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REPORT OF THE  
MARYLAND BOARD OF REVENUE ESTIMATES  
ON

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The seal of the State of Maryland is centered in the background. It features a circular design with a central figure holding a bow and arrow, surrounded by a wreath. The text "SEAL OF THE STATE OF MARYLAND" is visible around the perimeter, along with the date "1632".

ESTIMATED  
MARYLAND  
REVENUES

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FISCAL YEARS ENDING JUNE 30, 2017 AND JUNE 30, 2018

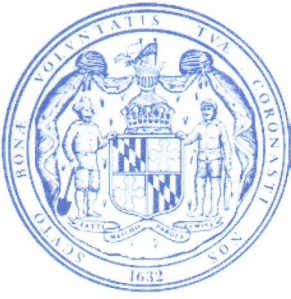
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SUBMITTED TO  
LAWRENCE J. HOGAN, JR.  
GOVERNOR

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DECEMBER 8, 2016

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# State of Maryland

## Board of Revenue Estimates

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Peter Franchot  
State Comptroller

Nancy K. Kopp  
State Treasurer

David R. Brinkley  
Secretary, Department of  
Budget and Management

Executive Secretary:  
Andrew M. Schaufele  
Director, Bureau of  
Revenue Estimates

December 8, 2016

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

Dear Governor Hogan:

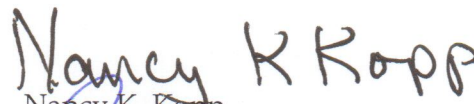
In compliance with Section 6-106(b) of the State Finance and Procurement Article of the Annotated Code of Maryland, the Board of Revenue Estimates has prepared and herewith submits to you new estimates of State revenues for the fiscal years ended June 30, 2017 and June 30, 2018, based upon current laws 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.

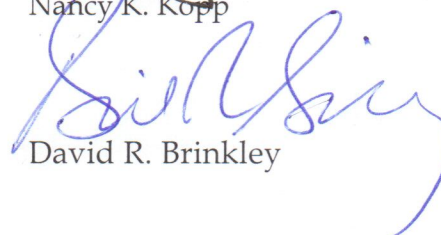
Respectfully yours,



Peter Franchot, Chairman



Nancy K. Kopp



David R. Brinkley

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## Executive Summary

The Board of Revenue Estimates submits revised general fund revenue estimates of \$16.621 billion for fiscal year 2017 and \$17.180 billion for fiscal year 2018. This translates into 2.6% and 3.4% year-over-year increases, respectively. Those rates of growth are generally sluggish with respect to historical pre-Great Recession general fund collections, though consistent with Maryland’s current and near-term economic climate. The fiscal year 2017 revision represents a decrease of \$13.8 million while the fiscal year 2018 revision represents a decrease of \$24.5 million from the September 2016 estimates. Furthermore, it should be noted that in the absence of certain one-time positive revenue impacts, the net adjustments would have been more profound.

Although the adjustments result in a decrease to the revenue forecast on net, the big picture economic outlook remains generally unchanged from September 2016. Our expectation is for improving employment and wages as economic growth continues, but at a rate lower than in previous periods of economic expansion. While this is both a national and State issue, Maryland’s performance is disproportionately impacted by both continuing federal budget sequestration and federal policy uncertainty.

Employment growth is anticipated to increase from 1.5% in 2015 to 1.6% in 2016. Through October, the reported 2016 year-over-year growth rate from the Bureau of Labor Statistics is 1.8%. There is preliminary census-type data from the Department of Labor Licensing and Regulation that suggests the federal data, which is based on a survey, is slightly optimistic. Employment growth in 2017 is expected to slow as a result of the economy reaching full employment.

### Maryland Board of Revenue Estimates’ Economic Forecast

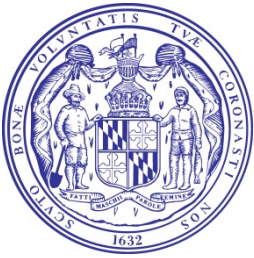
Calendar Year	Employment		Aggregate Wages		Average Wages		Personal Income	
	Sep 16	Dec 16	Sep 16	Dec 16	Sep 16	Dec 16	Sep 16	Dec 16
<b>2015</b>	1.5%	1.5%	3.9%	4.6%	2.4%	3.0%	4.0%	4.1%
<b>2016</b>	1.9%	1.6%	4.0%	3.3%	2.1%	1.7%	3.7%	3.3%
<b>2017</b>	1.0%	1.0%	3.9%	3.9%	2.9%	2.9%	4.4%	4.0%
<b>2018</b>	0.8%	0.8%	4.0%	4.0%	3.2%	3.2%	4.6%	4.2%

Additionally, we have amended our expected 2016 growth for aggregate wages and salaries to 3.3%. This is not a macroeconomic adjustment; rather, it is to adjust for what we believe is a pay period timing issue for the prior year. Given the one-time nature of the timing issue and the maturity of the employment expansion, we expect wage growth to increase to 3.9% in 2017. Average wage growth is also impacted by the timing issue before accelerating in both 2017 and 2018 as the labor market tightens and inflation materializes.

Driving the net decrease in our total revenue forecast is a downward revision to corporate income tax revenue -- reductions of \$81.8 million for fiscal year 2017 and \$68.1 million for fiscal year 2018. It now appears that corporate income in tax year 2015 was weaker than initially expected. Consequently, many corporations overpaid in fiscal year 2016 and have since filed for refunds in fiscal year 2017. The number of refunds, and dollars per refund, has increased substantially this fiscal year. Furthermore, there were several large refunds of a one-time nature that are not expected to continue beyond fiscal year 2017. This explains why the reduction in fiscal year 2018 is smaller than in fiscal year 2017. Additionally, beyond fiscal year 2017, the outlook for corporate profits, and resulting tax revenue, has been reduced since our September forecast.

The increased revenues for the personal income tax are *de minimis* in amount, but deserve some attention as the State's largest source of revenue. Concealed within the above estimate for personal income is a component designed to measure income sourced from dividends, interest, and rent (DIR). While the prospect for near-term federal funds rate increases seems very likely, DIR was reduced as our expectation for the impact of those federal funds rate increases is diminished relative to September. That adjustment reduces the outlook for income tax net receipts; however, countering that reduction is an increase to the State's share of income tax. This increase results from new information available with the closeout of tax year 2015 and serves to provide the modest increase.

The sales tax, the State's second largest source of general funds, is revised up modestly: \$17.8 million for fiscal year 2017 and \$15.9 million for fiscal year 2016. The relatively small revision reflects the fact that year-to-date collections are slightly better than our September estimate. Conversely, lottery revenue is revised down by \$20.4 million in fiscal year 2017 and \$18.7 million in fiscal year 2018. To date, sales growth has lagged our prior expectations, and payout rates have not favored the State. It is worth noting that the lottery estimate faces heightened uncertainty this year as it competes with the opening of the MGM casino in Prince George's County. Business Franchise Taxes benefit from the slower than expected rollout of the Maryland Small Business Retirement Savings Program which would have reduced business filing fees. The extraordinary revenues of \$47.4 million are the result of an overfunding of the Local Income Tax Reserve account as identified by the GAAP analysis for fiscal year 2016.



# State of Maryland Board of Revenue Estimates

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Andrew Schaufele  
Director, Bureau of  
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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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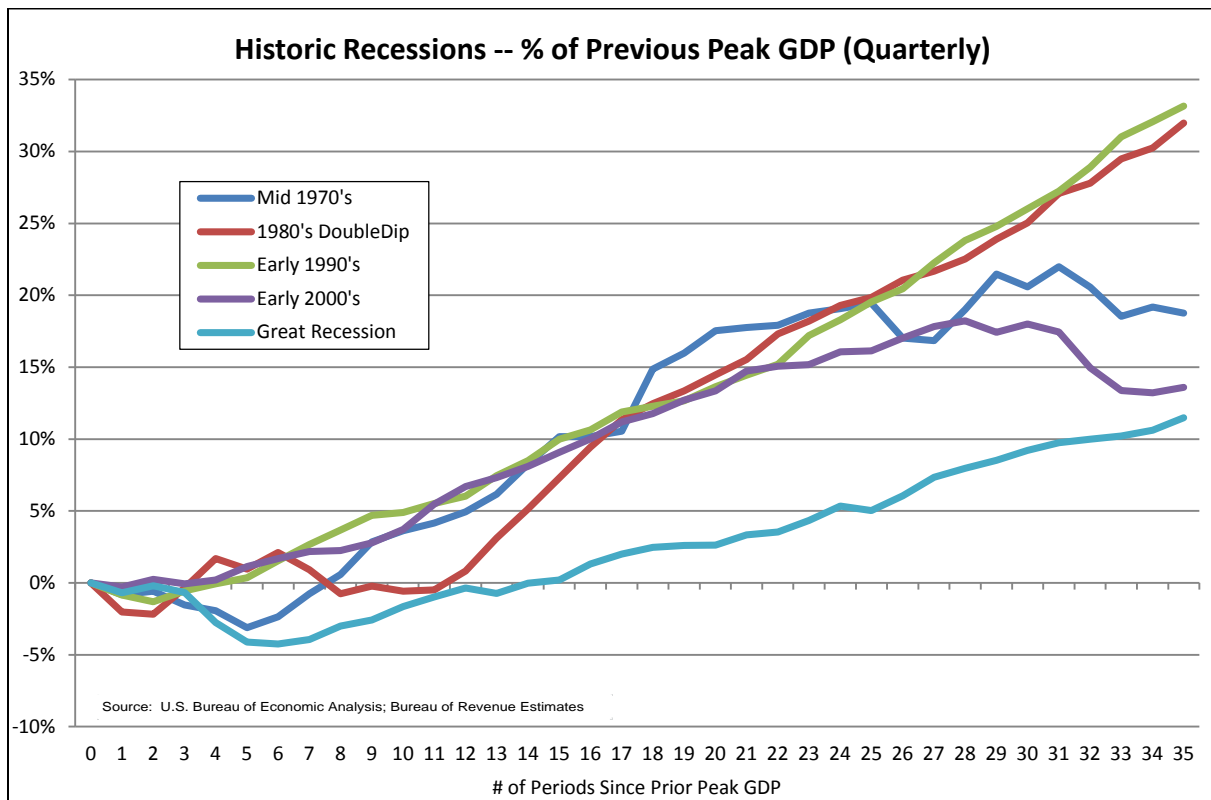


# Economic Outlook

In the nation as a whole, economic growth since the Great Recession remains muted. Moreover, the fiscal drag from federal budget sequestration and ongoing federal policy uncertainty continue to restrain growth in Maryland and the region. In other words, the economic picture has not changed much, accordingly our outlook remains subdued relative to previous periods of economic expansion. It must be stressed that our outlook calls for improving employment and wages as growth continues, just not at the rates witnessed throughout the expansionary periods of the 1990s and 2000s.

