

2018 - 2019 ESTIMATE DOCUMENTATION

BUREAU OF RESEARCH
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GENERAL FUND REVENUE ESTIMATES*

\$ millions

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<u>Revenue Sources</u>	<u>Revised</u>	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
TOTAL - GENERAL FUND	34,752.1	34,220.3	35,956.3	37,338.5	37,964.3	38,457.3
TOTAL - TAX REVENUE	32,158.4	33,609.5	35,418.1	36,800.3	37,426.1	37,916.5
TOTAL - Corporation Taxes	4,996.4	5,270.5	6,224.4	6,605.4	6,283.0	6,268.8
Corporate Net Income	3,010.1	3,074.7	4,007.7	4,289.8	3,932.7	3,847.8
Utility Gross Receipts	1,229.4	1,229.9	1,229.9	1,229.9	1,229.9	1,229.9
Utility Property	40.8	41.2	41.6	42.0	42.4	42.8
Insurance Premiums	392.9	344.3	346.5	355.2	368.5	419.2
Financial Institutions	323.2	331.7	334.6	333.2	333.0	335.6
Severance Tax	NA	248.7	264.1	355.3	376.5	393.5
TOTAL - Consumption Taxes	12,158.4	12,501.2	12,633.2	12,840.8	13,102.0	12,995.6
Sales and Use	10,407.4	10,781.6	10,935.9	11,163.1	11,441.7	11,350.8
Cigarette	1,230.4	1,182.9	1,143.1	1,105.4	1,069.2	1,034.2
Other Tobacco Products	122.2	123.4	124.6	125.8	127.0	128.2
Malt Beverage	24.5	24.5	24.5	24.5	24.5	24.5
Liquor	373.9	388.8	405.1	422.0	439.6	457.9
TOTAL - Other Taxes	15,003.6	15,837.8	16,560.5	17,354.1	18,041.1	18,652.1
Personal Income	13,399.9	14,127.2	14,786.2	15,525.8	16,191.4	16,774.4
Realty Transfer	509.8	547.3	584.9	606.5	610.0	613.4
Inheritance	1,012.7	1,061.6	1,102.4	1,142.1	1,182.6	1,226.2
Gaming	123.1	148.9	147.7	159.3	163.9	167.4
Minor and Repealed	(41.9)	(47.2)	(60.7)	(79.6)	(106.8)	(129.3)
TOTAL - NONTAX REVENUE	2,593.7	610.8	538.2	538.2	538.2	540.8
Liquor Store Profits	185.1	185.1	185.1	185.1	185.1	185.1
<u>Licenses, Fees & Miscellaneous Total</u>	<u>2,340.4</u>	<u>353.5</u>	<u>280.9</u>	<u>280.9</u>	<u>280.9</u>	<u>283.5</u>
Licenses and Fees	366.4	158.7	115.9	115.9	115.9	118.5
Miscellaneous	1,974.0	194.8	165.0	165.0	165.0	165.0
Fines, Penalties & Interest Total	68.2	72.2	72.2	72.2	72.2	72.2

*Individual accounts may not sum to totals due to rounding.

GENERAL FUND REVENUE ESTIMATES

Annual Percent Changes *

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<u>Revenue Sources</u>	<u>Revised</u>	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
TOTAL - GENERAL FUND	9.7%	-1.5%	5.1%	3.8%	1.7%	1.3%
TOTAL - TAX REVENUE	4.6%	4.5%	5.4%	3.9%	1.7%	1.3%
TOTAL - Corporation Taxes	4.5%	5.5%	18.1%	6.1%	-4.9%	-0.2%
Corporate Net Income	9.4%	2.1%	30.3%	7.0%	-8.3%	-2.2%
Utility Gross Receipts	-1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Utility Property	1.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Insurance Premiums	-9.4%	-12.4%	0.6%	2.5%	3.7%	13.8%
Financial Institutions	0.2%	2.6%	0.9%	-0.4%	-0.1%	0.8%
Severance Tax	---	NA	6.2%	34.5%	6.0%	4.5%
TOTAL - Consumption Taxes	3.6%	2.8%	1.1%	1.6%	2.0%	-0.8%
Sales and Use	4.0%	3.6%	1.4%	2.1%	2.5%	-0.8%
Cigarette	-2.5%	-3.9%	-3.4%	-3.3%	-3.3%	-3.3%
Other Tobacco Products	45.6%	1.0%	1.0%	1.0%	1.0%	0.9%
Malt Beverage	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Liquor	3.3%	4.0%	4.2%	4.2%	4.2%	4.2%
TOTAL - Other Taxes	5.4%	5.6%	4.6%	4.8%	4.0%	3.4%
Personal Income	5.8%	5.4%	4.7%	5.0%	4.3%	3.6%
Realty Transfer	6.7%	7.4%	6.9%	3.7%	0.6%	0.6%
Inheritance	3.6%	4.8%	3.8%	3.6%	3.5%	3.7%
Gaming	2.1%	21.0%	-0.8%	7.9%	2.9%	2.1%
Minor and Repealed	-625.4%	-12.6%	-28.6%	-31.1%	-34.2%	-21.1%
TOTAL - NONTAX REVENUE	182.9%	-76.5%	-11.9%	0.0%	0.0%	0.5%
Liquor Store Profits/ Enhanced Proceeds	-14.5%	0.0%	0.0%	0.0%	0.0%	0.0%
<u>Licenses, Fees & Miscellaneous Total</u>	276.9%	-84.9%	-20.5%	0.0%	0.0%	0.9%
Licenses and Fees	207.5%	-56.7%	-27.0%	0.0%	0.0%	2.2%
Miscellaneous	293.3%	-90.1%	-15.3%	0.0%	0.0%	0.0%
Fines, Penalties & Interest Total	-14.0%	5.9%	0.0%	0.0%	0.0%	0.0%

* Figures reflect changes in unrounded receipts.

MOTOR LICENSE FUND REVENUE ESTIMATES*

\$ millions

<u>Revenue Sources</u>	<u>2017-18</u> <u>Revised</u>	<u>2018-19</u> <u>Budget</u>	<u>2019-20</u> <u>Estimate</u>	<u>2020-21</u> <u>Estimate</u>	<u>2021-22</u> <u>Estimate</u>	<u>2022-23</u> <u>Estimate</u>
TOTAL - MOTOR LICENSE FUND	2,941.3	2,921.4	2,985.8	2,969.9	2,984.2	3,030.3
TOTAL - LIQUID FUELS TAXES	1,855.8	1,838.8	1,843.0	1,847.4	1,852.1	1,856.6
Liquid Fuels	0.0	0.0	0.0	0.0	0.0	0.0
Fuels	0.0	0.0	0.0	0.0	0.0	0.0
Motor Carriers / IFTA	130.1	130.7	132.0	133.3	134.7	136.0
Alternative Fuels	13.0	13.6	14.2	14.9	15.7	16.4
Oil Company Franchise	1005.9	1007.6	1009.0	1010.4	1011.9	1013.4
Act 89-2013 OCF - Liquid Fuels	559.9	542.9	542.4	541.9	541.4	540.9
Act 89-2013 OCF - Fuels	146.9	144.0	145.4	146.9	148.4	149.9
TOTAL - LICENSES & FEES	1,038.3	1,064.2	1,124.2	1,103.8	1,113.2	1,154.6
Special Hauling Permits	34.8	35.1	36.0	36.3	37.7	38.0
International Registration Plan (IRP)	136.9	140.3	146.2	149.8	157.7	161.6
Operators' Licenses	71.8	73.6	98.4	78.7	73.3	84.9
Real ID	NA	NA	30.3	10.1	10.1	10.1
Vehicle Registration & Titling	775.4	795.6	793.2	808.7	813.4	838.9
Other Fees - Bureau of Motor Vehicles	19.4	19.6	20.1	20.2	21.0	21.1
TOTAL - OTHER MOTOR	47.2	18.4	18.6	18.7	18.9	19.1
Revenue/Gross Receipts Tax	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Code Fines/Clearing Account	0.5	0.5	0.5	0.5	0.5	0.5
Miscellaneous - Treasury	43.7	14.9	15.1	15.2	15.4	15.5
Miscellaneous - Transportation	2.6	2.6	2.6	2.6	2.6	2.7
Miscellaneous - General Services	0.4	0.4	0.4	0.4	0.4	0.4
Miscellaneous - Revenue	0.0	0.0	0.0	0.0	0.0	0.0
Turnpike Payments	0.0	0.0	0.0	0.0	0.0	0.0

* Individual accounts may not sum to totals due to rounding.

MOTOR LICENSE FUND REVENUE ESTIMATES

Annual Percent Changes *

<u>Revenue Sources</u>	<u>2017-18</u> <u>Revised</u>	<u>2018-19</u> <u>Budget</u>	<u>2019-20</u> <u>Estimate</u>	<u>2020-21</u> <u>Estimate</u>	<u>2021-22</u> <u>Estimate</u>	<u>2022-23</u> <u>Estimate</u>
TOTAL - MOTOR LICENSE FUND	6.6%	-0.7%	2.2%	-0.5%	0.5%	1.5%
TOTAL - LIQUID FUELS TAXES	7.1%	-0.9%	0.2%	0.2%	0.3%	0.2%
Liquid Fuels	-100.0%	NA	NA	NA	NA	NA
Fuels	NA	NA	NA	NA	NA	NA
Motor Carriers / IFTA	30.2%	0.5%	1.0%	1.0%	1.1%	1.0%
Alternative Fuels	17.3%	4.6%	4.4%	4.9%	5.4%	4.5%
Oil Company Franchise	11.3%	0.2%	0.1%	0.1%	0.1%	0.1%
Act 89-2013 OCF - Liquid Fuels	-2.0%	-3.0%	-0.1%	-0.1%	-0.1%	-0.1%
Act 89-2013 OCF - Fuels	0.2%	-2.0%	1.0%	1.0%	1.0%	1.0%
TOTAL - LICENSES & FEES	3.8%	2.5%	5.6%	-1.8%	0.9%	3.7%
Special Hauling Permits	7.4%	0.9%	2.6%	0.8%	3.9%	0.8%
International Registration Plan (IRP)	12.2%	2.5%	4.2%	2.5%	5.3%	2.5%
Operators' Licenses	3.1%	2.5%	33.7%	-20.0%	-6.9%	15.8%
Real ID	NA	NA	NA	-66.7%	0.0%	0.0%
Vehicle Registration & Titling	2.3%	2.6%	-0.3%	2.0%	0.6%	3.1%
Other Fees - Bureau of Motor Vehicles	3.1%	1.0%	2.6%	0.5%	4.0%	0.5%
TOTAL - OTHER MOTOR RECEIPTS	86.3%	-61.0%	1.1%	0.5%	1.1%	1.1%
Revenue/Gross Receipts Tax	NA	NA	NA	NA	NA	NA
Vehicle Code Fines/Clearing Account	-82.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Miscellaneous - Treasury	192.7%	-65.9%	1.3%	0.7%	1.3%	0.6%
Miscellaneous - Transportation	-63.9%	0.0%	0.0%	0.0%	0.0%	3.8%
Miscellaneous - General Services	-3.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Miscellaneous - Revenue	-100.0%	NA	NA	NA	NA	NA
Turnpike Payments	NA	NA	NA	NA	NA	NA

* Figures reflect changes in unrounded receipts.

Tax revenues are affected by legislative and judicial modifications on both the national and state levels. The following is a list of recently enacted significant changes in state law that may affect unrestricted General Fund and Motor License Fund revenues.

ACT #55 of November 6, 2017 made the following changes:

To the Educational Improvement Tax Credit:

- Increased the program cap from \$125 million to \$135 million for fiscal years 2017-18 and forward.

ACT #44 of October 30, 2017 made the following changes:

To the Enhanced Revenue Collection Account:

- Provides that the Enhanced Revenue Collection Account will continue through fiscal year 2019-20, with \$30 million per fiscal year appropriated to the Department of Revenue, beginning in fiscal year 2017-18.

To Transfers and Payments:

- Provides for \$200 million to be transferred from the Pennsylvania Professional Liability Joint Underwriting Association on or before December 1, 2017.
- Provides for \$300 million to be transferred from amounts available in special funds and restricted accounts to the General Fund in fiscal year 2017-18.

ACT #43 of October 30, 2017 made the following changes:

To the Sales and Use Tax:

- Exempts help desk or call center support for canned software from sales and use tax when separately invoiced, effective October 30, 2017.
- Exempts kegs used to contain malt or brewed beverages from sales and use tax as part of wrapping and packaging supplies, effective October 30, 2017.
- Provides that sellers of products on the internet not maintaining a place of business in Pennsylvania, not collecting Pennsylvania sales tax, and making sales of at least \$10,000 into Pennsylvania in the previous calendar year must file an election by March 1, 2018, opting either to begin collecting sales and use tax by April 1, or committing to sending use tax notices with each sale. Additionally, sellers sending notices must also send an annual summary of purchases both to the customer and to the Department of Revenue.
 - Affected entities are: marketplace facilitators, persons who list or advertise property for sale in any forum and who either directly or indirectly collect the payment from the purchaser and transmit the payment to the person selling the property; remote sellers, persons that do not maintain a place of business in Pennsylvania and sell at retail into the Pennsylvania; and referrers, persons who provide a forum for interaction between buyers and sellers but do not directly participate in the sale. Marketplace facilitators and referrers are required to file an election on behalf of all the sellers participating in their system. If the election is made to collect sales tax, then the marketplace facilitator or referrer is

required to collect and remit sales tax on all of its taxable marketplace sales from sellers that do not maintain a place of business in Pennsylvania.

- For those opting to collect sales tax, the new provisions require collection to begin by April 1, 2018, for tangible personal property. The effective date is delayed until April 1, 2019, for digital goods such as electronic copies of books, canned software, music and similar items.

To the Personal Income Tax:

- Clarifies the tax treatment of Achieving a Better Life Experience (ABLE) savings accounts. In addition to being exempt from tax by the commonwealth and its political subdivisions, total contributions to all ABLE accounts, up to the current dollar amount under Section 2503(b) of the Internal Revenue Code, may be deducted from the taxable income of the contributor. The deduction may not result in the contributor's taxable income being less than zero.
- Provides that the refund donation checkoff options for the Wild Resource Conservation Fund, Organ and Tissue Donation Awareness Trust Fund, Military Family Relief Assistance Program, Pennsylvania Children's Trust Fund and American Red Cross do not expire.
- Provides for withholding of personal income tax from various sources of income for Pennsylvania non-residents. Payers of non-employee compensation and business income to non-resident individuals (or disregarded entities with a non-resident owner) are required to withhold personal income tax from such payments. The United States government, the commonwealth of Pennsylvania, their agencies, instrumentalities, and any political subdivisions of Pennsylvania are excluded from this requirement, which is effective January 1, 2018. Additionally, lessees of Pennsylvania real estate making lease payments to non-resident lessors are also required to withhold personal income tax on such payments. Residential rental payments are exempt from the withholding requirement. Withholding of tax is required for payments of \$5,000 or more annually, and is optional on payments less than \$5,000.

