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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, 2021 AND JUNE 30, 2022

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SUBMITTED TO  
LARRY HOGAN  
GOVERNOR

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DECEMBER 11, 2020

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COMPTROLLER  
*of* MARYLAND  
*Serving the People*

Peter Franchot  
*Comptroller*


Andrew M. Schaufele  
*Director*  
*Bureau of Revenue Estimates*

December 11, 2020

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

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

Sincerely,



Andrew M. Schaufele



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## Executive Summary

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The Board of Revenue Estimates submits revised general fund revenue estimates of \$18.774 billion for fiscal year 2021 and \$19.808 billion for fiscal year 2022. The fiscal year 2021 revision represents an increase of \$63.8 million (0.3%) from the September 2020 estimate while the fiscal year 2022 revision represents an increase of \$142.6 million (0.7%). These December estimates mark a minor adjustment to revenues from September. However, it is worth noting that these estimates are down relative to pre-COVID-19 estimates by \$608.8 million for fiscal year 2021 and by \$312.2 million for fiscal year 2022.

### *Economic Fundamentals*

The global COVID-19 pandemic (the pandemic) and efforts to contain it are the key economic factors in 2020. This pandemic is the worst since the 1918 influenza pandemic and caused the worst global economic contraction since the Great Depression. The COVID-19 Recession (Covid Recession) is distinct from other modern recessions in that it has unfolded far more rapidly and was caused by both a negative supply shock and the usual negative demand shock. Recovery also set in rapidly but has recently slowed. We expect the recovery to slow over the winter and accelerate next spring as the pandemic wanes due to a successful vaccination campaign.

Despite the severity of the contraction, earned income, consumption, and therefore tax revenue, held up well. The economic policy response from the federal government was large, quick, and consistent with macroeconomic consensus. In a crisis, people increase their stocks of many goods, including money. The Federal Reserve has taken considerable actions to address the negative demand shock by supporting the circulation of spending. The Federal Reserve also increased direct lending to banks and businesses in order to forestall a financial crisis. Fiscal stimulus programs included: expanded unemployment insurance (UI) benefits, which are taxable through income tax withholding; direct payments to individuals; and business lending and forgivable loans. These policies contributed to increase total Personal Income (PI), a key measure of individual income, in Maryland by an estimated 8.8% year-over-year in 2020 Q2.

Throughout the pandemic there has been considerable uncertainty as to its ultimate course, and uncertainty as to the resulting economic impact. While there is still uncertainty, we expect the recovery to slow over the winter months as the pandemic worsens and improve in the spring as the current wave dissipates and vaccination begins. Growth in mid-2021 is expected to accelerate as pent-up demand is unleashed and then settle into pre-pandemic trends in 2022. This estimate is consistent with the expectation of a quick, or V-shaped recovery once the pandemic is over.

## *Revenue Structure*

The reality of which industries are worst impacted by the pandemic and the state's tax structure insulate 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. This fact paired with the state's relatively progressive personal income tax means revenue collection has kept up despite high unemployment. The worst impacted industries are also predominately service providers, and services generally are not taxable under the sales tax. Because personal income has kept growing, consumption has only slightly declined even while the savings rate grew. This means consumption has shifted from services into goods, which are taxable.

## *Non-Wage Income*

Capital gains income continues to steadily grow in our outlook. In fact, much of the income tax estimate increase is due to a more upbeat capital gains outlook for 2020 and beyond. That increase is entirely attributable to the fact that the stock markets, like asset prices generally, quickly recovered from their fall last spring and have sustained new highs in the critical fourth quarter. 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 those expected gains, bidding up the price. Given that, and the success of economic stimulus programs and positive vaccine news, high stock prices now seem less odd. The lesson we've learned is 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 significant uncertainty surrounding business income. But here the story is similar to that of withholding: the worst affected industries account for a relatively smaller share of business income than industries that are less affected. However, just because a business is making payroll (and therefore remitting withholding) does not mean it is profitable. Some businesses may be taking losses to maintain payroll with the expectation of profitable operation after the pandemic wanes, or because the cost of shutting down is greater than continuing to operate.



# 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)

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State Comptroller

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State Treasurer

David R. Brinkley  
Secretary, Department of  
Budget and Management

Executive Secretary:  
Andrew Schaufele  
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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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Daniel Riley, Director  
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David Romans, Fiscal & Policy Coordinator  
Fiscal & Policy Analysis  
Department of Legislative Services

Theresa M. Tuszynski, Economist  
Office of Policy Analysis  
Department of Legislative Services

Linda Williams  
Financial Planning Manager  
Maryland Department of Transportation

Telephone: 410-260-7450

Toll free: 1-888-674-0017 • For the hearing impaired: Maryland Relay 711 • TTY 410-260-7157 • EOE



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# Economic Outlook

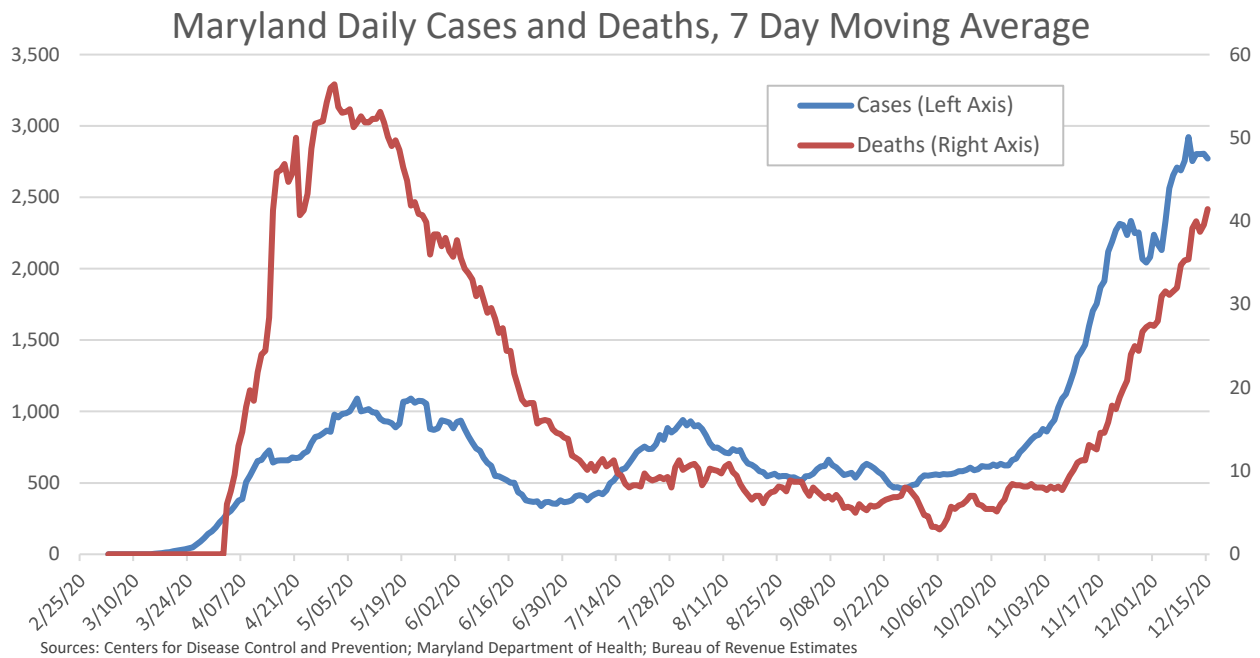
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The COVID-19 pandemic (the pandemic) and the efforts to contain it are causing the most severe economic crisis since the Great Depression. The COVID-19 Recession (Covid Recession) is different from past recessions in two main ways. First, it is evolving far more rapidly than past recessions. Declines in employment and output that played out over a year during the Great Recession were surpassed within months last spring. Second, this recession involves both a negative supply shock and a negative demand shock. Despite the severity of the downturn, recovery has set in just as rapidly, though it is currently slowing.

So far, it appears the federal government's fiscal and monetary policy response has been large enough to keep Personal Income (PI), a key measure of individual income, growing and generally contain the economic fallout of the pandemic to directly affected industries. Worst affected industries tend to have lower average wages. As a result, tax revenue collections continue to outperform what we would typically expect from such dire labor market conditions. We expect the recovery to slow over the winter months as the pandemic worsens and improve in the spring as the current wave dissipates and vaccination begins. Growth in mid-2021 is expected to accelerate as pent-up demand is unleashed and then settle into pre-pandemic trends in 2022.