## The National Expansion and Business Investment

Real Gross Domestic Product (GDP), the broadly used inflation adjusted aggregate measure of the national economy, has proven volatile. Furthermore, the growth trajectory, 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 2016, the national economy is only 11.5% larger than its pre-recession peak (a full 35 quarters later), a remarkable laggard relative to other expansions. The confluence of slow growth and continued volatility feeds and reinforces uncertainty for business owners contemplating capital and labor expansion, discouraging investment.



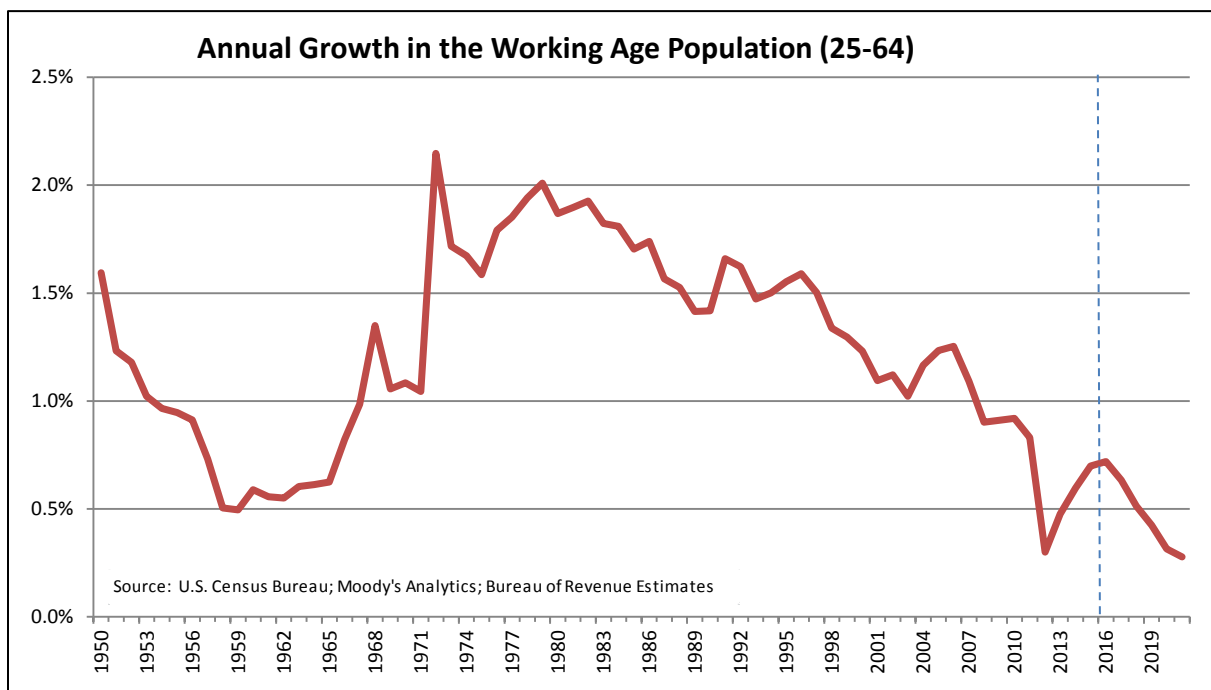
But uncertainty regarding current economic conditions cannot be the only explanatory variable for our slow recovery. Consumer demand has been strong, growing at an average 2.9% annual rate beginning in 2014, a particularly relevant point as consumer spending typically accounts for around 70% of GDP. Such robust and sustained demand should support positive investment decision metrics;

however, it does not seem that companies are investing heavily in the future. Quite the opposite, companies are distributing cash to their investors at a relatively high instance through one-time measures such as stock buy backs or ongoing measures such as increased or new dividends.

A company, acting as a fiduciary for its owners, should only distribute cash to shareholders when it cannot determine an investment with a greater return. While this might be somewhat a function of the ever increasing need to meet short-term investor return requirements, it is also likely demonstrative of fewer investment opportunities. The latter is a point of particular concern and requires further examination.

The quantity of labor and the productivity of that labor generally sums up to the supply side of the economy. Contrary to what is often turned into a partisan political argument, the supply and demand sides of the economy are equally relevant and highly dependent upon one another. While there is no empirical consensus that defines the root cause of the recent economic sluggishness, it is likely a function of a reduced outlook for the labor force, the ability of that labor to grow production levels at previously experienced rates, and the subsequent impact those factors will have on demand.

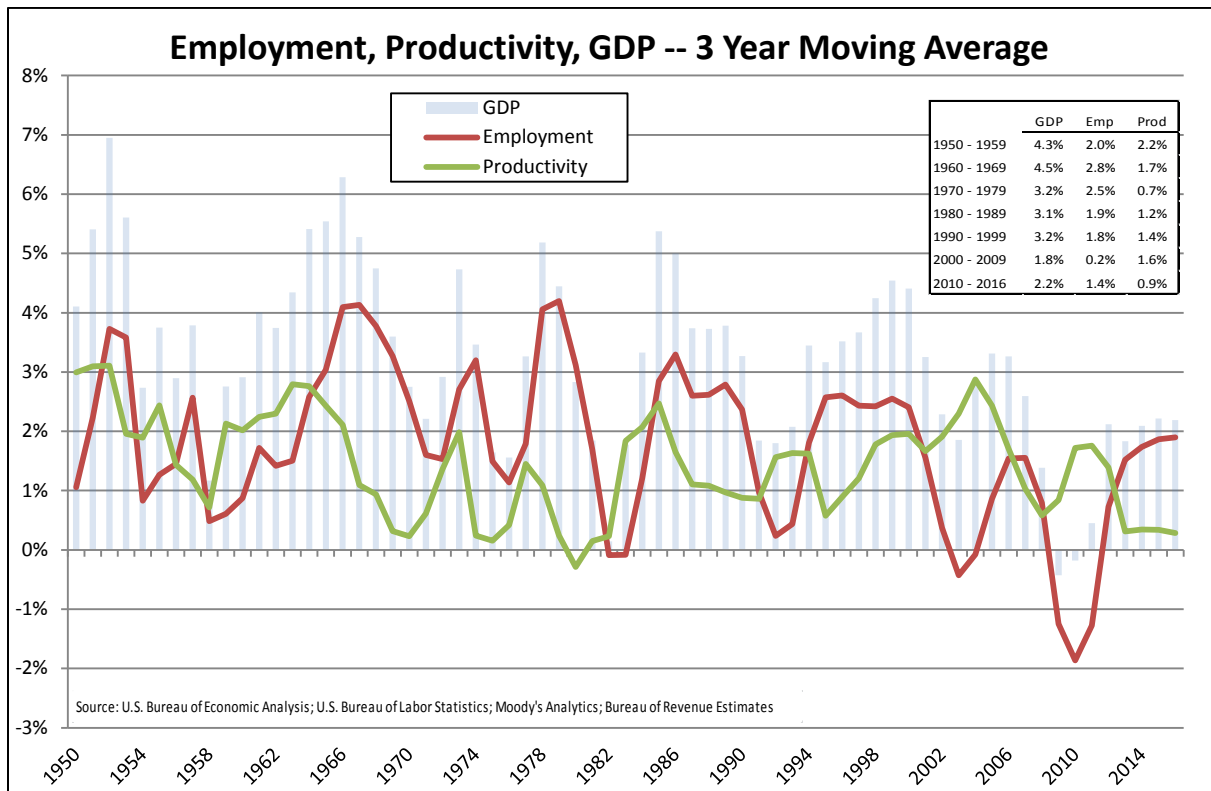
The premise that this country, as well as most countries, is aging is nothing new; the difference now is that the trend is within the ten year horizon. Demographic trends are set in stone early; they are based on population age stratifications, life expectancy, and birth rates. For many years now it has been common knowledge that not only would the share of those aged 65 or more increase significantly, but also that the number of individuals in the working years of their life (defined here as 25 – 64) would grow at a slow pace. The latter fact is a direct problem from an economic output perspective, while the prior has myriad other implications. Slowing growth in the number of workers, *ceteris paribus*, translates to slower growth in economic output. The chart below illustrates historical growth rates in the working age population as well as Moody's Analytics outlook; the baby boomer generation and a recent uptick from their offspring, the millennials, are evident. However, falling birth rates, beginning with the baby boomers and continuing with subsequent generations, has resulted in the current outlook.



The above could be offset by increased productivity, but that also seems to be an issue. Since World War II this country has witnessed extraordinary growth from this metric, a key reason that this country enjoys the relatively high standard of living that it does. Technological revolutions affecting industrial as well as office activities have dominated the economic landscape, resulting in outsized gains for the economy.

The cause of recent slowing in productivity is a highly debated issue amongst economists. One argument is that we have picked the proverbial low hanging fruit, meaning that marginal improvements made to technology at this point result in lesser gains than prior improvements; hence slower growth. Additionally, such technology is now relatively ubiquitous across industries and consumers alike.

