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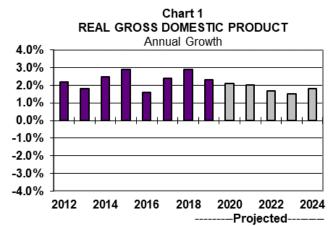
ECONOMIC OVERVIEW

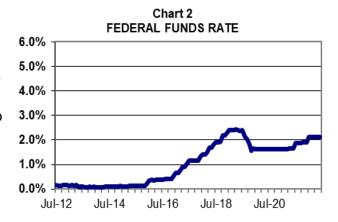
The Pennsylvania Department of Revenue and the Office of the Budget utilize economic forecast data supplied by IHS Markit and Moody's Analytics in constructing the official tax revenue estimates and forecasts. Analysis and discussion throughout this section are based upon data from each source in addition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

U.S. Recent Trends and Current Conditions

The United States GDP growth continued in 2019, as the fundamentals for the U.S. economy remain sound. This growth was led by strong gains in household sector wealth and growth in real income which supported continued consumer spending.

The U.S. economy is projected to see similar GDP growth in calendar year 2020 as recent softness in business fixed investment is expected to be replaced with a modest upturn next year. Equity markets pushed to record highs on continued economic performance, as news that the US and China resolved trade issues and the decision by the Federal Reserve to cut its policy rate in late October. Solid employment gains are projected to lower the unemployment rate to 3.4 percent. Near term recession risks appears to be contained as manufacturing weakness seems to be abating.





The Forecast

The Bipartisan Budget Act of 2019, and favorable financial conditions, should support slightly above-trend growth of GDP through calendar year 2020. Continued strong gains in household net worth and income should support solid consumer spending in calendar year 2020. Recession risks have been reduced as IHS Markit, predicting about a 20 percent chance of a recession in the next 12 months. The Federal Reserve cut the federal funds rate by a quarter point at the October 2019 meeting, and the expectation is that there may be a tightening in December 2020.

Table 1 and Table 2 are U.S. macro forecast projections from IHS Markit. Table 1 outlines the expected outlook for lower unemployment and a minimal decrease in GDP in calendar year 2020. Table 2 notes that over the next two years there is a 60 percent probability of slowing GDP growth, with an increase in consumer spending and a decrease in business fixed investment. Table 2 also provides narrative for each economic indicator.

ECONOMIC OVERVIEW

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

| Indicator | 2018 | 2019p | 2020p | 2021p |
|-------------------------------|------|-------|-------|-------|
| Nominal GDP | 5.4 | 4.1 | 4.1 | 4.3 |
| Real GDP | 2.9 | 2.3 | 2.1 | 2.0 |
| Total Consumption | 3.00 | 2.6 | 2.8 | 2.6 |
| Corporate Profits (After Tax) | 1.7 | 0.5 | 3.4 | 4.7 |
| Unemployment Rate (Rate) | 3.9 | 3.7 | 3.5 | 3.5 |
| CPI | 2.4 | 1.8 | 1.8 | 1.8 |
| Federal Funds (Rate) | 1.83 | 2.17 | 1.63 | 2.01 |

^{*} Assumptions in this chart, as well as other assumptions, are incorporated in the 2020-21 fiscal year revenue estimates.

Table 2
U.S. Macro Forecast Projection from IHS Global Insight
December 2019

| | Baseline Forecast (60% Probability) |
|-----------------------------|--|
| GDP Growth | Growth slows to 2.2% in 2019 amid slowing global growth and remains at 2.2% in 2020 |
| Consumer Spending | Growth edges up to 2.7% in 2019 and holds at that level in 2020 |
| Business Fixed Investment | Growth is projected to fall to 0.4% in 2019 as nonfarm business sector output slows, then climbs to 3.3% in 2020 |
| Housing | Housing starts expected to rise from 1.31 million in fourth quarter 2019 and fall to 1.28 million in fourth quarter 2020 |
| Exports | Expected to fall 1.1% in 2019 and rise 4.2% in 2020 |
| Fiscal Policy | Personal tax cuts extended, while entitlement spending will follow current program guidelines |
| Monetary Policy | Federal Reserve is at the end of its easing cycle and the federal funds rate eventually rises to 2.50-2.75% |
| Credit Conditions | Gradually easing |
| Consumer Confidence | Gradually declines from the third quarter in 2020 through the end of forecast |
| Oil Prices (Dollars/barrel) | Brent crude oil averages \$64 in 2019 and \$57 in 2020 |
| Stock Markets | The S&P 500 gains 25.2% over 2019 (Dec. to Dec.) but only registers a gain of 3.8% in 2020 (Dec. to Dec.) |
| Inflation (CPI) | Core personal consumption (PCE) price inflation rises 1.6% in 2019, then grows at 2.0% in 2020 and 2021 |
| Foreign Growth | In 2019, Eurozone growth drops to 1.2%, while China's growth eases to 6.2% |
| U.S. Dollar | The real dollar gradually appreciates through 2023 before falling through the end of forecast |

p = projected

ECONOMIC OVERVIEW

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.

The Marcellus shale natural gas deposit is a long-term asset for the state and region, although drilling activity has slowed due to low prices for natural gas. The buildout of infrastructure to transport the gas to market continues, with construction of pipelines, compressing stations and processing facilities continuing to benefit Pennsylvania. Development of natural gas continues to be a factor for Pennsylvania's economic outlook. Direct employment in natural resources and mining is small relative to the total jobs in the state but other industries, such as construction, transportation, and professional services have benefited from the natural gas industry. Longer-term, Pennsylvania's competitiveness in manufacturing should be enhanced by the decreased costs of energy and petrochemical feedstocks coming from beneath the state.

Portions of the state, especially the Pittsburgh area, have become magnets for high-tech jobs such as software development and robotics. Pittsburgh has continued to build on its reputation as one of the nation's leading cities for startup businesses, in part due to the presence of its universities and the graduates they produce.

Education and health care 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 1.3 percent over the next five years. The health care sector remains the most reliable source of new jobs and investments in the state, while the ethane cracker plant in western Pennsylvania will provide an additional demand source. Overall employment growth in Pennsylvania is expected to be 0.7 percent for 2019, then decline slightly over the next several years.

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

ECONOMIC OVERVIEW

Table 3
Key Economic Indicators for Pennsylvania

| PENNSYLVANIA: Key Economic Indicators | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|----------|----------|----------|----------|----------|----------|
| Real Gross State Product (in millions, 2012 | | | | | | |
| dollars) | 693,676 | 711,822 | 726,752 | 737,226 | 747,902 | 756,295 |
| Real Gross State Product (percentage change) | 0.6% | 2.6% | 2.1% | 1.4% | 1.4% | 1.1% |
| Total Employment (in thousands) | 5,941.9 | 6,007.5 | 6,048.7 | 6,089.3 | 6,105.1 | 6,102.8 |
| Total Employment (percentage change) | 1.0% | 1.1% | 0.7% | 0.7% | 0.3% | 0.0% |
| Manufacturing Employment (in thousands) | 562.9 | 569.2 | 564.2 | 558.4 | 548.6 | 547.7 |
| Nonmanufacturing Employment (in | | | | | | |
| thousands) | 5,379.0 | 5,438.4 | 5,484.5 | 5,531.0 | 5,556.5 | 5,555.1 |
| Population (in thousands) | 12,793.1 | 12,809.1 | 12,824.7 | 12,839.3 | 12,854.0 | 12,868.6 |
| Population (percentage change) | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% |
| Unemployment Rate (percentage) | 4.9% | 4.3% | 4.0% | 3.8% | 3.8% | 3.9% |
| Personal Income (percentage change) | 3.0% | 5.9% | 4.7% | 3.4% | 3.7% | 3.7% |
| U.S. ECONOMY | | | | | | |
| Real Gross Domestic Product (percentage | | | | | | |
| change) | 2.4% | 2.9% | 2.3% | 2.0% | 1.9% | 1.7% |
| Employment (percentage change) | 1.4% | 1.5% | 1.4% | 1.2% | 0.8% | 0.5% |

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METHODOLOGY OVERVIEW

For the 2019-20 revised and 2020-21 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:

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

A regression equation, $y = \beta_0 + \beta_1 x_1 + ... + \beta_n x_n + e$, differs from the true equation by the error term e. The method of least squares regression estimates values for the coefficients β_0 , β_1 , ..., β_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:

$$y_t = \beta_0 + \beta_1 x_1 + ... + \beta_n x_n + v_t$$

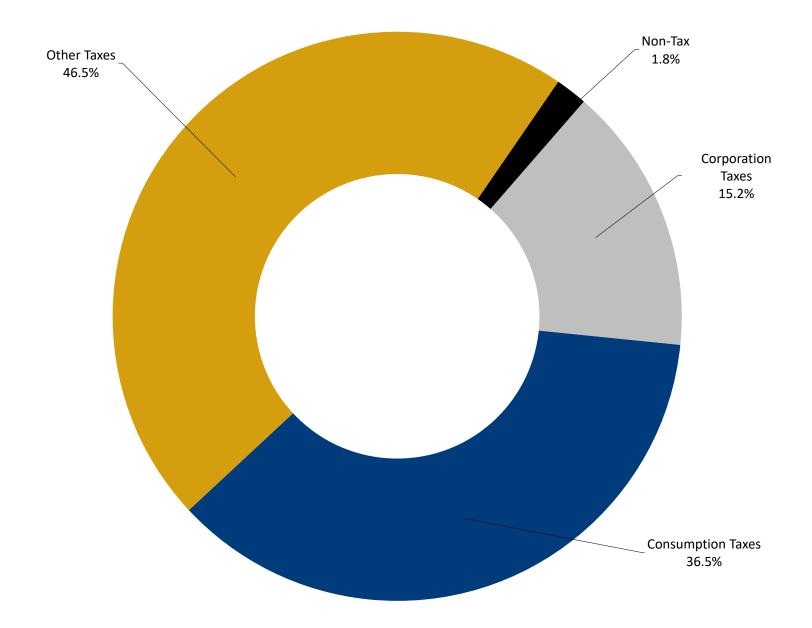
$$v_t = \rho_1 V_{t-1} + \cdots + \rho_z V_{t-z} + \varepsilon_t$$

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 OVERVIEW

REVENUE ESTIMATES (\$M)