To the Corporate Net Income Tax:

- Provides for changes to the net operating loss deduction, pending the outcome of litigation regarding the constitutionality of certain net operating loss deduction carryforward provisions and clarifies notice requirements for publication of those changes. Following the decision in *Nextel v. Commonwealth of Pennsylvania*, the \$5 million cap on net operating loss carryforward will not be available for tax years 2017 and after. For tax year 2017, the cap on carryforward remains at 30 percent of taxable income. For tax year 2018, it increases to 35 percent; for tax years 2019 and afterward, it increase to 40 percent.
- Creates the Qualified Manufacturing Innovation & Reinvestment Deduction. The deduction allows a qualified business to deduct five percent of its capital investment from its corporate net income tax liability if it invests at least \$100 million in the creation of new or refurbished manufacturing capacity within three years of a designated start date. The deduction would be available to each qualifying business for five years and cannot exceed 50 percent of the corporation's tax liability. Interested businesses can contact the Department of Community and Economic Development after December 29, 2017.

To the Realty Transfer Tax:

- Broadens the category of veterans' service organizations defined as tax-exempt for purposes of transfers under the realty transfer tax, effective October 30, 2017.

To the Inheritance Tax:

- Clarifies existing requirements regarding the filing of returns for the inheritance tax exemption on transfers of certain family owned farms and family owned businesses. Any inheritance tax return filed after July 1, 2012 under Section 2136 that reports transfers of property which are exempt from inheritance tax under Section 2111 will be considered timely if filed within one year of the tax return due date, including an extended due date.

To the Public Transportation Assistance Fund:

- Provides for a prorated fee for partial day car sharing services as a clarification to the current vehicle rental fee. Rentals of less than two hours will be subject to a \$0.25 fee. Rentals of two to three hours will be subject to a fee of \$0.50. Rentals of more than three but less than four hours will be subject to a \$1.25 fee. Rentals of four or more hours will be subject to a fee of \$2.00. The prorated fee schedule is effective October 30, 2017.

To the Fireworks Tax:

- Incorporates the existing Fireworks Law into the Tax Reform Code and modernizes and expands the definition of legal consumer fireworks. Further imposes a tax at the rate of 12 percent on the sale price of consumer fireworks suitable for use by the public. The 12 percent tax will be in addition to the sales and use tax already imposed on such sales. The Department of Agriculture will continue to administer the Fireworks Law. The fireworks tax is effective October 30, 2017.

To Tax Credit and Economic Development Programs:

- Provides that, before a tax credit can be awarded, the Department of Revenue may make a finding that the taxpayer has filed all required state tax reports and returns and paid any balance due, provided the tax is not currently under appeal.
- Creates Film Production Tax Credit Districts by amending the existing Film Production Tax Credit to authorize the creation of up to two districts. The districts must meet certain location, size, technical, and investment requirements, and the designation will expire after 15 years. Tax credits for these districts are in addition to the existing Film Production Tax Credit and may be approved beginning in fiscal year 2019-20.
- Moves the authorizing language for the Concert Rehearsal and Tour Tax Credit from Title 12, Chapter 33 to the Tax Reform Code.
- Makes administrative changes to the City Revitalization and Improvement Zone (CRIZ) program, allowing for the transfer of inactive parcels out of the zone and their replacement with parcels of equal or less acreage. Also provides that excess money transferred to a CRIZ fund for utilization in a pilot zone is not required to be returned to the commonwealth by the pilot zone's contracting authority and must be used in accordance with the current utilization provisions.
- Amends the Neighborhood Improvement Zone (NIZ) program to allow the contracting authority to transfer parcels out of the zone and replace with parcels not to exceed the acreage transferred out, provided that there is no activity in the zone being transferred that generates tax receipts or other revenue. The changes are effective in one year.
- Extends the application date for additional Keystone Opportunity Zones from October 2016 to October 2018 and extends the date for DCED action on applications for additional KOZs from December 2016 to December 2018.

To Petitions for Reassessment:

- Reduces the period for a taxpayer to file a petition for reassessment, review or adjustment with the Board of Appeals from 90 days to 60 days after the mailing date of the notice of assessment. The period for appeal to the Board of Finance and Revenue by a taxpayer is also reduced from 90 days to 60 days. This change applies to petitions for refunds, petitions for reassessments, and petitions for redeterminations filed with the Department of Revenue on or after December 29, 2017.

To the Tobacco Master Settlement:

- Authorizes the Commonwealth Financing Authority to enter into a sales agreement or issue bonds utilizing a portion of the annual payments from the Tobacco Master Settlement Agreement. Any agreement or issuance of bonds shall raise net proceeds of \$1.5 billion to be deposited into the General Fund. The term of the sales agreement shall not exceed 10 years and the term of the bonds shall not exceed 30 years.

ACT #42 of October 30, 2017 made the following changes:**To Title 4 Amusements (Gaming):**

- Provides for the implementation of interactive gaming operated by slot machine licensees and qualified gaming entities and the taxes and fees associated therewith.
- Provides for an interactive gaming certificate holder to conduct interactive gaming at a qualified airport through the use of multi-use computing devices.
- Accelerates repayment of loans provided under Section 1901 to be deposited to the General Fund instead of the State Gaming Fund.
- Provides for ten Category 4 slot machine licenses, along with the taxes and fees associated with the slots and tables operated therein.
- Provides for Category 3 facilities to add up to 250 additional slots and 15 additional tables for an additional fee.
- Provides for the removal of Category 3 license conditions, defining which individuals may enter a gaming area for a one-time fee to be deposited in the General Fund.
- Provides for video gaming at licensed truck stop establishments and establishes the Video Gaming Fund in which the taxes on gross terminal revenue are to be initially deposited.
- Provides for the conduct of fantasy contests by licensed operators and the taxes and fees associated therewith.
- Eliminates the higher tax rate of 14 percent of daily gross table game revenue applicable for a period of two years following commencement of table games operations at a licensed facility.

ACT #39 of October 30, 2017 made the following changes:**To the Personal Income Tax:**

- Creates a new personal income tax refund donation checkoff option for donations to pediatric cancer research, beginning with tax year 2018 returns.

ACT #7 of June 22, 2017 made the following changes:**To the Concert Rehearsal and Tour Tax Credit:**

- Moves the authorizing language from the Tax Reform Code to the Entertainment Economic Enhancement Program under Title 12, Chapter 33 of the Pennsylvania Consolidated Statutes.
- Changes the structure of the program cap from \$4 million per year to permitting awards to up to five tours per year with a maximum award of up to \$800,000 per tour.

ACT #117 of November 2, 2016 made the following changes:**To the Property Tax or Rent Rebate (PTRR) Program:**

- Amends the definition of income to exclude federal veterans' disability payments and state veterans' benefits. The changes are effective within 60 days and will first impact claim year 2017 rebates.

ACT #86 of July 13, 2016 made the following changes:**To the Educational Tax Credits:**

- Increases funding from \$100 million to \$125 million for the aggregate amount of all tax credits approved for contributions from business firms to scholarship organizations, educational improvement organizations and pre-kindergarten scholarship organizations.
- Requires, effective for the 2016-17 fiscal year, that the Department of Community and Economic Development (DCED) to notify applicants of the status of the application in writing within 90 days of submitting the application.
- Moves the Educational Tax Credits program to the Public School Code, following its repeal from the Tax Reform Code in Act 86-2016.

ACT #85 of July 13, 2016 made the following changes:**To the Cigarette Tax:**

- Increases the mandatory cost of doing business (selling cigarettes) under the Cigarette and the Sales and Use taxes from 6.0 percent to 7.0 percent, resulting in a minimum price increase of \$0.06, beginning August 1, 2016.

To Transfers and Payments:

- In fiscal year 2016-17, \$350.2 million in payments will be made from the Tobacco Settlement Fund to fund health related programs.
- In fiscal year 2016-17, the following transfers, totaling \$265.5 million, will be made to the General Fund
 - \$5.0 million from the Alternative Fuels Incentive Fund
 - \$2.0 million from the Local Law Enforcement Block Grants;
 - \$9.0 million from the Recycling Fund

- \$28.5 million from the Tobacco Settlement Fund;
 - \$9.0 million from the Volunteer Companies Loan Fund;
 - \$200.0 million from the unappropriated surplus of the Pennsylvania Professional Liability Joint Underwriting Association; and
 - \$12.0 million from the CFA Building Pennsylvania program account.
- For any slot machine issued in fiscal year 2016-17, the Pennsylvania Gaming Control Board shall require the slot machine license fee (\$50.0 million) and the table games authorization fee (\$24.75 million) to be paid in full to the General Fund no later than June 30, 2017.

ACT #84 of July 13, 2016 made the following changes:

To the Sales and Use Tax:

- Specifically extends the sales and use tax to items delivered to a customer electronically or digitally or by streaming, including music or any other audio, video (such as movies and streaming services), e-books and any otherwise taxable printed matter. Also extends the sales and use tax to items such as apps and in-app purchases, ringtones, online games, canned software - frequently referred to as off-the-shelf software - and any updates, maintenance or support of these items. Items that are exempt in physical form are not subject to tax. Provisions are effective August 1, 2016.
- Caps the sales tax vendor discount at the lesser of one percent of the amount of sales tax collected or \$25 on a monthly return, \$75 on a quarterly return or \$150 on a semi-annual return, for sales tax returns for periods ending after August 1, 2016.
- Deems as an offense the possession, sale or distribution of zappers or sales suppression software with the intent to evade taxes, effective immediately. Individuals could be fined up to \$10,000 and sentenced to up to one year in prison.
- Exempts from sales and use tax returnable corrugated boxes used to deliver snack food products when purchased by a manufacturer, effective immediately.
- Exempts from sales and use tax the sale at retail or use of services related to the setup, teardown, or maintenance of tangible personal property rented by an authority to exhibitors at the Pennsylvania Convention Center and the David L. Lawrence Convention Center, effective September 11, 2016.
- Exempts from sales and use tax property and services directly and predominately used in timbering operations when purchased by a company primarily engaged in the business of harvesting trees, effective July 1, 2017. Timbering does not include the harvesting of trees for clearing land for access roads.

To the Cigarette and Tobacco Products Taxes:

- Increases the state tax on cigarettes by \$1.00 per pack, to \$2.60 per pack, effective August 1, 2016. \$1.00 per pack increase. In Philadelphia, the tax will be \$4.60 per pack.
- Imposes a \$0.55 per ounce tax on pipe tobacco, chewing tobacco, snuff, and any other tobacco products for chewing, ingesting or smoking, except cigars, with a minimum tax per package of

\$0.66, effective October 1, 2016. Electronic cigarettes including both the liquid product and the delivery device will be subject to a 40 percent tax on the wholesale price.

- Imposes a \$0.55 per ounce tax on roll-your-own tobacco, effective 60 days after the Attorney General publishes a notice in the Pennsylvania Bulletin that the tax is permitted under the Master Settlement Agreement with the tobacco companies.
- Established a transfer of monies from the General Fund to the Local Cigarette Tax Fund if the amount of monies deposited in the Local Cigarette Tax Fund in a given fiscal year falls below \$58 million. The transfer, if necessary, will equal the difference between the amount deposited and \$58 million and will occur by July 15.
- The expiration date of the Local Cigarette Tax of June 30, 2019 is eliminated.

To the Corporate Net Income Tax:

- Changes the due date for corporate net income tax reports (RCT-101) to 30 days after the federal report is due, or would be due if that corporation were required to file federally, for tax years beginning after December 31, 2015.
- Provides procedures for corporations filing amended corporate tax reports beginning with amended reports filed after December 31, 2016. Taxpayers will have three years from the due date of the original report to file an amended report. The department will have one year from the date the amended report is filed to notify the taxpayer if the changes are accepted. If the taxpayer is not notified within one year, the report is deemed accepted.

To the Bank Shares Tax:

- Changes the bank shares tax rate from 0.89 percent to 0.95 percent, effective January 1, 2017.
- Allows a phased-in deduction for Edge Act corporation equity, effective January 1, 2018.
- Changes the source for income in the receipts definition from the federal tax return to the Consolidated Reports of Condition.
- Clarifies the deduction for goodwill generated from combination activity and for the apportionment of receipts from investment and trading assets and activities.

To the Personal Income Tax:

- Imposes the personal income tax on cash prizes from the Pennsylvania Lottery, retroactively effective January 1, 2016.
- Allows taxpayers receiving a refund to designate all or a portion of their refund as a contribution to a Tuition Account Program (TAP) directly from their personal income tax return, beginning with the tax year 2016 return.
- Clarifies the language specifying the treatment of intangible drilling costs.
- Applies Section 1033 of the Internal Revenue Code to the personal income tax, effective September 11, 2016. This federal provision allows a taxpayer to acquire replacement property and make an election to defer recognition of gain following an involuntary conversion, such as when the original property is destroyed by fire or natural disaster.

To the Realty Transfer Tax:

- Allows that agricultural, conservation, or historic preservation easements transferred or sold to certain dedicated conservancies as well as government entities may be made without the seller paying the realty transfer tax, effective September 11, 2016.
- Exempts from the realty transfer tax transfers by not-for-profit veterans' organizations that are recognized by the Internal Revenue Service as 501(c)(19) tax-exempt organizations, though other parties to the transaction may still be liable, effective September 11, 2016.
- Excludes from the realty transfer tax transfers to or from a land bank, which can be established by government entities in the commonwealth, effective September 11, 2016.

To the Inheritance Tax:

- Amends the exemption for family farms and family businesses, allowing for farms and businesses that are transferred "to or for the benefit of" a member of the same family to be exempt from the taxable estate. This language extends the family farm and business exclusions to transfers of trusts for the benefit of members of the same family. This amendment also added relatives of a decedent's spouse to the definition of "members of the same family." The farm provision is effective retroactive to dates of death after December 31, 2012, while the business provision is retroactive to dates of death after June 30, 2013.

To the Table Game Taxes:

- Increases the tax on casinos' gross table games revenue from 12 percent tax to 14 percent, effective August 1, 2016, and set to expire on June 30, 2019.

To the Tax Amnesty Program:

- Provides for the implementation of a tax amnesty program by the Department of Revenue. The Governor will establish the 60-day period that must end by June 30, 2017.
- Authorizes the Department of Revenue to waive 100 percent of penalties and 50 percent of the interest due on taxes delinquent as of December 31, 2015, during the amnesty period.
- Requires the Department of Revenue to publish guidelines for the program within 60 days of the effective date of Act 84-2016, including an explanation of the program, the amnesty period dates, a sample tax return, and estimates for amnesty revenue.

To Tax Credit and Economic Development Programs

- Removes the sunset provision for the Research and Development (R&D) tax credit, which was December 31, 2015, establishing a permanent R&D tax credit.
- Significantly amends the Film Production Tax Credit by renaming it the Entertainment Production Tax Credit and including three programs: an expanded Film Production Tax Credit, the Concert Rehearsal and Tour Tax Credit, and the Video Game Production Tax Credit.
 - Expands the scope of eligible production expenses and expands the eligible tax types against which the credit may be used. Additionally, the program cap is increased from \$60 million to \$65 million per year beginning in the 2017-18 fiscal year, and the Department of Community and Economic Development may now reissue unused Film Production Tax Credits from prior fiscal years, beginning in the 2017-18 fiscal year.

