



# **The Economic Outlook and Revenue Forecast through Fiscal Year 2024**

Prepared by the Virginia Department of Taxation  
for Review by the  
Governor's Advisory Council on Revenue Estimates

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## Introduction

The Joint Advisory Board of Economists (JABE) met on October 13, 2021 as part of the fall forecasting process to consider three economic forecasts: the IHS Markit September standard forecast, the IHS Markit September alternative pessimistic forecast, and Moody's Analytics September standard forecast. Nine members of the Board agreed that the IHS Markit September standard forecast was a reasonable outlook for Virginia. Two members thought a pessimistic forecast for fiscal year 2022 would be more prudent and one member felt that the standard forecast was not sufficiently optimistic.

The purpose of this meeting is to review the most current economic forecasts to determine the most likely path for the Virginia economy over the next biennium and which of the resulting revenue forecasts seems appropriate. This forecast will serve as the basis for the budget to be released by the Governor in December.

Section 1 of this book contains a review of the national economic performance during fiscal year 2021. Summaries of IHS Markit October standard and alternative pessimistic national outlooks are presented.

Section 2 contains a review of Virginia's economic performance during fiscal year 2021. This is followed by a summary of the IHS Markit October standard and alternative pessimistic economic scenarios for Virginia developed by the Department of Taxation.

Section 3 contains a review of Virginia's general fund revenue collections during fiscal year 2021. This is followed by a summary of the October standard and alternative pessimistic forecasts.

Section 4 discusses nongeneral fund revenue and forecasts.

Historical and forecast economic data are contained in Appendix A. Appendix B is a history of general fund revenue collections. Appendix C contains detailed econometric output for major sources.

**SECTION 1**  
**THE U.S. ECONOMY**

## Section 1 The U.S. Economy

### Introduction

This section reviews fiscal year 2021 economic outcomes compared with the official forecast and examines the outlook for the national economy for fiscal years 2022 through 2024. Table 1.1 on the next page compares the official forecast for fiscal year 2021 to the actual outcomes for key economic variables. Tables 1.2 and 1.3 at the end of this section compare the IHS Markit October 2020 standard forecast, on which Virginia's current official economic and revenue forecasts are based, with two forecasts for your consideration: the IHS Markit October 2021 standard and the alternative pessimistic scenarios.

### Review of Fiscal Year 2021

As IHS Markit prepared the October 2020 forecast, real GDP had fallen at an annualized rate of 31.4 percent in the second quarter of 2020. The standard forecast expected the COVID-19 infection rate would likely increase through the fall, causing consumers and businesses to remain cautious. It was expected that the second round of stimulus checks and emergency unemployment benefits would be disbursed in the fourth quarter.

Following is a summary of key assumptions included in the October 2020 standard forecast and how those assumptions fared over the fiscal year. Table 1.1 on the next page compares the official forecast and actual results for fiscal year 2021.

- Real GDP rose 1.6 percent for the fiscal year, double the forecast of 0.8 percent growth.
- Total personal income rose 7.1 percent in fiscal year 2021, 4.3 percentage points ahead of the forecast. Wages and salaries grew 4.7 percent, 1.7 percentage points above the forecast of 3.0 percent.
- Real consumer spending rose 2.9 percent in fiscal year 2021, 2.1 percentage points ahead of the forecast of 0.8 percent.
- Total nonagricultural employment fell 2.8 percent, 1.0 percentage point below the forecast of a 1.8 percent decline, with job losses in all major sectors. The construction sector fell by 0.5 percent, compared with the forecast of a 2.9 percent decline, and manufacturing fell 2.5 percent while forecast was for a 3.3 percent drop. All other sectors finished the year behind expectations.

**Table 1.1 - Fiscal Year 2021 U.S. Forecast Performance (% Change)**

	<u>Forecast</u>	<u>Actual</u>	<u>Actual Minus Forecast</u>
<u>Output, Income, and Spending (% of Total)</u>			
Real GDP	0.8	1.6	0.8
Total Personal Income	2.8	7.1	4.3
Wages and Salaries (50%)	3.0	4.7	1.7
Average Wage	4.7	7.6	2.9
Real Consumer Spending	0.8	2.9	2.1
<u>Employment and Labor Markets (% of Total)</u>			
Total Nonagricultural Employment	(1.8)	(2.8)	(1.0)
Construction (5%)	(2.9)	(0.5)	2.4
Manufacturing (9%)	(3.3)	(2.5)	0.8
Trade, Transportation, and Utilities (19%)	0.3	(0.7)	(1.0)
Information (2%)	(2.1)	(5.4)	(3.3)
Financial Activities (6%)	0.7	(0.1)	(0.8)
Professional and Business Services (14%)	(0.9)	(1.9)	(1.0)
Education and Health Services (16%)	(1.2)	(2.3)	(1.1)
Leisure and Hospitality (11%)	(6.4)	(9.8)	(3.4)
Other Services (4%)	(1.9)	(2.5)	(0.6)
Government (15%)	(1.9)	(3.5)	(1.6)
Unemployment Rate (%)	7.3	6.9	(0.4)
<u>Interest Rates (% of Total)</u>			
3-Month Treasury Bills	0.1	0.1	0.0
30-Year Treasury Bonds	1.5	1.8	0.3
<u>Prices (% of Total)</u>			
CPI	1.9	2.3	0.4
GDP Deflator	1.4	2.2	0.8

The Official forecast is IHS Markit's October 2020 U.S. standard scenario.

