Report of the

Maryland Board of Revenue Estimates

on

Estimated Maryland Revenues

Fiscal Years Ending June 30, 2019 and June 30, 2020

Submitted to
Larry Hogan
Governor

December 12, 2018

State of Maryland
Board of Revenue Estimates

Louis L. Goldstein Treasury Building, P.O. Box 466
Annapolis, Maryland 21404-0466
bre@comp.state.md.us

December 12, 2018

Honorable Lawrence Hogan
Governor of Maryland
State House
Annapolis, Maryland 21401

Dear Governor Hogan:

In compliance with Section 6-106(b) of the State Finance and Procurement Article of the Annotated Code of Maryland, the Board of Revenue Estimates has prepared and herewith submits to you new estimates of State revenues for the fiscal years ended June 30, 2019 and June 30, 2020, based upon current laws and administrative practices. As in the past, the estimates represent the collective efforts of each of the Board members and their staffs.

The Board will continue its study of economic and revenue trends and will report to you any significant changes that may affect Maryland's revenues.

Respectfully yours,

Peter Franchot, Chairman

Nancy K. Kopp

David R. Brinkley

COMPTROLLER of MARYLAND
Serving the People

Peter Franchot
Comptroller

Andrew M. Schaufele
Director
Bureau of Revenue Estimates

December 12, 2018

Although the official revenue revisions carry the support of the Board of Revenue Estimates, the report and analysis provided belong to Andrew M. Schaufele, the Director of the Bureau of Revenue Estimates and Executive Secretary of the Board. It is provided solely to aid objective analysis of Maryland's economic and fiscal condition.

I hope you find this report informative. If you should have any questions or concerns regarding this report, please do not hesitate to contact me at 410-260-7450.

Sincerely,

Andrew M. Schaufele

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The Board of Revenue Estimates submits revised general fund revenue estimates of $18.070 billion for fiscal year 2019 and $18.622 billion for fiscal year 2020. The fiscal year 2019 revision represents a decrease of $18.4 million from the September 2018 estimate, while the fiscal year 2020 revision represents a decrease of $55.3 million.

These December estimates mark a very minor adjustment to revenues, just -0.2% across both years. However, we should not let the insubstantial magnitude of the revision distract from the confluence of economic and policy factors that are supporting the total amounts of general fund dollars that are forecast for each of the years.

Economic Fundamentals

Whereas this national economic expansion has been lethargic relative to prior post World War II economic expansions, the rate of growth had been somewhat consistent with constraints imposed by a slow growing labor force and only marginal gains in productivity. More recently, and for the time being, economic growth has improved. The improvement is largely driven by debt financed federal stimulus channeled through increased federal budget expenditures and the major federal tax cuts enacted in the *Tax Cuts and Jobs Act* (TCJA). After the tax cut ripples through the broader economy and peaks in impact, the result will be a return to the modest pre-stimulus growth rates, assuming a soft landing.

Our outlook calls for slowing, but positive, employment growth and an increase in wage growth in the next two years. Beyond that time frame we expect growth to slow as federal stimulus wears off. We forecast the current expansion, already the second longest in our recorded history, to continue, while calling attention to the fact that slowdowns can turn into recessions quite unexpectedly.

Policy Impacts

The State tax impacts from our coupling to federal tax law in light of the TCJA and the additional sales tax revenue resulting from the Supreme Court's Wayfair decision are expected to produce $537 million in new State revenue in fiscal year 2019 and another $459 million in fiscal year 2020.

Risks

A list of discrete risks to the economy can be found in the Economic Outlook section of this book. Here, it is prudent to simply discuss the big-picture risk. As noted above, our economy is growing at a greater clip than underlying fundamentals would dictate. That separation almost always indicates an upswing in the business cycle. In addition, revenues are also following an even steeper trajectory relative to the real economy, the result of a surge in capital gains income.

This economic expansion is just six months shy of surpassing the 1990s expansion as our longest in modern history. Time does not cause recessions, but more time enables more opportunity for misallocation of capital, which does cause recessions. Of particular note, the federal government's monetary policy and fiscal policies are working at cross purposes. As the fiscal stimulus matures and possibly retracts, the Federal Reserve will have to walk a tightrope to ensure that it neither chokes off this expansion, nor allows an inflationary boom to materialize. It is for these reasons that we view the risk of recession in our forecast horizon as elevated.

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The Board of Revenue Estimates thanks the following participants of the Revenue Monitoring Committee for their assistance.

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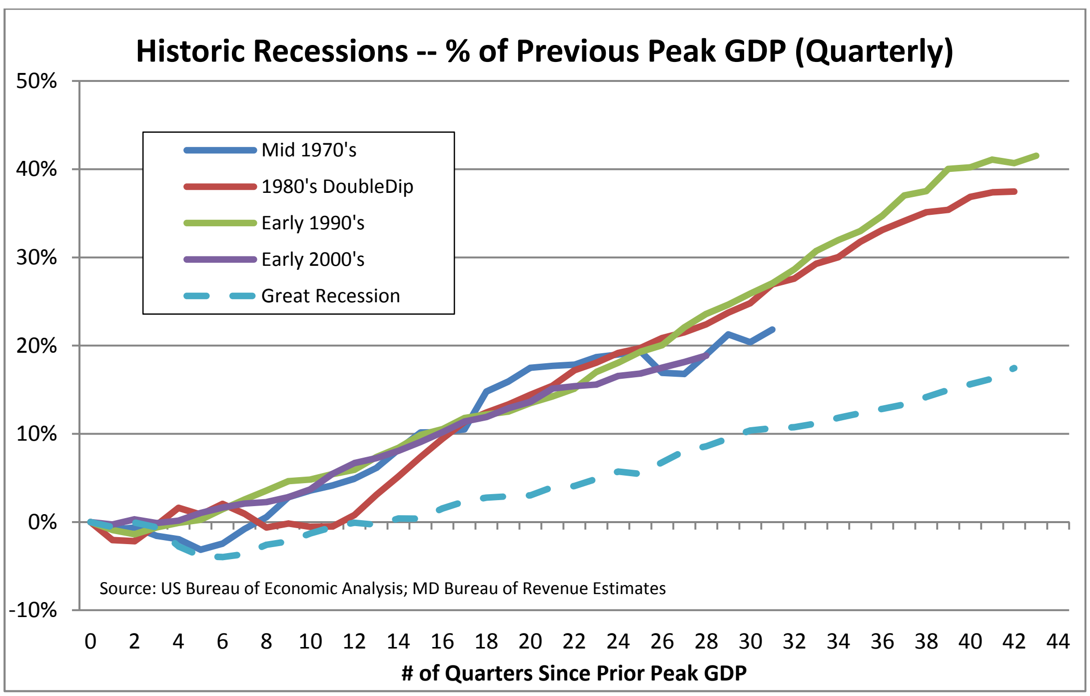
In the nation as a whole, economic growth since the Great Recession has been consistent but subdued. More recently, growth has picked up, in large part due to federal stimulus. Our outlook calls for slowing, but positive, employment growth and an increase in wage growth in the next two years. Beyond that time frame we expect growth to slow as the stimulus wears off. We forecast the current expansion to continue, while recognizing the fact that slowdowns can turn into recessions quite unexpectedly.

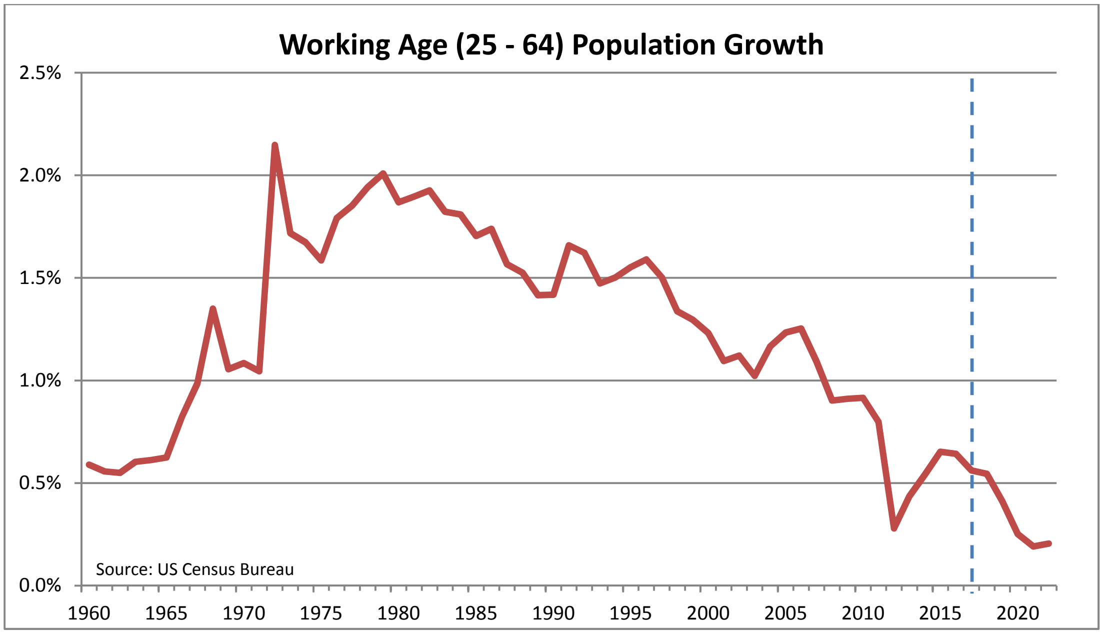
The National Expansion

The growth of real Gross Domestic Product (GDP), the broadly used inflation-adjusted measure of the national economy, as displayed in the chart below, has been the slowest relative to any other expansion since World War II. In fact, through the third quarter of 2018, the national economy is only 18.5% larger than its pre-recession peak (a full 43 quarters later), a remarkable laggard relative to other expansions. Where this expansion stands out is its length. The economy has been growing at a steady pace since 2010, and, at 113 months at the time of writing, is the second longest economic expansion in modern US history. Should growth continue through May 2019, this expansion will be the longest on record.