- Establishes the Concert Rehearsal and Tour Tax Credit, which will award tax credits to tour operators representing musicians for rehearsals and live musical performances within the commonwealth. Credits may be awarded for up to 40 percent of eligible expenses up to \$800,000 per taxpayer per fiscal year. The program cap is \$4 million per year beginning in the 2017-18 fiscal year.
- Establishes the Video Game Production Tax Credit, which will award tax credits to video game production companies for qualifying production expenses. Credits may be awarded for up to 25 percent of qualified expenses in the first four years of production and 10 percent for each year thereafter per taxpayer per fiscal year. The program cap is \$1 million per year beginning in the 2017-18 fiscal year.
- Establishes the Coal Refuse Energy and Reclamation Tax Credit, which is designed to incentivize eligible facilities that generate electricity in the commonwealth to use coal refuse for power generation, control acid gasses for emission control and use ash produced by the facility to reclaim mining-affected sites. Credits may be awarded at a rate of \$4 per 2,000 pounds of qualified refuse, capped at 22.2 percent of the available budget allocation per fiscal year. The program cap is \$7.5 million for the 2016-17 fiscal year and \$10 million in subsequent fiscal years.
- Establishes the Waterfront Development Tax Credit, which is designed to generate funding for waterfront development projects that provide or improve public access to waterfront sites within the commonwealth. Contributions in the form of cash or personal property may be donated to an approved waterfront organization for up to a 75 percent equivalent tax credit per contributed dollar. The program cap is \$1.5 million per year beginning in the 2017-18 fiscal year.
- Repeals Article XVII-F of the Tax Reform Code, containing the provisions of the Educational Tax Credit Program. The program was subsequently amended into the Public School Code through Act 86-2016.
- Renames the Job Creation Tax Credit as the Tax Credit for New Jobs, and amends the credit to include an incentive for businesses to hire veterans for a job tax credit equivalent to \$2,500 per veteran hired, effective immediately.
- Makes several amendments to the City Revitalization and Improvement Zone (CRIZ) Program, effective immediately, to include:
 - Broadening definitions regarding the scope and administration of the program, expanding the powers and duties of contracting authorities, and amending the permitted uses of CRIZ funds by a contracting authority.
 - Expanding program eligibility to additional cities and municipalities and expanding CRIZ-eligible tax types.
 - Amending the formula for the calculation of the annual certification and lowering the cap on annual borrowing by zones.
- Establishes the Manufacturing and Investment Tax Credit, which is designed to support job creation. Eligible taxpayers, capable of increasing annual taxable payroll by a minimum of \$1 million through the creation of new full-time jobs can earn a tax credit up to 5 percent of the taxpayer's increase in annual taxable payroll. Jobs must be maintained for at least five years. The program cap is \$4 million per year beginning in the 2017-18 fiscal year.

- Establishes the Rural Jobs and Investment Tax Credit, which is designed to stimulate growth and job creation in rural areas by providing access to capital to rural businesses from businesses supporting rural growth funds. Credit for eligible contributions made by a business firm may be approved for up to a 90 percent equivalent tax credit per contributed dollar. The program cap is \$1 million per year beginning in the 2017-18 fiscal year, and is not to exceed \$4 million for the duration of the program.
- Amends the definitions of affordable housing, domestic violence or veterans' housing assistance in the Neighborhood Assistance Tax Credit program. By inclusion of these amendments, tax credits may be awarded equivalent to 75 percent of the total amount contributed by business firms participating in the program. The amendments are effective immediately.
- Makes several amendments to the Neighborhood Improvement Zone (NIZ) Program, including:
 - Broadening definitions regarding the scope and administration of the program for the state and contracting authority.
 - Providing for new penalty provisions, acceptance of late reports within the program reconciliation, and an annual program audit by an independent auditing firm.
 - Prohibiting the assessing of real estate taxes on any property owned by the contracting authority in a zone and prohibiting property valuation for property within the zone for use by the county.
 - Changing the collection and distribution of local hotel taxes within the zone.
- Changes the sunset date for the Keystone Special Development Zone (KSDZ) Tax Credit program from 2026 to 2035, effective immediately.
- Expands the Keystone Opportunity Zone (KOZ) program to include the designation of 12 new Keystone Opportunity Expansion Zones consisting of 375 acres each for a period of up to 10 years, effective January 1, 2017 to December 31, 2026. In addition, existing parcels can be extended up to 10 years for state tax benefits, if the applicant can meet the job creation and capital investment requirements in the enabling legislation.
- Establishes the Mixed-Use Development Tax Credit, which is designed to help communities address affordable housing shortages and support business growth. Qualified taxpayers may purchase tax credits to benefit the Pennsylvania Housing Finance Agency's Mixed-Use Development Program. The tax credit program cap is \$2 million per year beginning in the 2017-18 fiscal year.
- Repeals the previous authorizing statute for the Keystone Innovation Zone (KIZ) program and moves it to Article XIX-F of the Tax Reform Code. Additionally, the cap for the KIZ tax credit program is reduced to \$15 million per fiscal year from \$25 million per fiscal year, effective immediately.
- Reinstates the Malt Beverage Tax Credit in the 2017-18 fiscal year, capping the credit program at \$5 million per year. The credit was formerly effective from January 1, 1974, to December 31, 2008.

- Establishes the Computer Data Center Equipment Incentive Program, which is designed to attract new investment from businesses that operate within facilities containing equipment such as servers or data storage equipment necessary to operate a computer data center. Applicants must meet capital investment and annual compensation requirements for employees working within the data center. The program cap is \$5 million per year beginning in the 2017-18 fiscal year.
- Repeals the Promoting Employment Across Pennsylvania (PEP) tax credit, effective December 1, 2016.

ACT #39 of June 8, 2016 made the following changes:

To the Liquor Code:

- Allows restaurants and hotels to purchase an expanded wine permit to sell up to 3,000 mL of wine (4 bottles) for off-premise consumption.
- Sets the initial permit fee of \$2,000 and the renewal fee equal to 2.0 percent of the cost of wine purchased from the board for off-premise consumption.
- Allows the LCB to sell PA Lottery tickets through instant ticket vending machines, player activated terminals and technologies for the self-service sale of Pennsylvania Lottery tickets and provides that the licensee commission be deposited in the General Fund.
- Authorizes the LCB to issue licenses to casinos for a fee of \$1 million to sell alcohol 24 hours a day, 7 days a week. The renewal fee will be \$1 million for the next four years and will be set at \$250,000 per year thereafter.
- Allows a restaurant license that ceased to exist under law to be auctioned by the LCB once a year to the highest bidder with the minimum bid set at \$25,000.
- Allows for the conversion of an eating place license to a restaurant license for a fee of \$30,000.
- Provides for up to \$1 million annually for the awarding of grants for the purpose of increasing production of malt and brewed beverages made in PA. Provides for up to \$1 million annually for the awarding of grants for the purpose of increasing production of wines made in PA.
- Specifies that these provisions will be effective 60 days after enactment.

ACT #25 of April 25, 2016 made the following changes:

To the Enhanced Revenue Collections Account:

- Provides that the Enhanced Revenue Collection Account (ERCA) in the Department of Revenue will continue through FY 2019-20. Revenues collected will be deposited into the account. Of the funds in the account, for each of the fiscal years from FY 2015-16 through FY 2019-20, up to \$25 million is appropriated to the department to fund the costs associated with the increased tax collection enforcement and reduction of tax refund errors. The balance in account on June 15, 2014, and each June 15 thereafter shall be deposited into the General Fund. The department will generate a report to the governor and General Assembly including a detailed breakdown of administrative costs, the amount of revenue collected and the amount of refunds avoided.

To the Educational Tax Credits:

- Provides language necessary to allow a business which participates in the Educational Improvement Tax Credit (EITC) and Opportunity Scholarship Tax Credit (OSTC) programs during FY 2015-16 to utilize the credit in either the tax year in which the application or the contribution is made.

To Transfers and Payments:

- Reduces the statutory annual transfer from the Oil and Gas Lease Fund to the Marcellus Legacy Fund for transfer to the Environmental Stewardship Fund for FY 2015-16 to \$20 million to align with amounts available and modifies the distribution to agencies from that transfer to ensure that mandatory debt service continues to be paid and to preserve the funding for the Agricultural Conservation Easement Program.
- Directs that any payment of a slot machine license fee received by the Pennsylvania Gaming Control Board after June 30, 2014, is to be deposited in and credited to the General Fund. The transfer is estimated to generate a deposit of \$50 million by June 30, 2016.
- Directs that by June 1, 2016, \$4.5 million shall be transferred from the Dormitory Sprinkler System fund to the General Fund.

ACT #17 of April 18, 2016 made the following changes:**To the Personal Income Tax:**

- Establishes ABLE (Achieving a Better Life Experience) accounts under the Pennsylvania ABLE Act and provides that contributions made to an ABLE account, any increase in the value of those contributions, the retention or transfer during life or as a result of death of any legal interest in an account and payment of qualified disability expenses of eligible individuals from an account shall be exempt from all taxation by the Commonwealth and its political subdivisions. All provisions are effective immediately.

ACT #58 of November 4, 2015 made the following changes:**To the Pennsylvania Housing Affordability and Rehabilitation Enhancement Fund:**

- Provides for a transfer of realty transfer tax funds to the Pennsylvania Housing Affordability and Rehabilitation Enhancement Fund, beginning in fiscal year 2015-16.
- Specifies that the annual transfer is to be the lesser of \$25 million or 40 percent of the difference between (a) the total dollar amount of the realty transfer tax collected in the prior fiscal year and (b) the total dollar amount of the realty transfer tax official estimate for the fiscal year 2014-15 (\$447.5 million).

ACT #203 of October 31, 2014 made the following changes:**To Procedure and Tax Administration for Out-of-State Entities During a Declared Emergency:**

- Provides that out-of-state businesses responding to a disaster emergency declared by the Governor of Pennsylvania or President would not be subject to: state or local business licensing or

registration; PUC or regulatory requirements; state and local taxes/fees, such as unemployment insurance, sales and use tax, property tax on equipment brought in on a temporary basis, used or consumed in the Commonwealth during the disaster emergency, and subsequently removed from the Commonwealth, state or local occupational licensing fees or local service taxes; and state or local tax on or measured by, in whole or in part, net or gross income or receipts.

- An out-of-state employee shall not be considered to have established residency that would require the individual or the employer to do the following: file and pay income taxes; be subjected to income tax withholding; or file and pay any other state or local tax or fee for disaster emergency-related work performed during the period designated.
- These exemptions apply to an out-of-state business who performs work for a period of not more than ten days before and not more than 60 days after the end of a declared disaster emergency period and the business must be in compliance with all applicable regulatory and licensing requirements in its state of domicile. The exemption period may be extended by the Governor for a period of not more than 30 days for each declared disaster emergency.

ACT #201 of October 31, 2014 made the following changes:

To the State Lottery Fund:

- Added definitions for Internet Instant Game and Keno, while prohibiting the Secretary of Revenue from authorizing these games unless authorized by an act of law.
- Allocates no less than 27% of total revenues from the sale of lottery tickets or shares to property tax relief and free or reduced fare transit service for the elderly in fiscal years beginning before July 1, 2014. For fiscal years beginning after June 30, 2014, that percentage drops to 25%.

ACT #194 of October 31, 2014 made the following changes:

To the Educational Improvement Tax Credit (EITC) and Educational Opportunity Scholarship Tax Credit (EOSTC):

- Repeals the EITC and EOSTC as stand-alone Articles in the Tax Reform Code (TRC).
- Consolidates both the EITC and EOSTC programs into Article XVII-F of the TRC under the title of the Educational Tax Credits (ETC) Program.
- Adds the Malt Beverage Tax to the list of taxes against which the ETC can be applied.
- Includes numerous administrative changes regarding how the ETC operates.

To the City Revitalization and Improvement Zones (CRIZ):

- Effectively allows a borough or township to create an authority to apply for a pilot zone. Previous law did not include this language, so no pilot zones were able to be awarded.

ACT #193 of October 31, 2014 made the following changes:**To the Organ and Bone Marrow Donor Tax Credit:**

- Repeals Act 65-2006, the Organ and Bone Marrow Donor Act, which contained the original creation of the Organ and Bone Marrow Tax Credit.
- Adds Article XVIII to the Tax Reform Code (TRC), containing the reestablished Organ and Bone Marrow Tax Credit, which had expired in 2010.
- The Organ and Bone Marrow Donor Tax Credit is for expenses incurred when a business firm grants to any of its employees a paid leave of absence for the purpose of donating an organ or bone marrow. Credits can be used against the taxes imposed under Articles III, IV, VI, VII, VIII or XV of the TRC. The credit is retroactively available for tax years beginning on or after January 1, 2011. (Effective immediately)

ACT # 156 of October 22, 2014 made the following changes:**To the Property Tax or Rent Rebate (PTRR) Program:**

- Allowed that PTRR claimants who are eligible as of December 31, 2012 would remain eligible if the household income limit is exceeded only due to a Social Security cost-of-living increase. This provision expires on December 31, 2016.

ACT #131 of September 24, 2014 made the following changes:**To the Cigarette Tax:**

- Authorizes Philadelphia School District to levy a cigarette tax at the rate of 10 cents per cigarette. Effective October 1, 2014 to June 30, 2019.

ACT #90 of November 27, 2013 made the following changes:**To the Tavern Games Taxes:**

- Provides for the conduct of tavern games by tavern games licensees and imposes a tavern games tax of 60 percent and a host municipality tavern games tax of 5 percent on the net revenue from tavern games. Revenue from the tavern games tax is deposited into the General Fund. Revenue from the host municipality tavern games tax is deposited into the Host Municipality Tavern Games Local Share Account, a restricted receipts account established within the General Fund.

ACT #89 of November 25, 2013 made the following changes:**To the Liquid Fuels and Fuels Taxes:**

- Eliminates the permanent trust fund tax of \$0.12 per gallon on all taxable liquid fuels, fuels, and alternative fuels used or sold and delivered by distributors in the Commonwealth, effective January 1, 2014.

To the Oil Company Franchise Tax:

- Sets the average wholesale price at \$1.87 in 2014, \$2.49 in 2015 and 2016, and in 2017 the average wholesale price will be uncapped. An average wholesale price floor is set at \$2.99 for 2017 and each year thereafter. The prior cap was \$1.25 per gallon, with a \$.90 floor.
- Adds an additional 64 mills to the tax rate in 2014, 49 mills in 2015, 48 mills in 2016, 41 mills in 2017, and 39 mills in 2018 and each calendar year thereafter on all taxable liquid fuels, fuels, and alternative fuels. Furthermore, 4.17% of the mills added by Act 89 are transferred to the Liquid Fuels Tax Fund.

To Licenses and Fees:

- Increases various motor vehicle registration fees, effective April 1, 2014.
- Redirects certain vehicle fees that had been deposited in the Motor License Fund to the Public Transportation Trust Fund and the Multimodal Transportation Fund, effective January 1, 2014.
- Authorizes a fee option in lieu of suspension for driving without insurance, effective January 1, 2015.
- Provides the motor vehicle owner an option for biennial vehicle registration renewal rather than the current annual cycle beginning January 1, 2017.