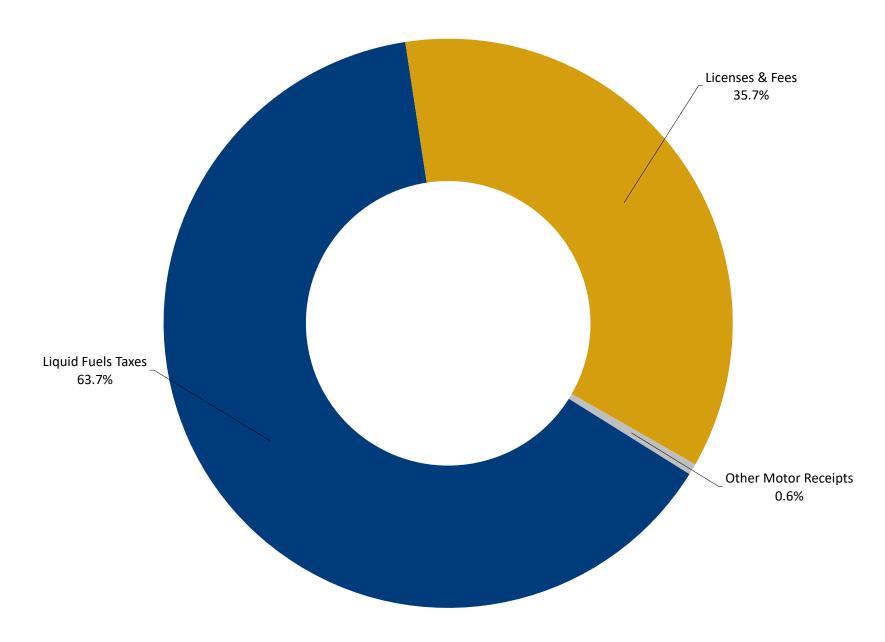
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | | GRO | OWTH RAT | TES | |
|-------------------------|----------|----------|----------|----------|----------|----------|---------|---------|----------|---------|---------|
| | REVISED | BUDGET | ESTIMATE | ESTIMATE | ESTIMATE | ESTIMATE | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Total General Fund | 35,696.8 | 37,299.8 | 38,311.6 | 38,941.2 | 39,644.4 | 40,269.7 | 4.5% | 2.7% | 1.6% | 1.8% | 1.6% |
| Total Tax Revenue | 35,019.1 | 36,624.5 | 37,639.3 | 38,268.9 | 38,972.1 | 39,597.4 | 4.6% | 2.8% | 1.7% | 1.8% | 1.6% |
| Total Corporation Taxes | 5,420.4 | 5,676.0 | 5,888.0 | 5,811.6 | 5,542.1 | 5,283.7 | 4.7% | 3.7% | -1.3% | -4.6% | -4.7% |
| Accelerated Deposits | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Corporate Net Income | 3,400.5 | 3,692.5 | 3,877.9 | 3,762.7 | 3,466.3 | 3,182.4 | 8.6% | 5.0% | -3.0% | -7.9% | -8.2% |
| Gross Receipts | 1,192.0 | 1,192.0 | 1,192.0 | 1,192.0 | 1,192.0 | 1,192.0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Utility Property | 35.6 | 35.9 | 36.2 | 36.5 | 36.8 | 37.1 | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% |
| Insurance Premium | 420.7 | 380.8 | 401.2 | 427.7 | 442.1 | 455.1 | -9.5% | 5.4% | 6.6% | 3.4% | 2.9% |
| Bank Shares | 347.1 | 350.4 | 357.6 | 369.8 | 382.0 | 394.2 | 1.0% | 2.1% | 3.4% | 3.3% | 3.2% |
| Mutual Thrift | 24.5 | 24.4 | 23.1 | 22.9 | 22.9 | 22.9 | -0.4% | -5.3% | -0.9% | 0.0% | 0.0% |
| Total Consumption Taxes | 13,060.0 | 13,601.3 | 13,899.0 | 13,826.8 | 14,163.6 | 14,488.1 | 4.1% | 2.2% | -0.5% | 2.4% | 2.3% |
| Sales and Use - Total | 11,595.2 | 12,213.0 | 12,560.0 | 12,530.5 | 12,904.4 | 13,258.2 | 5.3% | 2.8% | -0.2% | 3.0% | 2.7% |
| Nonmotor | 10,035.3 | 10,609.2 | 10,949.6 | 11,335.6 | 11,675.2 | 12,024.8 | 5.7% | 3.2% | 3.5% | 3.0% | 3.0% |
| Motor Vehicle | 1,559.9 | 1,603.8 | 1,610.4 | 1,194.9 | 1,229.2 | 1,233.4 | 2.8% | 0.4% | -25.8% | 2.9% | 0.3% |
| Cigarette | 917.9 | 824.6 | 750.8 | 682.8 | 619.8 | 564.0 | -10.2% | -8.9% | -9.1% | -9.2% | -9.0% |
| Other Tobacco Products | 129.4 | 134.4 | 142.7 | 151.1 | 159.5 | 167.8 | 3.9% | 6.2% | 5.9% | 5.6% | 5.2% |
| Malt Beverage | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Liquor | 394.7 | 406.5 | 422.7 | 439.6 | 457.1 | 475.3 | 3.0% | 4.0% | 4.0% | 4.0% | 4.0% |
| Total Other Taxes | 16,538.7 | 17,347.2 | 17,852.3 | 18,630.5 | 19,266.4 | 19,825.6 | 4.9% | 2.9% | 4.4% | 3.4% | 2.9% |
| Personal Income - Total | 14,741.7 | 15,466.9 | 15,929.4 | 16,680.2 | 17,290.4 | 17,832.3 | 4.9% | 3.0% | 4.7% | 3.7% | 3.1% |
| Withholding | 10,856.4 | 11,486.5 | 11,838.4 | 12,376.0 | 12,821.2 | 13,104.9 | 5.8% | 3.1% | 4.5% | 3.6% | 2.2% |
| Quarterly | 2,130.2 | 2,209.2 | 2,338.2 | 2,531.5 | 2,668.0 | 2,822.0 | 3.7% | 5.8% | 8.3% | 5.4% | 5.8% |
| Annual | 1,755.1 | 1,771.2 | 1,752.8 | 1,772.7 | 1,801.2 | 1,905.4 | 0.9% | -1.0% | 1.1% | 1.6% | 5.8% |
| Realty Transfer | 553.0 | 569.4 | 575.9 | 579.9 | 588.2 | 604.9 | 3.0% | 1.1% | 0.7% | 1.4% | 2.8% |
| Inheritance | 1,113.9 | 1,148.4 | 1,190.5 | 1,214.6 | 1,243.3 | 1,257.8 | 3.1% | 3.7% | 2.0% | 2.4% | 1.2% |
| Gaming | 180.3 | 210.5 | 210.5 | 224.5 | 229.7 | 233.9 | 16.7% | 0.0% | 6.7% | 2.3% | 1.8% |
| Minor and Repealed | -50.2 | -48.0 | -54.0 | -68.7 | -85.2 | -103.3 | 4.4% | -12.5% | -27.2% | -24.0% | -21.2% |
| Total Nontax Revenue | 677.7 | 675.3 | 672.3 | 672.3 | 672.3 | 672.3 | -0.4% | -0.4% | 0.0% | 0.0% | 0.0% |



MOTOR LICENSE FUND OVERVIEW

REVENUE ESTIMATES (\$M)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | | GR | OWTH RA | TES | |
|---------------------------------------|---------|---------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | REVISED | BUDGET | ESTIMATE | ESTIMATE | ESTIMATE | ESTIMATE | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Total Motor License Fund | 2,861.9 | 2,911.9 | 2,927.7 | 2,944.7 | 2,972.8 | 2,971.1 | 1.7% | 0.5% | 0.6% | 1.0% | -0.1% |
| Total - Liquid Fuels Taxes | 1,834.2 | 1,854.8 | 1,864.7 | 1,854.0 | 1,855.7 | 1,847.1 | 1.1% | 0.5% | -0.6% | 0.1% | -0.5% |
| Motor Carriers / IFTA | 134.0 | 133.9 | 134.0 | 133.8 | 134.1 | 135.1 | -0.1% | 0.1% | -0.1% | 0.2% | 0.7% |
| Alternative Fuels | 15.5 | 16.3 | 17.1 | 17.9 | 18.8 | 19.7 | 5.2% | 4.9% | 4.7% | 5.0% | 4.8% |
| Oil Company Franchise | 1,038.7 | 1,050.7 | 1,056.1 | 1,049.3 | 1,049.6 | 1,043.2 | 1.2% | 0.5% | -0.6% | 0.0% | -0.6% |
| Contra OCFT | -35.0 | -35.0 | -35.0 | -35.0 | -35.0 | -35.0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Act 89-2013 OCF - Liquid Fuels | 145.0 | 144.5 | 144.2 | 144.0 | 144.7 | 145.6 | -0.3% | -0.2% | -0.1% | 0.5% | 0.6% |
| Act 89-2013 OCF - Fuels | 536.0 | 544.4 | 548.3 | 544.0 | 543.5 | 538.5 | 1.6% | 0.7% | -0.8% | -0.1% | -0.9% |
| Minor and Repealed | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Total - Licenses & Fees | 1,009.0 | 1,038.8 | 1,044.5 | 1,072.0 | 1,098.3 | 1,105.0 | 3.0% | 0.5% | 2.6% | 2.5% | 0.6% |
| Special Hauling Permits | 36.3 | 36.6 | 37.6 | 37.9 | 39.2 | 39.6 | 0.8% | 2.7% | 0.8% | 3.4% | 1.0% |
| International Registration Plan (IRP) | 149.6 | 153.3 | 160.0 | 164.0 | 172.3 | 176.6 | 2.5% | 4.4% | 2.5% | 5.1% | 2.5% |
| Operators' Licenses | 82.5 | 64.7 | 67.6 | 69.4 | 78.4 | 80.4 | -21.6% | 4.5% | 2.7% | 13.0% | 2.6% |
| Real ID | 27.4 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | -63.1% | 0.0% | 0.0% | 0.0% | 0.0% |
| Vehicle Registration & Titling | 772.4 | 772.1 | 767.2 | 788.6 | 796.2 | 796.2 | 0.0% | -0.6% | 2.8% | 1.0% | 0.0% |
| Miscellaneous Collections | -59.2 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 103.4% | 0.0% | 0.0% | 5.0% | 0.0% |
| Total - Other Motor Receipts | 18.7 | 18.3 | 18.5 | 18.7 | 18.8 | 19.0 | -2.1% | 1.1% | 1.1% | 0.5% | 1.1% |
| Gross Receipts | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Vehicle Code Fines | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Miscellaneous - Treasury | 15.6 | 15.7 | 15.9 | 16.1 | 16.2 | 16.4 | 0.6% | 1.3% | 1.3% | 0.6% | 1.2% |
| Miscellaneous - Transportation | 2.3 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | -21.7% | 0.0% | 0.0% | 0.0% | 0.0% |
| Miscellaneous - General Services | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Miscellaneous - Revenue | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Vehicle Code Fines Clearing | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |