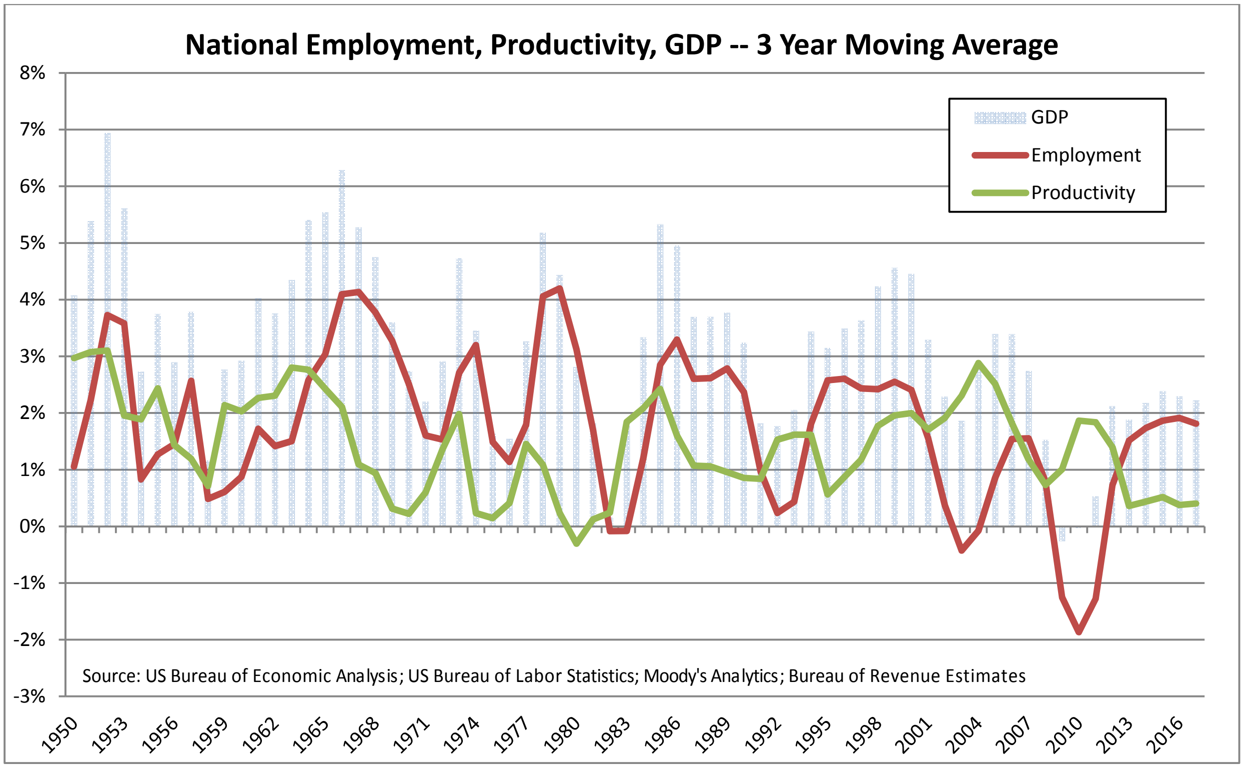
While economic growth during this expansion has been slower than prior post-WWII expansions, factors elaborated on below show that the economy is growing at about its potential. Some simple arithmetic will help illustrate this: the product of the quantity of labor and the productivity of that labor (defined here as output per worker) is the total output of the economy. Framed in this manner, the decline in economic growth since the Great Recession, and even since the turn of the 21st century, is a function of slowing labor force growth, slower productivity growth, and the resulting impact those factors have on demand. The key question is why labor force and productivity growth are slower than in the past. Demographic trends largely answer this question.

The number of people in the working years of their life (defined here as 25 – 64) has been and will continue to grow at a decreasing pace. Slowing growth in the number of workers, ceteris paribus, translates to slower growth in output. In reality, this has been partially ameliorated by increased labor participation of those 65 and older.



The cause of slow productivity growth is debated amongst economists. Some argue that we have picked the proverbial low hanging fruit of technological advances, meaning that further improvements at this point result in lesser gains than prior improvements, hence slower productivity growth. And such technology is now relatively ubiquitous across industries and consumers alike. Other theories relate to decreasing competition observed in most industries. Causes of declining competition include increasing intellectual property protections and government support – at all levels – for large incumbent firms. As competition declines, so do output, employment, and the incentive to innovate. A lack of economic dynamism puts newer firms, which tend to be smaller and more productive, at a disadvantage.

However one of the most significant causes again relates to demographic trends. A large share of the labor force is retiring, while a large generation of younger workers has recently entered. This means there are proportionally fewer middle aged workers in the labor force, and they tend to be the most productive on average. As the most experienced workers exit the labor force, and less experienced workers enter, average productivity declines. The chart below shows employment, productivity and GDP growth. These supply side factors form the basis for a general consensus that GDP growth of around 2% a year is the sustainable trend rate of growth over the medium term – ignoring cyclical factors of the business cycle.



Short Term Outlook

In the short run however, economic growth can deviate significantly from what economists expect to be the potential, or sustainable, rate of growth. This point is especially important given our forecast horizon and the stance of federal fiscal and monetary policy. With a combination of tax cuts and spending increases, the federal government has embarked on a large debt-financed fiscal stimulus in the midst of a mature economic expansion. An uptick in both real and nominal GDP growth from this stimulus is already evident in quarterly growth rates. The forecasters we consult with are predicting real GDP growth of between 2.5% to 3.0% for calendar years 2018 and 2019. As the stimulus wears off, the consensus forecast is for a slowdown in 2020, typically to around 2.0%. Moody's Analytics presently forecasts 0.9% growth in 2020.

Inflation has risen to just above the Federal Reserve's (the Fed's) 2.0% target. As a result, Nominal GDP (NGDP) growth has increased faster than real growth. In the third quarter of 2018, NGDP grew 5.5% year over year – the fastest rate of this expansion. This point is of particular relevance as the State collects tax in nominal dollars, not inflation-adjusted dollars. Viewed this way, the Fed's rising target for the Federal Funds Rate (FFR), a key short term interest rate, has largely just kept up with improvement in underlying conditions. Given the Fed's dual mandate of low and stable unemployment and inflation, further increases in the FFR are expected, as is appropriate. In short, the federal government's monetary and fiscal policies are working at cross purposes.

As real GDP growth slows, the Fed will have to walk a tightrope to ensure that it neither chokes off this expansion, nor allows an inflationary boom to materialize. It is for these reasons that we view the risk of a recession in our forecast horizon as elevated. However, we do not forecast a recession. This is because no one has been able to accurately predict recessions – a result consistent with economic theory. Similarly, time since the last recession is not a reliable indicator of when the next recession will occur. Australia, for example, last had a recession in 1991. Rather we warn of heightened risk. This expansion is mature; relative to economic fundamentals, we are now in a boom. Policy makers should be aware that it will inevitably come to an end and plan accordingly. The question we cannot reliably answer is exactly when.

Another relevant question concerns the magnitude of a potential recession. If monetary policymakers react perfectly, growth may simply slow rather than contract. Furthermore, the Great Recession's closest parallel in our recorded history is the Great Depression. That is to say it was a highly unusual event. Taking that history as our guide, we would expect the next recession, whenever it happens, to look much more like the mild recessions of the early 1990s and 2000s than the Great Recession.

Labor Market Improvements & Wage Growth

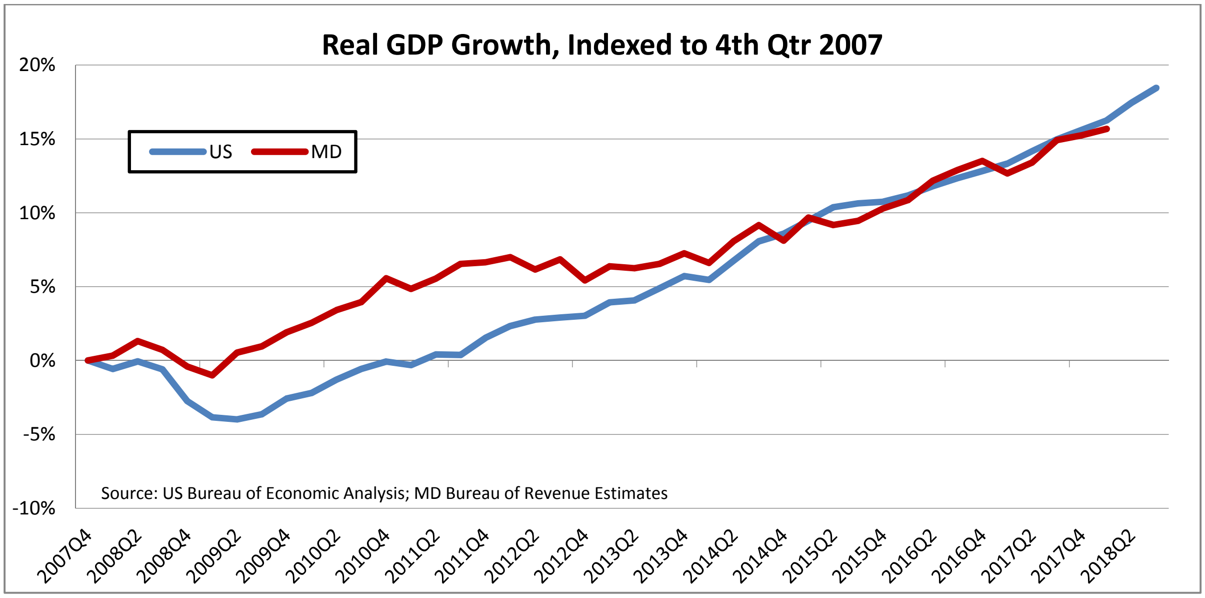
The national labor market continues to improve, though by how much depends on the data source. In October 2018, the national unemployment rate remained at 3.7% while Maryland's unemployment rate fell 0.1 percentage points to 4.1%. This marks nine months that Maryland's unemployment rate has been higher than the nation's – the longest stretch since state-level records began in 1976. After growing 1.0% in 2017, the number of jobs in Maryland has grown 0.6% through October of this year according to the Current Employment Statistics (CES) payroll survey. The Quarterly Census of Employment and Wages (QCEW) however, puts the State's year over year employment growth at 1.0% as of Q2 2018, compared to CES estimates of 0.6%. The QCEW is a census of employers, so it is more reliable but less timely data. Our forecast therefore assumes employment growth for 2018 will follow the trajectory of the QCEW rather than the CES. Lagging employment gains have been wage gains. The average wage, defined as total wages divided by the total number of jobs, increased 2.4% in 2017 and is up 2.7% through the first two quarters of 2018. Nominal wage growth is increasing, as expected, but so is inflation. The average real wage is up only 0.8% through the first two quarters of 2018.

