying that tobacco products are safer due to FDA regulation violated their First Amendment speech rights. The district court granted partial summary judgment to the government on all other claims. Both parties appealed from the district court's order and on March 19, 2012, the U.S. Court of Appeals for the Sixth Circuit affirmed the district court's decision upholding the FSPTCA's restrictions on the marketing of modified-risk tobacco products, the FSPTCA's bans on event sponsorship, branding non-tobacco merchandise, and free sampling, and the requirement that tobacco manufacturers reserve significant packaging space for textual health warnings. The Sixth Circuit further affirmed the district court's grant of summary judgment to plaintiff manufacturers on the unconstitutionality of the FSPTCA's restriction of tobacco advertising to black and white text. The Sixth Circuit reversed the district court's determination that the FSPTCA's restriction on statements regarding the relative safety of tobacco products based on FDA regulation is unconstitutional and its determination that the FSPTCA's ban on tobacco continuity programs is permissible under the First Amendment. On May 31, 2012, the Sixth Circuit denied the plaintiffs' motion for rehearing en banc. On October 30, 2012, the plaintiffs filed a petition for writ of certiorari with the U.S. Supreme Court. On April 22, 2013, the U.S. Supreme Court denied plaintiffs' petition for certiorari. The government had not appealed the portion of the Court of Appeals ruling that affirmed the unconstitutionality of the FSPTCA's restriction of tobacco advertising to black and white text.

In a separate lawsuit that challenged the constitutionality of the FDA regulation that restricts tobacco manufacturers from using the trade or brand name of a non-tobacco product on cigarettes or smokeless tobacco products, the case was dismissed without prejudice pursuant to a stipulation by which the FDA agreed not to enforce the current or any amended trade name rule against plaintiffs until at least 180 days after rulemaking on the amended rule concludes. This relief only applies to plaintiffs in the case. However, in May 2010, the FDA issued guidance on the use of non-tobacco trade and brand names applicable to all cigarette and smokeless tobacco product manufacturers. This guidance indicated the FDA's intention not to commence enforcement actions under the regulation while it considers how to address the concerns raised by various manufacturers. In November 2011, the FDA proposed an amended rule, but has not yet issued a final rule, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

In February 2011, Lorillard, along with Reynolds Tobacco, filed a lawsuit in the U.S. District Court for the District of Columbia, *Lorillard, Inc. v. U.S. Food and Drug Administration*, against the FDA challenging the composition of the TPSAC because of the FDA's appointment of certain voting members with significant financial conflicts of interest. Lorillard believed these members were financially biased because they regularly testify as expert witnesses against tobacco-product manufacturers, and because they are paid consultants for pharmaceutical companies that develop and market smoking-cessation products. The suit similarly challenged the presence of certain conflicted

individuals on the Constituents Subcommittee of the TPSAC. The complaint sought a judgment (i) declaring that, among other things, the appointment of the conflicted individuals to the TPSAC (and its Constituents Subcommittee) was arbitrary, capricious, an abuse of discretion, and otherwise not in compliance with the law because it prevented the TPSAC from preparing a report that was unbiased and untainted by conflicts of interest, and (ii) enjoining the FDA from, among other things, relying on the TPSAC's report. On July 21, 2014, the U.S. District Court for the District of Columbia granted plaintiffs' summary judgment motion, in part, and denied defendants' summary judgment motion, finding that three of the panel's members had conflicts of interest that biased them against the tobacco industry and that "the FDA's appointment of those members was arbitrary and capricious, in violation of the APA, and fatally tainted the composition of the TPSAC and its work product, including the Menthol Report." The court ordered the FDA to reconstitute the TPSAC so that it complies with the applicable ethics laws and barred the FDA from relying on the TPSAC 2011 report on menthol, which the court found to be, "at a minimum suspect, and at worst untrustworthy." The FDA appealed the district court's decision to the U.S. Court of Appeals for the District of Columbia in September 2014. On March 5, 2015, the FDA announced the resignation or termination of four members from the TPSAC and the addition of three members to the TPSAC, in response to the district court's order to reconstitute the committee. The FDA also announced that it would work expeditiously to fill the remaining vacancy. On January 15, 2016, the appellate court reversed the decision of the district court, finding that the plaintiffs did not have standing to challenge appointments of certain TPSAC members. Under the appellate court's order, the three former committee members can serve once again on the TPSAC and the FDA can rely on the TPSAC menthol report. On February 26, 2016, the plaintiff tobacco manufacturers filed a petition for a rehearing en banc, which was denied in May 2016.

On August 16, 2011, five tobacco companies (including OPMs Reynolds Tobacco and Lorillard as well as SPMs Commonwealth Brands, Inc., Liggett Group LLC, and Santa Fe Natural Tobacco Company) filed a complaint against the FDA in the U.S. District Court for the District of Columbia, *R.J. Reynolds Tobacco Co. v. U.S. Food and Drug Administration*, challenging the FDA's rule requiring new textual and graphic warning labels on cigarette packaging and advertisements. The tobacco companies sought a declaratory judgment that the FDA's final rule violates the First Amendment and the Administrative Procedure Act (the "**APA**"), and declarative and injunctive relief that the new textual and graphic warnings will not become effective until 15 months after the FDA issues regulations "that are permissible under the United States Constitution and federal laws." The plaintiffs alleged that the FDA's final rule regarding textual and graphic warnings requires them "to become a mouthpiece for the Government's emotionally-charged anti-smoking message." The plaintiffs also contended that the FDA's warnings are unjustified and unduly burdensome, as they do not further any compelling governmental purpose and are "unlikely to have any material impact on consumer understanding of smoking risks, consumer intentions regarding smoking, or actual consumer smoking decisions." The FDA's final rule, according to the plaintiffs, "violates the First Amendment under any standard of review." On February 29, 2012, the district court granted the plaintiffs' motion for summary judgment and entered an order permanently enjoining the FDA, until 15 months following the issuance of new regulations implementing Section 201(a) of the FSPTCA that are substantively and procedurally valid and permissible under the United States Constitution and federal law, from enforcing against plaintiffs the new textual and graphic warnings required by Section 201 (a) of the FSPTCA. The district court ruled that the mandatory graphic warnings violated the First Amendment by unconstitutionally compelling speech, and that the FDA had failed to carry both its burden of demonstrating a compelling interest for its rule requiring the textual and graphic warning labels and its burden of demonstrating that the rule is narrowly tailored to achieve a constitutionally permissible form of compelled commercial speech. The FDA filed an appeal with the U.S. Court of Appeals for the District of Columbia Circuit on March 4, 2012, and moved the appellate court to consolidate this appeal with the FDA's appeal of the preliminary injunction decision. The Court of Appeals granted the FDA's motion and heard argument on both appeals on April 10, 2012. On August 24, 2012, the Court of Appeals affirmed the district court's decision invalidating the graphic warning rule. On October 9, 2012, the FDA filed a motion for rehearing en banc with the Court of Appeals, and on December 5, 2012, the Court of Appeals denied the FDA's petition for a rehearing en banc. The FDA, on December 5, 2012, issued a notice announcing its intention to collect information from consumers to determine the effectiveness of graphic warning labels, in apparent response to the Court of Appeal's August 2012 affirmation of the invalidation of the graphic warning rule, in which it cited the absence of evidence that the chosen labels furthered the FDA's stated goal of encouraging cessation and discouraging initiation of smoking. On March 19, 2013, the FDA announced that it would not file a petition for a writ of certiorari with the U.S. Supreme Court, but instead would undertake research to support a new rulemaking on different warning labels consistent with the FSPTCA and would propose a new graphic warnings rule in the future. The FDA has not provided a timeline for a new rule. In October 2016, several public

health groups filed suit in federal court to force the FDA to issue final rules requiring graphic warnings on cigarette packs and advertising.

In 2015, cigarette manufacturers filed a lawsuit in the federal district court for the District of Colombia challenging the FDA's draft guidance that had announced that certain label changes and changes to the quantity of tobacco products in a package would each require submission of substantial equivalence reports and authorization from the FDA prior to marketing tobacco products with such changes. In August 2016, the court held that a modification to an existing product's label does not result in a "new tobacco product" and therefore such a label change does not give rise to the substantial equivalence review process, but the court upheld the guidance document's treatment of product quantity changes as modifications that give rise to a "new tobacco product" requiring substantial equivalence review. The parties did not appeal this decision, concluding the litigation.

Surgeon General Reports

In 1964, the Report of the Advisory Committee to the Surgeon General of the U.S. Public Health Service concluded that cigarette smoking was a health hazard of sufficient importance to warrant appropriate remedial action. Since this initial report in 1964, the Secretary of Health, Education and Welfare (now the Secretary of Health and Human Services) and the Surgeon General have issued a number of other reports that find the nicotine in cigarettes addictive and that link cigarette smoking and exposure to cigarette smoke with certain health hazards, including various types of cancer, coronary heart disease and chronic obstructive lung disease. These reports have recommended various governmental measures to reduce the incidence of smoking. Furthermore, there are various Surgeon General's warnings that are required on cigarette packages and advertisements.

In June 2006, the Office of the Surgeon General released a report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke." It is a comprehensive review of health effects of involuntary exposure to tobacco smoke. It concludes definitively that secondhand smoke causes disease and adverse respiratory effects. It also concludes that policies creating completely smoke-free environments are the most economical and efficient approaches to providing protection to non-smokers. On September 18, 2007, the Office of the Surgeon General released the report, "Children and Secondhand Smoke Exposure", which concludes that many children are exposed to secondhand smoke in the home and that establishing a completely smoke-free home is the only way to eliminate secondhand smoke exposure in that setting. The Surgeon General also addressed the health risks of second-hand smoke in its 2010 report entitled "How Tobacco Smoke Can Cause Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease." In 2012, the Surgeon General released a report on preventing tobacco use among youth and young adults, and on January 17, 2014, the Surgeon General released a report on the health consequences of smoking, contending that smoking is linked to a higher number of deaths to Americans than previous estimates, that filtered cigarettes may increase the risk of certain diseases, and that cigarettes are a causal factor in certain conditions and diseases that had not previously been linked to cigarette smoking. These reports are expected to strengthen arguments in favor of further smoking restrictions across the country.

In December 2016, the Surgeon General issued a report on e-cigarettes, raising public health concerns regarding the use of e-cigarettes by U.S. youth and young adults. The report recommended that state, local, tribal, and territorial governments implement additional laws and regulations to address e-cigarette use among youth and young adults, including: incorporating e-cigarettes into existing smoke-free policies; preventing youth access to e-cigarettes through various restrictions on sales of e-cigarettes to minors (including age verification requirements, prohibitions against self-service displays, and active enforcement of existing laws); implementing taxation and other price policies for e-cigarettes; increasing regulation of e-cigarette marketing by expanding evidence and facilitating the development of constitutionally feasible restrictions on such marketing; and targeting youth and young adults with educational initiatives on e-cigarettes and their potential for nicotine addiction and adverse health consequences. The report also calls for expanded federal funding of e-cigarette research efforts, including research on health risks and the impact of governmental policies on initiation and use patterns for e-cigarettes and other tobacco products, and recommends continued surveillance of e-cigarette marketing to assess the link between exposure to e-cigarette marketing and use of these products.

Other Federal Action

In October 2011, the FDA and the National Institutes of Health (the "**NIH**") announced a joint national study called the "Tobacco Control Act National Longitudinal Study of Tobacco Users" to monitor and assess the behavioral and health impacts of new government tobacco regulations by following approximately 60,000 users of tobacco products and those who are 12 and over who are at risk of using tobacco products. The study is being coordinated by researchers at the NIH's National Institute on Drug Abuse and the FDA's Center for Tobacco Products. According to the NIH, data is expected to be collected between 2013 and 2016. The results of the study will be used to guide the FDA in targeting effective actions to reduce the effects of smoking on public health.

In November 2011, the FDA announced its plans for an integrated anti-smoking campaign targeting teenagers, with a combined budget of up to $600 million over five years. As part of this campaign, the FDA announced in February 2014 that advertisements would run for at least one year under the "Real Cost" campaign that targets young people aged 12-17 years and shows the costs and health consequences associated with tobacco use. According to the FDA, subsequent campaigns will target young adults aged 18-24 years and people who influence teens, including parents, family members and peers. The FDA reported that the "Real Cost" campaign prevented nearly 350,000 youth aged 11 to 18 nationwide from smoking.

In March 2012, the CDC announced its first national anti-tobacco effort entitled "Tips From Former Smokers" (TIPS) which features graphic advertisements intended to shock smokers into quitting with stories of people damaged by tobacco products. The initial campaign's goal was to convince 500,000 people to try quitting smoking and 50,000 to quit long-term, and the CDC reported that as a result of the 2012 campaign an estimated 1.6 million smokers attempted to quit smoking and more than 200,000 Americans had quit smoking immediately following the campaign, of which researchers estimated that more than 100,000 would likely quit smoking permanently, according to the CDC. The TIPS advertising campaign was subsequently renewed in March of 2013, July of 2014 and March of 2015 with new advertisements showing in stark terms the negative health effects of smoking. The CDC announced the launch of another graphic anti-smoking campaign beginning in January 2016, to run for 20 weeks on television, radio, billboards online and in magazines and newspapers. The CDC has reported that the TIPS program helped prompt millions of smokers to try to quit since it began in 2012. Annual budgets of the CDC have consistently included funds for tobacco prevention and control, including in order to continue the national tobacco education campaigns that are meant to raise awareness about the health effects of tobacco use and prompt smokers to quit.

In November 2008, the FTC rescinded guidance it issued in 1966 which provided that tobacco manufacturers were allowed to make factual public statements concerning the tar, nicotine and carbon monoxide yields of their cigarettes without violating the Federal Trade Commission Act if they were based on the "**Cambridge Filter Method**." The Cambridge Filter Method is a machine-based test that "smokes" cigarettes according to a standard protocol and measures tar, nicotine and carbon monoxide yields. The FTC has determined that machine-based yields determined by the Cambridge Filter Method are relatively poor indicators of actual tar, nicotine and carbon monoxide exposure and may be misleading to individual consumers who rely on such information as indicators of the amount of tar, nicotine and carbon monoxide they will actually receive from smoking a particular cigarette and therefore do not provide a good basis for comparison among cigarettes. According to the FTC, this is primarily due to "smoker compensation," which is the tendency of smokers of lower nicotine rated cigarettes to alter their smoking behavior in order to obtain higher doses of nicotine. Now that the FTC has withdrawn its guidance, tobacco manufacturers may no longer make public statements that state or imply that the FTC has endorsed or approved the Cambridge Filter Method or other machine-based testing methods in determining the tar, nicotine and carbon monoxide yields of their cigarettes. Factual statements concerning cigarette yields are allowed by the FTC if they are truthful, non-misleading and adequately substantiated, which is the same basis on which the FTC evaluates other advertising or marketing claims that are subject to the FTC's jurisdiction. It is possible that the FTC's rescission of its guidance regarding the Cambridge Filter Method could be cited as support for allegations by plaintiffs in pending or future litigation, or could encourage additional litigation against cigarette manufacturers.

It has been reported that the U.S. Defense Department is making a concerted effort to reduce smoking among its members, and in June 2014 it formed an advisory committee to explore avenues for a reduction in smoking. A March 14, 2014 Defense Department memo encourages the services to eliminate tobacco sales and tobacco use on military bases, although it does not order specific actions. In July 2014, the Senate Appropriations defense

subcommittee approved a defense spending bill that would eliminate the 25% discount that members of the armed services enjoy when buying tobacco products at commissaries and elsewhere.

Excise Taxes

Cigarettes are subject to substantial excise taxes in the U.S. On February 4, 2009, President Obama signed into law, effective April 1, 2009, an increase of $0.62 in the excise tax per pack of cigarettes, bringing the total federal excise tax to $1.01 per pack, and significant tax increases on other tobacco products. The federal excise tax rate for snuff increased $0.925 per pound to $1.51 per pound. The federal excise tax on small cigars, defined as those weighing three pounds or less per thousand, increased by $48.502 per thousand to $50.33 per thousand. In addition, the federal excise tax rate for roll-your-own tobacco increased from $1.097 per pound to $24.78 per pound. Press reports have noted that many consumers who previously purchased roll-your-own tobacco began using pipe tobacco to roll their own cigarettes in order to avoid the new excise tax, as pipe tobacco excise taxes were unaffected, and using new, mechanized rolling machines to process cigarettes in bulk. Press reports have also noted that increased excise taxes have led to an increase in cigarette smuggling. On July 6, 2012, President Obama signed into law a provision classifying retailers that operate roll-your-own machines as cigarette manufacturers, thus requiring those retailers to pay the same tax rate as other cigarette manufacturers.

All of the states, the District of Columbia, Puerto Rico, Guam and the Northern Mariana Islands currently impose cigarette taxes, which in 2017 ranged from $0.17 per pack in Missouri to $4.35 per pack in New York, according to the Campaign for Tobacco-Free Kids. Since January 1, 2002, 47 states and the District of Columbia have raised their cigarette taxes, many of them more than once, according to the American Lung Association's Tobacco Policy Project/State Legislated Actions on Tobacco Issues ("**SLATI**"). According to a report by the American Lung Association, in 2009, 14 states turned to cigarette taxes to increase revenue in response to record state deficits. As reported by SLATI, six states passed cigarette excise tax increases during 2010, two states (Connecticut and Vermont) passed cigarette excise tax increases during 2011, and in 2012, Illinois and Rhode Island enacted legislation to increase their cigarette excise taxes. During 2013, Massachusetts, Minnesota, Oregon and Puerto Rico had enacted legislation to increase their cigarette taxes. In particular, Minnesota increased its cigarette excise tax in July 2013 by $1.60 per pack, and Massachusetts raised its excise tax by $1.00 per pack, effective July 31, 2013, bringing its tax to $3.51 per pack. New Hampshire's cigarette tax also increased by $0.10 on August 1, 2013 due to legislation enacted in 2011. Vermont enacted a cigarette excise tax increase in 2014. During 2015, Alabama, Nevada, Kansas, Vermont, Louisiana, Ohio, Rhode Island and Connecticut enacted legislation to increase their cigarette excise taxes. During 2016, Louisiana, Pennsylvania, West Virginia and California enacted legislation to increase cigarette excise taxes. In particular, in California, a $2.00 per pack increase in that state's cigarette excise tax (in addition to that state's then current $0.87 per pack excise tax) was passed by voters on November 8, 2016, effective April 1, 2017. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, Rhode Island, Delaware, Oklahoma and Puerto Rico enacted cigarette excise tax increases in 2017, although in August 2017 the Oklahoma Supreme Court found that Oklahoma's tobacco tax increase, labeled as a "smoking cessation fee," was unconstitutional because the legislature failed to abide by the state's procedures for passing a tax measure.

In addition to federal and state excise taxes, certain city and county governments also impose substantial excise taxes on tobacco products sold such as New York City, Philadelphia and Chicago. In November 2013, New York City passed an ordinance that set a minimum price of $10.50 for every pack of cigarettes sold in New York City, and in August 2017 New York City raised the price of a pack of cigarettes to $13, effective June 1, 2018. Altria reported in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017 that between the end of 1998 (the year in which the MSA was executed) and October 23, 2017, the weighted-average state and certain local cigarette excise taxes increased from $0.36 to $1.75 per pack. It is expected that states and local governments will continue to raise excise taxes on cigarettes in future years.

All 50 states and the District of Columbia subject smokeless tobacco to excise taxes. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, a majority of states currently tax smokeless tobacco products using an ad valorem method, which is calculated as a percentage of the price of the product, typically the wholesale price. As of October 23, 2017, the federal government, 23 states, Puerto Rico, Philadelphia, Pennsylvania and Cook County, Illinois have adopted a weight-based tax methodology for smokeless tobacco, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. According to SLATI, six states (Kansas, Louisiana, Minnesota, North Carolina, Pennsylvania and West Virginia) and

the District of Columbia have established separate taxes on electronic cigarettes and/or vapor products—Kansas, Louisiana, North Carolina and West Virginia tax by weight of the e-cigarette liquid used in the product, while Minnesota, Pennsylvania and the District of Columbia tax by the percentage of the wholesale price of the product.