To Transfers and Payments:

- Transfers \$35 million from Oil Company Franchise Tax revenues to the Multimodal Transportation Fund beginning in fiscal year 2015-16.
- Redirects the \$200 million Pennsylvania Turnpike payment to the Motor License Fund beginning in fiscal year 2014-15. That payment will now be split between the Public Transportation Trust Fund and the Multimodal Transportation Fund.

ACT #71 of July 18, 2013 made the following changes:**To Procedure and Administration:**

- Authorizes the Department of Revenue and the State Treasurer to mandate that payments of \$1,000 or more for corporation taxes, employer withholding and sales tax must be made electronically. Personal income tax is not required to be paid electronically. Effective Jan. 1, 2014.
- Requires electronic filing by third-party preparers who annually submit 11 or more state tax reports or returns. Effective immediately.
- Prohibits the department from contracting with third parties to conduct field audits based on a contingent fee. Effective immediately.

To the Corporate Loans Tax:

- Repeals the corporate loans tax effective for tax years beginning after Dec. 31, 2013.

ACT #52 of July 9, 2013 made the following changes:**To the Sales and Use Tax:**

- Effective 90 days following enactment, provides a sales and use tax exemption for aircraft parts, services to aircraft and aircraft components.

- Immediately reduces the appeal period for a sales tax license revocation from 90 days to 30 days.
- The additional 1 percent local Philadelphia sales and use tax authorized under Act 44-2009 is made permanent. The total Philadelphia sales and use tax is 2 percent.
- Repeals the call center tax credit.
- Repeals authorization for county treasurers to receive use tax from any person other than a licensee.

To the Personal Income Tax:

- Aligns Pennsylvania with federal rules to allow for a \$5,000 start-up business deduction in the year a new business is established. Effective Jan. 1, 2014.
- Permits a taxpayer to recover intangible drilling costs as defined by federal rules by using either a 10-year amortization period or an election to currently expense up to one-third of the allowable costs and amortize the remaining costs over 10 years for personal income tax. Effective beginning with tax year 2014.
- Effective Jan. 1, 2014, authorizes actions by the department to improve tax compliance and administrative efficiency for pass-through entities such as partnerships, limited liability companies and S corporations. Provisions include:
 - Authorizes assessment at the entity level for understatements of income in excess of \$1 million by partnerships with eleven or more partners, or having at least one partner that is a corporation, limited liability company, partnership, S corporation or trust, or that elects to be subject to this provision. A similar provision applies to S corporations. These provisions do not apply to publicly traded partnerships.
 - Requires partnerships to maintain accurate lists of partners and addresses.
 - Requires estates and trusts to withhold Pennsylvania tax on PA-source income from nonresidents.
 - Requires nonresident estates and trusts to file Pennsylvania returns if they have Pennsylvania beneficiaries or PA-source income.
 - Clarifies that filing of PA-20S/PA-65 returns (pass-through information returns) and RK-1s and NRK-1s is mandatory.
- Eliminates the resident credit for personal income tax paid to foreign countries. Effective Jan. 1, 2014.
- Extends and adds PA-40 refund donation options
 - Extends the Wild Resources Conservation, Organ and Tissue Donation Awareness and Military Family Relief donation options to Jan. 1, 2018.
 - Adds the Children's Trust Fund donation option effective Jan. 1, 2015.
 - Adds the American Red Cross donation option effective Jan. 1, 2015.
- In order to encourage tax compliance, authorizes the department to file citations with magisterial district judges against taxpayers collecting and not remitting employer withholding tax.

To the Corporate Net Income Tax:

- Requires the add-back of intangible expenses to income for interest, royalties, patents, trademarks, etc., between affiliated companies in certain instances. Effective for taxable years beginning in 2015.
- Clarifies the rules for the sales apportionment factor with regard to sale of services. Effective Jan. 1, 2014, the following sourcing rules apply:
 - The sale, lease, rental or other use of real property occurs at the location of the real property.
 - The rental, lease or licensing of tangible personal property occurs at the location of first possession of the property.
 - Sales of services occur at the point of delivery of the services.
- Effective Jan. 1, 2014, establishes a satellite television apportionment formula, based upon the value of equipment used in generating, processing or transmitting satellite television services.
- Increases the net operating loss deduction cap to \$4 million or 25 percent of Pennsylvania taxable income for tax year 2014 and \$5 million or 30 percent for tax year 2015 and beyond.
- Creates a minimum \$500 penalty for failure to file or knowingly making a false corporation tax report for tax years beginning after Jan. 1, 2014, in order to encourage greater compliance with the tax law.

To the Capital Stock/Foreign Franchise Tax:

- The capital stock/foreign franchise tax phase out is extended to January 2016, reducing the rate according to the following schedule:
 - Tax Year 2013 – 0.89 mills
 - Tax Year 2014 – 0.67 mills
 - Tax Year 2015 – 0.45 mills
 - Tax Year 2016 and thereafter – 0.00 mills

To the Bank and Trust Company Shares Tax:

- Reduces the bank shares tax rate from 1.25 percent to 0.89 percent as of Jan. 1, 2014, and thereafter. In addition:
- Eliminates the use of a six-year average to calculate the value of total equity capital, and instead bases the tax on the most recent year-end value of total bank equity capital.
- Requires apportionment solely based on receipts, similar to the manner in which the corporate net income tax is apportioned based on sales.
- Expands the extent to which out-of-state banks doing business in Pennsylvania are subject to the tax. A new definition of “doing business in this Commonwealth” is added, extending the tax to banking institutions that generate at least \$100,000 of gross receipts apportioned to Pennsylvania and solicit business in Pennsylvania, or hold a security interest, mortgage or lien in real or personal property located in the commonwealth.
- The prohibition on petitions for reassessment of bank shares tax is repealed.

- Requires the Department of Revenue and the Department of Banking and Securities to analyze whether the statutory tax rate sufficiently addresses the significant changes in the structure and regulatory environment within the banking industry. Requires a report within 18 months of enactment.

To the Realty Transfer Tax:

- Expands circumstances in which the sale of a real estate company is subject to tax. The following changes are effective Jan. 1, 2014:
 - An option or commitment to transfer interests in a real estate company in the future is now treated as a transfer of those interests.
 - A closely held company, 90 percent of whose assets are interests in one or more real estate companies, is now considered a real estate company itself.
 - Whether or not a company is a real estate company is determined by consideration of real estate everywhere, not just in Pennsylvania.
- Exempts from realty transfer tax the following transfers, effective immediately, applicable to transactions that occurred on or after Nov 1, 2011:
 - The transfer of real estate from the commonwealth or any of its instrumentalities to a volunteer rescue company.
 - A transfer of real estate between two or more volunteer agencies when done for no or nominal consideration.

To the Pari-mutuel Wagering Tax:

- Establishes a 10 percent tax on advance deposit account wagering through a non-licensed corporation on a horse race made over the phone or online from locations within this commonwealth. Effective immediately.

To the Film Production Tax Credit:

- Requires that Pennsylvania personal income tax shall be withheld by a production company and paid on that portion of Pennsylvania income paid to individual talent through a pass-through entity. Effective July 1, 2013.
- Provides that a film production tax credit purchased or assigned in calendar year 2013 may be used in 2014.
- Provides that a film production tax credit purchased or assigned in calendar year 2014 may be used in 2015.

To the Innovate in PA Tax Credit Program:

- This tax credit is created to distribute funding for innovation and economic growth biotechnology based projects. The Department of Community and Economic Development (DCED) is authorized to sell up to \$100 million in tax credits against insurance premiums tax liabilities to qualified taxpayers. Effective Oct. 1, 2013.
- A qualified taxpayer is an insurance company authorized to do business in the commonwealth, or a holding company that has at least one insurance company subsidiary authorized to do business in the commonwealth.

- The credits may only be claimed beginning in 2017 and the total credit applied for all claimants in any one tax year may not exceed \$20,000,000. Credits claimed may not exceed the insurance premiums tax liabilities of the claimant. Any unused credits may be carried over to any year prior to the 2026 tax year.

Creation of City Revitalization and Improvement Zones (CRIZ):

- Establishes the CRIZ program for the purpose of improvement and development within a third class city with a population of at least 30,000 based on the most recent federal census. Effective immediately.
- Designation requires approval of an application by the Department and Community Development (DCED), Department of Revenue and the Office of the Budget, and zones may not overlap locations with other economic development incentive zones or areas.
- Eligible state and local tax revenues from businesses in the CRIZ will be transferred from the General Fund or local government fund to the CRIZ Fund. Eligible state tax revenues above the baseline will be transferred to CRIZ Authority on an annual basis. Baseline tax revenues, which are eligible state tax revenue calculated in the first year of the CRIZ, will remain with the General Fund on an annual basis in most instances.
- Limited to the creation of two zones until 2016, when two additional zones may be approved each year afterwards.
- DCED may approve one “pilot zone,” which is a zone within a township or borough having a population of at least 7,000 people.

To the Mobile Telecommunications Broadband Investment Tax Credit:

- Establishes a new tax credit against corporate net income tax based upon 5 percent of the cost of investment in qualified broadband equipment located in the commonwealth. Effective beginning with tax year 2014.
- The tax credit may not be sold or assigned to third parties.
- The credit is capped at \$5 million per year and will be prorated if necessary.

To the Inheritance Tax:

- Provides a small business exemption from inheritance tax for a transfer of a family-owned business interest to one or more family members, provided that after the transfer, the family-owned business interest continues to be owned by a family member for a minimum of seven years after the decedent’s date of death. Effective July 1, 2013.
- The exemption is limited to qualified family-owned business interests, defined as having fewer than 50 full-time equivalent employees, a net book value of assets less than \$5 million, and being in existence for at least five years, as of the decedent’s date of death. In addition, the principal purpose of the entity must not be the management of investments or income-producing assets owned by the entity.
- Specifies that any family-owned business interest no longer owned by a member of the decedent’s family within seven years shall be subject to the inheritance tax in the amount that would have been paid for nonexempt transfers of property, plus interest.

- Requires annual certification to the department that the family-owned business interest qualifies for the exemption and notification to the department within 30 days if it fails to qualify.
- Does not apply to property transferred to the business within one year of the date of death unless the transfer is for a legitimate business purpose.
- Repeals poverty exemption for spouses in inheritance tax, now superseded by an exemption for transfers to spouses.

To Procedure and Administration:

- Reorganizes the existing Board of Finance and Revenue by April 2014 by replacing the existing six members of the Board with three full-time members, who must be attorneys or certified public accountants having substantial knowledge of Pennsylvania tax law. Two members will be²⁸ nominated by the Governor and confirmed by the Senate, and the third member is the Pennsylvania Treasurer or Treasurer's designee.
 - The petitioner and the department are entitled to present oral and documentary evidence before the Board with regard to tax appeals.
 - The board may order a compromise settlement with agreement of both parties.

Economic Outlook

The Pennsylvania Department of Revenue and the Office of the Budget utilize economic forecast data supplied by IHS Markit and Moody’s Analytics in constructing the official tax revenue estimates and forecasts. Analysis and discussion throughout this section is based upon data from each source in addition to further analysis from the Department of Revenue and the Office of the Budget.

U.S. Recent Trends and Current Conditions

U.S. GDP growth continued in 2017, led by accelerations in consumer spending and business fixed investment, along with an upturn in residential investment. The U.S. economy is expected to see further growth in 2018. The greatest risk to this growth assumption is policy mistakes here or abroad.

The Federal Open Market Committee (FOMC) raised the federal funds rate by 25 basis points at the December 12, 2017 meeting for the third and final time in 2017. The expectation going forward assumes three rate hikes in 2018, with the first hike as early as March.

After the rollercoaster ride of 2017, the dollar is likely to move higher in 2018, although volatility could remain. The Federal Reserve will continue to monitor the U.S. economic and political developments while further considering the pace and frequency of future interest rate hikes.

Chart 1
REAL GROSS DOMESTIC PRODUCT
Annual Growth

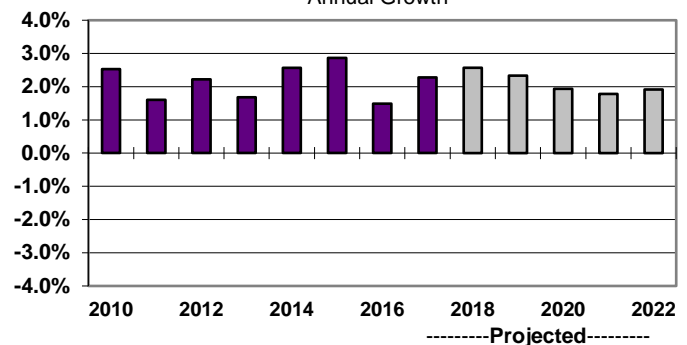
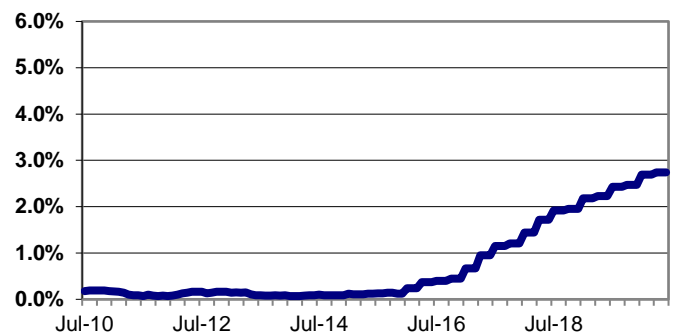


Chart 2
FEDERAL FUNDS RATE



The Forecast

Growth is expected to trend higher for the U.S. in the coming year as consumer spending, housing, and capital expenditures expand. The higher value of the dollar is largely due to the Federal Reserve’s widening interest rate differentials in 2018, anticipating continuing growth in the U.S. economy. IHS Markit predicts that, on a trade-weighted basis, the dollar will increase 2-3% over 2018

Table 1 and Table 2 are U.S. macro forecast projections from IHS Markit. Table 1 outlines the expected outlook for lower unemployment and an increase in GDP. Table 2 notes that over the next two years there is a 65% probability of moderate GDP growth, with an increase in consumer and business fixed investment. Table 2 also provides narrative for each economic indicator.

