OFFICIAL
REVENUE ESTIMATE

FY 2019-20

June 2019

Independent Fiscal Office

About the Independent Fiscal Office

The Independent Fiscal Office (IFO) provides revenue projections for use in the state budget process along with impartial and timely analysis of fiscal, economic and budgetary issues to assist Commonwealth residents and the General Assembly in their evaluation of policy decisions. In that capacity, the IFO does not support or oppose any policy it analyzes, and will disclose the methodologies, data sources and assumptions used in published reports and estimates.

Independent Fiscal Office
Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17105

Telephone:	717-230-8293
Email:	contact@ifo.state.pa.us
Website:	www.ifo.state.pa.us

IFO

The Independent Fiscal Office was created
by the Act of Nov. 23, 2010 (P.L.1269, No.120).

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INDEPENDENT FISCAL OFFICE

June 21, 2019

The Honorable Members of the Pennsylvania General Assembly:

The Independent Fiscal Office submits this official revenue estimate in accordance with Section 1704-E (b) of The Fiscal Code. This report provides revenue estimates for fiscal year (FY) 2018-19 and FY 2019-20, and supersedes the initial revenue estimate released by the Independent Fiscal Office on May 20, 2019.

This report contains estimates for unrestricted General Fund and Motor License Fund revenues that may be considered for appropriation in the General Appropriations Act. Estimates for the Lottery Fund represent net revenues after the deduction of certain expenses. Federal funds subject to General Fund appropriation are stated separately. A separate report that describes the methodologies used to produce the various revenue estimates included in this report will be posted to the office website.

Questions or comments regarding the contents of this report are welcome and can be submitted to contact@ifo.state.pa.us.

Sincerely,

MATTHEW J. KNITTEL
Director

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Economic Outlook

For 2019 and 2020, the U.S. Economic forecast by IHS Markit projects a deceleration of economic growth, stable wage gains and moderate inflation. (See **Table 1.1.**) For Pennsylvania, the economic forecast by the Independent Fiscal Office (IFO) also projects a deceleration of economic growth due to (1) the fading impact of the federal income tax cut and (2) a more moderate pace of jobs creation. The Pennsylvania forecast for calendar years 2019 and 2020 projects that:

- Real GDP (real gross domestic product, excludes inflation) will increase by 1.9 percent each year.
- Wages and Salaries paid to Pennsylvania residents will increase by 4.1 percent each year.
- Payroll Employment will expand by 57,700 and 54,600 jobs over the two years.
- The Philadelphia CPI-U (consumer price index) will increase by 1.7 percent (2019) and 2.0 percent (2020).

Table 1.1
Economic Growth Rates or Change

	2016	2017	2018	2019	2020
United States					
Real GDP	1.6%	2.2%	2.9%	2.7%	2.1%
Wages-Salaries	2.9%	4.6%	4.5%	4.5%	4.7%
New Payroll Jobs (000s)	2,522	2,263	2,454	2,369	1,804
U.S. CPI-U	1.3%	2.1%	2.4%	2.2%	2.2%
Pennsylvania					
Real GDP	1.1%	1.7%	2.1%	1.9%	1.9%
Wages-Salaries	1.3%	4.0%	4.1%	4.1%	4.1%
New Payroll Jobs (000s)	48.8	58.8	65.6	57.7	54.6
Philadelphia CPI-U	0.6%	1.3%	1.3%	1.7%	2.0%

Note: New payroll jobs exclude agriculture, military, self-employed individuals and independent contractors. U.S. forecasts by IHS Markit. Pennsylvania forecasts by IFO.
Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics.

Table 1.2 displays economic trends for recent quarters based on the latest state data published by the U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics. The trends reveal the recent moderation in the Pennsylvania labor market as the pace of net new jobs creation fell from 69,600 (annualized rate) in 2018 Q1 to 50,800 (preliminary) in 2019 Q1. The data also show that the growth of real GDP peaked in 2018 Q2. However, it should be noted that the real GDP data are preliminary and will be revised.

Table 1.2
Recent Pennsylvania Economic Growth Rates or Change

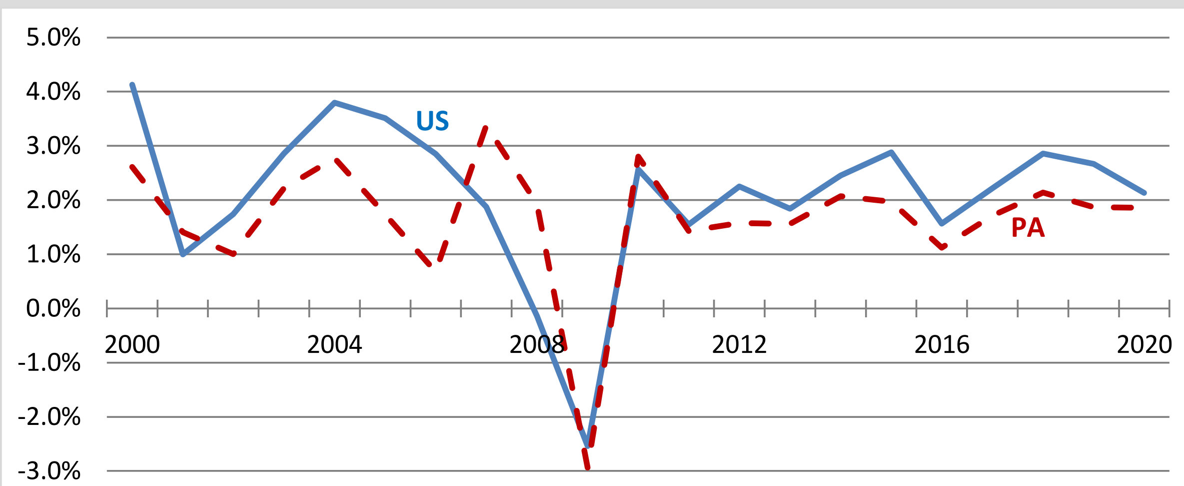
	2018.1	2018.2	2018.3	2018.4	2019.1	2019.2
Real GDP	0.7%	4.0%	3.2%	2.5%	n.a.	n.a.
Wages-Salaries	4.1%	4.0%	3.5%	4.2%	3.8%	4.6%
New Payroll Jobs (000s)	69.6	64.4	64.1	60.4	50.8	n.a.
Philadelphia CPI-U	0.5%	1.6%	1.7%	1.3%	1.5%	1.9%

Note: New payroll jobs exclude agriculture, military, self-employed individuals and independent contractors.
Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics.

Real Gross Domestic Product

Figure 1.1 displays long-term real GDP growth rates for the U.S. and Pennsylvania. The data show that Pennsylvania typically lags U.S. growth for most years, and the forecast projects a continuation of that trend. For 2018, the U.S. GDP data reflect the impact of the federal Tax Cuts and Jobs Act (TCJA) of 2017, but the impact is less noticeable for Pennsylvania. However, the tax law change did manifest itself through higher sales tax and corporate net income tax collections, and those impacts are discussed in the next section.

Figure 1.1
U.S. and Pennsylvania Real GDP Growth



Source: U.S. Bureau of Economic Analysis. U.S. forecast by IHS Markit. Pennsylvania forecast by IFO.