- Price increases were greater than expected. Growth in the CPI increased 2.3 percent, 0.4 percentage point above forecast, and the GDP deflator increased 2.2 percent for the year, and was 0.8 percentage point above its forecast.

## **The IHS Markit U.S. Standard Forecast**

The IHS October forecast reflects all pandemic relief measures of 2020 including the \$1.9 trillion American Recovery Plan enacted in March and the Infrastructure Investment and Jobs Act passing, resulting in about \$300 billion of additional spending over the next five fiscal years. However, continuing supply restraints and COVID-19 effects are expected to dampen the expansion in the second half of this year. IHS assigns a probability of 50 percent to the standard scenario.

On a fiscal year basis, the October standard forecast predicts real GDP will grow 4.5 percent in fiscal year 2022, then 3.7 percent in fiscal year 2023. Following a 2.8 percent decline in employment in fiscal year 2021, payroll employment is expected to grow 4.2 percent in fiscal year 2022 and 2.7 percent in fiscal year 2023. The October standard forecast expects the unemployment rate to fall to 4.6 percent in fiscal year 2022, and 3.7 percent in fiscal year 2023.

Total personal income is expected to rise by 1.0 percent in fiscal year 2022, faster than the official forecast of 0.6 percent. Income growth then increases to 4.4 percent in fiscal year 2023, just below the official forecast of 4.6 percent. The October forecast for the largest component of personal income, wages and salaries, is also higher than the official estimate in fiscal year 2022. IHS Markit expects wages and salaries to rise 8.3 percent in fiscal year 2022 and 6.3 percent in fiscal year 2023.

Expectations for consumer spending in the October standard forecast are more optimistic than the official forecast for fiscal year 2022. Real consumer spending is expected to rise 5.3 percent in fiscal year 2022, compared with 3.1 percent in the official forecast. Spending is then expected to slow to 2.7 percent in fiscal year 2023.

At its September meeting, the Federal Reserve left the federal funds target rate unchanged at 0.0 to 0.25 percent. In the October standard forecast, IHS assumed the Fed will begin raising its policy rate in March of 2023.

## **Alternative U.S. Forecast**

### **IHS Markit Pessimistic Alternative Scenario**

The pessimistic scenario anticipates a weaker recovery in consumer spending and a slower recovery than the standard forecast. This scenario is based on two underlying assumptions. First, the resurgence in COVID-19 leads to more cautious consumer spending; and, second, that this development results in some workers choosing to delay returning to work. This consumer hesitancy leads to business investment being scaled back. IHS Markit assigns a 30 percent probability to the pessimistic scenario.

In this forecast, real GDP grows by 3.4 percent in fiscal year 2022, then increases 3.2 percent in fiscal year 2023. Total personal income growth is flat in fiscal year 2022 before increasing to 3.3 percent in fiscal year 2023. In fiscal year 2024, growth is expected to pick up to 4.5 percent.

This forecast expects employment to increase 3.9 percent in fiscal year 2022, and 2.3 percent in 2023. Unemployment declines to 5.0 percent in fiscal year 2022, and 4.5 percent in fiscal year 2023.

Wages and salaries remain below the standard forecast, growing 7.4 percent in fiscal year 2022, and 4.8 percent in fiscal year 2023.