Another argument relates to demographic trends: a significant share of the labor force is aging, while a large generation of younger workers is entering the labor force. This means there are proportionally fewer middle aged workers in the labor force, who tend to be the most productive age demographic. As the most experienced workers exit the labor force, and less experienced workers enter, productivity declines. The chart below shows employment, productivity (defined here as output per worker) and GDP growth. The number of people employed and their productivity add up to GDP. It is clear that the past few years have seen historically low productivity, at around the same time as millennials began entering the labor force. This period of low productivity has a precedent in the available history: the 1970s, about the time baby boomers were reaching working age. Yet employment growth in the 1970s was such that GDP growth continued to be relatively strong. If this argument is correct, productivity growth, and therefore GDP growth, given our outlook for employment, will remain subdued for the near future. On the positive side, we can expect higher productivity growth in the future as younger workers gain experience.



The contrary views to the above require full disclosure and are two-fold. First, the argument can be made that we cannot foresee future productivity improvements. For example, could anyone have

truly predicted the omnipresence of the internet? Therefore how could we discount the possibility for future innovation? Human ingenuity will result in some great new market or technological improvement, whether it is an energy revolution or something completely unimaginable at the moment. However, faith in the future is not a prudent basis for the near-term outlook. The second argument is that GDP is not accurately measuring the contribution of much of the new technology, particularly technology that is available for free (e.g., Facebook, etc.). It is not a simple endeavor to determine its value. To be sure, many of the websites and applications coming out of Silicon Valley type companies create great utility, but that does not mean they comparatively create the broad based economic value as, say, enterprise software systems did in the 1990s. Furthermore, non-monetary transactions are not part of the tax base, which means that the amount of value they create has little significance for the amount of tax revenue the state will collect.

The above supply side issues translate to the demand side, and vice-versa. Slower growth in workers also means slower growth in consumers. If the expectation is for GDP to grow slower in general because of productivity concerns, that will translate to lesser wage gains, another impediment to consumer spending. Additionally, recent above average unemployment may have temporarily eroded the ability of workers to demand higher wages, contributing to subdued wage growth. The result would be less incentive for employers to invest in labor saving technology that would boost productivity. Of course, many of our companies and their workers are operating in a global economy, not a national economy. Many developed nations are in similar or worse situations. Some are further along the road at this point in terms of aging populations. Increasing purchasing power in developing nations, even as their rapid expansions begin to slow a bit, have likely already been factored in; the large investments required to satisfy that demand have likely been made and further increases will only prove marginal in the forecast horizon.

### **Labor Market Improvements & Wage Growth**

The national labor market continues to improve, albeit at a slower pace. After growing 2.1% in 2015, the number of jobs has grown 1.4% through November of this year. The unemployment rate has fallen to 4.6%. Lagging employment gains have been wage improvements. The average wage, defined as total wages divided by the total number of jobs, increased just 2.9% in 2015 and is up only 1.6% through the first two quarters of 2016. In several years after the Great Recession inflation adjusted average wage growth was negative, meaning consumers lost purchasing power.

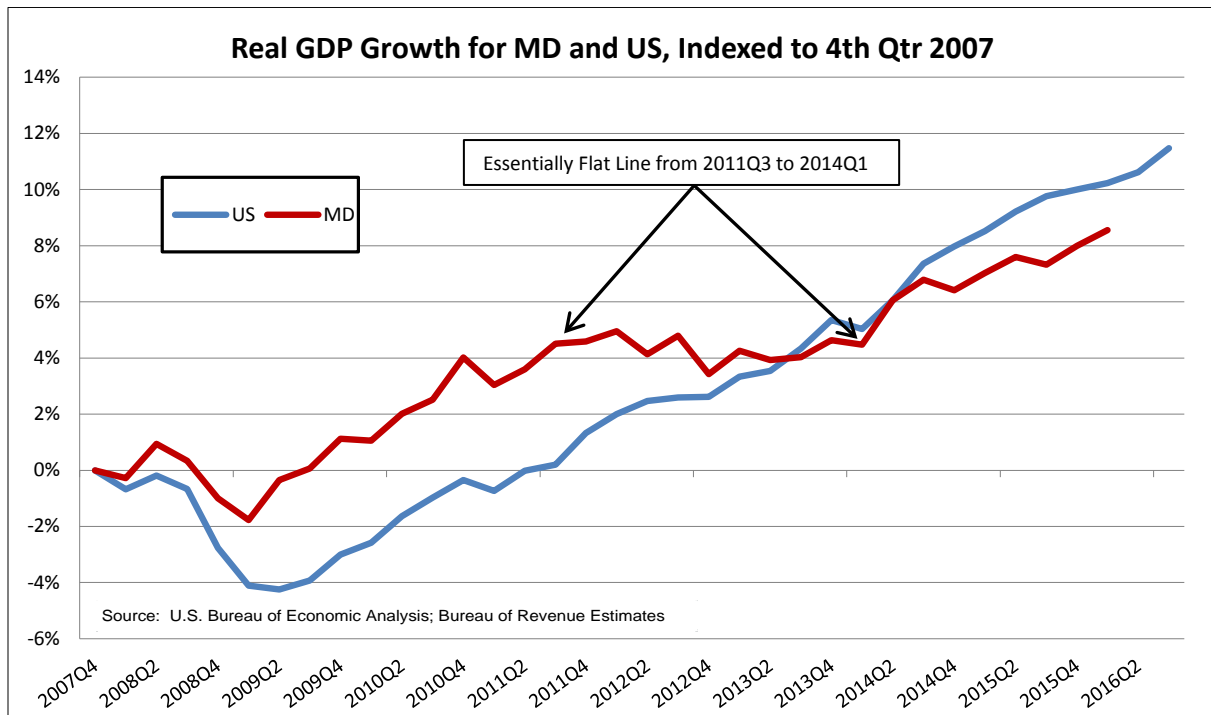
However, wage gains typically do lag employment gains. This is a bright spot in the outlook; as we continue to add positions and bring individuals back into the labor market, the market will tighten and wage growth should increase. The concern at this point is that the job mix, or the types of jobs that are being created, has been heavily concentrated in positions below the national average wage. As a result, growth in average wages might remain muted relative to the normal gains accompanying a tightening labor market.

Gains in the national labor market have favored low-skilled service positions. 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. There is, of course, nothing wrong with the work or services performed by individuals in these lower-skilled

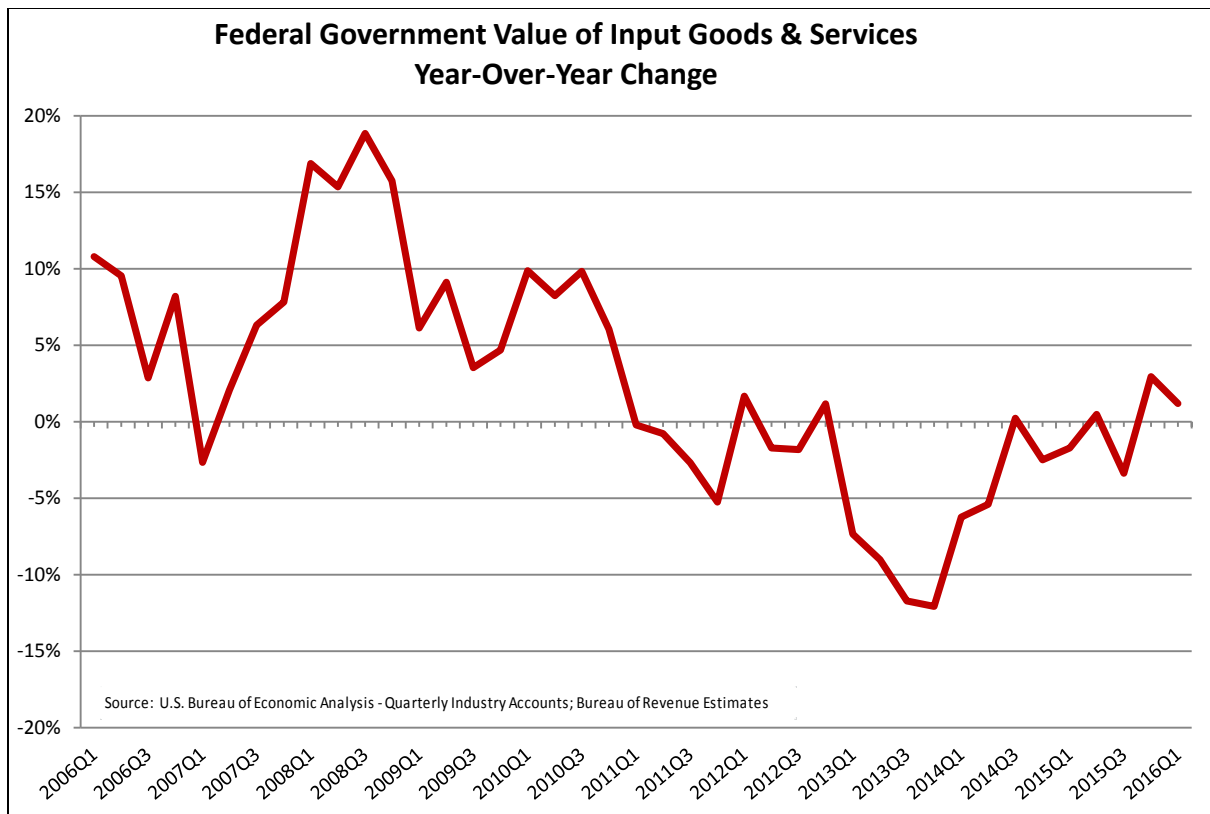
positions, but it will restrain wage growth. This may help reconcile the weak growth in GDP and the strong labor gains.

### Maryland and Sequester

Maryland’s economic growth between 2012 and 2015 has been tepid at best, particularly relative to national growth. This coincides with federal budget sequestration. The private sector began to adjust payrolls immediately, even as the bill was being discussed in Congress. Actual austerity measures did not take effect until 2013, at which point the private and public sectors took another hit. The following chart illustrates the relative weakness of Maryland’s recovery over this period compared to the national recovery, a clear indication of the relative fiscal drag.