Table 1.3 displays real GDP average annual growth rates for the U.S. and Pennsylvania for two ten-year periods: 1997 to 2007 and 2010 to 2020. These two periods exclude the 2008-09 housing-financial recession. For the first time period, U.S. real GDP growth averaged 3.1 percent per annum versus 2.1 percent for Pennsylvania. For the second time period, real GDP growth decelerated for both the U.S. and Pennsylvania. This outcome is consistent for economies with a maturing population and slower rates of population growth. The average U.S. (2.2 percent) and Pennsylvania (1.7 percent) growth rates are consistent with the long-term potential of both economies, and those rates can serve as a baseline forecast in the absence of a boom or recession.

However, in per capita terms, the U.S. and Pennsylvania real GDP growth rates are quite similar. For both ten-year time periods, the U.S. population growth greatly exceeds Pennsylvania population growth. The differential is especially notable for the second decade, as the state population growth is nearly flat. For Pennsylvania, the stagnant population growth is driven by lower fertility and marriage rates, and more recently, lower inflows of international migrants.

Table 1.3
Average Annual Growth Rates

	Real GDP		Population		Per Capita Real GDP	
	1997-07	2010-20	1997-07	2010-20	1997-07	2010-20
United States	3.1%	2.2%	1.0%	0.7%	2.1%	1.5%
Pennsylvania	2.1%	1.7%	0.3%	0.1%	1.8%	1.6%

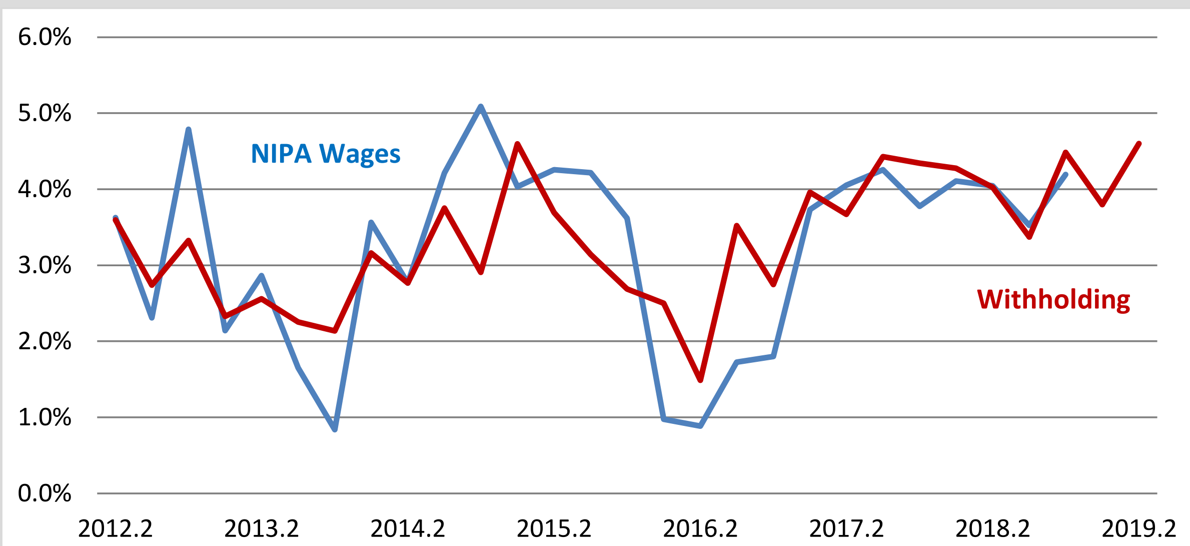
Source: U.S. Bureau of Economic Analysis. U.S. forecast by IHS Markit. Pennsylvania forecast by IFO.

Wages and Salaries

Figure 1.2 displays the year-over-year growth rates for state withholding tax revenues and Pennsylvania wages-salaries paid as published by the U.S. Bureau of Economic Analysis in the National Income and Product Accounts (NIPA). The two series trend closely because they generally reflect the same economic metric: wages and salaries paid to Pennsylvania residents. For 2018, total wages-salaries paid was $338 billion and comprised roughly 78 percent of the state personal income tax (PIT) base. Wages and salaries also motivate most of the growth in sales tax revenues because Pennsylvania consumers effectively pay the majority of those collections.

Since 2012, Pennsylvania wage growth generally ranged from 2.5 to 4.0 percent per annum. However, more recent data reveal growth rates that exceed 4.0 percent, which reflect the strong labor market in Pennsylvania during the past two years. The wage gains likely reflect higher wages paid to new employees by employers who have found it more difficult to fill vacant positions. These conditions are partly driven by a contracting working age cohort between the ages of 20 and 64. Demographics data show that the contraction began in 2012 as the oldest baby boomers turned 65. Since then, the trend has strengthened and will begin to abate in the middle of the next decade. Barring a recession, these demographic trends and recent migration patterns suggest that the state labor market will remain tight in the near term. That outcome should support further wage growth and General Fund tax revenues.

Figure 1.2
Annual Growth of Pennsylvania Wages and Salaries



Note: Withholding series controls for shifting due dates. Growth rates are year-over-year.
Source: U.S. Bureau of Economic Analysis.

Payroll Employment

Table 1.4 displays annual net job gains for Pennsylvania payroll jobs, which excludes agriculture, military, self-employed individuals and independent contractors. The data show that 2018 was a strong year for the Pennsylvania labor market, with 65,600 net payroll jobs created (preliminary). For the prior four years, net jobs creation averaged roughly 50,000 per annum.

The table provides a breakdown of net jobs created by sector. The top half of the table contains net new jobs in the healthcare-social assistance sector only. For 2017 and 2018, that single sector comprised 40 to 45 percent of all net jobs created, and the two subsectors devoted to care of the elderly-disabled comprised roughly one-quarter of all net jobs created. Other sectors that recorded notable gains include food service (limited- and full-service restaurants and drinking establishments), construction and transportation-storage. When combined with healthcare-social assistance, the four sectors comprised 75 to 85 percent of all net jobs created. This result is partly driven by a significant contraction in the retail trade sector, which contracted by 8,000 net jobs in 2017 and 6,400 in 2018. Data for the first quarter of 2019 show a contraction of nearly 10,000 jobs (annualized level) in the retail trade sector relative to the same quarter in the prior year. The contraction is motivated by strong growth of internet sales, which is reflected in jobs growth for the transportation-storage sector. That sector includes private couriers such as FedEx and UPS, as well as firms with significant warehousing activity (e.g., Amazon).

Table 1.4
Annual New Payroll Jobs by Sector

	2014	2015	2016	2017	2018
All Payroll Jobs (000s)	**47.3**	**46.2**	**48.8**	**58.8**	**65.6**
Social Assist: Elderly-Disabled	6.0	5.7	8.8	10.4	9.7
All Other Social Assistance	-0.9	2.0	3.3	3.5	2.1
Home Healthcare	3.6	4.2	4.8	4.5	5.9
Other Ambulatory Care	4.5	2.0	4.7	4.1	6.9
All Other Healthcare	1.1	-2.7	0.7	3.8	2.4
All Food Service	4.9	5.8	8.0	6.3	5.2
Construction	5.1	6.4	3.7	9.9	7.0
Transportation-Storage	7.3	10.9	9.2	7.3	9.1
Retail Trade	1.8	0.8	0.2	-8.0	-6.4
All Other Sectors	14.0	11.2	5.4	16.8	23.7

Note: Ambulatory Care is medical care provided on an outpatient basis including diagnosis, observation, treatment and rehabilitation services. All Other Healthcare includes hospitals and nursing/residential care facilities. Data exclude agriculture, military, self-employed individuals and independent contractors. Due to rounding, detail may not sum to total.