Table 1
Forecast Change in
Key U.S. Economic Indicators
Annual Percentage Growth*

Indicator	2016	2017p	2018p	2019p
Nominal GDP	2.6	4.1	4.7	4.6
Real GDP	1.5	2.3	2.6	2.3
Real Personal Consumption	2.7	2.7	2.5	2.3
Corporate Profits (After Tax)	2.2	8.4	6.0	7.4
Unemployment Rate (Rate)	4.9	4.4	3.9	3.8
CPI	1.3	2.1	1.8	2.1
Federal Funds (Rate)	0.40	1.00	1.76	2.33

*Assumptions in this chart, as well as other assumptions, are incorporated in the 2018-19 fiscal year revenue estimates.

p = projected

Table 2
U.S. Macro Forecast Projection from IHS Global Insight
December 2017

Baseline Forecast (65% Probability)	
GDP Growth	Moderate growth, 2.3% in 2017 and 2.6% in 2018
Consumer Spending	A key driver of growth, up 2.7% in 2017 and 2.5% in 2018
Business Fixed Investment	Rebounds 4.7% in 2017 as equipment and structures spending picks up, and then moderates to 4.1% in 2018
Housing	Gradual improvement, with 1.4 million starts by fourth quarter 2019
Exports	Climb 3.1% in 2017 and 4.3% in 2018 due to stronger economic growth in countries to which the United States exports
Fiscal Policy	New administration fosters bipartisan agreements that fund existing obligations without interruption
Monetary Policy	Federal Reserve anticipates three federal funds rate hikes in 2018, ending the year at 2.25%
Credit Conditions	Gradually easing
Consumer Confidence	On an upward trajectory until third quarter 2018
Oil Prices (Dollars/barrel)	Brent crude oil averages \$54 in 2017 and \$56 in 2018
Stock Markets	The S&P 500 rises 16.9% in 2017 and 7.1% in 2018
Inflation (CPI)	Both headline and core CPI inflation average 2.0% over 2017-19
Foreign Growth	In 2017, Eurozone growth rises to 2.4%, while China's growth edges up to 6.8%

Pennsylvania Outlook

Pennsylvania benefits from a highly diversified economy with a mix of industries. No single employment sector dominates Pennsylvania. Since the turbulent diversification of the Pennsylvania economy during the 1970's and 1980's, Pennsylvania has a much more stable economy which tends to track the national economy but with less volatility. During periods of national economic contraction, Pennsylvania often will outperform the U.S. in areas such as growth in real gross state product, growth in real personal income, and employment growth. Pennsylvania's unemployment rate generally trends below the U.S. rate, and per capita income levels in the Commonwealth exceed national levels. However, during periods of economic expansion, Pennsylvania will often lag behind the rate of growth in the national economy.

Pennsylvania will continue to benefit from the Marcellus shale natural gas deposit. The buildout of infrastructure to move gas to the market will continue with the construction of pipelines, compressing stations, and processing facilities. Eventually the Utica Shale will continue to provide jobs in the mining industry. The state may also attract jobs in industries that can benefit from the increase in natural gas supplies, either for low-cost energy or for inputs into chemical products. The current growth phase in the Marcellus Shale production continues to focus on building infrastructure to service existing wells. Royal Dutch Shell is moving forward with its proposed processing plant in Beaver County. The plant will process ethane from nearby natural gas wells in Pennsylvania, Ohio, and West Virginia into ethylene, which is the building block of plastics. The plant will provide hundreds of jobs and ensure market access for locally produced natural gas liquids.

The Pittsburgh area continues to attract high-tech jobs such as software development. This, along with the state's numerous high-quality research universities, is helping to mitigate job migration. Tech giants Google and eBay have recently moved into the area, while Westinghouse is in the process of expanding its headquarters in the region.

The Port of Philadelphia is reporting sharp increases in import volume. This is due to the expansion of the Panama Canal that has reduced the cost to ship from the Pacific Ocean to the East coast. Pennsylvania is investing \$300 million in the Port of Philadelphia to increase capacity and compete against other ports on the Eastern seaboard. The Port has reached a deal with Hyundai to handle 150,000 cars annually through the port. The related facility will employ approximately 400 workers.

South-central Pennsylvania continues to grow as a distribution hub for the northeast region. Norfolk Southern is building an intermodal terminal southwest of Harrisburg. Their \$95 million facility is part of the "Crescent Corridor" project, a rail corridor from Louisiana to New Jersey.

Education and healthcare sectors remain a vital part of the state economy. The health care sector expects to benefit from increased demand building upon expanded insurance coverage already provided through the Affordable Care Act. Pennsylvania also boasts many top-flight research hospitals that draw patients from outside the state. The state's education providers, especially its notable research universities, not only provide jobs on campus but also help to nurture new businesses with the graduates they produce.

Pennsylvania is expected to add jobs at an annual average rate of 0.7% between 2018 and 2020. The healthcare sector continues to be a reliable source for new jobs and investment, while construction expands due to increased activity in residential and commercial development, as well as infrastructure spending. Overall employment growth in Pennsylvania is expected to be 1.1% for 2018. The state's unemployment rate will continue to fall below its current 4.7%.

Table 3 shows various historical and projected key economic indicators for Pennsylvania and the U.S. economy.

Table 3
Key Economic Indicators for Pennsylvania

PENNSYLVANIA: Key Economic Indicators	2016	2017	2018	2019	2020	2021
Real Gross State Product (in millions, 2009 dollars)	647,708	659,477	673,237	685,195	696,365	706,862
Real Gross State Product (percentage change)	0.6%	1.8%	2.1%	1.8%	1.6%	1.5%
Total Employment (in thousands)	5,886.6	5,952.2	6,015.2	6,061.3	6,079.4	6,081.6
Total Employment (percentage change)	0.9%	1.1%	1.1%	0.8%	0.3%	0.0%
Manufacturing Employment (in thousands)	558.3	553.3	563.3	571.9	576.3	577.5
Nonmanufacturing Employment (in thousands.)	5,328.3	5,398.9	5,451.9	5,489.4	5,503.1	5,504.1
Population (in thousands)	12,783.7	12,782.4	12,788.3	12,798.8	12,813.9	12,831.4
Population (percentage change)	-0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Unemployment Rate (percentage)	5.5%	4.9%	4.3%	4.1%	4.1%	4.3%
Personal Income (percentage change)	1.8%	2.9%	4.0%	4.3%	4.3%	4.0%
U.S. ECONOMY						
Real Gross Domestic Product (percentage change)	1.5%	2.1%	2.3%	2.4%	1.9%	1.8%
Employment (percentage change)	1.8%	1.5%	1.5%	1.3%	0.7%	0.4%

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For the 2016-17 revised and 2017-18 budget estimates, three types of models were used: (1) econometric, (2) structural and (3) combined structural and econometric models. An econometric model assumes that tax revenues are a function of one or more economic factors. An example of such a model is the realty transfer tax model. Structural models forecast revenue based on the statutory requirements, on the timing of tax remittances, and on projected changes in aggregate liabilities. Projected changes in tax liabilities are estimated either from economic data or from historic patterns.

Econometric models are estimated using least squares regression. Regression analysis assumes a relationship where the dependent variable, y , equals the sum of the products of independent variables, x_n , and their respective coefficients, β_n , plus an error term, e :

$$y = \beta_0 + \beta_1 x_1 + \dots + \beta_n x_n + e.$$

A regression equation, $y = \beta_0 + \beta_1 x_1 + \dots + \beta_n x_n + e$, differs from the true equation by the error term, e . The method of least squares regression estimates values for the coefficients $\beta_0, \beta_1, \dots, \beta_n$ such that the sum of the squared error terms is minimized. Once a regression equation is determined, a projection of future estimates may be derived using forecasts of the independent variables.

Certain econometric models need to be adjusted for a serial correlation bias. The autoregressive coefficient of the residual, ρ (rho), is used to adjust these forecasts. The corrected forecast equals:

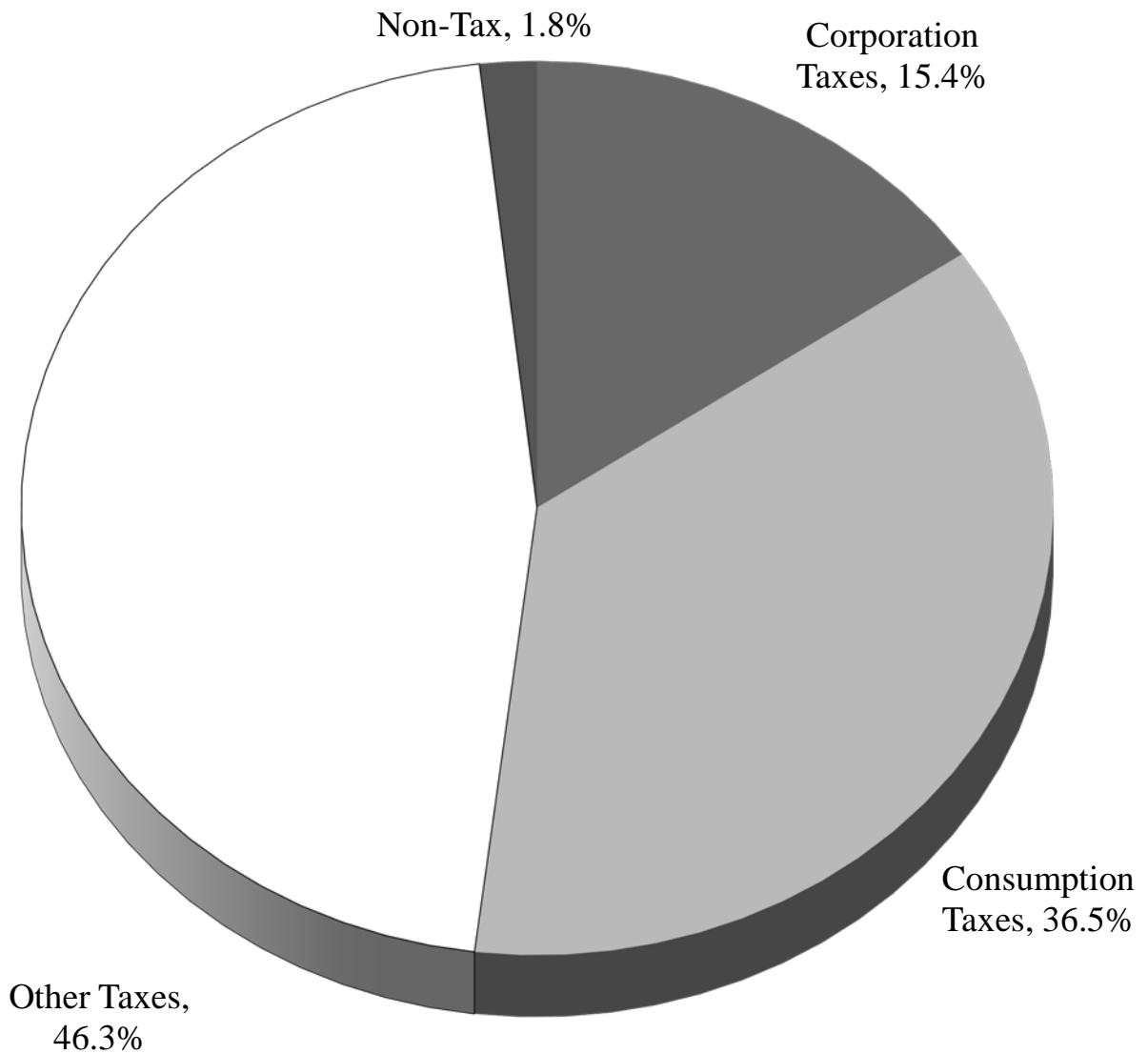
$$y_i = \beta_0 + \beta_1 x_1 + \dots + \beta_n x_n + v_i$$

$$v_t = \rho_1 V_{t-1} + \dots + \rho_z V_{t-z} + \varepsilon_t$$

where t equals the number of observations into the forecast period and z equals the number of prior periods included in the autoregressive equation. All models for which v_t is shown, are adjusted to correct for a serial correlation bias.

GENERAL FUND REVENUE

Fiscal Year 2018-19



CIGARETTE TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	1,069.9	-0.5%
2012-13	1,024.1	-4.3%
2013-14	976.9	-4.6%
2014-15	927.2	-5.1%
2015-16	911.5	-1.7%
2016-17	1,261.6	38.4%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	1,230.4	-2.5%
2018-19	1,182.9	-3.9%
2019-20	1,143.1	-3.4%
2020-21	1,105.4	-3.3%
2021-22	1,169.2	-3.3%
2022-23	1,034.2	-3.3%

MODEL: Econometric

EQUATION: $\ln CIGADJ_t = 11.4788 - 0.0024T_t + 0.3404RATE1 + 0.1571FLOOR + v_t$
 $v_t = 0.8213 v_{t-12}$

VARIABLES:

CIGADJ - Monthly cigarette tax receipts adjusted for PA tax rate and transfers.

T - Linear time variable: 2010 M1 = 1, 2010 M2 = 2, etc.

RATE1 - Dummy variable for rate change.

FLOOR - Dummy variable for floor tax.

STATISTICS:

r^2	=	0.879	<i>DF</i>	=	91
<i>F</i>	=	164.50	<i>N</i>	=	96
<i>DW</i>	=	1.96			

COEFFICIENT T-STATS :

β_0	=	450.17	β_1	=	-5.97
β_2	=	19.77	β_3	=	5.71
β_4	=	-13.67			

CIGARETTE TAX (Cont'd)

Base cigarette tax receipts are forecasted using an econometric model, adjusted for a twelfth-order serial correlation bias, and utilizing time as an explanatory variable. Dummy variables are used to capture the non-repeating floor tax remittances and the change in the tax rate as a result of Act 84-2016. Results are transformed into cash receipts by rate adjusting and including transfers.

Act 84-2016 increased the cigarette tax rate from 8 cents to 13 cents per cigarette and included a floor tax due ninety days after the effective date of the Act.

Act 84-2016 also established a transfer of monies from the General Fund to the Local Cigarette Tax Fund if the amount of monies deposited in the Local Cigarette Tax Fund in a given fiscal year falls below \$58 million. The transfer, if necessary, will equal the difference between the amount deposited and \$58 million and will occur by July 15.

CORPORATE NET INCOME TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	2,022.4	-5.1%
2012-13	2,423.4	19.8%
2013-14	2,501.6	3.2%
2014-15	2,811.5	12.4%
2015-16	2,842.4	1.1%
2016-17	2,781.0	-3.2%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	3,010.1	9.4%
2018-19	3,074.7	2.1%
2019-20	4,007.7	30.3%
2020-21	4,289.8	7.0%
2021-22	3,932.7	-8.3%
2022-23	3,847.8	-2.2%

MODEL: Econometric, Structural

EQUATIONS: $\ln PAYMENTS_t = -0.8257 + 0.8746 \ln BASE + v_t$
 $v_t = 0.2557 v_{t-1} + 0.9043 v_{t-4} - 0.2925 v_{t-5}$

VARIABLES: *PAYMENTS* - Corporate net income tax receipts on a quarterly basis for all corporations.

BASE - Weighted average before-tax US corporate profits, adjusted for tax law changes

STATISTICS:

\bar{r}^2	=	0.873	<i>DF</i>	=	67
<i>F</i>	=	115.54	<i>N</i>	=	72
<i>DW</i>	=	2.19			

COEFFICIENT T-STATS :

β_0	=	-0.46	β_1	=	3.93
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CORPORATE NET INCOME TAX (Cont'd)

The autoregressive equation predicts Corporate Net Income Tax (CNIT) payments on a quarterly basis, which are then summed to create the fiscal year forecast. Predictions for the current month are determined by payments in the previous quarter, payments in the same quarter a year ago, and the payments from a year and one quarter ago. An estimate of the Pennsylvania corporate profit base for the current quarter also determines current receipts. This structurally derived estimate is based on historical corporate tax payment patterns, adjusted for changes in NOL caps and sales factor weighting, and national corporate profit estimates from IHS Global Insight.

The Governor's Executive Budget proposes the following changes to the Corporate Net Income Tax:

For all tax years beginning after December 31, 2018, Corporate Net Income Tax filers will be required to use the combined reporting method if they are a member of a corporate group.