The chart on the following page may help to illustrate the timing of the impacts and might even offer a glimmer of hope. The data is somewhat esoteric, even for most economists, but it shows the growth in the value of intermediate inputs purchased by the federal government. Intermediate inputs represent the value of the private sector’s sales to the federal government, an important component to Maryland’s economy. While this data is not Maryland specific, we are far more affected than any other jurisdiction outside of Virginia and the District.



As the above chart shows, the worst impact of the sequester may be behind us. 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. That said, the sector will continue to be a drag. The sequester targets will restrain growth in discretionary spending until 2019; therefore an important sector of our economy will remain handicapped. As such, Maryland’s economic trajectory should remain tepid relative to the national rate until either sequester is lifted or the next recession.

This will also be a possible positive risk to this forecast. Federal sequestration did close to nothing to fix the federal fiscal quagmire. In fact, it may have had a negative effect; the economic impact of the half-measures reduced economic growth without solving longer term spending issues. The real issues for the federal fiscal outlook are entitlements (also related to demographics). Should Congress address the real problem, and ameliorate or remove the sequester altogether, Maryland will grow at a higher trajectory.

### The Maryland Outlook

Maryland’s economy will expand in 2016 and growth in employment is expected to rise to 1.6% from 1.5% in 2015. Employment growth in 2017 is expected to slow as a result of the economy reaching full employment. Growth in the average wage for 2016 is expected to equal 1.7%, a somewhat disappointing factor. In addition to the reasons that have been discussed throughout this summary, there appear to have been timing issues, such as an extra pay period at the end of 2015, that inflated average wage growth in 2015 (of 3.0%) at the expense of reported wage growth in 2016. The rate of wage growth is expected to increase throughout the out years as the labor market tightens and workers gain experience, but to be sure, the expected rate of wage growth is low relative to historical norms. Aggregate wage growth and personal income measures increase as employment and the average wage

improves. The outlook for the largest general fund revenue source, the income tax, is relatively strong. This is due to Maryland’s strong concentration of wealthy taxpayers. As has been noted, income growth at the higher end has been substantial (volatile as well), buoying aggregate receipts to growth rates of 4.9% fiscal year to date.

Real estate and construction are relative bright spots in the recent history and outlook. The number of houses in foreclosure continues to decrease, while sales have been strong. The median existing house price has been stagnant or declining in the past two years but is up 3.4% year to date as of October. Employment in residential construction grew 4.7% in 2015 and is trending upwards. Sales and Use Tax (SUT) receipts point to strength in the construction sector as a whole. In fiscal year 2016, SUT receipts from the construction sector grew by 4.4%, following growth of 6.0% in fiscal year 2015.

Inflation has been historically low since the Great Recession, and driven lower more recently by falling oil prices. As measured by the Consumer Price Index, inflation, near zero for most of 2015, has risen above 1.5% as of October. All else equal, lower inflation would mean lower nominal wage growth, as employers do not need to increase nominal wages by as much to keep up with inflation. An increase in inflation would mean faster nominal wage growth, and therefore income tax revenues, than would otherwise be the case. Increasing nominal prices could, by the same logic, lead to faster growth in nominal SUT revenue. When all else is not equal, the net effect can depend on the source of inflation. If the source is negative supply shock, such as during the 1970s oil price spike, real growth, and ultimately tax collections, may be harmed.

<b>Outlook For Key Maryland Economic Variables</b>				
<b>Calendar Year</b>	<b>Non-Farm Employment Growth</b>	<b>Personal Income</b>	<b>Aggregate Wage &amp; Salary Income</b>	<b>Average Wage</b>
2014	0.9%	3.4%	3.3%	2.4%
2015	1.5%	4.1%	4.6%	3.0%
2016E	1.6%	3.3%	3.3%	1.7%
2017E	1.0%	4.0%	3.9%	2.9%
2018E	0.8%	4.2%	4.0%	3.2%
2019E	0.5%	4.1%	3.8%	3.2%
2020E	0.6%	4.1%	4.0%	3.4%
Source: Bureau of Revenue Estimates				

## Risks

As usual, risks abound. Federal Reserve action to tighten monetary policy is imminent; there is a risk that the market reacts in a negative manner that gains traction or that resulting higher interest rates slow broader growth in such a way that the economy again falters. Additionally, with the new incoming presidential administration there is considerable federal policy uncertainty. Some policies that may or may not come to be could help the Maryland economy, while others could hurt it. Another risk is oil prices. While lower oil prices have created a consumer dividend for an extended period of time, OPEC has recently pledged to cut production. A resulting increase in oil prices would be a drag on average



consumer spending in Maryland. Where oil prices end up depends predominantly on the size of OPEC production cuts and the ability of shale oil producers in the United States to increase their output in response to a rise in prices.

Positive risks include the aforementioned reduction or abolition of federal sequester, as well as the expansion of the Panama Canal for the Port of Baltimore. The Panama Canal widening, which allows so called “post-Panamax ships” to navigate the Canal, permits large cargo ships to sail from Asia to the East Coast. Prior to the project’s completion in June 2016 that cargo was typically delivered to the West Coast and then transported by rail and road throughout the country. Baltimore is one of the few ports on the East Coast with the depth and infrastructure to handle these types of ships and will see increased need for labor and capital, of which the proposed expansion of the Howard Street rail tunnel is an example. Should there be a meaningful surge in activity and jobs, there will also be positive indirect and induced impacts.

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**Table 1**  
**Forecast of the US Economy**  
**Primary Indicators**

CALENDAR YEAR	2012	2013	2014	2015	2016	2017	2018
Real Gross Domestic Product (\$ in billions)	15,355	15,612	15,982	16,397	16,652	17,035	17,483
	2.2%	1.7%	2.4%	2.6%	1.6%	2.3%	2.6%
Federal Funds Rate	0.1%	0.1%	0.1%	0.1%	0.4%	0.9%	1.7%
10-Year Treasury Bond Yield	1.8%	2.4%	2.5%	2.1%	1.8%	2.5%	3.2%
Consumer Price Index (%Δ from prior year)	1.9%	1.3%	1.2%	0.4%	1.9%	2.4%	2.4%
Housing Starts (thousands of units)	784	928	1,001	1,108	1,174	1,231	1,321
	28.1%	18.4%	7.8%	10.7%	5.9%	4.9%	7.3%
Light Vehicle Sales (thousands of units)	14,435	15,529	16,455	17,398	17,400	17,532	17,568
	13.3%	7.6%	6.0%	5.7%	0.0%	0.8%	0.2%
Corporate Profits Before Taxes (\$ in billions)	1,998	2,033	2,152	2,088	2,053	2,142	2,240
	10.0%	1.7%	5.9%	-3.0%	-1.7%	4.3%	4.6%
Total Non-Agricultural Employment (thousands)	134,173	136,381	138,939	141,833	144,313	146,169	147,951
	1.7%	1.6%	1.9%	2.1%	1.7%	1.3%	1.2%
Unemployment Rate	8.1%	7.4%	6.2%	5.3%	4.9%	4.6%	4.3%
Personal Income (\$ in billions)	13,915	14,074	14,810	15,459	16,023	16,797	17,675
	5.0%	1.1%	5.2%	4.4%	3.6%	4.8%	5.2%

Source: Board of Revenue Estimates and Global Insight (December 2016 Forecast)

**Table 2**  
**Forecast of the MD Economy**  
**Primary Indicators**

CALENDAR YEAR	2012	2013	2014	2015	2016	2017	2018
Total Non-Agricultural Employment (thousands)	2,573	2,597	2,621	2,660	2,704	2,732	2,753
	1.2%	0.9%	0.9%	1.5%	1.6%	1.0%	0.8%
Existing Median Home Price (\$)	244,549	259,449	269,259	267,163	274,312	283,364	290,165
	-0.9%	6.1%	3.8%	-0.8%	2.7%	3.3%	2.4%
Existing Single Family Home Sales (thousands)	68.5	75.7	81.0	90.5	103.1	109.5	115
	3.6%	10.5%	7.0%	11.8%	13.9%	6.2%	4.7%
Private Housing Starts (thousands)	14.3	16.9	16.6	16.4	17.4	17.9	20
	23.9%	17.7%	-1.9%	-1.1%	6.4%	2.7%	13.9%
Personal Income (\$ in millions)	314,160	312,370	322,885	336,187	347,382	361,375	376,591
	3.2%	-0.6%	3.4%	4.1%	3.3%	4.0%	4.2%
Wages and Salaries (\$ in millions)	148,883	150,140	155,126	162,273	167,706	174,300	181,267
	3.1%	0.8%	3.3%	4.6%	3.3%	3.9%	4.0%
Dividends, Interest and Rent (\$ in millions)	59,853	58,335	61,770	63,904	65,494	67,915	71,015
	8.1%	-2.5%	5.9%	3.5%	2.5%	3.7%	4.6%
Capital Gains (\$ millions)	7,877	6,647	9,508	8,557	8,557	8,557	8,557
	41.1%	-15.6%	43.0%	-10.0%	0.0%	0.0%	0.0%
Unemployment Rate	6.9%	6.5%	5.8%	5.2%	4.4%	4.4%	4.3%

Source: Board of Revenue Estimates and Global Insight (December 2016 Forecast)

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## General Fund Revenues

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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 2016 through 2018. 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 2016 - 2018