Source: U.S. Bureau of Labor Statistics, State and Area Employment.

Miscellaneous National and State Economic Metrics

Table 1.5 contains seven metrics for the U.S. and Pennsylvania economies that provide additional insight into recent trends that affect the economic and revenue outlook. Recent trends include:

- For the current and most recent quarter, the S&P 500 Index has recorded strong gains, which should bolster consumer confidence and spending.
- The yield on the 10-year note, which is closely tied to residential mortgage rates, has declined from a recent peak in 2018 Q4, providing relief to homebuyers and homeowners who want to refinance.
- The mid-Atlantic gasoline price reflects market conditions in Pennsylvania, New Jersey and New York. Recent data show an uptick in gasoline prices and most analysts expect that trend to continue through the summer.
- The home price index measures the value of existing homes, and home values continue to display solid growth.
- The growth of taxable retail sales (excludes the base expansion from taxation of internet sales) recently accelerated relative to the first quarter.
- Data from the Department of Environmental Protection show that the pace of natural gas production decelerated in 2019 Q1 but maintained recent strength.
- Lottery instant ticket sales can serve as a leading or contemporaneous economic indicator because they are often impulse purchases that reflect consumer confidence. Recent quarterly data show that these sales have also decelerated but remain solid.

Table 1.5
Other Macro Economic Indicators

	Growth Rate or Level					
	2018.1	2018.2	2018.3	2018.4	2019.1	2019.2
S&P 500 Index	11.8%	12.2%	17.6%	-6.2%	7.3%	8.7%
10-Year Note Yield	2.76	2.92	2.93	3.03	2.65	2.03
Mid-Atlantic Gasoline	$2.70	$2.90	$2.91	$2.42	$2.68	$2.74
PA Home Price Index	5.9%	5.4%	4.7%	5.3%	5.0%	n.a.
PA Taxable Retail Sales	3.0%	5.0%	5.4%	4.7%	3.2%	5.6%
PA Natural Gas Production	10.1%	10.1%	18.6%	17.8%	14.7%	n.a.
PA Instant Ticket Sales	4.8%	6.7%	5.4%	5.5%	5.8%	4.0%

Note: Gasoline price and S&P 500 are values from end of quarter. Taxable retail sales adjusted for internet base expansion. All growth rates are year-over-year. Data for 2019 Q2 are estimates based on the most recent published data through June.

Sources: Financial data from *Wall Street Journal* . Gas prices from U.S. Energy Information Administration. Other data from Federal Housing Finance Administration, PA Department of Environmental Protection and PA Lottery.

Long-Term Relationship: Economics and Tax Revenues

Table 1.6 contains long-run average growth rates for the two largest tax revenue sources and a key economic metric: wages-salaries paid to state residents. Sales and use tax (SUT) and PIT revenues comprise roughly three-quarters of all General Fund tax revenues. Historical data demonstrate the close relation between those revenue sources and wages-salaries paid to residents. For the time period examined, average annual growth rates were as follows: SUT (2.6 percent), PIT withholding (3.4 percent) and PIT non-withholding (5.1 percent).[1] Combined, the two revenue sources had an average growth rate of 3.2 percent per annum. By comparison, wages-salaries paid to Pennsylvania residents grew at an average rate of 3.4 percent per annum.

For fiscal year (FY) 2019-20, the IFO economic forecast projects wage-salary growth of 4.1 percent, which slightly exceeds the combined growth rate for the two major revenue sources (3.8 percent). Wages-salaries is a key metric that is generally responsive to economic conditions with a short lag. As shown in Figure 1.2, the series is relatively stable and can be projected with a fair degree of accuracy if economic conditions do not change in an abrupt manner. Therefore, the projected 4.1 percent growth rate for FY 2019-20 could be viewed as a "baseline" growth rate that motivates the majority of General Fund revenues. Other secondary (e.g., inheritance, cigarette and gross receipts) and minor (e.g., liquor and realty transfer) revenue sources will cause deviation from that baseline growth rate. Consumer behavior, corporate profits, new tax laws or administrative rulings and timing issues (e.g., taxpayer response to tax law changes) will also cause divergence from the baseline growth rate.

Table 1.6
Long-Term Economic and Tax Revenue Growth

	2010-11	2018-19	AAGR	2019-20
Sales and Use	$8.59	$10.52	2.6%	3.2%
Withholding	8.01	10.45	3.4	4.1
Non-Withholding	2.42	3.60	5.1	4.6
Total	**19.03**	**24.57**	**3.2**	**3.8**
Wages-Salaries	259.60	338.20	3.4	4.1

Note: billions of dollars. AAGR is average annual growth rate. Sales and use excludes revenues from internet sales base expansion.

[1] PIT non-withholding tax revenues are attributable to non-wage income such as business profits, capital gains, interest and dividends.

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Official Revenue Estimate

This section provides revised revenue estimates for FY 2018-19 and official estimates for FY 2019-20 for the General Fund, Motor License Fund, Lottery Fund and federal funds subject to appropriation. The subsequent pages provide detail on the projected levels and growth rates for those funds. An appendix contains historical data that displays long-term revenue and economic trends. For the purpose of this official revenue estimate, all projections are made on a "current law" basis and exclude any statutory changes or administrative actions proposed in the *2019-20 Executive Budget*.

The General Fund

In June 2018, the Independent Fiscal Office (IFO) released its official General Fund revenue estimate of $33.9 billion for FY 2018-19.[2] Based on actual revenue collections through May 2019 and projections for the remainder of the fiscal year, the revised estimate for FY 2018-19 increases revenues by $910 million from the IFO's official revenue estimate. (See **Table 2.1.**) The revision largely occurs across four revenue sources:

- Corporate net income tax (CNIT) collections are projected to grow at a rate of 17.4 percent for FY 2018-19, which will exceed the IFO's official estimate by $306 million. The unusually high growth rate is primarily the result of profit shifting from tax year (TY) 2017 into 2018 to take advantage of lower tax rates under the federal TCJA, federal tax base expansion and strong baseline corporate profits growth for TY 2018.
- Non-motor vehicle SUT collections are expected to exceed the IFO's official estimate for FY 2018-19 by $300 million, largely the result of higher than anticipated collections from marketplace vendors under Act 43 of 2017. The revised Act 43 impact is $168 million higher than the amount included in the IFO's official revenue estimate.
- The revised estimate for non-withheld PIT collections is $71 million higher than the IFO's official estimate for FY 2018-19. The overage is entirely attributable to strong April 2019 collections. Final and preliminary tax data suggest that profit shifting occurred over multiple tax years (from 2016 to 2017 and then to 2018), as taxpayers anticipated rate cuts after the 2016 election and in response to the federal TCJA. A sample of other states' March-April 2019 non-withheld PIT collections averaged 42 percent higher than March-April 2018 and indicates that this collection pattern was not unique to Pennsylvania.[3]
- Licenses and fees revenue is projected to exceed the IFO's official estimate by $93 million, primarily the result of collecting $79 million more than anticipated in fees related to gaming expansion.