Demographic trends and the types of jobs created help explain why wage growth has been lower than in previous expansions. Lower productivity growth means lower wage growth. Reflecting productivity differences across the age spectrum, middle age workers earn the most on average and young workers the least. As young workers replace older higher paid workers, average wage growth is subdued. The job mix, or the types of jobs that are being created, has been heavily concentrated in lower-skilled services. As a result, growth in average wages might remain muted relative to the gains typically associated with this tight of a labor market. Such positions are likely growing in order to satisfy demand from those consumers who have seen their incomes rise at healthy rates throughout this recovery: those that own capital and those in skilled positions.

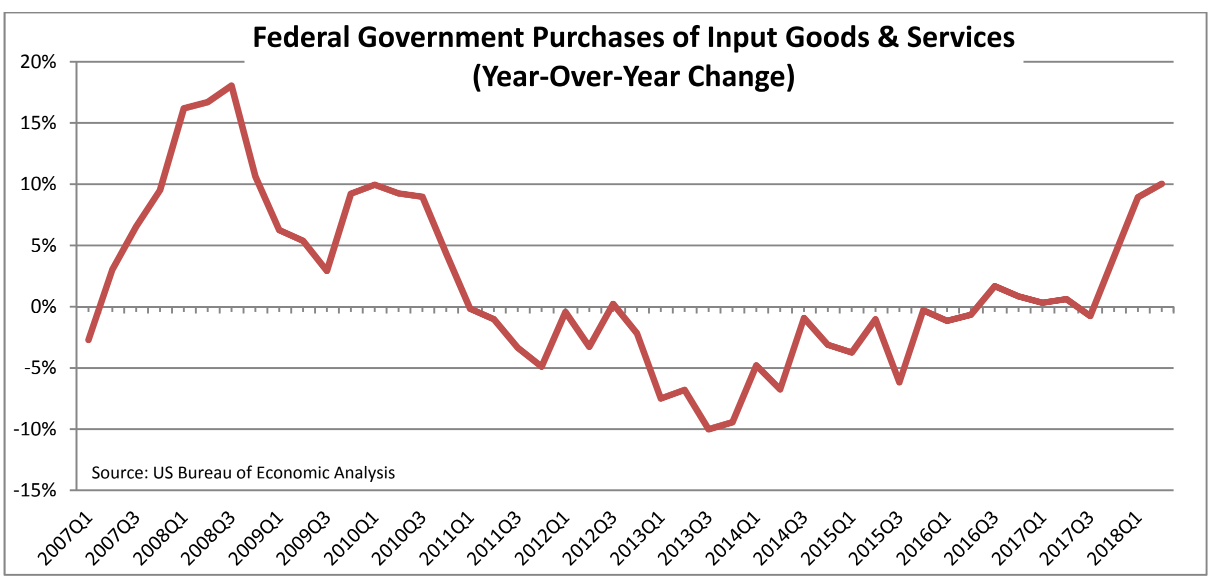
Adding in low inflation to the above factors, it is no mystery that nominal wages have grown so slowly in this expansion. With rising inflation resulting from increased aggregate demand, nominal wage growth should increase. We can also expect improvement in the labor market to lead to wage gains in the short run as employers compete more intensely for labor. In the longer run, productivity growth should increase as younger workers gain experience, with wage gains to follow.

Maryland and Federal Fiscal Policy

Maryland's economic growth during federal budget sequestration, from about 2011 and 2014, was stagnant. As the worst of the sequester passed, Maryland's economy returned to growth in line with the nation as a whole. The following chart illustrates the trajectory of Maryland's recovery over this period relative to the nation.



The next chart helps illustrate the timing of the sequester impacts. It shows the growth in the value of intermediate inputs purchased by the federal government from the private sector. In other words, it shows the value of the private sector's sales to the federal government, an important component of Maryland's economy. While this data is not Maryland specific, we are far more affected than other jurisdictions outside the D.C. area.



As the chart shows, the decline in the value of intermediate inputs purchased by the Federal Government leveled out at around the same time Maryland's economy returned to growth. More recently, the value of inputs purchased has increased, which will likely benefit the State's economy. Pushing in the other direction however is direct federal employment. Although the federal government is spending more, and buying more from the private sector, federal employment in Maryland and D.C. has recently shrunk. Using CES data, federal employment in Maryland this past October was 1.2% lower than the previous October; for DC, where many Marylanders work, the comparable figure is 1.7% lower. However, over September and October federal employment in Maryland stabilized, which may suggest the worst is behind us. Nevertheless, federal policy again appears to be pulling in opposite directions, with the overall result somewhat ambiguous.

The Maryland Outlook

Maryland's economy is expected to continue expanding while growth in employment is expected to be 0.8% in 2018, down from 1.1% in 2017. Employment growth in 2019 is expected to remain at 0.8% before declining in the out-years due to slower working age population growth. Growth in the average wage for 2018 is expected to be 3.1%. The rate of wage growth is expected to increase as a result of the tight labor market and higher nominal growth, but remain low relative to historical norms. Aggregate wage growth and personal income measures increase as employment and the average wage grow.

The outlook for the largest general fund revenue source, the income tax, is relatively strong. This is due in part to Maryland's strong concentration of wealthy taxpayers and federal tax changes. Among other changes, the *Tax Cuts and Jobs Act* (TCJA) increased the standard deduction and eliminated most itemized deduction components. Both measures have the impact of reducing the value of itemized deductions compared to the standard deduction. The result is that many taxpayers will switch to using the standard deduction at the federal level. If they do so, they must also use the State's standard deduction. As a result, many taxpayers will pay less in combined State and federal tax by switching to the standard deduction, while paying more State tax than before. The result is a sizable increase in State personal income tax collections.

However, it is generally the case that revenue collections per unit of economic growth have declined in this expansion. An examination of our tax base shows that, comparing the number of taxpayers to population estimates, the share of Maryland residents filing tax returns has been declining since the onset of the Great Recession. This suggests that a lesser share of residents is earning taxable income than in the recent past. The reasons are not known with certainty and the issue requires further analysis. The corporate income tax is also projected to benefit from the TCJA. A reduction in the federal corporate tax rate should mean greater profitability for corporations. As the State's corporate income tax rate remains unchanged, our own collections should increase.

Revenue growth of the SUT is also projected to be strong in the short run, reflecting underlying economic conditions. However, collections per unit of overall economic growth as well as per dollar spent by consumers have declined. This is due in part to demographic forces.

Beyond middle age, individuals tend to consume less overall and a greater share of non-taxable services. In addition to the rise of online retailing and digital goods, the internet has enabled a sharing economy and more frequent consumer-to-consumer sales of used goods. The Supreme Court's recent ruling in *South Dakota v. Wayfair, Inc.* allows states to require out of state retailors to collect and remit sales tax for online purchases, subject to certain limitations. This will naturally serve to increase the State's sales tax collections, though it should be noted that the largest online retailer, Amazon, already has a physical presence in Maryland, so already remits sales tax from its direct sales to Maryland residents. It is also the case for both income and sales taxes that tax expenditures (deductions, subtractions, credits, etc.) have grown over time. The estimated value of this foregone tax revenue has grown faster than underlying revenue, which surely accounts for some of the decline in collections per unit of economic growth.

Outlook For Key Maryland Economic Variables

Calendar Year	Non-Farm Employment Growth	Personal Income	Aggregate Wage & Salary Income	Average Wage
2016	1.2%	3.7%	2.9%	1.6%
2017	1.1%	4.1%	3.5%	2.4%
2018E	0.8%	3.7%	3.9%	3.1%
2019E	0.8%	4.2%	4.0%	3.2%
2020E	0.6%	4.0%	3.9%	3.3%
2021E	0.4%	3.8%	3.3%	2.9%
2022E	0.5%	3.9%	3.5%	3.0%

Source: Bureau of Revenue Estimates

Risks

As usual, risks abound. Federal Reserve action to tighten monetary policy is ongoing and forecast to continue; as previously mentioned, there is a risk that tightening could be overdone and slow broader growth in such a way that the economy falters. Additionally, there continues to be considerable federal policy uncertainty. Some policies that may or may not come to be could help the Maryland economy, such as increased infrastructure spending, while others could hurt it, such as a return to sequestration spending caps. The existing federal budget is set to expire shortly; however, a divided Congress and recent history provide a high likelihood that spending will be increased above or stabilized at current levels, a much larger amount than underlying sequestration amounts.

Another risk, as ever, is oil prices. A resulting increase in oil prices would be a drag on average consumer spending in Maryland. Oil prices have been highly volatile, impacting consumers and geopolitics. For example, Qatar, a member of OPEC, recently announced it is leaving the cartel early next year. While oil price changes still impact the economy, the rise of domestic shale oil producers and their ability to respond quickly to price changes means the US economy as a whole is affected to a lesser extent by swings in the international oil market. Increasing fuel and energy efficiency has a similar effect of reducing the impact of oil price swings on the economy. However, whereas falling oil prices were once unambiguously beneficial to the US economy, domestic shale oil production falls when oil prices fall, creating regional volatility in industrial production.

The evolution of trade policy is another international risk. There is considerable uncertainty as to the imposition, extent, and duration of tariffs and other barriers. Uncertainty itself can depress economic growth, and tariffs act as a tax on US consumers. Surely the direct impacts are already reverberating through the global economy. These impacts will likely increase in the near-term. However, the President of the United States has a track record for starting negotiations from a far out-of-reach position only to compromise. A recent example is the NAFTA renegotiation: following a promise to scrap NAFTA altogether, the resulting deal, USMCA, would leave existing arrangements largely in-tact. The wealth gains to all participants from international trade are likely too large to sacrifice. In short, the incentive for all sides to find a mutually acceptable compromise is massive.

Continuing with trade policy, the Port of Baltimore is a significant east coast port. It is among a few that have the berth depths and infrastructure to handle "Post Panamax" ships – those that can now pass through the expanded Panama Canal. As such, the port is liable to feel the impacts of increasing trade barriers. However, the port benefits from trade regardless of which direction goods move. While trade barriers will make some goods more expensive to import, the overall trade balance is determined by the savings rates of the trading partners involved. When the US has negative savings, it is by definition importing more than it exports (spending more than it earns), and vice versa. Federal policies to date have resulted in higher federal borrowing. If not canceled out by an increase in private savings, these policies will increase the overall trade deficit through higher imports, regardless of the tariff rates on certain goods. Indeed the trade deficit has recently gotten larger. The port conceivably benefits from that increased demand for imports.