	GENERAL FUND			SPECIAL FUND			TOTAL		
	Fiscal Year 2016 Actual	Fiscal Year 2017 Revised Estimate	Fiscal Year 2018 Estimate	Fiscal Year 2016 Actual	Fiscal Year 2017 Revised Estimate	Fiscal Year 2018 Estimate	Fiscal Year 2016 Actual	Fiscal Year 2017 Revised Estimate	Fiscal Year 2018 Estimate
<b>\$ Thousands</b>									
<b>INCOME TAXES</b>									
Individual	8,517,585	8,991,352	9,389,593				8,517,585	8,991,352	9,389,593
Corporations	874,465	771,602	830,074	254,543	200,118	215,283	1,129,008	971,720	1,045,357
<b>Total</b>	<b>9,392,050</b>	<b>9,762,953</b>	<b>10,219,667</b>	<b>254,543</b>	<b>200,118</b>	<b>215,283</b>	<b>9,646,594</b>	<b>9,963,071</b>	<b>10,434,949</b>
<b>SALES AND USE TAXES</b>	<b>4,444,481</b>	<b>4,592,595</b>	<b>4,741,168</b>	<b>59,759</b>	<b>69,083</b>	<b>69,774</b>	<b>4,504,241</b>	<b>4,661,678</b>	<b>4,810,942</b>
<b>STATE LOTTERY RECEIPTS</b>									
Lottery Games	529,754	492,309	505,178	102,091	109,175	109,248	631,845	601,484	614,427
Casinos				519,211	622,529	746,275	519,211	622,529	746,275
<b>Total</b>	<b>529,754</b>	<b>492,309</b>	<b>505,178</b>	<b>621,302</b>	<b>731,704</b>	<b>855,523</b>	<b>1,151,056</b>	<b>1,224,013</b>	<b>1,360,701</b>
<b>TRANSPORTATION REVENUES</b>									
Motor Vehicle Fuel Tax	4,625	-	-	1,006,712	1,033,040	1,048,493	1,011,337	1,033,040	1,048,493
Motor Vehicle Licenses, Fees				778,248	793,482	794,386	778,248	793,482	794,386
Motor Vehicle Titling Tax				860,416	882,000	895,000	860,416	882,000	895,000
Maryland Transit Fees				156,579	159,988	167,606	156,579	159,988	167,606
Maryland Port Fees				49,999	50,505	52,508	49,999	50,505	52,508
Maryland Aviation Fees				229,993	234,389	237,076	229,993	234,389	237,076
<b>Total</b>	<b>4,625</b>	<b>-</b>	<b>-</b>	<b>3,081,947</b>	<b>3,153,404</b>	<b>3,195,069</b>	<b>3,086,572</b>	<b>3,153,404</b>	<b>3,195,069</b>
<b>OTHER REVENUES</b>									
Property Transfer Tax	115,367	62,771	46,028	76,383	140,463	168,802	191,750	203,234	214,830
Business Franchises and Filing Fees	221,967	223,513	227,345				221,967	223,513	227,345
State Tobacco Tax	395,279	393,827	392,214				395,279	393,827	392,214
Tax on Insurance Companies	287,407	294,802	304,618				287,407	294,802	304,618
Alcoholic Beverages Excises	31,946	32,947	33,365				31,946	32,947	33,365
Estate & Inheritance Taxes	261,932	206,720	184,512				261,932	206,720	184,512
Clerks of the Court	34,203	36,947	36,393				34,203	36,947	36,393
District Courts	72,334	70,255	70,240				72,334	70,255	70,240
Hospital Patient Recoveries	57,499	57,781	58,296				57,499	57,781	58,296
Interest on Investments	15,008	20,000	35,000						
Miscellaneous Fees, Other Receipts	334,145	326,485	326,311						
<b>Total</b>	<b>1,827,086</b>	<b>1,726,047</b>	<b>1,714,320</b>						
<b>Total Current Revenues</b>	<b>16,197,996</b>	<b>16,573,905</b>	<b>17,180,333</b>						
Extraordinary Revenues <sup>1</sup>	-	47,432	-						
<b>GRAND TOTAL</b>	<b>16,197,996</b>	<b>16,621,336</b>	<b>17,180,333</b>						

--- See Notes ---

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--- See Notes ---

<sup>1</sup> The fiscal year 2016 GAAP audit of the Local Income Tax Reserve account found that the account was overfunded by \$47.4 million

Notes: Includes all general fund revenues, all Transportation revenues and selected special fund taxes. In conjunction with Appendix B of the Fiscal Year 2016 Budget Book, this table will comprise the official estimate of total state revenues.

Table 4  
**Maryland General Fund Revenues**  
 Fiscal Years 2016 - 2018

\$ Thousands	FY 2017					FY 2018			
	FY 2016 Actual	September Estimate	December Estimate	Difference	Growth	September Estimate	December Estimate	Difference	Growth
<b>INCOME TAXES:</b>									
Individual	8,517,585	8,963,525	8,991,352	27,827	5.6%	9,370,438	9,389,593	19,155	4.4%
Corporation	874,465	853,356	771,602	(81,755)	-11.8%	898,200	830,074	(68,126)	7.6%
<b>Total</b>	<b>9,392,050</b>	<b>9,816,881</b>	<b>9,762,953</b>	<b>(53,928)</b>	<b>3.9%</b>	<b>10,268,638</b>	<b>10,219,667</b>	<b>(48,971)</b>	<b>4.7%</b>
<b>SALES AND USE TAXES</b>	<b>4,444,481</b>	<b>4,574,750</b>	<b>4,592,595</b>	<b>17,845</b>	<b>3.3%</b>	<b>4,725,297</b>	<b>4,741,168</b>	<b>15,871</b>	<b>3.2%</b>
<b>STATE LOTTERY</b>	<b>529,754</b>	<b>512,662</b>	<b>492,309</b>	<b>(20,353)</b>	<b>-7.1%</b>	<b>523,889</b>	<b>505,178</b>	<b>(18,711)</b>	<b>2.6%</b>
<b>OTHER REVENUES</b>									
Business Franchise Taxes	221,967	226,404	223,513	(2,891)	0.7%	193,099	227,345	34,246	1.7%
Tax on Insurance Companies	287,407	294,802	294,802	-	2.6%	304,618	304,618	-	3.3%
Estate and Inheritance Taxes	261,932	207,815	206,720	(1,095)	-21.1%	184,766	184,512	(254)	-10.7%
Tobacco Tax	395,279	393,479	393,827	348	-0.4%	391,864	392,214	350	-0.4%
Alcoholic Beverages Excise Tax	31,946	32,390	32,947	558	3.1%	32,839	33,365	526	1.3%
Motor Vehicle Fuel Tax	4,625	-	-	-	-100.0%	-	-	-	
District Courts	72,334	71,885	70,255	(1,630)	-2.9%	71,870	70,240	(1,630)	0.0%
Clerks of the Court	34,203	36,947	36,947	-	8.0%	36,239	36,393	153	-1.5%
Hospital Patient Recoveries	57,499	58,348	57,781	(567)	0.5%	58,348	58,296	(52)	0.9%
Interest on Investments	15,008	20,000	20,000	-	33.3%	35,000	35,000	-	75.0%
Miscellaneous	334,145	326,020	326,485	465	-2.3%	332,353	326,311	(6,042)	-0.1%
<b>Total</b>	<b>1,716,344</b>	<b>1,668,088</b>	<b>1,663,276</b>	<b>(4,812)</b>	<b>-3.1%</b>	<b>1,640,995</b>	<b>1,668,292</b>	<b>27,297</b>	<b>0.3%</b>
<b>Total Current Revenues</b>	<b>16,082,630</b>	<b>16,572,382</b>	<b>16,511,134</b>	<b>(61,248)</b>	<b>2.7%</b>	<b>17,158,819</b>	<b>17,134,305</b>	<b>(24,514)</b>	<b>3.8%</b>
Extraordinary Revenues <sup>1</sup>	-	-	47,432	47,432		-	-	-	
Transfer Tax Revenues <sup>2</sup>	115,367	62,771	62,771	-		46,028	46,028	-	-26.7%
<b>GRAND TOTAL</b>	<b>16,197,996</b>	<b>16,635,153</b>	<b>16,621,336</b>	<b>(13,817)</b>	<b>2.6%</b>	<b>17,204,847</b>	<b>17,180,333</b>	<b>(24,514)</b>	<b>3.4%</b>

<sup>1</sup> The fiscal year 2016 GAAP audit of the Local Income Tax Reserve account found that the account was overfunded by \$47.4 million

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



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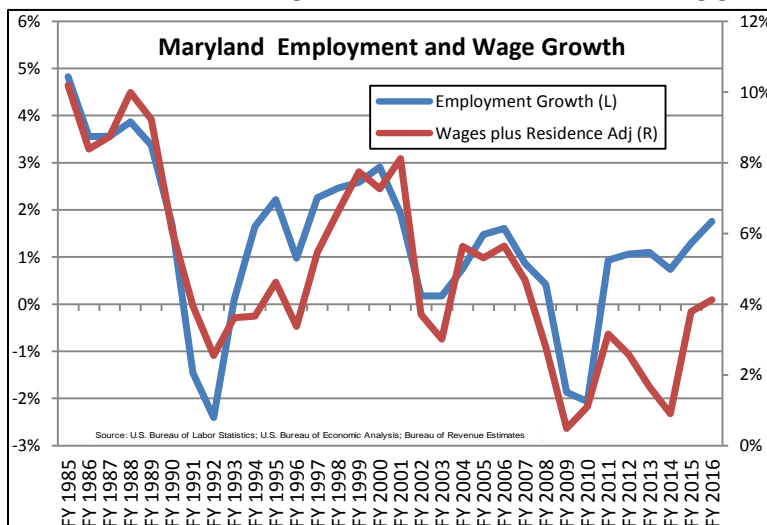


# Individual Income Tax

General fund estimates for the personal income tax are expected to increase 5.6% for fiscal year 2017 and 4.4% for fiscal year 2018. Certain technicalities originating in the effects of the “Wynne” case on the local income tax distribution as well as a timing issue related to withholding exaggerate underlying fundamentals for fiscal year 2017. In the absence of those items, approximate underlying general fund growth for fiscal year 2016 would have been 2.7% and estimated growth for fiscal year 2017 would be 3.3% (detail below). Furthermore, it is worth noting that fiscal year 2016 income tax proved the primary source of variance of the general fund estimate at closeout; the last official estimate had called for general fund growth of 5.2% whereas actual growth was a disappointing 2.1%. Several aspects of the components of that variance are instructive for understanding the estimates for fiscal years 2017 and 2018.

