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REPORT OF THE  
MARYLAND BOARD OF REVENUE ESTIMATES  
ON

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ESTIMATED  
MARYLAND  
REVENUES

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FISCAL YEARS ENDING JUNE 30, 2022 AND JUNE 30, 2023

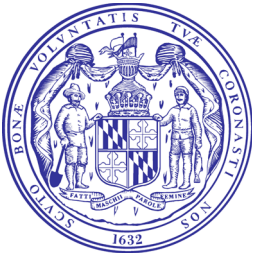
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SUBMITTED TO  
LARRY HOGAN  
GOVERNOR

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DECEMBER 14, 2021

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# State of Maryland Board of Revenue Estimates

Louis L. Goldstein Treasury Building, P.O. Box 466  
Annapolis, Maryland 21404-0466  
E-mail: [bre@comp.state.md.us](mailto:bre@comp.state.md.us)

## Members

Hon. 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 14, 2021

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, 2022 and June 30, 2023, 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

Telephone: 410-260-7450

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## Executive Summary

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The Board of Revenue Estimates submits revised general fund revenue estimates of \$21.592 billion for fiscal year (FY) 2022 and \$22.789 billion for FY 2023. The fiscal year 2022 revision represents an increase of \$495.2 million (2.3%) from the September 2021 estimate while the fiscal year 2023 revision represents an increase of \$542.6 million (2.4%). Although the dollar amounts are large, the December estimate marks a relatively minor adjustment in percentage terms to revenues from September, which saw a more substantial revision of expectations.

### *Economic Fundamentals*

In short, the impact of the severe economic contraction caused by the COVID-19 pandemic (the pandemic) was offset by an unprecedentedly large economic stimulus response from both monetary and fiscal authorities. As a result, income and consumption have grown significantly, to the benefit of tax collection. Because demand recovered while the pandemic continues to disrupt supply, prices have risen resulting in the highest recorded inflation in decades.

We expect growth to remain elevated in the near term as the stimulus flows through the economy. Individual savings have increased significantly and should help sustain consumption without further stimulus. Beyond the near term we expect growth to decline to rates consistent with long run trends. We expect the trend rate of growth in this expansion to be marginally higher than the previous expansion due to higher inflation and productivity growth. In other words, we expect higher growth in both nominal and real, or inflation-adjusted, terms.

### *Revenue Structure*

The reality of which industries are worst impacted by the pandemic and the state's tax structure insulate the state's revenue collections to a degree. Job losses have been most severe in low wage industries, while high wage industries have grown in terms of total wages. Paired with the state's relatively progressive personal income tax, revenue collection has grown despite an incomplete recovery in terms of employment. Further supporting revenue, the worst impacted industries are predominately service providers, and services are generally not subject to the sales tax. Consumption shifted from services to goods, which are taxable.

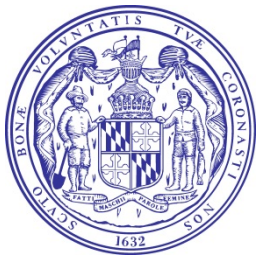
### *Non-Wage Income*

Capital gains income continues to steadily grow in our near-term outlook, reaching levels beyond those seen prior to the Great Recession. The increase is entirely attributable to the fact that the stock market, like asset prices generally, quickly recovered from their fall last spring and has largely sustained those gains. It may seem odd for stock prices to have reached new highs during a severe recession, but the current price of a stock is based on the market's expectation of future prices. If prices are expected to increase in the future, investors will buy the stock now in

order to realize the expected gain, bidding up the current price. Given that, the success of economic stimulus programs, and positive vaccine news, high stock prices seem less odd. Even so, we've learned that capital gains income is far more volatile and unpredictable than other types of income, with great consequence for revenue collection. The full application of the revenue volatility cap serves to ameliorate that consequence and we support the maintenance of that cap.

There is also significant uncertainty surrounding business income. But here the story is similar to that of withholding: the worst affected industries account for a smaller share of profits than industries that are less affected.

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Secretary, Department of  
Budget and Management

Executive Secretary:  
Andrew Schaufele  
Director, Bureau of  
Revenue Estimates

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

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Director, Bureau of Revenue Estimates  
Office of the Comptroller

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Chief Deputy Treasurer  
State Treasurer's Office

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Department of Legislative Services

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# Economic Outlook

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The COVID-19 pandemic (the pandemic) continues to cause disruption amid a rapid but uneven economic recovery. Following a steep decline in output, economic stimulus offset the collapse in demand. As a result, income continued growing through the pandemic. At the same time, the pandemic continues to disrupt supply, which cannot shift as quickly as demand. The result of supply constraints in the context of the recovery in demand is a rise in prices. We expect the recovery to continue but slow as the economy gets back to its long-term trend rate of growth.

Because total income and spending continued to grow through the pandemic, the economic fallout was more limited to directly affected industries, such as hospitality and recreation. Job losses were disproportionately in lower wage service industries. The resulting loss in wage income was largely offset by expanded unemployment benefits. As a result, tax revenue collections outperformed what we would typically expect from recent labor market conditions.

## **COVID-19 Pandemic**

At the time of writing, Johns Hopkins University records over 790,000 deaths in the U.S. due to COVID infection. The Maryland Department of Health reports over 11,000 deaths in the state. Another winter wave appears to be underway. Using a seven-day moving average, new cases were declining from an early fall peak and spiked upwards about a week after Thanksgiving. The ultimate trajectory of the pandemic is uncertain, though we generally expect it to worsen over winter and improve in spring. It is too soon to tell whether the new Omicron variant will substantially change this picture.

The worse the pandemic gets the more it will disrupt continued growth. As consumers and investors, people typically react to perceptions of increased risk by pulling back on consumption and increasing their savings. Furthermore, pandemic related supply constraints are causing price increases, leading to the highest measured inflation in decades.

## **Economic Conditions**

The recovery to date has been quick but uneven. As of the third quarter of calendar year 2021, nominal output, the dollar value of output, has reattained its pre-COVID growth trend. As of November, the unemployment rate is 4.2% nationally. Taken together these two statistics suggest the recovery is complete. Following the Great Recession the unemployment rate did not reach below 5.0% until 2016.

Monetary and fiscal stimulus boosted aggregate demand, keeping spending circulating. Maintaining spending prevented a worse recession and accelerated the recovery. Consistent with consensus economic policy, these tools were used at a scale necessary to bring aggregate demand back to its pre-crisis trend. This outcome was not predestined. In the early days of the pandemic short-term real interest rates spiked, while asset prices and inflation expectations deteriorated early warning signs of a financial crisis that was ultimately avoided.

Though the unemployment rate is low, total employment remains millions of jobs below its prior peak, pointing to a decline in labor participation. After falling 5.1% from January to April



2020, labor participation recovered only some of its loss by July 2020 and has been essentially flat ever since. The labor participation rate of workers over 55 remains near its pandemic low. Despite record openings, elevated wage growth, and expired unemployment benefits, potential workers have not been brought back into the labor force in significant numbers.

Total wage income fell 10.3% from February to April 2020 but is now 6.8% above its pre-pandemic peak. In real inflation-adjusted terms, aggregate wages are only 3.2% higher than their pre-pandemic peak. The real average wage, defined here as wage income per employee, has grown 8.4% since 2020 Q1, but practically all that wage growth occurred in 2020 Q2, the result of job losses concentrated in lower wage sectors. Since then, the real average wage has fallen 1.1%. It appears that recent nominal wage gains have generally kept up with inflation.

Because of supply disruptions, prices have risen above their pre-pandemic trend as demand recovered. Negative supply shocks reduce output and therefore increase prices, all else equal. But there are elements of the COVID Recession that do not fit neatly into the binary of supply or demand. Demand for services fell. But this reflects a disruption in the ability of producers to safely supply services in-person. Supply of goods has been constrained, but this partially reflects ongoing adjustment to increased demand for goods.

Declines in spending in directly affected industries like hospitality and accommodations have been offset by increased spending elsewhere, such as on durable goods. Spending shifted from higher risk to lower risk consumption and from services to goods. The sectors that are growing have higher average wages than the sectors that shed jobs. This shift in labor composition boosts the average wage and helps support tax withholding due to Maryland's relatively progressive state income tax structure.

The preceding analysis speaks to the macroeconomy on average. But this average is not necessarily representative of the experience of any one sector, region, group, person, or business. Losses and gains have been experienced unequally. Job losses were concentrated among lower income workers, particularly in services, while employment in higher income jobs recovered. Larger businesses have better access to government subsidies and the financial system, so they can sustain themselves for longer during a crisis. Small businesses run by Black and/or Latino owners closed, whether temporarily or permanently, at higher-than-average rates over the pandemic. In short, the pandemic worsened existing social inequalities.

## **Inflation**

The causes of inflation can be put into two categories: monetary and real. Monetary causes are an increase in the money supply or a decrease in money demand (how much wealth people prefer to hold in the form of money). In the long run, an increase in the money supply only influences nominal, or dollar, prices. The unit of measurement (the dollar) is smaller, but real prices are unchanged. In the short run, nominal prices are sticky – they take time to adjust. During this adjustment period, expansionary policy boosts aggregate demand. Eventually increased demand bids nominal prices up to the unchanged equilibrium real price.

The real causes of inflation, which result in real price increases, are an increase in aggregate demand or decrease in aggregate supply. Supply, based on real productive capability, is inflexible in the short run. If supply falls, it will take time to recover; if demand rises, supply will

take time to expand. The result of constrained supply during this period of adjustment is higher real prices and lower output than would otherwise be the case. The pandemic caused a negative supply shock and shifted demand towards goods. At the same time economic stimulus caused a rapid recovery in aggregate demand. The result is elevated inflation in the short run. How long the short run is depends on how long it takes aggregate supply to adjust, which in turn depends partially on the length and severity of the pandemic.

Inflation that persists into the long run is achieved through monetary causes. Whether elevated inflation will be persistent therefore depends primarily on monetary policy. Nominal Gross Domestic Product (GDP) has recovered its pre-pandemic trend; unemployment is low, and inflation elevated. These are signals that the Federal Reserve (the Fed) should move to tighten policy to prevent persistent inflation; they recently announced their intention to do just that.

## **Maryland**

Maryland's economy has structural factors in its favor. Typically, the State's economy and employment contracts less than the nation in a recession. This is partly due to high education and skill levels of the labor force and the presence of the federal government, a stable source of well-paying jobs. That said, employment in Maryland has not performed noticeably better than the nation. Maryland employment reached its peak in January 2020 and fell by 400,700 (14.4%) to a low in April 2020. As of October 2021, employment remains 91,800 (3.3%) below the prior peak. However, the State is slightly outperforming the nation in terms of wage growth. In 2021 Q2, the most recent data at the state level, total wages grew 13.3% year-over-year in Maryland compared to 12.3% for the nation.

As a percent of the total population, Maryland has the 8<sup>th</sup> highest vaccination rate in the nation. As a result of vaccinations and social distancing measures, the State's COVID case and death rates are typically lower than the nation's. This speaks to less disruption to income and demand of state residents. But supply is global and disruptions to it raise prices everywhere. More recently cases and deaths are trending up as they did last winter.