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Table 1

Forecast of the US Economy

Primary Indicators

Calendar Year	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Real Gross Domestic Product ($ in billions)	16,900	17,387	17,659	18,051	18,574	19,048	19,438
	2.5%	*2.9%*	*1.6%*	*2.2%*	*2.9%*	*2.6%*	*2.0%*
Federal Funds Rate	0.1%	0.1%	0.4%	1.0%	1.8%	2.7%	3.3%
10-Year Treasury Bond Yield	2.5%	2.1%	1.8%	2.3%	2.9%	3.3%	3.5%
Consumer Price Index (%D from prior year)	1.2%	0.4%	1.8%	2.1%	2.2%	2.4%	1.9%
Housing Starts (thousands of units)	999	1,107	1,177	1,208	1,259	1,275	1,380
	7.7%	*10.7%*	*6.4%*	*2.6%*	*4.2%*	*1.2%*	*8.3%*
New Light Vehicle Sales (thousands of units)	16,452	17,396	17,465	17,149	17,114	16,749	16,603
	5.9%	*5.7%*	*0.4%*	*-1.8%*	*-0.2%*	*-2.1%*	*-0.9%*
Corporate Profits Before Taxes ($ in billions)	2,119	2,057	2,035	2,099	2,257	2,399	2,449
	5.4%	*-2.9%*	*-1.1%*	*3.2%*	*7.5%*	*6.3%*	*2.1%*
Total Non-Agricultural Employment (thousands)	138,937	141,819	144,349	146,624	149,010	151,126	152,728
	1.9%	*2.1%*	*1.8%*	*1.6%*	*1.6%*	*1.4%*	*1.1%*
Unemployment Rate	6.2%	5.3%	4.9%	4.4%	3.9%	3.5%	3.6%
Personal Income ($ in billions)	14,992	15,720	16,125	16,831	17,566	18,359	19,220
	5.7%	*4.9%*	*2.6%*	*4.4%*	*4.4%*	*4.5%*	*4.7%*

Source: IHS Markit (December 2018 Forecast)

Table 2

Forecast of the MD Economy

Primary Indicators

Calendar Year	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Total Non-Agricultural Employment (thousands)	2,624	2,664	2,697	2,726	2,748	2,770	2,785
	0.9%	*1.5%*	*1.2%*	*1.1%*	*0.8%*	*0.8%*	*0.6%*
Existing Median Home Price ($)	279,359	277,885	283,779	294,497	304,797	315,160	325,560
	4.1%	*-0.5%*	*2.1%*	*3.8%*	*3.5%*	*3.4%*	*3.3%*
Existing Single Family Home Sales (thousands)	62,075.9	66,967.9	75,370.5	81,420.9	82,286.0	84,754.5	87,636.2
	4.2%	*7.9%*	*12.5%*	*8.0%*	*1.1%*	*3.0%*	*3.4%*
Private Housing Starts (thousands)	16.5	17.0	17.6	15.9	17.4	19.3	21.8
	-2.9%	*3.3%*	*3.3%*	*-9.5%*	*9.4%*	*10.9%*	*12.7%*
Personal Income ($ in millions)	324,968	341,295	353,880	368,258	381,954	398,031	413,786
	3.8%	*5.0%*	*3.7%*	*4.1%*	*3.7%*	*4.2%*	*4.0%*
Wages and Salaries ($ in millions)	155,236	162,450	167,100	172,935	179,683	186,904	194,186
	3.4%	*4.6%*	*2.9%*	*3.5%*	*3.9%*	*4.0%*	*3.9%*
Dividends, Interest and Rent ($ in millions)	61,894	65,607	66,716	70,024	72,931	76,155	79,295
	7.8%	*6.0%*	*1.7%*	*5.0%*	*4.2%*	*4.4%*	*4.1%*
Capital Gains ($ millions)	9,508	9,643	8,556	10,528	11,800	12,346	11,902
	43.0%	*1.4%*	*-11.3%*	*23.1%*	*12.1%*	*4.6%*	*-3.6%*
Unemployment Rate	5.8%	5.1%	4.4%	4.1%	4.2%	3.7%	3.4%

Source: Board of Revenue Estimates and IHS Markit (December 2018 Forecast)

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General Fund Revenues

In preparing these estimates, all of the State's revenue collecting agencies were consulted. In addition, the Board of Revenue Estimates continued to rely on the Revenue Monitoring Committee, comprised of key State staff with revenue estimating knowledge or collection responsibility. The committee compared and considered alternative economic forecasts from national economic consulting firm Moody's Analytics and Global Insight, and local economists at Sage Policy Group.

Table 3 shows detail on general fund and selected special fund revenue sources for fiscal years 2018 through 2020. Table 4 provides additional detail on general fund revenues. The sections which follow these tables provide more information on each of the state's general fund revenue sources.

Table 3
Selected Revenues
Fiscal Years 2018 - 2020

$ Thousands	GENERAL FUND			SPECIAL FUND			TOTAL		
	Fiscal Year 2018 Actual	Fiscal Year 2019 Revised Estimate	Fiscal Year 2020 Estimate	Fiscal Year 2018 Actual	Fiscal Year 2019 Revised Estimate	Fiscal Year 2020 Estimate	Fiscal Year 2018 Actual	Fiscal Year 2019 Revised Estimate	Fiscal Year 2020 Estimate
INCOME TAXES									
Individual	9,507,776	10,202,601	10,526,798				9,507,776	10,202,601	10,526,798
Corporations	820,401	958,048	965,267	212,774	248,473	250,346	1,033,175	1,206,521	1,215,612
Total	10,328,177	11,160,649	11,492,065	212,774	248,473	250,346	10,540,952	11,409,122	11,742,410
SALES AND USE TAXES	4,645,756	4,863,056	5,026,412	70,423	71,832	73,269	4,716,179	4,934,888	5,099,680
STATE LOTTERY RECEIPTS									
Lottery Games	534,598	544,454	535,223	110,403	123,323	123,076	645,001	667,777	658,299
Casinos[1]	15,337			669,542	716,912	709,969	684,879	716,912	709,969
Total	549,935	544,454	535,223	779,945	840,235	833,045	1,329,880	1,384,689	1,368,268
TRANSPORTATION REVENUES									
Motor Vehicle Fuel Tax				1,072,002	1,077,810	1,128,487	1,072,002	1,077,810	1,128,487
Motor Vehicle Licenses, Fees				794,472	777,745	792,226	794,472	777,745	792,226
Motor Vehicle Titling Tax				886,010	869,309	904,000	886,010	869,309	904,000
Maryland Transit Fees				150,911	146,237	163,619	150,911	146,237	163,619
Maryland Port Fees				51,783	53,799	54,885	51,783	53,799	54,885
Maryland Aviation Fees				257,218	254,014	268,854	257,218	254,014	268,854
Total	-	-	-	3,212,396	3,178,914	3,312,071	3,212,396	3,178,914	3,312,071
OTHER REVENUES									
Property Transfer Tax	46,028	-	-	171,917	213,942	220,542	217,945	213,942	220,542
Business Franchises and Filing Fees	245,946	242,553	208,395				245,946	242,553	208,395
State Tobacco Tax	372,735	372,350	364,021				372,735	372,350	364,021
Tax on Insurance Companies	386,427	377,456	396,861				386,427	377,456	396,861
Alcoholic Beverages Excises	32,032	32,432	32,567				32,032	32,432	32,567
Estate & Inheritance Taxes	214,383	177,372	164,273				214,383	177,372	164,273
Clerks of the Court	31,765	31,861	32,292				31,765	31,861	32,292
District Courts	62,990	58,671	58,184				62,990	58,671	58,184
Hospital Patient Recoveries	69,803	56,171	56,715				69,803	56,171	56,715
Interest on Investments	32,001	45,000	50,000					--- See Notes ---	
Miscellaneous Fees, Other Receipts	354,513	307,776	298,877						
Total	1,848,623	1,701,644	1,662,185						
Total Current Revenues	17,372,492	18,269,803	18,715,885						
Excellence in Education Fund[2]	-	(200,000)	-					--- See Notes ---	
Revenue Volatility Cap[3]	-	-	(93,579)						
GRAND TOTAL	17,372,492	18,069,803	18,622,306		--- See Notes ---				

[1] The 2017 BRFA diverted VLT revenue dedicated to the SMWOB Account to the General Fund for FY 2018. In FY 2019 and 2020, that money will be distributed to the Education Trust Fund
[2] The 2018 BRFA diverted $200M from individual income tax revenues to the Commission on Innovation and Excellence in Education Fund
[3] Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by the 2018 BRFA