For FY 2019-20, the initial estimate is $35.7 billion, an increase of $939 million (2.7 percent) over the current fiscal year. (See **Table 2.2.**)

[2] The estimate reflects the IFO's official estimate released on June 18, 2018 and updated for statutory changes that were enacted with the FY 2018-19 state budget.
[3] Based on gross collections data from Connecticut, Massachusetts, Michigan, New York, North Carolina and Ohio.

Table 2.1
Adjustment to Revenue Estimate for FY 2018-19

	June 2018 Estimate		June 2019 Estimate		Dollar
	Amount	Growth	Amount	Growth	Change
Total General Fund	**$33,899**	**-1.9%**	**$34,809**	**0.7%**	**$910**
Total Tax Revenue	**33,183**	**3.7**	**34,010**	**6.3**	**827**
Total Corporation Taxes	**5,111**	**4.5**	**5,495**	**12.4**	**384**
Corporate Net Income	3,075	6.8	3,381	17.4	306
Gross Receipts	1,213	5.5	1,249	8.6	36
Utility Property	35	2.9	36	7.3	1
Insurance Premiums	426	-5.6	443	-1.7	17
Financial Institutions	363	-2.3	385	3.8	22
Total Consumption Taxes	**12,416**	**2.7**	**12,777**	**5.6**	**361**
Sales and Use	10,751	3.6	11,119	7.1	368
Non-Motor	9,324	3.7	9,624	7.1	300
Motor	1,427	2.5	1,495	7.4	68
Cigarette	1,136	-5.2	1,121	-6.4	-15
Other Tobacco Products	119	0.1	130	9.2	11
Malt Beverage	23	-4.6	23	-3.4	0
Liquor	387	4.1	383	3.1	-4
Total Other Taxes	**15,656**	**4.2**	**15,738**	**4.8**	**82**
Personal Income	13,980	4.3	14,048	4.8	68
Withholding	10,450	4.1	10,447	4.1	-3
Quarterly	2,060	2.0	1,873	-7.3	-187
Annual	1,470	9.5	1,728	28.7	258
Realty Transfer	543	5.6	534	3.8	-9
Inheritance	1,046	2.6	1,044	2.5	-2
Gaming	129	4.9	133	7.8	4
Minor and Repealed	-42	-18.8	-21	42.1	21
Total Non-Tax Revenue	**717**	**-72.1**	**799**	**-68.8**	**82**
State Store Fund Transfers	185	-0.1	185	0.0	0
Licenses and Fees	224	-30.8	317	-1.7	93
Treasury	51	62.0	73	131.3	22
Escheats	110	55.5	83	16.8	-27
Other Miscellaneous	69	-96.3	68	-96.4	-1
Fines, Penalties & Interest	78	3.9	73	-2.6	-5

Note: figures in dollar millions. Due to rounding, detail may not sum to total. Growth rates based on the unrounded amounts. The June 2018 estimate reflects the IFO's official estimate released on June 18, 2018 and updated for statutory changes that were enacted with the FY 2018-19 state budget.

Table 2.2
General Fund Revenue Estimate for FY 2019-20

	Estimated 2018-19		Projected 2019-20	
	Amount	Growth	Amount	Growth
Total General Fund	**$34,809**	**0.7%**	**$35,748**	**2.7%**
Total Tax Revenue	**34,010**	**6.3**	**35,135**	**3.3**
Total Corporation Taxes	**5,495**	**12.4**	**5,577**	**1.5**
Corporate Net Income	3,381	17.4	3,472	2.7
Gross Receipts	1,249	8.6	1,214	-2.8
Utility Property	36	7.3	37	2.8
Insurance Premiums	443	-1.7	467	5.3
Financial Institutions	385	3.8	387	0.5
Total Consumption Taxes	**12,777**	**5.6**	**13,161**	**3.0**
Sales and Use	11,119	7.1	11,544	3.8
Non-Motor	9,624	7.1	9,996	3.9
Motor	1,495	7.4	1,548	3.5
Cigarette	1,121	-6.4	1,063	-5.2
Other Tobacco Products	130	9.2	135	3.5
Malt Beverage	23	-3.4	23	0.0
Liquor	383	3.1	396	3.5
Total Other Taxes	**15,738**	**4.8**	**16,396**	**4.2**
Personal Income	14,048	4.8	14,640	4.2
Withholding	10,447	4.1	10,875	4.1
Quarterly	1,873	-7.3	2,058	9.9
Annual	1,728	28.7	1,707	-1.2
Realty Transfer	534	3.8	568	6.3
Inheritance	1,044	2.5	1,070	2.4
Gaming	133	7.8	154	16.0
Minor and Repealed	-21	42.1	-35	-69.3
Total Non-Tax Revenue	**799**	**-68.8**	**613**	**-23.3**
State Store Fund Transfers	185	0.0	185	0.0
Licenses and Fees	317	-1.7	185	-41.7
Treasury	73	131.3	43	-41.0
Escheats	83	16.8	91	9.9
Other Miscellaneous	68	-96.4	34	-49.9
Fines, Penalties & Interest	73	-2.6	76	2.9

Note: figures in dollar millions. Due to rounding, detail may not sum to total. Growth rates based on the unrounded amounts.

The text that follows provides a brief description of the factors that motivate trends across revenue sources for FY 2018-19 and FY 2019-20.

Corporate Net Income

The revised CNIT estimate for FY 2018-19 is $3.38 billion. The estimate reflects an increase of $501 million (17.4 percent) over the prior fiscal year and is $306 million higher than the IFO's official estimate. The revision is driven by strong final payments attributable to TY 2017 and strong estimated and final payments for TY 2018. By contrast, the first estimated payment for TY 2019 (remitted March 15th) was relatively weak and declined by 1.8 percent from the prior year. The forecast assumes that the June 2019 estimated payment will increase by 1.9 percent.

The strong growth rate for FY 2018-19 revenues was driven by three factors. The first two factors relate to the enactment of the federal TCJA of 2017. That act reduced the federal corporate net income tax rate from 35 to 21 percent. Due to that significant rate reduction, it is likely that many corporations shifted taxable income out of TY 2017 into TY 2018. To the extent that occurred, those revenue gains would be temporary and would not be carried forward to next fiscal year. The act also expanded the federal and state tax base, most notably through the elimination of the Section 199 manufacturing deduction and the limitation on interest deductions.

The third factor is strong profits growth for calendar year 2018. Preliminary data from the U.S. Bureau of Economic Analysis estimate that the domestic profits of non-financial corporations expanded by 10.7 percent. The original forecast used by the IFO had assumed a growth rate of 6.3 percent. The much stronger profits growth accounts for roughly one-half of the underprediction for FY 2018-19.

For FY 2019-20, the forecast projects CNIT revenue growth of 2.7 percent. The more modest growth rate is motivated by lower profits growth, the phase-in to the higher net operating loss deduction limit (from 35 to 40 percent of taxable income) and the lack of profit shifting into TY 2019. The first two estimated payments for TY 2019 support the modest revenue growth for next fiscal year.

Gross Receipts

The revised gross receipts tax (GRT) estimate for FY 2018-19 is $1.25 billion. The estimate reflects an increase of $99 million (8.6 percent) from the prior fiscal year and is $36 million higher than the IFO's official estimate. The upward revision is attributable to stronger than anticipated estimated payments for the electric sector for TY 2019 and regular payments for the telecommunications sector for TY 2018. For FY 2019-20, GRT revenues are projected to decrease by 2.8 percent. The forecast assumes that the electric sector will experience solid growth (6.0 percent), while the telecommunications sector will continue to contract (-2.0 percent) for TY 2019.