CIGARETTE TAX

| HISTORY 8 | & FORECAST | (\$M) | MODEL | ECONOMETRIC | | | | |
|-------------|------------|--------|------------|--|-----------------------------|--------------------------------|--------------|--------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | In CIGADJ _t = 11.7147 - 0.0056 T + 0.0412 FLOOR - 0.1748 WINT | | | WINTER + v t | |
| 2013-14 | 976.9 | | | $v_t = -0.55$ | 511 v _{t-1} + 0.38 | 885 v _{t-2} | | |
| 2014-15 | 927.2 | -5.1% | | | | | | |
| 2015-16 | 911.5 | -1.7% | VARIABLES | CIGADJ | Monthly CIG | 3 receipts adjusted for rate a | nd trar | nsfers |
| 2016-17 | 1,261.6 | 38.4% | | T | Linear time | variable (January 2010 = 1) | | |
| 2017-18 | 1,198.3 | -5.0% | | FLOOR | Dummy vari | iable for floor tax | | |
| 2018-19 | 1,118.8 | -6.6% | | WINTER | Dummy vari | iable for seasonality | | |
| 2019-20 | 917.9 | -18.0% | | | | | | |
| 2020-21 | 824.6 | -10.2% | | | | | | |
| 2021-22 | 750.8 | -8.9% | STATISTICS | R^2 | 0.811 | COEFFICIENT T STATS | β_0 | 901.14 |
| 2022-23 | 682.8 | -9.1% | | F | 28.4 | | β_1 | -11.55 |
| 2023-24 | 619.8 | -9.2% | | DW | 2.07 | | β_2 | 1.29 |
| 2024-25 | 564.0 | -9.0% | | DF | 33 | | β_3 | -14.17 |
| | | | | N | 39 | | β_4 | 3.41 |
| | | | | | | | β_5 | 2.41 |

Base cigarette tax receipts are forecasted using an econometric model, adjusted for first, and second-order serial correlation bias, and utilizing time as an explanatory variable. Dummy variables are used to capture the non-repeating floor tax remittances, seasons, 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 90 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.

The forecasted figures above include the effect from the federal legislation, H.R.1865, banning the sale of tobacco products to persons under 21.

The Governor's Executive Budget proposes the following changes to the Cigarette Tax (this impact is included above):

A transfer of funds from the Cigarette Tax to the Tobacco Settlement Fund to replace monies deducted from the Master Settlement Agreement for deposit in the Tobacco Revenue Bond Debt Service Account is proposed.

CORPORATE NET INCOME TAX

| HISTORY 8 | & FORECAST | (\$M) | MODEL | ECONOMETRIC | | | | | |
|-------------|------------|--------|------------|---|----------------------------|--|---------------|---|----------------------------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | InPAYMENTS $_t$ = -2.1805 + 1.0034 BASE + v_t | | | | | |
| 2013-14 | 2,501.6 | | | $v_t = 0.10$ | 78 v _{t-1} - 0.12 | 71 v _{t-2} + 0.1123 v _{t-3} - 0.0868 | $v_{t-4} - 0$ | 0.0760 v _{t-10} + 0.0845 v _{t-11} + | - 0.8236 v _{t-12} |
| 2014-15 | 2,811.5 | 12.4% | | | | | | | |
| 2015-16 | 2,842.4 | 1.1% | VARIABLES | PAYMENTS Corporate net income tax receipts on a monthly basis for all corporations. | | | | | |
| 2016-17 | 2,751.5 | -3.2% | | BASE Weighted average before-tax US corporate profits, adjusted for tax law changes | | | | | anges |
| 2017-18 | 2,879.0 | 4.6% | | | | | | | |
| 2018-19 | 3,397.5 | 18.0% | STATISTICS | R^2 | 0.933 | COEFFICIENT T STATS | β_0 | -1.84 | |
| 2019-20 | 3,400.5 | 0.1% | | F | 400.2 | | β_1 | 5.97 | |
| 2020-21 | 3,692.5 | 8.6% | | DW | 2.02 | | β_2 | -3.35 | |
| 2021-22 | 3,877.9 | 5.0% | | DF | 231 | | β_3 | 3.72 | |
| 2022-23 | 3,762.7 | -3.0% | | N | 240 | | β_4 | -3.87 | |
| 2023-24 | 3,466.3 | -7.9% | | | | | β_5 | 3.21 | |
| 2024-25 | 3,182.4 | -8.2% | | | | | β_6 | 2.91 | |
| | | | | | | | β_7 | -2.83 | |
| | | | | | | | β_8 | -23.81 | |

The autoregressive equation predicts Corporate Net Income Tax (CNIT) payments on a monthly basis, which are then summed to create the fiscal year forecast. Predictions for the current month are determined by payments in previous months (1st, 2nd, 3rd, 4th, 10th, 11th, and 12th lags) and the corporate profit base estimate. The estimate of the Pennsylvania corporate profit base is structurally derived, 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 (this impact is included above):

Effective for tax years beginning on or after January 1, 2021, cap Net Operating Losses at 40% of taxable income accompanied by mandatory combined reporting. Effective for tax years beginning on or after January 1, 2021, the CNIT rate is proposed to be reduced from 9.99% to 8.99%. The CNIT rate is proposed to be further reduced to 8.29% in 2022; 7.49% in 2023; 6.99% in 2024; and 5.99% in 2025 and thereafter.

FINANCIAL INSTITUTIONS TAXES

| HISTORY 8 | & FORECAST | 「(\$M) | MODEL | STRUCTURAL | | | | |
|-------------|------------|--------|-----------|------------|--|--|--|--|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | FIT = MT | TIT + BST | | | |
| 2013-14 | 317.9 | | | | | | | |
| 2014-15 | 294.1 | -7.5% | VARIABLES | FIT | Financial Institutions Taxes | | | |
| 2015-16 | 330.0 | 12.2% | | MTIT | Mutual Thrift Institutions Tax | | | |
| 2016-17 | 322.5 | -2.3% | | BST | Bank and Trust Company Shares Tax and Title Insurance Company Shares Tax | | | |
| 2017-18 | 371.3 | 15.1% | | | | | | |
| 2018-19 | 380.1 | 2.4% | | | | | | |
| 2019-20 | 371.6 | -2.2% | | | | | | |
| 2020-21 | 374.8 | 0.9% | | | | | | |
| 2021-22 | 380.7 | 1.6% | | | | | | |
| 2022-23 | 392.7 | 3.2% | | | | | | |
| 2023-24 | 404.9 | 3.1% | | | | | | |
| 2024-25 | 417.1 | 3.0% | | | | | | |

MUTUAL THRIFT INSTITUTIONS TAX

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.

BANK SHARES TAX

The bank shares tax (BST) estimate results from a structural model that utilizes historical BST return data to estimate taxable shares. Growth 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 was 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 was 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 changed 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

HISTORY & FORECAST (\$M)

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 71.0 | |
| 2014-15 | 70.2 | -1.1% |
| 2015-16 | 72.0 | 2.5% |
| 2016-17 | 79.3 | 10.2% |
| 2017-18 | 75.4 | -4.9% |
| 2018-19 | 72.9 | -3.2% |
| 2019-20 | 70.8 | -2.9% |
| 2020-21 | 71.1 | 0.4% |
| 2021-22 | 71.1 | 0.0% |
| 2022-23 | 71.1 | 0.0% |
| 2023-24 | 71.1 | 0.0% |
| 2024-25 | 71.1 | 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

| HISTORY & FORE | CAST (\$M) | MODEL | ECONOMETRIC AND STRUCTURAL | | | | |
|-------------------|------------|------------|----------------------------|--------------------|--|-----------|-------|
| FISCAL YEAR RECEI | PTS GROWTH | FORMULA | (A) | GT = TGT + IG | GT + FCT + SWT + VGTT | | |
| 2013-14 | 0.5 | | (B) | $InGTGR_t = -3$ | $1.2398 + 1.2188 \text{InTBL}_{t} + \text{v}_{t}$ | | |
| 2014-15 | 5.9 6.0% | | | $v_t = 0.5459 v_t$ | ' t-1 | | |
| 2015-16 10 | 0.2 4.5% | | | | | | |
| 2016-17 12 | 0.6 20.4% | VARIABLES | TGT | Table Game 1 | Taxes | | |
| 2017-18 12 | 3.1 2.0% | | IGT | Interactive G | aming Tax | | |
| 2018-19 13 | 1.7 7.0% | | FCT | Fantasy Cont | est Tax | | |
| 2019-20 18 | 0.3 36.9% | | SWT | Sports Wager | ring Tax | | |
| 2020-21 21 | 0.5 16.7% | | VGTT | Video Gamin | g Terminal Tax | | |
| 2021-22 21 | 0.5 0.0% | | GTGR | Quarterly gro | ss table game revenue | | |
| 2022-23 22 | 4.5 6.7% | | TBL | Quarterly tot | al tables | | |
| 2023-24 22 | 9.7 2.3% | | | | | | |
| 2024-25 23 | 3.9 1.8% | STATISTICS | R^2 | 0.943 | COEFFICIENT T STATS | β_0 | -4.11 |
| | | | F | 245.9 | | β_1 | 10.82 |
| | | | DW | 2.02 | | β_2 | -3.50 |
| | | | DF | 30 | | | |
| | | | N | 33 | | | |

TABLE GAME TAXES

The autoregressive equation is used to predict quarterly gross table game revenues (GTGRt) at Category 1, 2, and 3 facilities, which are then summed and multiplied by the tax rate to create the fiscal year estimate. The model uses historical and predicted total tables (TBLt) each quarter and the gross table game revenue from one quarter prior (GTGRT-1) to estimate quarterly gross table game revenues. The projected number of tables is adjusted based on Pennsylvania Gaming Control Board knowledge of anticipated table game expansion at existing or new facilities.

Act 84-2016 increase the table game tax rate from 12 percent to 14 percent from August 1, 2016 through June 30, 2019. Act 13-2019 extended the expiration of the tax increase to August 1, 2021. Act 42-2017 provided for up to ten Category 4 licensed facilities. The projections for revenues from Category 4 facilities is developed in a structural model. This estimate is added to the projections for Category 1, 2, and 3 facilities.

OTHER GENERAL FUND GAMING TAXES

Act 42-2017 allowed for interactive gaming, fantasy contest, sports wagering, and video gaming terminal taxes. These taxes are all forecasted in a structrual model.

The Governor's Executive Budget proposes the following changes to the Video Gaming Terminal Tax (this impact is included above):

A modification of the transfer of Video Gaming Terminal Tax revenues from the Video Gaming Fund is proposed. The proposal allows appropriations from administration and reimbursement of startup costs, net of regulatory assessments, to be dedicated from the amount of the transfer. The proposal will reduce the General Fund share of video gaming terminal tax revenue by \$2.2 million in 2020-21.