## **Outlook**

This is an especially challenging time to forecast economic and revenue conditions with a useful degree of accuracy. Revenue collection heavily depends on the course of the pandemic, its impact on the economy, and the federal economic policy response. Recent data shows that the recovery is slowing, particularly in the labor market. At the same time, new infections and daily deaths are rising. Given the recovery in GDP and elevated inflation the Fed is likely to begin withdrawing stimulus in the near term while the political appetite for fiscal stimulus is likely waning.

Our outlook calls for growth in employment and aggregate wages to slow but continue over the winter months. At the same time, there are factors supporting an outlook of continued growth. High savings will boost investment and can be drawn down to sustain consumption in the event of a decline in income. Record amounts of job openings are available and quits are occurring as employment shifts away from the directly affected sectors. Historically, job switching leads to wage gains for employees.

Beyond this winter, we expect the recovery to accelerate as the pandemic wanes. Real growth through 2022 is forecast to accelerate as supply adjusts and settles into longer run trends in 2022. Employment is not expected to regain its prior peak until early 2023. The table below shows the recent history and forecast growth rates for key economic variables.

<b>Outlook For Key Maryland Economic Variables</b>				
<b>Calendar Year</b>	<b>Employment Growth</b>	<b>Personal Income</b>	<b>Aggregate Wages</b>	<b>Average Wage</b>
2019	0.6%	2.5%	3.7%	3.0%
2020	-6.8%	6.1%	1.7%	9.3%
2021E	2.8%	6.2%	9.0%	5.9%
2022E	3.5%	1.0%	5.0%	1.5%
2023E	1.6%	4.4%	4.3%	2.7%
2024E	0.9%	4.5%	4.2%	3.3%
2025E	0.5%	4.5%	3.9%	3.4%
Source: Bureau of Revenue Estimates				

## **Risks**

The most significant risks to the current forecast are the future course of the pandemic and of monetary policy. The course of the pandemic, and when COVID becomes simply endemic, will depend on when the global population is widely vaccinated. It appears that increasing the vaccination rate will be a prolonged effort dependent on increasing trust among a population that is skeptical and/or has lower access to healthcare systems. Meanwhile, the virus continues to evolve. The new Omicron variant has caused concern though it is too early to tell what its impact will be. A return to widespread business closures and other restrictive social distancing orders is unlikely. But again, the worse the pandemic gets, the worse the economic disruption will be. So far, the pandemic has led to an economic policy response that boosted income, resulting in elevated revenue growth. However, this relationship may not hold as the appetite for more stimulus wanes.

Monetary policy is at an inflection point. The nominal recovery is complete, which means the Fed must tighten the right amount at the right time to prevent persistent inflation while avoiding hitting the brakes too hard. It is a delicate balance that is easy to miscalculate in normal times. If the Fed does too little too late, inflation could become a serious issue. If the Fed does too much too soon, it will reduce economic growth and prolong the labor market recovery.

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

Calendar Year	2017	2018	2019	2020	2021	2022	2023
Gross Domestic Product (\$ in billions)	18,079	18,607	19,033	18,385	19,424	20,256	20,778
	2.3%	2.9%	2.3%	-3.4%	5.7%	4.3%	2.6%
Federal Funds Rate	1.0%	1.8%	2.2%	0.4%	0.1%	0.2%	0.7%
10-Year Treasury Bond Yield	2.3%	2.9%	2.1%	0.9%	1.4%	1.7%	2.3%
Consumer Price Index (%D from prior year)	2.1%	2.2%	2.0%	1.3%	6.5%	2.0%	2.2%
Housing Starts (thousands of units)	1,205	1,247	1,292	1,397	1,571	1,455	1,328
	2.4%	3.5%	3.6%	8.1%	12.5%	-7.4%	-8.7%
New Light Vehicle Sales (thousands of units)	17,150	17,225	16,961	14,472	14,960	15,438	17,175
	-1.9%	0.4%	-1.5%	-14.7%	3.4%	3.2%	11.2%
Corporate Profits Before Taxes (\$ in billions)	2,129	2,305	2,368	2,244	2,674	2,725	2,763
	4.5%	8.3%	2.7%	-5.2%	19.2%	1.9%	1.4%
Total Non-Agricultural Employment (thousands)	146,595	148,893	150,900	142,252	146,140	151,741	153,939
	1.6%	1.6%	1.3%	-5.7%	2.7%	3.8%	1.4%
Unemployment Rate	4.4%	3.9%	3.7%	8.1%	5.4%	3.6%	3.5%
Personal Income (\$ in billions)	16,850	17,706	18,424	19,628	21,040	21,324	22,344
	4.7%	5.1%	4.1%	6.5%	7.2%	1.3%	4.8%

Source: IHS Markit (December 2021 Forecast)

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

Calendar Year	2017	2018	2019	2020	2021	2022	2023
Total Non-Agricultural Employment (thousands)	2,727 <i>1.1%</i>	2,752 <i>0.9%</i>	2,770 <i>0.6%</i>	2,582 <i>-6.8%</i>	2,654 <i>2.8%</i>	2,746 <i>3.5%</i>	2,790 <i>1.6%</i>
Existing Median Home Price (\$)	303,142 <i>3.8%</i>	316,217 <i>4.3%</i>	322,704 <i>2.1%</i>	334,732 <i>3.7%</i>	371,839 <i>11.1%</i>	396,191 <i>6.5%</i>	413,456 <i>4.4%</i>
Home Sales (thousands)	95,329 <i>4.4%</i>	96,540 <i>1.3%</i>	92,104 <i>-4.6%</i>	89,793 <i>-2.5%</i>	121,395 <i>35.2%</i>	117,442 <i>-3.3%</i>	109,868 <i>-6.4%</i>
Private Housing Starts (thousands)	15.8 <i>-9.4%</i>	17.1 <i>7.9%</i>	18.0 <i>5.6%</i>	17.5 <i>-2.9%</i>	17.1 <i>-2.2%</i>	19.1 <i>11.3%</i>	19.5 <i>2.1%</i>
Personal Income (\$ in millions)	361,777 <i>3.3%</i>	372,197 <i>2.9%</i>	381,397 <i>2.5%</i>	404,521 <i>6.1%</i>	429,746 <i>6.2%</i>	434,016 <i>1.0%</i>	453,270 <i>4.4%</i>
Wages and Salaries (\$ in millions)	173,621 <i>3.6%</i>	179,641 <i>3.5%</i>	186,246 <i>3.7%</i>	189,437 <i>1.7%</i>	206,471 <i>9.0%</i>	216,875 <i>5.0%</i>	226,244 <i>4.3%</i>
Dividends, Interest and Rent (\$ in millions)	66,873 <i>5.6%</i>	69,275 <i>3.6%</i>	70,769 <i>2.2%</i>	70,043 <i>-1.0%</i>	70,712 <i>1.0%</i>	73,575 <i>4.0%</i>	77,152 <i>4.9%</i>
Capital Gains (\$ millions)	11,379 <i>33.0%</i>	12,948 <i>13.8%</i>	13,207 <i>2.0%</i>	15,994 <i>21.1%</i>	17,601 <i>10.1%</i>	17,597 <i>0.0%</i>	17,544 <i>-0.31%</i>
Unemployment Rate	4.1%	3.8%	3.5%	6.8%	5.9%	4.1%	3.5%

Source: Board of Revenue Estimates and IHS Markit (December 2021 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 2021 through 2023. 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 2021 - 2023

\$ Thousands	GENERAL FUND			SPECIAL FUND			TOTAL		
	Fiscal Year 2021 Actual	Fiscal Year 2022 Revised Estimate	Fiscal Year 2023 Estimate	Fiscal Year 2021 Actual	Fiscal Year 2022 Revised Estimate	Fiscal Year 2023 Estimate	Fiscal Year 2021 Actual	Fiscal Year 2022 Revised Estimate	Fiscal Year 2023 Estimate
	<hr/>								
<b>INCOME TAXES</b>									
Individual Corporations	11,704,777	12,058,202	12,915,163				11,704,777	12,058,202	12,915,163
	1,461,893	1,389,464	1,526,557	379,147	360,363	395,918	1,841,040	1,749,827	1,922,475
<b>Total</b>	<b>13,166,670</b>	<b>13,447,666</b>	<b>14,441,720</b>	<b>379,147</b>	<b>360,363</b>	<b>395,918</b>	<b>13,545,817</b>	<b>13,808,029</b>	<b>14,837,638</b>
<b>SALES AND USE TAXES</b>	<b>4,988,078</b>	<b>5,509,522</b>	<b>5,742,530</b>	<b>470,837</b>	<b>665,445</b>	<b>650,872</b>	<b>5,458,915</b>	<b>6,174,967</b>	<b>6,393,402</b>
<b>STATE LOTTERY RECEIPTS</b>									
Lottery Games	631,719	648,688	664,897	127,963	125,996	127,948	759,682	774,684	792,845
Casinos				731,163	809,022	823,225	731,163	809,022	823,225
<b>Total</b>	<b>631,719</b>	<b>648,688</b>	<b>664,897</b>	<b>859,126</b>	<b>935,017</b>	<b>951,173</b>	<b>1,490,845</b>	<b>1,583,705</b>	<b>1,616,070</b>
<b>TRANSPORTATION REVENUES</b>									
Motor Vehicle Fuel Tax				1,017,091	1,084,078	1,209,886	1,017,091	1,084,078	1,209,886
Motor Vehicle Licenses, Fees				782,742	803,523	808,076	782,742	803,523	808,076
Motor Vehicle Titling Tax				976,727	991,380	1,031,040	976,727	991,380	1,031,040
Maryland Transit Fees				50,060	75,690	122,289	50,060	75,690	122,289
Maryland Port Fees				49,261	48,409	53,584	49,261	48,409	53,584
Maryland Aviation Fees				184,300	254,000	236,000	184,300	254,000	236,000
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,060,181</b>	<b>3,257,080</b>	<b>3,460,875</b>	<b>3,060,181</b>	<b>3,257,080</b>	<b>3,460,875</b>
<b>OTHER REVENUES</b>									
Property Transfer Tax				267,153	303,372	306,471	267,153	303,372	306,471
Business Franchises and Filing Fees	210,510	244,484	212,708	83,545			294,055	244,484	212,708
State Tobacco Tax	388,261	532,719	519,667				388,261	532,719	519,667
Tax on Insurance Companies	358,071	567,602	585,590				358,071	567,602	585,590
Alcoholic Beverages Excises	39,722	33,621	33,918				39,722	33,621	33,918
Estate & Inheritance Taxes	240,592	214,330	225,071				240,592	214,330	225,071
Clerks of the Court	36,096	42,588	32,643				36,096	42,588	32,643
District Courts	35,191	43,757	48,767				35,191	43,757	48,767
Hospital Patient Recoveries	64,754	60,142	61,715				64,754	60,142	61,715
Interest on Investments	12,297	15,000	20,000						
Miscellaneous Fees, Other Receipts	300,451	311,403	299,795						--- See Notes ---
<b>Total</b>	<b>1,685,944</b>	<b>2,065,647</b>	<b>2,039,874</b>						
<b>Total Current Revenues</b>	<b>20,472,411</b>	<b>21,671,523</b>	<b>22,889,021</b>						
Extraordinary Revenues <sup>1</sup>	358,603	-	-						--- See Notes ---
Revenue Volatility Cap <sup>2</sup>	-	(80,000)	(100,000)						
<b>GRAND TOTAL</b>	<b>20,831,014</b>	<b>21,591,523</b>	<b>22,789,021</b>						--- See Notes ---