According to the Campaign for Tobacco-Free Kids, six states have special taxes or fees on brands of manufacturers not participating in the State Settlement Agreements: Alaska, Michigan, Minnesota, Mississippi, Texas and Utah. Texas's tax took effect on September 1, 2013, but in November 2013, a district court judge in *Texas Small Tobacco Coalition. v. Combs* (Tex. Dist. Ct., Travis Cnty.) ruled that the tax violated the Equal and Uniform Taxation clause of the Texas Constitution. The Texas Comptroller of Public Accounts appealed this decision on November 13, 2013, and on August 15, 2014 the Texas Court of Appeals affirmed the district court judge's decision, holding that the tax violates the Texas Constitution, and enjoined Texas from collecting or assessing the tax. The State of Texas filed its petition for review with the Texas Supreme Court in October 2014, and on April 1, 2016, the Texas Supreme Court reversed the Texas Court of Appeals and ruled that the Texas equity fee legislation does not violate the Texas Constitution and remanded the case back to the Texas Court of Appeals for that court to consider the non-settling manufacturers' remaining challenges to the legislation. On March 24, 2017, the Texas Court of Appeals granted Texas' motion for summary judgment, ruling that the tax does not violate the equal protection and due process clauses of the U.S. Constitution.

In 2005, Minnesota enacted a 75-cent "health impact fee" on tobacco manufacturers for each pack of cigarettes sold, in order to recover Minnesota's health costs related to or caused by tobacco use. The imposition of this fee was contested by Philip Morris and upheld by the Minnesota Supreme Court as not in violation of Minnesota's settlement with the tobacco companies (and in February 2007, the U.S. Supreme Court denied Philip Morris's petition for writ of certiorari). In 2013, however, the Minnesota legislature repealed the health impact fee (the bill cited the contemporaneous increase in the cigarette excise tax as offsetting the repeal of the health impact fee).

In November 2013, New York City passed an ordinance that set a minimum price of $10.50 for every pack of cigarettes sold in the City and prohibited the use of coupons or other promotional discounts to lower that price. On February 16, 2014, tobacco companies and trade groups representing cigarette retailers filed a motion for preliminary injunction in federal court to block that portion of the ordinance that prohibited the use of coupons and other promotional discounts (*National Association of Tobacco Outlets Inc. et al. v. City of New York et al.*), but in June 2014 the court upheld that portion of the ordinance.

Minimum Age to Possess or Purchase Tobacco Products

All states and the District of Columbia have enacted laws generally prohibiting the sale of tobacco products to individuals under the age of 18. Several jurisdictions have recently passed legislation, and other jurisdictions are considering proposals, to raise the minimum age for the purchase of tobacco products. The minimum age to purchase tobacco products rose to 21 in the State of Hawaii effective as of January 1, 2016 (the first state to do so), and subsequently, California (effective June 2016), New Jersey (July 2017 legislation, effective November 2017), Maine (August 2017 legislation, effective July 2018) and Oregon (August 2017 legislation, effective January 2018) have raised the minimum age to purchase tobacco products to 21. According to the Campaign for Tobacco-Free Kids, at least 270 localities have raised the tobacco age to 21, including New York City, Chicago, Boston, Cleveland, and both Kansas Cities. According to the Tobacco Consumption Report, proposals to raise the minimum age to 21 have been introduced in at least twenty-four states. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, the minimum age in Alabama, Alaska and Utah is 19. On March 12, 2015, the Institute of Medicine of the National Academy of Sciences released a report recommending that the minimum age of legal access to tobacco products be raised to 21. The report concluded that raising the minimum legal age to 21 would likely decrease smoking prevalence by 12% among today's teenagers when they become adults. In November 2017, U.S. Congresswoman Diana DeGette introduced the Tobacco to 21 Act (H.R. 4273), a bicameral legislation that would prohibit the sale of tobacco products to anyone under age 21.

The enactment of "minimum age" laws with respect to the sale of tobacco products is one of the factors that has led to decreasing smoking prevalence among teenagers. The CDC's Youth Risk Behavior Surveillance System found that the number of high school students who had smoked a cigarette in the previous month had dropped to 10.8% in 2015, from 15.7% in 2013, 18.1% in 2011, 21.9% in 2003 and 36.4% in 1997.

State and Local Regulation

Legislation imposing various restrictions on public smoking has been enacted in all of the states and many local jurisdictions. A number of states have enacted legislation designating a portion of increased cigarette excise taxes to fund either anti-smoking programs, healthcare programs or cancer research. In addition, educational and research programs addressing healthcare issues related to smoking are being funded from industry payments made or to be made under the MSA.

The FSPTCA substantially expanded federal tobacco regulation, but state regulation of tobacco is not necessarily preempted by federal law in this instance. Importantly, the FSPTCA specifically allows states and localities to impose restrictions on the time, place and manner, but not content, of advertising and promotion of tobacco products. The FSPTCA also eliminated the prior federal preemption of state regulation that, in certain circumstances, had been upheld by the U.S. Supreme Court.

In addition to the FSPTCA disclosure requirements and marketing and labeling restrictions, several states have enacted or proposed legislation or regulations that would require cigarette manufacturers to disclose the ingredients used in the manufacture of cigarettes to state health authorities. According to SLATI, six states currently require some form of tobacco product disclosure information, including, for example, requiring tobacco manufacturers to disclose any added constituent of tobacco products other than tobacco, water and reconstituted tobacco sheet made wholly from tobacco (Massachusetts and Texas); requiring disclosure of the nicotine yield for each brand of cigarettes (Massachusetts, Texas and Utah); and requiring tobacco manufacturers to disclose the presence of ammonia, any compound of ammonia, arsenic, cadmium, formaldehyde or lead in their unburned or burned states (Minnesota and Utah).

In 2003, New York was the first state to pass legislation requiring the introduction of cigarettes with a lower likelihood of starting a fire. Cigarette manufacturers responded by designing cigarettes that would extinguish quicker when left unattended. Since then, according to SLATI, fire-safety standards for cigarettes identical to those of New York are in effect in all 50 states and the District of Columbia.

In July 2007, the State of Maine became the first state to enact a statute that prohibits the sale of cigarettes and cigars that have a characterizing flavor. The legislation defines characterizing flavor as “a distinguishable taste or aroma that is imparted to tobacco or tobacco smoke either prior to or during consumption, other than a taste or aroma from tobacco, menthol, clove, coffee, nuts or peppers.” In 2008 New Jersey passed similar legislation prohibiting the sale of cigarettes that have a characterizing flavor (other than the flavors of tobacco, clove or menthol). Numerous counties and municipalities have since adopted laws prohibiting or restricting the sale of certain tobacco products containing “characterizing flavors.” The scope of these laws varies from jurisdiction to jurisdiction; for example, some, but not all, of these laws exempt menthol from the definition of a “characterizing flavor,” and certain laws apply to tobacco products other than cigarettes. The “characterizing flavor” ordinances in New York City and Providence, Rhode Island were each challenged on the grounds, among others, that the FSPTCA preempts such local laws. The U.S. Courts of Appeals for the Second Circuit and First Circuit have held that the FSPTCA does not preempt the New York City and Providence, Rhode Island ordinances, respectively. In June 2017, San Francisco amended its city health code to prohibit tobacco retailers from selling flavored tobacco products, including flavored e-cigarettes and menthol cigarettes, effective April 1, 2018.

According to ANRF, as of October 2, 2017, 41 states and territories have laws that require either 100% smoke-free non-hospitality workplaces or restaurants or bars (and only 14 states and territories do not have laws that require either 100% smoke-free non-hospitality workplaces or restaurants or bars, being Alabama, Alaska, Arkansas, Georgia, Kentucky, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia and Wyoming). On September 4, 2014, Kentucky banned all uses of tobacco products on most government properties. Also according to ANRF, as of October 2, 2017, 27 states and territories have laws that require 100% smoke-free non-hospitality workplaces and restaurants and bars: Arizona, California, Delaware, Hawaii, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Jersey, New York, North Dakota, Ohio, Oregon, Puerto Rico, Rhode Island, South Dakota, the U.S. Virgin Islands, Utah, Vermont, Washington and Wisconsin. Restrictions in many jurisdictions also include a ban on outdoor smoking within a specified number of feet of the entrances of restaurants and other public places. ANRF also tracks clean indoor air ordinances by local governments throughout the U.S. Most states without a statewide smoking ban have some local municipalities that

have enacted smoking regulations. As of October 2, 2017, there were 1,415 municipalities with local laws that require 100% smoke-free non-hospitality workplaces or restaurants or bars, of which 931 municipalities (including the District of Columbia) have local laws that require 100% smoke-free non-hospitality workplaces and restaurants and bars. In addition, according to ANRF, as of October 2, 2017, there are at least 782 state-regulated gambling facilities that are required to be 100% smoke-free indoors, and there are at least 619 smoke-free airports. It is expected that restrictions on indoor smoking will continue to proliferate.

Smoking bans have also extended outdoors. For example, according to ANRF, as of October 2, 2017:

- Puerto Rico prohibits smoking on beaches, Maine prohibits smoking on beaches in its state parks, and 317 municipalities specified that all city beaches and/or specifically named city beaches are smoke-free;

- Oklahoma prohibits tobacco and e-cigarette use on all state lands and parks, Puerto Rico prohibits smoking in all parks, and 1,531 municipalities specified that all city parks and/or specifically named city parks are smoke-free; in addition, on March 31, 2016, New York's highest court upheld a smoking ban in certain outdoor areas, state parks and historic sites;

- Hawaii, Maine, Michigan, Washington and Puerto Rico laws prohibit smoking in both outdoor dining areas and bar patios (while Iowa prohibits smoking only in outdoor dining areas), and 454 municipalities have enacted laws for 100% smoke-free outdoor dining, while 285 municipalities have enacted laws for 100% smoke-free outdoor dining areas and bar patios; and

- Iowa, New York, Wisconsin, Guam and the U.S. Virgin Islands prohibit smoking in outdoor public transit waiting areas, and there are 535 municipalities with smoke-free outdoor public transit waiting area laws.

Smoking bans have also been enacted for smaller governmental and private entities. According to the ANRF, as of October 2, 2017, there are at least 2,064 100% smoke-free university and college campuses, and of these, 1,736 have a 100% tobacco-free policy and 1,649 prohibit the use of e-cigarettes anywhere on campus. The University of California implemented its system-wide smoke-free and tobacco-free policy effective January 1, 2014. ANRF further reports, as of October 2, 2017, that four national hospitals, clinics, insurers and health service companies, and at least 4,016 local and/or state hospitals, healthcare systems and clinics have adopted 100% smokefree grounds policies; that in July 2013 New York State enacted a law requiring 100% smoke-free grounds of general hospitals; in April 2016, Hawaii enacted a law requiring 100% tobacco- and e-cigarette-free grounds of state health facility properties; and that 44 municipalities have enacted laws specifically requiring 100% smoke-free hospital grounds. In addition, ANRF reports as of October 2, 2017 that effective January 2015 the Federal Bureau of Prisons prohibits the smoking of tobacco in any form in and on the grounds of its institutions and offices, that correctional facilities in 21 states plus Puerto Rico are 100% smoke-free indoors and outdoors, and that 28 other states ban smoking indoors in correctional facilities (but allow smoking in outdoor areas). ANRF reports that as of October 2, 2017, five states and 192 municipalities have laws requiring that all hotel and motel rooms be 100% smoke-free. Furthermore, ANRF reports as of October 2, 2017 that 61 municipalities restrict or prohibit smoking in private units of market-rate multi-unit housing (whether privately-owned or publicly-owned housing), and 530 municipalities have smoke-free policies for publicly-owned multi-unit housing. The Department of Housing and Urban Development prohibits smoking in public housing residences nationwide under a federal rule effective February 3, 2017; public housing agencies have 18 months to put smoke-free policies into effect.

Voluntary Private Sector Regulation

In recent years, many employers have initiated programs restricting or eliminating smoking in the workplace and providing incentives to employees who do not smoke, including charging higher health insurance premiums to employees who smoke and refusing to hire people who do smoke, and many common carriers have imposed restrictions on passenger smoking more stringent than those required by governmental regulations. Similarly, many restaurants, hotels and other public facilities have imposed smoking restrictions or prohibitions more stringent than those required by governmental regulations, including outright bans. According to the Tobacco Consumption Report,

New York City's first non-smoking apartment building opened in 2009, and many landlords and condominium associations in California and New York City have also established smoke-free apartment policies, including Related Companies, which manages 40,000 rental units across the country and announced in 2013 a ban on smoking for all new tenants.

International Agreements

On March 1, 2003, the member nations of the World Health Organization concluded four years of negotiations on an international treaty, the Framework Convention on Tobacco Control (the "**FCTC**"), whose objective is to establish a global agenda for tobacco regulation with the purpose of reducing initiation of tobacco use and encouraging cessation. The FCTC entered into force in February 2005, and according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, as of October 23, 2017, 180 countries and the European Community have become party to the FCTC. The treaty recommends (and in certain instances, requires) signatory nations to enact legislation that would, among other things: establish specific actions to prevent youth tobacco product use; restrict or eliminate all tobacco product advertising, marketing, promotion and sponsorship; initiate public education campaigns to inform the public about the health consequences of tobacco consumption and exposure to tobacco smoke and the benefits of quitting; implement regulations imposing product testing, disclosure and performance standards; impose health warning requirements on packaging; adopt measures intended to combat tobacco product smuggling and counterfeit tobacco products, including tracking and tracing of tobacco products through the distribution chain; and restrict smoking in public places, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. While the United States is a signatory of the FCTC, it is not currently a party to the agreement, as the agreement has not been submitted to, or ratified by, the United States Senate, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

Civil Litigation

Overview

Legal proceedings or claims covering a wide range of matters are pending or threatened in various United States and foreign jurisdictions against the tobacco industry. Several types of claims are raised in these proceedings including, but not limited to, claims for product liability, consumer protection, antitrust, and reimbursement. Litigation is subject to many uncertainties and it is possible that there could be material adverse developments in pending or future cases. Damages claimed in some tobacco-related and other litigation are or can be significant and, in certain cases, range in the billions of dollars. It can be expected that at any time and from time to time there will be developments in the litigation presently pending and filing of new litigation that could materially adversely affect the business of the PMs and the market for or prices of securities such as the Series 2018 Bonds payable from tobacco settlement payments made under the MSA.

Thousands of claims have been brought against the PMs in tobacco-related litigation. According to Altria in its Form 8-K filed with the SEC on February 1, 2018, the following tobacco-related cases were pending against Altria and/or its subsidiary Philip Morris: 92 individual smoking and health cases (see "—Individual Smoking and Health Cases" below); 2,414 flight attendant cases (see "—Flight Attendant Cases" below); approximately 2,400 *Engle* Progeny cases in state court (involving approximately 3,100 state court plaintiffs) and approximately 12 *Engle* Progeny cases in federal court (see "—*Engle* Progeny Cases" below); 4 smoking and health class actions and aggregated claims cases, which number includes as one case the 30 civil actions (of which 9 were actions pending against Philip Morris) that were to be tried in West Virginia state court as six consolidated trials (see "—West Virginia Individual Personal Injury Cases" below), and an additional 3 "Lights" class action cases (see "—Class Action Cases" below); and 1 health care cost recovery case (see "—Health Care Cost Recovery Cases" below). Altria reported in its Form 8-K filed with the SEC on February 1, 2018 that after exhausting all appeals in cases resulting in adverse verdicts associated with tobacco-related litigation, since October 2004 Philip Morris has paid in the aggregate judgments (and related costs and fees) totaling approximately $490 million and interest totaling approximately $184 million as of December 31, 2017.

Plaintiffs assert a broad range of legal theories in these cases, including, among others, theories of negligence, fraud, misrepresentation, strict liability in tort, design defect, breach of warranty, enterprise liability (including claims asserted under RICO), civil conspiracy, intentional infliction of harm, injunctive relief, indemnity, restitution, unjust

enrichment, public nuisance, unfair trade practices, claims based on antitrust laws and state consumer protection acts, and claims based on failure to warn of the harmful or addictive nature of tobacco products.

The MSA does not release the PMs from liability in individual plaintiffs' cases or in class action lawsuits. Plaintiffs in most of the cases seek unspecified amounts of compensatory damages and punitive damages that may range into the billions of dollars. Plaintiffs in some of the cases have sought treble damages, statutory damages, disgorgement of profits, equitable and injunctive relief, and medical monitoring and smoking cessation programs, among other damages.

The list below specifies certain categories of tobacco-related cases pending against the tobacco industry. A summary description of each type of case follows the list.

Type of Case

Individual Smoking and Health Cases
Flight Attendant Cases
West Virginia Individual Personal Injury Cases
Engle Progeny Cases
Class Action Cases
Health Care Cost Recovery Cases

"**Individual Smoking and Health Cases**" are smoking and health cases brought by or on behalf of individual plaintiffs who allege personal injury caused by smoking cigarettes, by using smokeless tobacco products, by addiction to tobacco, or by exposure to environmental tobacco smoke (but this category of cases as described herein does not include the Flight Attendant Cases, West Virginia Cases or *Engle* Progeny Cases discussed below).

"**Flight Attendant Cases**" are brought by non-smoking flight attendants alleging injury from exposure to environmental smoke in the cabins of aircraft. Plaintiffs in these cases may not seek punitive damages for injuries that arose prior to January 15, 1997. The time for filing Flight Attendant Cases expired in 2000 and no additional cases in this category may be filed.

West Virginia Individual Personal Injury Cases. In a 1999 administrative order, the West Virginia Supreme Court of Appeals transferred to a single West Virginia court a group of cases brought by individuals who allege cancer or other health effects caused by smoking cigarettes, smoking cigars, or using smokeless tobacco products (the "**West Virginia Cases**"). The plaintiffs' claims alleging injury from smoking cigarettes were consolidated for trial. The plaintiffs' claims alleging injury from the use of other tobacco products have been severed from the consolidated cigarette claims and have not been consolidated for trial. The time for filing a case that could be consolidated for trial with the West Virginia Cases expired in 2000.

"***Engle* Progeny Cases**" are brought by individuals who purport to be members of the decertified *Engle* class. These cases are pending in a number of Florida courts. The time period for filing *Engle* Progeny Cases expired in January 2008 and no additional cases may be filed. Some of the *Engle* Progeny Cases were filed on behalf of multiple class members. Some of the courts hearing the cases filed by multiple class members severed these suits into separate individual cases. It is possible the remaining suits filed by multiple class members may also be severed into separate individual cases.

"**Class Action Cases**" are purported to be brought on behalf of large numbers of individuals for damages allegedly caused by smoking, including, among other categories, "lights" Class Action Cases.

"**Health Care Cost Recovery Cases**" are brought by or on behalf of entities seeking equitable relief and reimbursement of expenses incurred in providing health care to individuals who allegedly were injured by smoking. Plaintiffs in these cases have included the U.S. federal government, U.S. state and local governments, foreign governmental entities, hospitals or hospital districts, American Indian tribes, labor unions, private companies and private citizens. Included in this category is the suit filed by the federal government, *United States of America v.*

Philip Morris USA, Inc., et al. (the "**DOJ Case**"), that sought to recover profits earned by the defendants and other equitable relief.

Individual Smoking and Health Cases

This category of cases includes smoking and health cases alleging personal injury that are brought by or on behalf of individual plaintiffs, but as described herein does not include the Flight Attendant Cases, West Virginia Cases or *Engle* Progeny Cases discussed below. An example of an Individual Smoking and Health Case pending during 2017 against Philip Morris is *Gentile*, in which, in October 2017, a jury in a Florida state court returned a verdict in favor of the plaintiff, awarding approximately $7.1 million in compensatory damages and allocating 75% of the fault to Philip Morris (an amount of approximately $5.3 million).