## **COVID-19 Pandemic**

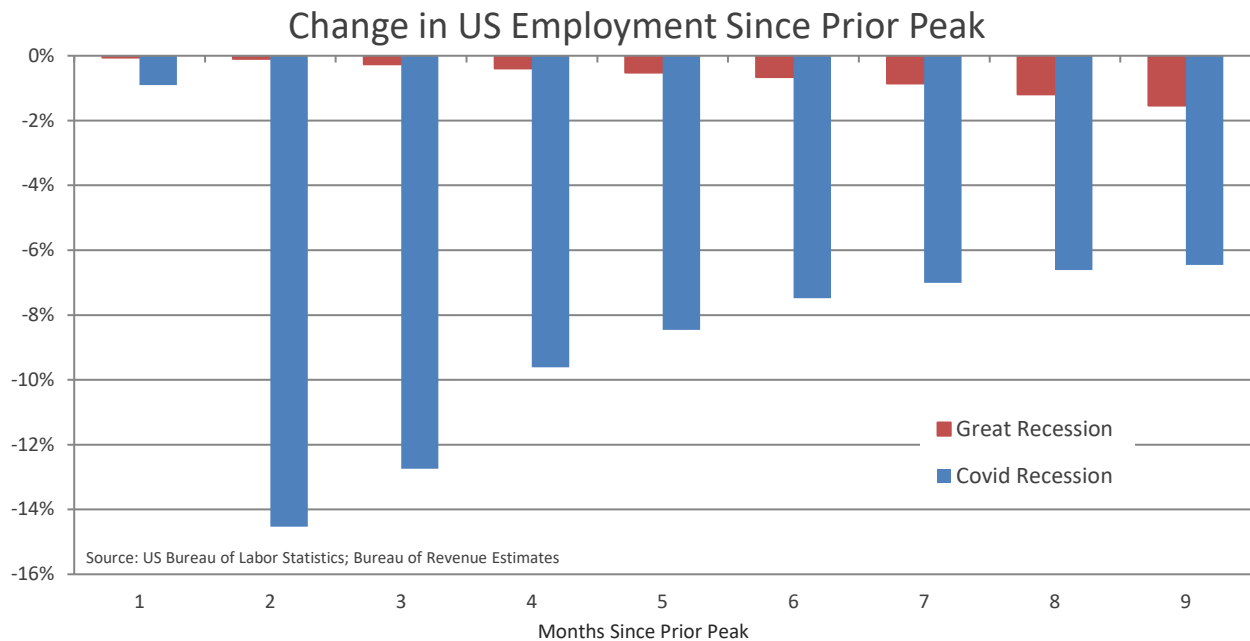
At the time of writing, Johns Hopkins University records over 16.7 million cumulative U.S. COVID-19 cases and over 300,000 deaths. Maryland's statistics are more than 241,000 thousand cases and over 5,100 deaths. A third wave of the pandemic, already of a similar magnitude to the first, is well underway. Using a seven-day moving average, new cases flattened out in early November and spiked upwards about a week after Thanksgiving. The ultimate trajectory of the third wave is uncertain, though we generally expect the pandemic to worsen over winter and improve in spring.



The pandemic caused significant economic disruption, particularly the early attempts to contain it through mandated business closures and stay-at-home orders. Such orders clearly disrupted economic activity, but it would be incorrect to conclude that there is a simple trade-off between public health and the economy. Without social distancing the pandemic would be far worse. Sick workers are not productive, and every death is a loss of human capital, to say nothing of the social and personal loss. As current infections rise, so does the risk of engaging in ordinary economic activity. As consumers and investors, people typically react to perceptions of increased risk by pulling back on consumption and increasing their savings.

### **Economic Conditions**

The pandemic brought to an end the longest recorded economic expansion in US history (and the slowest since WWII). The recovery to date is partial, uneven, and slowing. US employment fell 22.2 million (14.5%) from its peak in February to its trough in April. As of November, employment remains 9.8 million (6.5%) below its prior peak. In November itself, employment grew by just 245,000 according to early estimates. Total wages also peaked in February and fell \$997.4 billion (10.3%) by April. Wages have recovered faster than employment. In November, wages were down \$82.4 billion (0.9%) from the prior peak.



Whereas typical recessions are essentially demand-side phenomena, the Covid Recession also involves a significant negative supply shock. The pandemic disrupted global supply chains as well as the safe provision of goods and especially services. The effect of a negative supply shock is to reduce output and therefore increase prices, all else equal. This impact is felt primarily in the directly affected industries, where prices and/or scarcities of particular products have increased.

The negative demand shock results from increased demand for money. As risk increases and sources of income become less certain, people seek to increase their cash on hand to cover exigencies – like stockpiling other essential goods. People increase their cash balances by reducing spending, which puts downward pressure on prices and output. There are also elements of the Covid Recession that do not fit neatly into the bifurcation of supply or demand. For example, demand for indoor dining has fallen significantly. But this reflects a disruption in the ability of producers to safely supply indoor meals.

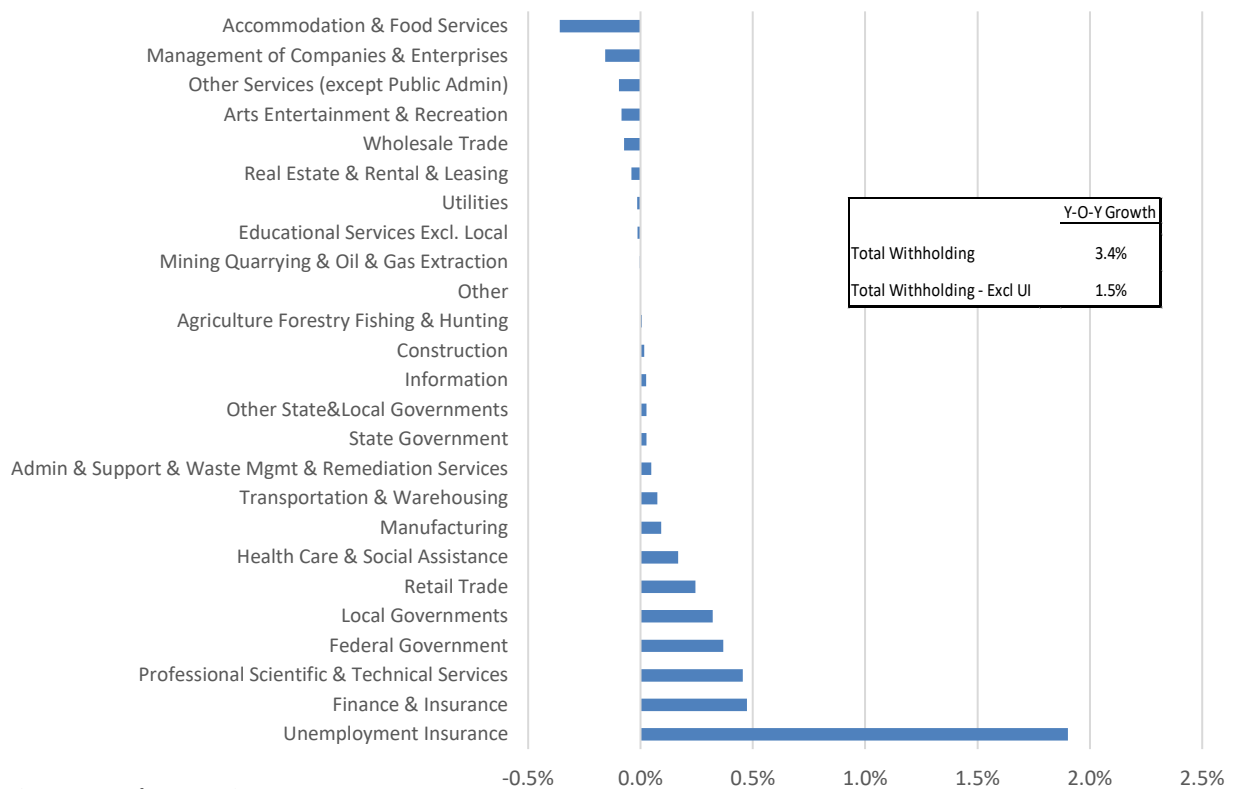
Besides the spending that directly addresses public health aspects of the pandemic, the point of fiscal and monetary stimulus is to boost aggregate demand - to keep spending circulating. Maintaining spending prevents a wider economic contagion, when the contraction in directly affected sectors spreads to all sectors. A classic example is the Great Recession – when a decline in home values led to a financial crisis that caused wide-spread unemployment. While all sectors experienced some decline in employment, so far contagion has been largely avoided. This outcome was not predestined. In the early days of the pandemic, short-term real interest rates increased while asset prices and inflation expectations plunged, which are early warning signs of a financial crisis.

Despite the worst economic contraction and labor market conditions since the Great Depression, declines in income and spending have been modest. Consequently, tax revenue has held up surprisingly well given economic conditions. This is largely attributable to the massive federal economic policy response in mid-2020. The Federal Reserve acted quickly and preemptively, at least compared to past behavior, to loosen monetary policy and provide emergency lending. They also promised to make up for past misses in their inflation target. Fiscal

policy makers provided income to individuals, expanded unemployment insurance, and business grants and loans through the CARES Act. These policies contributed to increase total PI in Maryland by an estimated 8.8% year-over-year in 2020 Q2. The increase in PI was driven by an 83.0% increase in transfers, or government programs that distribute income to or spend on behalf of individuals, in 2020 Q2.

So far PI has grown faster than pre-pandemic trends. As a result, declines in spending in directly affected sectors like hospitality and accommodations have been offset by increased spending elsewhere. The spending shifted from higher risk to lower risk consumption and from services to goods. This is apparent in our own income tax withholding data. Withholding collections declined in sectors like accommodation and food service, and arts, entertainment, and recreation. These declines were more than offset by increases in sectors like finance and insurance, federal government, and professional services. The sectors that are growing have higher average wages than the sectors that have shrunk, which helps support overall withholding due to Maryland’s relatively progressive state income tax structure. The below chart displays the contribution to overall withholding growth of each sector, as well as the contribution from unemployment insurance, which is taxable income.

Contribution to Year-Over-Year Growth of Total Withholding  
(Jan to Oct)



The preceding analysis speaks to the macroeconomy on average. But this average is not necessarily representative of the experience of any one sector, demographic, person, or business. Losses have been experienced unequally, like the gains from the last expansion. Job losses to date

are concentrated among lower income workers, particularly in services, while employment in higher income jobs has already regained its prior peak. Because of increased childcare demands on parents and pre-existing societal norms, labor participation of women has declined more than men. As of November 2020, labor force participation has fallen more than average among black and older workers. Declines in labor participation typically take longer to recover than do increases in unemployment. Those who spend a significant time out of work face lower average lifetime earnings even after they re-enter the workforce. Larger businesses have been better able to access credit and stimulus funds, shift business models, and sustain themselves than small businesses. 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 has exacerbated existing inequalities.