GROSS RECEIPTS TAX

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|---|---|---------------------------------------|
| 2013-14 | 1,279.2 | |
| 2014-15 | 1,261.8 | -1.4% |
| 2015-16 | 1,304.9 | 3.4% |
| 2016-17 | 1,230.5 | -5.7% |
| 2017-18 | 1,149.9 | -6.6% |
| 2018-19 | 1,250.1 | 8.7% |
| 2019-20 | 1,192.0 | -4.6% |
| 2020-21 | 1,192.0 | 0.0% |
| 2021-22 | 1,192.0 | 0.0% |
| 2022-23 | 1,192.0 | 0.0% |
| 2023-24 | 1,192.0 | 0.0% |
| 2024-25 | 1,192.0 | 0.0% |
| 2019-20 2020-21 2021-22 2022-23 2023-24 | 1,192.0 1,192.0 1,192.0 1,192.0 1,192.0 | -4.69 0.09 0.09 0.09 0.09 |

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

| HISTORY & FORECAST (\$M) | | | MODEL | ECONO | METRIC AND STR | RUCTURAL | | |
|--------------------------|----------|--------|------------|--|----------------|----------------------------|-----------|-------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | InIT _t = 2.7923 + 0.3491 InSP _{t-1} + v _t | | | | |
| 2013-14 | 877.4 | | | $vt = 0.3890 v_{t-4}$ | | | | |
| 2014-15 | 1,002.3 | 14.2% | | | | | | |
| 2015-16 | 962.2 | -4.0% | VARIABLES | IT | Quarterly Inh | neritance Tax collections | | |
| 2016-17 | 977.9 | 1.6% | | SP Quarterly Standard and Poor's Index of Common Stocks | | | n Stocks | |
| 2017-18 | 1,019.3 | 4.2% | | | | | | |
| 2018-19 | 1,053.6 | 3.4% | STATISTICS | R^2 | 0.814 | COEFFICIENT T STATS | β_0 | 12.96 |
| 2019-20 | 1,113.9 | 5.7% | | F | 155.4 | | β_1 | 11.86 |
| 2020-21 | 1,148.4 | 3.1% | | DW | 2.17 | | β_2 | -3.43 |
| 2021-22 | 1,190.5 | 3.7% | | DF | 71 | | | |
| 2022-23 | 1,214.6 | 2.0% | | N | 74 | | | |
| 2023-24 | 1,243.3 | 2.4% | | | | | | |
| 2024-25 | 1,257.8 | 1.2% | | | | | | |

The autoregressive equation is used to predict quarterly inheritance tax (IT) collections, which are then summed to create the fiscal year estimate. The model uses quarterly Standard and Poor's Index from one quarter prior (SPt-1) and inheritance tax collections from four quarters prior (IT-4). Historical inheritance tax collections are adjusted for unusual payments and the impact of enforcement programs, which occur at various times. The natural logarithm of inheritance tax collections and the Standard and Poor's Index are used in the equation; the result is then converted to the exponential form for the estimates.

INSURANCE PREMIUMS TAX

| HISTORY 8 | & FORECAST | (\$M) | MODEL | ECONOMETRIC AND STRUCTURAL | | | | |
|-------------|------------|--------|------------|---|------------------|--------------------------------|-----------|-------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | $IPT_t = -1658.00 + 0.1740 PAPOPU65_t + 0.7465 CSINS_t + v_t$ | | | | |
| 2013-14 | 432.1 | | | $v_t = 0.5195$ | v _{t-1} | | | |
| 2014-15 | 454.3 | 5.1% | | | | | | |
| 2015-16 | 464.6 | 2.3% | VARIABLES | IPT | Insurance P | remiums Tax liabilities by tax | year | |
| 2016-17 | 433.4 | -6.7% | | PAPOPU65 PA population under age 65 | | | | |
| 2017-18 | 450.9 | 4.0% | | CSINS | US Consume | er spending on insurance | | |
| 2018-19 | 444.3 | -1.5% | | | | | | |
| 2019-20 | 420.7 | -5.3% | STATISTICS | R^2 | 0.977 | COEFFICIENT T STATS | β_0 | -4.11 |
| 2020-21 | 380.8 | -9.5% | | F | 322.8 | | β_1 | 4.37 |
| 2021-22 | 401.2 | 5.4% | | DW | 1.97 | | β_2 | 8.87 |
| 2022-23 | 427.7 | 6.6% | | DF | 23 | | β_3 | -2.95 |
| 2023-24 | 442.1 | 3.4% | | N | 27 | | | |
| 2024-25 | 455.1 | 2.9% | | | | | | |

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.

LICENSES, FEES, AND MISCELLANEOUS

HISTORY & FORECAST (\$M)

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 358.1 | |
| 2014-15 | 950.0 | 165.3% |
| 2015-16 | 571.8 | -39.8% |
| 2016-17 | 621.0 | 8.6% |
| 2017-18 | 2,303.1 | 270.9% |
| 2018-19 | 543.6 | -76.4% |
| 2019-20 | 421.8 | -22.4% |
| 2020-21 | 419.1 | -0.6% |
| 2021-22 | 416.1 | -0.7% |
| 2022-23 | 416.1 | 0.0% |
| 2023-24 | 416.1 | 0.0% |
| 2024-25 | 416.1 | 0.0% |

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

HISTORY & FORECAST (\$M)

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|---------|
| 2013-14 | 80.0 | |
| 2014-15 | 80.0 | 0.0% |
| 2015-16 | 0.0 | -100.0% |
| 2016-17 | 216.4 | NA |
| 2017-18 | 185.1 | -14.5% |
| 2018-19 | 185.1 | 0.0% |
| 2019-20 | 185.1 | 0.0% |
| 2020-21 | 185.1 | 0.0% |
| 2021-22 | 185.1 | 0.0% |
| 2022-23 | 185.1 | 0.0% |
| 2023-24 | 185.1 | 0.0% |
| 2024-25 | 185.1 | 0.0% |

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

LIQUOR TAX

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 320.9 | |
| 2014-15 | 334.4 | 4.2% |
| 2015-16 | 348.1 | 4.1% |
| 2016-17 | 361.9 | 4.0% |
| 2017-18 | 371.5 | 2.7% |
| 2018-19 | 381.9 | 2.8% |
| 2019-20 | 394.7 | 3.4% |
| 2020-21 | 406.5 | 3.0% |
| 2021-22 | 422.7 | 4.0% |
| 2022-23 | 439.6 | 4.0% |
| 2023-24 | 457.1 | 4.0% |
| 2024-25 | 475.3 | 4.0% |
| | | |

These estimates are based on current collection patterns.

MINOR AND REPEALED TAXES

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|---------|
| 2013-14 | 296.3 | |
| 2014-15 | 222.8 | -24.8% |
| 2015-16 | 145.2 | -34.8% |
| 2016-17 | -5.8 | -104.0% |
| 2017-18 | -35.4 | -513.4% |
| 2018-19 | -23.0 | 35.1% |
| 2019-20 | -50.2 | -118.2% |
| 2020-21 | -48.0 | 4.4% |
| 2021-22 | -54.0 | -12.5% |
| 2022-23 | -68.7 | -27.2% |
| 2023-24 | -85.2 | -24.0% |
| 2024-25 | -103.3 | -21.2% |

Minor and repealed tax revenues are derived from:

Tax on legal documents

Tavern games tax

Excess vehicle rental tax collections

Corporate loans tax, repealed for taxable years beginning after December 31, 2013

Tax on electric cooperatives

Tax on agricultural cooperative associations

Wine excise tax

Consumer fireworks tax

Capital stock & franchise tax, repealed for taxable years beginning after December 31, 2015

In addition, Minor and Repealed totals include the General Fund impacts of the Neighborhood Improvement Zone and the City Revitalization and Improvement Zones. State and local taxes remitted from entities conducting business in these zones are funnelled back to the zones to repay bonds and fund various economic development projects.

MALT BEVERAGE TAX

| HISTORY & FORECAST (\$M) | MODEL | STRUCTURAL |
|--------------------------|-------|------------|
|--------------------------|-------|------------|

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 25.1 | |
| 2014-15 | 24.5 | -2.5% |
| 2015-16 | 24.9 | 1.9% |
| 2016-17 | 24.4 | -2.2% |
| 2017-18 | 24.1 | -1.1% |
| 2018-19 | 23.5 | -2.4% |
| 2019-20 | 22.8 | -3.1% |
| 2020-21 | 22.8 | 0.0% |
| 2021-22 | 22.8 | 0.0% |
| 2022-23 | 22.8 | 0.0% |
| 2023-24 | 22.8 | 0.0% |
| 2024-25 | 22.8 | 0.0% |

These estimates are based on current collection patterns.

OTHER TOBACCO PRODUCTS TAX

| HISTORY & FORECAST (\$M) | MODEL | STRUCTURAL |
|--------------------------|-------|------------|
|--------------------------|-------|------------|

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | NA | |
| 2014-15 | NA | NA |
| 2015-16 | NA | NA |
| 2016-17 | 83.9 | NA |
| 2017-18 | 119.1 | 42.0% |
| 2018-19 | 129.9 | 9.1% |
| 2019-20 | 129.4 | -0.4% |
| 2020-21 | 134.4 | 3.9% |
| 2021-22 | 142.7 | 6.2% |
| 2022-23 | 151.1 | 5.9% |
| 2023-24 | 159.5 | 5.6% |
| 2024-25 | 167.8 | 5.2% |

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. E-cigarette components, such as but not limited to coils, batteries, and reservoirs, if sold separately, are not subject to tax.

The forecasted figures above include the effect from the federal legislation, H.R.1865, banning the sale of tobacco products to persons under 21.