Flight Attendant Cases

The Flight Attendant Cases were filed as a result of a settlement agreement by the parties in *Broin v. Philip Morris Companies, Inc., et al*. (Circuit Court, Miami-Dade County, Florida, filed October 31, 1991), a class action brought on behalf of flight attendants claiming injury as a result of exposure to environmental tobacco smoke in airplane cabins. The settlement agreement, among other things, permitted the plaintiff class members to file these individual suits. The settlement agreement bars class members from bringing aggregate claims, bars class members from obtaining punitive damages, and bars individual claims to the extent that they are based on fraud, misrepresentation, conspiracy to commit fraud or misrepresentation, RICO, suppression, concealment or any other alleged intentional or willful conduct. The defendant tobacco manufacturers agreed that, in any individual case brought by a class member, the defendant will bear the burden of proof with respect to whether environmental tobacco smoke can cause certain specifically enumerated diseases, referred to as "general causation." With respect to all other issues relating to liability, including whether an individual plaintiff's disease was caused by his or her exposure to environmental tobacco smoke in airplane cabins, referred to as "specific causation," the individual plaintiff will have the burden of proof. On September 7, 1999, the Florida Supreme Court approved the settlement, and the individual Flight Attendant Cases arose out of such settlement. In October 2000, the *Broin* court entered an order applicable to all Flight Attendant Cases that the terms of the settlement agreement do not require the individual plaintiffs in the Flight Attendant Cases to prove the elements of strict liability, breach of warranty or negligence. Under the order, there is a rebuttable presumption in the plaintiffs' favor on those elements, and the plaintiffs bear the burden of proving that their alleged adverse health effects actually were caused by exposure to environmental tobacco smoke in airplane cabins (specific causation). The period for filing Flight Attendant Cases expired in 2000 and no additional cases in this category may be filed.

West Virginia Cases

The West Virginia Cases began in 1999, in West Virginia state court, as a series of roughly 1,200 individual plaintiff cases making claims with respect to cigarettes manufactured by Philip Morris, Lorillard, Reynolds Tobacco and other manufacturers. The cases were consolidated for a Phase I trial on various defense conduct issues, to be followed in Phase II by individual trials of remaining claims to determine liability and compensatory damages. On May 15, 2013, the Phase I jury found that defendants' cigarettes were not defectively designed; defendants' cigarettes were not defective due to a failure to warn before July 1, 1969; defendants were not negligent, did not breach warranties, and did not engage in conduct warranting punitive damages; and defendants' ventilated filter cigarettes manufactured and sold between 1964 and July 1, 1969 were defective for a failure to instruct. In November 2014, the West Virginia Supreme Court affirmed the verdict. On June 8, 2015, the U.S. Supreme Court denied the plaintiffs' petition for writ of certiorari. On the same date, the trial court issued an order finding that only 30 plaintiffs are alleged to have smoked ventilated filter cigarettes in the relevant period. On October 9, 2015, the trial court outlined the procedures it will follow for resolving the claims of the 30 Phase II plaintiffs, which claims will focus on whether plaintiffs blocked cigarette vents and, if so, whether blocking proximately caused their alleged injuries. According to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017, the court intends to try the claims of these 30 plaintiffs in six consolidated trials, each with a group of five plaintiffs; the first trial is currently scheduled to begin May 1, 2018, and dates for the five remaining consolidated trials have not been scheduled. The parties have since agreed to resolve the cases for an immaterial amount and have so notified the court together with a motion that the court vacate the May trial date, according to Altria in its Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

Engle Progeny Cases

The case of *Engle v. R.J. Reynolds Tobacco Co., et al.* (Circuit Court, Dade County, Florida, filed May 5, 1994) was certified in 1996 as a class action on behalf of Florida residents, and survivors of Florida residents, who were injured or died from medical conditions allegedly caused by addiction to smoking. During the three-phase trial, a Florida jury awarded compensatory damages to three individuals and approximately $145 billion in punitive damages to the certified class. In *Engle v. Liggett Group, Inc.*, 945 So.2d 1246 (Fla. 2006), the Florida Supreme Court vacated the punitive damages award, determined that the case could not proceed further as a class action and ordered decertification of the class. The Florida Supreme Court also reinstated the compensatory damages awards to two of the three individuals whose claims were heard during the first phase of the *Engle* trial. These two awards totaled approximately $7 million.

The Florida Supreme Court's 2006 ruling also permitted *Engle* class members to file individual actions, including claims for punitive damages. The court further held that these individuals are entitled to rely on a number of the jury's findings in favor of the plaintiffs in the first phase of the *Engle* trial. These findings included that smoking cigarettes causes a number of diseases; that cigarettes are addictive or dependence-producing; and that the defendants were negligent, breached express and implied warranties, placed cigarettes on the market that were defective and unreasonably dangerous, and concealed or conspired to conceal the risks of smoking. The time period for filing *Engle* Progeny Cases expired in January 2008 and no additional cases may be filed. In 2009, the Florida Supreme Court rejected a petition that sought to extend the time for purported class members to file an additional lawsuit.

In the wake of the Florida Supreme Court ruling, thousands of individuals filed separate lawsuits seeking to benefit from the *Engle* findings. According to Altria's Form 8-K filed with the SEC on February 1, 2018, as of January 29, 2018, 116 state and federal *Engle* Progeny Cases involving Philip Morris have resulted in verdicts since the Florida Supreme Court's *Engle* decision, 61 of which were returned in favor of plaintiffs, 45 of which were returned in favor of Philip Morris, 8 of which were initially returned in favor of plaintiffs but were reversed post-trial or on appeal and remain pending, and 2 of which were returned in favor of Philip Morris but were reversed for a new trial. In addition, according to Altria's Form 8-K filed with the SEC on February 1, 2018, as of January 29, 2018 approximately 2,400 state court cases were pending against Philip Morris or Altria asserting individual claims by or on behalf of approximately 3,100 state court plaintiffs, and approximately 12 cases were pending against Philip Morris in federal court representing the federal cases excluded from the settlement agreement discussed below.

On October 23, 2013, Vector Group Ltd. announced that it and its subsidiary Liggett reached a comprehensive settlement (which is now final) resolving substantially all of the individual *Engle* Progeny Cases pending against them. Under the settlement, which did not require court approval, approximately 4,900 (out of approximately 5,300) individual *Engle* plaintiffs would dismiss their claims against Vector Group Ltd. and Liggett. Vector Group Ltd. recorded a charge of approximately $86 million for the year ended December 31, 2013 related to the settlement agreement. Pursuant to the terms of the agreement, Liggett will pay a total of $110 million, with approximately $61.6 million paid collectively in December 2013 and February 2014, and the balance to be paid in equal annual installments over the following 14 years.

In February 2015, Philip Morris, Reynolds Tobacco and Lorillard settled virtually all of the *Engle* Progeny Cases then pending against them in federal district court. The total amount of the settlement of the federal *Engle* Progeny Cases was $100 million, divided among Reynolds Tobacco ($42.5 million), Philip Morris ($42.5 million) and Lorillard ($15 million), which shares of the settlement were paid into escrow in March 2015. The settlement, which received final approval from the court on November 6, 2015, covers more than 400 federal *Engle* Progeny Cases but does not cover certain federal *Engle* Progeny Cases previously tried to verdict and pending on post-trial motions or appeal, or filed by different lawyers from the ones who negotiated the settlement for the plaintiffs. Also, certain state court cases were removed from state to federal court, which were not part of the settlement, and were all remanded back to state court.

At the beginning of the *Engle* Progeny Cases litigation, a central issue was the proper use of the preserved *Engle* findings. The tobacco manufacturers had argued that use of the *Engle* findings to establish individual elements of progeny claims (such as defect, negligence and concealment) was a violation of federal due process, but in 2013, both the Florida Supreme Court (in the *Douglas* case) and the Eleventh Circuit (in the *Duke* and *Walker* cases) rejected that argument, and the U.S. Supreme Court denied the tobacco manufacturers' petitions for writ of certiorari in all of

those cases. As noted below, the Eleventh Circuit, sitting en banc, recently heard argument on this issue again, and in January 2018, the U.S. Supreme Court denied the tobacco manufacturers' petition for writ of certiorari after the Eleventh Circuit's decision.

In addition to the global due process argument, the tobacco manufacturers raise many other factual and legal defenses as appropriate in each case, including, among other things, arguing that the plaintiff is not a proper member of the *Engle* class, that the plaintiff did not rely on any statements by any tobacco company, that the trial was conducted unfairly, that some or all claims are preempted or barred by applicable statutes of limitation, or that any injury was caused by the smoker's own conduct. In *Hess v. Philip Morris USA Inc.* and *Russo v. Philip Morris USA Inc.*, decided on April 2, 2015, the Florida Supreme Court held that, in *Engle* Progeny Cases, the defendants cannot raise a statute of repose defense to claims for concealment or conspiracy. On April 8, 2015, in *Graham v. R. J. Reynolds Tobacco Co.*, the Eleventh Circuit held that federal law impliedly preempts use of the preserved *Engle* findings to establish claims for strict liability or negligence. On January 21, 2016, the Eleventh Circuit granted the plaintiff's motion for rehearing en banc and vacated the panel decision. On May 18, 2017, the en banc Eleventh Circuit rejected the tobacco companies' due process and implied preemption arguments, holding that giving preclusive effect to the findings of negligence and strict liability by the *Engle* jury in individual *Engle* Progeny Case actions against the tobacco companies is not preempted by federal tobacco laws and does not deprive the tobacco companies of due process, and the Eleventh Circuit affirmed the final judgment entered in the plaintiff's favor. In January 2018, the U.S. Supreme Court denied the tobacco companies' petition for writ of certiorari. On January 6, 2016, in *Marotta v. R. J. Reynolds Tobacco Co.*, the Florida Fourth District Court of Appeal also disagreed with the 2015 *Graham* panel decision and held that federal law does not impliedly preempt any tort claims against cigarette manufacturers, including those of plaintiffs in *Engle* Progeny Cases. The Florida Supreme Court accepted jurisdiction in *Marotta*, and in April 2017 affirmed the ruling of the Florida Fourth District Court of Appeal and found that federal law does not preempt the *Engle* Progeny Case plaintiff's claims, according to Altria in its Form 8-K filed with the SEC on February 1, 2018.

In addition, in *Searcy*, an *Engle* Progeny Case against Philip Morris and Reynolds Tobacco on appeal to the Eleventh Circuit, defendants argued that application of the *Engle* findings to the *Engle* progeny plaintiffs' concealment and conspiracy claims violated defendants' due process rights; the appeal is pending, according to Altria's Form 8-K filed with the SEC on February 1, 2018. In *Soffer*, an *Engle* Progeny Case against Reynolds Tobacco, the Florida First District Court of Appeal held that *Engle* progeny plaintiffs can recover punitive damages only on their intentional tort claims; the Florida Supreme Court accepted jurisdiction over plaintiff's appeal from the Florida First District Court of Appeal's decision and, in March 2016, held that *Engle* progeny plaintiffs can recover punitive damages in connection with all of their claims, and the plaintiffs now generally seek punitive damages in connection with all of their claims in *Engle* Progeny Cases, according to Altria's Form 8-K filed with the SEC on February 1, 2018. In *Ciccone*, an *Engle* Progeny Case against Reynolds Tobacco, the Florida Fourth District Court of Appeal held that *Engle* progeny plaintiffs could establish class membership by showing that they developed symptoms during the *Engle* class period that could, in hindsight, be attributed to their smoking-related disease. The court certified a conflict with *Castleman*, a Florida First District Court of Appeal decision, which held that manifestation requires *Engle* progeny plaintiffs to have been aware during the class period that they had a disease caused by smoking in order to establish class membership. The Florida Supreme Court accepted jurisdiction in the *Ciccone* case and, in March 2016, ruled in favor of the plaintiff, approving the Fourth District Court of Appeal's definition, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017. In *Schoeff*, an *Engle* Progeny Case against Reynolds Tobacco, the Florida Fourth District Court of Appeal held that comparative fault findings should apply to reduce all compensatory damage awards, including awards based on intentional fraud claims. The Florida Supreme Court accepted jurisdiction over the plaintiff's appeal of the Florida Fourth District Court of Appeal's decision, and in December 2017, reversed the Court of Appeals decision, finding that comparative fault does not reduce compensatory damages awards for intentional torts, according to Altria's Form 8-K filed with the SEC on February 1, 2018.

In one of the pending *Engle* Progeny Cases in which each of Philip Morris, Reynolds Tobacco and Lorillard are defendants, *Calloway v. R.J. Reynolds Tobacco Company, et al.* (Circuit Court, Seventeenth Judicial Circuit, Broward County, Florida), the jury awarded plaintiff and a daughter of the decedent a total of $20,500,000 in compensatory damages. The jury apportioned 20.5% of the fault for the smoker's injuries to the smoker, 27% to Reynolds Tobacco, 25% to Philip Morris, 18% to Lorillard, and 9.5% to Liggett. The jury awarded a total punitive damages award from the defendants of $54,850,000. In August 2012, the court granted a post-trial motion by the defendants and lowered the compensatory damages award to $16,100,000. The court also ruled that the jury's finding

on the plaintiff's percentage of comparative fault would not be applied to reduce the compensatory damage award because the jury found in favor of the plaintiff on her claims alleging intentional conduct. In August 2012, the court entered final judgment against defendants in the amount of $16,100,000 in compensatory damages and $54,850,000 in punitive damages, plus the statutory rate of interest. On January 6, 2016, the Florida Fourth District Court of Appeal reversed the fraudulent concealment and conspiracy claims, reversed the punitive damages award, and remanded the case for a new trial on those issues. On September 23, 2016, the Fourth District Court of Appeal, sitting en banc, reversed the judgment in its entirety and remanded the case for a new trial. In October 2016, the plaintiff filed a notice to invoke the discretionary jurisdiction of the Florida Supreme Court, which the court denied in March 2017, and in June 2017 the plaintiff filed a petition for writ of certiorari with the United States Supreme Court seeking review of the 2016 en banc ruling by the Florida Fourth District Court of Appeal, which the court denied in October 2017, according to Altria in its Form 8-K filed with the SEC on February 1, 2018.

In another pending *Engle* Progeny Case, *Naugle v. Philip Morris*, a jury returned a verdict in November 2009 in favor of the plaintiff and against Philip Morris. The jury awarded approximately $56.6 million in compensatory damages and $244 million in punitive damages, allocating 90% of the fault to Philip Morris. In August 2010, the trial court entered an amended final judgment of approximately $12.3 million in compensatory damages and approximately $24.5 million in punitive damages. In June 2012, the Fourth District Court of Appeal affirmed the amended final judgment, and in July 2012, Philip Morris filed a motion for rehearing. In December 2012, the Fourth District withdrew its prior decision, reversed the verdict as to compensatory and punitive damages and returned the case to the trial court for a new trial on the question of damages. Upon retrial on the question of damages, on October 16, 2013, the new jury awarded approximately $3.7 million in compensatory damages and $7.5 million in punitive damages. On May 16, 2014, Philip Morris filed a notice of appeal to the Fourth District Court of Appeal. On January 6, 2016, the Fourth District Court of Appeal reversed the trial court's decision and remanded the case to the trial court to conduct a juror interview. In April 2016, Philip Morris moved for a new trial following the juror interview, which the court denied, and in May 2016, Philip Morris filed a notice of appeal to the Fourth District Court of Appeal. In April 2017, the Fourth District Court of Appeal issued a per curiam decision affirming the trial court's judgment against Philip Morris. In September 2017, Philip Morris filed a petition for writ of certiorari with the United States Supreme Court on due process and federal preemption grounds, which Philip Morris dismissed after the Supreme Court denied the tobacco companies' petition for writ of certiorari in the *Graham* case discussed above, according to Altria in its Form 8-K filed with the SEC on February 1, 2018.

In another *Engle* Progeny Case, *Robinson v. R.J. Reynolds*, on July 18, 2014 a jury in Escambia County, Florida rendered a verdict against Reynolds Tobacco and awarded plaintiff $16.9 million in compensatory damages and $23.6 billion in punitive damages for the lung cancer death of plaintiff's spouse who smoked Kool brand cigarettes for more than 20 years from age 13 to his death at age 36. Reynolds Tobacco filed a motion on July 28, 2014 to set aside the jury's verdict on the grounds that it was unconstitutionally disproportionate to plaintiff's actual damages. The court entered partial judgment on the compensatory damages against Reynolds Tobacco in the amount of $16.9 million on July 21, 2014. On January 27, 2015 the court denied the defendant's post-trial motions, but granted the defendant's motion for remittitur of the punitive damages award. The punitive damages award was remitted to approximately $16.9 million. In February 2015, Reynolds Tobacco filed an objection to the remitted award of punitive damages and a demand for a new trial on damages. The court granted a new trial on the amount of punitive damages only. The new trial on punitive damages has been stayed pending Reynolds Tobacco's appeal to the First District Court of Appeal of the partial judgment of compensatory damages and of the order granting a new trial on the amount of punitive damages only. On February 24, 2017, the First District Court of Appeal reversed the judgment of the trial court and remanded the case for a new trial. On May 17, 2017, the First District Court of Appeal denied the plaintiff's motion for rehearing and the plaintiff filed a notice to invoke the discretionary jurisdiction of the Florida Supreme Court on June 14, 2017. The Florida Supreme Court has not yet issued a ruling.

In yet another Engle Progeny Case, *Purdo*, a jury returned a verdict in favor of the plaintiff and against Philip Morris and Reynolds Tobacco, awarding compensatory damages of $21 million, and awarding $6.25 million in punitive damages against each defendant. In May 2016, Philip Morris and Reynolds Tobacco filed various post-trial motions, including motions to set aside the verdict and for a new trial, all of which the court denied and entered final judgment in favor of plaintiff with a deduction for plaintiff's comparative fault. In June 2016, the defendants filed a notice of appeal to the Florida Fourth District Court of Appeal. In August 2017, the Florida Fourth District Court of Appeal affirmed the final judgment in favor of plaintiff, and in September 2017, the defendants petitioned the Florida Fourth District Court of Appeal for panel rehearing or for rehearing en banc, which the court denied in October 2017,

and in November 2017, the defendants filed a notice to invoke the discretionary jurisdiction of the Florida Supreme Court, according to Altria in its Form 8-K filed with the SEC on February 1, 2018. In another Engle Progeny Case, *Kerrivan*, a jury returned a verdict against Philip Morris and Reynolds Tobacco, awarding the plaintiff $15.8 million in compensatory damages and $25.3 million in punitive damages. The trial court entered final judgment without any deduction for plaintiff's comparative fault. In December 2014, the defendants filed various post-trial motions, including a renewed motion for judgment or for a new trial. In May 2015, the trial court deferred further briefing on the post-trial motions, and in June 2017, the trial court lifted the stay on the post-trial motions, according to Altria in its Form 8-K filed with the SEC on February 1, 2018.

Various *Engle* Progeny Cases in addition to the cases described herein are discussed in detail in the SEC filings of Altria, and a number of *Engle* Progeny Cases have been placed on courts' upcoming trial calendars. Trial schedules are subject to change.

In June 2009, Florida amended its existing bond cap statute by adding a $200 million bond cap that applied to all *Engle* Progeny Cases in the aggregate. In May 2011, Florida removed the provision that would have allowed it to expire on December 31, 2012. The bond cap for any given individual *Engle* Progeny Case varies depending on the number of judgments in effect at a given time, but never exceeds $5 million per case for appeals within the Florida state court system. The legislation, which became effective in June 2009 and 2011, applies to judgments entered after the original 2009 effective date. The plaintiffs in some cases challenged the constitutionality of the amended statute. These motions were denied, withdrawn or declared moot. In January 2012, the Florida Supreme Court agreed to review one of the orders denying a challenge to the amended statute, and in August 2012 the Florida Supreme Court dismissed the appeal as moot because the defendant had satisfied the judgment and denied the plaintiffs' rehearing petition in October 2012. In another case in August 2013, the plaintiff filed a motion in the trial court to determine the sufficiency of the bond posted by defendants on the ground that the bond cap statute was unconstitutional, which was denied. In yet another case in April 2016, the District Court of Appeal held that the bond cap applies to the period between a Florida Supreme Court ruling and completion of United States Supreme Court writ of certiorari review. No federal court has yet addressed the constitutionality of the bond cap statute or the applicability of the bond cap to *Engle* Progeny Cases tried in federal court, according to Altria in its Form 8-K filed with the SEC on February 1, 2018. The Florida legislature is considering legislation that would repeal the 2009 appeal bond cap statute, according to Altria in its Form 8-K filed with the SEC on February 1, 2018.