The CNIT rate will be phased down from the current 9.99% rate, starting in tax year 2020:

Tax Year	CNIT Rate
2020	9.49%
2021	8.99%
2022	8.49%
2023 and after	7.99%

FINANCIAL INSTITUTIONS TAXES

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	272.5	14.7%	2017-18	323.2	0.2%
2012-13	351.5	29.0%	2018-19	331.7	2.6%
2013-14	317.9	-9.6%	2019-20	334.6	0.9%
2014-15	294.1	-7.5%	2020-21	333.2	-0.4%
2015-16	333.0	12.2%	2021-22	333.0	-0.1%
2016-17	322.5	-2.3%	2022-23	335.6	0.8%

EQUATION: $FIT = MTIT + BST$

VARIABLES:

FIT - Financial Institutions Tax

MTIT - Mutual Thrift Institutions Tax

BST - Bank and Trust Company Shares Tax and Title Insurance
Company Shares Tax

MUTUAL THRIFT INSTITUTIONS TAX

MODEL: Structural

The mutual thrift institutions tax (MTIT) structural model estimates are flat during the projection period. MTIT collections are expected to remain flat for a number of reasons.

Little or no expansion is expected within the industry in the forecast period as the past trend in mergers and acquisitions has yielded to appeal litigation seeking to reduce or eliminate the tax liability of some taxpayers. Any successful appeals will decrease the MTIT base, thus no growth is projected over the forecast period.

FINANCIAL INSTITUTIONS TAX (Cont'd)

SHARES TAX

MODEL: Structural

The bank shares tax (BST) estimate results from a structural model that utilizes historical BST return data to estimate taxable shares. Growth for 2017-18 and beyond is determined using historical BST collections and industry trends.

Act 52-2013 made several revisions to the BST. Beginning January 1, 2014, the use of a six-year average to calculate the value of total equity capital is eliminated. Instead, the taxable value of shares is computed on the most recent year-end value of an institution's total bank equity capital, adjusted to exclude the value of United States obligations. Apportionment is now based solely on receipts, rather than on payroll, receipts, and deposits. Also beginning January 1, 2014, the tax rate on the dollar value of each taxable share of stock is reduced from 1.25 percent to 0.89 percent.

Act 84-2016 made several revisions to the BST. Effective January 1, 2017, the tax rate changes from 0.89 percent to 0.95 percent. Effective January 1, 2018, a phased-in deduction is allowed for Edge Act corporation equity.

FINES, PENALTIES, AND INTEREST

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	66.4	322.2%	2017-18	68.2	-14.0%
2012-13	55.4	-16.5%	2018-19	72.2	5.9%
2013-14	71.0	28.0%	2019-20	72.2	0.0%
2014-15	70.2	-1.1%	2020-21	72.2	0.0%
2015-16	72.0	2.5%	2021-22	72.2	0.0%
2016-17	79.3	10.2%	2022-23	72.2	0.0%

Beginning in fiscal year 2013-14, fines, penalties, and interest on taxes are included with their respective tax types. Other fines, penalties, and interest are collected by several different departments. Each of these departments prepares estimates which are reviewed and totaled by the Department of Revenue.

GAMING TAXES

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	95.0	38.4%	2017-18	123.1	2.1%
2012-13	88.7	-6.7%	2018-19	148.9	21.0%
2013-14	90.5	2.0%	2019-20	147.7	-0.8%
2014-15	95.9	6.0%	2020-21	159.3	7.9%
2015-16	100.2	4.5%	2021-22	163.9	2.9%
2016-17	120.6	20.4%	2022-23	167.4	2.1%

EQUATION: $GT = TGT + IGT + FCT + VGTT$

- VARIABLES:**
- TGT – Table Game Taxes
 - IGT – Interactive Gaming Tax
 - FCT – Fantasy Contest Tax
 - $VGTT$ – Video Gaming Terminal Tax

TABLE GAME TAXES

MODEL: Structural

These estimates are derived from historical data from each of the slot machine license holders operating table games as well as Pennsylvania Gaming Control Board knowledge of anticipated table game expansion at existing or new facilities.

Act 84-2016 established an additional 2 percent table game tax on gross table game revenue for the period August 1, 2016 through June 30, 2019.

Act 42-2017 provides for additional gaming tables at Category 3 licensed facilities and provides for ten Category 4 licensed facilities, operating up to 30 gaming tables.

GAMING TAXES (Cont'd)

INTERACTIVE GAMING TAX

MODEL: Structural

This estimate is derived from historical interactive gaming data from New Jersey. U.S. Census Bureau population data are then used to estimate Pennsylvania gross interactive gaming revenue.

Act 42-2017 established a 14 percent interactive gaming tax on daily gross interactive gaming revenue and a 14 percent multi-use gaming device tax on daily gross interactive airport gaming revenue from peer-to-peer interactive games and non-peer-to-peer interactive games that simulate table games.

FANTASY CONTEST TAX

MODEL: Structural

This estimate is derived from historical industry data related to revenue, market share, and growth. U.S. Census Bureau population data are then used to estimate Pennsylvania fantasy contest revenue.

Act 42-2017 established a 15 percent fantasy contest tax on monthly fantasy contest adjusted revenue.

VIDEO GAMING TERMINAL TAX

MODEL: Structural

This estimate is derived from Illinois' historical video gaming terminal data and data on the number of truck stops in Pennsylvania to estimate Pennsylvania participation and revenue.

Act 42-2017 established a 42 percent video gaming terminal tax on gross terminal revenue from all video gaming terminals operated by a terminal operator licensee within this commonwealth.

GROSS RECEIPTS TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	1,330.0	8.6%	2017-18	1,229.4	-0.1%
2012-13	1,306.3	-1.8%	2018-19	1,229.9	0.0%
2013-14	1,279.2	-2.1%	2019-20	1,229.9	0.0%
2014-15	1,261.8	-1.4%	2020-21	1,229.9	0.0%
2015-16	1,304.9	3.4%	2021-22	1,229.9	0.0%
2016-17	1,230.5	-5.7%	2022-23	1,229.9	0.0%

MODEL: Structural

These estimates are derived from a database of gross receipts tax history and liability predictions as well as economic data. The estimates are prepared on a sector-by-sector basis; electric, telephone, and transportation. The telephone sector is then further broken down into collections from intrastate, interstate, and wireless telecommunications services. Total predicted liabilities are transformed to a fiscal year payment basis to obtain the receipts forecast.

INHERITANCE TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	827.7	2.8%
2012-13	845.3	2.1%
2013-14	877.4	3.8%
2014-15	1,002.3	14.2%
2015-16	962.2	-4.0%
2016-17	977.9	1.6%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	1,012.7	3.6%
2018-19	1,061.6	4.8%
2019-20	1,102.4	3.8%
2020-21	1,142.1	3.6%
2021-22	1,182.6	3.5%
2022-23	1,226.2	3.7%

MODEL: Econometric and Structural

EQUATION: $ASSETS = 951.0809 + 0.7430 GDP_t + 1.4257 SP_t$

VARIABLES:

- ASSETS* - Assets subject to tax at the time of death
- GDP* - Annual gross domestic product in current dollars
- SP* - Annual Standard and Poor's Index of Common Stocks

STATISTICS:

r^2	=	0.982	<i>DF</i>	=	17
<i>F</i>	=	507.30	<i>N</i>	=	20
<i>DW</i>	=	2.37			

COEFFICIENT T-STATS:

β_0	=	2.57	β_1	=	18.62
β_2	=	3.94			

INHERITANCE TAX (Cont'd)

These estimates result from an econometric model that utilizes US gross domestic product and the Standard and Poor's Index to predict Pennsylvania taxable assets by year of death.

A structural model is used to distribute taxable assets by date of death. Those assets are then divided into transfer classes and distributed into the proper fiscal years. The appropriate tax rate is then applied to the taxable assets in order to estimate fiscal year cash payments.

The Pennsylvania estate tax is based on the federal estate tax credit of state death taxes. As a result of the passage of The American Taxpayer Relief Act of 2012, the state death tax credit will not return. Accordingly, we do not include estimates for Pennsylvania estate taxes in this forecast.

INSURANCE PREMIUMS TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	458.4	7.0%	2017-18	392.9	-9.4%
2012-13	446.9	-2.5%	2018-19	344.3	-12.4%
2013-14	432.1	-3.3%	2019-20	346.5	0.6%
2014-15	454.3	5.1%	2020-21	355.2	2.5%
2015-16	464.6	2.3%	2021-22	368.5	3.7%
2016-17	433.4	-6.7%	2022-23	419.2	13.8%

MODEL: Econometric and Structural

EQUATION:
$$IPT_t = -1725.000 + 0.1808 PAPOPU65_t + 0.7305 CSINS_t + v_t$$

$$v_t = 0.5064 v_{t-1}$$

VARIABLES:

<i>IPT</i>	-	Insurance Premiums Tax payments by tax year
<i>PAPOPU65</i>	-	PA population under age 65
<i>CSINS</i>	-	US Consumer spending on insurance

STATISTICS:

\bar{r}^2	=	0.9684	DF	=	21
F	=	214.80	N	=	25
DW	=	2.02			

COEFFICIENT T-STATS:

β_0	=	-3.18	β_1	=	3.33
β_2	=	5.42			

INSURANCE PREMIUMS TAX (Cont'd)

The regression equation predicts tax year payments with an adjustment for serial correlation bias. A structural model then transforms tax year payments and liabilities into regular and estimated payments that are distributed to the appropriate fiscal years.

Assessments paid to the Property and Casualty Insurance Guaranty Association (PIGA) generate tax credits to be used against IPT. Due to the return of old assessments paid by members of PIGA, liabilities were generated in order to pay back tax credits used by taxpayers in the past. This impacted tax collections in recent fiscal years.

Assessments paid to the Pennsylvania Life and Health Insurance Guaranty Association (PLHIGA) generate tax credits to be used against IPT liabilities. Due to recent large assessments, the use of these credits is expected to impact IPT collections during the next several fiscal years.

A portion of IPT is taxes charged for premiums sold by unauthorized insurers. This is referred to as surplus lines tax. The Federal Nonadmitted and Reinsurance Reform Act of 2009 forced states to change the way they taxed surplus lines insurance. Acts 28 & 29-2011 changed the tax base for surplus lines taxes to include all premiums, regardless of the location of risk, and only for insureds whose home state is the Commonwealth. Previously, all policies with any risk in Pennsylvania were taxable and had to be allocated by the location of the risk, regardless of the home state of the insured. No adjustments are made to this forecast for this change.

LICENSES, FEES, AND MISCELLANEOUS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	383.0	-58.2%	2017-18	2,340.4	276.9%
2012-13	444.3	16.0%	2018-19	353.5	-84.9%
2013-14	358.1	-19.4%	2019-20	280.9	-20.5%
2014-15	950.0	165.3%	2020-21	280.9	0.0%
2015-16	571.8	-39.8%	2021-22	280.9	0.0%
2016-17	621.0	8.6%	2022-23	283.5	0.9%

This category consists mainly of revenues from the sale of licenses, the collection of fees from numerous sources, transfers from other funds, and interest earned on General Fund deposits.

Estimates made by the collecting departments for other revenue items are reviewed and totaled by the Department of Revenue.

LIQUOR STORE PROFITS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	80.0	-23.8%	2017-18	185.1	-14.5%
2012-13	80.0	0.0%	2018-19	185.1	0.0%
2013-14	80.0	0.0%	2019-20	185.1	0.0%
2014-15	80.0	0.0%	2020-21	185.1	0.0%
2015-16	0.0	-100.0%	2021-22	185.1	0.0%
2016-17	216.4	NA	2022-23	185.1	0.0%

These estimates have been received from the Liquor Control Board and the Office of the Budget.

LIQUOR TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	298.1	5.8%
2012-13	311.2	4.4%
2013-14	320.9	3.1%
2014-15	334.4	4.2%
2015-16	348.1	4.1%
2016-17	361.9	4.0%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	373.9	3.3%
2018-19	388.8	4.0%
2019-20	405.1	4.2%
2020-21	422.0	4.2%
2021-22	439.6	4.2%
2022-23	457.9	4.2%

MODEL: Structural

These estimates are based on current collection patterns.

MALT BEVERAGE TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	25.9	-0.1%
2012-13	25.2	-2.9%
2013-14	25.1	-0.2%
2014-15	24.5	-2.5%
2015-16	24.9	1.9%
2016-17	24.4	-2.2%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	24.5	0.4%
2018-19	24.5	0.0%
2019-20	24.5	0.0%
2020-21	24.5	0.0%
2021-22	24.5	0.0%
2022-23	24.5	0.0%

MODEL: Structural

These estimates are based on current collection patterns.

MINOR AND REPEALED TAXES

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	850.5	1.3%	2017-18	(41.9)	-625.4%
2012-13	593.6	-30.2%	2018-19	(47.2)	-12.6%
2013-14	296.3	-50.1%	2019-20	(60.7)	-28.6%
2014-15	222.8	-24.8%	2020-21	(79.6)	-31.1%
2015-16	145.2	-34.8%	2021-22	(106.8)	-34.2%
2016-17	(5.8)	-104.0%	2022-23	(129.3)	-21.1%

The historical collections shown above now include revenues that had been reported as Other Selective Business Taxes and Capital Stock & Franchise Tax in previous versions.

Minor and repealed tax revenues are derived from; the tax on legal documents, the tavern games tax, excess vehicle rental tax collections, the corporate loans tax (repealed for taxable years beginning after December 31, 2013), the tax on electric cooperatives, the tax on agricultural cooperative associations, the wine excise tax, the consumer fireworks tax created by Act 43 of 2017, and the Capital Stock & Franchise Tax, repealed for taxable years beginning after December 31, 2015. In addition, Minor and repealed includes the General Fund impact of the Neighborhood Improvement Zone and the City Revitalization and Improvement Zones.

Act 50-2009 created a Neighborhood Improvement Zone (NIZ) in the city of Allentown. Beginning in 2012, state and local taxes remitted from entities conducting business in the zone are to be used to repay bonds issued to fund various economic development projects within the zone.

Act 52-2013 created the City Revitalization and Improvement Zone (CRIZ) program permitting third class cities in the Commonwealth with a population of at least 30,000, and one township with a population of at least 7,000, to establish contract authorities for the purpose of CRIZ designation. Beginning in 2013, the establishment of a zone in two cities and one township were authorized by the Act. Beginning in 2016, two additional cities each year may be given the ability to establish a CRIZ. State and local taxes remitted from entities conducting business in the zone in excess of the baseline amount are to be used to repay bonds issued to fund various economic development projects within the zone. Act 194-2014 modified CRIZ law effectively allowing a borough or township to create an authority to apply for a pilot zone. Previous law did not include this language, so no pilot zones were awarded.

OTHER TOBACCO PRODUCTS TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	NA	NA	2017-18	122.2	45.6%
2012-13	NA	NA	2018-19	123.4	1.0%
2013-14	NA	NA	2019-20	124.6	1.0%
2014-15	NA	NA	2020-21	125.8	1.0%
2015-16	NA	NA	2021-22	127.0	1.0%
2016-17	83.9	NA	2022-23	128.2	1.0%

MODEL: Structural

Estimates were derived using actual collection patterns.