PERSONAL INCOME TAX

| HISTORY & FORECAST (\$M) | | | MODEL | ECONOMETRIC AND STRUCTURAL | | | | | | |
|--------------------------|----------|--------|------------|----------------------------|--|-----------------|-----------------|-------------------------|--------------------------|-------------------------------------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | (A) | PIT = WITH | + ANN + EST | | | | |
| 2013-14 | 11,437.3 | | | (B) | In MWITH $_t$ | = 1.7132 + 0. | .9333 InPAWA | GES _t + 0.13 | 392 WED _t + | v_t |
| 2014-15 | 12,107.4 | 5.9% | | | $v_t = 0.9257$ | t-12 | | | | |
| 2015-16 | 12,506.0 | 3.3% | | (C) | (C) $InANN_t = 1.2204 + 0.7280 InANN_{t-1} - 0.5310 InRENT_t + 0.5509 InRENT_{t-1} + 0.3972 InDex.$ | | | | | InRENT $_{t-1}$ + 0.3972 InDIV $_t$ |
| 2016-17 | 12,664.4 | 1.3% | | | + 0.3988 InDIV $_{\mathrm{t-2}}$ + 0.3078 InCG $_{\mathrm{t}}$ - 0.3687 InCG $_{\mathrm{t-1}}$ - 0.6884 InPROP $_{\mathrm{t-2}}$ | | | | | ROP _{t-2} |
| 2017-18 | 13,399.0 | 5.8% | | (D) | $InEST_t = -2$ | 10.2984 + 0.7 | 246 InPROP $_t$ | + 1.0794 lnl | NT _t + 0.1548 | $3 lnCG_t$ - 0.2463 $lnRENT_{t-1}$ |
| 2018-19 | 14,095.5 | 5.2% | | | | | | | | |
| 2019-20 | 14,741.7 | 4.6% | VARIABLES | PIT | Fiscal year p | personal inco | me tax receipt | :S | | |
| 2020-21 | 15,466.9 | 4.9% | | WITH | Fiscal year e | employer with | hholding recei | pts | | |
| 2021-22 | 15,929.4 | 3.0% | | NONWITH | Γ Fiscal year ε | estimated (ES | T) and annual | (ANN) rece | ipts | |
| 2022-23 | 16,680.2 | 4.7% | | MWITH | Cash month | lly personal ir | ncome tax rec | eipts from e | mployer witl | hholding payments |
| 2023-24 | 17,290.4 | 3.7% | | ANN | Yearly annu | al personal ir | ncome tax pay | ments rate | adjusted to 3 | 3.07% |
| 2024-25 | 17,832.3 | 3.1% | | EST | Yearly estim | nated persona | al income tax | payments ra | ite adjusted | to 3.07% |
| | | | | PAWAGES | Pennsylvani | ia wages and | salaries | | | |
| | | | | WED | Wednesday | dummy | | | | |
| | | | | RENT | Pennsylvani | ia rent | | | | |
| | | | | INT | Pennsylvani | ia interest | | | | |
| | | | | DIV | Pennsylvani | ia dividends | | | | |
| | | | | CG | PA capital g | ains | | | | |
| | | | | PROP | Pennsylvani | ia proprietors | s' income (farr | n and nonfa | ırm) | |
| | | | STATISTICS | EQUA | TION B | EQU <i>A</i> | ATION C | EQU | ATION D | |
| | | | | R^2 | 0.969 | R^2 | 0.992 | R^2 | 0.988 | |
| | | | | F | 1020.9 | F | 279.6 | F | 461.2 | |
| | | | | DW | 1.87 | DW | 2.22 | DW | 2.38 | |
| | | | | DF | 97 | DF | 19 | DF | 23 | |
| | | | | N | 101 | N | 28 | N | 28 | |

PERSONAL INCOME TAX (CONTINUED)

| COEFFICIENT T STATS | EQUATION B | | EQU | ATION C | EQU | ATION D |
|---------------------|-------------------|--------|-----------|---------|-----------|---------|
| | β_0 | 2.47 | β_0 | 3.55 | β_0 | -12.42 |
| | β_1 | 17.00 | β_1 | 7.82 | β_1 | 11.05 |
| | β_2 | 34.77 | β_2 | -5.82 | β_2 | 11.96 |
| | β_3 | -28.28 | β_3 | 5.71 | β_3 | 7.88 |
| | | | β_4 | 3.96 | β_4 | -6.01 |
| | | | β_5 | 5.85 | | |
| | | | β_6 | 9.06 | | |
| | | | β_7 | -8.43 | | |
| | | | β_8 | -4.83 | | |

The regression equation is used to predict monthly employer withholding payments (MWITHt) with adjustments for serial correlation bias. The variable WED is used to account for the number of Wednesdays per month; larger employer withholding payments are typically made on Wednesdays.

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

ANNt predicts annual personal income tax payments by tax year using current year rent (RENTt), dividends (DIVt), and capital gains (CGt); prior year rent (RENTt-1), capital gains (CGt-1), and annual payments (ANNt-1); and two years prior proprietors' income (PROPt -2) and dividends (DIVt-2). Tax year cash payment amounts are transformed into a fiscal year with aggregate adjustments for tax base and law changes.

ESTt predicts estimated personal income tax payments by tax year using current year proprietors' income (PROPt), interest (INTt), and capital gains (CGt); and prior year rent (RENTt-1). Tax year cash payment amounts are transformed into a fiscal year with aggregate adjustments for tax base and law changes.

The Governor's Executive Budget proposes the following changes to the Personal Income Tax (this impact is included above):

A transfer of funds from the Personal Income Tax to the Environmental Stewardship Fund for Growing Greener debt service payments is proposed.

A transfer of \$165.0 million from the Personal Income Tax to the Workers' Compensation Security Fund to repay a previous transfer is proposed in FY 2024-25

Effective July 1, 2020, an increase in the minimum wage from \$7.25 per hour to \$12.00 per hour is proposed. The minimum wage increases annually by \$0.50 per hour each July 1 until it reaches \$15.00 per hour on July 1, 2026. The increase includes tipped workers currently making less than minimum wage. The proposal will generate \$53.9 million in personal income tax revenue in 2020-21.

PUBLIC UTILITY REALTY TAX

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 37.0 | |
| 2014-15 | 38.2 | 3.0% |
| 2015-16 | 39.2 | 2.8% |
| 2016-17 | 40.2 | 2.5% |
| 2017-18 | 33.8 | -15.8% |
| 2018-19 | 36.3 | 7.3% |
| 2019-20 | 35.6 | -1.9% |
| 2020-21 | 35.9 | 0.8% |
| 2021-22 | 36.2 | 0.8% |
| 2022-23 | 36.5 | 0.8% |
| 2023-24 | 36.8 | 0.8% |
| 2024-25 | 37.1 | 0.8% |

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

| HISTORY 8 | & FORECAST | Г (\$М) | MODEL | ECONOM | ETRIC | | | | | |
|-------------|------------|---------|------------|---|-------------|----------------------------|-----------|-------|--|--|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | $InBASE_t = 4.5040 + 0.7563 InVALUE_t + v_t$ | | | | | | |
| 2013-14 | 375.4 | | | $v_t = 0.4267 v_{t-1} + 0.1606 v_{t-3} - 0.1035 v_{t-4} + 0.1825 v_{t-11} + 0.5516 v_{t-12} - 0.2517 v_{t-1}$ | | | | | | |
| 2014-15 | 413.8 | 10.2% | | | | | | | | |
| 2015-16 | 481.7 | 16.4% | VARIABLES | BASE | Monthly rea | Ity transfer tax receipts | | | | |
| 2016-17 | 478.0 | -0.8% | | VALUE | PA home sal | es revenue | | | | |
| 2017-18 | 514.4 | 7.6% | | | | | | | | |
| 2018-19 | 534.0 | 3.8% | STATISTICS | R^2 | 0.873 | COEFFICIENT T STATS | β_0 | 3.08 | | |
| 2019-20 | 553.0 | 3.6% | | F | 214.7 | | β_1 | 8.94 | | |
| 2020-21 | 569.4 | 3.0% | | DW | 1.97 | | β_2 | -6.90 | | |
| 2021-22 | 575.9 | 1.1% | | DF | 219 | | β_3 | -3.17 | | |
| 2022-23 | 579.9 | 0.7% | | N | 227 | | β_4 | 2.26 | | |
| 2023-24 | 588.2 | 1.4% | | | | | β_5 | -3.75 | | |
| 2024-25 | 604.9 | 2.8% | | | | | β_6 | -9.12 | | |
| | | | | | | | β_7 | 3.84 | | |

The autoregressive equation is used to predict monthly realty transfer tax (BASEt). BASEt predicts monthly realty transfer tax collections using Pennsylvania median existing home price multiplied by Pennsylvania home sales (VALUEt), and is corrected for serial autocorrelation bias.

Act 58-2015 requires that funds be transferred from the realty transfer tax to the Pennsylvania Housing Affordability and Rehabilitation Enhancement Fund (PHARE) beginning in fiscal year 2015-16. The transfer amount was 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). Starting in fiscal year 2019-20, the annual PHARE transfer from realty tax funds shall be the minimum of \$40 million or the difference between total realty transfer tax collections for the prior fiscal year and the official estimate for fiscal year 2014-15. In fiscal year 2019-20, \$40 million was transferred.

SALES AND USE TAX

| HISTORY & FORECAST (\$M) | | MODEL | ECONOMETRIC AND STRUCTURAL | | | | | | |
|--------------------------|----------|--------|----------------------------|-----------|--------------------|---------------------------------|---------------------------|-------------------------|---|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | (A) | ST = No | ON-MOTOR + I | ECOMCASH | + MV | |
| 2013-14 | 9,129.6 | | | (B) | InNMC | ASH _t = -2.293 | 88 + 0.7459 | InPERSONAL | $_{t}$ + v_{t} |
| 2014-15 | 9,493.1 | 4.0% | | | $v_t = 0.$ | 9231 v _{t-4} | | | |
| 2015-16 | 9,795.2 | 3.2% | | (C) | InMVC. | $ASH_t = 2.0862$ | 2 + 0.5680 lr | $PCE_t + v_t$ | |
| 2016-17 | 10,004.5 | 2.1% | | | $v_t = 0$. | 4572 v _{t-1} + 0.8 | 8907 v _{t-4} - (| 0.4361 v _{t-5} | |
| 2017-18 | 10,381.4 | 3.8% | | | | | | | |
| 2018-19 | 11,099.6 | 6.9% | VARIABLES | ST | Fiscal y | ear sales and | use tax rece | eipts | |
| 2019-20 | 11,595.2 | 4.5% | | NON-MOTOR | Fiscal y | ear non-moto | r vehicle sa | les and use t | ax receipts |
| 2020-21 | 12,213.0 | 5.3% | | ECOMCASH | Fiscal y | ear e-commer | rce sales and | d use tax rec | eipts |
| 2021-22 | 12,560.0 | 2.8% | | MV | Fiscal y | ear motor veh | nicle sales a | nd use tax re | ceipts |
| 2022-23 | 12,530.5 | -0.2% | | NMCASH | Quarte | erly non-motor | vehicle sale | es and use ta | x receipts, less receipts from e-commerce |
| 2023-24 | 12,904.4 | 3.0% | | PERSONAL | PA personal income | | | | |
| 2024-25 | 13,258.2 | 2.7% | | MVCASH | Quarte | erly motor vehi | icle sales an | d use tax red | ceipts |
| | | | | PCE | | sumer expend ntial investmer | | | vehicles, less parts, plus gross non- ipment |
| | | | STATISTICS | | EQUA | ATION B | EQU | ATION C | |
| | | | | | R^2 | 0.973 | R^2 | 0.911 | |
| | | | | | F | 534.5 | F | 219.8 | |
| | | | | | DW | 1.93 | DW | 2.14 | |
| | | | | | DF | 30 | DF | 86 | |
| | | | | | N | 33 | N | 91 | |
| | | | COEFFICIENT | T STATS | EQU | ATION B | EQU | ATION C | |
| | | | | | β_0 | -3.01 | β_0 | 4.25 | |
| | | | | | β_1 | 13.12 | β_1 | 7.35 | |
| | | | | | β_2 | -13.18 | β_2 | -4.79 | |
| | | | | | | | β_3 | -19.33 | |
| | | | | | | | β_4 | 4.33 | |

SALES AND USE TAX (CONTINUED)

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 income. Adjustments are made to account for the recent changes to the tax base from legislation affecting electronic commerce entities. The resulting estimates are then converted to a cash basis forecast.