## **Maryland**

Maryland's economy has structural factors in its favor. In typical recessions, the state's economy and employment contracts less than the national average. Maryland has a higher income labor force than the nation. This is partly due to the presence of the federal government, which has been a growing source of well-paying jobs over the pandemic, even outside of temporary census hiring. That being said, employment in Maryland has not performed noticeably better than the nation. Maryland employment reached its peak in February and fell by 388,300 (13.9%) to a low in April. As of October, employment remains 182,000 (6.5%) below the prior peak. The state is outperforming the nation in terms of wage growth however. In 2020 Q2, the most recently available datapoint at the state level, total wages grew 0.8% over 2020 Q1. Total wages grew an impressive 7.6% year over year in 2020 Q2.

## **Outlook**

This is an especially challenging time to forecast economic and revenue conditions with a useful degree of accuracy. Revenue collection ultimately 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 mounting. Even apart from the recent wave of the pandemic, it is likely the recovery would slow as cold weather and shorter evenings reduce demand for outdoor recreation and dining. Additionally, fiscal stimulus programs have been ending with, at the time of writing, no replacement.

Our outlook therefore calls for growth in employment and aggregate wages to slow but continue over the winter months. As dire as the current wave of the pandemic looks, there are factors supporting an outlook of continued recovery. Despite fiscal stimulus programs ending, the large payments to individuals resulted in increased savings, which can be drawn down to sustain consumption beyond the end date of a program. And a second round of stimulus remains possible, especially if the economic situation deteriorates. We anticipate that any future stimulus will be generally of a magnitude intended to maintain the current trajectory of growth, rather than boost growth above trend as the first round of stimulus did.

## US Personal Income and Savings (\$ Billions, Annualized)



Beyond winter our outlook calls for the recovery to accelerate as the pandemic wanes and pent-up demand is released, particularly after a vaccine is widely available. Growth through 2021 is expected to accelerate as pent-up demand is unleashed and then settle into pre-pandemic trends in 2022. Employment is not expected to regain its prior peak until mid-2022. The table below shows the recent history and forecast growth rates for key economic variables. Average wage growth accelerates in 2020 as a result of job losses in lower wage industries. Note that average wage growth often increases in recessions.

Outlook For Key Maryland Economic Variables				
Calendar Year	Non-Farm Employment Growth	Personal Income	Aggregate Wage & Salary Income	Average Wage
2018	0.9%	3.4%	3.6%	2.7%
2019	0.6%	3.3%	3.6%	3.0%
2020E	-5.7%	4.9%	0.5%	6.6%
2021E	3.4%	0.6%	6.0%	2.4%
2022E	2.8%	4.0%	4.6%	1.7%
2023E	0.6%	4.1%	4.0%	3.4%
2024E	0.9%	4.5%	4.6%	3.6%
Source: Bureau of Revenue Estimates				

## **Risks**

The most significant risks to the current forecast are the future course of the pandemic, its impact on the economy, and the federal government's reaction to both. The course of the pandemic depends most immediately on adherence to social distancing. When the pandemic ends will depend on when the population is widely vaccinated, which depends on a significant logistical operation and public trust.

A return to widespread business closures and other restrictive social distancing orders experienced last spring could reduce economic activity and sales tax revenue in the short run, though of course a worsening pandemic could ultimately end up restraining economic activity anyway. Worsening economic conditions increase the probability of additional fiscal and monetary stimulus. The risk there is that, given the already sizable deficit, fiscal policy makers become more conservative with additional rounds of stimulus. Monetary policy makers face fewer political constraints in theory, but cannot specifically target aid on those worst affected like fiscal policy can.



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

Calendar Year	2016	2017	2018	2019	2020	2021	2022
Real Gross Domestic Product (\$ in billions)	18,745	19,543	20,612	21,433	20,949	22,228	23,459
	2.8%	4.3%	5.5%	4.0%	-2.3%	6.1%	5.5%
Federal Funds Rate	0.4%	1.0%	1.8%	2.2%	0.4%	0.1%	0.1%
10-Year Treasury Bond Yield	1.8%	2.3%	2.9%	2.1%	0.9%	1.0%	1.3%
Consumer Price Index (%D from prior year)	1.8%	2.1%	2.2%	2.0%	1.2%	2.3%	2.4%
Housing Starts (thousands of units)	1,177	1,207	1,248	1,295	1,373	1,386	1,312
	6.3%	2.6%	3.4%	3.8%	6.0%	1.0%	-5.4%
New Light Vehicle Sales (thousands of units)	17,465	17,136	17,214	16,953	14,393	16,061	15,987
	0.4%	-1.9%	0.5%	-1.5%	-15.1%	11.6%	-0.5%
Corporate Profits Before Taxes (\$ in billions)	2,024	2,115	2,243	2,251	2,132	1,866	1,978
	-1.8%	4.5%	6.1%	0.3%	-5.3%	-12.5%	6.0%
Total Non-Agricultural Employment (thousands)	144,329	146,589	148,891	150,935	142,272	146,344	151,297
	1.8%	1.6%	1.6%	1.4%	-5.7%	2.9%	3.4%
Unemployment Rate	4.9%	4.4%	3.9%	3.7%	8.1%	5.9%	4.6%
Personal Income (\$ in billions)	16,161	16,949	17,852	18,552	19,708	19,790	20,435
	2.8%	4.9%	5.3%	3.9%	6.2%	0.4%	3.3%

Source: IHS Markit (December 2020 Forecast)

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

Calendar Year	2016	2017	2018	2019	2020	2021	2022
Total Non-Agricultural Employment (thousands)	2,698 <i>1.3%</i>	2,727 <i>1.1%</i>	2,752 <i>0.9%</i>	2,770 <i>0.6%</i>	2,613 <i>-5.7%</i>	2,702 <i>3.4%</i>	2,779 <i>2.8%</i>
Existing Median Home Price (\$)	292,050 <i>2.8%</i>	303,753 <i>4.0%</i>	317,093 <i>4.4%</i>	324,225 <i>2.2%</i>	335,325 <i>3.4%</i>	343,307 <i>2.4%</i>	353,213 <i>2.9%</i>
Home Sales (thousands)	91,311 <i>6.9%</i>	95,336 <i>4.4%</i>	96,681 <i>1.4%</i>	92,027 <i>-4.8%</i>	88,950 <i>-3.3%</i>	96,907 <i>8.9%</i>	110,986 <i>14.5%</i>
Private Housing Starts (thousands)	17.4 <i>2.4%</i>	15.9 <i>-8.9%</i>	17.2 <i>8.2%</i>	18.4 <i>7.0%</i>	17.4 <i>-5.1%</i>	18.3 <i>5.2%</i>	18.4 <i>0.4%</i>
Personal Income (\$ in millions)	354,261 <i>3.8%</i>	365,998 <i>3.3%</i>	378,492 <i>3.4%</i>	390,792 <i>3.3%</i>	409,939 <i>4.9%</i>	412,550 <i>0.6%</i>	429,115 <i>4.0%</i>
Wages and Salaries (\$ in millions)	167,388 <i>3.0%</i>	173,369 <i>3.6%</i>	179,665 <i>3.6%</i>	186,162 <i>3.6%</i>	187,061 <i>0.5%</i>	198,230 <i>6.0%</i>	207,394 <i>4.6%</i>
Dividends, Interest and Rent (\$ in millions)	67,338 <i>1.2%</i>	71,363 <i>6.0%</i>	75,588 <i>5.9%</i>	76,429 <i>1.1%</i>	75,798 <i>-0.8%</i>	75,316 <i>-0.6%</i>	76,010 <i>0.9%</i>
Capital Gains (\$ millions)	8,556 <i>-11.3%</i>	11,379 <i>33.0%</i>	12,948 <i>13.8%</i>	13,207 <i>2.0%</i>	13,735 <i>4.0%</i>	13,735 <i>0.0%</i>	13,994 <i>1.9%</i>
Unemployment Rate	4.5%	4.2%	4.0%	3.6%	6.5%	4.8%	4.0%

Source: Board of Revenue Estimates and IHS Markit (December 2020 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 2020 through 2022. 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 2020 - 2022