<sup>1</sup> Extraordinary revenues includes:

(a) \$341,446,827 is the FEMA reimbursement as included in the budget and outlined in the FY 2022 Fiscal Digest

(b) \$17,156,310 is attributable to a payment to the General Fund from the Maryland Technology Development Corporation (TEDCO)

<sup>2</sup> Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by several succeeding Budget Reconciliation And Financing Acts

Table 4  
**Maryland General Fund Revenues**  
Fiscal Years 2021 - 2023

\$ Thousands	FY 2022					FY 2023			
	FY 2021 Actual	September Estimate	December Estimate	Difference	Growth	September Estimate	December Estimate	Difference	Growth
<b>INCOME TAXES:</b>									
Individual	11,704,777	11,796,984	12,058,202	261,217	3.0%	12,634,221	12,915,163	280,941	7.1%
Corporation	1,461,893	1,445,951	1,389,464	(56,487)	-5.0%	1,555,574	1,526,557	(29,017)	9.9%
Total	13,166,670	13,242,936	13,447,666	204,730	2.1%	14,189,795	14,441,720	251,925	7.4%
<b>SALES AND USE TAXES</b>	4,988,078	5,283,158	5,509,522	226,365	10.5%	5,519,908	5,742,530	222,622	4.2%
<b>STATE LOTTERY</b>	631,719	641,020	648,688	7,668	2.7%	651,428	664,897	13,469	2.5%
<b>OTHER REVENUES</b>									
Business Franchise Taxes	210,510	252,844	244,484	(8,360)	16.1%	222,770	212,708	(10,062)	-13.0%
Tax on Insurance Companies	358,071	575,874	567,602	(8,272)	58.5%	591,110	585,590	(5,520)	3.2%
Estate and Inheritance Taxes	240,592	206,673	214,330	7,658	-10.9%	222,212	225,071	2,859	5.0%
Tobacco Tax	388,261	466,890	532,719	65,829	37.2%	455,481	519,667	64,185	-2.5%
Alcoholic Beverages Excise Tax	39,722	32,572	33,621	1,049	-15.4%	32,844	33,918	1,074	0.9%
District Courts	35,191	50,258	43,757	(6,501)	24.3%	51,761	48,767	(2,994)	11.4%
Clerks of the Court	36,096	42,588	42,588	0	18.0%	32,643	32,643	0	-23.4%
Hospital Patient Recoveries	64,754	60,142	60,142	0	-7.1%	61,715	61,715	0	2.6%
Interest on Investments	12,297	10,000	15,000	5,000	22.0%	15,000	20,000	5,000	33.3%
Miscellaneous	300,451	311,403	311,403	0	3.6%	299,795	299,795	0	-3.7%
Total	1,685,944	2,009,244	2,065,647	56,403	22.5%	1,985,332	2,039,874	54,543	-1.2%
<b>Total Current Revenues</b>	20,472,411	21,176,357	21,671,523	495,166	5.9%	22,346,462	22,889,021	542,559	5.6%
Extraordinary Revenues <sup>1</sup>	358,603	-	-	-		-	-	-	
Revenue Volatility Cap <sup>2</sup>	-	(80,000)	(80,000)	-		(100,000)	(100,000)	-	
<b>GRAND TOTAL</b>	20,831,014	21,096,357	21,591,523	495,166	3.7%	22,246,462	22,789,021	542,559	5.5%

<sup>1</sup> Extraordinary revenues includes:

(a) \$341,446,827 is the FEMA reimbursement as included in the budget and outlined in the FY 2022 Fiscal Digest

(b) \$17,156,310 is attributable to a payment to the General Fund from the Maryland Technology Development Corporation (TEDCO)

<sup>2</sup> Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by several succeeding Budget Reconciliation And Financing Acts

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# Individual Income Tax

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General fund revenue from the personal income tax is estimated to grow 3.0% and 7.1% to \$12.058 billion and \$12.915 billion for fiscal years (FY) 2022 and 2023, respectively. Withholding is anticipated to grow 5.9% in FY 2022 and another 5.0% in FY 2023. The COVID-19 Recession injects significant uncertainty into this estimate, but it is worth noting an especially heightened risk for non-wage income. This forecast includes strong growth of capital gains, for which the strong stock market bestows confidence, but time has shown capital gains are generally not sustainable over long periods of time without at-least a short-term interruption.

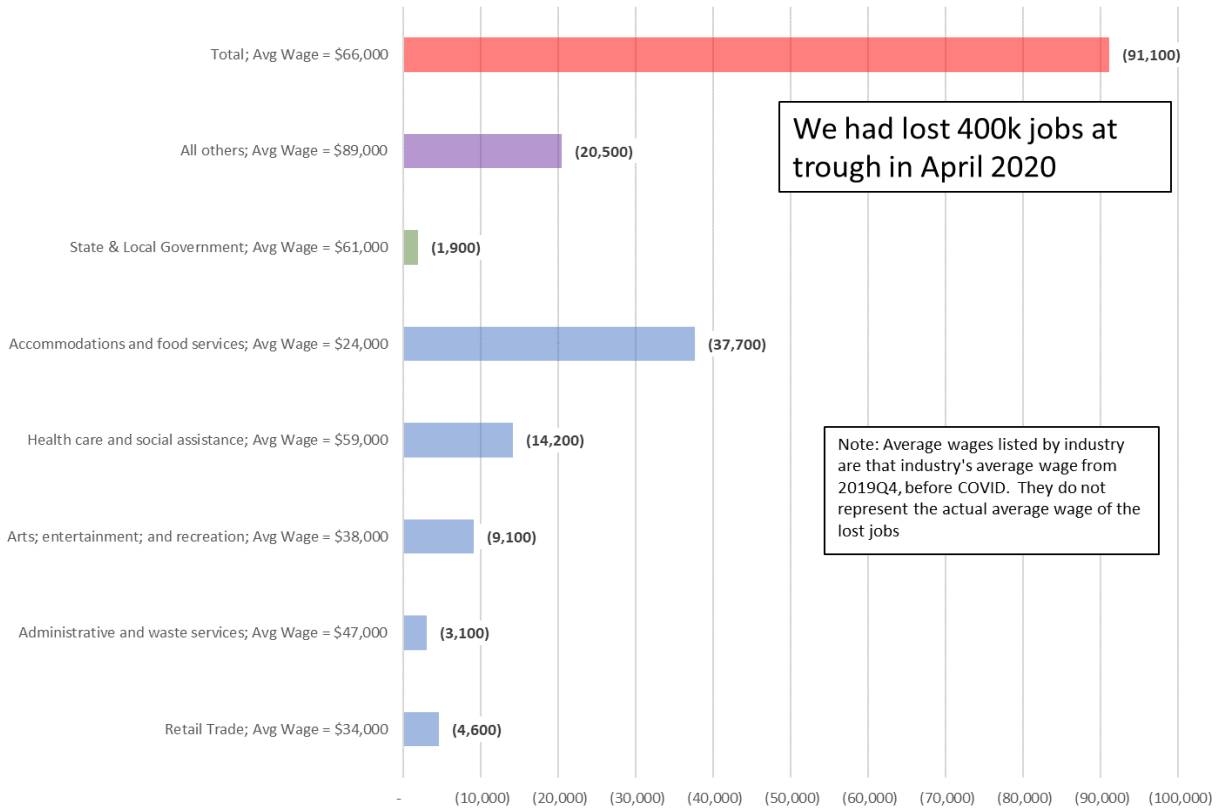
## **Withholding**

In order to better understand withholding, it's pivotal to understand wages. The following chart distills the impact the COVID-recession has had on the job market. We see that the industries that require human contact are acutely impacted – we also find that those industries, on average, pay less than the statewide average. The clearest example is the Accommodations and Food Services industry, which saw the sharpest decline in employment and pays the smallest average wage: \$37,700. On the other hand, jobs averaging wages of approximately \$89,000 constitute less than a quarter of the shortfall in Maryland's employment. While the job losses are sobering, the distribution of job losses among low wage sectors – as opposed to the more evenly dispersed job losses during the Great Recession – has meant State withholding has not deteriorated in a manner similar to prior recessions.

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Jobs Lost From Feb 2020 to Oct 2021: Top 5 Private Sector; S&L Gov; & All Others

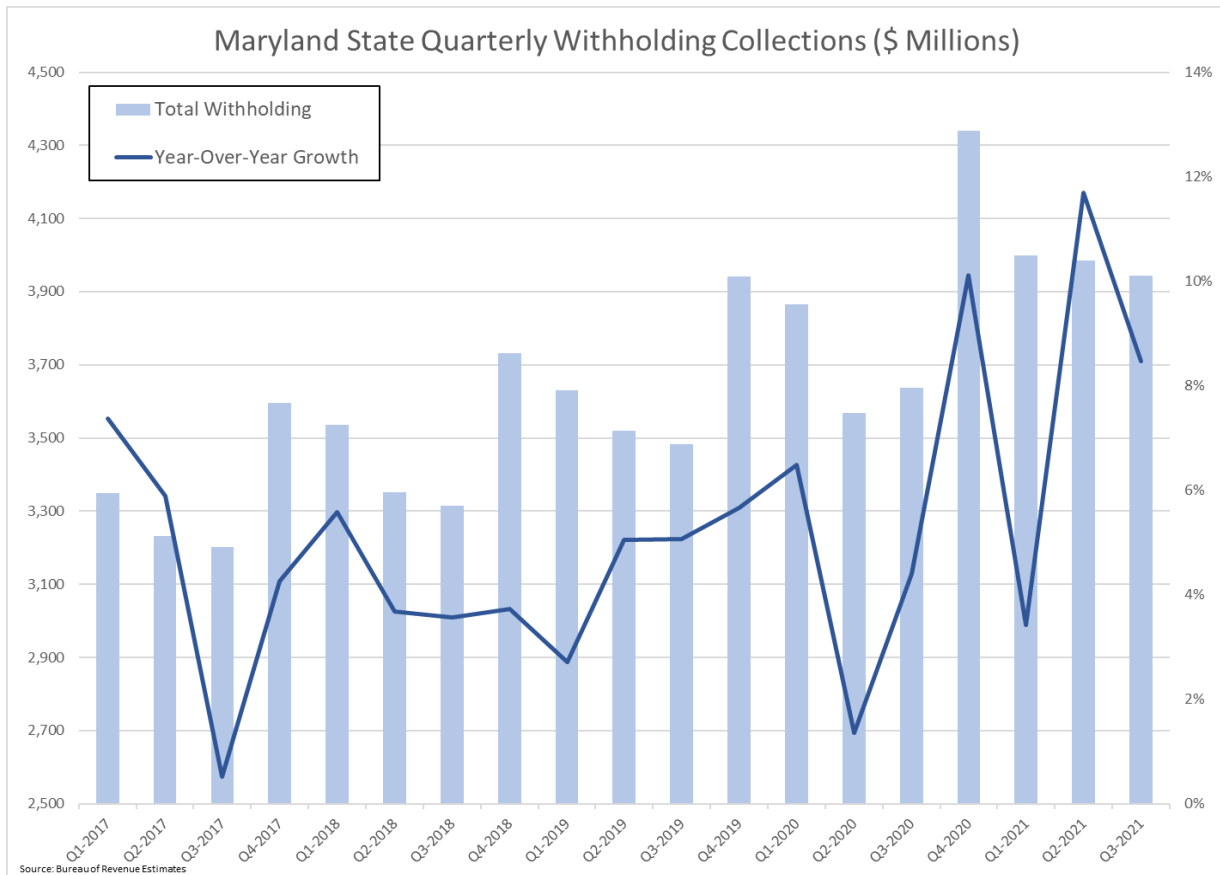


Sources: U. S. Bureau of Labor Statistics, Maryland Department of Labor, Comptroller of Maryland, Bureau of Revenue Estimates