Sales and Use

The revised SUT estimate for FY 2018-19 is $11.12 billion. The estimate reflects an increase of $738 million (7.1 percent) over the prior fiscal year and is $368 million higher than the IFO's official estimate. Motor vehicle revenues are higher than anticipated, with projected growth of 7.4 percent for the current fiscal year. Non-motor vehicle revenues are projected to grow at a rate of 7.1 percent, supported by strong collections related to Act 43 of 2017 that requires online marketplace sellers to either remit any sales tax due to the Commonwealth or notify the Department of Revenue of sales tax owed by customers. The FY 2018-19 official estimate included $40 million for Act 43, while the revised estimate reflects $208 million in Act 43 collections. For FY 2019-20, the forecast projects that total sales tax revenues will increase by 3.8

percent, and the growth of non-motor vehicle revenues (3.9 percent) will outpace motor vehicle revenues (3.5 percent).

Personal Income

The revised PIT estimate for FY 2018-19 is $14.0 billion. The estimate reflects an increase of $649 million (4.8 percent) over the prior fiscal year and is $68 million higher than the IFO's official estimate. Weak estimated payments for TY 2018 generated unusually large final payments in the spring of 2019. As a result, the expected FY 2018-19 shortfall in estimated payments (-$187 million) is more than offset by an overage in final payments ($258 million). In addition, preliminary data suggest that non-withheld collections have also been impacted by profit shifting over multiple years (from 2016 to 2017 and then to 2018) as taxpayers anticipated rate cuts after the 2016 election and then in response to the passage of the federal TCJA. Withholding revenues are projected to fall short of estimate for FY 2018-19 (-$3 million).

For FY 2019-20, the forecast projects an increase of $592 million (4.2 percent) in PIT. Withholding revenue is expected to increase by $428 million (4.1 percent). Non-withheld revenues are projected to increase by $164 million (4.6 percent).

Gaming Taxes

The revised gaming estimate for FY 2018-19 is $133 million. The estimate reflects an increase of $10 million (7.8 percent) over the prior fiscal year and is $4 million higher than the IFO's official estimate. The revision was due to higher than expected fantasy contest revenues and sports wagering launching earlier than anticipated. The updated estimate includes $3 million in collections from fantasy contests and $7 million in collections from sports wagering.

The forecast for FY 2019-20 is $154 million. Gaming revenues are expected to increase by 16.0 percent, due to (1) the launch of iGaming, (2) a full year of collections for sports wagering, (3) collections from video gaming terminals (VGTs) and (4) collections from the new Stadium Casino which is expected to open in 2020.

Other Revenue Sources

Other revenue sources that have a notable impact on General Fund revenue trends for FY 2018-19 and FY 2019-20 include:

- Licenses and fees collections for FY 2018-19 include $97 million in iGaming certificates and operator fees, $70 million in sports wagering certificates, $13 million in change of control fees, $5 million in table game fees associated with the new mini casinos and $0.7 million in VGT license and application fees. The FY 2019-20 estimate includes $21 million in iGaming certificates and operator fees, $20 million in sports wagering certificates, $8 million in table game fees associated with the new mini casinos, $5 million in change of control fees and $0.2 million in VGT license and application fees.
- Escheats collections are projected to total $83 million in FY 2018-19 and $91 million in FY 2019-20. Recent collections have been impacted by 2015 legislation that reduced the holding period for unclaimed property from five to three years. After an initial influx of collections, the shortened holding period dramatically increased claims by facilitating the return of unclaimed property to its

rightful owner. Collections in FY 2018-19 have stabilized and it is anticipated that escheats collections will return to historical growth rates in FY 2019-20 and forward.

- Treasury collections for FY 2018-19 include $30 million for a settlement under the Air Pollution Control Act. Collections for FY 2019-20 are expected to return to normal levels.

The Motor License Fund

The Motor License Fund (MLF) includes various excise taxes levied on a per gallon basis and revenue from licenses and registration fees. Based on actual revenue collections through May 2019 and projections for the remainder of the fiscal year, the revised estimate for FY 2018-19 is $2.86 billion, a decline of 3.0 percent from the prior year and $103 million below the IFO's official estimate. (See **Table 2.3.**) The MLF is projected to grow at a rate of 0.5 percent ($15 million) for FY 2019-20.

Motor License Fund revenues continue to be impacted by Act 89 of 2013. The legislation (1) tied increases for most fees levied under Title 75 (the Vehicle Code) to the rate of inflation;[4] (2) transitioned certain fee revenue to the Multimodal Transportation Fund and Public Transportation Trust Fund over a period of four years;[5] (3) gradually lifted the average wholesale price (AWP) of fuel, until the cap was eliminated beginning in calendar year 2017 and thereafter;[6] and (4) repealed the liquid fuels and fuels taxes and replaced them with an oil company franchise tax (OFT) component. Act 89 fee increases effective July 1, 2019 are determined based on the change in the consumer price index for all urban consumers (CPI-U) for the period February 1, 2017 to January 31, 2019, or 3.6539 percent.

Motor License Fund collections for FY 2018-19 are constrained due to the lack of an inflationary fee adjustment and a decline in the Act 89 liquid fuels and fuels OFT rate (roughly 2.9 percent on a fiscal year blended basis). For FY 2019-20, there will be no change in any of the OFT rates, but motor fuel tax collections are projected to decline (0.5 percent), as vehicles continue to become more fuel efficient. Licenses and fees collections for FY 2019-20 will be impacted by: (1) a fee increase based on the calculated change in the CPI-U, (2) an additional $30 million for the new REAL ID program, and (3) a reduction of $36 million for a prior year adjustment related to the phase-in of transfers to the Public Transportation Trust Fund and the Multimodal Transportation Fund under Act 89 of 2013. Overall FY 2019-20 licenses and fees revenues are projected to rise (2.4 percent), while other motor receipts remain flat.

[4] Inflation adjustments occur in calendar years ending in an odd number.
[5] Those fees were fully transitioned beginning with FY 2017-18.
[6] The OFT rate on a cent per gallon basis is calculated annually based on the AWP of gasoline and diesel fuel. Beginning with calendar year 2017 and thereafter, the minimum AWP is $2.99 per gallon. For the 12-month period ending September 30, 2018, the Pennsylvania Department of Revenue determined the actual AWP to be $2.04 cents per gallon. Therefore, the AWP used to calculate the 2019 OFT rate is the statutory minimum $2.99 per gallon.

Table 2.3
Motor License Fund Summary

	Estimated 2018-19		Projected 2019-20	
	Amount	Growth	Amount	Growth
Total Motor License Fund	**$2,859**	**-3.0%**	**$2,873**	**0.5%**
Liquid Fuels Taxes	**1,833**	**-0.7**	**1,824**	**-0.5**
Motor Carriers/FTA	133	-1.5	133	0.0
Alternative Fuels	15	6.8	16	5.3
Oil Company Franchise	1,005	-1.3	1,000	-0.5
Act 89 OFT - Liquid Fuels	534	0.9	529	-1.0
Act 89 OFT - Fuels	146	-2.7	146	0.0
Motor Licenses and Fees	**1,003**	**-4.1**	**1,027**	**2.4**
Special Hauling Permits	37	-0.3	38	3.5
Registrations Other States/IRP	146	5.1	152	4.2
Operators Licenses	74	9.7	73	-2.2
Real ID	2	n.a.	30	n.a.
Vehicle Registration & Titling	734	-5.4	788	7.3
Miscellaneous	10	-64.3	-54	-665.3
Other Motor Receipts	**23**	**-59.3**	**23**	**0.0**
Treasury	16	-66.2	16	0.0
Transportation	3	-20.6	3	0.0
General Services	1	4.4	1	0.0
Vehicle Fines Clearing Acct	3	-22.8	3	0.0

Note: figures in dollar millions. Due to rounding, detail may not sum to total. Growth rates based on the unrounded amounts.