Withholding growth finished the fiscal year at only 3.4%. However, it seems clear that a calendar timing issue resulted in a smaller withholding accrual for fiscal year 2016 and a correspondingly larger withholding amount for the month of July, the first month of fiscal year 2017. The year-end withholding accrual is based on the tax period submitted by employers with their remittances; the accrual for fiscal year 2016 was down 19.2%, or \$85.7 million. Further research showed that remittances attributable to June 2016 from many of the larger employers contained one fewer pay period whereas July 2017 appears to have an additional pay period. The practical impact is a non-economic shifting of revenue from fiscal year 2016 into fiscal year 2017. If we assume 0.0% growth for the fiscal year 2016 accrual and therefore shift \$85.7 million between years, withholding growth in fiscal year 2016 would have been 4.1% and estimated withholding growth in fiscal year 2017 would be 3.7%.

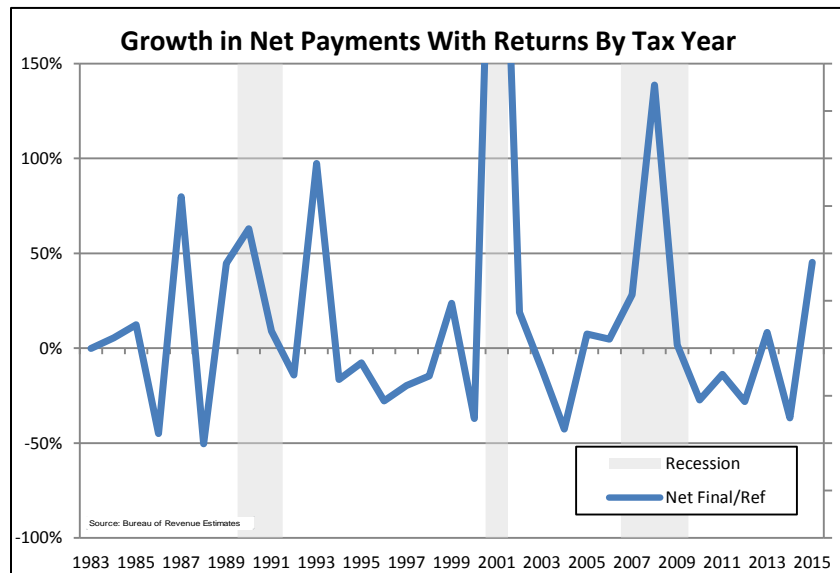
Even considering the above distortion, withholding growth remains weak relative to prior



economic expansions and particularly to periods of comparable employment growth. Fiscal year 2016’s employment growth of 1.8% was the strongest period of this expansion (see insert). Growth in Maryland’s wages and residence adjustment reached a post-Great Recession peak of 4.1% (residence adjustment is critical to Maryland as we are a net exporter of workers,

notably high skilled workers to D.C. and Virginia). Of note is the gap between employment growth and wage growth. In general the gap between the two should be tight; the gap in this expansion illustrates the weak wage growth that has accompanied this economic expansion in Maryland and throughout the nation. The causes are myriad: concentrated job growth in lower paying industries; continued slack in the labor market; low inflation that serves to reduce the employer incentive to raise wages in order to maintain existing living standards; and weak and at times contracting productivity growth. While the gap that existed for several years following the recession in the early 1990s is smaller in relation to the current, it is interesting to note that that expansion also included a reduction in federal government spending, the so called “peace dividend,” an event somewhat comparable to today’s federal budget sequestration and the disproportionately negative impact it has had on Maryland relative to other states.

While withholding proved an important component of the fiscal year 2016 variance, the impact from net payments with returns was paramount. Net payments with returns is the summation of refunds and payments received with filing extensions or actual tax return filings. The figure is always negative as wage-earning taxpayers are generally over-withheld and a 13.0% interest rate accompanies



underpayment. Year-over-year growth for this component on a baseline tax year basis was 45.3% for tax year 2015 (see inset). Also of note, for clarity purposes the amount for tax year 2001 is cut out; year-over-year growth in that year was 371.9%. As the net amount is negative, growth in this component subtracts from revenue for the State. An examination of the vertical axis scale shows just how significant

the growth rates for this component can be.

Net payments with returns is the most volatile and difficult to estimate component of the income tax. It is believed that a contraction in capital gains income for tax year 2015 drove the significant increase which would mark the first year in which capital gains decreased while the stock market increased since 1994. Until actual data detailing the sources of income becomes available, it would be imprudent to rule out weak or negative growth from income derived from pass through entities (PTE) as a source of the increase. Both sources of income, capital gains and PTE, are concentrated within a small number of tax returns and may be impacted by unprecedented pressures related to the nature of this expansion.

Our outlook is consistent with the underlying economic and income assumptions. In general, receipts growth is subdued relative to other periods of economic expansion. Withholding growth is commensurate with our outlook for growth in wages and salaries. Furthermore, our outlook for capital gains income growth is 0.0%. The volatility of that component (standard deviation of 35.9%) and recent divorce from tracking the market in direction (up or down) calls for caution. Finally, general fund growth is bolstered by a reduction in the local governments' share of collections; this adjustment is commensurate with tax year 2015 returns and related to the first local impact from the "Wynne" case.

**Table 5**  
**Individual Income Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
<b>Gross Receipts (State &amp; Local)</b>				
<b>Withholding</b>	12,177,833	12,585,880	13,227,022	13,830,652
<b>Estimated Payments</b>	1,935,904	1,957,103	1,946,619	2,019,716
<b>Payments with Final Returns</b>	1,718,004	1,716,427	1,794,731	1,868,891
<b>Fiduciary</b>	131,616	124,396	129,853	137,218
<b>Gross Receipts</b>	15,963,356	16,383,806	17,098,225	17,856,477
<b>Refunds</b>	(2,416,403)	(2,621,264)	(2,710,863)	(2,829,633)
<b>Net Receipts (State &amp; Local)</b>	13,546,953	13,762,542	14,387,361	15,026,844
<b>Local Reserve Account</b>	(5,199,134)	(5,243,868)	(5,395,010)	(5,636,251)
<b>Income Tax Check-offs</b>	(1,674)	(1,089)	(1,000)	(1,000)
<b>Net General Fund</b>	8,346,145	8,517,585	8,991,352	9,389,593

Figures may not sum to totals due to rounding.



## Corporate Income Tax

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General Fund corporate income tax revenues increased 12.5% to \$874.5 million in fiscal year 2016. Gross receipts for fiscal year 2016 increased 11.0% while refunds increased 3.0%. Receipts were bolstered by an extraordinary court decision settled in favor of the State; however, underlying receipts growth remained strong. Nationally, corporate profits declined 6.7% in fiscal year 2016. Leading up to 2016, growth in corporate profits had fallen from historic highs earlier in the decade to relatively subdued levels compared to the previous two economic expansions. Growth in corporate profits is expected to be modest over the forecast horizon. 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 in national income and tax accounting, and in the corporate tax base composition in Maryland compared to the nation as a whole.

Through November, net receipts are down 33.9%. Some of the decrease is due to the fact that fiscal year 2016 was an above average year for receipts growth. However, the bulk of the decrease is due to a substantial increase in refunds; through November, refunds are up 58.9%. There were some sizable refunds of a one-time nature, as well as refunds for film production credits that contributed to the large increase in refunds. Beyond those, it appears that corporate profits in 2015 were weaker than expected. As a result, many corporations likely overpaid for tax year 2015 (driving strong receipts growth in fiscal year 2016) and have since filed for refunds. For fiscal year 2017, net receipts are forecast to decrease 13.9%. General fund revenue is forecast to decrease 11.8%. The difference in the rates of decline is due to a statutory decrease in the share of net receipts that is distributed to the transportation trust fund, to the benefit of the general fund, for fiscal year 2017 and beyond. For fiscal year 2018, net receipts and general fund revenue are forecast to increase 7.6%.

**Table 6**  
**Corporate Income Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Estimated</b>	<b>2018 Estimated</b>
<b>Gross Receipts</b>	1,188,136	1,319,162	Note 1	Note 1
<b>Refunds</b>	(184,548)	(190,154)	Note 1	Note 1
<b>Net Receipts</b>	1,003,588	1,129,008	971,720	1,045,357
<b>Transportation Trust Fund</b>	(166,051)	(186,803)	(141,815)	(152,561)
<b>Higher Education Investment Fund</b>	(60,215)	(67,740)	(58,303)	(62,721)
<b>Net General Fund</b>	777,321	874,465	771,602	830,074

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

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The sales and use tax, the second largest source of revenues to the general fund, increased 2.5% in fiscal year 2016 following 5.1% in fiscal year 2015. Growth in fiscal year 2015 was buoyed by Amazon's establishment of nexus with the State. Growth for fiscal years 2017 and 2018 is expected to be 3.3% and 3.2%, respectively. The relatively small revision reflects the fact that year-to-date collections are slightly better than our September estimate.

The consumer segment, the largest component of the sales and use tax, grew by 4.0% in fiscal year 2016, compared to 5.9% in fiscal year 2015. Through October, the consumer segment is up 2.4% on a year-over-year basis. Growth of the consumer segment for fiscal years 2017 and 2018 is expected to be 2.3% and 3.2%, respectively. The forecast for this segment is unchanged from September.

The construction segment, the second largest component of the sales and use tax, continues to show strong growth, up 4.2% in fiscal year 2016. The construction industry has benefited from historically low mortgage interest rates and increasing housing demand. The share of first-time home buyers has been smaller relative to historical averages for myriad reasons, but has increased in 2016. Construction receipts are expected to finish fiscal year 2016 up 2.4%. Growth of the construction segment for fiscal years 2017 and 2018 is expected to be 3.7% and 3.9%, respectively.