### *Wage Growth and Year-To-Date Withholding*

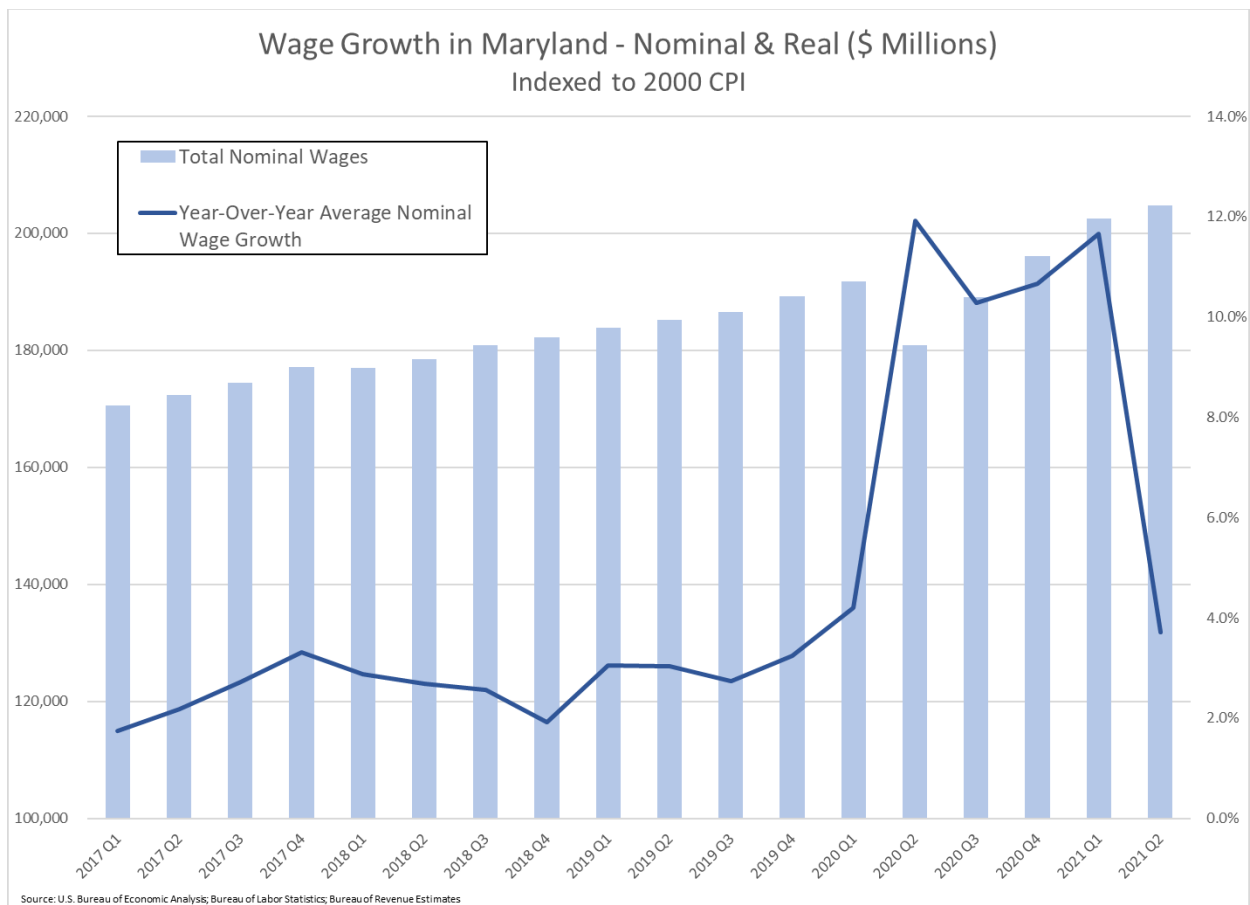
To this end, withholding has not only been insulated from the widespread unemployment brought on by the COVID-recession but has instead seen growth exceeding trends from the prior expansion, see the chart below. As mentioned previously, this is partially attributable to the nature of COVID related job losses but was further bolstered by the strongest wage growth Maryland has seen since the Great Recession. Aggregate wage growth reattained its pre-pandemic peak in the fourth quarter of 2020 and has since continued strong growth despite the job market not yet fully recovering. This is due to strong growth in average wages driven by a variant of factors including increased productivity, the unique labor market conditions created by the pandemic, and heightened inflation. These driving factors will fade as the impact of the pandemic wanes, but we expect they may continue for up to another year.

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Further impacting wage growth is the composition of the remaining lost jobs in Maryland. We expect Maryland to regain its prior level of peak employment by the first quarter of 2023. And although additional employment will further positively impact withholding, the majority of these jobs will go to industries worst impacted by the pandemic, specifically industries with relatively low average wages. As a result, the impact of the additional employment although positive, will be less than might otherwise be expected in a more typical recovery.

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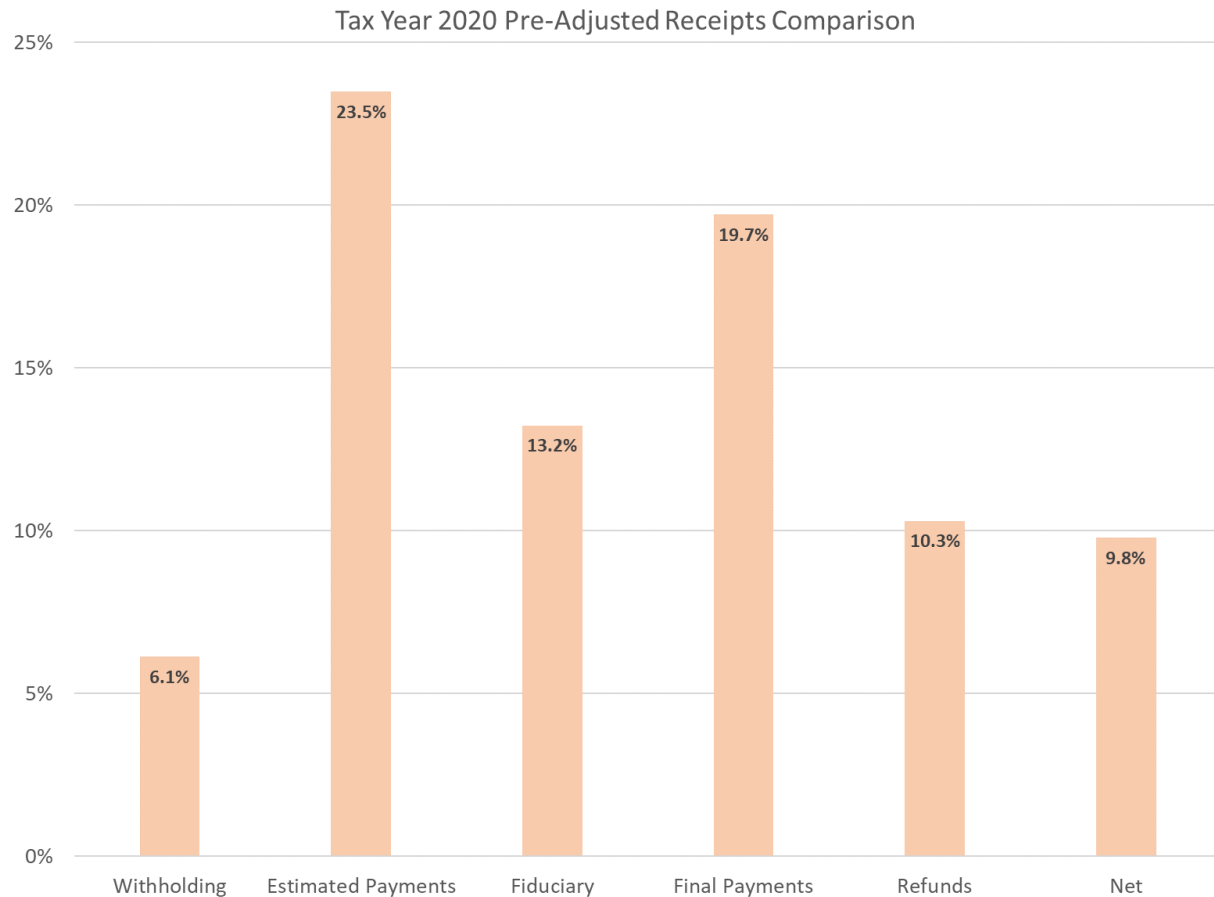
### *Discussion of Unemployment Insurance (UI)*

Through the CARES Act, Congress established three new unemployment benefits programs: the Federal Pandemic Unemployment Compensation (FPUC), the Pandemic Emergency Unemployment Compensation (PEUC), and the Pandemic Unemployment Assistance (PUA). The FPUC included an additional \$600 weekly benefit in addition to the benefit recipients would normally receive. The PEUC is a separate program that extends UI benefits for an additional 13 weeks for those who have already exhausted their benefits. The PUA offers UI benefits to those who would not typically qualify such as contractors, the self-employed, and gig workers. These and all other similar extended UI programs expired as of September 4th this year.

It is important to keep in mind that although a tremendous sum of income was delivered to Marylanders through these programs, The Maryland Relief Act of 2021 has exempted the large majority of unemployment recipients from paying income tax on UI income. Although it appears that utilization of this policy in tax year (TY) 2020 was below expectations, we assume a greater utilization rate going into TY 2021. These expectations and policy adjustments have been considered in our forecast.