Table 4
Maryland General Fund Revenues
Fiscal Years 2018 - 2020

$ Thousands	FY 2018 Actual	FY 2019 September Estimate	FY 2019 December Estimate	FY 2019 Difference	FY 2019 Growth	FY 2020 September Estimate	FY 2020 December Estimate	FY 2020 Difference	FY 2020 Growth
INCOME TAXES:									
Individual	9,507,776	10,249,575	10,202,601	(46,974)	7.3%	10,594,570	10,526,798	(67,772)	3.2%
Corporation	820,401	936,958	958,048	21,090	16.8%	943,432	965,267	21,834	0.8%
Total	10,328,177	11,186,533	11,160,649	(25,884)	8.1%	11,538,002	11,492,065	(45,937)	3.0%
SALES AND USE TAXES	4,645,756	4,863,056	4,863,056	-	4.7%	5,026,412	5,026,412	-	3.4%
STATE LOTTERY	534,598	528,581	544,454	15,874	1.8%	539,264	535,223	(4,042)	-1.7%
OTHER REVENUES									
Business Franchise Taxes	245,946	245,550	242,553	(2,997)	-1.4%	212,709	208,395	(4,314)	-14.1%
Tax on Insurance Companies	386,427	377,456	377,456	-	-2.3%	396,861	396,861	-	5.1%
Estate and Inheritance Taxes	214,383	183,988	177,372	(6,616)	-17.3%	167,160	164,273	(2,887)	-7.4%
Tobacco Tax	372,735	374,563	372,350	(2,212)	-0.1%	363,169	364,021	852	-2.2%
Alcoholic Beverages Excise Tax	32,032	32,163	32,432	269	1.2%	32,294	32,567	273	0.4%
District Courts	62,990	58,671	58,671	-	-6.9%	58,184	58,184	0	-0.8%
Clerks of the Court	31,765	32,308	31,861	(447)	0.3%	32,740	32,292	(448)	1.4%
Hospital Patient Recoveries	69,803	63,621	56,171	(7,449)	-19.5%	63,621	56,715	(6,905)	1.0%
Interest on Investments	32,001	37,000	45,000	8,000	40.6%	40,000	50,000	10,000	11.1%
Miscellaneous	354,513	304,736	307,776	3,041	-13.2%	301,065	298,877	(2,188)	-2.9%
Total	1,802,595	1,710,056	1,701,644	(8,412)	-5.6%	1,667,804	1,662,185	(5,618)	-2.3%
Total Current Revenues	17,311,127	18,288,225	18,269,803	(18,422)	5.5%	18,771,482	18,715,885	(55,597)	2.4%
Extraordinary Revenues [1]	15,337	-	-	-		-	-	-	
Transfer Tax Revenues [2]	46,028	-	-	-		-	-		
Excellence in Education Fund [3]	-	(200,000)	(200,000)	-		-	-		
Revenue Volatility Cap [4]	-	-	-	-		(93,857)	(93,579)	278	
GRAND TOTAL	17,372,492	18,088,225	18,069,803	(18,422)	4.0%	18,677,625	18,622,306	(55,319)	3.1%

[1] The 2017 BRFA diverted VLT revenue dedicated to the SMWOB Account to the General Fund for FY 2018. In FY 2019 and 2020, that money will be distributed to the Education Trust Fund

[2] The Tax Property Article §13-209 has been altered across several legislative sessions so as to provide various distributions to the general fund

[3] The 2018 BRFA diverted $200M from individual income tax revenues to the Commission on Innovation and Excellence in Education Fund

[4] Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by the 2018 BRFA

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Individual Income Tax

Relatively small downward revisions to the personal income tax estimate have been made since the September forecast. General fund estimates for the personal income tax are expected to increase 7.3% for fiscal year 2019 to $10.203 billion and another 3.2% in fiscal year 2020 to $10.527 billion. The amounts are greatly impacted by expected growth in capital gains income, but most significant is the revenue that is estimated to flow through from the *Tax Cuts and Jobs Act* (TCJA). Adjusting for the TCJA, the underlying income tax growth rates for fiscal years 2019 and 2020 would be 3.2% and 4.3%, respectively.

***Tax Cuts and Jobs Act* (TCJA) Impact**

Detailed reports regarding the many ways that the TCJA impact the State income taxes are available on the Comptroller's website. In summary, we expect an additional $397.4 million in personal income tax revenue in fiscal year 2019 and another $300.7 million in fiscal year 2020. The amount is larger in fiscal year 2019 as we believe that taxpayers are not yet cognizant of the flow-through effect of the TCJA on their State tax bill. Taxpayers that will continue to itemize under the new tax regime may find that many of their prior itemized deductions are no longer valid while those that itemized previously may be incentivized to take the new larger federal standard deduction, which would require them to also take the far less valuable State standard deduction. We believe that we have likely seen very little of this additional money to-date, as taxpayers will be impacted when they actually file their taxes between February and April of 2019 for tax year 2018.

This filing reckoning partially explains why, for fiscal year 2019, we have such large final payments and reduced refunds. Taxpayers will likely reconcile for tax year 2018 through either increased payments at the time of filing or reduced refunds, or some combination of the two. Of course, these are educated assumptions – we cannot be certain how this revenue will find its way to State coffers. Following their tax year 2018 filing, we believe that taxpayers will become aware and adjust their withholding and estimated payments to better account for their new tax situations. We will need to be mindful of our assumptions as we evaluate actual collections going forward. The following table contains our assumptions for the total TCJA impact as well as each payment component to be impacted.

Estimated Impact to Income Tax Components from TCJA

FY 2018 – FY 2020

($ in millions)

	Total GF	Total Receipts	Withholding	Estimated	Final	Refunds
Fiscal Year						
2018	27.7	44.3	-	44.3	-	-
2019	397.4	634.1	111.1	133.5	145.5	(244.1)
2020	300.7	479.9	193.1	120.3	-	(166.4)

Note: Receipts dollars (total and components) include State and local taxes; these are all cash receipts

Capital Gains

In previous years, we had operated under an informal policy of estimating zero percent growth in capital gains income. This policy acknowledged the difficulty in estimating capital gains due to their inherent volatility and therefore hedged against that volatility. The essential effect of our policy was the following: in a good year for capital gains, all-else-equal, we could expect to see growth above our estimate; in a bad year, our losses were limited. Research regarding revenue volatility and especially the role that capital gains play in that volatility can be found in the 2016 Report on Revenue Volatility assembled by the various agencies that compose the Revenue Monitoring Committee. While we cannot be certain at this point, we believe that capital gains caused much of the variance from our estimate for the income tax in fiscal year 2018.

Following the above report, the General Assembly passed excellent legislation that created a mechanism to reduce the volatility of non-wage income as a whole, called the Revenue Volatility Cap. Effectively, when non-wage receipts are estimated to consume a larger share of the total than their rolling ten year average, we reduce the total general fund estimate by that overage. After a two year phase-in period, that reduction is capped at 2% of total revenues. Furthermore, if that revenue is indeed attained, there is statutory guidance concerning the purposes for which it is to be appropriated: first, to bolster reserves, and second, to augment one-time spending. The first year for which the cap is in place is fiscal year 2020.

The creation of the Revenue Volatility Cap has provided us the hedge to properly estimate capital gains income. Additionally, given the strong market and our belief that a large amount of capital gains from the market expansion have gone unrealized, we assume growth for tax year 2018 (impact in fiscal year 2019, therefore no hedge from the Revenue Volatility Cap). Historical and estimated growth rates for capital gains income are available in our economic outlook table (Table 2).

Table 5

Individual Income Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Gross Receipts (State & Local)				
Withholding	13,367,762	13,803,174	14,381,448	15,094,856
Estimated Payments	1,936,069	2,257,208	2,412,670	2,421,233
Payments with Final Returns	1,720,252	1,787,832	2,087,675	2,062,932
Fiduciary	125,628	131,596	150,267	155,561
Gross Receipts	17,149,711	17,979,810	19,032,060	19,734,583
Refunds	(2,718,071)	(2,742,076)	(2,722,594)	(2,899,762)
Net Receipts (State & Local)	14,431,640	15,237,734	16,309,466	16,834,821
Local Reserve Account	(5,411,420)	(5,728,268)	(6,104,901)	(6,306,059)
Income Tax Check-offs	(942)	(1,690)	(1,964)	(1,964)
Net General Fund	9,019,278	9,507,776	10,202,601	10,526,798

Figures may not sum to totals due to rounding.

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Corporate Income Tax

General Fund Corporate Income Tax (CIT) revenues increased 3.1% to $820.4 million in fiscal year 2018. As the distribution shares of CIT revenue between the general fund, transportation trust fund, and higher education investment fund remained unchanged, and will remain so under current law, net receipts also increased 3.1%, to $1.033 billion. Gross receipts for fiscal year 2018 decreased 1.8%, but refunds decreased 21.7%. Refunds were elevated in fiscal year 2017 due to several extraordinary refunds for large tax payers. Even so, underlying growth in gross receipts was negative for the second year in a row.

Nationally, corporate profits grew 4.8% in fiscal year 2018. Growth in corporate profits has fallen from historic highs earlier in the decade to relatively subdued levels compared to the previous two economic expansions. Growth in pre-tax corporate profits is expected to increase in the near term before falling to more modest levels in the out-years of the forecast horizon. It is worth noting that national measures of corporate profits do not fully correlate with corporate income tax receipts in Maryland. This is partly due to timing issues related to the normal tax administration process, as well as differences both in national income and tax accounting relative to Maryland and between the corporate tax base composition of Maryland and that of the nation as a whole.

Additionally, we do expect significant State revenue as a by-product of the federal corporate tax changes in the *Tax Cuts and Jobs Act* (TCJA). Generally, while the federal reforms provided large amounts of tax relief through reduced rates, taxable income was actually increased; that increase in taxable income is what flows through to Maryland. We have estimated increases of $96.4 million and $74.2 million to net receipts for fiscal years 2019 and 2020, respectively, due to the flow through of federal law changes. The TCJA has provisions that seek to incentivize business investment, which, if successful, would result in higher profits in the long run as investments pay off.

Through November, net receipts are up 19.0%. Refunds are up 25.5%, putting fiscal year 2019 on track to be another unusually strong year for refunds, to the negative for State tax collections. Gross receipts, however, have also posted strong growth year to date, at 20.8%, resulting in positive net receipts growth Fiscal year 2019 net receipts, as well as general fund revenue, are forecast to grow 16.8%, largely due to federal tax law changes. For fiscal year 2020, net receipts and general fund revenue are forecast to increase 0.8%, reflecting the Bureau's estimated TCJA impact, as well as an expected slowdown in economic and corporate profit growth.

Table 6

Corporate Income Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Gross Receipts	1,250,779	1,228,042	Note 1	Note 1
Refunds	(248,845)	(194,867)	Note 1	Note 1
Net Receipts	1,001,934	1,033,175	1,206,521	1,215,612
Transportation Trust Fund	(146,224)	(150,784)	(176,082)	(177,409)
Higher Education Investment Fund	(60,116)	(61,991)	(72,391)	(72,937)
Net General Fund	795,594	820,401	958,048	965,267

Note 1: Estimates are only for net receipts
Figures may not sum to totals due to rounding.