ECOMCASH is a structural model. 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, as well as gross non-residential investment in transportation equipment.

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

There have been several legislative changes addressing the sales and use tax obligations of electronic commerce entities. Most recently, Act 13-2019 addressed the decision in South Dakota v. Wayfair by amending various definitions, setting collection and reporting requirements based on sales thresholds during the preceding 12-month calendar period, and eliminating the election option previously enacted under Act 43-2017.

Separately, Act 13-2019 clarified the sales and use tax treatment of malt or brewed beverages sold by a manufacturer directly to the consumer; provided exemptions from tax for materials used to construct animal housing, food and beverages sold by nonprofit associations to support youth centers, and food and beverages sold by volunteer firemen's organizations for fundraising; and permitted the absorption and payment of tax by sellers. Act 90-2019 provided an exemption from tax for financial institution purchases of canned software directly utilized in the business of banking.

The Governor's Executive Budget proposes the following changes to the Sales and Use Tax (this impact is included above):

An additional transfer of funds from the Sales and Use Tax to a restricted account to provide for school construction (PlanCon) debt service payments related to the 2020-21 obligations is proposed.

Effective July 1, 2020, an increase in the minimum wage from \$7.25 per hour to \$12.00 per hour is proposed. The minimum wage increases annually by \$0.50 per hour each July 1 until it reaches \$15.00 per hour on July 1, 2026. The increase includes tipped workers currently making less than minimum wage. The proposal will generate \$79.4 million in sales and use tax revenue in 2020-21.

ALTERNATIVE FUELS

HISTORY & FORECAST (\$M) MODEL STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 1.9 | |
| 2014-15 | 3.6 | 89.8% |
| 2015-16 | 9.4 | 160.2% |
| 2016-17 | 11.1 | 17.4% |
| 2017-18 | 14.2 | 28.3% |
| 2018-19 | 15.6 | 9.6% |
| 2019-20 | 15.5 | -0.6% |
| 2020-21 | 16.3 | 5.2% |
| 2021-22 | 17.1 | 4.9% |
| 2022-23 | 17.9 | 4.7% |
| 2023-24 | 18.8 | 5.0% |
| 2024-25 | 19.7 | 4.8% |

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 rates are calculated from the current oil company franchise tax rate on gasoline indexed to the energy content of the alternative fuel.

MOTOR CARRIERS ROAD/IFTA TAXES

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 35.8 | |
| 2014-15 | 71.9 | 100.8% |
| 2015-16 | 95.3 | 32.6% |
| 2016-17 | 99.9 | 4.9% |
| 2017-18 | 134.7 | 34.8% |
| 2018-19 | 134.0 | -0.5% |
| 2019-20 | 134.0 | 0.0% |
| 2020-21 | 133.9 | -0.1% |
| 2021-22 | 134.0 | 0.1% |
| 2022-23 | 133.8 | -0.1% |
| 2023-24 | 134.1 | 0.2% |
| 2024-25 | 135.1 | 0.7% |
| | | |

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. 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.

Effective January 1, 1996, Pennsylvania implemented the International Fuel Tax Agreement (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. Identification markers cost \$12 per qualified vehicle. The underlying fuel tax rates are unaffected by IFTA.

LICENSES & FEES

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 893.9 | |
| 2014-15 | 950.8 | 6.4% |
| 2015-16 | 962.7 | 1.2% |
| 2016-17 | 1,000.5 | 3.9% |
| 2017-18 | 1,045.6 | 4.5% |
| 2018-19 | 992.4 | -5.1% |
| 2019-20 | 1,009.0 | 1.7% |
| 2020-21 | 1,038.8 | 3.0% |
| 2021-22 | 1,044.5 | 0.5% |
| 2022-23 | 1,072.0 | 2.6% |
| 2023-24 | 1,098.3 | 2.5% |
| 2024-25 | 1,105.0 | 0.6% |
| | | |

The Commonwealth receives revenue from the collection of fees levied on the registration of motor vehicles and for the issuance of learners' permits, operators' licenses, 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 began during fiscal year 2018-19. Real IDs are optional and require an additional fee over and above the traditional driver's license fee.

MINOR AND REPEALED

| HISTORY & FORECAST (\$M) | MODEL | STRUCTURAL |
|--------------------------|-------|------------|
|--------------------------|-------|------------|

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|---------|
| 2013-14 | 416.0 | |
| 2014-15 | 4.5 | -98.9% |
| 2015-16 | -0.8 | -117.6% |
| 2016-17 | 0.1 | 107.5% |
| 2017-18 | 0.0 | -86.3% |
| 2018-19 | 0.0 | 142.3% |
| 2019-20 | 0.0 | -100.0% |
| 2020-21 | 0.0 | NA |
| 2021-22 | 0.0 | NA |
| 2022-23 | 0.0 | NA |
| 2023-24 | 0.0 | NA |
| 2024-25 | 0.0 | NA |

Effective January 1, 2014, Act 89 of 2013 repealed the permanent 12 cents per gallon tax imposed upon liquid fuels and fuels used or sold and delivered by registered distributors within this Commonwealth. Revenue from this tax is reported under Minor and Repealed. Motor fuel tax notice payments were temporarily deposited here in fiscal year 2018-19.

OIL COMPANY FRANCHISE TAX

| HISTORY & FORECAST (\$M) | | MODEL | MODEL ECONOMETRIC | | | | | | | | | | |
|--------------------------|----------|--------|-------------------|-----------|--|----------------------------|-------------------------|----------------------------|---------------------------|---------------------------|-------------------------|----------------------------|------------|
| FISCAL YEAR | RECEIPTS | GROWTH | FORMULA | (A) | OCFT : | = OCFT + Act | 89 OCFT Li | quid Fuels + . | Act 89 OCF | T Fuels | | | |
| 2013-14 | 840.7 | | | (B) | InGAS | t = 9.3493 - 0 | 0.1277 GRA | ATE _t - 1.2618 | 8 InPRICE _t - | + 2.1846 InSA | ALES _t + 3.2 | 768 InPRICE t | <u>t</u> - |
| 2014-15 | 1,482.4 | 76.3% | | | ₁ - 5.9 | 472 InSALES | _{t-1} - 3.1785 | InPRICE t-2 + | - 5.7722 InS | ALES _{t-2} + 1.1 | 1692 InPRIC | CE _{t-3} - 2.2157 | , |
| 2015-16 | 1,555.3 | 4.9% | | | Insales $_{t	ext{-}3}$ + 3.6861 IngsP $_{t	ext{-}4}$ - 7.1275 IngsP $_{t	ext{-}5}$ + 5.4157 IngsP $_{t	ext{-}6}$ - 0.2207 InPRICE $_{t	ext{-}7}$ + | | | | | | PRICE _{t-7} + | | |
| 2016-17 | 1,621.6 | 4.3% | | | 0.3910 InSALES $_{\text{t-7}}$ - 2.0966 InGSP $_{\text{t-8}}$ + 0.0300 InPRICE $_{\text{t-12}}$ - 0.1832 InGAS $_{\text{t-6}}$ + 0.0975 | | | | | | | 0.0975 | |
| 2017-18 | 1,697.5 | 4.7% | | | InGAS | _{t-7} + 0.6596 I | nGAS _{t-12} | | | | | | |
| 2018-19 | 1,687.6 | -0.6% | | (C) | InDIES | $SEL_t = 24.608$ | 2 + 4.6724 | $InGSP_t - 27.$ | .2341 InGSF | P _{t-3} + 70.873 | 7 InGSP _{t-4} | - 74.5774 | |
| 2019-20 | 1,684.7 | -0.2% | | | InGSP | _{t-5} + 31.5846 | InGSP _{t-6} - | 17.6945 InG | SP _{t-10} - 0.30 | 072 DRATE _{t-:} | ₁₁ + 23.534 | 9 InGSP _{t-11} - | |
| 2020-21 | 1,704.6 | 1.2% | | | 10.820 | 04 InGSP _{t-12} · | - 0.4953 Inl | DIESEL _{t-4} - 0. | .3987 InDIE. | SEL _{t-8} + 0.32 | 62 InDIESE | L _{t-12} | |
| 2021-22 | 1,713.6 | 0.5% | | | | | | | | | | | |
| 2022-23 | 1,702.3 | -0.7% | VARIABLES | GAS | Month | nly gasoline c | onsumptio | n in gallons. | | | | | |
| 2023-24 | 1,702.8 | 0.0% | | GRATE | PA tax | rate on gasc | oline. | | | | | | |
| 2024-25 | 1,692.3 | -0.6% | | PRICE | US ave | erage retail p | rice of gaso | oline. | | | | | |
| | | | | SALES | PA ret | ail sales of ga | asoline. | | | | | | |
| | | | | GSP | GSP PA gross state product. | | | | | | | | |
| | | | | DIESEL | ESEL Monthly diesel fuel consumption in gallons. | | | | | | | | |
| | | | | DRATE | PA tax rate on diesel. | | | | | | | | |
| | | | STATISTICS | | EQU <i>A</i> | ATION B | EQU | ATION C | | | | | |
| | | | | | R^2 | 0.885 | R^2 | 0.760 | | | | | |
| | | | | | F | 87.1 | F | 27.1 | | | | | |
| | | | | | DW | 1.72 | DW | 2.02 | | | | | |
| | | | | | DF | 216 | DF | 103 | | | | | |
| | | | | | N | 236 | N | 116 | | | | | |
| | | | COEFFICIENT | T T STATS | | | | EQUA | TION B | | | | |
| | | | | | β_0 | 3.96 | β_5 | -4.72 | β_{10} | 3.37 | β_{15} | -4.54 | |
| | | | | | β_1 | -2.00 | β_6 | -4.26 | β ₁₁ | -3.17 | β ₁₆ | 2.36 | |
| | | | | | β_2 | -4.44 | β ₇ | 4.49 | β_{12} | 3.36 | β ₁₇ | -4.36 | |
| | | | | | β_3 | 4.54 | β_8 | 3.78 | β_{13} | -4.41 | β ₁₈ | 2.33 | |
| | | | | | β_4 | 4.44 | β_9 | -4.09 | β_{14} | 4.65 | β_{19} | 14.32 | |

MOTOR LICENSE FUND ESTIMATE METHODOLOGIES

OIL COMPANY FRANCHISE TAX (CONTINUED)

| COEFFICIENT T STATS | EQUATION C | | | | | |
|----------------------------|------------|-------|-----------|-------|--------------|-------|
| | β_0 | 6.04 | β_5 | 2.70 | β_9 | -2.88 |
| | β_1 | 4.12 | β_6 | -3.17 | β_{10} | -6.23 |
| | β_2 | -2.63 | β_7 | -3.58 | β_{11} | -4.67 |
| | β_3 | 2.80 | β_8 | 2.94 | β_{12} | 4.21 |
| | β_4 | -2.82 | | | | |

The amounts shown above include non-restricted Oil Company Franchise Tax (OCFT) revenue within the Motor License Fund. This includes amounts reported as OCFT (57 mills out of the 153.5 mills on gasoline and 208.5 mills on diesel fuel), Act 89 OCFT Liquid Fuels (additional mills added by Act 89-2013 on gasoline), and Act 89 OCFT Fuels (additional mills added by Act 89 on diesel fuel). Act 89 also provided for a transfer of \$35 million annually to the Multimodal Transportation Fund beginning in fiscal year 2015-16. The amounts provided are net of that transfer.