Act 84-2016 created a tax on other tobacco products, effective October 1, 2016 on smokeless tobacco, pipe tobacco, e-cigarettes, including the products and substances that go into the e-cigarettes, and any other tobacco products for chewing, ingesting or smoking, except cigars. The tax was effective December 14, 2016 for roll-your-own tobacco. The tax rate on roll-your-own, chewing tobacco, snuff and pipe tobacco is 55 cents (\$0.55) per ounce, with a minimum tax per package of 66 cents (\$0.66). E-cigarettes and vapor products are taxed at 40 percent of the purchase price from the wholesaler.

PERSONAL INCOME TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	10,800.5	3.5%	2017-18	13,399.9	5.8%
2012-13	11,371.2	5.3%	2018-19	14,127.2	5.4%
2013-14	11,437.3	0.6%	2019-20	14,786.2	4.7%
2014-15	12,107.4	5.9%	2020-21	15,525.8	5.0%
2015-16	12,506.0	3.3%	2021-22	16,191.4	4.3%
2016-17	12,664.4	1.3%	2022-23	16,774.4	3.6%

MODEL: Econometric and Structural

- EQUATIONS:**
- A) $PIT = WITH + NONWITH$
 - B) $\ln QWITH_t = -0.5748 + 1.0309 \ln PAWAGES_t + 0.0331 WEDADJ_t - 0.9313 \ln PAWAGES_{t-4} - 0.0558 WEDADJ_{t-4} + 0.9122 \ln QWITH_{t-4}$
 - C) $\ln ANN_t = 4.3105 + 0.3167 \ln CG_t + 0.5255 \ln PROP_{t-1}$
 - D) $\ln EST_t = 1.5702 + 0.5041 \ln RID_t + 0.1283 \ln CG_t + 0.4247 \ln ANN_{t-1}$

- VARIABLES:**
- PIT* - Fiscal year personal income tax receipts
 - WITH* - Fiscal year employer withholding receipts
 - NONWITH* - Fiscal year estimated (*EST*) and annual (*ANN*) receipts
 - QWITH* - Cash quarterly personal income tax receipts from employer withholding payments rate adjusted to 3.07%
 - ANN* - Tax year annual personal income tax payments rate adjusted to 3.07%
 - EST* - Tax year estimated personal income tax payments rate adjusted to 3.07%
 - PAWAGES* - Pennsylvania wages and salaries

PERSONAL INCOME TAX (Cont'd)

<i>WEDADJ</i>	-	Wednesday dummy
<i>RID</i>	-	Annual Pennsylvania rent, interest, and dividends
<i>CG</i>	-	Annual PA capital gains
<i>PROP</i>	-	Annual Pennsylvania proprietors' income (farm and nonfarm)

STATISTICS (Equation B):

\bar{r}^2	=	0.9917	<i>DF</i>	=	77
<i>F</i>	=	1990.38	<i>N</i>	=	83
<i>DW</i>	=	1.82			

COEFFICIENT T-STATS (Equation B):

β_0	=	-2.18	β_1	=	10.15
β_2	=	3.42	β_3	=	-8.65
β_4	=	-5.77	β_5	=	19.30

STATISTICS (Equation C):

\bar{r}^2	=	0.827	<i>DF</i>	=	16
<i>F</i>	=	47.60	<i>N</i>	=	19
<i>DW</i>	=	1.53			

COEFFICIENT T-STATS (Equation C):

β_0	=	14.09	β_1	=	5.55
β_2	=	6.20			

PERSONAL INCOME TAX (Cont'd)

STATISTICS (Equation D):

\bar{r}^2	=	0.96	DF	=	15
F	=	155.81	N	=	19
DW	=	2.42			

COEFFICIENT T-STATS (Equation D):

β_0	=	4.23	β_1	=	4.91
β_2	=	3.64	β_3	=	4.47

The personal income tax estimate is derived from forecasts of withholding, estimated, and annual payments adjusted to a constant rate. Estimated and annual payments are modeled separately.

An econometric model using vector autoregression is used to predict quarterly employer withholding payments (QWITH) to capture relationships across time, particularly due to the seasonal nature of withholding. A dummy variable is also introduced to account for quarters with more or fewer Wednesdays than usual; larger employer withholding payments are typically made on Wednesdays.

An econometric model using vector autoregression is used to predict tax year annual payments (ANN_t) and tax year estimated payments (EST_t) to capture relationships between annual and estimated payments and other independent variables across time.

ANN_t predicts tax year annual personal income payments using current year capital gains (CG_t) and prior year's proprietors' income (P_{t-1}). Tax year cash payment amounts are transformed into a fiscal year cash flow with aggregate adjustments for tax base changes.

EST_t predicts estimated personal income tax payments on a tax year basis using current year Pennsylvania interest, dividends, and rents (RID_t), current year PA capital gains (CG_t), and prior year annual payments (ANN_{t-1}). Tax year cash payment amounts are transformed into a fiscal year cash flow with aggregate adjustments for tax base changes.

Adjustments are made to account for tax law changes, including those made to the tax base and special poverty provisions (SP).

PUBLIC UTILITY REALTY TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	28.7	-16.6%	2017-18	40.8	1.5%
2012-13	43.9	52.8%	2018-19	41.2	1.0%
2013-14	37.0	-15.6%	2019-20	41.6	1.0%
2014-15	38.2	3.0%	2020-21	42.0	1.0%
2015-16	39.2	2.8%	2021-22	42.4	1.0%
2016-17	40.2	2.5%	2022-23	42.8	0.9%

MODEL: Structural

The public utility realty tax (PURTA) revenue estimates are derived from a database of utility realty tax liability history and predictions based on data from reports filed by public utility realty taxpayers, as well as those filed by local taxing authorities (LTAs). Total predicted liabilities were transformed into a fiscal year basis to obtain the receipts forecasts.

REALTY TRANSFER TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	292.2	4.7%
2012-13	338.7	15.9%
2013-14	375.4	10.8%
2014-15	413.8	10.2%
2015-16	481.7	16.4%
2016-17	478.0	-0.8%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	509.8	6.7%
2018-19	547.3	7.4%
2019-20	584.9	6.9%
2020-21	606.5	3.7%
2021-22	610.0	0.6%
2022-23	613.4	0.6%

MODEL: Econometric

EQUATION: $\ln CASH_t = -6.7262 + 0.4027 \ln STARTS_t + 0.5128 \ln VALUE_t - 0.3744 \ln COMP_{t-4} - 0.125 \ln CASH_{t-2} + 0.6312 \ln CASH_{t-4}$

VARIABLES:

CASH - Quarterly realty transfer tax receipts.

STARTS - PA housing starts, total private.

VALUE - Value of homes sold in PA (new and existing).

COMP - PA housing completions, total.

STATISTICS:

\bar{r}^2	=	0.89	<i>DF</i>	=	59
<i>F</i>	=	91.95	<i>N</i>	=	65
<i>DW</i>	=	1.61			

COEFFICIENT T-STATS:

β_0	=	-3.80	β_1	=	5.77
β_2	=	4.35	β_3	=	-6.54
β_4	=	-2.07	β_5	=	10.63

REALTY TRANSFER TAX (Cont'd)

These estimates result from an econometric approach using the Pennsylvania average sales price of new and existing houses and the quantity of Pennsylvania housing starts and sales to model the realty transfer tax collections. The model also adjusts for a serial correlation bias.

Act 58-2015 requires that funds be transferred from the realty transfer tax to the Pennsylvania Housing Affordability and Rehabilitation Enhancement Fund beginning in fiscal year 2015-16. The transfer amount is the lesser of \$25 million or 40 percent of the difference between the total dollar amount of the realty transfer tax collected in the prior fiscal year and the total dollar amount of the realty transfer tax official estimate for the fiscal year 2014-15 (\$447.5 million). There will be no transfer in 2015-16 as total collections in 2014-15 were less than \$447.5 million. The 2016-17 transfer was \$12.7 million.

SALES AND USE TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	8,772.3	2.1%	2017-18	10,407.4	3.9%
2012-13	8,893.7	1.4%	2018-19	10,781.6	3.6%
2013-14	9,129.6	2.7%	2019-20	10,935.9	1.4%
2014-15	9,493.1	4.0%	2020-21	11,163.1	2.1%
2015-16	9,795.2	3.2%	2021-22	11,441.7	2.5%
2016-17	10,004.5	2.1%	2022-23	11,350.8	3.8%

MODEL: Econometric and Structural

- EQUATIONS:**
- A) $ST = NON-MOTOR + E-COM + MV$
- B) $\ln NMCASH_t = 0.5199 - 0.0005 \ln CDT_t + 0.0009 \ln OTHERND_t + 0.0003 \ln BUSINESS_{t-1} + 0.0009 \ln CDT_{t-1} - 0.0003 \ln BUSINESS_{t-2} + 0.9215 \ln NMCASH_{t-4} - 0.0015 \ln FOODACC_{t-4}$
- C) $\ln ECOMCASH_t = 49.6913 + 0.1475T + 0.3839T^2 - 0.6863 \ln ECOMCASH_{t-1} - 0.7798 \ln ECOMCASH_{t-2} - 0.5085 \ln ECOMCASH_{t-3}$
- D) $\ln MVCASH = 1.5445 + 0.7022 \ln PCE + v_t$
 $v_t = 0.3256 v_{t-1} + 0.8958 v_{t-4} - 0.3206 v_{t-5}$

- VARIABLES:**
- ST* - Fiscal year sales and use tax receipts
- NON-MOTOR* - Fiscal year non-motor vehicle sales and use tax receipts
- E-COM* - Fiscal year e-commerce sales and use tax receipts
- MV* - Fiscal year motor vehicle sales and use tax receipts
- NMCASH* - Quarterly non-motor vehicle sales and use tax receipts, less receipts from e-commerce
- ECOMCASH* - Quarterly sales and use tax receipts from e-commerce sales
- MVCASH* - Quarterly vehicle sales and use tax receipts
- FOODACC* - Total US consumption of food services and accommodations

SALES AND USE TAX (Cont'd)

<i>OTHERND</i>	-	Total US spending on other nondurable goods
<i>CDT</i>	-	Total US spending on durable goods, less motor vehicles
<i>BUSINESS</i>	-	Total US non-residential fixed investment adjusted to exclude fixed investment in industrial and transportation equipment
<i>T</i>	-	Linear time variable: 2012 Q4 = 1, 2013 Q1 = 2, etc.
<i>T2</i>	-	Logged time variable to account for Act 84-2016 changes: 2016Q4 = 0.69, 2017Q1 = 1.10, etc.
<i>PCE</i>	-	US consumer expenditures on new and used vehicles, less parts

STATISTICS (Equation B):

\bar{r}^2	=	0.9790	<i>DF</i>	=	63
<i>F</i>	=	418.80	<i>N</i>	=	71
DW	=	1.83			

COEFFICIENT T-STATS (Equation B):

β_0	=	1.23	β_1	=	-2.02
β_2	=	6.72	β_3	=	2.79
β_4	=	3.28	β_5	=	-3.31
β_6	=	-6.47	β_7	=	15.17

STATISTICS (Equation C):

\bar{r}^2	=	0.9647	<i>DF</i>	=	14
<i>F</i>	=	76.47	<i>N</i>	=	20

SALES AND USE TAX (Cont'd)

COEFFICIENT T-STATS (Equation C):

β_0	=	6.91	β_1	=	6.79
β_2	=	5.84	β_3	=	-3.07
β_4	=	-6.72	β_5	=	-2.66

STATISTICS (Equation D):

\bar{r}^2	=	0.9091	DF	=	78
F	=	194.91	N	=	83
DW	=	2.13			

COEFFICIENT T-STATS (Equation D):

β_0	=	3.45	β_1	=	9.16
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NON-MOTOR is the result of a transformation of *NMCASH*, which allows for the lag between the time of sale and the appropriate sales tax due date (usually one month). Equation B is an econometric model, adjusted for a serial correlation bias, which predicts actual sales and use tax estimates, less e-commerce receipts, using personal consumption and business nonresidential fixed investment. Adjustments are made to account for the recent changes to the tax base from Act 84-2016. The resulting estimates are then converted to a cash basis forecast.

ECOMCASH is an econometric model, adjusted for serial correlation bias, which predicts quarterly e-commerce receipts using a linear time variable and a logged time variable beginning with collections from digital downloads (due to Act 84-2016). E-commerce collections are forecasted separately due to their dissimilar growth rates.

MV is an econometric model, adjusted for a serial correlation bias, which predicts quarterly motor vehicle sales and use tax revenues using US consumer expenditures on new and used autos and light trucks.

Total fiscal year sales and use tax forecasts equal cash non-motor vehicle forecasts, plus cash e-commerce forecasts, plus cash motor vehicle forecasts.

Act 46-2011 requires licensees reporting a total tax liability of \$25,000 or more for the third calendar quarter of the preceding year to file a return and make a payment by the 20th of the month. The payment includes 50% of the liability from the same month of the prior calendar year and any remaining amount due from the previous calendar month. This procedure replaces language enacted in the Tax

SALES AND USE TAX (Cont'd)

Reform Code by Act 48-2009 that required two sales tax returns per month from the same sales tax vendor.

Act 85-2012 provided sales tax licensees whose actual tax liability for the third calendar quarter of the preceding year was at least \$25,000 but less than \$100,000 with an alternative payment option to the requirement of paying 50 percent of the tax liability for the same month of the preceding calendar year. In the event that the same month of the preceding calendar year was not reflective of the monthly sales of the licensee in the current year, the licensee is permitted to remit a lesser amount as long as the amount paid is equal to or greater than 50 percent of the actual tax liability required to be reported for the same month in the current year. This provision applied to returns filed after September 30, 2012.

Act 84-2016 made the succeeding changes to sales and use tax: extended the sales and use tax to items delivered to a customer electronically or digitally or by streaming; exempted property and services directly and predominately used in timbering operations when purchased by a company primarily engaged in the business of harvesting trees; capped the vendor discount at the lesser of one percent of the amount of sales tax collected or \$25 on a monthly return, \$75 on a quarterly return or \$150 on a semi-annual return; exempted returnable corrugated boxes used to deliver snack food products when purchased by a manufacturer; exempted the sale at retail or use of services related to the setup, teardown, or maintenance of tangible personal property rented by an authority to exhibitors at the Pennsylvania Convention Center and the David L. Lawrence Convention Center; and made it illegal to possess, sell or distribute zappers or sales suppression software with the intent to evade taxes, and instituted a fine of up to \$10,000 and one year in prison.

VOLUMETRIC SEVERANCE TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	NA	NA	2017-18	NA	NA
2012-13	NA	NA	2018-19	248.7	NA
2013-14	NA	NA	2019-20	264.1	6.2%
2014-15	NA	NA	2020-21	355.3	34.5%
2015-16	NA	NA	2021-22	376.5	6.0%
2016-17	NA	NA	2022-23	393.5	4.5%

MODEL: Structural

The revenue estimates included in the Governor’s Executive Budget are based on a forecast of existing natural gas production as well as increased future production from the Marcellus Shale region. A statistical model is used to forecast the number of wells drilled (“spud”) per month, based on price forecasts from IHS, and historic spud data from the PA Department of Environmental Protection. To calculate the value of natural gas production, the results of this model are combined with a structural model of production per well, and price forecasts from IHS.