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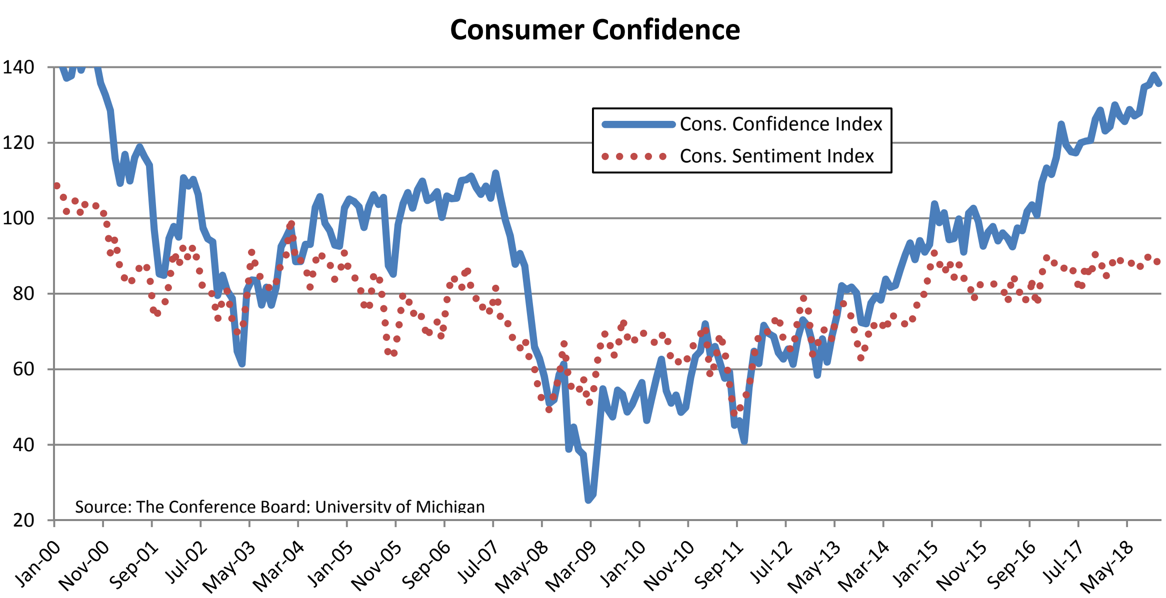
Sales and Use Taxes

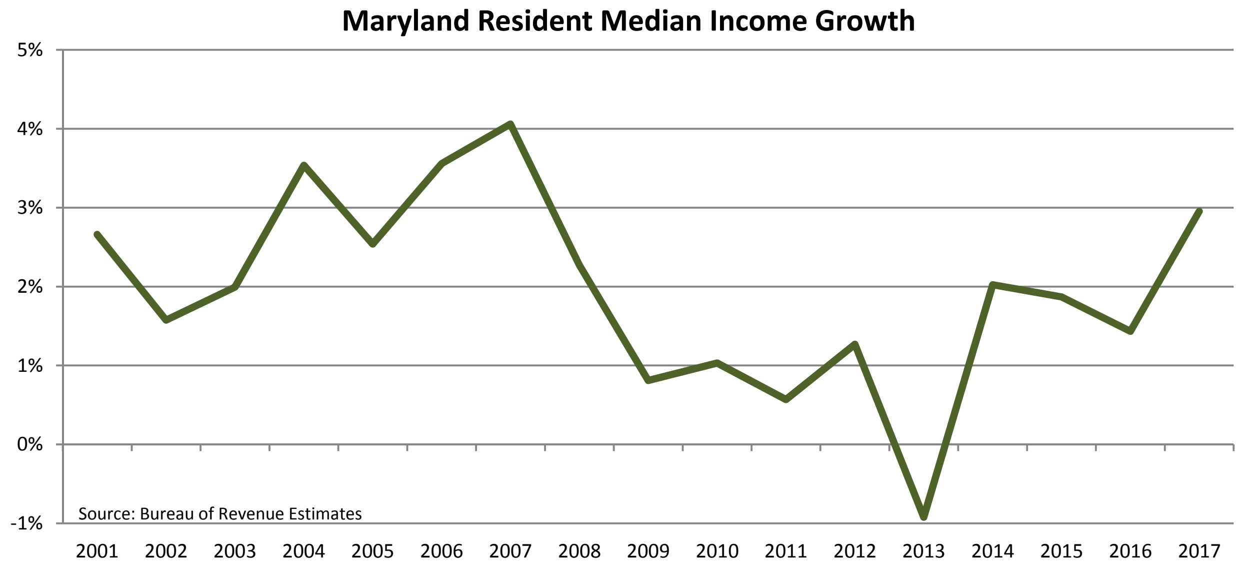
The second largest component of general fund revenues grew 2.3% in fiscal year 2018 after growing at a 2.1% rate in fiscal year 2017, and is generally on track with September's fiscal year 2019 expectations. To date, revenues are up 3.7% on the year, just -0.1% off the estimate. In addition, we have identified approximately $5.8 million in collections from remote sellers for sales made in the month of October, the first effective month of Maryland regulations governing remote sellers; our September estimate called for $62.9 million of remote sales and use tax in fiscal year 2019 and $99.1 million in fiscal year 2020. No adjustments have been made to September's sales and use tax forecast.

Near term improvement in the tax is driven primarily by the fiscal stimulus provided by a combination of the *Tax Cuts and Jobs Act* (TCJA) and increases in federal government spending. The Supreme Court's decision of *South Dakota v. Wayfair, Inc.*, which essentially allows states to tax those sellers with business in the state regardless of their location, also serves to boost near term growth. Remove the effects of the federal stimulus and *Wayfair* revenues and baseline growth would likely remain sluggish. In fiscal year 2021, we expect a return to this baseline, as the stimulus wears off and growth slows down.

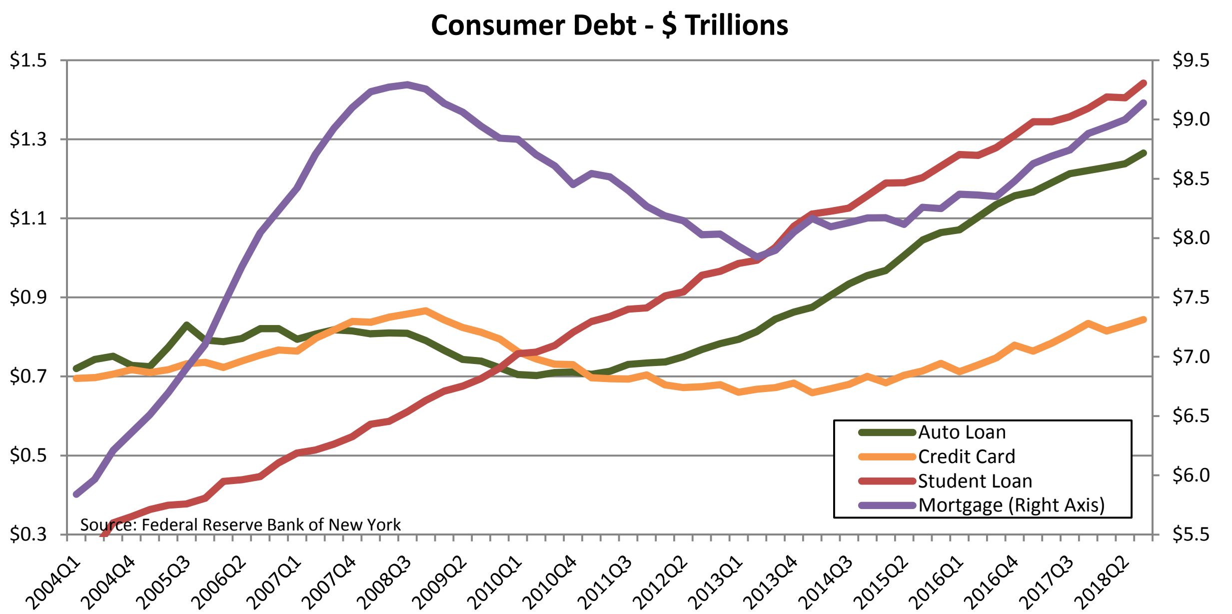
High consumer confidence has certainly benefited sales tax. The chart below shows two measures of US consumer confidence levels with respect to the nation's general economic situation. The Consumer Confidence Index (CCI) last reached its current levels in 2000, while the Consumer Sentiment Index (CSI) has not had a year as consistently high as 2018 since 2004.



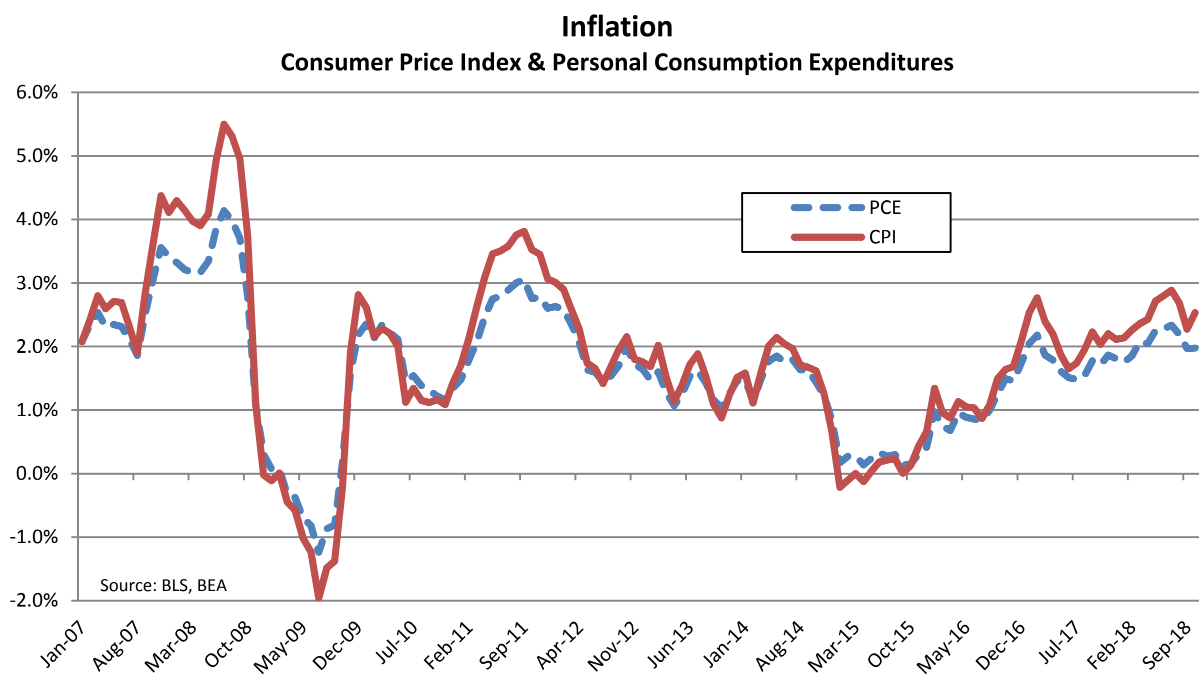
Some of this confidence is likely due to rising incomes. The middle class consumer is finally seeing income growth – the strongest median income growth in this expansion occurred in 2017, the latest year for which tax data is available. Job growth has been strong for the last several years and it seems that the combination of low unemployment, increased productivity, and increased inflation have finally triggered better-than-2% median income growth. Additionally, most consumers saw immediate increases in their disposable incomes as federal income tax relief reduced federal withholding.