Econometric models using vector autoregression are used to predict monthly consumption of gasoline (GASt) and diesel fuel (DIESELt) by month to capture relationships between those consumption levels and independent variables across time.

Monthly gasoline consumption (GASt) is predicted using monthly gasoline consumption lagged 6, 7, and 12 months; the current month PA tax rate on gasoline (GRATEt); concurrent monthly average retail price of gasoline (PRICEt) and the average price of gasoline lagged 1, 2, 3, 7, and 12 months; concurrent monthly retail sales of gasoline (SALESt) and monthly retail sales lagged 1, 2, 3, and 7 months; and gross state product (GSP) lagged 4, 5, 6, and 8 months.

Monthly diesel consumption (DIESELt) is predicted using monthly diesel consumption lagged 4, 8, and 12 months; current month gross state product (GSPt) and gross state product lagged 3, 4, 5, 6, 10, 11, and 12 months; and the PA tax rate on diesel fuel (DRATEt) eleven months prior.

A structural model applies tax rates to these consumption forecasts and transforms estimated liabilities into monthly collections.

Act 89-2013 increased the OCFT rates beginning in calendar year 2014. Those rates were phased-in through calendar year 2017. Thereafter, the rate is calculated as the product of an uncapped average wholesale price (AWP) and a millage rate. There is an AWP floor in place in calendar year 2017 and thereafter, as well.

MOTOR LICENSE FUND ESTIMATE METHODOLOGIES

OTHER MOTOR RECEIPTS

HISTORY & FORECAST (\$M)

MODEL

STRUCTURAL

| FISCAL YEAR | RECEIPTS | GROWTH |
|-------------|----------|--------|
| 2013-14 | 258.4 | |
| 2014-15 | 98.3 | -62.0% |
| 2015-16 | 35.7 | -63.7% |
| 2016-17 | 25.3 | -29.0% |
| 2017-18 | 56.5 | 122.9% |
| 2018-19 | 19.7 | -65.2% |
| 2019-20 | 18.7 | -5.0% |
| 2020-21 | 18.3 | -2.1% |
| 2021-22 | 18.5 | 1.1% |
| 2022-23 | 18.7 | 1.1% |
| 2023-24 | 18.8 | 0.5% |
| 2024-25 | 19.0 | 1.1% |
| | | |

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.

LEGISLATIVE OVERVIEW

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 #101 of November 27, 2019

Military Installation Remediation Projects:

 Provides that state tax revenue resulting from the development of a qualified former military installation and nearby parcels be directed to a qualified municipal authority created to fund military installation remediation projects.

ACT #97 of November 27, 2019

State Lottery Law:

• Mandates the minimum rate of return on revenues accruing from the sale of lottery tickets is temporarily reduced from 25 percent to 20 percent for fiscal years beginning after June 30, 2019, and ending June 30, 2024. For fiscal years beginning after June 30, 2024, the rate returns to 25 percent.

ACT #90 of November 27, 2019

<u>Time Period for Collection of Assessed Taxes and Criminal Tax Enforcement:</u>

- Established the time period for collection of taxes owed to the commonwealth as ten years from the date of the settlement, determination, or assessment of the tax, except in cases of fraud or willful failure to file a return. The statute of repose applies beginning January 1, 2021, for all commonwealth taxes except Inheritance Tax.
- Provides the department with additional time for investigation, development, and prosecution of cases focused on the theft of trust fund taxes, effective immediately.

Financial Institution Data Match Program:

 Updates the bank attachment process by authorizing the department to enter into agreements with financial institutions to electronically share certain bank account information of delinquent taxpayers for the purposes of tax collection, effective January 26, 2020.

Sales and Use Tax:

Excludes from sales and use tax the sale at retail or use by a financial institution of canned computer software directly utilized in the business of banking, effective November 27, 2019. For this provision, the term "financial institution" means an institution doing business in the commonwealth subject to Bank and Trust Company Shares or Mutual Thrift Institutions Taxes.

LEGISLATIVE OVERVIEW

ACT #65 of July 2, 2019

Personal Income Tax:

Creates the beginning farmer management tax credit, which may be applied against personal income tax liabilities. The tax credit may be claimed by an owner of agricultural assets based on the sale or rental of agricultural assets to a beginning farmer. Effective immediately, the program is capped at \$5 million for tax year 2020 and \$6 million for tax years 2021 to 2029.

ACT #20 of June 28, 2019

Transfer and Payments:

- Provides that an amount equal to the annual debt service due in fiscal year 2019-20 shall be transferred to the Tobacco Settlement Fund from Cigarette Tax revenues. The amount certified by the Secretary of the Budget shall be deposited by April 30, 2020.
- Provides that any funds from fiscal years ending before July 1, 2019, not committed for local law enforcement grants on September 1, 2019, shall be transferred to the General Fund. From those transferred funds, \$1.192 million shall be transferred to the Video Gaming Fund.
- Creates a restricted revenue account for the Department of General Services to make payments related to the Farm Show Complex and provides that transfers will be made from Personal Income Tax revenues into this account in each fiscal year beginning with the 2019-20 fiscal year.
- Provides that \$3.852 million will be transferred to the State Employees Retirement System from Personal Income Tax revenues.
- Provides that, by September 1, 2020, \$45 million will be transferred to the School Safety and Security Fund from Personal Income Tax revenues.
- Provides that \$20 million will be transferred to the Environmental Stewardship Fund from Personal Income Tax revenues.

Gaming:

Provides that beginning no later than September 4, 2019, and concluding by December 31, 2019, the Pennsylvania Gaming Control Board shall conduct up to five auctions for the remaining available Category 4 slot machine licenses.

ACT #16 of June 28, 2019

Educational Tax Credits:

- Effective for fiscal year 2019-20, increases the fiscal year cap for Educational Improvement Tax Credits (EITC) from \$160 million to \$185 million.
- Effective for fiscal year 2019-20, increases the fiscal year cap for Educational Opportunity Scholarship Tax Credit (EOSTC) from \$50 million to \$55 million.
- Effective July 1, 2019, considers a qualified subchapter S trust a pass-through entity for EITC/EOSTC purposes.

LEGISLATIVE OVERVIEW

ACT #15 of June 28, 2019

Licenses and Fees:

■ Increases the amount of licenses and fees collected by the Department of Labor and Industry that shall be used to augment funds appropriated to the Bureau of Occupational and Industrial Safety from \$7.0 million to \$10.0 million.

ACT #13 of June 28, 2019

Sales and Use Tax:

- Updates definitions and requirements, effective for sales on or after July 1, 2019, for marketplace sellers and marketplace facilitators following the decision in South Dakota v. Wayfair. Amends various definitions, including marketplace seller, marketplace facilitator, and vendor, and sets collection and reporting requirements based on sales thresholds during the preceding twelvementh calendar period. Eliminates the election option previously enacted by Act 43 of 2017.
- Provides that, for sales on or after October 1, 2019, the purchase price of malt or brewed beverages sold by a manufacturer of malt or brewed beverages directly to the ultimate consumer for consumption on or off premises shall be 25 percent of the retail price of the malt or brewed beverages sold for consumption on or off premises.
- Defines "animal housing facility" and provides that the sale at retail of supplies for the construction of animal housing facilities, regardless if the sale is made to the purchaser directly or pursuant to a construction contract, is exempt from sales and use tax, effective for sales on or after January 1, 2020.
- Provides, effective immediately, that a seller may advertise, hold out, or state to the public or to any purchaser or user, directly or indirectly, that any sales or use tax due will be absorbed and paid by the seller. The seller absorbs, pays, and becomes solely responsible and liable for tax due. The seller must state on any receipt, invoice, or sales slip that the tax is being paid by the seller and that the purchase is not exempt from tax. The seller must also note the purchase price and tax in the seller's books and records.
- Provides that, effective for sales on or after January 1, 2020, food and beverages sold by nonprofit associations that support youth centers are exempt from sales and use tax.
- Provides that, for sales on or after January 1, 2020, the sale at retail or use of food and beverages by a volunteer firemen's organization to raise funds for the purposes of the volunteer firemen's organization is exempt from sales and use tax.

Personal Income Tax:

- Establishes conformity to section 1400Z-2 of the Internal Revenue Code by providing that income
 derived from investment in a qualified opportunity zone that is exempt from federal tax shall also
 be exempt from Pennsylvania tax beginning with tax year 2020.
- Exempts from tax the value of Olympic medals and prize money received from the United States Olympic Committee, effective immediately.

LEGISLATIVE OVERVIEW

- Starting in the 2020 tax year, taxpayers receiving a personal income tax refund will have the option of designating all or a portion of the refund as a contribution to the Veteran's Trust Fund directly from their personal income tax return.
- Beginning with tax year 2020, allows a fiduciary to elect to file a single tax return for an estate and a trust.
- Establishes that paid tax return preparers must sign the personal income tax returns that they prepare and supply their tax identification number; noncompliance carries a \$50 penalty per violation, up to \$25,000 per preparer per calendar year.

Corporate Net Income Tax:

- Reduces the minimum private capital investment needed to qualify for the Manufacturing Innovation and Reinvestment Deduction, to \$60 million from the previous requirement of \$100 million. The Act now specifies that to be eligible the qualifying investment must be in private capital.
 - o For firms whose qualified investment is greater than \$60 million and less than \$100 million, the maximum deduction is 37.5 percent of the total investment, with no more than 7.5 percent of the investment deductible in a single tax year. Firms with qualified investment greater than or equal to \$100 million have a maximum deduction of 25 percent of the total private investment, with no more than 5 percent of the total investment allowed to be used in any one tax year.
 - O After the credit is awarded by the department, taxpayers can now carry the credit forward for 10 years, increased from five years.

Realty Transfer Tax:

- Effective July 1, 2019, defines the term "qualified beginning farmer" and provides that any transfers of real estate that are subject to an agricultural conservation easement to a qualified beginning farmers are tax-exempt.
- Starting in fiscal year 2019-20, the annual transfer from realty transfer tax funds to the Pennsylvania Housing Affordability and Rehabilitation Enhancement (PHARE) Fund shall be the minimum of \$40 million or the difference between total realty transfer tax collections for the prior fiscal year and the official estimate for fiscal year 2014-15.