The Lottery Fund

The official revenue estimate projects that Lottery Fund net revenues will increase by $219 million (12.2 percent) for FY 2018-19 and are projected to be flat for FY 2019-20. The significant increase in FY 2018-19 is primarily due to iLottery, which launched in June 2018 and is expected to generate $365 million in FY 2018-19 sales. Growth of iLottery is expected to moderate (1.5 percent) in FY 2019-20. Instant ticket sales, which include Fast Play, are projected to grow by $167 million (5.7 percent) for the current fiscal year and $133 million (4.3 percent) for FY 2019-20. Multi-state lotto sales increased significantly in FY 2018-19 (16.7 percent) due to large jackpots for Powerball and Mega Millions. The FY 2019-20 estimate assumes a return to normal sales levels for these games, or a decline of $24 million (-4.9 percent). For FY 2018-19, in-state lotto sales are up $16 million (6.1 percent) but should return to a growth rate in line with historical averages (1.4 percent) in FY 2019-20. Sales of numbers games (Pick 2, Pick 3, Pick 4, Pick 5 and Wild Ball) are relatively flat for this fiscal year (0.8 percent) and are expected to decline next year (-3.1 percent).

Table 2.4
Lottery Fund Summary

	Estimated 2018-19		Projected 2019-20	
	Amount	Growth	Amount	Growth
Total Lottery Fund	**$2,013**	**12.2%**	**$2,016**	**0.1%**
Gross Ticket Sales	**4,862**	**15.2**	**4,962**	**2.1**
Instant Tickets	3,105	5.7	3,238	4.3
Multi-State Lotto Games	495	16.7	471	-4.9
In-State Lotto and Raffle	278	6.1	282	1.4
Numbers Games	572	0.8	554	-3.1
iLottery	365	n.a.	370	1.5
Keno and Express Sports	46	497.6	46	1.5
Field Paid Prizes & Commissions	**-2,997**	**16.3**	**-3,094**	**3.3**
Miscellaneous Revenues	**148**	**-0.2**	**148**	**-0.3**
Gaming Fund Transfers	142	-2.7	146	3.2
Other Miscellaneous Revenue	6	135.8	1	-80.4

Note: figures in dollar millions. Due to rounding, detail may not sum to total. Growth rates based on the unrounded amounts.

Federal Funds

Federal funds appropriations confer authority to spend money that the federal government may provide, and state agencies request annual spending authority as part of the budget process. A federal funds appropriation does not guarantee funding at any particular level. In fact, the actual funds received and disbursed may be considerably less than the appropriated amounts. Agencies typically request authority to spend all federal funds anticipated for a given fiscal year.

The IFO reviewed Request for Appropriation of Federal Funds (RAFF) forms and reports provided by the Office of the Budget regarding requested federal funds authority. These reports show a 2.3 percent decrease in requested federal appropriations of General Fund monies across all agencies for next fiscal year. Therefore, the office projects that agencies will require $27.5 billion in General Fund federal spending authority for FY 2019-20. Executive authorizations and non-General Fund requests for appropriations are not included.

The departments of Human Services (DHS), Education (PDE) and Health comprise roughly 92 percent of the General Fund federal spending authority requested by the Commonwealth. The text that follows provides highlights for those agencies.

Department of Human Services

For FY 2019-20, DHS requests authority to spend up to $22.1 billion in federal funds, a 3.3 percent decrease over the current year. Federal funds authorized for DHS comprise approximately 81 percent of the General Fund federal spending request for FY 2019-20.

The federal government provides financial assistance to the Commonwealth for Medical Assistance (MA) payments made on behalf of eligible recipients who receive various medical services. This assistance generally requires state matching funds and represents the largest commitment of federal funds ($19.1 billion) from the General Fund. (See **Table 2.5.**) While the federal match rate for recipients granted coverage under the MA expansion provisions of the Affordable Care Act are falling over the forecast period, the rates for standard MA recipients remains stable.[7] The total projected FY 2019-20 MA amount is 3.0 percent less than the current fiscal year.

Social services grants ($938 million) provide funds for programs that promote self-sufficiency, discourage substance abuse and provide shelters to counter domestic violence. Child services grants ($1.2 billion) reimburse counties for various programs that provide services to eligible children. Administration grants ($451 million) provide for the reimbursement of administrative costs and funding for various training programs. Children's health ($395 million) provides health insurance to children that are not MA eligible through the Children's Health Insurance Program (CHIP). The federal match rate for CHIP recipients falls over the forecast period, resulting in a projected children's health amount decrease of 11.0 percent for FY 2019-20.[8]

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[7] The rate for MA expansion recipients declines according to the following schedule: 100 percent to 95 percent effective January 1, 2017, to 94 percent effective January 1, 2018, to 93 percent effective January 1, 2019, and to 90 percent effective January 1, 2020 and beyond. The rate for standard MA recipients increased from 51.82 percent to 52.25 percent effective October 1, 2018, and will remain at 52.25 effective October 1, 2019.

[8] The rate for CHIP recipients increased from 89.27 to 89.58 effective October 1, 2018, but will decline to 78.08 effective October 1, 2019.

Table 2.5
Summary of General Fund Federal Appropriation Requests

	2017-18	Available 2018-19		Projected 2019-20	
	Amount	Amount	Growth	Amount	Growth
Total Federal Funds	**$26,875**	**$28,102**	**4.6%**	**$27,466**	**-2.3%**
Human Services	**21,810**	**22,910**	**5.0**	**22,147**	**-3.3**
Medical Assistance	18,653	19,729	5.8	19,131	-3.0
Social Services	1,166	1,100	-5.7	938	-14.7
Child Services	966	1,090	12.8	1,174	7.7
Administration Grants	542	489	-9.7	451	-7.8
Children's Health Insurance	411	444	8.2	395	-11.0
ARRA	71	57	-19.8	57	0.0
Education	**2,402**	**2,464**	**2.6**	**2,472**	**0.3**
Grants and Subsidies	2,179	2,247	3.1	2,308	2.7
Administration Grants	197	187	-5.1	134	-28.0
Assessments	15	15	0.0	15	0.0
All Other	11	16	39.4	14	-9.9
Health	**569**	**571**	**0.5**	**581**	**1.7**
WIC	276	278	0.8	278	0.0
Administration Grants	90	87	-3.7	88	1.0
State Health Centers	30	34	13.9	33	-2.0
All Other	173	173	-0.1	182	5.5
All Other Agencies	**2,095**	**2,157**	**3.0**	**2,266**	**5.0**

Note: figures in dollar millions. Due to rounding, detail may not sum to total. Growth rates based on the unrounded amounts. ARRA is American Recovery and Reinvestment Act.