One companion of rising confidence and incomes is a willingness to take on additional debt, as displayed in the chart below (along with a constant rise in student loan debt).



Credit card debt is nearly back to its pre-Great Recession peak, as is mortgage debt; both amounts, however, are constituted by a decidedly different mix of credit scores than they were prior to the Great Recession. While much of the increase in auto loans has been driven by high credit score cohorts with low financing rates, the sub-prime cohort ranks second in terms of auto loans during this expansion; this may be weighing on taxable spending. That said, increasing debt generally benefits the sales tax.



Whereas the pace of inflation was receding between 2011 through 2014, since then inflation has gradually increased, now at or near the Federal Reserve's oft-cited target of 2%. For durable goods, much of this expansion has been marked with deflation, which harms sales tax collections. The recent increases in inflation are having a direct impact on increasing sales tax collections.

As for the underlying sluggishness in the sales tax, the long-term slowdown is due to a confluence of several factors. An aging population means productivity declines and slowing wage growth. Job gains among younger cohorts are offset by retirements in the older cohorts. Not to mention the jobs gained, on average filled by younger, less experienced workers, constitute a mix skewed toward lower-income occupations. Moreover, older cohorts tend to spend more on nontaxable expenditures such as healthcare, while younger cohorts are burdened by student loan debt and prefer amenity-based housing, all of which cannibalize disposable income. In addition, structural changes to consumers' preferences for services and digital goods, both of which are generally untaxable, will continue to restrain sales tax growth relative to total consumer spending.

Table 7

Sales and Use Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Consumer	3,301,779	3,378,053	3,541,375	3,664,731
Construction	645,205	671,152	704,200	737,244
Capital Goods	287,463	298,231	309,008	313,421
Utilities	388,041	372,507	385,338	389,443
Gross Collections	4,622,489	4,719,943	4,939,921	5,104,839
Assessments	10,062	8,100	9,722	9,965
Refunds	(23,085)	(11,864)	(14,755)	(15,124)
Transportation Trust Fund	(31,566)	(31,691)	(32,324)	(32,971)
Other	(38,580)	(38,733)	(39,508)	(40,298)
Total General Fund	4,539,320	4,645,756	4,863,056	5,026,412

Figures may not sum to totals due to rounding.

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Remaining Supporting Tables

Table 8A

Traditional Lottery - Sales

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Pick 3	239,154	235,402	233,048	232,811
Pick 4	291,588	296,207	298,132	304,430
Multimatch	24,019	28,953	31,559	28,953
Instant/5 Card Cash	682,298	756,535	821,755	847,403
Keno/Racetrax	483,643	483,994	485,819	493,670
Bonus Match 5	19,799	19,658	19,265	19,242
MegaMillions/Powerball	166,478	199,751	235,620	199,596
Instant Ticket Lottery Machines[1]	11,868	12,928	13,381	13,581
Cash4Life	16,194	13,174	11,988	11,988
Gross Sales	1,935,041	2,046,602	2,150,567	2,151,675

Note 1: Sales accounting for Instant Ticket Lottery Machines was changed to "net after payout" basis beginning fiscal year 2016
Figures may not sum to totals due to rounding.

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Table 8B

Traditional Lottery - Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Pick 3	99,559	98,285	92,238	93,461
Pick 4	100,210	128,798	123,568	125,066
Multimatch	8,566	8,839	11,052	10,128
Instant/5 Card Cash	111,790	119,154	126,801	130,579
Keno/Racetrax	124,147	123,267	121,406	122,368
Bonus Match 5	6,673	6,895	6,475	6,581
MegaMillions/Powerball	67,867	84,320	98,365	81,024
Instant Ticket Lottery Machines[1]	702	766	810	822
Cash4Life	7,032	4,646	4,821	5,277
Gross Revenue	526,546	574,970	585,536	575,305
Less: Stadium Authority Revenue	(40,000)	(40,000)	(40,000)	(40,000)
Less: Veteran's Trust Fund Revenue	(70)	(77)	(81)	(82)
Misc. Year End Adjustments	(1,643)	705	-	-
Less: MD Intl Race Fund	(500)	(1,000)	(1,000)	-
Net General Fund	484,332	534,598	544,454	535,223

Figures may not sum to totals due to rounding.

Table 9

Business Franchise Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Public Service Company Franchise Tax	138,251	145,437	139,934	142,145
Filing Fees	90,186	100,509	102,619	66,250
Net General Fund	228,437	245,946	242,553	208,395

Table 10

Insurance Premium Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Insurance Premium Tax	360,861	414,643	412,456	431,861
Less: MD Health Benefit Exchange Distributions	(32,127)	(28,216)	(35,000)	(35,000)
Net General Fund	328,734	386,427	377,456	396,861

Table 11

Estate and Inheritance Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Collateral Inheritance Tax	52,889	58,297	58,297	56,374
Direct Inheritance Tax	68	42	59	56
Estate Tax	174,990	156,044	119,016	107,843
Net General Fund	227,947	214,383	177,372	164,273

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Table 12

Hospital Patient Recoveries

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Medicaid	19,495	17,891	18,378	18,639
Medicare	8,382	7,437	4,893	5,301
Insurance and Sponsors	4,840	3,391	1,822	1,885
	32,717	28,719	25,093	25,826
Disproportionate Share	27,762	34,611	27,884	28,010
Medicaid Cost Settlements	1,702	6,473	3,195	2,879
Net General Fund	62,180	69,803	56,171	56,715

Figure may not sum to totals due to rounding

Table 13

Excise Tax Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Cigarette Tax	348,893	331,398	329,149	319,740
Other Tobacco Products Tax	38,083	41,337	43,201	44,281
Net General Fund Tobacco	386,976	372,735	372,350	364,021
Distilled Spirits Tax	16,899	17,007	16,889	17,024
Wine Tax	6,891	6,473	7,069	7,139
Beer Tax	8,361	8,201	8,119	8,038
Miscellaneous Licenses	432	435	448	459
Subtotal Alcoholic Beverages Taxes	32,583	32,116	32,525	32,660
Less: MD Wine and Grape Promotion Fund	(93)	(85)	(92)	(93)
Net General Fund Alcoholic Beverages	32,490	32,032	32,432	32,567

Figures may not sum to totals due to rounding.

Table 14

General Fund Court Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
District Courts	69,303	62,990	58,671	58,184
Clerks of the Court	36,146	31,765	31,861	32,292

Table 15

General Fund Interest Earnings

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Interest Earnings	22,492	32,001	45,000	50,000

Table 16

Miscellaneous Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Recording Organization & Capitalization Fees	14,283	15,968	16,622	16,997
Excess Fees of Office	(3,186)	(208)	(400)	(410)
Unclaimed Property	94,673	112,999	95,000	95,000
Local Income Tax Reimbursement	13,271	15,428	16,109	16,431
Uninsured Motorist Penalty Fees	48,734	42,971	41,190	41,100
Federal Retiree Drug Subsidy	13,631	10,809	10,124	-
Tobacco Conversion Program Bond Repayment	3,823	-	-	-
Miscellaneous Revenues and Transfers	3,429	3,911	3,800	3,900
Net General Fund	188,658	201,876	182,446	173,018

Figures may not sum to totals due to rounding.

Table 17

Miscellaneous Agency Revenues

Fiscal Years 2017 – 2020

($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
PSC Fines, Citations and Filing Fees	50	85	78	80
Legislature	30	31	18	18
Workers' Compensation	53	52	52	52
Public Defender	1,760	1,828	857	527
Attorney General	55,144	30,939	31,811	32,205
Executive & Administrative Control	8,724	7,561	8,764	8,258
Financial & Revenue Administration	19,433	19,248	20,159	18,562
Budget & Fiscal Administration	6,112	3,529	4,284	5,018
General Services	772	1,565	-	-
Natural Resources	110	23	22	22
Agriculture	110	97	95	89
Health & Mental Hygiene	36,250	33,095	30,258	31,073
Human Resources	51	1,666	1,602	1,602
Labor, Licensing & Regulation	12,877	8,181	4,126	4,541
Public Safety & MD State Police	13,778	11,034	11,630	11,816
Public Education	8,958	9,175	9,322	9,473
Housing and Community Development	376	411	76	399
Business & Economic Development	34	78	30	31
Environment	609	22,477	578	495
Juvenile Services	1	88	62	62
Alcoholic Beverage Licenses	1,386	1,476	1,506	1,536
Net General Fund	166,619	152,637	125,331	125,859

Figures may not sum to totals due to rounding.

Table 18
Transportation Revenues
Fiscal Years 2017 – 2020
($ in thousands)

	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated
Department of Transportation				
Registrations	389,094	390,056	399,100	397,900
Licenses	55,039	44,623	56,200	59,600
Med-Evac Surcharge	72,043	72,231	73,893	73,671
Trauma Physician Services Surcharge	12,400	12,445	12,731	12,693
Miscellaneous Motor Vehicle Fees	197,491	192,088	192,413	192,690
Vehicle Emission Inspection Fees	33,592	31,964	29,789	30,323
Security Interest Filing Fees – Special Funds	12,378	12,080	12,400	12,500
Hauling Fees	10,997	11,015	11,000	11,100
Special License Tags – Special Funds	4,938	4,673	4,700	4,800
Titling Tax	886,010	869,309	904,000	913,000
Sales Tax on – Rental Vehicles	31,566	31,691	32,324	32,971
Special Distribution Tax				
	1,705,548	1,672,175	1,728,550	1,741,248
Motor Fuel Vehicle Tax	739,130	738,022	751,100	757,900
Road Tax	6,310	6,393	-	-
Decals & Permits	190	177	-	-
Sales Tax Equivalent	292,957	287,086	310,225	345,289
Indexing	39,915	52,702	67,162	87,129
	1,078,502	1,084,380	1,128,487	1,190,318
Total	2,784,050	2,756,555	2,857,037	2,931,566

Figures may not sum to totals due to rounding.