Class Action Cases

In 1996, the Fifth Circuit Court of Appeals in *Castano v. American Tobacco Co.* overturned the certification of a nation-wide class of persons whose claims related to alleged addiction to tobacco products, finding that the district court failed to properly assess variations in the governing state laws and whether common issues predominated over individual issues. Since the Fifth Circuit's ruling in *Castano*, plaintiffs have filed numerous putative smoking and health class action suits in various state and federal courts; in general, these cases purport to be brought on behalf of residents of a particular state or states, according to Altria in its Form 8-K filed with the SEC on February 1, 2018. In most of the class action cases, plaintiffs seek class certification on behalf of groups of cigarette smokers, or the estates of deceased cigarette smokers, who reside in the state in which the case is filed. Several categories of class action cases are discussed below.

"Lights" Class Action Cases. In "lights" Class Action Cases, plaintiffs generally allege that the tobacco manufacturers made false and misleading claims that "lights" cigarettes were lower in tar and nicotine and/or were less hazardous or less mutagenic than other cigarettes. These cases typically are filed pursuant to state consumer protection laws and related statutes.

In one of the "lights" Class Action Cases, *Good v. Altria Group, Inc., et al.*, the U.S. Supreme Court ruled in December 2008 that neither the Federal Cigarette Labeling and Advertising Act nor the Federal Trade Commission's regulation of cigarettes' tar and nicotine disclosures preempts (or bars) certain of plaintiffs' claims. Although the Court rejected the argument that the Federal Trade Commission's actions were so extensive with respect to the descriptors that the state law claims were barred as a matter of federal law, the Court's decision was limited: it did not address the ultimate merits of plaintiffs' claim, the viability of the action as a class action, or other state law issues. The case was returned to the federal court in Maine and consolidated by the Judicial Panel on Multidistrict Litigation ("**JPMDL**") with other federal cases in a multidistrict litigation proceeding. In June 2011, the plaintiffs voluntarily

dismissed the *Good* case without prejudice after the district court denied plaintiffs' motion for class certification, concluding the litigation. The other multidistrict cases were either voluntarily dismissed or resolved in a manner favorable to Philip Morris, according to Altria's SEC filings.

As of January 29, 2018, 21 state courts in 22 "lights" Class Action Cases have refused to certify class actions, dismissed class action allegations, reversed prior class certification decisions or entered judgment in favor of Philip Morris, according to Altria's Form 8-K filed with the SEC on February 1, 2018. State trial courts have certified classes against Philip Morris in several jurisdictions; over time, all such cases have been dismissed by the courts at the summary judgment stage, were settled by the parties or were resolved in favor of Philip Morris, according to Altria's Form 8-K filed with the SEC on February 1, 2018.

The Price Case. In *Price, et al v. Philip Morris Inc*. (Circuit Court, Madison County, Illinois, filed February 10, 2000) the trial judge found in favor of the plaintiff class and awarded $7.1 billion in compensatory damages and $3 billion in punitive damages against Philip Morris in 2003. In December 2005, the Illinois Supreme Court issued its judgment reversing the trial court's judgment in favor of the plaintiffs and directing the trial court to dismiss the case. In December 2006, the defendant's motion to dismiss and for entry of final judgment was granted, and the case was dismissed with prejudice. In December 2008, plaintiffs filed with the trial court a petition for relief from the final judgment and sought to vacate the 2005 Illinois Supreme Court judgment, contending that the U.S. Supreme Court's December 2008 decision in *Good* demonstrated that the Illinois Supreme Court's decision was "inaccurate." In February 2009, the trial court granted Philip Morris's motion to dismiss plaintiffs' petition. In March 2009, the plaintiffs filed a notice of appeal with the Illinois Appellate Court, Fifth Judicial District. In February 2011, the Illinois Appellate Court, Fifth Judicial District reversed the trial court's dismissal of plaintiffs' petition and remanded for further proceedings, and on September 28, 2011, the Illinois Supreme Court denied Philip Morris' petition for leave to appeal that ruling. As a result, the case returned to the trial court for proceedings on whether the court should grant the plaintiffs' petition to reopen the prior judgment. In February 2012, plaintiffs filed an amended petition, which Philip Morris opposed. Subsequently, in responding to Philip Morris's opposition to the amended petition, plaintiffs asked the trial court to reinstate the original judgment. On December 12, 2012, the trial court denied the plaintiffs' request to reopen the prior judgment, and the plaintiffs filed a notice of appeal to the Fifth District Appellate Court on January 8, 2013. On April 29, 2014, the Fifth District Appellate Court reinstated the $10.1 billion 2003 verdict. In May 2014, Philip Morris filed a petition requesting the Illinois Supreme Court to direct the Fifth Judicial District to vacate its April 2014 judgment and to order the Fifth Judicial District to affirm the trial court's denial of the plaintiff's petition for relief from the judgment, or in the alternative, grant its petition for leave to appeal. On September 24, 2014, the Illinois Supreme Court agreed to hear Philip Morris's appeal. In November 2015, the Illinois Supreme Court vacated the judgments of the lower courts and dismissed the case without prejudice to allow the plaintiffs to file a motion to recall the mandate. The plaintiffs filed a motion to recall the mandate or for other appropriate relief in the Illinois Supreme Court, which was denied on January 11, 2016. In January 2016 plaintiffs filed a petition for writ of certiorari with the United States Supreme Court on the question of whether one of the Illinois Supreme Court justices should have recused himself, and in June 2016 the U.S. Supreme Court denied plaintiffs' petition for writ of certiorari, concluding the litigation.

In another "Lights" Class Action Case, *Larsen v. Philip Morris Inc.* (formerly *Craft v. Philip Morris Inc.*), a Missouri Court of Appeals in August 2005 affirmed a class certification order for current and former smokers of Marlboro Lights. (The class period is 1995 through 2003.) Plaintiffs sought nearly $2 billion in damages. In June 2011, Philip Morris filed various summary judgment motions challenging the plaintiffs' claims. In August 2011, the trial court granted Philip Morris's motion for partial summary judgment, ruling that plaintiffs could not present a damages claim based on allegations that Marlboro Lights are more dangerous than Marlboro Reds, and denied Philip Morris's remaining summary judgment motions. Trial began in September 2011, and in October 2011 the trial court declared a mistrial after the jury failed to reach a verdict. In January 2014, the trial court reversed its prior ruling granting partial summary judgment against plaintiffs' "more dangerous" claim and allowed plaintiffs to pursue that claim. In October 2014, Philip Morris filed motions to decertify the class and for partial summary judgment on the plaintiffs' "more dangerous" claim, which the court denied in June 2015. Upon retrial, in April 2016, the jury returned a verdict in favor of Philip Morris, and in May 2016, plaintiffs filed a motion for a new trial, which Philip Morris opposed in June 2016. In August 2016, the trial court denied the plaintiffs' motion for a new trial, the plaintiffs filed a notice of appeal and Philip Morris cross-appealed, and in November 2016 the court of appeals dismissed Philip Morris's cross-appeal without prejudice upon joint motion of the parties. On appeal, in November 2017, the Missouri

Court of Appeals affirmed the judgment in favor of Philip Morris, and plaintiffs did not seek further appellate review, concluding the litigation, according to Altria's Form 8-K filed with the SEC on February 1, 2018.

In November 2013, an Arkansas trial court approved class certification in a Marlboro Lights lawsuit, *Miner et al v. Philip Morris Cos. Inc*. Plaintiffs initially filed the lawsuit against Philip Morris in 2003, accusing the company of deceptive marketing practices in violation of the Arkansas Deceptive Business Practices Act. Plaintiffs alleged that Philip Morris violated the law by advertising Marlboro Lights as a safer alternative to regular cigarettes. Philip Morris filed a notice of appeal of the class certification ruling to the Arkansas Supreme Court in December 2013. In February 2015, the Arkansas Supreme Court affirmed the trial court's class certification order. In May 2015, Philip Morris filed a motion for partial summary judgment seeking to foreclose any recovery for cigarette purchases prior to 1999, when a private right of action was added to the consumer protection statute under which plaintiffs are suing. The trial court denied the motion in July 2015. In June 2016, the trial court granted Philip Morris's motion for partial summary judgment to limit any damages claimed by the plaintiffs' class to purchases made prior to May 2003. In July 2016, the parties agreed to settle all claims for $45 million, the trial court granted final approval of the settlement in November 2016, and Philip Morris paid $45 million to the plaintiffs' escrow agent in December 2016, concluding the litigation, according to Altria's Form 10-Q filed with the SEC for the nine-month period ended September 30, 2017.

Other Class Action Cases. Other categories of class action cases include, among others, (i) medical monitoring class action cases, wherein plaintiffs seek to recover the cost for, or otherwise the implementation of, court-supervised programs for ongoing medical monitoring providing members of the purported class low dose CT scanning in order to identify and diagnose lung cancer, and other relief such as court-supervised smoking cessation programs; (ii) e-cigarette class action cases, wherein plaintiffs seek damages, alleging that defendants made false and misleading claims that e-cigarettes are less hazardous than other cigarette products or failed to disclose that e-cigarettes expose users to certain substances; and (iii) class action cases seeking damages related to Santa Fe Natural Tobacco Company's allegedly deceptive use of the words "natural" and "additive-free" in the labeling, advertising, and promotional materials for Natural American Spirit brand cigarettes.

Health Care Cost Recovery Cases

Health Care Cost Recovery Cases are brought by or on behalf of entities seeking equitable relief and reimbursement of expenses incurred in providing health care to individuals who allegedly were injured by smoking. Plaintiffs in these cases have included the U.S. federal government, U.S. state and local governments, foreign governmental entities, hospitals or hospital districts, American Indian tribes, labor unions, private companies and private citizens. Relief sought by some but not all plaintiffs includes punitive damages, multiple damages and other statutory damages and penalties, injunctions prohibiting alleged marketing and sales to minors, disclosure of research, disgorgement of profits, funding of anti-smoking programs, additional disclosure of nicotine yields, and payment of attorney and expert witness fees. The claims asserted include the claim that cigarette manufacturers were "unjustly enriched" by plaintiffs' payment of health care costs allegedly attributable to smoking, as well as claims of indemnity, negligence, strict liability, breach of express and implied warranty, violation of a voluntary undertaking or special duty, fraud, negligent misrepresentation, conspiracy, public nuisance, claims under federal and state statutes governing consumer fraud, antitrust, deceptive trade practices and false advertising, and claims under federal and state anti-racketeering statutes.

According to Altria in its Form 8-K filed with the SEC on February 1, 2018, although there have been some decisions to the contrary, most judicial decisions in the U.S. have dismissed all or most health care cost recovery claims against cigarette manufacturers; nine federal circuit courts of appeals and eight state appellate courts, relying primarily on grounds that plaintiffs' claims were too remote, have ordered or affirmed dismissals of health care cost recovery actions, and the U.S. Supreme Court has refused to consider plaintiffs' appeals from the cases decided by five circuit courts of appeals.

The DOJ Case. In 1999, in *United States v. Philip Morris USA Inc.*, the U.S. Department of Justice brought an action against various tobacco manufacturers in the U.S. District Court for the District of Columbia. The government initially sought to recover federal funds expended by the federal government in providing health care to smokers who developed diseases and injuries alleged to be smoking-related, based on several federal statutes. In addition, the government sought, pursuant to the civil provisions of RICO, disgorgement of profits the government contended were earned as a consequence of a RICO racketeering "enterprise." In September 2000, the district court

dismissed the government's claims asserted under the Medical Care Recovery Act as well as those under the Medicare Secondary Payer provisions of the Social Security Act, but did not dismiss the RICO claims. In February 2005, the Circuit Court of Appeals for the District of Columbia ruled that disgorgement is not an available remedy in the case. The government's petition for writ of certiorari with the U.S. Supreme Court was denied in October 2005. The non-jury, bench trial concluded in June 2005, and in August 2006, the U.S. District Court for the District of Columbia issued its final judgment and remedial order in favor of the government. The court determined that the defendants violated certain provisions of the RICO statute, that there was a likelihood of present and future RICO violations, and that equitable relief was warranted. The government was not awarded monetary damages.

The equitable relief included permanent injunctions that prohibit the defendant tobacco manufacturers from engaging in any act of racketeering, as defined under RICO; from making any material false or deceptive statements concerning cigarettes; from making any express or implied statement about health on cigarette packaging or promotional materials (these prohibitions include a ban on using such descriptors as "low tar," "light," "ultra-light," "mild" or "natural"); from making any statements that "low tar," "light," "ultra-light," "mild" or "natural" or low-nicotine cigarettes may result in a reduced risk of disease; and from participating in the management or control of certain entities or their successors. The final judgment and remedial order also requires the defendants to make corrective statements on their websites, in certain media, in point-of-sale advertisements, and on cigarette package "onserts" (as described below). In addition, the final judgment and remedial order requires defendants to make disclosures of disaggregated marketing data to the government, and to make document disclosures on a website and in a physical depository, and also prohibits each defendant that manufactures cigarettes from selling any of its cigarette brands or certain elements of its business unless certain conditions are met.

Following trial, the final judgment and remedial order was stayed because the defendants, the government and several intervenors noticed appeals to the Circuit Court of Appeals for the District of Columbia. In May 2009, a three judge panel upheld substantially all of the District Court's final judgment and remedial order. In September 2009, the Court of Appeals denied defendants' rehearing petitions as well as their motion to vacate those statements in the appellate ruling that address defendants' marketing of "low tar" or "lights" cigarettes, to vacate those parts of the trial court's judgment on that issue, and to remand the case with instructions to deny as moot the government's allegations and requested relief regarding "lights" cigarettes. In June 2010, the U.S. Supreme Court denied all of the petitions for review of the case. The case was returned to the trial court for implementation of the Court of Appeals' directions in its 2009 ruling and for entry of an amended final judgment. In March 2011, defendants filed a motion to vacate the court's factual findings and remedial order on alternative grounds, and on June 1, 2011, the trial court denied defendants' motion. Defendants filed a notice of appeal, and in July 2012 the appellate court affirmed the District Court's ruling, permitting the case to proceed. In response to the government's motion requesting clarification, the trial court held in April 2011 that the defendants must provide a broad range of data for the ten-year period beginning July 29, 2010, and that the Department of Justice may share that data with other governmental agencies, subject to the confidentiality requirements previously imposed by the trial court. The defendants noticed an appeal from this order to the U.S. Court of Appeals for the District of Columbia Circuit. In July 2012, the appellate court dismissed the appeal for lack of jurisdiction, and the defendants have not sought further review of that decision.

On November 27, 2012, the U.S. District Court for the District of Columbia issued an order specifying the text of the corrective statements that the defendants must make on their websites and through other media. The court ordered that the corrective statements include statements, among others, to the effect that smoking kills on average 1,200 Americans every day, results in various detrimental health conditions and is highly addictive, that low tar and light cigarettes are not less harmful than regular cigarettes and cause some of the same detrimental health conditions that regular cigarettes cause, that tobacco companies intentionally designed cigarettes to make them more addictive, and that secondhand smoke causes lung cancer and coronary heart disease in adults who do not smoke. The court further ordered that the parties are to engage in discussions with the court, regarding implementation of the corrective statements. In January 2013, defendants appealed to the U.S. Court of Appeals for the District of Columbia Circuit the district court's November 2012 order on the text of the corrective statements, claiming a violation of free speech rights. Defendants also filed a motion to hold the appeal in abeyance pending the completion of related proceedings in the district court regarding the implementation of the corrective statements, which the Court of Appeals granted in February 2013.

On January 10, 2014, the U.S. government and the defendant tobacco companies issued a joint status report confirming that the parties reached an agreement following the negotiations regarding implementation of the

corrective statements and filed a joint motion for consent order. For specified time periods following the date when all appeals are exhausted, corrective statements would be disseminated in newspapers (print and online), on television, on the tobacco companies' websites, and on "onserts" affixed to cigarette packs. In April 2014, the parties filed an amended proposed consent order and accompanying submission in the district court seeking entry of a revised agreement on the implementation details of the corrective communications remedy. The consent order as revised by the parties provided that the parties thereto do not waive or abandon any appeal or appellate rights or argument and that defendants reserve the right to challenge on appeal the content of the court-ordered corrective statements and the requirement that the court-ordered corrective statements appear in the multiple media referenced in the court's remedial order and in the consent order. The consent order further provided that defendants will not challenge on appeal the specific implementation executions in the consent order, that plaintiffs will not invoke defendants' agreement to the specific implementation executions in response to defendants' appellate challenge to the court-ordered corrective statements, and that should the language of the corrective statements be changed as a result of further litigation, the parties reserve the right to seek different requirements than those in the consent order. In addition, the consent order stays implementation until the exhaustion of the defendants' appeal challenging the constitutionality of the corrective statements. In June 2014, U.S. District Court for the District of Columbia approved the April 2014 proposed consent order. However, the June 2014 consent order did not resolve outstanding issues as to whether corrective statements must be posted in retail point-of-sale displays, and this issue remains pending.

In May 2015, the U.S. Court of Appeals affirmed in part and reversed in part the consolidated appeal before it, and upheld the content of the corrective statements ordered by the district court in November 2012, but rejected the preamble to the statements (which had included a statement that the PMs deliberately deceived the American public). The Court of Appeals remanded the case to the trial court for further proceedings. In July 2015, the government filed a petition for panel rehearing, which the U.S. Court of Appeals denied in August 2015. In October 2015, the district court ordered further briefing on the content of the preamble to the statements and any implementation changes the parties propose.

On June 30, 2015, the district court held a status conference to discuss briefing and scheduling of future submissions in light of the Court of Appeals' decision on the corrective statement issue. On July 7, 2015, the U.S. Department of Justice filed a motion for rehearing with the Court of Appeals, which was denied on August 5, 2015. On August 20, 2015, the district court directed the parties to undertake mediation in order to attempt to reach agreement on the wording of the corrective-statements preamble. The parties were unable to reach agreement. On October 1, 2015, the district court held a status conference at which it ordered the parties to propose new corrective-statements preambles and brief their proposals in October and November 2015. The U.S. Department of Justice proposed a preamble that removed the reference to deliberate deception, and instead included only that a federal court has ordered the PMs to make such corrective statements. On February 8, 2016, the district court issued an order on the content of the corrective-statements preamble. In the order, the district court held that the preamble proposed by the Department of Justice remedied the concern of the Court of Appeals, and the district court adopted the corrective statements set forth in the order, with the preamble that the government had proposed. The court also ordered the parties to submit proposed changes to the consent order on the implementation details, which the parties jointly submitted and the court approved in April 2016. Also in April 2016, defendants filed a notice of appeal to the U.S. Court of Appeals for the District of Columbia Circuit on the content of the corrective communications, and in May 2016, defendants filed a notice of appeal of the consent order for the purpose of perfecting the appeal of the district court's February 2016 order on the content of the corrective communications. In April 2017, the U.S. Court of Appeals for the District of Columbia Circuit reversed in part the district court's decision on the content of the corrective communications, striking certain content (the statement "Here is the Truth") and remanding to the district court the decision on how to revise certain other content. In June 2017, the U.S. District Court for the District of Columbia issued an order adopting modified corrective statements, featuring a preamble to the effect that a federal court has ordered the OPMs to make the specified statements, and featuring statements regarding the adverse health effects of smoking, the addictiveness of smoking and nicotine, the lack of significant health benefit from smoking "low tar", "light", "ultra light", "mild" and "natural" cigarettes, the manipulation of cigarette design and composition to ensure optimum nicotine delivery, and the adverse health effects of exposure to second hand smoke.