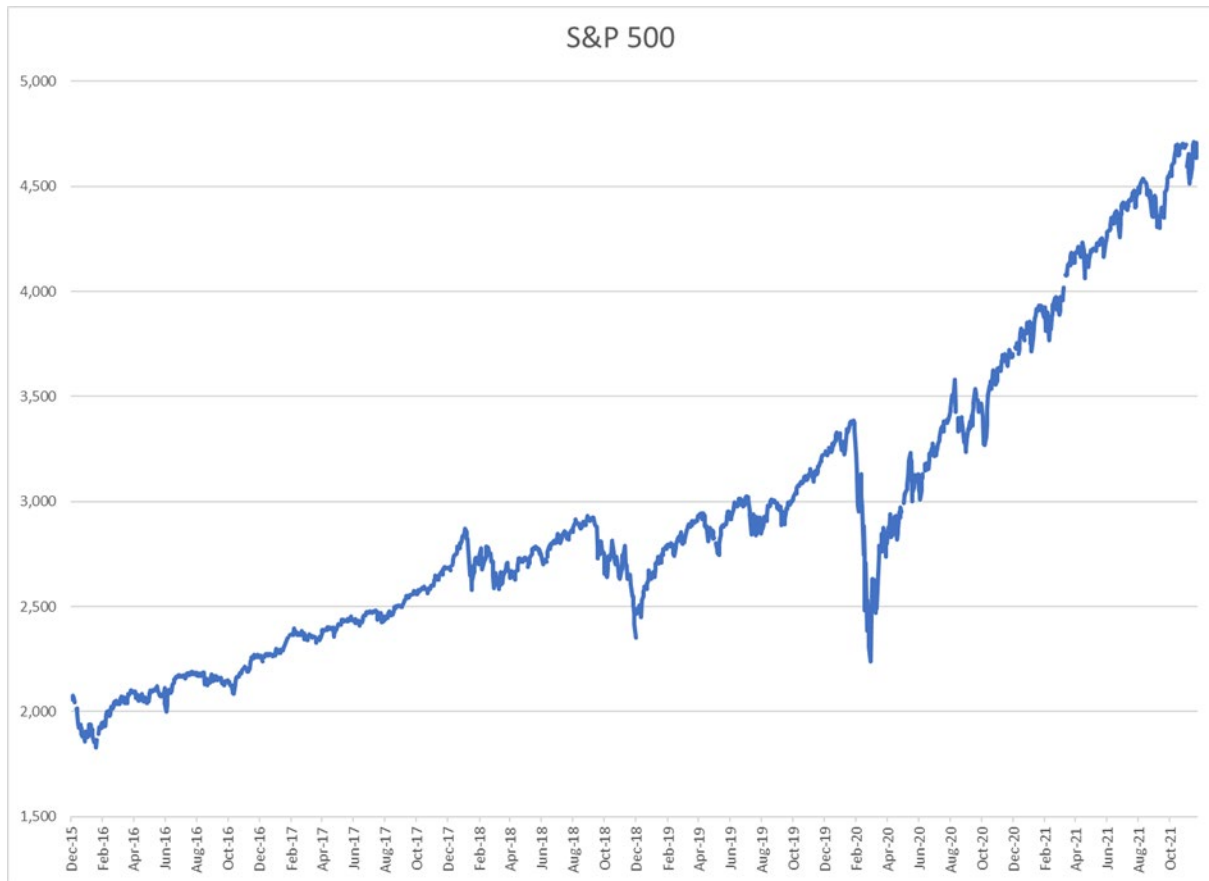
## Tax Year 2020

When looking back at TY 2020, the vast majority of the revenue has been collected but it is important to note that we are still receiving tax returns, particularly from high income filers. That said, it is abundantly clear that TY 2020 exceeded expectations due to a number of factors ranging from the aforementioned strong wage growth, to substantial non-wages growth, as well as fewer than expected refunds.



## Non-Wage Income

When discussing TY 2020 income tax revenue, there are very strong indications that non-wage income has risen substantially. This is likely a combination of business income from small and medium sized firms as well as substantial capital gains growth. While the stock market took a nosedive at the beginning of the pandemic, it had more than recovered since and continued a historic run until the publishing of this report. This is likely because of the stimulus and the market's general consensus for a rapid recovery. Capital gains (expected to account for roughly 7.5% of total income tax receipts for tax year 2021) are notoriously difficult to estimate, but generally, when the market increases so does capital gains income.



Business income is tremendously uncertain. While we are excited that the job and wage losses have not been as significant as in other recessions, we have no data regarding the profitability of these industries. To this end, Maryland likely benefits from our relatively high concentration in high-skill/high-education firms. These firms are more than likely to be able to maintain a higher level of business during the pandemic. But, again, that does not mean that they are profitable. Business income accounted for a little more than 8% of total income in 2018.

There are positive risks for non-wage income as well. For example, the confluence of the strong market and the possibility for higher tax rates on capital gains in the future might induce a torrent of gains taking before year-end. Moreover, a similar phenomenon could unfold for dividend income – dividend income tax rates might increase in the future, prompting special dividend payments in 2021. Should this situation play-out, it would likely resemble the volatile years of 2012 and 2013, colloquially referred to as the fiscal cliff, where 2012 benefitted from the prospect of higher rates in the future, but the following year was significantly down as a result. In these instances, taxable income shifts across years, it does not necessarily mean that there is “additional” taxable income.

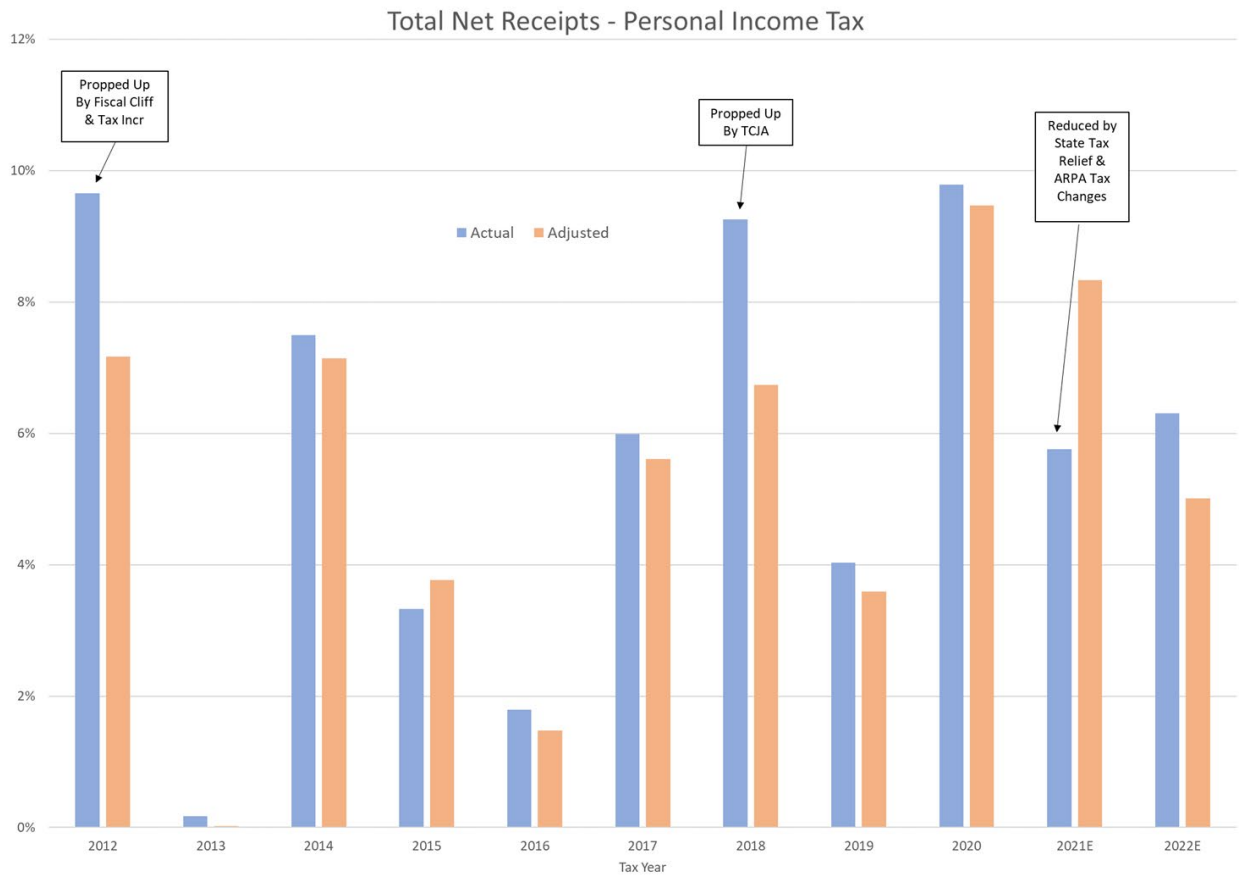
## **Refunds**

Although refunds grew by 10.3% in TY 2020, this was significantly below our expectations. It is difficult to discern the exact cause of this thus far but now it seems that the utilization of various policies put in place by The Maryland Relief Act and other similar law changes was lower than expected. Particularly those policies that were entangled with the federal policy that allowed the use of 2019 earned income to calculate the 2020 credit – this ability was significantly underutilized. Consequently, foregone refunds have directly bolstered State income tax revenue in TY 2020.

## **The Forecast**

Looking into the future, as mentioned above, we are generally optimistic on the wage growth in the aggregate as average wages continue to increase and as employment continues to recover. As a result, withholding – as the largest component of individual income tax – will continue to drive strong income tax growth going into the near future. Simultaneously, as mentioned earlier, we are assuming better utilization of policies such as the expanded EITC eligibility criterion to increase refunds and reduce taxable income generally in TY 2021. The net impact being moderate growth in TY 2021 followed by strong growth going into TY 2023 and 2024 as temporary pandemic relief policies expire, allow the full income tax utilization of the recovered Maryland tax base. This phenomenon can be seen in the chart below which demonstrates that we would have expected extremely strong income tax growth in TY 2021 if not for the various law changes put in place to support taxpayers through the pandemic.

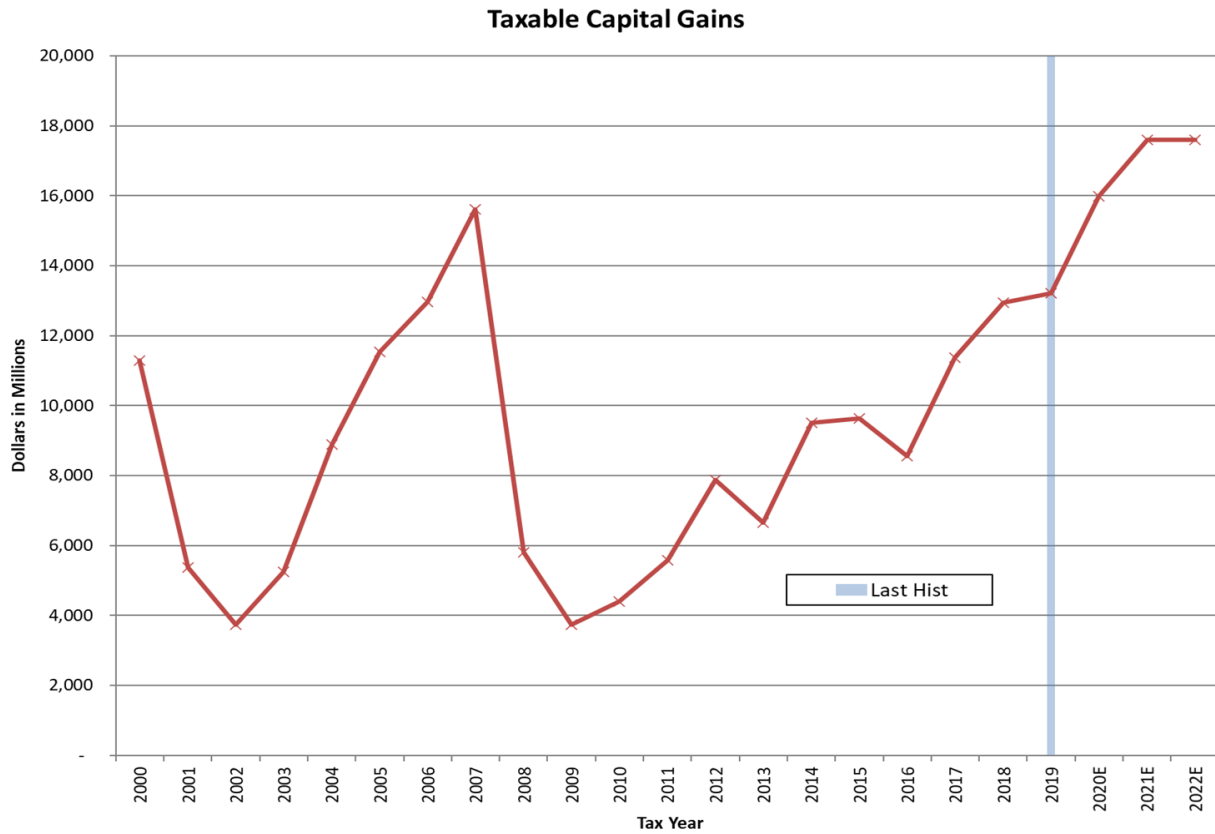
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## Risks

The most uncertain aspect of the individual income tax moving forward is the non-wage income. Although we feel confident in our estimates of non-wage income in TY 2020 and 2021. Looking farther into the future the risk of extreme volatility in this revenue stream becomes very high. The stock market has been extremely volatile over the pandemic, albeit with a very positive trend, and concurrently the State's capital gains collections are at peak levels similar to those just prior to 2008. We do not make a habit of predicting asset market behavior, but it is worth noting that non-wage revenues are not nearly as consistent or durable as wage income, thus this boost in non-wage income may very well be a temporary phenomenon or accompanied by a year of correction.