Department of Education

For FY 2019-20, the Department of Education requests authority to spend up to $2.5 billion in General Fund federal monies, an increase of 0.3 percent over the current year. Grants and subsidies ($2.3 billion) comprise 93 percent of education-related federal funds. The grants provide funding for improvement initiatives for educationally-deprived students, students with disabilities and students with limited English proficiency. Administration grants are expected to decline by $52 million (-28.0 percent) for FY 2019-20. This reduction was mostly the result of a number of grants that were reduced for FY 2019-20, including: (1) $28 million in the Emergency Impact Aid Program, (2) $14 million in the Preschool Development Grants and (3) $10 million in School Improvement Grants.

Department of Health

For FY 2019-20, the Department of Health requests authority to spend up to $581 million in General Fund federal revenue, an increase of 1.7 percent over the current year. Of that amount, $278 million will be used for the Women, Infants, and Children (WIC) program. WIC provides nutrition services, breast feeding support, healthcare and social service referrals and healthy foods to an average of over 218,000 participants per month in FY 2017-18.

Appendix: Historical Data

Table A.1
Historical General Fund Revenues

Fiscal Year	Total	Corp. Net Inc.	Other Corporate	Sales and Use	Personal Income	All Other
2010-11	$27,497	$2,131	$2,761	$8,590	$10,436	$3,579
2011-12	27,678	2,022	2,941	8,772	10,801	3,141
2012-13	28,647	2,423	2,766	8,894	11,371	3,192
2013-14	28,607	2,502	2,397	9,130	11,437	3,142
2014-15	30,593	2,811	2,305	9,493	12,107	3,875
2015-16	30,902	2,842	2,291	9,795	12,506	3,467
2016-17	31,669	2,751	2,063	10,004	12,664	4,186
2017-18	34,567	2,879	2,010	10,381	13,399	5,898
2018-19	34,809	3,381	2,114	11,119	14,048	4,147
2019-20	35,748	3,472	2,105	11,544	14,640	3,987
AAGR	3.0%	5.6%	-3.0%	3.3%	3.8%	1.2%

Note: figures in dollar millions. Due to rounding, detail may not sum to total. AAGR is the average annual growth rate from FY 2010-11 to FY 2019-20.

Figure A.1
Annual Growth Rates of Selected Tax Revenue Sources

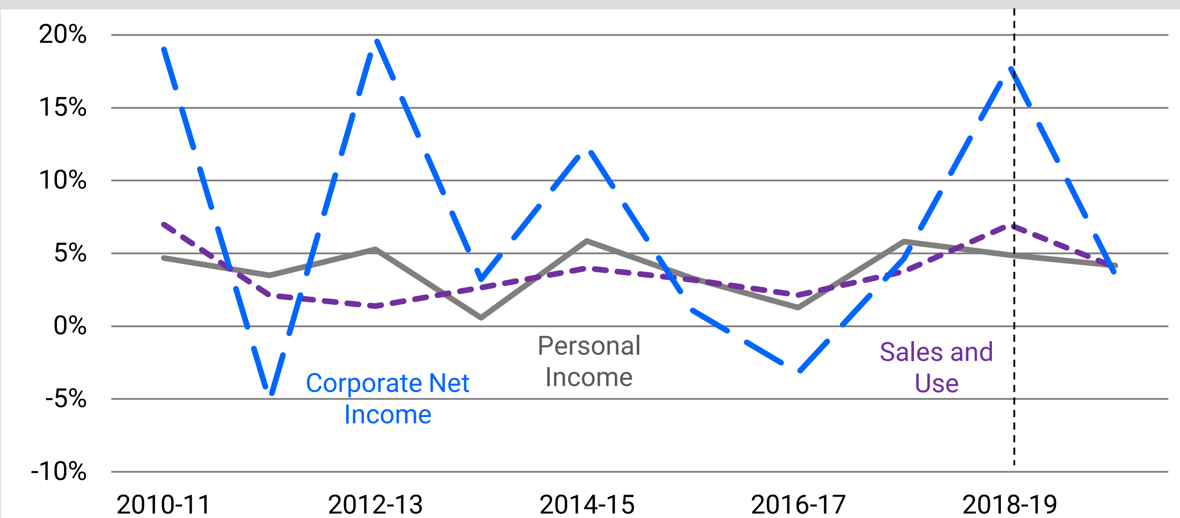


Table A.2
Historical Motor License Fund Revenues

Fiscal Year	Total	Liquid Fuels and Fuels[1]	Oil Company Franchise	Vehicle Reg. and Titling	All Other
2010-11	$2,521	$720	$455	$692	$654
2011-12	2,414	717	458	683	556
2012-13	2,416	728	445	688	555
2013-14	2,447	723	534	686	504
2014-15	2,612	739	747	728	397
2015-16	2,658	718	837	720	383
2016-17	2,759	718	904	758	379
2017-18	2,948	679	1,018	776	475
2018-19	2,859	680	1,005	734	440
2019-20	2,873	675	1,000	788	411
AAGR	1.5%	-0.7%	9.1%	1.4%	-5.0%

[1] Includes the original Liquid Fuels and Fuels Tax and the Oil Company Franchise Tax replacement.

Note: figures in dollar millions. Due to rounding, detail may not sum to total. AAGR is the average annual growth rate from FY 2010-11 to FY 2019-20.

Figure A.2
Annual Growth Rates of Selected MLF Revenue Sources

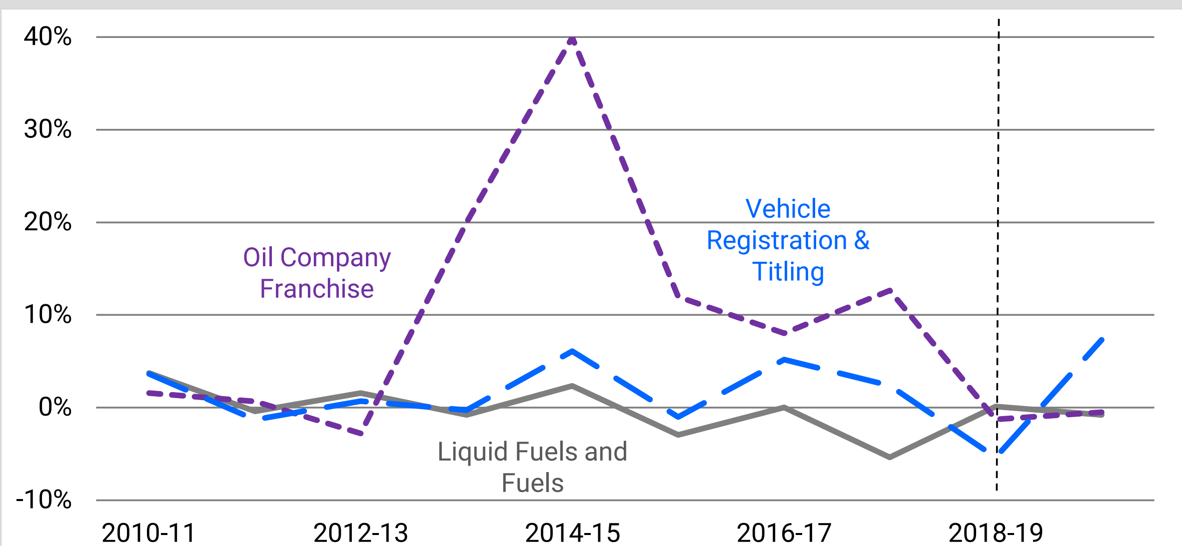


Table A.3
Historical Lottery Fund Collections

Fiscal Year	Gross Sales	Instant Tickets	Multi-State Lotto	In-State Lotto	Numbers Games	iLottery	Keno
2010-11	$3,208	$1,922	$340	$271	$674	n.a.	n.a.
2011-12	3,481	2,135	429	271	646	n.a.	n.a.
2012-13	3,700	2,305	485	279	631	n.a.	n.a.
2013-14	3,800	2,445	447	296	611	n.a.	n.a.
2014-15	3,820	2,592	381	250	597	n.a.	n.a.
2015-16	4,135	2,793	496	265	581	n.a.	n.a.
2016-17	4,001	2,782	369	260	590	n.a.	n.a.
2017-18	4,221	2,939	424	262	568	$21	$8
2018-19	4,862	3,105	495	278	572	365	46
2019-20	4,962	3,238	471	282	554	370	46
AAGR	5.0%	6.0%	3.7%	0.4%	-2.1%	n.a.	n.a.