In October 2017, the U.S. District Court for the District of Columbia approved the parties' consent order implementing the corrective statements remedy for newspapers and television. According to the October 2017 court order, beginning in November 2017, the OPMs will run court-mandated announcements containing the agreed-upon corrective statements. Television announcements will be between 30 and 45 seconds long and will run in prime time

five days a week for 52 weeks. Full-page print ads will appear in at least 45 newspapers and will run on five weekends spread over approximately four months, and will also appear on the newspapers' websites. The corrective statements will also appear on company-owned websites and in "onserts" affixed to cigarette packs, and the parties are in the process of finalizing the details for the company-owned websites and onserts. Altria stated in its Form 8-K filed with the SEC on February 1, 2018 that in the second quarter of 2014, Altria and Philip Morris recorded provisions on each of their respective balance sheets totaling $31 million for the estimated costs of implementing the corrective communications remedy, and that although this estimate is subject to change, Altria and Philip Morris do not expect any change to be material.

Other Litigation

By way of example only, and not as an exclusive or complete list, the following are additional types of tobacco-related litigation which the tobacco industry is also the target of: (a) asbestos contribution cases, where asbestos manufacturers and related parties seek contribution or reimbursement where asbestos claims were allegedly caused in whole or in part by cigarette smoking, (b) patent infringement claims, (c) "ignition propensity cases" where wrongful death actions contend fires caused by cigarettes led to other individuals' deaths, (d) "filter cases" which mostly have been filed against Lorillard for alleged exposure to asbestos fibers there were incorporated into filter material used in one brand of cigarettes manufactured by Lorillard over 50 years ago, (e) claims related to smokeless tobacco products and electronic cigarettes, (f) ERISA claims, (g) antitrust claims and (h) employment litigation claims. Tobacco manufacturers are also subject to international litigation.

Defenses

The PMs have stated that they believe that they have valid defenses to the cases pending against them as well as valid bases for appeal should any adverse verdicts be returned against them. While PMs have indicated their intent to defend vigorously all tobacco products liability litigation, it is not possible to predict the outcome of any litigation. Litigation is subject to many uncertainties. Plaintiffs have prevailed in several cases, as noted herein, and it is possible that one or more of the pending actions could be decided unfavorably as to the PMs or the other defendants. The PMs may enter into discussions in an attempt to settle particular cases if the PMs believe it is appropriate to do so.

Some plaintiffs have been awarded damages from cigarette manufacturers at trial. While some of these awards have been overturned or reduced, other damages awards have been paid after the manufacturers have exhausted their appeals. These awards and other litigation activities against cigarette manufacturers and health issues related to tobacco products also continue to receive media attention. It is possible, for example, that the 2006 verdict in the DOJ case, which made many adverse findings regarding the conduct of the defendants, could form the basis of allegations by other plaintiffs or additional judicial findings against cigarette manufacturers. In addition, the U.S. Supreme Court ruling in *Good v. Altria* could result in further "lights" litigation. Any such developments could have material adverse effects on the ability of the PMs to prevail in smoking and health litigation and could influence the filing of new suits against the PMs. The type or extent of litigation that could be brought against PMs in the future cannot be predicted.

The foregoing discussion of civil litigation against the domestic tobacco industry is not exhaustive and is not based upon the examination or analysis by the Authority of the court records of the cases mentioned or of any other court records. It is based on SEC filings by Altria (as well as certain prior SEC filings of other OPMs) and on other publicly available information published by the OPMs or others. Prospective purchasers of the Series 2018 Bonds are referred to such SEC filings and applicable court records for additional descriptions thereof.

Litigation is subject to many uncertainties, and it is not possible to predict the outcome of litigation or estimate the possible loss or range of loss to the tobacco manufacturers. Altria has stated in its SEC filings that damages claimed in some tobacco-related and other litigation are or can be significant and, in certain cases, have ranged in the billions of dollars. Altria has further stated in its SEC filings that it is possible that the consolidated results of operations, cash flows or financial position of itself or one or more of its subsidiaries could be materially affected in a particular fiscal quarter or fiscal year by an unfavorable outcome or settlement of certain pending litigation. It can be expected that at any time and from time to time there will be developments in the litigation currently pending and filing of new litigation that could materially adversely affect the business of the PMs and the market for or prices of securities such as the Series 2018 Bonds payable from tobacco settlement payments made by the PMs under the MSA.

APPENDIX F

SUMMARY OF THE INDENTURE

The following is a brief summary of certain definitions and certain provisions of the Indenture. This summary does not purport to be comprehensive or definitive and is subject to, and qualified in its entirety by reference to, all of the terms and provisions of the Indenture. Copies of the Indenture may be obtained upon written request to the Trustee at The Bank of New York Mellon Trust Company, N.A., 500 Ross Street, 12th Floor, Pittsburgh, PA 15262. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2018 BONDS' and "THE SERIES 2018 BONDS" for further descriptions of certain terms and provisions of the Series 2018 Bonds. Unless otherwise specified below, all capitalized terms used in this APPENDIX F and not defined below have the same meanings given to such terms in the forepart of this Official Statement.

Certain Definitions

In addition to terms defined elsewhere in the Indenture, the following terms have the following meanings in this summary, unless the context otherwise requires:

"**Accounts**" or **"Funds"** means the Revenue Account, the Debt Service Account, the Other Financing Obligations Account, the Costs of Issuance Account, the Rebate Account and the Surplus Account, and any subaccounts within such accounts and any accounts established in connection with the issuance of Refunding Bonds, and any funds therein.

"Act" means 64 P.C.S. Section 1501 et seq., as amended from time to time, pursuant to which the Authority was created.

"Article II Revenues" means the revenues collected by the Commonwealth under Article II of the Act of the Tax Reform Code of 1971.

"**Authorized Denominatio**n" shall mean $5,000 or an integral multiple thereof.

"**Authorized Officer**" means: (i) in the case of the Authority, the Chairperson or Executive Director or any person or persons designated by resolution to act on behalf of the Authority and their successors in office, or any other officer as may be designated as an "authorized officer" by the Authority; (ii) in the case of the Trustee, any officer or authorized signer customarily performing functions similar to those performed in the administration of trusts and having direct responsibility for the administration of the Indenture; and (iii) in the case of the Commonwealth, means the Secretary, or his or her designee.

"**Bondholders**" or "**Holders**" or similar terms mean the registered owners of the Bonds registered as to principal and interest or as to principal only, as shown on the books of the Trustee.

"**Bonds**" means the obligations issued pursuant to the Indenture and described under the subheading "ISSUANCE OF BONDS", below, and Refunding Bonds issued pursuant to the Indenture.

"Business Day" means any day other than a Saturday or a Sunday or a legal holiday on which banking institutions in the Commonwealth or New York, New York, are required or authorized by law, regulation or executive order to be closed.

"**Code**" or "**Tax Code**" means the Internal Revenue Code of 1986, as amended.

"**Commonwealth**" or **"State"** means the Commonwealth of Pennsylvania.

"**Corporate Trust Office**" means the office of the Trustee at which the corporate trust business of the Trustee related hereto shall, at any particular time, be principally administered, which office is, at the date of the Indenture, located as follows: The Bank of New York Mellon Trust Company, N.A., 500 Ross Street, 12th Floor, Pittsburgh, PA 15262, Attention: CFA Tobacco Administrator.

"**Costs of Issuance**" means those costs related to the authorization, sale or issuance of Bonds, including but not limited to all fees, costs, expenses and governmental charges for: underwriting and transaction structuring, auditors or accountants, Rating Agency fees, printing, reproducing documents, filing and recording of documents, fiduciaries, legal services, financial advisory and professional consultants' services, credit ratings, execution, and transportation and safekeeping of Bonds.

"**Costs of Issuance Account**" means the Account so designated and established pursuant the Indenture.

"**Debt Service**" or **"Bond Payment Obligations"** means interest, principal and Sinking Fund Installments due on Outstanding Bonds.

"**Debt Service Account**" means the Account so designated and established pursuant to the Indenture.

"**Default**" means an Event of Default without regard to any declaration, notice or lapse of time.

"**Defeasance Collateral**" means money and, to the extent permitted by the Act, (a) non-callable direct obligations of, or obligations the principal of and the interest on which are unconditionally guaranteed by, the United States of America and which are entitled to the full faith and credit thereof, and (b) obligations issued by United States of America government agencies or instrumentalities, as to which the full and timely payment of the principal of, premium, if any, and the interest on which is fully and unconditionally guaranteed as a full faith and credit obligation of the United States of America (including any securities described in (a) or (b) issued or held in book entry form on the books of the Department of the Treasury of the United States of America).

"**Defeased Bonds**" means Bonds that remain in the hands of their Holders, but are deemed no longer Outstanding as specified in Clause (iv) of the definition below of "Outstanding".

"**DTC**" means The Depository Trust Company, a limited-purpose trust company organized under the laws of the State of New York, and includes any nominee of DTC in whose name any Bonds are then registered.

"**Eligible Investments**" shall mean and include any of the following securities, to the extent permitted under the Act:

(i) Direct obligations of, or obligations the principal of and the interest on which are unconditionally guaranteed by, the United States of America and which are entitled to the full faith and credit thereof;

(ii) Bonds, notes, debentures, or other obligations or securities issued by a federal government agency which, at the time of purchase, is rated "AAA" (or equivalent) by Standard & Poor's and Fitch, respectively, or if not rated by both of them, so rated by one of them and in the equivalent category by another nationally recognized rating agency;

(iii) Prime commercial paper of a corporation incorporated under the laws of any state of the United States of America with assets exceeding $ 500,000,000 if (i) such obligations which, at the time of purchase, are rated "A-1" and "F1" by Standard & Poor's and Fitch, respectively, or if not rated by both of them, so rated by one of them and in the equivalent category by another nationally recognized rating agency and which mature not later than 180 days from the date of purchase, (ii) such purchases do not exceed 10% of the corporation's outstanding obligations and (iii) no more than one-third of the public agency's funds may be invested in short term obligations of corporations;

(iv) Banker's acceptances issued by a domestic bank or a federally chartered domestic office of a foreign bank, which, at the time of purchase, are eligible for purchase by the Federal Reserve System, rated "A-1" and "F1" by Standard & Poor's and Fitch, respectively or, if not rated by either of them, rated in the equivalent category by another nationally recognized rating agency;

(v) Demand deposits, including interest bearing money market accounts, time deposits, trust funds, trust accounts, overnight bank deposits and interest-bearing deposits, other deposit products, certificates of deposit, including those placed by a third party pursuant to an agreement between the Authority and the Trustee, or bankers' acceptances of depository institutions, including the Trustee or any of its affiliates;

(vi) Shares in diversified open-end, no load investment funds, provided such funds are registered under the Investment Company Act of 1940, which is a money market mutual fund, which, at the time of purchase, has been rated "AAAm" and "AAAm-G" or the equivalent by Standard & Poor's and Fitch or, if not rated by either of them, rated in the equivalent category by another nationally recognized rating agency, and such fund is limited to obligations described in (i) or (ii) above and to agreements to repurchase such obligations, including those for which the Trustee or an affiliate performs services for a fee, whether as a custodian, transfer agent, investment advisor or otherwise;

(vii) Federally insured or collateralized certificates of deposit issued by banks (which may include the Trustee or an affiliate of the Trustee) which are state chartered banks, federally chartered banks or foreign banks with domestic offices. Collateralized certificates of deposit shall be collateralized by obligations described in clause (i) or (ii) above, which such obligations at all times have a market value (exclusive of accrued interest) at least equal to a minimum of one hundred and two percent (102%) of such bank deposits so secured, including interest;

(viii) Repurchase agreements relating to securities of the type specified in clauses (i) and (ii) above; provided that such securities in an amount at least equal to a market value at all times of at least one hundred and two percent (102%) of the amount of the agreements shall be delivered as security for such agreements to the account of the Trustee to be held therein during the term of the agreements;

(ix) The Pennsylvania Daily Invest Funds; and

(x) Any other obligations conforming to the requirements of the Public Funds Investment Act, so long as such obligations are rated, at the time of purchase, at least in the two highest rating categories of each of Standard & Poor's and Fitch, or if not rated by both of them, so rated by one of them and in the equivalent category by another nationally recognized rating agency.

"Enabling Act" means the Act of October 30, 2017, P.L. 672, No. 43 of the General Assembly of the Commonwealth.

"**Events of Default**" means an event specified under the heading below entitled "EVENTS OF DEFAULT."

"**Event of Non-Appropriation**" means the Legislature shall fail to appropriate funds (including any continuing appropriation which remains in effect) for any Fiscal Year in the amount required for the Office to meet its obligations under the Service Agreement.

"**Fiduciary**" means the Trustee, and each Paying Agent, if any.

"**Fiscal Year**" means the twelve (12) month period commencing July 1 of each year and ending on June 30 of the succeeding year.

"**Fitch**" means Fitch Ratings, Inc.

"Indenture" means the Trust Indenture, dated as of February 1, 2018, by and between the Authority and the Trustee, as amended and supplemented.

"**Legislature**" means the House of Representatives and the Senate of the Commonwealth.

"**Majority in Interest**" means as of any particular date of calculation the Holders of a majority of the Outstanding Bonds eligible to act on a matter, measured by Outstanding principal amount, payable at maturity.

“**Master Settlement Agreement**” or “**MSA**” means the MSA identified in the Enabling Act.

“**Maturity Date**” means the stated maturity date of each Serial Bond and Term Bond.

“Moody’s” means Moody’s Investors Services.

“Obligations” means the Bond Payment Obligations and the Other Financing Obligations.

“Office” means the Governor’s Office of the Budget.

“**Officer’s Certificate**” means a certificate signed by an Authorized Officer of the Authority.

“Other Financing Obligations” means (i) the on-going fees and expenses of the Trustee in administering the Indenture; and (ii) any other costs set forth in an Officer’s Certificate to be an expense to be paid pursuant to the Service Agreement.

“**Outstanding**” means, with respect to Bonds, all Bonds issued under the Indenture, excluding: (i) Bonds that have been exchanged or replaced, or delivered to the Trustee for credit against a principal payment; (ii) Bonds that have been paid; (iii) Bonds that have become due and for the payment of which money has been duly provided; and (iv) Bonds for which (A) there has been irrevocably set aside sufficient Defeasance Collateral timely maturing and bearing interest, to pay or redeem such Bonds and (B) any required notice of redemption shall have been duly given in accordance with the Indenture or irrevocable instructions to give notice shall have been given to the Trustee.

“**Paying Agent**” means each Paying Agent designated from time to time pursuant to the Indenture.

“**Payment Date**” means (i) each June 1 and December 1, commencing June 1, 2018, or if such date is not a Business Day, the following Business Day, (ii) each additional Payment Date selected by the Authority or the Trustee following an Event of Default, and (iii) each Payment Date, to the extent so characterized in a Supplemental Indenture.

“**Payment Default**” means the occurrence of an Event of Default specified under the heading below entitled “EVENTS OF DEFAULT.”

“Pledged Annual Payments” means the Pledged Annual Payments as defined in the Transfer Agreement.

“**Pledged Article II Revenues**” means the Article II Revenues pledged under Section 2804(c)(1) of the Enabling Act and certified by the Secretary under Section 2804(c)(2) of the Enabling Act, in the maximum annual amounts necessary to supplement the Pledged Annual Payments for payment of principal and interest for Bonds issued by the Authority under the Enabling Act.

“**Rating Agency**” means each nationally recognized statistical rating organization that has, at the request of the Authority, a rating in effect for the Bonds.

“**Rebate Account**” means the Account so designated and established pursuant to the Indenture.

“**Record Date**” means the fifteenth day of the calendar month preceding a Payment Date, and if such date is not a Business Day, the next succeeding Business Day; and the Authority or the Trustee may in its discretion establish special record dates for the determination of the Holders of Bonds for various purposes under the Indenture, including giving consent or direction to the Trustee.

“**Refunding Bonds**” means obligations issued under the Indenture to refund the Bonds, by exchange, purchase, redemption or payment. The final Maturity Date of any Refunding Bonds shall not exceed 30 years from the date of issuance of the Bonds.

"**Revenues"** means the Pledged Annual Payments received by the Trustee from the Transfer Agreement, all amounts payable under the Service Agreement and earnings on all Funds and Accounts under the Indenture, except for moneys in the Rebate Account.

"**S&P**" means S&P Global Ratings, a Division of the S&P Global, Inc.; references to S&P are effective so long as S&P is a Rating Agency.

"**Securities Depository**" means DTC, or if the incumbent Securities Depository resigns from its functions as depository of the Bonds or the Authority discontinues use of the incumbent Securities Depository, then any other securities depository designated in an Officer's Certificate of the Authority.

"**Serial Bonds**" means the Bonds so specified in the Indenture and described under the subheading "ISSUANCE OF BONDS", below, with a stated maturity date or as specified in a Supplemental Indenture.

"**Service Agreement**" means the Service Agreement, dated as of February 1, 2018, by and between the Authority and the Commonwealth, as amended, supplemented and in effect from time to time.

"**Sinking Fund Installment**" means a scheduled amount set forth under the Indenture for required amortization prior to maturity of a Term Bond.

"**Sinking Fund Installment Date**" means the date scheduled for the payment of a Sinking Fund Installment.

"**Supplemental Indenture**" means a supplement to the Indenture adopted and becoming effective in accordance with the terms of the Indenture.

"**Surplus Account**" means the account so designated and established pursuant to the Indenture.

"**Surplus Revenues**" means all moneys received by the Trustee pursuant to the Service Agreement, other than Pledged Annual Payments and Pledged Article II Revenues, that are in excess of the deposit requirements under the Indenture and as described in clauses (a)(1)-(2) under the heading "Application of Revenues" below.

"**Tax-Exempt Bonds**" means the Bonds and any Refunding Bonds so identified by the Authority.

"**Term Bonds**" means the Bonds with a stated maturity date but requiring the payment of Sinking Fund Installments, or as specified in a Supplemental Indenture.

"**Transaction Counsel**" or **"Bond Counsel"** means a nationally recognized bond counsel as may be selected by the Authority for a specific purpose under the Indenture.

"**Transfer Agreement**" means the Transfer Agreement, dated as of February 1, 2018, by and between the Authority and the Commonwealth, as amended, supplemented and in effect from time to time.

"**Trust Estate**" collectively refers to the pledges and security interests with respect to the Bond Payment Obligations and Other Financing Obligations as described in the Indenture.

"**Trustee**" means The Bank of New York Mellon Trust Company, N.A., until a successor shall become such pursuant to the applicable provisions of the Indenture and, thereafter, "Trustee" shall mean the successor Trustee.

"**Written Notice**", "**written notice**" or "**notice in writing**" means notice in writing which may be delivered by hand or first class mail and also means facsimile transmission and electronic mail transmission.

Pledge of Trust Estate

As set forth in the Indenture, in order to secure Bond Payment Obligations with respect to the Bonds issued and Outstanding under the Indenture and to secure the performance and observance of all the covenants and conditions set forth in the Indenture, the Authority under the Indenture, pledges and assigns to the Trustee and grants to the

Trustee a security interest in all right, title and interest of the Authority in and to (i) the Pledged Annual Payments; (ii) the Transfer Agreement; (iii) the Service Agreement; (iv) all monies deposited into accounts or funds created by the Indenture and held by the Trustee, other than the Rebate Fund; and (v) all investment earnings on monies held in accounts and funds established by the Indenture, other than the Rebate Fund (collectively, the "Pledged Property").

In order to secure Other Financing Obligations, the Authority under the Indenture pledges and assigns to the Trustee and grants to the Trustee, subject and subordinate to the pledge and security interest granted to secure Bond Payment Obligations, a security interest in all right, title and interest of the Authority in the Service Agreement; provided, however, that neither Pledged Annual Payments nor Article II Revenues shall secure Other Financing Obligations (the pledges and security interests with respect to the Bond Payment Obligations and the Other Financing Obligations being collectively referred to as the "Trust Estate").