That said, there is also the risk to the near-term upside, specifically a situation similar to the fiscal cliff of 2012. The ongoing policy discussions on changing various tax provisions could very well have initiated the realization of gains to avoid increased future tax rates. Unfortunately, we lack the data to follow this in real time but in such a scenario it is fully possible, and perhaps likely, that our estimates of taxable capital gains are significantly below the actual amounts.



**Table 5**  
**Individual Income Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	2020 Actual	2021 Actual	2022 Estimated	2023 Estimated
<b>Gross Receipts (State &amp; Local)</b>				
<b>Withholding</b>	15,071,419	16,138,143	17,083,738	17,930,010
<b>Estimated Payments</b>	2,220,171	3,124,243	3,093,632	3,082,130
<b>Payments with Final Returns</b>	2,450,459	2,546,132	2,840,591	2,969,652
<b>Fiduciary</b>	145,204	160,345	183,364	186,018
<b>Gross Receipts</b>	19,887,254	21,968,864	23,201,325	24,167,810
<b>Refunds</b>	(2,624,661)	(2,755,890)	(3,236,636)	(3,068,499)
<b>Net Receipts (State &amp; Local)</b>	17,262,593	19,212,974	19,964,689	21,099,310
<b>Local Reserve Account</b>	(6,562,059)	(7,506,231)	(7,904,521)	(8,182,181)
<b>Income Tax Check-offs</b>	(1,659)	(1,966)	(1,966)	(1,966)
<b>Net General Fund</b>	10,698,875	11,704,777	12,058,202	12,915,163

Figures may not sum to totals due to rounding.



# Corporate Income Tax

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General Fund Corporate Income Tax (CIT) revenue grew 39.0% to \$1.462 billion in Fiscal Year (FY) 2021. Both final payments, based on tax year 2020 profits, and estimated payments, based on tax year 2021 expected profits, grew by double digits. Gross revenue collected in FY 2021 grew 31.3% while refunds dropped 15.2%.

This remarkably high growth rate is likely attributable to continuing impacts of the Tax Cuts and Jobs Act (TCJA), stimulus measures such as the Paycheck Protection Program, and to the fact that total income and spending continued to grow through the pandemic. The TCJA made changes at the federal level that expanded the definition of taxable income while reducing the statutory tax rate. At the state level, the statutory rate is unchanged but taxable income is larger, resulting in revenue growth. Businesses in all sectors received significant pandemic related government benefits in tax year 2020. At the beginning of the pandemic, businesses cut costs, particularly by shedding employment. But, unlike in most recessions, demand continued to grow due to economic stimulus. Revenue therefore held up while cost fell, resulting in significant profit growth in the aggregate. This is not to say that all businesses saw increased profits, many have shuttered permanently. It does mean that large businesses that drive CIT revenue experienced higher profits on average. Lastly, refunds paid out in FY 2021 fell 15.2%, marginally boosting net revenue.

Going forward we expect CIT revenue growth to slow. In FY 22, CIT revenue is forecast to decline 5.0% before returning to growth in FY 23. Year-to-date in FY 22 refunds remain unusually low. That said, we expect refund volume to return to more normal levels by the end of FY 22, marginally reducing net revenue growth.

Concerning longer run trends, the International Monetary Fund finds that competition among producers, both in the US and globally, is declining over time, largely as a result of state aid to incumbent businesses. Declining competition enables firms to receive more profit by producing less at a higher real price than they could in a more competitive market. While declining competition has a negative impact on the economy in general, it has a positive impact on profits and therefore corporate tax revenue. This is a structural factor that changes gradually over time, but it helps explain profit growing faster than aggregate income.

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**Table 6**  
**Corporate Income Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Gross Receipts</b>	1,543,077	2,026,185	Note 1	Note 1
<b>Refunds</b>	(218,479)	(185,251)	Note 1	Note 1
<b>Net Receipts</b>	1,324,599	1,841,040	1,749,827	1,922,475
<b>Transportation Trust Fund</b>	(193,315)	(268,685)	(255,373)	(280,570)
<b>Higher Education Investment Fund</b>	(79,476)	(110,462)	(104,990)	(115,349)
<b>Net General Fund</b>	1,051,808	1,461,893	1,389,464	1,526,557

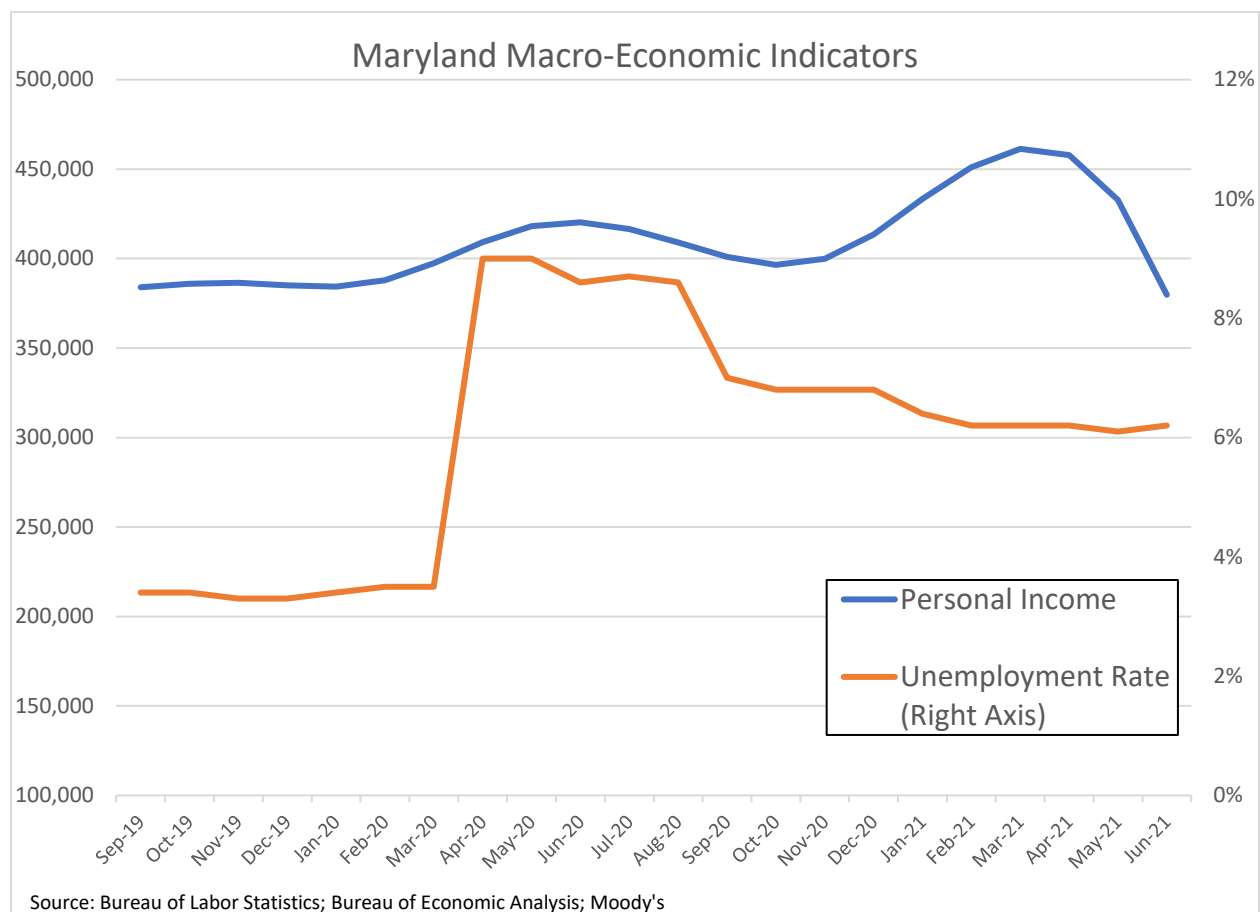
Note 1: Estimates are only for net receipts  
 Figures may not sum to totals due to rounding.

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# Sales and Use Taxes

The Sales and Use Tax (SUT) revenue grew 7.6% in Fiscal Year (FY) 2021, more than recovering from a decline of 3.7% in fiscal year 2020. We forecast general fund SUT revenue to grow 10.5% in FY 2022. Several factors support this expectation. Consumption has held up well through the pandemic even as private savings increased. Demand shifted away from services, which are generally untaxed, and towards goods, which are generally taxed. Elevated inflation too means higher nominal prices and therefore higher nominal revenue growth. As the pandemic wanes we expect a partial shift back toward services, but exactly when this will happen is uncertain. We forecast growth to slow to 4.2% in FY 2023.