Note: figures in dollar millions. Due to rounding, detail may not sum to total. AAGR is the average annual growth rate from FY 2010-11 to FY 2019-20. Raffle included in In-State Lotto. Express Sports included in Keno. Total Gross Sales and Multi-State Lotto categories for FY 2014-15 include Monopoly Millionaires' Club sales.

Figure A.3
Annual Growth Rates of Lottery Revenue Sources

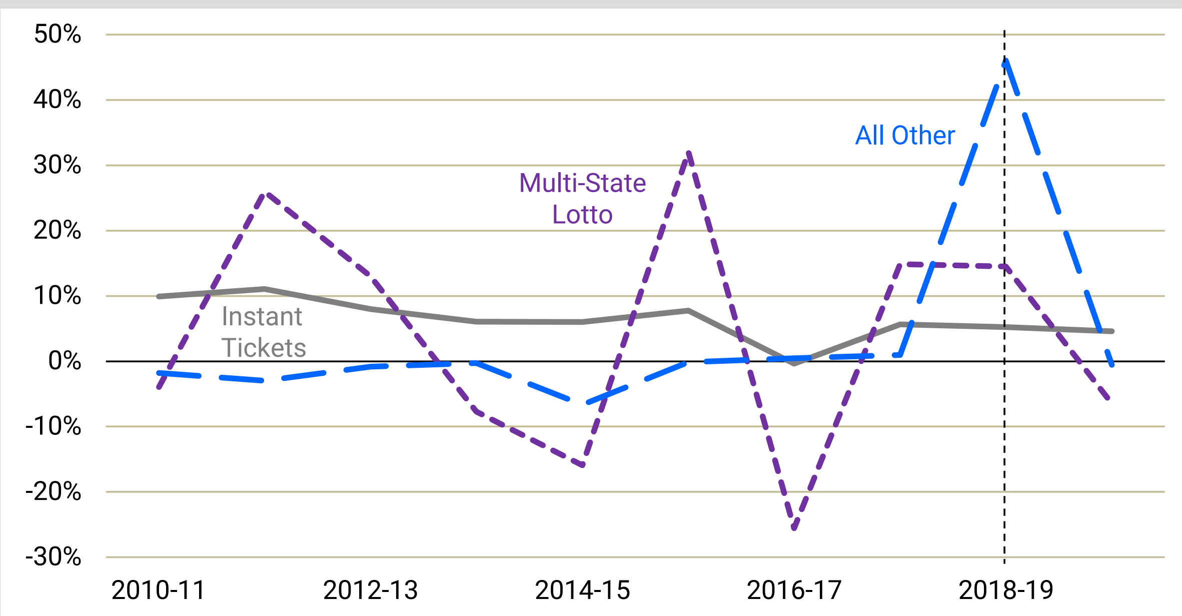
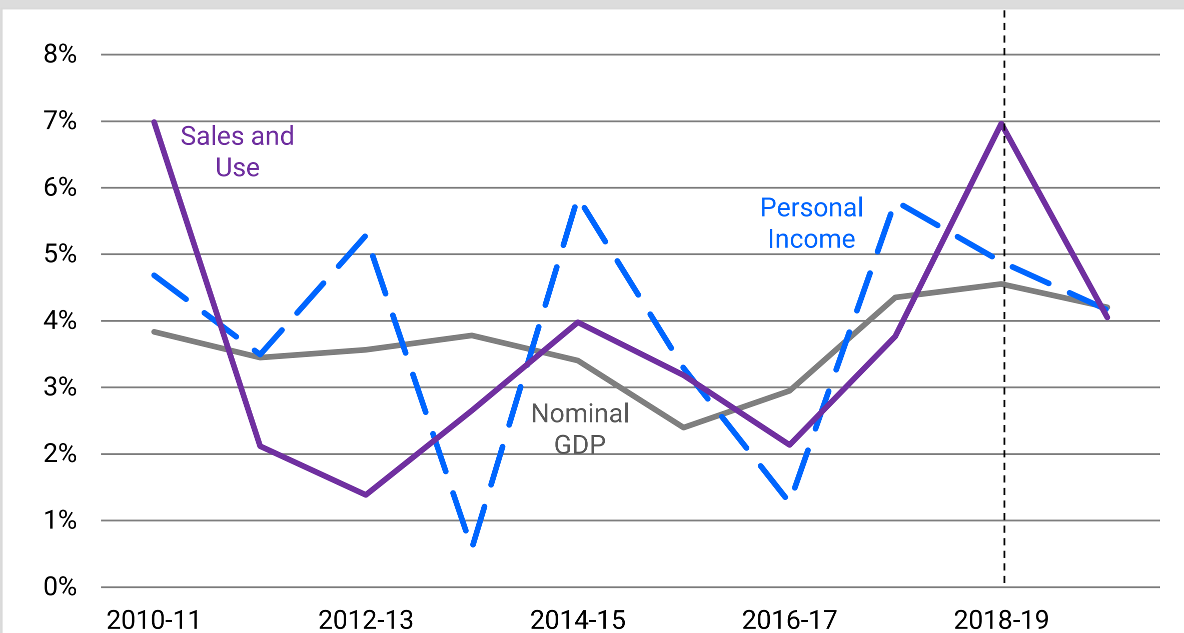


Table A.4
Comparison of Tax Revenue to Other State Variables

Fiscal Year	General Fund	Personal Income	Sales and Use	Nominal GDP	CPI-U (level)
2010-11	$26,461	$10,436	$8,590	$609,150	230.8
2011-12	27,149	10,801	8,772	630,153	236.0
2012-13	28,067	11,371	8,894	652,609	239.5
2013-14	28,098	11,437	9,130	677,288	242.5
2014-15	29,492	12,107	9,493	700,351	244.0
2015-16	30,258	12,506	9,795	717,146	244.6
2016-17	30,752	12,664	10,004	738,303	246.9
2017-18	32,003	13,399	10,381	770,439	250.0
2018-19	34,010	14,048	11,119	805,545	253.6
2019-20	35,135	14,640	11,544	839,411	258.1
AAGR	3.2%	3.8%	3.3%	3.6%	1.3%

Note: figures in dollar millions. AAGR is the average annual growth rate from FY 2010-11 to FY 2019-20.

Figure A.4
Annual Growth Rates of Major Tax Revenues and State GDP



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