Debt or Liability

(a) The Authority is obligated to pay the principal of and interest on the Bonds only from the Trust Estate pledged or available for repayment.

(b) The Commonwealth shall not be obligated to pay the principal of and interest on the Bonds.

(c) The full faith and credit of the Commonwealth is not pledged to the payment of the principal of or the interest on the Bonds. The Authority has no taxing power.

Waiver of Personal Liability

No member, officer, agent or employee of the Authority shall be individually or personally liable for the payment of the principal or redemption price or interest on the Bonds or be subject to any personal liability or accountability by reason of the issuance thereof; but nothing contained in the Indenture shall relieve any such member, officer, agent or employee from the performance of any official duty provided by law or by the Indenture

The Bonds

Issuance of Bonds. The Authority shall issue the Bonds and Refunding Bonds in accordance with the provisions set forth in the Indenture. Following the issuance of the Bonds, only Refunding Bonds may be issued under the Indenture. The Bonds shall be issued for the purpose of providing General Fund budgetary relief as provided in the Enabling Act.

The Bonds may be issued as Serial Bonds or Term Bonds.

Simultaneously with the issuance of the Bonds, there shall be delivered to the Trustee duly executed by the parties thereto, the Transfer Agreement and the Service Agreement.

Denominations; Date; Maturity; Numbering. The Bonds shall be delivered in the form of fully registered Bonds in Authorized Denominations of $5,000 and any integral multiple thereof. The Bonds shall be registered initially in the name of "Cede & Co.," as nominee of the Securities Depository and shall be evidenced by one Bond for each maturity of the Bonds in the total aggregate principal amount of the Bonds. Registered ownership of the Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Indenture. The Bonds shall be dated the date of their initial issuance and shall mature (subject to prior redemption) on their respective maturity dates. The Bonds shall be numbered from R-1 upward.

Refunding Bonds. The Authority may issue Refunding Bonds from time to time under the Indenture containing such terms as are set forth under the Indenture, as supplemented by a Supplemental Indenture. Refunding Bonds may be issued and the Trustee shall authenticate and deliver such Refunding Bonds when there have been filed with the Trustee the following:

(a) A certified resolution of the Authority authorizing (1) the execution and delivery of a Supplemental Indenture providing for, among other things the date, rate or rates of interest on, interest payment dates, Maturity Dates (which shall not exceed 30 years from the date of original issuance of the Bonds) and redemption provisions of such Refunding Bonds, and (2) the issuance, sale, execution and delivery of the Refunding Bonds;

(b) An original executed counterpart of the Supplemental Indenture and an original executed counterpart of an amendment to the Transfer Agreement and Service Agreement which extends the Office's obligation to make payments thereunder, subject to the provisions thereof, to the Refunding Bonds, if required;

(c) An Opinion of Bond Counsel, addressed to the Authority and to the Trustee, which includes opinions to the effect that (1) the issuance of the Refunding Bonds is permitted under the Indenture, the Act and Enabling Act (2) the Supplemental Indenture and the Refunding Bonds have been duly authorized, executed and delivered and are valid, binding and enforceable obligations of the Authority;

(d) A request of the Authority to the Trustee to authenticate and deliver the Refunding Bonds to such Person or Persons named therein after confirmation of payment to the Trustee for the account of the Authority of a sum specified in such Request (which may include directions as to the disposition of such sum); and

(e) Such further documents and deposits of funds as are required by the provisions of the Supplemental Indenture.

Defeasance

When (i) there is held by or for the account of the Trustee, Defeasance Collateral in such principal amounts, bearing fixed interest at such rates and with such maturities as will provide sufficient funds to pay or redeem all or any portion of Outstanding Bonds in accordance with their terms (to be verified by a nationally recognized firm of independent certified public accountants or other professionals expert in verifying bond defeasance escrows), (ii) any required notice of redemption shall have been duly given in accordance with the Indenture or irrevocable written instructions to give notice shall have been given to the Trustee, and (iii) all payment of Other Financing Obligations owed to the Fiduciaries have been provided for, then upon written notice from the Authority to the Trustee, the Holders shall cease to be entitled to any benefit or security under the Indenture except the right to receive payment of the funds so held and other rights which by their nature cannot be satisfied prior to or simultaneously with termination of the lien under the Indenture, the security interests created by the Indenture (except in such funds and investments) shall terminate, and the Authority and the Trustee shall execute and deliver such instruments as may be necessary to discharge the Trustee's lien and security interests created under the Indenture. Upon such defeasance, the funds and investments required to pay or redeem such Bonds shall be irrevocably set aside for that purpose, subject, however, to the provisions of the Indenture and as described under the heading "UNCLAIMED MONEY", below, and money held for defeasance shall be invested only in Defeasance Collateral and applied by the Trustee and other Paying Agents, if any, to the retirement of such Bonds and such other obligations. When provision for payment or redemption is made in accordance with the Indenture for less than all the Bonds of a maturity, the Trustee shall choose by lot the particular Bond or Bonds and maturity to be so paid or redeemed. Upon defeasance of all Outstanding Bonds, the lien of the Indenture shall be extinguished, the Indenture shall be deemed terminated and any funds or property held by the Trustee and not required for payment or redemption of such Bonds or shall be distributed to, or upon the order of, the Authority.

Accounts

The following Accounts and subaccounts are established by the Indenture and shall be held and maintained by the Trustee:

Revenue Account;
Debt Service Account and within the Debt Service Account, the following subaccounts:
Pledged Annual Payments/Master Settlement Subaccount;
Pledged Article II Revenues/Other Appropriated Funds Subaccount;
Capitalized Interest Subaccount;
Other Financing Obligations Account;

Costs of Issuance Account;
Surplus Account; and
Rebate Account.

The Authority may also by Supplemental Indenture create additional Accounts and sub-accounts within any Account. Amounts in the foregoing Accounts may be invested by the Trustee in Eligible Investments pursuant to the Indenture and described under the heading "INVESTMENTS", below.

Use of Proceeds of the Bonds; Costs of Issuance

Upon issuance of the Bonds, the amount of proceeds thereof specified in an Officer's Certificate shall be (i) paid to the Commonwealth pursuant to the Enabling Act for deposit to the General Fund, (ii) deposited in the Capitalized Interest Subaccount to pay interest on the Bonds to June 1, 2019, and (iii) deposited in the Costs of Issuance Account for payment of the Costs of Issuance. Payment of the Costs of Issuance not paid at the time the Bonds are issued shall be made by the Trustee from the proceeds of the Bonds on deposit in the Costs of Issuance Account upon receipt of an Officer's Certificate stating with respect to each payment the name of each payee, the amount payable to each payee and that each payment constitutes Costs of Issuance. Any money or investments held in the Costs of Issuance Account for more than 180 days shall be transferred to the Debt Service Account and be used to pay interest on the Bonds on the next succeeding Payment Date.

Application of Revenues

(a) **Deposit and Transfer of Revenues**. The Trustee will deposit all Revenues received by it pursuant to the Transfer Agreement or the Service Agreement to the Revenue Account; not later than five Business Days following each deposit of Revenues to the Revenue Account (but in no event later than the next Payment Date), the Trustee will withdraw Revenues on deposit in the Revenue Account and transfer such amounts as follows and in the following order of priority:

(1) to the Pledged Annual Revenues/Master Settlement Subaccount, an amount equal to the Pledged Annual Payments or moneys received under the Master Settlement Agreement which have been appropriated by the Legislature;

(2) to the Pledged Article II Payments/Other Appropriated Funds Subaccount, amounts constituting Pledged Article II Revenues or funds, other than moneys received under the Master Settlement Agreement, which have been appropriated by the Legislature for the payment of Debt Service; and

(3) to the Surplus Account, the Surplus Revenues.

(b) Not later than five Business Days following each deposit of Surplus Revenues to the Surplus Account (but in no event later than the next Payment Date), the Trustee shall withdraw Surplus Revenues from the Surplus Account and transfer such amounts as follows and in the following order of priority:

(1) to the Other Financing Obligations Account, the amount required to pay Trustee fees and expenses (including reasonable attorney's fees, if applicable) reasonably expected to be due during the next Fiscal Year; and

(2) to the Other Financing Obligations Account, the amount set forth in an Officer's Certificate necessary to pay Other Financing Obligations then due and payable or reasonably expected to be due during the next Fiscal Year.

(c) **Application of Revenues; Capitalized Interest**. The Trustee will apply amounts in the various subaccounts of the Debt Service Account in the following order of priority:

(1) from the Capitalized Interest Subaccount, on each Payment Date to and including June 1, 2019, to pay interest on the Bonds;

(2) on each Payment Date, from and after December 1, 2019, first from the Pledged Annual Payments/Master Settlement Subaccount and thereafter, if necessary, from the Pledged Article II Revenues/ Other Appropriated Funds Subaccount, to pay interest on the Outstanding Bonds due on such Payment Date;

(3) on each Payment Date, from and after December 1, 2019, first from the Pledged Annual Payments/Master Settlement Subaccount and thereafter, if necessary, from the Pledged Article II Revenues/Other Appropriated Funds Subaccount, to pay in order of Maturity Dates and Sinking Fund Installment Dates, the principal and Sinking Fund Installments due on such Payment Date; and

(4) from the Other Financing Obligations Account, as and when moneys are transferred thereto, to the parties entitled thereto (or to the Rebate Account), the Trustee's fees and expenses and the Other Financing Obligations set forth in clauses (b)(1) and (2) above.

Investments

(a) Pending its application under the Indenture, moneys in the Funds, Accounts and Subaccounts may be invested by the Trustee pursuant to written direction of the Authority in Eligible Investments maturing or redeemable at the option of the holder at or before the time when such money is expected to be needed. Specifically, Eligible Investments shall mature or be redeemable at the option of the Authority in an amount and at such times sufficient to make payments under the Indenture on the applicable Payment Dates. Investments shall be held by the Trustee in the respective Funds, Accounts and Subaccounts, shall not be comingled, and shall be sold or redeemed to the extent necessary to make payments or transfers from each Fund, Account or Subaccount. Investment earnings on moneys in the Pledged Annual Payments/Master Settlement Subaccount shall remain therein; investment earnings on moneys in the Pledged Article II Revenues/Other Appropriated Funds Subaccount shall remain therein. Investment earnings on other Funds, Accounts and Subaccounts (other than moneys in the Rebate Account) shall be transferred monthly by the Trustee to the Pledged Article II Revenues/Other Appropriated Funds Subaccount. The Trustee shall not be liable for any losses on investments made at the direction of the Authority. The Trustee may conclusively rely upon the Authority's written instructions as to both the suitability and legality of the directed investments. Ratings of Eligible Investments shall be determined at the time of purchase of such Eligible Investments and without regard to ratings subcategories. The Trustee may make any and all such investments through its own investment department or that of its affiliates or subsidiaries, and may charge its ordinary and customary fees for such trades, including cash sweep account fees. In the absence of directions from the Authority, the Trustee shall invest in the Pennsylvania Invest Daily Fund or its successor or, if not available, investments by the Commonwealth of Pennsylvania Department of Treasury pursuant to the Memorandum of Understanding with the Authority dated December 1, 2006, or any successor agreement providing for investments pursuant to the Commonwealth Financing Authority Investment Policy.

(b) In computing the amount in a Fund or Account, the value of Eligible Investments shall be determined by the Trustee at least as frequently as the third Business Day preceding each Payment Date and shall be calculated as follows:

(i) As to investments the bid and asked prices of which are published on a regular basis in The Wall Street Journal, the average of the bid and asked prices for such investments so published on or most recently prior to such time of determination;

(ii) As to investments the bid and asked prices of which are not published on a regular basis in The Wall Street Journal, the average bid price at such time of determination for such investments by any two nationally recognized government securities dealers (selected by the Trustee in its absolute discretion) at the time making a market in such investments or the bid price published by a nationally recognized pricing service;

(iii) As to certificates of deposit and bankers acceptances, the face amount thereof, plus accrued interest; and

(iv) As to any investment not specified above, the value thereof established by prior agreement between the Authority and the Trustee.

(c) The Trustee may hold undivided interests in Eligible Investments for more than one Fund or Account (for which they are eligible) and may make interfund transfers in kind.

(d) In respect of Defeasance Collateral held for Defeased Bonds, the provisions under this section "INVESTMENTS" shall be effective only to the extent it is consistent with other applicable provisions of the Indenture or any separate escrow agreement.

Unclaimed Money

Anything in the Indenture to the contrary notwithstanding, any money held by a Fiduciary in trust for the payment and discharge of any of the Bonds which remain unclaimed after the date when such Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such money was held by the Fiduciary at such date, or after the date of deposit of such money if deposited with the Fiduciary after the said date when such Bonds became due and payable, shall be applied when and as provided in by the escheat laws of the Commonwealth and the Fiduciary shall thereupon be released and discharged with respect thereto and the Bondholders shall have such rights as are provided in said laws.

Rebate

(a) The Trustee shall establish and maintain an account separate from any other account established and maintained under the Indenture designated as the Rebate Account. Subject to the transfer provisions provided in paragraph (e) below, all money at any time deposited in the Rebate Account shall be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement (as defined, computed and provided to the Trustee by the Authority), for payment to the United States Treasury. Neither the Authority nor any Bondholder shall have any rights in or claim to such money in the Rebate Account. All amounts deposited into or on deposit in the Rebate Account shall be governed by the provisions set forth under this section entitled "REBATE". The Trustee shall be deemed conclusively to have complied with such provisions if it follows such directions of the Authority.

(b) Upon the Authority's written direction, an amount shall be deposited to the Rebate Account by the Trustee from amounts on deposit in the Other Financing Obligations Account so that the balance in the Rebate Account shall equal the Rebate Requirement. Computations of the Rebate Requirement shall be furnished by or on behalf of the Authority. Upon request, the Trustee shall supply to the Authority information to determine the Rebate Requirement to the extent such information is in the records of the Trustee.

(c) The Trustee shall have no obligation to rebate any amounts required to be rebated pursuant to this provision, other than from money held in the Rebate Account.

(d) At the written direction of the Authority, the Trustee shall invest all amounts held in the Rebate Account in Eligible Investments. Money shall not be transferred from the Rebate Account except as provided below. The Trustee shall not be liable for any consequences arising from such investment.

(e) Upon receipt of the Authority's written directions, the Trustee shall remit part or all of the balances in the Rebate Account to the United States, as directed in writing by the Authority. In addition, if the Authority so directs, the Trustee will deposit money into or transfer money out of the Rebate Account from or into such Accounts or Funds as directed by the Authority's written directions; provided, however, that only money in excess of the Rebate Requirement may, at the written direction of the Authority, be transferred out of the Rebate Account to such other Accounts or Funds or to anyone other than the United States in satisfaction of the arbitrage rebate obligation. Any funds remaining in the Rebate Account after each five year remittance to the United States, redemption and payment of all of the Bonds and payment and satisfaction of any Rebate Requirement, or after provision has been made therefor satisfactory to the Trustee, shall be transferred to or upon the order of the Authority.

Notwithstanding any other provision of the Indenture, the obligation to remit the Rebate Requirement to the United States and to comply with all other requirements of this provision shall survive the defeasance or payment in full of the Tax-Exempt Bonds.

Redemption of Bonds

The Bonds are subject to redemption prior to maturity as described in the forepart of the Official Statement under the heading "THE SERIES 2018 BONDS—Redemption Provisions."

Particular Covenants

Payment of Obligations, etc. The Authority shall punctually cause to be paid all Bond Payment Obligations on the Bonds, in strict conformity with the terms of the Bonds and of the Indenture, according to the true intent and meaning thereof, but only out of the Trust Estate. The Authority also shall punctually cause to be paid all Other Financing Obligations, in strict conformity with the terms thereof, according to the true intent and meaning thereof, but only out of the Trust Estate and only to the extent provided under the Indenture.

Extension of Payment of Bonds. The Authority shall not directly or indirectly extend or assent to the extension of the maturity of any of the Bonds or the time of payment of any claims for interest by the purchase or funding of such Bonds or claims for interest or by any other arrangement and in case the maturity of any of the Bonds or the time of payment of any such claims for interest shall be extended, such Bonds or claims for interest shall not be entitled, in case of any default under the Indenture, to the benefits of the Indenture, except subject to the prior payment in full of the principal of all of the Bonds then Outstanding and of all claims for interest thereon that shall not have been so extended.

Against Encumbrances. The Authority shall not create, or permit the creation of, any pledge, lien, charge or other encumbrance upon the Revenues and other assets pledged or assigned under the Indenture while any of the Bonds or Other Financing Obligations are Outstanding, except the pledge and assignment created by the Indenture.

Power to Issue Bonds and Make Pledge and Assignment. The Authority is duly authorized pursuant to law to issue the Bonds and to enter into the Indenture and to pledge and assign the Pledged Annual Payments, the Transfer Agreement and the Service Agreement under the Indenture in the manner and to the extent provided in the Indenture. The Bonds and the provisions of the Indenture are and will be the legal, valid and binding limited obligations of the Authority enforceable in accordance with their terms, and the Authority and Trustee shall at all times, to the extent permitted by law, defend, preserve and protect said pledge and assignment of Revenues and other assets and all the rights of the Bondholders under the Indenture against all claims and demands of all persons whomsoever.

Accounting Records and Financial Statements. The Trustee shall at all times keep, or cause to be kept, proper books of record and account, prepared in accordance with the Trustee's accounting practices for books of record and account relating to similar trust accounts, in which complete and accurate entries shall be made of all transactions relating to the proceeds of Bonds, the Transfer Agreement, the Service Agreement and all funds and accounts established pursuant to the Indenture. Such books of record and account shall be available for inspection by the Authority, and at the written request of Holders of an aggregate amount of Bonds not less than 25% in principal amount Outstanding, to any Bondholder, or his agent or representative duly authorized in writing, at reasonable hours and under reasonable circumstances.

The Trustee shall file and furnish on or before the 15th day of each month to the Authority, and each Bondholder who shall have filed his or her name and address with the Trustee for such purpose a complete financial statement (which need not be audited) covering receipts, disbursements, allocation and application of Revenues and any other monies (including proceeds of Bonds) in any of the funds and accounts established pursuant to the Indenture for the preceding month.

Tax Covenants. The Authority shall at all times do and perform all acts and things permitted by law and the Indenture that are necessary or desirable in order to assure that interest paid on any Tax-Exempt Bonds will not be includible gross income for purposes of federal income taxes and shall take no action that would result in such interest not being excluded from gross income for federal income taxes.

Transfer Agreement and Service Agreement. The Authority agrees to comply with the respective applicable terms of the Transfer Agreement and the Service Agreement. The Trustee shall seek to cause the Office to

perform all duties imposed upon it pursuant to the Service Agreement. In addition, the Trustee shall promptly collect all amounts due from the Office pursuant to the Service Agreement.

The Authority may amend, modify or terminate any of the terms of the Transfer Agreement and the Service Agreement without the consent of the Trustee, or any Bondholders (a) if such amendment, modification or termination will not materially adversely affect the interests of the Bondholders or (b) if such amendment, modification or termination is reasonably required in connection with an appropriation by the Commonwealth to pay moneys pursuant to the Service Agreement. No such amendment, modification or termination shall reduce the amounts to be paid to the Authority or the Trustee by the Office pursuant to the Service Agreement below the amounts necessary to make payments under the Indenture, or extend the time for making such payments, without the written consent of all of the Holders of all Obligations then Outstanding.

Waiver of Laws. The Authority shall not at any time insist upon or plead in any manner whatsoever, or claim or take the benefit or advantage of, any stay or extension law now or at any time hereafter in force that may affect the covenants and agreements contained in the Indenture or in the Bonds, and all benefit or advantage of any such law or laws is expressly waived under the Indenture by the Authority to the extent permitted by law.

Ratings. The Authority shall pay such reasonable fees and provide such available information as may be necessary to obtain and keep in effect ratings on the Bonds from at least one Rating Agency.