Capital goods receipts cover a broad range of products, with some concentration in business inputs such as office furniture and technology equipment. As evidenced in the accompanying table, taxable capital investment has been volatile and lagging relative to prior economic expansions. Capital goods receipts growth for fiscal years 2017 and 2018 is expected to be 1.0% and 1.1%, respectively.

Utility receipts are composed of communications related sales and power sales to businesses. Communications equipment and voice services are taxable, data plans are not. Recently, the communications segment has been under pressure as pricing shifted towards data services and general voice services have become widely available through general merchandise and convenience stores. On the power side, low natural gas prices served to hold down prices charged to businesses. Despite these trends, growth has been positive as demand has continued to grow. As a whole, the utilities segment is up 8.1% through October, and is expected to grow 11.6% for the current fiscal year before slowing to 3.6% in fiscal year 2018.

It should be noted that the segments described above are becoming less descriptive each year. Goods that were sold at specialty stores are now sold at general retailers, leading the sale of some

goods to be attributable to different segments than in the past. An informative example is cell phones. In the past cell phones were largely sold through carriers and recognized as communications; but now cell phones are likely to be purchased at a general retailer and attributable to the consumer segment.

**Table 7**  
**Sales and Use Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Estimated</b>	<b>2018 Estimated</b>
<b>Consumer</b>	3,135,214	3,259,059	3,332,999	3,439,943
<b>Construction</b>	592,863	619,063	641,938	666,741
<b>Capital Goods</b>	297,261	287,600	292,996	296,084
<b>Utilities</b>	390,093	359,886	401,782	416,411
<b>Gross Collections</b>	4,415,430	4,525,609	4,669,715	4,819,179
<b>Assessments</b>	10,508	11,718	12,011	12,311
<b>Refunds</b>	(16,042)	(33,085)	(20,047)	(20,548)
<b>Transportation Trust Fund</b>	(30,788)	(30,780)	(31,087)	(31,398)
<b>Other</b>	(28,381)	(28,980)	(37,996)	(38,376)
<b>Total General Fund</b>	4,350,726	4,444,481	4,592,595	4,741,168

Figures may not sum to totals due to rounding.



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## Remaining Supporting Tables

**Table 8A**  
**Traditional Lottery - Sales**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Estimated</b>	<b>2018 Estimated</b>
<b>Pick 3</b>	240,911	241,570	241,690	241,785
<b>Pick 4</b>	276,958	280,783	282,162	285,476
<b>Multimatch</b>	34,511	31,095	25,655	25,424
<b>Instant/5 Card Cash</b>	552,588	617,200	636,332	655,770
<b>Keno/Racetrax</b>	457,656	478,648	479,100	485,138
<b>Bonus Match 5</b>	21,321	20,612	19,778	19,684
<b>MegaMillions/Powerball</b>	171,529	216,743	175,621	178,611
<b>Instant Ticket Lottery Machines<sup>1</sup></b>	41,400	9,829	10,369	10,525
<b>Cash4Life/Monopoly Millionaires</b>	1,593	11,959	15,000	15,150
<b>Gross Sales</b>	<b>1,798,465</b>	<b>1,908,438</b>	<b>1,885,707</b>	<b>1,917,562</b>

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 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Pick 3	101,080	96,202	99,565	98,293
Pick 4	119,508	135,225	111,765	118,955
Multimatch	12,323	11,089	9,108	9,027
Instant/5 Card Cash	93,985	102,020	104,540	107,748
Keno/Racetrax	120,452	122,979	122,712	124,609
Bonus Match 5	7,609	6,968	6,683	6,841
MegaMillions/Powerball	70,047	89,490	72,024	73,382
Instant Ticket Lottery Machines <sup>1</sup>	297	595	628	637
Cash4Life/Monopoly Millionaires	599	3,924	6,348	6,750
<b>Gross Revenue</b>	<b>525,901</b>	<b>568,492</b>	<b>533,371</b>	<b>546,242</b>
<b>Less: Stadium Authority Revenue</b>	<b>(20,000)</b>	<b>(40,000)</b>	<b>(40,000)</b>	<b>(40,000)</b>
<b>Less: Veteran's Trust Fund Revenue</b>	<b>(34)</b>	<b>(60)</b>	<b>(63)</b>	<b>(64)</b>
<b>Misc. Year End Adjustments</b>	<b>622</b>	<b>1,321</b>		
<b>Less: MD Intl Race Fund</b>			<b>(1,000)</b>	<b>(1,000)</b>
<b>Net General Fund</b>	<b>506,493</b>	<b>529,753</b>	<b>492,308</b>	<b>505,178</b>

Figures may not sum to totals due to rounding.

**Table 9**  
**Business Franchise Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Public Service Company Franchise Tax	136,022	137,537	137,395	139,504
Filing Fees	89,676	84,430	86,119	87,841
<b>Net General Fund</b>	<b>225,699</b>	<b>221,967</b>	<b>223,513</b>	<b>227,345</b>

**Table 10**  
**Insurance Premium Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Insurance Premium Tax</b>	329,028	320,228	329,739	339,618
<b>Less: MD Health Benefit Exchange Distributions</b>	(12,978)	(32,821)	(34,937)	(35,000)
<b>Net General Fund</b>	316,050	287,407	294,802	304,618

**Table 11**  
**Estate and Inheritance Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	<b>2015 Actual</b>	<b>2016 Actual</b>	<b>2017 Estimated</b>	<b>2018 Estimated</b>
<b>Collateral Inheritance Tax</b>	48,689	54,912	51,617	52,237
<b>Direct Inheritance Tax</b>	66	89	85	150
<b>Estate Tax</b>	194,662	206,931	155,017	132,125
<b>Net General Fund</b>	243,418	261,932	206,720	184,512

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**Table 12**  
**Hospital Patient Recoveries**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Medicaid	-	22,661	20,592	20,909
Medicare	9,312	8,168	9,490	9,732
Insurance and Sponsors	4,646	5,420	2,751	2,707
	13,958	36,250	32,834	33,348
Disproportionate Share	-	21,249	21,206	21,206
Medicaid Cost Settlements			3,741	3,741
Not Separated <sup>1</sup>	51,225			
<b>Net General Fund</b>	65,182	57,499	57,781	58,296

Note 1: Medicaid and Disproportionate Share were not separated for accounting purposes in fiscal year 2015  
Figure may not sum to totals due to rounding

**Table 13**  
**Excise Tax Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Cigarette Tax	357,724	360,468	358,319	356,528
Other Tobacco Products Tax	33,739	34,812	35,508	35,686
<b>Net General Fund Tobacco</b>	391,463	395,279	393,827	392,214
<b>Distilled Spirits Tax</b>	15,931	16,538	17,398	17,659
<b>Wine Tax</b>	6,358	6,348	6,632	6,785
<b>Beer Tax</b>	8,667	8,741	8,592	8,592
<b>Miscellaneous Licenses</b>	351	404	413	419
<b>Subtotal Alcoholic Beverages Taxes</b>	31,306	32,032	33,035	33,455
<b>Less: MD Wine and Grape Promotion Fund</b>	-	(86)	(88)	(90)
<b>Net General Fund Alcoholic Beverages</b>	31,306	31,946	32,947	33,365

Figures may not sum to totals due to rounding.

**Table 14**  
**General Fund Court Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
District Courts	77,702	72,334	70,255	70,240
Clerks of the Court	34,433	34,203	36,947	36,393

**Table 15**  
**General Fund Interest Earnings**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Interest Earnings	10,709	15,008	20,000	35,000

**Table 16**  
**Miscellaneous Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
Recording Organization & Capitalization Fees	13,370	14,117	14,516	14,878
Excess Fees of Office	(1,165)	688	688	688
Unclaimed Property	98,883	91,199	86,000	86,000
Local Income Tax Reimbursement	13,891	15,257	14,724	15,018
Uninsured Motorist Penalty Fees	54,145	48,696	50,000	51,084
State Admissions & Amusement Tax	8,737	-	-	-
Federal Retiree Drug Subsidy	15,696	16,385	13,200	13,200
Tobacco Conversion Program Bond Repayment	3,323	3,823	3,823	3,823
Miscellaneous Revenues and Transfers	1,263	4,276	1,000	1,000
<b>Net General Fund</b>	<b>208,144</b>	<b>194,440</b>	<b>183,951</b>	<b>185,691</b>

Figures may not sum to totals due to rounding.

**Table 17**  
**Miscellaneous Agency Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
<b>PSC Fines, Citations and Filing Fees</b>	180	425	341	346
<b>Legislature</b>	43	22	35	36
<b>Workers' Compensation</b>	53	60	55	55
<b>Public Defender</b>	2,172	2,088	2,114	2,157
<b>Attorney General</b>	33,540	30,443	31,391	31,785
<b>Executive &amp; Administrative Control</b>	11,757	14,525	7,822	8,000
<b>Financial &amp; Revenue Administration</b>	22,658	20,973	15,320	15,612
<b>Budget &amp; Fiscal Administration</b>	16,158	4,459	4,506	3,706
<b>General Services</b>	-	-	-	-
<b>Natural Resources</b>	127	122	132	133
<b>Agriculture</b>	139	66	104	104
<b>Health &amp; Mental Hygiene</b>	54,884	29,647	42,905	43,449
<b>Human Resources</b>	925	1,376	1,262	1,278
<b>Labor, Licensing &amp; Regulation</b>	11,116	9,538	13,655	10,749
<b>Public Safety &amp; MD State Police</b>	14,733	14,151	14,550	14,768
<b>Public Education</b>	14,771	7,979	5,423	5,477
<b>Housing and Community Development</b>	(545)	1,277	364	370
<b>Business &amp; Economic Development</b>	3,697	512	408	412
<b>Environment</b>	837	641	717	724
<b>Juvenile Services</b>	1	1	1	1
<b>Alcoholic Beverage Licenses</b>	1,341	1,400	1,428	1,457
<b>Net General Fund</b>	188,584	139,704	142,534	140,621

Figures may not sum to totals due to rounding.