Table 19

Casino Revenues

Fiscal Years 2017 – 2020

($ in millions)

	Video Lottery Terminals			
	FY 2017	**FY 2018**	**FY 2019E**	**FY 2020E**
Education Trust Fund	361.7	401.8	438.7	430.1
Casino Operators	391.3	491.0	518.0	542.2
Local Impact Grants	47.5	56.8	59.8	60.8
Small, Minority, and Women – Owned Business	12.9	0.0	0.0	0.0
Purse Dedication	54.6	61.2	64.5	65.6
Race Tracks Facility Renewal Account	8.4	10.0	10.6	10.7
State Lottery Agency	9.3	10.5	11.0	11.2
General Fund		15.3	0.0	0.0
Total Video Lottery Terminals	885.9	1,046.7	1,102.6	1,120.6

	Table Games			
	FY 2017	**FY 2018**	**FY 2019E**	**FY 2020E**
Education Trust fund	89.5	94.8	99.3	98.7
Casino Operators	428.0	505.8	529.4	526.4
Local Impact Grants	17.6	31.6	33.1	32.9
Total Table Games	535.1	632.3	661.8	658.0

	Miscellaneous			
	FY 2017	**FY 2018**	**FY 2019E**	**FY 2020E**
Education Trust Fund	1.7	2.8	0.0	0.0

	Total			
	FY 2017	**FY 2018**	**FY 2019E**	**FY 2020E**
Education Trust Fund	452.9	499.4	537.9	528.8
Casino Operators	819.4	996.9	1,047.4	1,068.5
Local Impact Grants	65.0	88.4	92.9	93.7
Small, Minority, and Women – Owned Business	12.9	0.0	0.0	0.0
Purse Dedication	54.6	61.2	64.5	65.6
Race Tracks Facility Renewal Account	8.4	10.0	10.6	10.7
State Lottery Agency	9.3	10.5	11.0	11.2
General Fund		15.3	0.0	0.0
Total	1,422.6	1,681.7	1,764.3	1,778.5

Figures may not sum to totals due to rounding.

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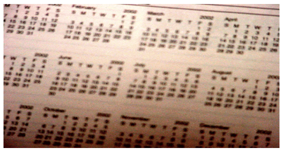

These estimates are based on the current economic outlook for the US and Maryland economies. The broader economic forecast calls for elevated GDP growth in the short run due to fiscal stimulus followed by a return to growth of around 2.0% in the out-years. The federal government has embarked on a fiscal stimulus at a time when the labor market is essentially at full employment and real GDP growth is near the Congressional Budget Office's estimate of potential growth, or the sustainable trend rate of growth. This is expected to result in higher aggregate demand, which will put upward pressure on wages, the largest segment of personal income. However, consistent with the broader picture, economic and wage growth are expected to remain lower than in recent past expansions.

Beginning in 2020, real GDP growth is expected to slow to around 2.0% a year, in line with recent history. The long run forecast is shaped by demographic trends, particularly the aging of the population: a smaller proportion of the population will be working age, defined here as 25 to 64 years old. All else equal, this means employment growth, and therefore output growth, will slow. Additionally, a large generation of relatively new workers has entered the labor force. Such workers are typically less productive than more experienced workers. Consequently productivity growth is expected to remain low. Productivity should increase as young workers gain experience, but given the forecast of slowing employment growth, the net effect on GDP growth depends on the magnitude of each factor. Furthermore, several provisions relating to businesses in the federal *Tax Cuts and Jobs Act* seek to incentivize business investment. To the extent they are successful, increased investment should lead to higher productivity and therefore growth in the long run.

As the economy slows, monetary policymakers will have the challenging task of balancing policy so as to prevent an inflationary boom and bust cycle while not becoming overly constrictive. At the time of this forecast, the Federal Reserve is anticipated to increase its benchmark interest rate. The extent of future tightening and its effect on the economy is less certain. Recessions cannot be predicted in advance with useful accuracy or consistency – a result consistent with economic theory. Therefore, our outlook does not call for a recession. However, we view the risk of a recession in the next five years as elevated, in large part due to the aforementioned challenges. Assuming economic growth continues through May 2019, this expansion will be the longest in modern US history. Our outlook therefore calls for this expansion to be the longest by about five years at least, which would be an impressive feat. In evaluating this risk it is important to note that time since the last recession is not a reliable indicator of when the next one will occur. The important take away is that the recovery phase of this expansion is over. Relative to fundamentals, we are entering a boom; it will come to an end eventually.

Table 20

Long Term Economic Forecast

Primary Indicators

Calendar Year	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
US Real GDP (2009 $ in billions)	17,659	18,051	18,574	19,048	19,438	19,758	20,083
	1.6%	*2.2%*	*2.9%*	*1.4%*	*2.0%*	*1.6%*	*1.6%*
US Non-Agricultural Employment (thousands)	144,349	146,624	149,010	151,126	152,728	153,605	154,485
	1.8%	*1.6%*	*1.6%*	*1.3%*	*1.1%*	*0.6%*	*0.6%*
US Personal Income ($ in billions)	16,125	16,831	17,566	18,359	19,220	20,066	20,937
	2.6%	*4.4%*	*4.4%*	*4.5%*	*4.7%*	*4.4%*	*4.3%*
Consumer Price Index (% Δ from prior year)	1.8%	2.1%	2.2%	2.4%	1.9%	2.5%	2.3%
US 10 Year Treasury Bond Yeild	1.8%	2.3%	2.9%	3.3%	3.5%	3.6%	3.5%
MD Total Non-Agricultural Employment (thousands)	2,697	2,726	2,748	2,770	2,785	2,795	2,808
	1.2%	*1.1%*	*0.8%*	*0.8%*	*0.6%*	*0.4%*	*0.5%*
MD Personal Income ($ in millions)	353,880	368,258	381,954	398,031	413,786	429,328	446,091
	3.7%	*4.1%*	*3.7%*	*4.2%*	*4.0%*	*3.8%*	*3.9%*

Source: Board of Revenue Estimates and IS Markit (December 2018 Forecast)

Table 21

Maryland General Fund Revenues

Fiscal Years 2018- 2024

($ in thousands)

	2018 Actual	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate
Income Taxes							
Individual	9,507,776	10,202,601	10,526,798	10,911,237	11,376,270	11,874,666	12,379,870
Corporation	820,401	958,048	965,267	1,062,838	1,152,951	1,199,039	1,240,749
TOTAL	10,328,177	11,160,649	11,492,065	11,974,075	12,529,222	13,073,705	13,620,619
Sales and Use Taxes	4,645,756	4,863,056	5,026,412	5,134,851	5,248,008	5,364,823	5,484,238
State Lottery	534,598	544,454	535,223	561,349	574,105	587,189	600,610
Franchise, Excise, License, Fee	1,802,595	1,701,644	1,662,185	1,686,413	1,717,906	1,742,328	1,773,074
ONGOING GENERAL FUND REVENUES	17,311,127	18,269,803	18,715,885	19,356,688	20,069,241	20,768,045	21,478,541
Transfer Tax Revenues [2]	46,028	-	-	-	-	-	-
Extraordinary Revenues [1]	15,337	-	-	-	-	-	-
Excellence in Education Fund [3]	-	(200,000)	-	-	-	-	-
Revenue Volatility Cap [4]	-	-	(93,579)	(193,567)	(304,441)	(288,133)	(253,974)
TOTAL GENERAL FUND REVENUES	17,372,492	18,069,803	18,622,306	19,163,121	19,764,800	20,479,912	21,224,567

[1] The 2017 BRFA diverted VLT revenue dedicated to the SMWOB Account to the General Fund for FY 2018. In FY 2019 and 2020, that money will be distributed to the Education Trust Fund

[2] The Tax Property Article §13-209 has been altered across several legislative sessions so as to provide various distributions to the general fund

[3] The 2018 BRFA diverted $200M from individual income tax revenues to the Commission on Innovation and Excellence in Education Fund

[4] Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by the 2018 BRFA

Table 22
Revenues From Maryland's Casinos
Fiscal Years 2018- 2024
($ in thousands)

	2018 Actual	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate
Video Lottery Terminals							
Education Trust Fund	401,820	438,660	430,102	419,617	425,667	429,498	433,364
Licensee	491,026	518,004	542,185	549,987	557,905	562,926	567,992
Local Impact Grants	56,793	59,816	60,791	61,666	62,553	63,116	63,684
Business Development	24	-	-	16,685	16,925	17,077	17,231
Purse Dedication	61,213	64,503	65,554	66,497	67,453	68,060	68,673
Racetrack Renewal	10,007	10,554	10,726	10,880	11,036	11,135	11,236
MD Lottery & Gaming Control	10,457	11,026	11,206	11,367	11,531	11,634	11,739
General Fund	15,337	-	-	-	-	-	
Subtotal	1,046,677	1,102,562	1,120,563	1,136,698	1,153,071	1,163,449	1,173,920
Table Games							
Education Trust Fund	94,843	99,266	98,693	100,181	101,692	102,607	103,530
Licensee	505,832	529,417	526,364	534,300	542,355	547,236	552,161
Local Impact Grants	31,614	33,089	32,898	33,394	33,897	34,202	34,510
Subtotal	632,290	661,772	657,955	667,875	677,944	684,045	690,202
Miscellaneous							
Education Trust Fund	2,771	-	-	-	-	-	-
Subtotal	2,771	-	-	-	-	-	-
Total							
Education Trust Fund	499,434	537,926	528,795	519,798	527,359	532,105	536,894
Licensee	996,858	1,047,421	1,068,549	1,084,287	1,100,260	1,110,162	1,120,154
Local Impact Grants	88,407	92,904	93,689	95,060	96,451	97,319	98,195
Business Development	24	-	-	16,685	16,925	17,077	17,231
Purse Dedication	61,213	64,503	65,554	66,497	67,453	68,060	68,673
Racetrack Renewal	10,007	10,554	10,726	10,880	11,036	11,135	11,236
MD Lottery & Gaming Control	10,457	11,026	11,206	11,367	11,531	11,634	11,739
General Fund	15,337	-	-	-	-	-	-
Total	1,681,737	1,764,333	1,778,518	1,804,573	1,831,015	1,847,494	1,864,121