The Holders

Action by Holders. Any request, authorization, direction, notice, consent, waiver or other action provided by the Indenture to be given or taken by Holders of Bonds may be contained in and evidenced by one or more writings of substantially the same tenor signed by the requisite number of Holders or their attorneys duly appointed in writing. Proof of the execution of any such instrument, or of an instrument appointing any such attorney, shall be sufficient for any purpose of the Indenture (except as otherwise therein expressly provided) if made in the following manner, but the Authority or the Trustee may nevertheless in its discretion require further or other proof in cases where it deems the same desirable. The fact and date of the execution by any Bondholder or his attorney of such instrument may be proved by the certificate or signature guarantee, which need not be acknowledged or verified, of an officer of a bank, trust company or securities dealer satisfactory to the Authority or to the Trustee; or of any notary public or other officer authorized to take acknowledgments of deeds to be recorded in the state in which he purports to act, that the person signing such request or other instrument acknowledged to him the execution thereof, or by an affidavit of a witness of such execution, duly sworn to before such notary public or other officer. The authority of the person or persons executing any such instrument on behalf of a corporate Holder may be established without further proof if such instrument is signed by a person purporting to be the president or a vice president of such corporate Holder with a corporate seal affixed and attested by a person purporting to be its clerk or secretary or an assistant clerk or secretary. Any action by the owner of any Bond shall be irrevocable and bind all future record and beneficial owners thereof.

Registered Owners. The provisions in the Indenture applicable to DTC as Holder of immobilized Bonds shall not be construed in limitation of the rights of the Authority and each Fiduciary to rely upon the registration books in all circumstances and to treat the registered owners of Bonds as the owners thereof for all purposes not otherwise specifically provided for by law or in the Indenture. Notwithstanding any other provisions hereof, any payment to the registered owner of a Bond shall satisfy the Authority's obligations thereon to the extent of such payment.

Defaults and Remedies

Events of Default. "Event of Default" under the Indenture means any one of the following:

(a) principal or Sinking Fund Installments of or interest on any Bond has not been paid when due (a "Payment Default");

(b) any Other Financing Obligations have not been paid when due;

(c) the Authority fails to observe or perform any other provision of the Indenture, which failure is not remedied within 60 days after written notice thereof is given to the Authority by the Trustee or to the Authority

and the Trustee by the Holders of at least 25% in principal amount of the Bonds then Outstanding. In the case of a Default under this clause (c), if the Default cannot be corrected within the said 60-day period and is diligently pursued until the Default is corrected, it shall not constitute an Event of Default if corrective action is instituted by the Authority within said 60-day period and diligently pursued until the Default is corrected;

(d) the Transfer Agreement or the Service Agreement shall for any reason cease to be valid and binding or shall be declared to be null and void as a result of an act of the Legislature or a final, non-appealable judgment or order of a court or governmental agency or authority having jurisdiction over the Office or in a judicial proceeding or any other official action commenced by the Office shall result in a non-applicable judgment or order of court declaring the Transfer Agreement or the Service Agreement null and void or unenforceable or the validity or enforceability of the Transfer Agreement or the Service Agreement shall be contested by the Office or the Office shall deny that it has any or further liability or obligation under the Transfer Agreement or the Service Agreement; or

(e) bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of debtors, are instituted by or against the Authority and, if instituted against the Authority, are not dismissed within 60 days after such institution.

NOTWITHSTANDING ANYTHING CONTAINED IN THIS PROVISION TO THE CONTRARY, AN EVENT OF NON-APPROPRIATION SHALL NOT CONSTITUTE AN EVENT OF DEFAULT.

Remedies. (a) If an Event of Default occurs, the Trustee may, and upon written request of the Holders of not less than 25% in principal amount of the Bonds Outstanding shall, in its own name by action or proceeding in accordance with the law:

(i) by an action in mandamus, or otherwise, enforce all rights of the Holders and require the Authority or, to the extent permitted by law, the Office to perform its duties under the Transfer Agreement and the Service Agreement;

(ii) sue upon such Bonds;

(iii) require the Authority to account as if it were the trustee of an express trust for the Holders of such Bonds; and

(iv) enjoin any acts or things which may be unlawful or in violation of the rights of the Holders of such Bonds.

(b) In no event shall the principal of any Bond be accelerated and declared due and payable in advance of its stated maturity and the Trustee and the Holders have no right to do so.

(c) The Trustee shall, in addition to the other provisions under this section "REMEDIES", have and possess all of the powers necessary or appropriate for the exercise of any functions incident to the general representation of Holders in the enforcement and protection of their rights.

Upon the occurrence of a Payment Default, the Trustee shall give written notice thereof to the Authority. The Trustee shall give Default notices under certain provisions of the Indenture when instructed to do so by the written direction of another Fiduciary or the Holders of at least 25% in principal amount of the Outstanding Bonds. The Trustee shall proceed for the benefit of the Holders in accordance with the written direction of a Majority in Interest of the Outstanding Bonds. The Trustee shall not be required to take any remedial action (other than the giving of notice) unless indemnity satisfactory to the Trustee is furnished for any expense or liability to be incurred therein. Upon receipt of written notice, direction and indemnity, and after making such investigation, if any, as it deems appropriate to verify the occurrence of any event of which it is notified as aforesaid, the Trustee will promptly pursue the remedies provided by the Indenture or any such remedies (not contrary to any such direction) as it deems appropriate for the protection of the Holders, and will act for the protection of the Holders with the same promptness and prudence as would be expected of a prudent person in the conduct of such person's own affairs.

Waiver. If the Trustee determines that a Default has been cured before becoming an Event of Default and before the entry of any final judgment or decree with respect to it, the Trustee may waive the Default and its consequences, by written notice to the Authority, and shall do so upon written instruction of the Holders of at least 25% in principal amount of the Outstanding Bonds.

Remedies Cumulative. The rights and remedies under the Indenture shall be cumulative and shall not exclude any other rights and remedies allowed by law, provided there is no duplication of recovery. The failure to insist upon a strict performance of any of the obligations of the Office or the Authority or to exercise any remedy for any violation thereof shall not be taken as a waiver in the future of the right to insist upon strict performance by the Office or the Authority or of the right to exercise any remedy for the violation.

Delay or Omission Not a Waiver. No delay or omission of the Trustee or of any Holder to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or acquiescence therein. Every right and remedy given hereby or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

Individual Remedies. No one or more Holders may by his or their action affect, disturb or prejudice the pledge created by the Indenture, or enforce any right under the Indenture, except in the manner provided therein; and all proceedings at law or in equity to enforce any provision of the Indenture will be instituted, had and maintained in the manner provided in the Indenture and for the equal benefit of all Holders; but nothing in the Indenture will affect or impair the right of any Holder of any Bond to enforce payment of the principal of, premium, if any, or interest thereon at and after the same comes due pursuant to the Indenture, or the obligation of the Authority to pay such principal, premium, if any, and interest on each of the Bonds to the respective Holders thereof at the time, place, from the source and in the manner expressed in the Indenture and in the Bonds.

Venue. The venue of every action, suit or special proceeding against the Authority shall be laid in the Commonwealth and shall be heard and determined in any court of the Commonwealth of competent jurisdiction, in accordance with the Act.

Supplements and Amendments to the Indenture

The Indenture may be:

(i) supplemented by delivery to the Trustee of an instrument certified by an Authorized Officer of the Authority to (A) provide for earlier or greater deposits into the Funds and Accounts, (B) subject any property to the lien of the Indenture, (C) add to the covenants and agreements of the Authority or surrender or limit any right or power of the Authority, (D) identify particular Bonds for purposes not inconsistent herewith, including credit or liquidity support, serialization and defeasance, (E) cure any ambiguity or defect, (F) protect the exclusion of interest on the Tax-Exempt Bonds from gross income for federal income tax purposes, or the exemption from registration of the Bonds under the Securities Act of 1933, as amended, or of the Indenture under the Trust Indenture Act of 1939, as amended, or (G) authorize Refunding Bonds and in connection therewith determine the matters referred to in the Indenture and any other things relative to such Refunding Bonds that are not materially adverse to the Holders of Outstanding Bonds; or

(ii) amended in any other respect by the Authority and the Trustee, (A) to add provisions that are not materially adverse to the Holders, or (B) to adopt amendments that do not take effect unless and until (1) no Bonds Outstanding prior to the adoption of such amendment remain Outstanding or (2) such amendment is consented to by the Holders of such Bonds in accordance with the further provisions of the Indenture; or

(iii) otherwise amended only with written notice to the Rating Agencies and the written consent of a Majority in Interest of the Bonds to be Outstanding and affected thereby; provided, however, that the Indenture shall not be amended so as to (A) extend the maturity of any Bond, (B) reduce the principal or Sinking Fund Installment amount, applicable premium or interest rate of any Bond, (C) make any Bond redeemable other than in accordance with its terms, (D) create a preference or priority of any Bond over any other Bond of the same class or

(E) reduce the percentage of the Bonds required to be represented by the Holders giving their consent to any amendment unless the Holders of the Bonds affected thereby have consented thereto in writing.

Any amendment of the Indenture shall be accompanied by a Transaction Counsel's opinion addressed to the Trustee to the effect that the amendment is authorized and permitted by law and by the Indenture and does not adversely affect the exclusion of interest on the Tax-Exempt Bonds from gross income for federal income tax purposes.

When the Authority determines that the requisite number of consents have been obtained for an amendment pursuant to the Indenture which requires consents, it shall file a certificate to that effect in its records and give written notice to the Trustee and the Holders. The Trustee will promptly certify to the Authority that it has given such notice to all Holders and such certificate will be conclusive evidence that such notice was given in the manner required thereby.

Duties, Immunities and Liabilities of Trustees

(a) The Authority appoints the Trustee to serve as trustee under the Indenture. Prior to an Event of Default, and after the curing of all Events of Default that may have occurred, the Trustee shall perform such duties and only such duties as are specifically set forth in the Indenture. The Trustee shall, during the existence of any Event of Default (that has not been cured), exercise such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in their exercise, as a prudent trustee would exercise or use under the circumstances in the conduct of his own affairs.

(b) The Authority may remove the Trustee at any time upon not less than with thirty (30) days' notice unless an Event of Default shall have occurred and then be continuing, and shall remove the Trustee if at any time the Trustee shall cease to be eligible in accordance with this provision, or shall become incapable of acting, or shall be adjudged as bankrupt or insolvent, or a receiver of the Trustee or its property shall be appointed, or any public officer shall take control or charge of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation, in each case by giving written notice of such removal to the Trustee, and thereupon shall appoint a successor Trustee by an instrument in writing. If an Event of Default shall have occurred and then be continuing, the Holders of a majority of the Outstanding Bonds may remove the Trustee by giving written notice of such removal to the Trustee and the Authority, and thereupon shall appoint a successor Trustee by an instrument in writing.

(c) The Trustee may at any time resign by giving written notice of such resignation to the Authority and by giving the Bondholders notice of such resignation by mail at the addresses shown on the bond registration books maintained by the Trustee. Upon receiving such notice of resignation, the Authority shall promptly appoint a successor Trustee by an instrument in writing. The Trustee shall not be relieved of its duties until such successor Trustee has accepted appointment.

(d) Any removal or resignation of the Trustee and appointment of a successor Trustee shall only become effective upon acceptance of appointment by the successor Trustee. If no successor Trustee shall have been appointed and have accepted appointment within 45 days of giving notice of removal or notice of resignation as aforesaid, the resigning Trustee or any Bondholder (on behalf of himself and all other Bondholders) may petition any court of competent jurisdiction for the appointment of a successor Trustee, and such court may thereupon, after such notice (if any) as it may deem proper, appoint such successor Trustee. Any successor Trustee appointed under the Indenture, shall signify its acceptance of such appointment by executing and delivering to the Authority and to its predecessor Trustee a written acceptance thereof, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become vested with all the monies, estates, properties, rights, powers, trusts, duties and obligations of such predecessor Trustee, with like effect as if originally named Trustee in the Indenture; but, nevertheless at the Request of the Authority or the request of the successor Trustee, such predecessor Trustee shall execute and deliver any and all instruments of conveyance or further assurance and do such other things as may reasonably be required for more fully and certainly vesting in and confirming to such successor Trustee all the right, title and interest of such predecessor Trustee in and to any property held by it under the Indenture and shall pay over, transfer, assign and deliver to the successor Trustee any money or other property subject to the trusts and conditions set forth under the Indenture. Upon request of the successor Trustee, the Authority shall execute and deliver any and

all instruments as may be reasonably required for more fully and certainly vesting in and confirming to such successor Trustee all such monies, estates, properties, rights, powers, trusts, duties and obligations. Upon acceptance of appointment by a successor Trustee as provided in this provision, the Authority shall mail a notice of the succession of such Trustee to the trusts thereunder to each Rating Agency then rating the Bonds and to the Bondholders at the addresses shown on the bond registration books maintained by the Trustee. If the Authority fails to mail such notice within 15 days after acceptance of appointment by the successor Trustee, the successor Trustee shall cause such notice to be mailed at the expense of the Authority.

(e) Any Trustee appointed under the Indenture in succession to the Trustee shall be a trust company or bank having the powers of a trust company in the Commonwealth, having (or if such trust company or bank is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of at least $50,000,000, and subject to supervision or examination by federal or Commonwealth authority and not be a "Disqualified Contractor", as such term is defined in the Commonwealth's Governor's Office, Management Directive 215.9, titled "Contractor Responsibility Program". If such bank or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purpose of this provision the combined capital and surplus of such bank or trust company shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this paragraph, the Trustee shall resign immediately in the manner and with the effect specified in this provision.

(f) The Authority designates the Trustee as Paying Agent and as registrar for the Bonds. The Authority may appoint additional Paying Agents, generally or for specific purposes, may discharge a Paying Agent from time to time and may appoint a successor, in each case with written notice to each of the Rating Agencies. The Authority shall designate a successor Paying Agent if the Trustee ceases to serve as Paying Agent. Each Paying Agent shall be a bank or trust company authorized to transact business under the laws of the State, and unless otherwise provided by a Supplemental Indenture shall have a capital and surplus of not less than $50,000,000 and be registered as a transfer agent with the Securities and Exchange Commission and not be a Disqualified Contractor. The Authority shall give notice of the appointment of a successor to the Trustee as Paying Agent in writing to each Beneficiary shown on the books of the Trustee. A Paying Agent may but need not be the same person as the Trustee. The Trustee as Paying Agent shall act as registrar and transfer agent, in accordance with the Indenture.

Merger or Consolidation. Any company into which the Trustee may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which the Trustee may sell or transfer all or substantially all of its corporate trust business and which company also shall be eligible under the Indenture and as described in clause (e) under the heading "DUTIES, IMMUNITIES AND LIABILITIES OF TRUSTEES", above, shall be the successor to such Trustee without the execution or filing of any paper or any further act, anything in the Indenture to the contrary notwithstanding, but such successor Trustee shall be responsible for paying any costs incurred in effecting such sale or transfer and in notifying the Holders, the Rating Agencies and all Bondholders.

Liability of Trustee. The recitals of facts in the Indenture and in the Bonds contained shall be taken as statements of the Authority, and the Trustee assumes no responsibility for the correctness of the same, or make any representations as to the validity or sufficiency of the Indenture or of the Bonds, or incurs any responsibility in respect thereof, other than in connection with the duties or obligations in the Indenture or in the Bonds assigned to or imposed upon it except for any recital or representation specifically relating to the Trustee or its powers. The Trustee shall, however, be responsible for its representations contained in its certificate of authentication on the Bonds. The Trustee shall not be liable in connection with the performance of its duties under the Indenture, except for its own gross negligence or willful misconduct. The Trustee may become the owner of Bonds with the same rights it would have if it were not Trustee and, to the extent permitted by law, may act as depositary for and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, any committee formed to protect the rights of Bondholders, whether or not such committee shall represent the Holders of a majority in principal amount of the Bonds then Outstanding.

The Trustee shall not be liable for any error of judgment made in good faith by a responsible officer, unless the Trustee was negligent in ascertaining the pertinent facts.

The Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of not less than a majority in aggregate principal amount of the Bonds at the time Outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under the Indenture.

The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by the Indenture at the request, order or direction of any of the Bondholders pursuant to the provisions of the Indenture unless such Bondholders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that may be incurred therein or thereby. The Trustee has no obligation or liability to the Holders for any Bond Payment Obligation or any other Financing Obligation from its own funds; but rather the Trustee's obligations shall be limited to the performance of its duties under the Indenture.

Except with respect to the Event of Default specified in clause (a) above under the heading "**Defaults and Remedies**--Events of Default", the Trustee shall not be deemed to have knowledge of any Event of Default unless and until an officer at the Trustee's corporate trust operation responsible for the administration of its duties thereunder shall have actual knowledge thereof or the Trustee shall have received written notice thereof at the Corporate Trust Office. The Trustee shall not be responsible for the validity or effectiveness of any collateral given to or held by it.

The Trustee may execute any of the trusts or powers under the Indenture or perform any duties thereunder either directly or by or through attorneys in fact, agents or receivers, and shall not be answerable for the negligence or misconduct of any such attorney-of-fact, agent or receiver selected by it with due care. The Trustee shall be entitled to advice of counsel and other professionals concerning all matters of trust and its duty thereunder, including verification reports in connection with any defeasance of the Bonds, but the Trustee shall not be answerable for any act or omission of such attorney, certified public accountant or other professional selected by the Trustee with due care.

The Trustee shall not be concerned with or accountable to anyone for the subsequent use or application of any monies that shall be released or withdrawn in accordance with the provisions of the Indenture.

The Trustee shall have no responsibility for any offering documents used in the issuance of the Bonds or for the use of the proceeds of the Bonds disbursed by the Trustee in accordance with the provisions of the Indenture. The permissive rights of the Trustee shall not be construed as duties.

The Trustee may conclusively rely upon the Authority's written instructions as to both the suitability and legality of the Eligible Investments.

Preservation and Inspection of Documents. All documents received by the Trustee under the provisions of the Indenture shall be retained in its possession and shall be subject at all reasonable times to the inspection of the Authority or any Bondholder, and their agents and representatives duly authorized in writing, at reasonable hours and under reasonable conditions.

Compensation and Indemnification. The Authority but only from funds and to the extent provided in the Service Agreement, shall pay to the Trustee from time to time reasonable compensation for all services rendered under the Indenture, and also all reasonable and actual expenses, charges, legal and consulting fees and other disbursements and those of their attorneys, agents and employees, incurred in and about the performance of their powers and duties under the Indenture. No provision of the Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties thereunder, or in the exercise of its rights or powers, if it has not received the agreed compensation for such services or, in cases where the Trustee has a right to reimbursement or indemnification for such performance or exercise, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

Supplements and Amendments to the Transfer Agreement and the Service Agreement

The Transfer Agreement may be amended in accordance with the provisions thereof and the Service Agreement may be amended in accordance with the provisions thereof; provided that the Trustee receives a

Transaction Counsel's opinion addressed to the Trustee to the effect that the amendment is authorized and permitted by law and by the Indenture and does not adversely affect the exclusion of interest on the Tax-Exempt Bonds from gross income for federal income tax purposes. The Transfer Agreement and the Service Agreement may also be amended from time to time by the Authority and the Commonwealth, with the consent of a Majority in Interest of the Bondholders, for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Transfer Agreement and the Service Agreement or of modifying in any manner the rights of the Bondholders, but no such amendment shall reduce the aforesaid portion of the Outstanding amount of the Bonds, the Holders of which are required to consent to any such amendment, without the consent of all of the Bondholders. In the event that the Trustee receives a request for a consent or other action under the Transfer Agreement and the Service Agreement, the Trustee may, and if consent or other action by Holders is required shall, transmit a notice of such request to each Holder and request directions with respect thereto; and the Trustee (and the Authority, if applicable) shall proceed in accordance with such directions (if any), the Indenture and the Transfer Agreement and the Service Agreement.