\$ Thousands	GENERAL FUND			SPECIAL FUND			TOTAL		
	Fiscal Year 2020	Fiscal Year 2021 Revised	Fiscal Year 2022	Fiscal Year 2020	Fiscal Year 2021 Revised	Fiscal Year 2022	Fiscal Year 2020	Fiscal Year 2021 Revised	Fiscal Year 2022
	Actual	Estimate	Estimate	Actual	Estimate	Estimate	Actual	Estimate	Estimate
<b>INCOME TAXES</b>									
Individual Corporations	10,698,875	10,850,150	11,315,685				10,698,875	10,850,150	11,315,685
	1,051,808	1,065,157	1,189,670	272,791	276,252	308,546	1,324,599	1,341,409	1,498,216
Total	11,750,683	11,915,307	12,505,355	272,791	276,252	308,546	12,023,473	12,191,559	12,813,901
<b>SALES AND USE TAXES</b>	4,634,874	4,700,197	4,934,197	301,786	510,841	512,956	4,936,660	5,211,038	5,447,153
<b>STATE LOTTERY RECEIPTS</b>									
Lottery Games	548,512	607,118	594,869	117,900	120,445	121,845	666,412	727,563	716,714
Casinos	-			531,165	703,491	747,915	531,165	703,491	747,915
Total	548,512	607,118	594,869	649,065	823,937	869,760	1,197,576	1,431,054	1,464,629
<b>TRANSPORTATION REVENUES</b>									
Motor Vehicle Fuel Tax				1,070,060	1,040,104	1,047,088	1,070,060	1,040,104	1,047,088
Motor Vehicle Licenses, Fees				720,735	781,406	816,186	720,735	781,406	816,186
Motor Vehicle Titling Tax				846,764	805,000	881,000	846,764	805,000	881,000
Maryland Transit Fees				108,074	54,172	114,824	108,074	54,172	114,824
Maryland Port Fees				54,743	42,040	46,954	54,743	42,040	46,954
Maryland Aviation Fees				231,521	181,011	243,694	231,521	181,011	243,694
Total	-	-	-	3,031,897	2,903,733	3,149,746	3,031,897	2,903,733	3,149,746
<b>OTHER REVENUES</b>									
Property Transfer Tax	-	-	-	215,453	208,127	232,062	215,453	208,127	232,062
Business Franchises and Filing Fees	211,259	208,502	206,686		49,914		211,259	258,416	206,686
State Tobacco Tax	362,912	340,277	343,846				362,912	340,277	343,846
Tax on Insurance Companies	395,851	405,914	598,361				395,851	405,914	598,361
Alcoholic Beverages Excises	30,209	30,545	32,524				30,209	30,545	32,524
Estate & Inheritance Taxes	197,175	151,644	198,469				197,175	151,644	198,469
Clerks of the Court	29,296	32,283	32,995				29,296	32,283	32,995
District Courts	47,676	30,488	53,072				47,676	30,488	53,072
Hospital Patient Recoveries	60,566	42,385	50,142				60,566	42,385	50,142
Interest on Investments	46,798	8,800	10,000						
Miscellaneous Fees, Other Receipts	318,296	300,178	327,708						--- See Notes ---
Total	1,700,037	1,551,015	1,853,802						
<b>Total Current Revenues</b>	18,634,105	18,773,636	19,888,223						--- See Notes ---
Revenue Volatility Cap	-	-	(80,000)						
<b>GRAND TOTAL</b>	18,634,105	18,773,636	19,808,223						--- See Notes ---

Note: Includes all general fund revenues (excluding transfers), all Transportation Revenues, and selected other special funds that are estimated by BRE. In conjunction with Appendix B from the Budget Books, this table comprises the official estimate of State revenues

Table 4  
**Maryland General Fund Revenues**  
Fiscal Years 2020 - 2022

\$ Thousands	FY 2021					FY 2022			
	FY 2020 Actual	September Estimate	December Estimate	Difference	Growth	September Estimate	December Estimate	Difference	Growth
<b>INCOME TAXES:</b>									
Individual	10,698,875	10,784,423	10,850,150	65,727	1.4%	11,200,369	11,315,685	115,316	4.3%
Corporation	1,051,808	1,094,883	1,065,157	(29,726)	1.3%	1,139,197	1,189,670	50,473	11.7%
Total	11,750,683	11,879,306	11,915,307	36,001	1.4%	12,339,566	12,505,355	165,789	5.0%
<b>SALES AND USE TAXES</b>	4,634,874	4,624,463	4,700,197	75,734	1.4%	4,938,104	4,934,197	(3,907)	5.0%
<b>STATE LOTTERY</b>	548,512	571,838	607,118	35,280	10.7%	584,384	594,869	10,485	-2.0%
<b>OTHER REVENUES</b>									
Business Franchise Taxes	211,259	232,538	208,502	(24,036)	-1.3%	190,049	206,686	16,637	-0.9%
Tax on Insurance Companies	395,851	386,872	405,914	19,042	2.5%	598,977	598,361	(616)	47.4%
Estate and Inheritance Taxes	197,175	173,023	151,644	(21,379)	-23.1%	181,615	198,469	16,854	30.9%
Tobacco Tax	362,912	348,246	340,277	(7,969)	-6.2%	341,108	343,846	2,738	1.0%
Alcoholic Beverages Excise Tax	30,209	22,678	30,545	7,867	1.1%	32,402	32,524	121	6.5%
District Courts	47,676	51,173	30,488	(20,685)	-36.1%	53,072	53,072	(0)	74.1%
Clerks of the Court	29,296	31,531	32,283	752	10.2%	34,051	32,995	(1,055)	2.2%
Hospital Patient Recoveries	60,566	58,089	42,385	(15,704)	-30.0%	59,301	50,142	(9,159)	18.3%
Interest on Investments	46,798	20,997	8,800	(12,197)	-81.2%	24,796	10,000	(14,796)	13.6%
Miscellaneous	318,296	309,045	300,178	(8,867)	-5.7%	300,121	327,708	27,586	9.2%
Total	1,700,037	1,634,192	1,551,015	(83,176)	-8.8%	1,815,492	1,853,802	38,310	19.5%
<b>Total Current Revenues</b>	18,634,105	18,709,799	18,773,636	63,838	0.7%	19,677,545	19,888,223	210,678	5.9%
Revenue Volatility Cap <sup>1</sup>	-	-	-	-		(11,876)	(80,000)	(68,124)	
<b>GRAND TOTAL</b>	18,634,105	18,709,799	18,773,636	63,838	0.7%	19,665,669	19,808,223	142,554	5.5%

<sup>1</sup> Established by Chapters 4 & 550 of the 2017 Legislative Session and modified several times in subsequent legislation

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# Individual Income Tax

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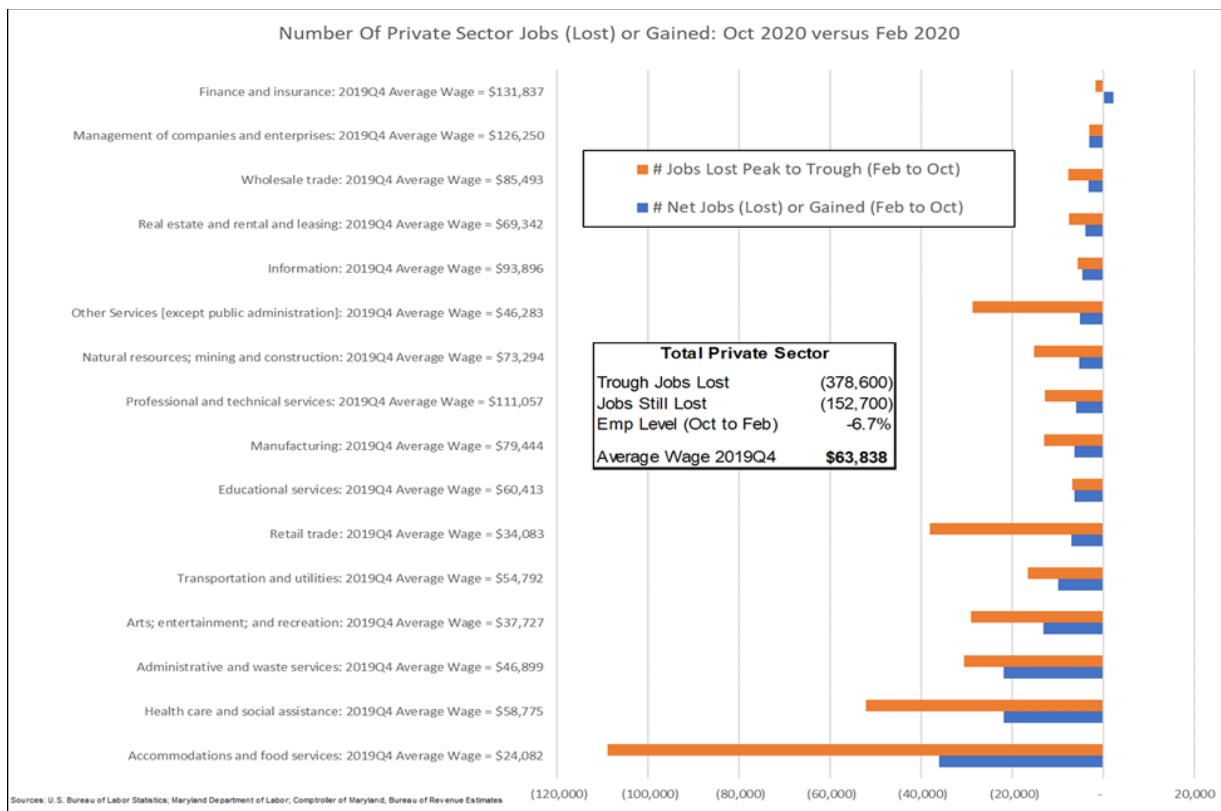
General fund revenue from the personal income tax are estimated to grow 1.4% and 4.3% to \$10.850 billion and \$11.316 billion for fiscal years 2021 and 2022, respectively. Withholding is anticipated to grow 3.8% in fiscal year 2021; excluding the expected withholding from unemployment insurance and the impact of higher local income tax rates for tax year 2020, the underlying FY 21 growth rate is 2.3%. The COVID-19 Recession injects a tremendous amount of 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 at this point we have very little insight into the profitability of businesses whose income passes through to owners.

## **Withholding**

In order to better understand withholding, it is pivotal to understand wages. The following chart distills the impact the present 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: \$24,082. On the other hand, the Finance and Insurance industry had the smallest decline in employment and pays the most generously at \$131,837. While the job losses are sobering, withholding has not deteriorated in a manner similar to prior recessions when job losses have been more broadly dispersed.