Inheritance Tax:

 Provides that the inheritance tax on a transfer from a parent to or for the use of a child 21 or younger shall be at the rate of zero percent effective for dates of death on or after January 1, 2020.

Table Games Taxes:

 Extends the expiration of the tax increase from 12 to 14 percent on casinos' gross table games revenue from June 30, 2019 to August 1, 2021.

LEGISLATIVE OVERVIEW

Film Production Tax Credit:

- Provides that tax credits may be sold or assigned to a purchaser or assignee included in the same federal consolidated tax return as the taxpayer originally awarded the credit to reduce or eliminate the qualified tax liability to the same extent allowable for the taxpayer originally awarded the credit. Credits sold or assigned under these conditions are limited to the taxable year in which the purchase or assignment is made and may only be carried forward for the remainder of the carry-forward period of the original credit.
- Increases the fiscal year program cap from \$65 million to \$70 million.
- Amends the investment and size requirements for Film Production Tax Credit Districts.

Entertainment Economic Enhancement Program:

- Amends the definitions of "taxpayer" to include a musical performer or a concert tour management company of a musical performer or performers.
- Amends the definition of "tour expense" to exclude costs associated with the transportation of equipment and the cost of insurance coverage purchased through an insurance agent based in the commonwealth.
- Provides that a tax credit recipient who held rehearsals after January 1, 2017, but before October 1, 2018, may use the credit against the recipient's tax year 2018 qualified tax liabilities or may sell or assign the credit upon satisfaction of the recipient's qualified tax liability for 2018.
- Increases program cap from \$4 million to \$8 million per fiscal year and increases the amount of advanced credits for future years that may be awarded from \$1.6 million to \$2 million.
- Changes the program cap structure to a flat dollar amount per fiscal year from a fixed number of tours and a maximum credit per tour.

Resource Enhancement and Protection Tax Credit:

- Increases the fiscal year cap from \$10 million to \$13 million.
- Amends various technical specifications for project eligibility and provides for prioritization of projects within the Chesapeake Bay Watershed Area, including the reservation and target of up to \$3 million in tax credits.
- Increases the maximum credits granted to eligible applicants and agricultural operations over a consecutive seven-year period from \$150,000 to \$250,000.
- Allows tax credits to be used against the tax liability of an eligible applicant's spouse, provided they file a joint return.

Historic Preservation Incentive Tax Credit:

- Effective fiscal year 2019-20, increases the fiscal year cap from \$3 million to \$5 million.
- Defines the term "workforce housing project."
- Requires a processing fee to apply for the credit and requires that applications be submitted between October 1 and October 31 each year.
- Provides that no applications will be accepted after February 1, 2031.

LEGISLATIVE OVERVIEW

Coal Refuse Energy and Reclamation Tax Credit:

- Increases the fiscal year program cap to \$10 million to \$20 million, effective fiscal year 2019-20.
- Extends the sunset date for the program to December 31, 2036.

Tax Credit for New Jobs:

Provides that the credit will not be awarded after June 30, 2020.

Rural Jobs and Investment Tax Credit:

- Increases the fiscal year cap from \$1 million to \$6 million, effective fiscal year 2019-20.
- Amends various program definitions.

<u>City Revitalization Improvement Zone Program:</u>

- Amends the definition of "infrastructure," giving greater latitude to the contracting authority to identify improvements in or out the zone.
- Provides that money transferred to the zone may be utilized for payment of debt service on bonds issued or refinanced to establish a revolving loan fund. The revolving loan fund will provide loans to qualified businesses acquiring property for the business, constructing a new facility, reconstructing or renovating an existing facility, or acquiring new equipment to be used by the qualifying business in a zone.

Neighborhood Assistance Program Tax Credit:

 Defines the term "youth and adolescent development services" and provides that contributions to such services qualify for the tax credit, effective immediately.

Keystone Opportunity Expansion Zones:

Amends provisions for the designation of additional zones.

Mixed-Use Development Tax Credit:

Increases the fiscal year cap from \$2 million to \$3 million.

Strategic Development Area (SDA) Program:

Provides that, for tax years beginning on or after January 1, 2019, certain items used within and outside of a designated SDA by a business qualified for the program are exempt from state and local sales and use tax when exclusively used by an employee assigned to a location in the SDA. The specifically exempted items are computers, laptops, tablet computers, computer hardware, related software, storage media, portable scanners and printers, mobile radio devices, cell phones, cell phone accessories, telecommunications services, global positioning systems and accessories, and parts for motor vehicles.

Computer Data Center Equipment Incentive Program:

Beginning in the 2019-20 fiscal year, increases the refund cap from \$5 million to \$7 million.

LEGISLATIVE OVERVIEW

Taxation of Independent Public Schools:

- Declares that a charter school, regional charter school, or cyber charter is an independent public school.
- Provides that independent public schools are free from taxation within the commonwealth to the same extent as a school district with respect to surplus lines tax, effective immediately.

ACT #131 of October 24, 2018

Corporate Net Income Tax:

- Allows "qualified air freight forwarding companies" to utilize special income apportionment based on revenue miles, for tax years starting after December 31, 2016. This is in addition to railroad, truck, bus, and airline companies currently using this apportionment.
- Qualified companies are those engaged in the air freight forwarding business and primarily use an airline with which it has common ownership and control. Such companies shall use the revenue miles of the airline.

ACT #109 of October 24, 2018

Hotel Occupancy Tax:

- Provides that booking agents that act as intermediaries in facilitating the short-term booking of an occupancy are required to collect and remit hotel occupancy tax on the room as well as any additional amounts charged, including service and accommodation fees, effective January 22, 2019.
- Directs that the tax collected on accommodation fees will be deposited into the Tourism
 Promotion Fund and disbursed for the purpose of promoting tourism within the Commonwealth.

ACT #100 of October 24, 2018

Neighborhood Assistance Program Tax Credit:

• Increases the cap of the Neighborhood Assistance Program Tax Credit from \$18 million to \$36 million, effective July 1, 2019.

Realty Transfer Tax:

Exempts from tax transfers of real estate by a housing authority created under the Housing Authorities Law to a nonprofit organization, which is utilizing the real estate for the purpose of Rental Assistance Demonstration administered by the U.S. Department of Housing and Urban Development. This applies to a county of the fifth class with a population between 115,000 and 118,000 that filed an appeal with the Board of Finance and Revenue after December 31, 2015.

LEGISLATIVE OVERVIEW

ACT #72 of June 28, 2018

Corporate Net Income Tax:

For property placed in service after September 27, 2017, companies can take an additional deduction under Internal Revenue Code §167 and §168 on their Pennsylvania return, which generally would be depreciation under modified acceleration cost recovery system or other accounting methods. The act is effective immediately for tax years beginning on or after January 1, 2017.

ACT #52 of June 28, 2018

Gross Receipts Tax:

Excludes from Gross Receipts Tax the sales of telephones, telephone handsets, modems, tablets, and related accessories, including cases, chargers, holsters, clips, hands-free devices, screen protectors and batteries from both landline receipts and mobile telecommunications receipts. The act is effective immediately and retroactively applies to gross receipts from transactions occurring on or after January 1, 2004, except claims for refund or credit for a tax paid prior to the effective date.

ACT #42 of June 22, 2018

<u>Property Tax/Rent Rebate (PTRR) Program:</u>

Effective for claim year 2018 and thereafter, retired federal civil service employees receiving benefit payments from the Civil Service Retirement System (CSRS) who did not have to contribute to Social Security for that equivalent period of employment will be able to exclude 50% of the average annual Social Security benefit amount from their PTRR income on claim forms reporting their eligibility income for Property Tax and Rent Rebate purposes.

Neighborhood Improvement Zone:

Effective immediately, adds the definition of "entertainment business financial management firm" to enable the contracting authority to identify the responsible party required to fulfill reporting compliance on behalf of a qualified business, for concerts or other performances in a facility in the zone.

Entertainment Economic Enhancement Program:

For fiscal year 2018-19 only, increases the number of tours that may be awarded concert rehearsal and tour tax credits from five to 10 tours. The Department of Community and Economic Development in consultation with the Department of Revenue may advance the award of tax credits for qualified rehearsal and tour expenses incurred or to be incurred to a maximum of two additional tours in fiscal year 2018-19.

LEGISLATIVE OVERVIEW

Enhanced Revenue Collections Account:

Provides that the Enhanced Revenue Collection Account (ERCA) in the Department of Revenue will continue through FY 2019-20. For fiscal years from 2018-19 and 2019-20, up to \$30 million is appropriated to the department to fund the costs associated with the increased tax collection enforcement and reduction of tax refund errors.

Transfers and Payments:

- Provides that \$5.2 million and \$4.901 million shall be transferred to the Public School Employees Retirement System and the State Employees Retirement System, respectively, from Personal Income Tax revenues.
- Provides that, by September 1, 2018, \$15 million shall be transferred to the School Safety and Security Fund from Personal Income Tax Revenues.
- Provides that if the Secretary of the Budget certifies that there is a surplus in the General Fund for fiscal year 2017-18, 50 percent of the surplus shall be deposited by the end of the next succeeding fiscal quarter into the Budget Stabilization Reserve Fund.

ACT #39 of June 22, 2018

Public School Code:

Educational Tax Credits: Increases funding from \$135 million to \$160 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.

ACT #55 of November 6, 2017

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

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.

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.

LEGISLATIVE OVERVIEW

ACT #43 of October 30, 2017 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 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.

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.

LEGISLATIVE OVERVIEW

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.

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 taxable income 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.

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.

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.

LEGISLATIVE OVERVIEW

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.

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.

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.

LEGISLATIVE OVERVIEW

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.

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

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

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.

LEGISLATIVE OVERVIEW

ACT #7 of June 22, 2017

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 #175 of November 21, 2016

Realty Transfer Tax:

• Clarifies timelines for the applicability of definition changes for the terms "conservancy" and "veterans' organization".

ACT #117 of November 2, 2016

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 #93 of July 20, 2016

Personal Income Tax:

Effective within 180 days, provides that in the case of any taxpayer due to receive a personal income tax refund, the Department of Revenue shall deduct the amount of any court-ordered obligations arising from criminal prosecution or proceeding and pay the amount to the clerk of courts for the county in which the order was entered.

ACT #86 of July 13, 2016

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

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.

LEGISLATIVE OVERVIEW

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
 - o \$5.0 million from the Alternative Fuels Incentive Fund
 - \$2.0 million from the Local Law Enforcement Block Grants;
 - o \$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
 - o \$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

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.

LEGISLATIVE OVERVIEW

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.

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.

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.

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.

LEGISLATIVE OVERVIEW

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.

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.

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.

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.

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.

LEGISLATIVE OVERVIEW

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.

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.

LEGISLATIVE OVERVIEW

- 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 CRIZeligible 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.
 - o 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.

LEGISLATIVE OVERVIEW

- 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

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 Pennsylvaia 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.

LEGISLATIVE OVERVIEW

- 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

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.

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.

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

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.