**Table 18**  
**Transportation Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in thousands)*

	2015 Actual	2016 Actual	2017 Estimated	2018 Estimated
<b>Department of Transportation</b>				
Registrations	376,513	381,344	389,500	387,600
Licenses	52,675	53,604	54,400	56,200
Med-Evac Surcharge	69,683	71,479	73,008	72,652
Trauma Physician Services Surcharge	11,999	12,316	12,579	12,518
Miscellaneous Motor Vehicle Fees	187,209	193,238	195,890	196,517
Vehicle Emission Inspection Fees	33,849	31,617	33,205	33,699
Security Interest Filing Fees – Special Funds	11,770	12,473	12,700	12,800
Hauling Fees	10,020	10,628	10,600	10,700
Special License Tags – Special Funds	5,117	5,017	5,100	5,200
Titling Tax	795,510	860,416	882,000	895,000
Sales Tax on – Rental Vehicles	30,788	30,780	31,087	31,398
Special Distribution Tax				
	1,585,133	1,662,912	1,700,069	1,714,284
Motor Fuel Vehicle Tax	745,100	717,836	722,700	729,100
Road Tax	6,322	6,431	6,500	6,500
Decals & Permits	109	101	-	-
Sales Tax Equivalent	146,312	257,066	273,099	269,292
Indexing	25,749	36,435	37,241	50,101
	923,592	1,017,869	1,039,540	1,054,993
<b>Total</b>	<b>2,508,725</b>	<b>2,680,781</b>	<b>2,739,609</b>	<b>2,769,277</b>

Figures may not sum to totals due to rounding.



**Table 19**  
**Casino Revenues**  
**Fiscal Years 2015 – 2018**  
*(\$ in millions)*

	Video Lottery Terminals			
	FY 2015	FY 2016	FY 2017E	FY 2018E
Education Trust Fund	316.5	322.0	376.3	447.9
Casino Operators	253.9	304.3	406.7	517.8
Local Impact Grants	36.4	39.7	49.5	61.0
Small, Minority, and Women – Owned Business	9.9	10.8	13.5	16.6
Purse Dedication	46.0	50.1	56.8	66.4
Race Tracks Facility Renewal Account	7.1	7.0	8.8	10.9
State Lottery Agency	11.9	7.8	9.7	11.8
<b>Total Video Lottery Terminals</b>	<b>681.8</b>	<b>741.7</b>	<b>921.2</b>	<b>1132.4</b>
	Table Games			
	FY 2015	FY 2016	FY 2017E	FY 2018E
Education Trust fund	71.3	80.5	90.2	98.8
Casino Operators	285.1	321.8	432.1	526.8
Local Impact Grants	-	-	17.8	32.9
<b>Total Table Games</b>	<b>356.4</b>	<b>402.3</b>	<b>540.2</b>	<b>658.5</b>
	Miscellaneous			
	FY 2015	FY 2016	FY 2017E	FY 2018E
Education Trust Fund	44.6	1.3	-	-
	Total			
	FY 2015	FY 2016	FY 2017E	FY 2018E
Education Trust Fund	432.4	403.8	466.6	546.7
Casino Operators	539.0	626.1	838.9	1,044.6
Local Impact Grants	36.4	39.7	67.3	94.0
Small, Minority, and Women – Owned Business	9.9	10.8	13.5	16.6
Purse Dedication	46.0	50.1	56.8	66.4
Race Tracks Facility Renewal Account	7.1	7.0	8.8	10.9
State Lottery Agency	11.9	7.8	9.7	11.8
<b>Total</b>	<b>1,082.8</b>	<b>1,145.3</b>	<b>1,461.4</b>	<b>1,790.9</b>

Figures may not sum to totals due to rounding.



## Five Year Forecast

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These estimates are based on current economic outlook for the U.S. and Maryland economies. The broader economic situation and outlook remains positive yet subdued. Economic growth since the most recent recession has been lower than in the economic expansions of the 1990s and 2000s, and is forecast to remain so. The labor market is increasingly close to reaching full employment. This is expected to lead to more bargaining power for labor, and upward pressure on wages, the largest segment of personal income. The longer run forecast is shaped by demographic trends, particularly the aging of the population. As a result, a lesser 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 new workers has just recently entered the labor force. Such workers are typically less productive than more experienced workers; but productivity should increase as they gain experience.

Risks to the forecast include federal policy and spending uncertainty, monetary policy, as well as geopolitical risk. Federal spending caps, often referred to as the federal sequestration, have been raised since their imposition in 2013, but still constrain spending. At the time of this forecast, the Federal Reserve is anticipated to increase its benchmark interest rate; however, the timing of future rate increases and their effect on the economy is less certain. The price of oil has been relatively low since the end of 2014, but OPEC, a cartel of oil producing nations, has recently agreed to a production cut that may lead to higher prices. Given increased domestic production, the United States economy is less vulnerable to oil price movements, as higher prices incentivize domestic producers to increase their output.

**Table 20**  
**Long Term Economic Forecast**  
**Primary Indicators**

Calendar Year	2014	2015	2016	2017	2018	2019	2020
US Real GDP (2009 \$ in billions)	15,982 2.4%	16,397 2.6%	16,652 1.6%	17,035 2.3%	17,483 2.6%	17,884 2.3%	18,256 2.1%
US Non-Agricultural Employment (thousands)	138,939 1.9%	141,833 2.1%	144,313 1.7%	146,169 1.3%	147,951 1.2%	149,710 1.2%	151,018 0.9%
US Personal Income (\$ in billions)	14,810 5.2%	15,459 4.4%	16,023 3.6%	16,797 4.8%	17,675 5.2%	18,596 5.2%	19,499 4.9%
Consumer Price Index (% Δ from prior year)	1.2%	0.4%	1.9%	2.4%	2.4%	2.6%	2.7%
US 10 Year Treasury Bond Yield	2.5%	2.1%	1.8%	2.5%	3.2%	3.8%	4.1%
MD Total Non-Agricultural Employment (thousands)	2,621 0.9%	2,660 1.5%	2,704 1.6%	2,732 1.0%	2,753 0.8%	2,768 0.5%	2,784 0.6%
MD Personal Income (\$ in millions)	322,885 3.4%	336,187 4.1%	347,382 3.3%	361,375 4.0%	376,591 4.2%	392,211 4.1%	408,376 4.1%

Source: Board of Revenue Estimates and Global Insight (December 2015 Forecast)

Table 21  
**Maryland General Fund Revenues**  
 Fiscal Years 2016- 2022  
 (\$ in thousands)

	2016 Actual	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate
<b>Income Taxes</b>							
Individual	8,517,585	8,991,352	9,389,593	9,802,447	10,238,035	10,692,979	11,168,140
Corporation	874,465	771,602	830,074	874,758	912,402	949,072	987,216
TOTAL	9,392,050	9,762,953	10,219,667	10,677,205	11,150,437	11,642,051	12,155,356
<b>Sales and Use Taxes</b>	4,444,481	4,592,595	4,741,168	4,889,345	5,045,963	5,192,225	5,358,545
<b>State Lottery</b>	529,754	492,309	505,178	516,010	529,827	557,051	570,629
<b>Franchise, Excise, License, Fee</b>	1,716,344	1,663,276	1,668,292	1,652,411	1,652,134	1,663,994	1,697,192
<b>ONGOING GENERAL FUND REVENUES</b>	16,082,630	16,511,134	17,134,305	17,734,972	18,378,361	19,055,322	19,781,721
<b>Transfer Tax GF Share</b>	115,367	62,771	46,028	-	-	-	-
<b>TOTAL GENERAL FUND REVENUES</b>	16,197,996	16,573,905	17,180,333	17,734,972	18,378,361	19,055,322	19,781,721

Notes:

Totals do not include extraordinary revenues.

Table 22  
**Revenues From Maryland's Casinos**  
 Fiscal Years 2016- 2022  
 (\$ in thousands)

	2016 Actual	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2022 Estimate
<b>Video Lottery Terminals</b>							
Education Trust Fund	322,049	376,345	447,898	454,106	460,918	467,832	474,849
Licensee	304,279	406,734	517,819	524,777	532,649	540,639	548,748
Local Impact Grants	39,656	49,459	61,030	61,860	62,788	63,730	64,686
Business Development	10,815	13,489	16,645	16,871	17,124	17,381	17,642
Purse Dedication	50,058	56,781	66,351	67,253	68,262	69,286	70,325
Racetrack Renewal	7,004	8,773	10,869	11,016	11,182	11,349	11,520
MD Lottery & Gaming Control	7,832	9,652	11,779	11,940	12,119	12,301	12,485
Subtotal	741,694	921,233	1,132,391	1,147,824	1,165,042	1,182,517	1,200,255
<b>Table Games</b>							
Education Trust Fund	80,456	90,224	98,777	100,008	101,508	103,031	104,576
Licensee	321,823	432,124	526,812	533,376	541,377	549,497	557,740
Local Impact Grants	-	17,807	32,926	33,336	33,836	34,344	34,859
Subtotal	402,279	540,155	658,516	666,720	676,721	686,872	697,175
<b>Miscellaneous</b>							
Education Trust Fund	1,341	-	-	-	-	-	-
Subtotal	1,341	-	-	-	-	-	-
<b>Total</b>							
Education Trust Fund	403,846	466,569	546,675	554,114	562,426	570,862	579,425
Licensee	626,102	838,858	1,044,632	1,058,153	1,074,025	1,090,136	1,106,488
Local Impact Grants	39,656	67,266	93,956	95,196	96,624	98,074	99,545
Business Development	10,815	13,489	16,645	16,871	17,124	17,381	17,642
Purse Dedication	50,058	56,781	66,351	67,253	68,262	69,286	70,325
Racetrack Renewal	7,004	8,773	10,869	11,016	11,182	11,349	11,520
MD Lottery & Gaming Control	7,832	9,652	11,779	11,940	12,119	12,301	12,485
Total	1,145,314	1,461,388	1,790,906	1,814,544	1,841,763	1,869,389	1,897,430