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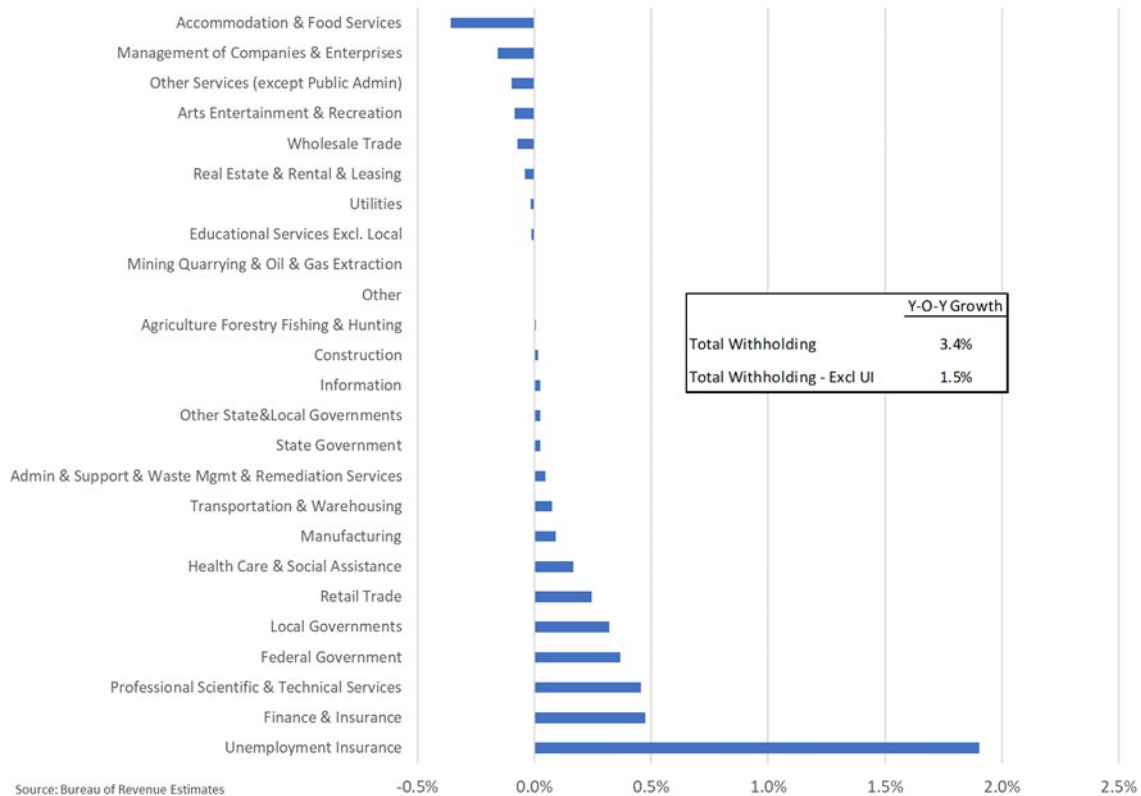


### *Connection to YTD Withholding*

The following chart shows the contribution of withholding by industry. This chart echoes the previous chart – while the losses in some industries have been severe, the gains (or at least the stability) of other industries make up for the losses. As discussed in the economic summary, this chart also illustrates the success of the fiscal and monetary programs that stemmed the industry contagion. This chart also illustrates the outsized impact that unemployment insurance, discussed in the next section, has had on withholding growth.

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### Contribution to Year-Over-Year Growth of Total Withholding (Jan to Oct)



### Discussion of 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. <sup>1</sup>

Keep in mind, the state’s new UI system defaults to withholding income tax. Previously claimants had to opt-in, and the share of claimants that did so was only about 25%. BRE estimates that \$269 million will be collected for UI withholdings for tax year 2020. We ran simulations on prior years that assumed 100% of taxpayers had withheld their UI; we found that

<sup>1</sup> The FPUC expired on the week ending July 25<sup>th</sup> of this year. The President signed an executive order that gave an additional \$300 benefit after FPUC expired. Furthermore, both PUA and PEUC are slated to expire by December 31<sup>st</sup>, 2020. While Congress is in negotiations for another stimulus, which would likely include extensions to PUA, and PEUC, no bill has been signed into law yet.

70% of the withholding from UI would eventually be refunded when the tax return is submitted, we have incorporated that in this estimate.

Even though the economy has fallen dramatically, BRE expects that it will recover as the pandemic winds down, and we will likely see a boom in economic activity as a vaccine enables rapid recovery for both the supply side and demand side aspects and pent-up demand is unleashed – demonstrating a “V-shaped” recovery. Employment levels will increase to accommodate the greater need for goods and more specifically services – supporting withholding growth.

### Non-Wage Income

While the stock market took a nosedive at the beginning of the pandemic, it had more than recovered by the fall. This is likely because of the stimulus and the market’s general consensus for a rapid recovery. More recently, market optimism has been buttressed by positive vaccine deployment milestones. Capital gains (accounting for 5% of total income in 2018) 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.

Another non-wage income source that might be impacted is taxable individual retirement distributions (e.g., 401k, Traditional IRAs, etc...). The CARES Act removed the mandatory distribution from retirement accounts for tax year 2020 – retirement income taxable at the federal level accounted for a little more than 2% of total income in recent years.

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 2020. 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.

**Table 5**  
**Individual Income Tax Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b> <b>Actual</b>	<b>2020</b> <b>Actual</b>	<b>2021</b> <b>Estimated</b>	<b>2022</b> <b>Estimated</b>
<b>Gross Receipts (State &amp; Local)</b>				
<b>Withholding</b>	14,248,409	15,071,419	15,648,865	16,324,062
<b>Estimated Payments</b>	2,119,004	2,220,171	2,200,355	2,225,770
<b>Payments with Final Returns</b>	2,442,064	2,450,459	2,299,584	2,417,221
<b>Fiduciary</b>	156,487	145,204	164,439	167,562
<b>Gross Receipts</b>	18,965,964	19,887,254	20,313,244	21,134,616
<b>Refunds</b>	(2,554,160)	(2,624,661)	(2,659,148)	(2,723,869)
<b>Net Receipts (State &amp; Local)</b>	16,411,804	17,262,593	17,654,095	18,410,746
<b>Local Reserve Account</b>	(6,137,714)	(6,562,059)	(6,802,286)	(7,093,402)
<b>Income Tax Check-offs</b>	(1,738)	(1,659)	(1,659)	(1,659)
<b>Net General Fund</b>	10,272,352	10,698,875	10,850,150	11,315,685

Figures may not sum to totals due to rounding.



## Corporate Income Tax

General Fund Corporate Income Tax (CIT) revenues increased 1.8% to \$1.052 billion in fiscal year (FY) 2020. Gross receipts increased 0.7% while refunds decreased 5.7%. Slowing revenue growth in FY 20 was expected following the extraordinary revenue growth of FY 19. That growth was predominately due to income shifting as a result of tax planning incentives from the *Tax Cuts and Jobs Act* (TCJA). Beyond the one-time boost from income shifting, the TCJA is still expected to result in increased taxable corporate income at the state level. In FY 22, the TCJA is forecast to contribute just over \$100 million in revenue.

So far, the CIT is the least sensitive major tax type to the COVID-19 pandemic. Net revenue collection in FY 21 has been driven more by large one-time refunds than a significant slowdown in corporate profits, though we do forecast profits to decline by 1.1% this fiscal year. Through November, gross receipts are down 3.9% while refunds are up 10.9%, resulting in net receipt growth of -9.3%. We expect growth to become positive in the remainder of the fiscal year as refunds slow down. Nevertheless, the December CIT forecast calls for \$29.7 million less revenue than in September, largely due to year to date trends. FY 2021 net receipts are forecast to increase 1.3% and grow 11.7% in FY 22. The elevated rate of growth in fiscal year 2022 is largely a result of TCJA provisions; underlying growth is forecast to be 3.7% in FY 22.

**Table 6**  
**Corporate Income Tax Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Gross Receipts</b>	1,532,707	1,543,077	Note 1	Note 1
<b>Refunds</b>	(231,656)	(218,479)	Note 1	Note 1
<b>Net Receipts</b>	1,301,050	1,324,599	1,341,409	1,498,216
<b>Transportation Trust Fund</b>	(189,878)	(193,315)	(195,768)	(218,653)
<b>Higher Education Investment Fund</b>	(78,063)	(79,476)	(80,485)	(89,893)
<b>Net General Fund</b>	1,033,109	1,051,808	1,065,157	1,189,670

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

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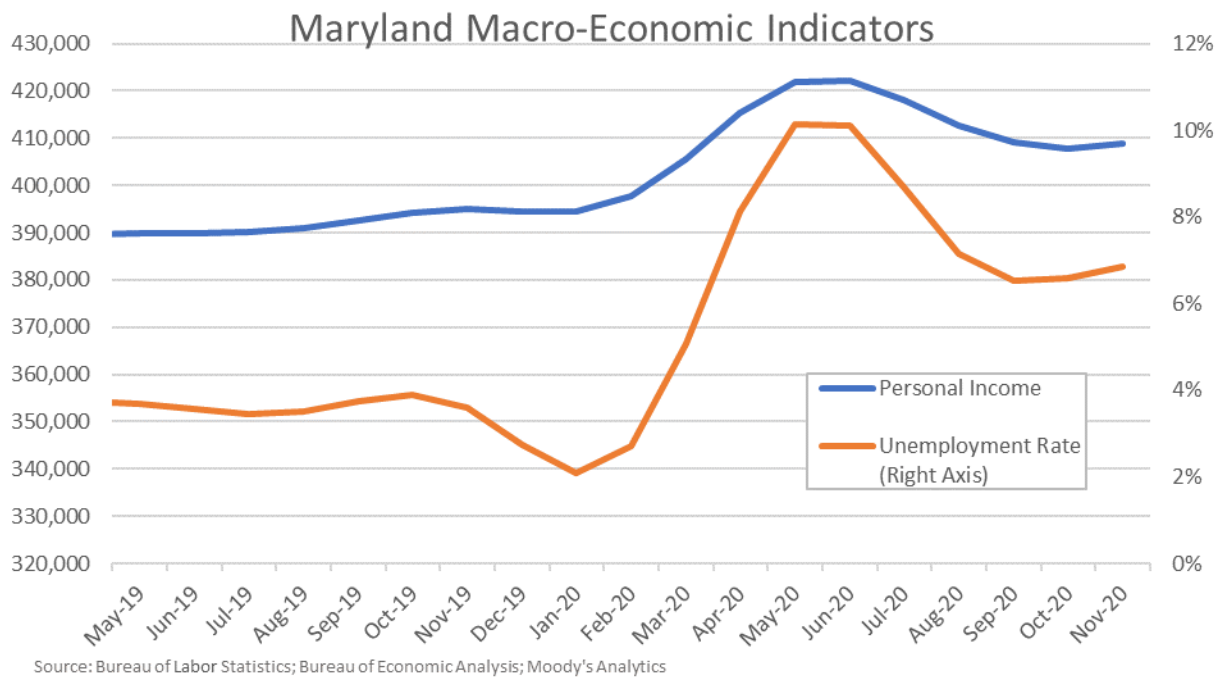
## Sales and Use Taxes