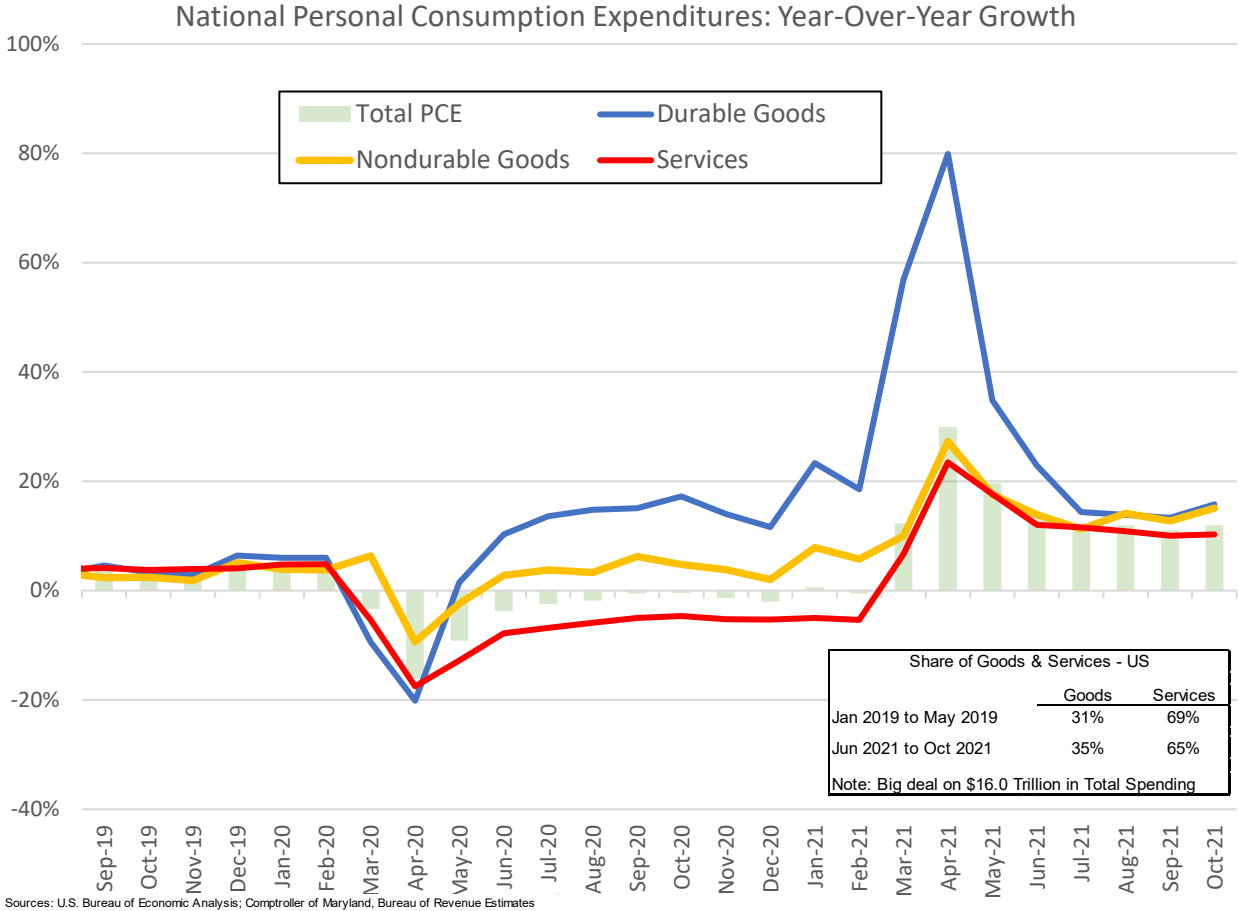
Because of government stimulus programs, income and wages continued to grow despite lower employment. Job losses are concentrated in service industries with below average wages, meaning that enhanced unemployment benefits nearly matched or exceeded recipients' previous incomes. As a result, people continued spending throughout the recession and recovery.



The pandemic shifted consumer preferences in three main ways: increased relative demand for goods, increased propensity to save, and increased demand for online retail.

Consumption spending has continued to grow but by less than income. The resulting increase in savings initially throttled back on consumption in the beginning of the pandemic, but those savings are now available to sustain consumption beyond the expiration of stimulus programs. We expect increased savings to be gradually drawn down and therefore support above-trend consumption growth in the near term.

As income rises, services typically become a larger share of total consumption. But the pandemic caused in-person services to become higher risk forms of production and consumption. As a result, consumers demand has shifted from services and towards goods, see the chart below. SUT revenue is derived almost entirely from the sale of goods. As the pandemic wanes we expect some shift in consumer spending back to services. So far, this shift has not happened, likely due to the Delta variant of COVID. The Delta variant is more contagious and so increased the risk of consuming in person services and prolonged the pandemic. It is possible that the Omicron variant could have a similar effect.



The final notable change in consumer behavior has been the shift towards online retail. For years online retail’s share of total sales has grown, but the pandemic accelerated this process.

Revenue from remote sellers (including marketplace facilitators) is expected to grow 13.5% in FY 2022, after having grown 57.9% in FY 2021. Only the first \$100 million in revenue from Remote Sellers goes to the general fund, the remainder is distributed to the Blueprint For Maryland’s Future Fund (the blueprint fund). We expect the blueprint fund to receive an increasing share of SUT revenue over the near term. We expect a partial shift back to in-store retail as the pandemic wanes, but the timing depends on the uncertain course of the pandemic. Post-pandemic we expect general fund SUT revenue growth to slow to about 2.0% a year, consistent with the pre-pandemic trend. In part this return to the prior trend occurs because recent base expansions for the SUT, like remote sales and digital goods, are dedicated to the blueprint fund.

**Table 7**  
**Sales and Use Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Gross Collections</b>	4,957,594	5,468,699	6,179,272	6,397,533
<b>Assessments</b>	11,739	2,273	8,054	8,537
<b>Refunds</b>	(32,673)	(12,057)	(12,358)	(12,667)
<b>Transportation Trust Fund</b>	(31,686)	(21,374)	(24,152)	(27,775)
<b>CB 2010 Fund</b>	(38,727)	(26,123)	(29,519)	(33,947)
<b>Blueprint for MD's Future Fund</b>	(231,373)	(423,340)	(611,773)	(589,150)
<b>Total General Fund</b>	4,634,874	4,988,078	5,509,522	5,742,530

Figures may not sum to totals due to rounding.

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# Remaining Supporting Tables

**Table 8A**  
**Traditional Lottery - Sales**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020 Actual</b>	<b>2021 Actual</b>	<b>2022 Estimated</b>	<b>2023 Estimated</b>
<b>Pick 3</b>	251,675	290,799	280,475	281,329
<b>Pick 4</b>	333,716	395,655	387,560	387,560
<b>Multimatch</b>	28,983	33,702	31,226	31,226
<b>Instant/5 Card Cash</b>	858,767	999,201	1,006,304	1,016,739
<b>Keno/Racetrax</b>	489,483	572,194	603,606	614,586
<b>Bonus Match 5</b>	18,524	20,508	20,164	20,140
<b>MegaMillions/Powerball</b>	148,983	201,186	197,401	180,011
<b>Instant Ticket Lottery Machines<sup>1</sup></b>	10,226	13,683	16,159	16,401
<b>Cash4Life/Fast Play</b>	51,773	87,379	99,754	98,957
<b>Gross Sales</b>	2,192,129	2,614,308	2,642,649	2,646,949

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 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Pick 3</b>	105,614	122,692	114,901	113,637
<b>Pick 4</b>	124,620	129,994	143,842	159,551
<b>Multimatch</b>	10,189	11,141	10,970	10,870
<b>Instant/5 Card Cash</b>	147,925	155,172	157,463	161,400
<b>Keno/Racetrax</b>	117,923	137,979	146,192	150,072
<b>Bonus Match 5</b>	6,628	7,432	7,080	6,915
<b>MegaMillions/Powerball</b>	61,466	82,214	82,326	73,496
<b>Instant Ticket Lottery Machines<sup>1</sup></b>	1,563	2,143	1,505	1,527
<b>Cash4Life/Fast Play</b>	12,741	18,673	21,932	23,950
<b>Gross Revenue</b>	588,668	667,440	686,212	701,419
<b>Less: Stadium Authority Revenue</b>	(40,000)	(35,208)	(35,233)	(34,637)
<b>Less: Veteran’s Trust Fund Revenue</b>	(156)	(214)	(150)	(153)
<b>Less: Youth Sports</b>	-	(299)	(1,000)	(1,000)
<b>Less: Maryland Humanities Council</b>	-	-	(150)	(150)
<b>Less: Legislative changes to distributions</b>	-	-	(990)	(582)
<b>Net General Fund</b>	548,512	631,719	648,688	664,897

Figures may not sum to totals due to rounding.

**Table 9**  
**Business Franchise Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Public Service Company Franchise Tax</b>	137,713	144,260	141,484	143,692
<b>Filing Fees</b>	73,546	149,795	103,000	69,016
<b>Blueprint Fund <sup>1</sup></b>	-	(83,545)	-	-
<b>Net General Fund</b>	211,259	210,510	244,484	212,708

Note 1: A one-time distribution of Filing Fee revenue as set forth in Chapter 16 of the 2019 Legislative Session



**Table 10**  
**Insurance Premium Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Insurance Premium Tax</b>	427,228	387,170	599,602	617,590
<b>MD Health Benefit Exchange Distributions</b>	(31,377)	(29,100)	(32,000)	(32,000)
<b>HMO &amp; MCO Premium Tax Collections<sup>1</sup></b>	-	-	206,839	213,044
<b>Net General Fund</b>	395,851	358,071	774,441	798,634

Note 1: Chapter 538 of the 2020 Legislative Session eliminated the Rate Stabilization Fund, therefore premium tax collections from Health Maintenance Organizations (HMO) & Managed Care Organizations (MCO) are deposited into the general fund beginning in fiscal year 2022

**Table 11**  
**Estate and Inheritance Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Collateral Inheritance Tax</b>	59,291	58,793	68,316	65,029
<b>Direct Inheritance Tax</b>	75	83	80	77
<b>Estate Tax</b>	137,809	181,716	145,933	159,965
<b>Net General Fund</b>	197,175	240,592	214,330	225,071

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**Table 13**  
**Excise Tax Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	2020 Actual	2021 Actual	2022 Estimated	2023 Estimated
<b>Cigarette Tax</b>	319,541	322,242	470,694	456,711
<b>Other Tobacco Products Tax</b>	43,371	47,348	62,025	62,956
<b>Floor Tax</b>	-	18,671	-	-
<b>Net General Fund Tobacco</b>	362,912	388,261	532,719	519,667
<b>Distilled Spirits Tax</b>	12,743	23,454	18,880	19,177
<b>Wine Tax</b>	4,824	7,206	6,406	6,462
<b>Beer Tax</b>	6,882	8,282	7,943	7,879
<b>Miscellaneous Licenses</b>	5,853	863	463	472
<b>Subtotal Alcoholic Beverages Taxes</b>	30,303	39,805	33,692	33,989
<b>Less: MD Wine and Grape Promotion Fund</b>	(94)	(83)	(71)	(71)
<b>Net General Fund Alcoholic Beverages</b>	30,209	39,722	33,621	33,918

Figures may not sum to totals due to rounding.

**Table 14**  
**General Fund Court Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	2020 Actual	2021 Actual	2022 Estimated	2023 Estimated
<b>District Courts</b>	47,676	35,191	43,757	48,767
<b>Clerks of the Court</b>	29,296	36,096	42,587	32,642

**Table 15**  
**General Fund Interest Earnings**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	2020 Actual	2021 Actual	2022 Estimated	2023 Estimated
<b>Interest Earnings</b>	46,798	12,297	15,000	20,000

**Table 18**  
**Transportation Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in thousands)*

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Department of Transportation</b>				
<b>Registrations</b>	367,209	407,631	413,087	415,565
<b>Licenses</b>	43,696	48,559	53,204	53,141
<b>Med-Evac Surcharge</b>	68,479	73,577	74,562	75,009
<b>Trauma Physician Services Surcharge</b>	11,798	12,562	12,730	12,806
<b>Miscellaneous Motor Vehicle Fees</b>	173,949	178,555	194,202	195,569
<b>Vehicle Emission Inspection Fees</b>	23,457	27,556	29,236	28,881
<b>Security Interest Filing Fees – Special Funds</b>	11,198	11,617	11,752	12,105
<b>Hauling Fees</b>	10,076	10,625	11,100	11,200
<b>Special License Tags – Special Funds</b>	4,575	3,650	3,650	3,800
<b>Titling Tax</b>	846,764	976,727	991,380	1,031,040
<b>Sales Tax on – Rental Vehicles</b>	31,686	21,374	24,152	27,775
	<u>1,592,887</u>	<u>1,772,433</u>	<u>1,819,055</u>	<u>1,866,891</u>
<b>Motor Fuel Vehicle Tax</b>	670,579	647,729	705,372	726,568
<b>Road Tax</b>	6,115	8,247	-	-
<b>Decals &amp; Permits</b>	183	163	-	-
<b>Sales Tax Equivalent</b>	317,781	277,033	270,504	334,343
<b>Indexing</b>	81,700	92,329	108,202	148,975
	<u>1,076,358</u>	<u>1,025,501</u>	<u>1,084,078</u>	<u>1,209,886</u>
<b>Total</b>	2,669,245	2,797,934	2,903,133	3,076,777

Figures may not sum to totals due to rounding.