Provisions Relating To Bond Insurance

The following provisions of the Indenture govern with respect to the Insured Bonds during such time as the Insurance Policy is in effect and the Insurer is not in default of its obligations thereunder, notwithstanding anything to the contrary set forth in the Indenture.

"Insured Bonds" means the Bonds maturing June 1, 2039. "Insurance Policy" means the insurance policy issued by the Insurer guaranteeing the scheduled payment of principal of and interest on the Insured Bonds when due. "Insurer" and "Bond Insurer" means "Assured Guaranty Municipal Corp., a New York stock insurance company, or any successor thereto or assignee thereof".

The Insurer shall be deemed to be the sole holder of the Insured Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured Bonds are entitled to take pursuant to the Indenture pertaining to (i) defaults and remedies and (ii) the duties and obligations of the Trustee. In furtherance thereof and as a term of the Indenture and each Insured Bond, each Insured Bondholder appoints the Insurer as its agent and attorney-in-fact and agree that the Insurer may at any time during the continuation of any proceeding by or against the Authority under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law (an "Insolvency Proceeding") direct all matters relating to such Insolvency Proceeding, including without limitation, (A) all matters relating to any claim or enforcement proceeding in connection with an Insolvency Proceeding (a "Claim"), (B) the direction of any appeal of any order relating to any Claim, (C) the posting of any surety, supersedeas or performance bond pending any such appeal, and (D) the right to vote to accept or reject any plan of adjustment. In addition, each Insured Bondholder delegates and assigns to the Insurer, to the fullest extent permitted by law, the rights each Insured Bondholder in the conduct of any Insolvency Proceeding, including, without limitation, all rights of any party to an adversary proceeding or action with respect to any court order issued in connection with any such Insolvency Proceeding. The Trustee acknowledges such appointment, delegation and assignment by each Insured Bondholder for the Insurer's benefit, and agrees to cooperate with the Insurer in taking any action reasonably necessary or appropriate in connection with such appointment, delegation and assignment. Remedies granted to the Bondholders shall expressly include mandamus.

No grace period for a covenant default shall exceed 30 days or be extended for more than 60 days, without the prior written consent of the Insurer. No grace period shall be permitted for payment defaults.

The Insurer is a third party beneficiary to the Indenture.

The exercise of any provision of the Indenture which permits the purchase of Insured Bonds in lieu of redemption shall require the prior written approval of the Insurer if any Bond so purchased is not cancelled upon purchase.

Any amendment, supplement, modification to, or waiver of, the Indenture, the Transfer Agreement, the Service Agreement or any other transaction document (each a "Related Document"), that requires the consent of Bond owners or adversely affects the rights and interests of the Insurer shall be subject to the prior written consent of the Insurer.

Only (1) cash, (2) non-callable direct obligations of the United States of America ("Treasuries"), (3) evidences of ownership of proportionate interests in future interest and principal payments on Treasuries held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor and the underlying Treasuries are not available to any person claiming through the custodian or to whom the custodian may be obligated, (4) subject to the prior written consent of the Insurer, pre-refunded municipal obligations rated "AAA" and "Aaa" by S&P and Moody's, respectively, or (5) subject to the prior written consent of the Insurer, securities eligible for "AAA" defeasance under then existing criteria of S & P or any combination thereof, shall be used to effect defeasance of the Insured Bonds unless the Insurer otherwise approves.

To accomplish defeasance, the Authority shall cause to be delivered (i) a report of an independent firm of nationally recognized certified public accountants or such other accountant as shall be acceptable to the Insurer ("Accountant") verifying the sufficiency of the escrow established to pay the Insured Bonds in full on the maturity or redemption date ("Verification"), (ii) an Escrow Deposit Agreement (which shall be acceptable in form and substance to the Insurer), (iii) an opinion of nationally recognized bond counsel to the effect that the Insured Bonds are no longer "Outstanding" under the Indenture and (iv) a certificate of discharge of the Trustee with respect to the Insured Bonds; each Verification and defeasance opinion shall be acceptable in form and substance, and addressed, to the Authority, Trustee and Insurer.

Insured Bonds shall be deemed "Outstanding" under the Indenture unless and until they are in fact paid and retired or the above criteria are met.

Amounts paid by the Insurer under the Insurance Policy shall not be deemed paid for purposes of the Indenture and the Insured Bonds relating to such payments shall remain Outstanding and continue to be due and owing until paid by the Authority in accordance with the Bond Indenture. The Indenture shall not be discharged unless all amounts due or to become due to the Insurer have been paid in full or duly provided for.

The Trustee shall designate any portion of payment of principal on Insured Bonds paid by the Insurer, whether by virtue of mandatory sinking fund redemption, maturity or other advancement of maturity, on its books as a reduction in the principal amount of Insured Bonds registered to the then current Insured Bondholder, whether DTC or its nominee or otherwise, and shall issue a replacement Bond to the Insurer, registered in the name of Assured Guaranty Municipal Corp., in a principal amount equal to the amount of principal so paid (without regard to authorized denominations); provided that the Trustee's failure to so designate any payment or issue any replacement Bond shall have no effect on the amount of principal or interest payable by the Authority on any Bond or the subrogation rights of the Insurer.

Upon payment of a claim under the Insurance Policy, the Trustee shall establish a separate special purpose trust account for the benefit of Insured Bondholders referred to as the "Policy Payments Account" and over which the Trustee shall have exclusive control and sole right of withdrawal. The Trustee shall receive any amount paid under the Insurance Policy in trust on behalf of Insured Bondholders and shall deposit any such amount in the Policy Payments Account and distribute such amount only for purposes of making the payments for which a claim was made. Such amounts shall be disbursed by the Trustee to Insured Bondholders in the same manner as principal and interest payments are to be made with respect to the Insured Bonds under the sections of the Indenture regarding payment of Insured Bonds. It shall not be necessary for such payments to be made by checks or wire transfers separate from the check or wire transfer used to pay debt service with other funds available to make such payments. Notwithstanding anything in the Indenture to the contrary, the Authority agrees to pay to the Insurer (i) a sum equal to the total of all amounts paid by the Insurer under the Insurance Policy (the "Insurer Advances"); and (ii) interest on such Insurer Advances from the date paid by the Insurer until payment thereof in full, payable to the Insurer at the Late Payment Rate per annum (collectively, the "Insurer Reimbursement Amounts"). "Late Payment Rate" means the lesser of (a) the greater of (i) the per annum rate of interest, publicly announced from time to time by JPMorgan Chase Bank at its principal office in The City of New York, as its prime or base lending rate (any change in such rate of interest to be effective on the date such change is announced by JPMorgan Chase Bank) plus 3%, and (ii) the then applicable highest rate of interest on the Insured Bonds and (b) the maximum rate permissible under applicable usury or similar laws limiting interest rates. The Late Payment Rate shall be computed on the basis of the actual number of days elapsed over a year of 360 days. The Authority covenants and agrees that the Insurer Reimbursement Amounts are secured by a lien on and pledge of the Revenues and payable from such Revenues on a parity with debt service due on the Bonds.

Funds held in the Policy Payments Account shall not be invested by the Trustee and may not be applied to satisfy any costs, expenses or liabilities of the Trustee. Any funds remaining in the Policy Payments Account following a Bond payment date shall promptly be remitted to the Insurer.

The Insurer shall, to the extent it makes any payment of principal of or interest on the Insured Bonds, become subrogated to the rights of the recipients of such payments in accordance with the terms of the Insurance Policy (which subrogation rights shall also include the rights of any such recipients in connection with any Insolvency Proceeding). Each obligation of the Authority to the Insurer under the Related Documents shall survive discharge or termination of such Related Documents.

Solely from Revenues, the Authority shall pay or reimburse the Insurer any and all charges, fees, costs and expenses that the Insurer may reasonably pay or incur in connection with (i) the administration, enforcement, defense or preservation of any rights or security in any Related Document; (ii) the pursuit of any remedies under the Indenture or any other Related Document or otherwise afforded by law or equity, (iii) any amendment, waiver or other action with respect to, or related to, the Indenture or any other Related Document whether or not executed or completed, or (iv) any litigation or other dispute in connection with the Indenture or any other Related Document or the transactions contemplated thereby, other than costs resulting from the failure of the Insurer to honor its obligations under the Insurance Policy.

Notwithstanding satisfaction of the other conditions to the issuance of Refunding Bonds set forth in the Indenture, no such issuance may occur if an Event of Default (or any event which, once all notice or grace periods have passed, would constitute an Event of Default) exists unless such default shall be cured upon such issuance or as otherwise permitted by the Insurer.

In determining whether any amendment, consent, waiver or other action to be taken, or any failure to take action, under the Indenture would adversely affect the security for the Insured Bonds or the rights of the Insured Bondholders, the Trustee shall consider the effect of any such amendment, consent, waiver, action or inaction by the Authority or the Trustee as if there were no Insurance Policy. No contract shall be entered into or any action taken by which the rights of the Insurer or Pledged Property securing the Insured Bonds may be impaired or prejudiced in any material respect except upon obtaining the prior written consent of the Insurer.

APPENDIX G

PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL

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February 20, 2018

Re: $1,487,170,000, Aggregate Principal Amount, Commonwealth Financing Authority, Tobacco Master Settlement Payment Revenue Bonds, Series 2018

To the Purchasers of the Within-Described Series 2018 Bonds:

We have acted as Co-Bond Counsel to the Commonwealth Financing Authority ("Authority"), in connection with the authorization, issuance and sale by the Authority of its Tobacco Master Settlement Payment Revenue Bonds, Series 2018 ("Series 2018 Bonds").

The Series 2018 Bonds are issued under and pursuant to provisions of: (i) the Constitution of the Commonwealth of Pennsylvania ("Commonwealth"); (ii) 64 Pa. C.S. §1501 *et seq.*, as amended ("Authority Act"), as supplemented by amendments to the Act of March 4, 1971 (P.L. 6, No. 2) known as the Tax Reform Code ("Tax Reform Code") contained in the Act of October 30, 2017, P.L. 672, No. 43, which added Article XXVIII ("Article XXVIII of the Tax Reform Code") to the Tax Reform Code (the Authority Act, together with Article XXVIII of the Tax Reform Code being hereinafter referred to collectively as the "Acts"); (iii) a Resolution ("Resolution") of the Authority adopted on November 14, 2017; and (iv) the Indenture, dated as of February 1, 2018 ("Indenture") between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee ("Trustee"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Indenture.

The Series 2018 Bonds are being issued by the Authority to provide funds to: (i) fund a deposit in the General Fund of the Commonwealth to provide General Fund budgetary relief; (ii) pay capitalized interest on the Series 2018 Bonds; and (iii) pay the costs of issuance incurred in connection with the issuance of the Series 2018 Bonds.

The Series 2018 Bonds, together with any refunding bonds issued under the Indenture are payable from and secured by a pledge under the Indenture of the Revenues which consist primarily of (i) the Pledged Annual Payments transferred and conveyed by the Commonwealth acting through the Office of the Budget of the Commonwealth ("Office") to the Authority pursuant to the Transfer Agreement, dated as of February 1, 2018 ("Transfer Agreement") and the Service Agreement, dated as of February 1, 2018, between the Commonwealth, acting through the Office, and the Authority ("Service Agreement"), and (ii) the Article II Revenues in the maximum annual amounts pledged by the Commonwealth and certified by the Secretary of the Budget to supplement the Pledged Annual Payments, if needed. The Authority has assigned to the Trustee its right, title and interest in and to

the Transfer Agreement and the Service Agreement, except for its rights in and to Service Charges payable under the Service Agreement for Authority Administrative Expenses, as provided therein.

The Authority, the Office and the Treasury Department of the Commonwealth have entered into a letter agreement, dated February 20, 2018 ("Letter Agreement"), providing administrative procedures for, inter alia, transfers of the Pledged Annual Payments and Article II Revenues to the Trustee.

As Co-Bond Counsel, we have examined: (i) the relevant provisions of the Constitution of the Commonwealth; (ii) the Acts; (iii) the Resolution; (iv) the Indenture; (v) the Transfer Agreement; (vi) the Service Agreement; (vii) the Letter Agreement; and (viii) certain statements, certifications, affidavits and other statutes and documents, instruments and matters of law as we have deemed necessary to enable us to render the opinion set forth below, including, without limitation, an agreement of officials of the Authority having responsibility for issuing the Series 2018 Bonds ("Tax Compliance Agreement"), intended to satisfy certain provisions of the Internal Revenue Code of 1986, as amended ("Code"), and applicable Treasury Regulations, and the other documents and instruments listed on the Index of Closing Documents relating to the Series 2018 Bonds dated the date hereof. We have also examined the fully executed and authenticated Series 2018 Bonds.

In rendering the opinion set forth below, we have relied upon the genuineness, accuracy and completeness of all of the documents, records, certifications and other instruments examined including, without limitation, the authenticity of all signatures appearing thereon. We have also relied, in the opinion set forth below, upon the opinions of counsel to the Authority, the Office of Chief Counsel for the Office and Special Counsel to the Commonwealth as to all matters of fact and law set forth therein. We have not made any independent examination in rendering this opinion other than the examination referred to above. Our opinion is therefore qualified in all respects by the scope of that examination.

Except with respect to Paragraph 5 below, our opinion is given only with respect to the internal laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof.

Based upon and subject to the foregoing and subject to the qualifications hereinafter set forth, we are of the opinion that:

1. The Authority is an instrumentality of the Commonwealth and a body corporate and politic, is validly existing under the laws of the Commonwealth and has the corporate power and authority: (a) to execute and deliver the Indenture, the Transfer Agreement, the Service Agreement and the Letter Agreement; and (b) to issue and deliver the Series 2018 Bonds for the purposes set forth in Article XXVIII of the Tax Reform Code and the Indenture.

2. The Indenture, the Transfer Agreement, the Service Agreement and the Letter Agreement have been duly authorized, executed and delivered by the Authority and are legal, valid

and binding obligations of the Authority enforceable in accordance with the respective terms thereof, except to the extent that enforcement thereof may be affected by bankruptcy, insolvency, reorganization, moratorium or other similar laws or legal or equitable principles affecting the enforcement of creditors' rights ("Creditors' Rights Limitations").

3. The Series 2018 Bonds have been duly authorized, executed, authenticated, issued and delivered, are entitled to the benefit and security of the lien of the Indenture, and are the legal, valid and binding obligations of the Authority, payable solely from Revenues pledged under the Indenture, enforceable in accordance with the terms thereof, except as enforcement may be affected by Creditors' Rights Limitations.

4. Under the laws of the Commonwealth, as enacted and construed on the date hereof, interest on the Series 2018 Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax, and the Series 2018 Bonds are exempt from personal property taxes in Pennsylvania; however, any profits, gains or income derived from the sale, exchange or other disposition of the Series 2018 Bonds will be subject to Commonwealth taxes and local taxes within the Commonwealth.

5. Under existing statutes, regulations, rulings and court decisions, interest on the Series 2018 Bonds, including interest in the form of original issue discount, will not be includible in gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the Authority with the requirements of the Code. Interest on the Series 2018 Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax on individuals.

In rendering this opinion, we have assumed compliance by the Authority with its covenants contained in the Indenture and the Service Agreement, and the representations and covenants in the Tax Compliance Agreement executed by the Authority and the Tax Certificate executed by the Office of the Budget on the date of issuance of the Series 2018 Bonds relating to actions to be taken or caused to be taken, after the issuance of the Series 2018 Bonds necessary to effect or maintain the exclusion from gross income of the interest on the Series 2018 Bonds for federal income tax purposes. These covenants and representations relate to, inter alia, the use and investment of proceeds and replacement proceeds of the Series 2018 Bonds and the rebate to the United States Department of Treasury of specified arbitrage earnings, if any. Failure to comply with such covenants could result in the interest on the Series 2018 Bonds becoming includible in gross income for federal income tax purposes from the date of issuance of the Series 2018 Bonds.

We call to your attention the fact that the Series 2018 Bonds are special obligations of the Authority payable solely from and secured solely by the Revenues pledged under the Indenture. The Series 2018 Bonds are not general obligations of the Authority and do not pledge the full faith and credit of the Authority or the full faith, credit or taxing power of the Commonwealth or any other political subdivision thereof or create any debt or charge against the general revenues of the Authority

or create a lien or charge against any property of the Authority other than the Revenues. The Authority has no taxing power. Neither the Commonwealth nor any political subdivision thereof is obligated to pay the principal of or interest on the Series 2018 Bonds.

We express no opinion as to any matter not set forth in the numbered paragraphs herein. This opinion is given as of the date hereof and we assume no obligation to supplement this opinion to reflect changes in law that may hereafter occur or changes in facts or circumstances that may hereafter come to our attention. Without limiting the generality of the foregoing, we express no opinion herein with respect to, and assume no responsibility for, the accuracy, adequacy or completeness of the Preliminary Official Statement, as supplemented, or Official Statement prepared in respect of the Series 2018 Bonds, and make no representation that we have independently verified the contents thereof.

Very truly yours,

APPENDIX H

FORM OF CONTINUING DISCLOSURE AGREEMENT

FORM OF CONTINUING DISCLOSURE AGREEMENT

This CONTINUING DISCLOSURE AGREEMENT dated February 20, 2018 (the "**Agreement**"), is executed and delivered by the Commonwealth Financing Authority (the "**Authority**") and the Commonwealth of Pennsylvania, acting through the Office of Budget (the "**Commonwealth**"), in connection with the Authority's issuance of its $1,487,170,000 Tobacco Master Settlement Payment Revenue Bonds, Series 2018 (the "**Bonds**"). The Authority and the Commonwealth hereby covenant and agree as follows:

Section 1. Purpose. This Agreement is being executed and delivered by the Authority and 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 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 of the type found under the following headings in the Official Statement for the Bonds dated February 13, 2018: (a) actual Commonwealth Annual Payments in the immediately prior fiscal year and the resulting Bond Debt Service Coverage (actual Commonwealth Annual Payments divided by Net Bond Debt Service) using the format as set forth in the Table under the heading "TABLE OF PROJECTED COMMONWEALTH ANNUAL PAYMENTS AND DEBT SERVICE"; (b) in Tables 5 through 10 under the heading "COMMONWEALTH FINANCIAL PERFORMANCE" in APPENDIX A; (c) in Tables 11 and 12 under the heading "COMMONWEALTH REVENUES AND EXPENDITURES" in APPENDIX A; (d) in Tables 15 through 18 under the heading "OUTSTANDING INDEBTEDNESS OF THE COMMONWEALTH" in Appendix A, and (e) Tables 20 through 24 under the heading "OTHER STATE RELATED OBLIGATIONS" in Appendix A. 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 ("**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 Authority 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 Authority or the Commonwealth;

(m) The consummation of a merger, consolidation, or acquisition involving the Authority or the Commonwealth or the sale of all or substantially all of the assets of the Authority or 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 an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

Section 4. Termination. The obligations of the Authority and 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 Authority and the Commonwealth may modify their respective obligations hereunder without the consent of Bondholders, provided that this Agreement as so modified complies with the Rule as it exists at the time of modification. The Authority or 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 Authority or 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 Authority or the Commonwealth, as applicable, 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 Authority or 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, indenture 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 Authority or the Commonwealth may from time to time disclose certain information and data in addition to the Continuing Disclosure. Notwithstanding anything herein to the contrary, neither the Authority nor the Commonwealth shall 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 Authority and the Commonwealth shall bind and inure to the benefit of their respective 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 the parties hereto have executed this Agreement as of the date and year first above written.

COMMONWEALTH FINANCING AUTHORITY

By:____
Executive Director

COMMONWEALTH OF PENNSYLVANIA,
acting through the Office of Budget

By:____
Secretary of Budget

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APPENDIX I

SPECIMEN MUNICIPAL BOND INSURANCE POLICY

MUNICIPAL BOND INSURANCE POLICY

ISSUER: Policy No: -N

BONDS: $ in aggregate principal amount of Effective Date:

Premium: $

SPECIMEN

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

Form 500NY (5/90)

SPECIMEN

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