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The Sales and Use Tax (SUT) is the second largest component of the general fund. SUT revenues decreased 3.7% in fiscal year 2020 after growing at a 3.6% rate in fiscal year 2019. Year-to-date (YTD) revenue is up 2.9%. However, collections from Remote Sellers have been a growing share of total SUT revenue since such collections began in November of 2018. Excluding revenues from Remote Sellers, revenue growth YTD would be -3.6%. Even so, consumption has held up well through the pandemic. We expect low but still positive revenue growth in FY 21. As the pandemic wanes we expect pent-up demand to be realized as well as a partial shift back toward in-store retail. We therefore forecast strong growth of 5.0% and 3.0% in FY 22 and FY 23 respectively.

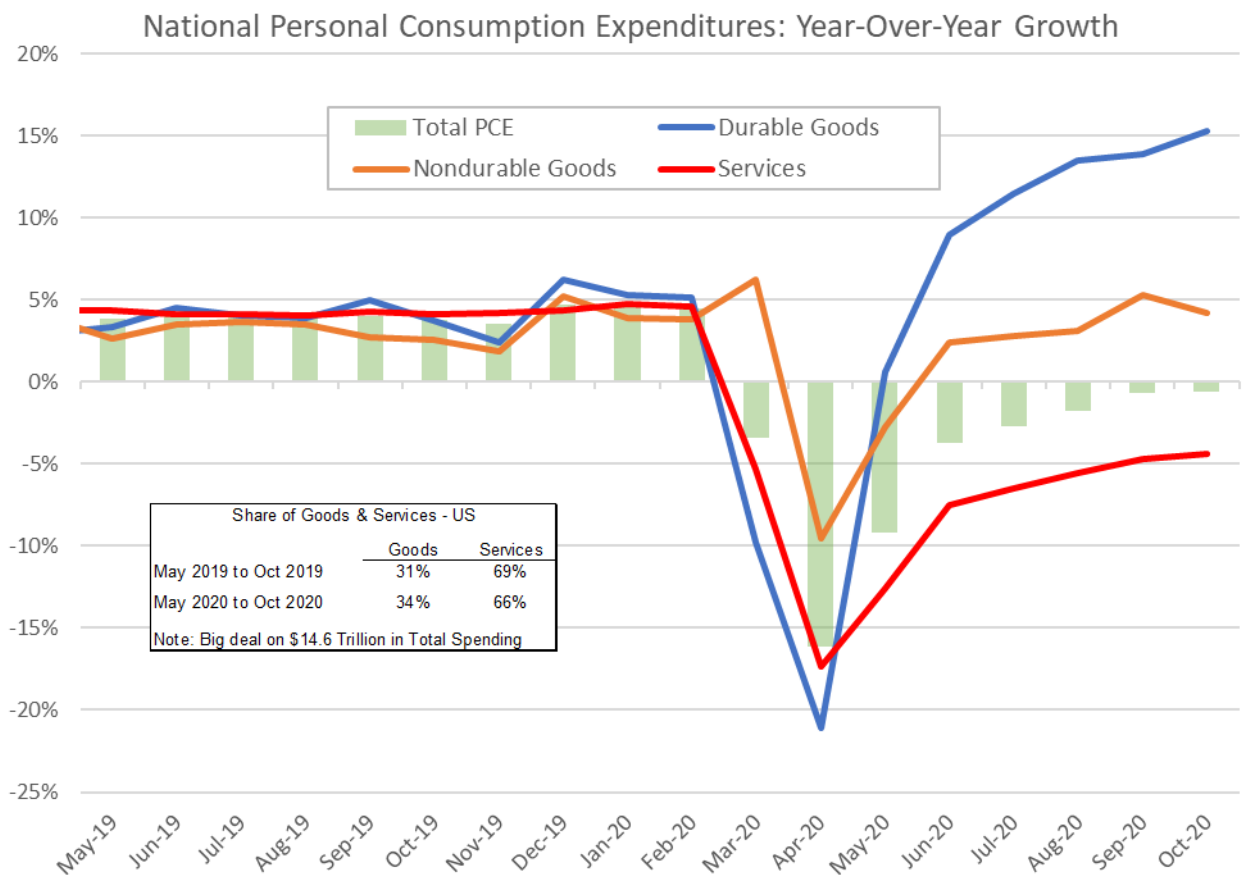
Near term revenue collection is driven by the pandemic and the accompanying government response. For example, SUT revenues were down 8% Year-Over-Year (YOY) in total and down 15% when excluding Remote Sellers through the height of the pandemic from April through July 2020. The impact of the pandemic on current and future revenues can be broken into three categories that will affect revenues in FY 21: direct economic impact on individuals, change in consumer preferences, and physical limitations of retail during the pandemic.

So far in the pandemic, it appears that the CARES Act has been largely successful in supporting personal income through the recession. As noted in the chart below, expanded unemployment programs have supported personal income such that personal income has continued to grow even as employment fell. Further, low-income individuals have borne the brunt of the recession's economic fallout, meaning that most individuals receiving enhanced unemployment benefits are nearly matching or often exceeding their previous incomes. As a result, despite widespread unemployment, individuals have had money on hand to continue spending and support SUT revenue throughout the recession.



The most important impact of the pandemic on SUT has been in consumer preferences. When examining consumer preferences there are three main factors we must account for: increased relative demand for goods, increased propensity to save, and increased demand for online retail. The consistent trend over the past few decades has been a shift in consumer consumption from goods to services but the pandemic has caused most services to become higher risk activities. As a result, consumers have dramatically favored goods as a substitute for services during the pandemic, see the chart below. SUT revenue is almost entirely derived from the sale of goods. As a result, revenue has grown in FY 21 despite a YOY decline in overall consumer spending. That said, we expect this to be a temporary trend that will revert to the historical pattern post-pandemic.





Sources: U.S. Bureau of Economic Analysis; Comptroller of Maryland, Bureau of Revenue Estimates

Another factor we expect to become increasingly important is the elevated personal savings rate. It is estimated that 27% of CARES Act stimulus check payments have gone toward savings during the recession and this is supported by the fact that YOY growth in personal savings for May and June 2020 was over 330%. The increase in savings over the summer has throttled consumption so far in the recovery but has positioned consumers well to continue consuming as the CARES Act and other programs expire. In effect, the increased savings will diffuse the effects of federal stimulus over the recovery and should be a contributing factor sustaining the recovery in the second half of FY 21.

The final notable change in consumer behavior has been the shift in preference toward online retail. For years online retail has constituted an increasing share of sales, but the pandemic has accelerated this process. Revenue from Remote Sellers (including marketplace facilitators) is expected to grow 65.0% in FY 21, and revenue has already exceeded the \$100 million general fund allocation this fiscal year. Considering only the first \$100 million in revenue from Remote Sellers goes to the general fund while the remainder is distributed to the blueprint fund, we expect the blueprint fund to receive an increasing share of SUT revenue for the years to come. A partial bounce back to in-store retail for FY 22 is forecasted, helping to drive strong growth that year, but some of the acquired market share will likely be permanently retained by online retailers moving forward.

As noted earlier, the potential of major restrictions to economic activity is the last major factor in SUT revenues. With the pandemic well into a third wave as of December 2020, the potential for economic activities to be severely restricted out of a public health necessity does constitute a significant downside risk for FY 21. To this effect, we factored some level of closures and a general slowdown of the recovery through the winter into our forecast. Other important long-term factors include: an aging population that consumes less; lack of inflation for goods, which reduces growth in the dollar value of taxable products; and reduced consumer confidence driving consumption. Each of these factors plays a role in our forecast but the pandemic and recovery will be the dominant factor in the next two fiscal years.

**Table 7**  
**Sales and Use Tax Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Gross Collections</b>	4,893,433	4,957,594	5,212,368	5,448,810
<b>Assessments</b>	8,093	11,739	11,739	11,739
<b>Refunds</b>	(12,835)	(32,673)	(13,069)	(13,396)
<b>Transportation Trust Fund</b>	(34,471)	(31,686)	(28,834)	(29,786)
<b>Other</b>	(42,131)	(38,727)	(35,242)	(36,405)
<b>Blueprint for MD's Future Fund</b>		(231,373)	(446,765)	(446,765)
<b>Total General Fund</b>	4,812,090	4,634,874	4,700,197	4,934,197

Figures may not sum to totals due to rounding.