**Table 19**  
**Casino Revenues**  
**Fiscal Years 2020 – 2023**  
*(\$ in millions)*

Video Lottery Terminals				
	FY 2020	FY 2021	FY 2022E	FY 2023E
<b>Education Trust Fund</b>	329.2	443.6	496.5	504.1
<b>Casino Operators</b>	390.3	546.5	611.0	620.3
<b>Local Impact Grants</b>	45.0	62.9	70.4	71.5
<b>Small, Minority, and Women – Owned Business</b>	0.0	17.0	19.1	19.3
<b>Purse Dedication</b>	48.5	67.8	75.9	77.1
<b>Race Tracks Facility Renewal Account</b>	7.9	11.1	12.4	12.6
<b>State Lottery Agency</b>	8.3	11.6	13.0	13.2
<b>Total Video Lottery Terminals</b>	829.3	1,160.4	1,298.2	1,318.1

Table Games				
	FY 2020	FY 2021	FY 2022E	FY 2023E
<b>Education Trust fund</b>	67.6	87.8	91.3	94.1
<b>Casino Operators</b>	360.6	468.3	487.0	501.7
<b>Local Impact Grants</b>	22.5	29.3	30.4	31.4
<b>Total Table Games</b>	450.7	585.3	608.7	627.1

Miscellaneous				
	FY 2020	FY 2021	FY 2022E	FY 2023E
<b>Education Trust Fund</b>	2.0	0.2	-	-

Total				
	FY 2020	FY 2021	FY 2022E	FY 2023E
<b>Education Trust Fund</b>	398.9	531.6	587.8	598.2
<b>Casino Operators</b>	750.9	1,014.7	1,097.9	1,122.0
<b>Local Impact Grants</b>	67.5	92.2	100.9	102.8
<b>Small, Minority, and Women – Owned Business</b>	0.0	17.0	19.1	19.3
<b>Purse Dedication</b>	48.5	67.8	75.9	77.1
<b>Race Tracks Facility Renewal Account</b>	7.9	11.1	12.4	12.6
<b>State Lottery Agency</b>	8.3	11.6	13.0	13.2
<b>Total</b>	1,282.0	1,745.9	1,907.0	1,945.2

Figures may not sum to totals due to rounding.

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# Five Year Forecast

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Economic and tax revenue growth are currently elevated due to the flow-through of federal stimulus efforts. The waning of the pandemic will also lead to a short run increase in growth. Beyond that, growth is expected to decline to rates consistent with underlying trend growth. The exact timing of this shift from elevated growth to longer run trends is uncertain and depends on the persistence and severity of the pandemic.

We expect the trend rate of growth post-pandemic to be marginally higher than pre-pandemic for a number of reasons. Inflation is one of them. We expect inflation to subside in the near term to rates consistent with the Federal Reserve's (the Fed's) target. If the Fed hits its inflation target, there will be higher inflation than there was after the Great Recession, when the Fed routinely undershot its inflation target. Revenue is collected in nominal dollars, so if inflation is higher revenue growth will be higher. Simultaneously millennials, the largest generation in the labor force, are becoming more productive as they gain experience. Finally, job switching typically also leads to wage and productivity gains and is occurring at an unprecedentedly high level.

However, the point at which the economy settles into longer run trends depends on when the pandemic is no longer a significant disruption to society. The end of pandemic disruptions would allow for an expansion of supply and therefore real output. Expanding supply will reduce inflationary pressures and lead to another short-run increase in growth before the return to trend. However, there is a risk that the pandemic continues as economic stimulus is withdrawn over inflation and debt concerns. Without stimulus, the impact of a resurgent pandemic on growth would turn negative.

Despite expectations of higher trend rates of growth going forward, the pandemic has done economic damage that will continue beyond the short run. For example, the pandemic caused a decline in labor participation that has only partially recovered. Labor participation is much less sensitive to the business cycle than unemployment. This means the decline in labor force participation is likely to persist for years after total employment recovers. Workers who leave the labor force, for whatever reasons, experience difficulty re-entering, skill loss, and lower lifetime incomes. Labor force growth was already expected to slow over time due to baby boomers leaving the labor force and declining population growth. The pandemic accelerated the exit of older workers from the labor force. Labor participation of workers aged 55 and over remains at its pandemic low even as other cohorts recover.

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

Calendar Year	2019	2020	2021	2022	2023	2024	2025
Gross Domestic Product (\$ in billions)	19,033 <i>2.3%</i>	18,385 <i>-3.4%</i>	19,424 <i>5.7%</i>	20,256 <i>4.3%</i>	20,778 <i>2.6%</i>	21,295 <i>2.5%</i>	21,819 <i>2.5%</i>
US Non-Agricultural Employment (thousands)	150,900 <i>1.3%</i>	142,252 <i>-5.7%</i>	146,140 <i>2.7%</i>	151,741 <i>3.8%</i>	153,939 <i>1.4%</i>	155,082 <i>0.7%</i>	156,032 <i>0.6%</i>
US Personal Income (\$ in billions)	18,424 <i>4.1%</i>	19,628 <i>6.5%</i>	21,040 <i>7.2%</i>	21,324 <i>1.3%</i>	22,344 <i>4.8%</i>	23,471 <i>5.0%</i>	24,683 <i>5.2%</i>
Consumer Price Index (% Δ from prior year)	2.0%	1.3%	6.5%	2.0%	2.2%	2.0%	2.1%
US 10 Year Treasury Bond Yield	2.1%	0.9%	1.4%	1.7%	2.3%	2.6%	2.8%
MD Total Non-Agricultural Employment (thousands)	2,770 <i>0.6%</i>	2,582 <i>-6.8%</i>	2,654 <i>2.8%</i>	2,746 <i>3.5%</i>	2,790 <i>1.6%</i>	2,814 <i>0.9%</i>	2,828 <i>0.5%</i>
MD Personal Income (\$ in millions)	381,397 <i>2.5%</i>	404,521 <i>6.1%</i>	429,746 <i>6.2%</i>	434,016 <i>1.0%</i>	453,270 <i>4.4%</i>	473,462 <i>4.5%</i>	494,539 <i>4.5%</i>

Source: Board of Revenue Estimates and IHS Markit (December 2021 Forecast)

Table 21  
**Maryland General Fund Revenues**  
 Fiscal Years 2021- 2027  
 (\$ in thousands)

	2021 Actual	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2026 Estimate	2027 Estimate
<b>Income Taxes</b>							
Individual	11,704,777	12,058,202	12,915,163	13,772,020	14,402,254	14,975,354	15,390,404
Corporation	1,461,893	1,389,464	1,526,557	1,615,579	1,689,577	1,764,670	1,833,195
<b>TOTAL</b>	13,166,670	13,447,666	14,441,720	15,387,598	16,091,831	16,740,024	17,223,599
<b>Sales and Use Taxes</b>	4,988,078	5,509,522	5,742,530	5,899,763	6,019,601	6,151,843	6,262,015
<b>State Lottery</b>	631,719	648,688	664,897	685,745	702,519	721,189	746,138
<b>Franchise, Excise, License, Fee</b>	1,685,944	2,065,647	2,039,874	2,077,567	2,116,613	2,144,627	2,177,052
<b>ONGOING GENERAL FUND REVENUE</b>	20,472,411	21,671,523	22,889,021	24,050,673	24,930,564	25,757,682	26,408,804
<b>Extraordinary Revenues</b> <sup>1</sup>	358,603	-	-	-	-	-	-
<b>Revenue Volatility Cap</b> <sup>2</sup>	-	(80,000)	(100,000)	(120,000)	(140,000)	(25,274)	-
<b>TOTAL GENERAL FUND REVENUES</b>	20,831,014	21,591,523	22,789,021	23,930,673	24,790,564	25,732,408	26,408,804

<sup>1</sup> Extraordinary revenues includes:

(a) \$341,446,827 is the FEMA reimbursement as included in the budget and outlined in the FY 2022 Fiscal Digest

(b) \$17,156,310 is attributable to a payment to the General Fund from the Maryland Technology Development Corporation (TEDCO)

<sup>2</sup> Established by Chapters 4 & 550 of the 2017 Legislative Session and amended by several succeeding Budget Reconciliation And Financing Acts



Table 22  
**Revenues From Maryland's Casinos**  
Fiscal Years 2021- 2027  
(\$ in thousands)

	2021 Actual	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2026 Estimate	2027 Estimate
<b>Video Lottery Terminals</b>							
Education Trust Fund	443,604	496,488	504,092	503,770	510,239	516,803	523,462
Licensee	546,465	610,961	620,286	630,948	639,035	647,240	655,564
Local Impact Grants	62,888	70,416	71,493	73,423	74,365	75,320	76,290
Business Development	17,006	19,051	19,342	20,024	20,281	20,542	20,806
Purse Dedication	67,756	75,920	77,082	80,098	81,125	82,168	83,225
Racetrack Renewal	11,070	12,418	12,608	13,350	13,521	13,695	13,871
MD Lottery & Gaming Control	11,604	12,982	13,181	13,350	13,521	13,695	13,871
Subtotal	1,160,393	1,298,237	1,318,084	1,334,962	1,352,087	1,369,462	1,387,090
<b>Table Games</b>							
Education Trust Fund	87,799	91,309	94,070	95,315	96,579	97,862	99,164
Licensee	468,263	486,984	501,708	508,349	515,089	521,930	528,872
Local Impact Grants	29,266	30,436	31,357	31,772	32,193	32,621	33,055
Subtotal	585,329	608,730	627,135	635,437	643,861	652,412	661,090
<b>Miscellaneous</b>							
Education Trust Fund	169	-	-	-	-	-	-
Subtotal	169	-	-	-	-	-	-
<b>Total</b>							
Education Trust Fund	531,572	587,797	598,162	599,085	606,818	614,665	622,626
Licensee	1,014,728	1,097,945	1,121,994	1,139,297	1,154,124	1,169,169	1,184,436
Local Impact Grants	92,154	100,853	102,850	105,195	106,558	107,941	109,344
Business Development	17,006	19,051	19,342	20,024	20,281	20,542	20,806
Purse Dedication	67,756	75,920	77,082	80,098	81,125	82,168	83,225
Racetrack Renewal	11,070	12,418	12,608	13,350	13,521	13,695	13,871
MD Lottery & Gaming Control	11,604	12,982	13,181	13,350	13,521	13,695	13,871
Total	1,745,891	1,906,966	1,945,219	1,970,399	1,995,948	2,021,874	2,048,180