The Governor’s Executive Budget proposes the establishment of a Volumetric Severance Tax:

The Volumetric Severance Tax would assess natural gas extraction on an annually fixed amount per thousand cubic feet (MCF). The rate per MCF is determined by the average price of natural gas in the previous calendar year, calculated in the same manner as the Act 13 Impact Fee (58 PA.C.S. § 2301). The rate is then set according to the range in which the average price falls:

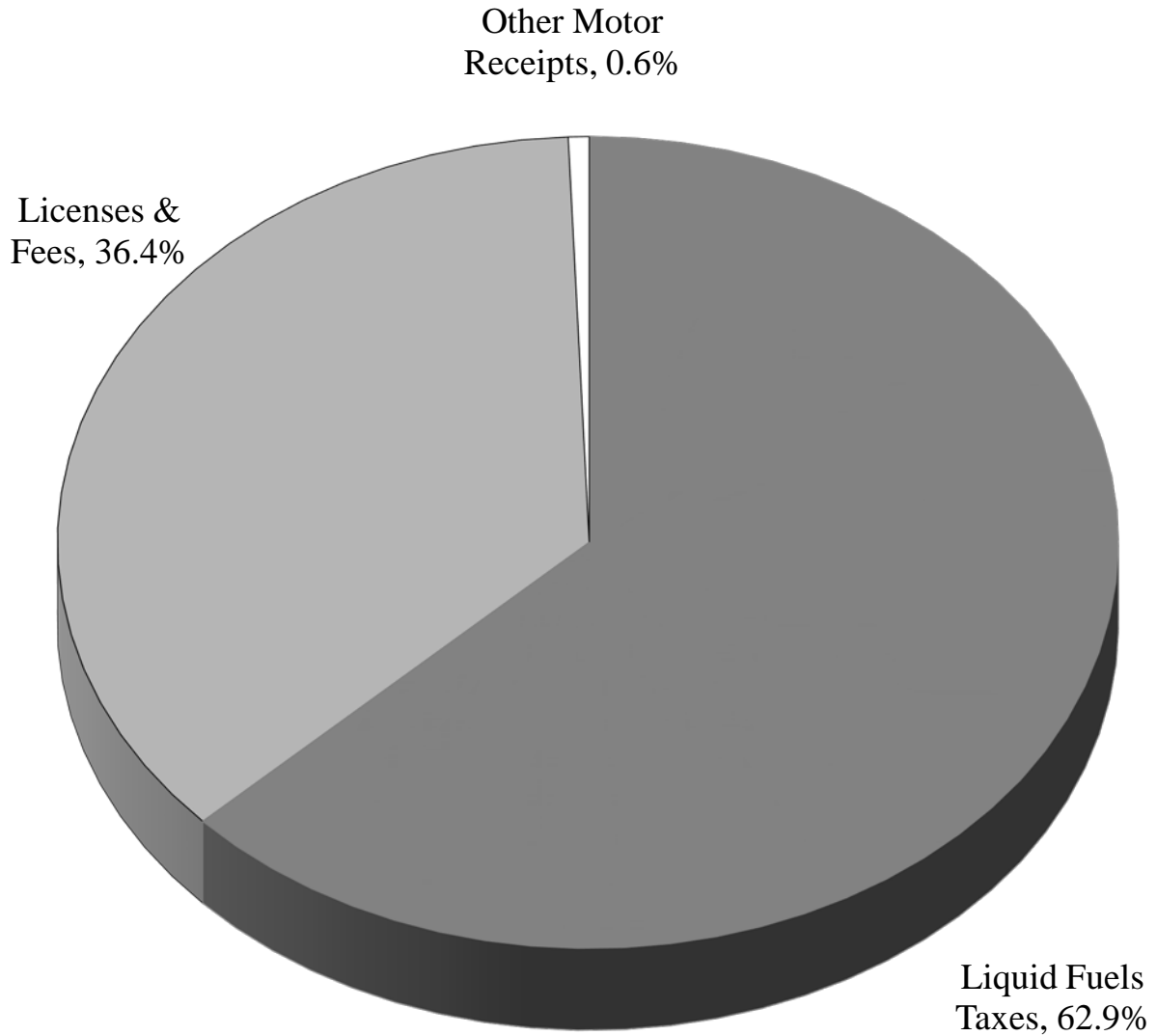
Price Range	Rate Per MCF
\$0.00 - \$3.00	4.2¢
\$3.01 - \$4.99	5.3¢
\$5.00 - \$5.99	6.4¢
\$6.00 or greater	7.4¢

The tax will become effective July 1, 2018, with the first payment due June 15, 2019, covering production from the effective date through April 30, 2019.

After the initial year, the tax will be paid annually on June 15th, and will cover production from May of the previous calendar year to April of the concurrent year.

MOTOR LICENSE FUND REVENUE

Fiscal Year 2018-19



LIQUID FUELS TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	561.4	-1.2%	2017-18	-	-100.0%
2012-13	576.3	2.7%	2018-19	-	NA
2013-14	320.9	-44.3%	2019-20	-	NA
2014-15	4.5	-98.6%	2020-21	-	NA
2015-16	(0.8)	-118.7%	2021-22	-	NA
2016-17	0.1	107.1%	2022-23	-	NA

MODEL: Structural

Effective January 1, 2014, Act 89-2013 repealed the permanent 12 cents per gallon tax imposed and assessed upon liquid fuels used or sold and delivered by registered distributors within this Commonwealth.

MOTOR LICENSE FUND ESTIMATE METHODOLOGIES

FUELS TAX

HISTORICAL DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	155.7	2.4%
2012-13	152.0	-2.4%
2013-14	95.1	-37.5%
2014-15	0.0	-100.0%
2015-16	0.0	1329.6%
2016-17	-	-100.0%

FORECASTED DATA

\$ Millions

<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2017-18	-	NA
2018-19	-	NA
2019-20	-	NA
2020-21	-	NA
2021-22	-	NA
2022-23	-	NA

MODEL: Structural

Effective January 1, 2014, Act 89-2013 repealed the permanent 12 cents per gallon tax imposed and assessed upon fuels used or sold and delivered by registered distributors within this Commonwealth.

ALTERNATIVE FUELS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	0.3	-47.1%	2017-18	13.0	17.3%
2012-13	1.4	363.8%	2018-19	13.6	4.6%
2013-14	1.9	40.6%	2019-20	14.2	4.4%
2014-15	3.6	89.8%	2020-21	14.9	4.9%
2015-16	9.4	160.2%	2021-22	15.7	5.4%
2016-17	11.1	17.4%	2022-23	16.4	4.5%

MODEL: Structural

The Alternative Fuels Tax became effective October 1, 1997, and is imposed on fuels other than liquid fuels or fuels used to propel motor vehicles on public highways. The tax rate applied to each gasoline gallon equivalent of alternative fuel equals the current tax on a gallon of gasoline.

MOTOR CARRIERS ROAD/IFTA TAXES

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	48.7	12.9%	2017-18	130.1	30.2%
2012-13	48.4	-0.7%	2018-19	130.7	0.5%
2013-14	35.8	-26.0%	2019-20	132.0	1.0%
2014-15	71.9	100.8%	2020-21	133.3	1.0%
2015-16	95.3	32.6%	2021-22	134.7	1.1%
2016-17	99.9	4.9%	2022-23	136.0	1.0%

MODEL: Structural

The Motor Carriers 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 is equal the current tax on a gallon of diesel fuel, which was impacted by Act 89-2013. Previously, the tax rate was 115 mills. Prior to October 1, 1997, an additional tax of 6 cents per gallon was collected through the motor carriers road tax. This tax was repealed and replaced by a 55 mill addition to the oil company franchise tax rate, imposed on fuels effective October 1, 1997. The 55 mill portion of the tax rate is dedicated to the highway bridge restricted account. Credit against the tax is given for liquid fuels and fuels tax and oil company franchise tax paid at the pump or directly remitted. Credit is also given for tax paid on motor fuels purchased in Pennsylvania but consumed elsewhere.

The Motorbus Road Tax which imposed taxes on the amount of motor fuel used by bus companies in their operations on highways within the commonwealth was repealed, effective January 1, 1996, with the enactment of the International Fuel Tax Agreement (IFTA).

Effective January 1, 1996, Pennsylvania implemented IFTA. Under this agreement, qualified vehicles are subject to base state reporting and payment of fuel tax obligations. Qualified vehicles are those with two axles greater than 26,000 pounds, combinations greater than 26,000 pounds and those with three or more axles regardless of weight. Therefore, 17,001 to 26,000 pound vehicles, which previously were subject to the Motor Carriers Road Tax, are not subject under IFTA. Additionally, the Motorbus Road Tax was repealed and a bus meeting the qualified vehicle definition is subject to IFTA provisions. Identification markers remain at \$12 per qualified vehicle. The underlying fuel tax rates are unaffected by IFTA.

OIL COMPANY FRANCHISE TAX

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	457.9	0.7%	2017-18	1,005.9	11.3%
2012-13	445.1	-2.8%	2018-19	1,007.6	0.2%
2013-14	534.1	20.0%	2019-20	1,009.0	0.1%
2014-15	747.4	39.9%	2020-21	1,010.4	0.1%
2015-16	836.9	12.0%	2021-22	1,011.9	0.1%
2016-17	904.0	8.0%	2022-23	1,013.4	0.1%

MODEL: Structural

This is an excise tax on all taxable liquid fuels, fuels, and alternative fuels. This is imposed on a cents-per-gallon equivalent basis by multiplying a millage rate and an average wholesale price (AWP). Act 3-1997 imposed a tax of 153.5 mills on all taxable liquid fuels and 208.5 mills on all taxable fuels. Act 89-2013 added additional mills which are reported and estimated as Act 89 Oil Company Franchise Tax. Act 89 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. Prior to Act 89, Act 32-1983 set the minimum and maximum AWP at \$0.90 and \$1.25 per gallon, respectively.

Shown above are receipts from 57 mills of the tax on liquid fuels and fuels which are deposited as unrestricted Motor License Fund revenue. The remaining balance of the revenues from the 153.5 mills on liquid fuels and the 208.5 mills on fuels represents revenues restricted to certain highway activities. These dedicated and restricted revenues are not included in the above estimates. Bus companies are entitled to a refund equal to 55 mills of the Oil Company Franchise Tax paid on fuels.

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.

ACT 89 OIL COMPANY FRANCHISE TAX LIQUID FUELS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	-	N/A	2017-18	559.9	-2.0%
2012-13	-	N/A	2018-19	542.9	-3.0%
2013-14	244.1	N/A	2019-20	542.4	-0.1%
2014-15	577.7	136.7%	2020-21	541.9	-0.1%
2015-16	568.1	-1.7%	2021-22	541.4	-0.1%
2016-17	571.0	0.5%	2022-23	540.9	-0.1%

MODEL: Structural

Act 89-2013 added additional mills to the Oil Company Franchise Tax applied to liquid fuels (primarily gasoline). An additional 64 mills in 2014, 49 mills in 2015, 48 mills in 2016, 41 mills in 2017, and 39 mills in 2018 and each calendar year thereafter. The applicable discount for registered distributors filing timely is calculated only on this additional millage. A percentage (4.17%) of the additional millage from Act 89 is deposited into the Liquid Fuels Tax Fund (for county allocation by statutory formula). The remaining 95.83% is allocated to the Motor License Fund. The Motor License Fund portion is reflected in the estimates above.

ACT 89 OIL COMPANY FRANCHISE TAX FUELS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	-	N/A	2017-18	146.9	0.2%
2012-13	-	N/A	2018-19	144.0	-2.0%
2013-14	62.6	N/A	2019-20	145.4	1.0%
2014-15	157.2	151.3%	2020-21	146.9	1.0%
2015-16	150.3	-4.4%	2021-22	148.4	1.0%
2016-17	146.6	-2.5%	2022-23	149.9	1.0%

MODEL: Structural

Act 89-2013 added additional mills to the Oil Company Franchise Tax applied to fuels (primarily diesel). An additional 64 mills in 2014, 49 mills in 2015, 48 mills in 2016, 41 mills in 2017, and 39 mills in 2018 and each calendar year thereafter. The applicable discount for registered distributors filing timely is calculated only on this additional millage. A percentage (4.17%) of the additional millage from Act 89 is deposited into the Liquid Fuels Tax Fund (for county allocation by statutory formula). The remaining 95.83% is allocated to the Motor License Fund. The Motor License Fund portion is reflected in the estimates above.

MOTOR LICENSE FUND ESTIMATE METHODOLOGIES

LICENSES & FEES

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	892.6	0.1%	2017-18	1,038.3	3.8%
2012-13	892.5	0.0%	2018-19	1,064.2	2.5%
2013-14	893.9	0.2%	2019-20	1,124.2	5.6%
2014-15	950.8	6.4%	2020-21	1,103.8	-1.8%
2015-16	962.7	1.2%	2021-22	1,113.2	0.9%
2016-17	1,000.5	3.9%	2022-23	1,154.6	3.7%

MODEL: Structural

The Commonwealth receives revenue from the collection of fees levied for the registration and titling of motor vehicles and for the issuance of learners' permits, operators' licenses, certificates of title and transfers of registration. Various motor vehicle registration fees were increased starting on April 1, 2014 per Act 89-2013. Act 89 also redirected certain fees that had been deposited in the Motor License Fund to the Public Transportation Trust Fund and the Multimodal Transportation Fund. In addition, Act 89 authorized a fee option in lieu of suspension for driving without insurance. Starting January 1, 2017, Act 89 also provides the motor vehicle owner an option for biennial vehicle registration renewal rather than the current annual cycle. The implementation of Real IDs in Pennsylvania is estimated to begin during fiscal year 2019-20. At this time, it is anticipated to be optional and require an additional fee over and above the traditional driver's license fee.

OTHER MOTOR RECEIPTS

HISTORICAL DATA			FORECASTED DATA		
\$ Millions			\$ Millions		
<u>Year</u>	<u>Receipts</u>	<u>Growth</u>	<u>Year</u>	<u>Receipts</u>	<u>Growth</u>
2011-12	297.6	-27.6%	2017-18	47.2	86.3%
2012-13	300.6	1.0%	2018-19	18.4	-61.0%
2013-14	258.4	-14.0%	2019-20	18.6	1.1%
2014-15	98.3	-62.0%	2020-21	18.7	0.5%
2015-16	35.7	-63.7%	2021-22	18.9	1.1%
2016-17	25.3	-29.0%	2022-23	19.1	1.1%

MODEL: Structural

The Commonwealth receives revenue from other Motor License Fund transactions. The main source of other Motor License Fund revenue results from Treasury investment income. Other sources include but are not limited to fees for reclaiming abandoned vehicles, fees for right to know requests, highway encroachment permits, and the sale of maps and plans. Other revenue sources, such as the sale of unserviceable property and fare evasion, contribute to these receipts, as well. Per Act 89-2013, all revenue generated from inspection sticker fees will be deposited in the Multimodal Transportation Fund and the Public Transportation Trust Fund after June 30, 2017. Also as a result of Act 89, the Motor License Fund stopped receiving payments from the Pennsylvania Turnpike after June 30, 2014. These payments are redirected to the Public Transportation Trust Fund and the Multimodal Transportation Fund.