## Remaining Supporting Tables

**Table 8A**  
**Traditional Lottery - Sales**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019 Actual</b>	<b>2020 Actual</b>	<b>2021 Estimated</b>	<b>2022 Estimated</b>
<b>Pick 3</b>	245,627	251,675	275,626	257,438
<b>Pick 4</b>	312,177	333,716	375,612	351,377
<b>Multimatch</b>	29,001	28,983	29,563	29,075
<b>Instant/5 Card Cash</b>	818,645	858,767	973,362	983,465
<b>Keno/Racetrax</b>	498,058	489,483	524,893	526,323
<b>Bonus Match 5</b>	19,573	18,524	19,821	19,488
<b>MegaMillions/Powerball</b>	251,786	148,983	143,640	148,352
<b>Instant Ticket Lottery Machines<sup>1</sup></b>	13,679	10,226	12,876	13,069
<b>Cash4Life/Fast Play</b>	12,390	51,773	80,860	82,074
<b>Gross Sales</b>	2,200,937	2,192,129	2,436,252	2,410,660

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 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Pick 3</b>	87,740	105,614	117,840	103,563
<b>Pick 4</b>	123,862	124,620	145,904	144,478
<b>Multimatch</b>	9,735	10,189	9,816	10,119
<b>Instant/5 Card Cash</b>	131,885	147,925	151,903	155,424
<b>Keno/Racetrax</b>	120,929	117,923	130,263	128,186
<b>Bonus Match 5</b>	5,891	6,628	6,769	6,535
<b>MegaMillions/Powerball</b>	104,912	61,466	58,483	60,375
<b>Instant Ticket Lottery Machines<sup>1</sup></b>	780	1,563	1,348	1,369
<b>Cash4Life/Fast Play</b>	4,319	12,741	20,135	20,191
<b>Gross Revenue</b>	590,052	588,668	642,460	630,239
<b>Less: Stadium Authority Revenue</b>	(40,000)	(40,000)	(35,208)	(35,233)
<b>Less: Veteran’s Trust Fund Revenue</b>	(78)	(156)	(135)	(137)
<b>Misc. Year End Adjustments</b>	3,401	-	-	-
<b>Less: MD Intl Race Fund</b>	(1,000)	-	-	-
<b>Net General Fund</b>	552,375	548,512	607,118	594,869

Figures may not sum to totals due to rounding.

**Table 9**  
**Business Franchise Tax Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Public Service Company Franchise Tax</b>	146,303	137,713	142,252	144,104
<b>Filing Fees</b>	98,762	73,546	116,164	62,582
<b>Blueprint Fund<sup>1</sup></b>	-	-	(49,914)	-
<b>Net General Fund</b>	245,065	211,259	208,502	206,686

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 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Insurance Premium Tax</b>	364,038	427,228	437,198	426,522
<b>MD Health Benefit Exchange Distributions</b>	(28,870)	(31,377)	(31,284)	(35,000)
<b>HMO &amp; MCO Premium Tax Collections<sup>1</sup></b>				206,839
<b>Net General Fund</b>	335,168	395,851	405,914	598,361

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 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Collateral Inheritance Tax</b>	63,732	59,291	57,038	58,806
<b>Direct Inheritance Tax</b>	106	75	76	73
<b>Estate Tax</b>	116,602	137,809	94,530	139,589
<b>Net General Fund</b>	180,440	197,175	151,644	198,469

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**Table 12**  
**Hospital Patient Recoveries**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Medicaid</b>	18,385	17,256	10,257	17,844
<b>Medicare</b>	7,577	5,241	6,568	6,156
<b>Insurance and Sponsors</b>	4,029	3,260	1,620	2,842
	29,991	25,757	18,445	26,842
<b>Disproportionate Share</b>	29,045	29,440	21,440	19,061
<b>Medicaid Cost Settlements</b>	5,261	4,019	2,500	4,239
<b>Net General Fund</b>	64,297	59,216	42,385	50,142

Figure may not sum to totals due to rounding

**Table 13**  
**Excise Tax Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Cigarette Tax</b>	315,376	319,541	294,737	296,485
<b>Other Tobacco Products Tax</b>	41,321	43,371	45,540	47,361
<b>Net General Fund Tobacco</b>	356,697	362,912	340,277	343,846
<b>Distilled Spirits Tax</b>	17,437	12,743	16,566	17,659
<b>Wine Tax</b>	6,374	4,824	5,724	6,182
<b>Beer Tax</b>	8,354	6,882	7,915	8,342
<b>Miscellaneous Licenses</b>	472	5,853	454	463
<b>Subtotal Alcoholic Beverages Taxes</b>	32,638	30,303	30,658	32,646
<b>Less: MD Wine and Grape Promotion Fund</b>	(104)	(94)	(113)	(122)
<b>Net General Fund Alcoholic Beverages</b>	32,534	30,209	30,545	32,524

Figures may not sum to totals due to rounding.

**Table 14**  
**General Fund Court Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>District Courts</b>	59,859	47,676	30,488	53,072
<b>Clerks of the Court</b>	30,204	29,296	32,283	32,995

**Table 15**  
**General Fund Interest Earnings**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Interest Earnings</b>	50,240	46,798	8,800	10,000

**Table 16**  
**Miscellaneous Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Recording Organization &amp; Capitalization Fees</b>	16,287	15,194	14,363	16,132
<b>Excess Fees of Office</b>	481	(3,151)	(2,364)	481
<b>Unclaimed Property</b>	99,223	104,704	99,000	99,000
<b>Local Income Tax Reimbursement</b>	16,565	19,590	22,543	23,219
<b>Uninsured Motorist Penalty Fees</b>	45,924	33,107	30,107	40,107
<b>State Admissions &amp; Amusement Tax</b>	-	-	-	9,000
<b>Federal Retiree Drug Subsidy</b>	9,462	6,412	6,400	6,400
<b>Miscellaneous Revenues and Transfers</b>	637	6,650	2,100	2,100
<b>Net General Fund</b>	188,579	182,506	172,149	196,439

Figures may not sum to totals due to rounding.

**Table 17**  
**Miscellaneous Agency Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>PSC Fines, Citations and Filing Fees</b>	85	52	30	85
<b>Legislature</b>	25	16	8	23
<b>Workers' Compensation</b>	54	53	52	52
<b>Public Defender</b>	606	204	72	27
<b>Attorney General</b>	32,862	33,234	31,194	33,208
<b>Executive &amp; Administrative Control</b>	8,383	9,234	7,554	7,166
<b>Financial &amp; Revenue Administration</b>	24,266	18,928	19,164	19,338
<b>Budget &amp; Fiscal Administration</b>	2,791	5,577	459	2,340
<b>General Services</b>	389	-	372	378
<b>Natural Resources</b>	113	150	115	116
<b>Agriculture</b>	227	79	129	131
<b>Health &amp; Mental Hygiene</b>	85,480	36,782	35,198	35,306
<b>Human Resources</b>	1,342	2,454	2,383	2,383
<b>Labor, Licensing &amp; Regulation</b>	4,474	4,289	4,539	5,991
<b>Public Safety &amp; MD State Police</b>	13,532	12,746	16,229	14,143
<b>Public Education</b>	8,175	8,862	8,136	8,256
<b>Housing and Community Development</b>	411	82	82	82
<b>Business &amp; Economic Development</b>	710	141	122	122
<b>Environment</b>	591	533	624	522
<b>Juvenile Services</b>	1	30	25	25
<b>Alcoholic Beverage Licenses</b>	1,512	2,346	1,542	1,573
<b>Net General Fund</b>	186,030	135,790	128,029	131,269

Figures may not sum to totals due to rounding.



**Table 18**  
**Transportation Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in thousands)*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Estimated</b>
<b>Department of Transportation</b>				
<b>Registrations</b>	403,495	367,209	405,000	424,800
<b>Licenses</b>	49,268	43,696	56,500	59,400
<b>Med-Evac Surcharge</b>	73,774	68,479	75,527	79,220
<b>Trauma Physician Services Surcharge</b>	12,708	11,798	13,012	13,648
<b>Miscellaneous Motor Vehicle Fees</b>	197,675	173,949	179,471	186,845
<b>Vehicle Emission Inspection Fees</b>	31,397	23,457	25,696	24,373
<b>Security Interest Filing Fees – Special Funds</b>	12,367	11,198	10,700	11,400
<b>Hauling Fees</b>	11,265	10,076	10,000	11,100
<b>Special License Tags – Special Funds</b>	4,844	4,575	5,500	5,400
<b>Titling Tax</b>	916,536	846,764	805,000	881,000
<b>Sales Tax on – Rental Vehicles</b>	34,471	31,686	28,834	29,786
	<u>1,747,800</u>	<u>1,592,887</u>	<u>1,615,240</u>	<u>1,726,972</u>
<b>Motor Fuel Vehicle Tax</b>	741,851	670,579	673,000	706,800
<b>Road Tax</b>	7,088	6,115	0	0
<b>Decals &amp; Permits</b>	181	183	0	0
<b>Sales Tax Equivalent</b>	321,741	317,781	275,328	234,889
<b>Indexing</b>	69,540	81,700	91,776	105,399
	<u>1,140,401</u>	<u>1,076,358</u>	<u>1,040,104</u>	<u>1,047,088</u>
<b>Total</b>	2,888,201	2,669,245	2,655,344	2,774,060

Figures may not sum to totals due to rounding.

**Table 19**  
**Casino Revenues**  
**Fiscal Years 2019 – 2022**  
*(\$ in millions)*

	Video Lottery Terminals			
	FY 2019	FY 2020	FY 2021E	FY 2022E
<b>Education Trust Fund</b>	447.4	329.2	421.7	449.0
<b>Casino Operators</b>	528.8	390.3	519.9	553.0
<b>Local Impact Grants</b>	61.1	45.0	59.8	63.6
<b>Small, Minority, and Women – Owned Business</b>	0.0	0.0	16.2	17.2
<b>Purse Dedication</b>	65.9	48.5	64.4	68.6
<b>Race Tracks Facility Renewal Account</b>	10.8	7.9	10.5	11.2
<b>State Lottery Agency</b>	11.2	8.3	11.0	11.7
<b>Total Video Lottery Terminals</b>	1,125.2	829.3	1,103.6	1,174.4

	Table Games			
	FY 2019	FY 2020	FY 2021E	FY 2022E
<b>Education Trust fund</b>	95.3	67.6	89.9	94.9
<b>Casino Operators</b>	508.2	360.6	479.4	506.3
<b>Local Impact Grants</b>	31.8	22.5	30.0	31.6
<b>Total Table Games</b>	635.2	450.7	599.3	632.8

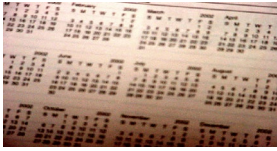
	Miscellaneous			
	FY 2019	FY 2020	FY 2021E	FY 2022E
<b>Education Trust Fund</b>	3.2	2.0	0.0	0.0

	Total			
	FY 2019	FY 2020	FY 2021E	FY 2022E
<b>Education Trust Fund</b>	545.9	398.9	511.6	543.9
<b>Casino Operators</b>	1,037.0	750.9	999.4	1,059.3
<b>Local Impact Grants</b>	92.8	67.5	89.8	95.3
<b>Small, Minority, and Women – Owned Business</b>	0.0	0.0	16.2	17.2
<b>Purse Dedication</b>	65.9	48.5	64.4	68.6
<b>Race Tracks Facility Renewal Account</b>	10.8	7.9	10.5	11.2
<b>State Lottery Agency</b>	11.2	8.3	11.0	11.7
<b>Total</b>	1,763.6	1,282.0	1,702.9	1,807.2

Figures may not sum to totals due to rounding.

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## Five Year Forecast

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Our forecast calls for economic growth to slow over the winter due to the worsening COVID-19 pandemic (the pandemic), accelerate next spring, and slow down once the economy retains prior trends, likely in 2022.

There is much uncertainty as to how fast and therefore how long the recovery will be once the pandemic is behind us. The recovery from the Great Recession was slow for a few main reasons: the fall in home values lowered average household wealth; the prior expansion was fueled by debt, which took time to clear once the value of underlying assets fell; and monetary policy was tight throughout the recovery. The Federal Reserve's interest rate target was low, but so were equilibrium rates. As some monetary policymakers themselves have acknowledged, their estimates of the natural rate of unemployment proved too high, causing them to tighten policy prematurely.

Because the Covid Recession was not caused by a debt-fueled financial crisis, we expect this recovery to be faster than the last, assuming appropriate monetary policy. However, not all the negative impacts of the pandemic will be temporary. Women and older workers have left the labor force at a higher rate than average. Many, particularly older workers, may not come back. For workers who do return, time spent out of the labor force often results in lower wages. We also do not know what the long-term health effects might be for the millions who were infected with COVID-19. Looking beyond the recovery, the long-run forecast is shaped by the aging of the population. As time goes on, a smaller portion of the population will be working age, defined here as 25 to 64 years old. Furthermore, certain industries may go through large post-Covid adjustments, commercial real estate seems likely to incur a revaluation as commercial space (office and retail) needs are revisited.

Productivity growth is expected to remain low, largely the result of the age distribution of the labor force. In short, the two largest generations in the labor force, boomers and millennials, are at opposite ends of the age distribution when it is middle-aged workers who are most productive on average. Productivity should increase as young workers gain experience, but given the forecast of slowing employment growth, the net effect on GDP depends on the magnitude of increasing productivity growth relative to slowing employment growth. We therefore expect a return to slow economic growth once the recovery phase is over.

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

Calendar Year	2018	2019	2020	2021	2022	2023	2024
US Real GDP (2009 \$ in billions)	20,612 <i>5.5%</i>	21,433 <i>1.4%</i>	20,949 <i>-2.3%</i>	22,228 <i>6.1%</i>	23,459 <i>5.5%</i>	24,522 <i>4.5%</i>	24,522 <i>4.6%</i>
US Non-Agricultural Employment (thousands)	148,891 <i>1.6%</i>	150,935 <i>1.3%</i>	142,272 <i>-5.7%</i>	146,344 <i>2.9%</i>	151,297 <i>3.4%</i>	153,218 <i>1.3%</i>	154,810 <i>1.0%</i>
US Personal Income (\$ in billions)	17,852 <i>5.3%</i>	18,552 <i>3.9%</i>	19,708 <i>6.2%</i>	19,790 <i>0.4%</i>	20,435 <i>3.3%</i>	21,301 <i>4.2%</i>	22,285 <i>4.6%</i>
Consumer Price Index (% Δ from prior year)	<i>2.2%</i>	<i>2.0%</i>	<i>1.2%</i>	<i>2.3%</i>	<i>2.4%</i>	<i>1.9%</i>	<i>2.1%</i>
US 10 Year Treasury Bond Yield	<i>2.9%</i>	<i>2.1%</i>	<i>0.9%</i>	<i>1.0%</i>	<i>1.3%</i>	<i>1.5%</i>	<i>1.6%</i>
MD Total Non-Agricultural Employment (thousands)	2,752 <i>0.9%</i>	2,770 <i>0.6%</i>	2,613 <i>-5.7%</i>	2,702 <i>3.4%</i>	2,779 <i>2.8%</i>	2,797 <i>0.6%</i>	2,823 <i>0.9%</i>
MD Personal Income (\$ in millions)	378,492 <i>3.4%</i>	390,792 <i>3.3%</i>	409,939 <i>4.9%</i>	412,550 <i>0.6%</i>	429,115 <i>4.0%</i>	446,888 <i>4.1%</i>	467,006 <i>4.5%</i>

Source: Board of Revenue Estimates and IHS Markit (December 2020 Forecast)

Table 21  
**Maryland General Fund Revenues**  
 Fiscal Years 2020- 2026  
 (\$ in thousands)

	2020 Actual	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2026 Estimate
<b>Income Taxes</b>							
Individual	10,698,875	10,850,150	11,315,685	11,880,002	12,396,619	12,926,502	13,481,794
Corporation	1,051,808	1,065,157	1,189,670	1,261,474	1,332,505	1,398,293	1,467,656
TOTAL	11,750,683	11,915,307	12,505,355	13,141,476	13,729,125	14,324,795	14,949,450
<b>Sales and Use Taxes</b>	4,634,874	4,700,197	4,934,197	5,082,306	5,229,180	5,354,197	5,484,185
<b>State Lottery</b>	548,512	607,118	594,869	609,416	624,433	640,015	657,338
<b>Franchise, Excise, License, Fee</b>	1,700,037	1,551,015	1,853,802	1,875,498	1,910,934	1,948,592	1,985,627
<b>ONGOING GENERAL FUND REVENUES</b>	18,634,105	18,773,636	19,888,223	20,708,696	21,493,671	22,267,599	23,076,601
<b>Revenue Volatility Cap <sup>1</sup></b>	-	-	(80,000)	(30,456)	-	-	-
<b>TOTAL GENERAL FUND REVENUES</b>	18,634,105	18,773,636	19,808,223	20,678,240	21,493,671	22,267,599	23,076,601

<sup>1</sup> Established by Chapters 4 & 550 of the 2017 Legislative Session and modified several times in subsequent legislation

Table 22  
**Revenues From Maryland's Casinos**  
 Fiscal Years 2020- 2026  
 (\$ in thousands)

	2020 Actual	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2026 Estimate
<b>Video Lottery Terminals</b>							
Education Trust Fund	329,218	421,733	448,954	454,626	459,833	465,666	471,584
Licensee	390,298	519,948	553,028	560,059	563,359	570,561	577,869
Local Impact Grants	45,011	59,787	63,649	64,460	66,242	67,086	67,942
Business Development	28	16,164	17,212	17,432	18,066	18,296	18,530
Purse Dedication	48,514	64,396	68,580	69,457	72,264	73,184	74,118
Racetrack Renewal	7,931	10,516	11,206	11,350	12,044	12,197	12,353
MD Lottery & Gaming Control	8,282	11,036	11,744	11,893	12,592	12,750	12,911
Subtotal	829,281	1,103,580	1,174,374	1,189,277	1,204,399	1,219,741	1,235,307
<b>Table Games</b>							
Education Trust Fund	67,604	89,894	94,927	96,145	97,380	98,634	99,906
Licensee	360,555	479,436	506,279	512,771	519,360	526,047	532,834
Local Impact Grants	22,535	29,965	31,642	32,048	32,460	32,878	33,302
Subtotal	450,693	599,295	632,849	640,964	649,200	657,558	666,042
<b>Miscellaneous</b>							
Education Trust Fund	2,044	-	-	-	-	-	-
Subtotal	2,044	-	-	-	-	-	-
<b>Total</b>							
Education Trust Fund	398,865	511,628	543,882	550,771	557,213	564,299	571,490
Licensee	750,853	999,384	1,059,308	1,072,830	1,082,719	1,096,608	1,110,703
Local Impact Grants	67,546	89,752	95,292	96,509	98,702	99,964	101,244
Business Development	28	16,164	17,212	17,432	18,066	18,296	18,530
Purse Dedication	48,514	64,396	68,580	69,457	72,264	73,184	74,118
Racetrack Renewal	7,931	10,516	11,206	11,350	12,044	12,197	12,353
MD Lottery & Gaming Control	8,282	11,036	11,744	11,893	12,592	12,750	12,911
Total	1,282,018	1,702,875	1,807,223	1,830,241	1,853,598	1,877,299	1,901,349