**Table 1.2 - Fiscal Years 2019-2024 Official and October IHS Forecasts**

U.S. Economic Forecasts - Income and Other Indicators (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Output, Income, and Spending (% of Total)</u>							
Real GDP	Official (Oct '20)	2.5	(1.1)	0.8	2.9	3.1	2.7
	Oct Standard	2.4	(0.9)	1.6	4.5	3.7	2.6
	Oct Pessimistic			1.6	3.4	3.2	2.9
Total Personal Income	Official (Oct '20)	4.8	5.1	2.8	0.6	4.6	4.4
	Oct Standard	4.8	5.4	7.2	1.0	4.4	5.1
	Oct Pessimistic			7.2	(0.0)	3.3	4.5
Wages and Salaries (50%)	Official (Oct '20)	4.9	1.7	3.0	5.8	5.3	4.6
	Oct Standard	4.9	2.4	4.8	8.3	6.3	5.3
	Oct Pessimistic			4.8	7.4	4.8	4.2
Average Wage	Official (Oct '20)	3.4	3.8	4.7	2.5	2.9	3.1
	Oct Standard	3.4	4.5	7.6	3.9	3.5	4.0
	Oct Pessimistic			7.6	3.3	2.4	3.0
Real Consumer Spending	Official (Oct '20)	2.5	(1.3)	0.8	3.1	2.8	2.6
	Oct Standard	2.5	(1.4)	2.9	5.3	2.7	2.6
	Oct Pessimistic			2.9	4.0	2.1	3.0
<u>Interest Rates (%)</u>							
3-Month Treasury Bills	Official (Oct '20)	2.3	1.2	0.1	0.1	0.1	0.1
	Oct Standard	2.3	1.2	0.1	0.1	0.1	0.6
	Oct Pessimistic			0.1	0.1	0.1	0.1
30-Year Treasury Bonds	Official (Oct '20)	3.0	1.9	1.5	1.9	2.2	2.4
	Oct Standard	3.0	1.9	1.8	2.1	2.6	2.9
	Oct Pessimistic			1.8	2.0	2.3	2.6
<u>Prices (% of Total)</u>							
CPI	Official (Oct '20)	2.1	1.6	1.9	2.7	2.0	1.8
	Oct Standard	2.1	1.6	2.3	4.6	2.0	2.1
	Oct Pessimistic			2.3	4.3	1.1	1.0
GDP Deflator	Official (Oct '20)	2.2	1.4	1.4	1.5	1.7	1.9
	Oct Standard	2.2	1.4	2.2	4.2	2.3	2.3
	Oct Pessimistic			2.2	3.9	1.3	1.2

The Official forecast is IHS Markit's October 2020 U.S. standard scenario.

The Oct Standard forecast is IHS Markit's October 2021 U.S. standard forecast.

The Oct Pessimistic forecast is IHS Markit's October 2021 U.S. pessimistic alternative scenario.

**Table 1.3 - Fiscal Years 2019-2024 Official and October IHS Forecasts**  
 U.S. Economic Forecasts - Employment and Labor Markets (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Employment and Labor Markets (% of Total)</u>							
Total Nonagricultural Employment	Official (Oct '20)	1.5	(1.9)	(1.8)	3.3	2.3	1.5
	Oct Standard	1.5	(1.9)	(2.8)	4.2	2.7	1.3
	Oct Pessimistic			(2.8)	3.9	2.3	1.1
Construction (5%)	Official (Oct '20)	4.1	(0.2)	(2.9)	(0.5)	1.9	1.8
	Oct Standard	4.1	(0.2)	(0.5)	1.0	0.9	0.2
	Oct Pessimistic			(0.5)	0.0	(0.8)	(0.4)
Manufacturing (9%)	Official (Oct '20)	1.9	(1.7)	(3.3)	1.0	1.2	0.6
	Oct Standard	1.9	(2.1)	(2.5)	2.4	0.6	0.4
	Oct Pessimistic			(2.5)	2.6	(0.0)	0.2
Trade, Transportation, and Utilities (19%)	Official (Oct '20)	0.6	(2.1)	0.3	2.1	(2.0)	(1.8)
	Oct Standard	0.7	(2.0)	(0.7)	2.6	(0.8)	(0.3)
	Oct Pessimistic			(0.7)	2.1	(1.0)	(0.5)
Financial Activities (6%)	Official (Oct '20)	1.9	0.9	0.7	2.3	4.4	1.2
	Oct Standard	1.9	1.1	(0.1)	1.8	3.1	(0.6)
	Oct Pessimistic			(0.1)	1.9	3.2	(0.2)
Professional and Business Services (14%)	Official (Oct '20)	2.0	(0.8)	(0.9)	5.2	6.7	5.0
	Oct Standard	1.9	(1.3)	(1.9)	5.5	6.3	1.2
	Oct Pessimistic			(1.9)	3.6	4.2	1.6
Education and Health Services (16%)	Official (Oct '20)	1.9	(0.1)	(1.2)	3.5	1.0	0.8
	Oct Standard	1.9	(0.2)	(2.3)	2.8	2.2	0.4
	Oct Pessimistic			(2.3)	3.0	2.6	0.3
Leisure and Hospitality (11%)	Official (Oct '20)	1.5	(8.6)	(6.4)	8.2	5.2	3.7
	Oct Standard	1.5	(8.2)	(9.8)	13.1	8.0	7.8
	Oct Pessimistic			(9.8)	13.6	7.5	7.1
Government (15%)	Official (Oct '20)	0.5	(0.6)	(1.9)	1.6	2.1	2.1
	Oct Standard	0.5	(0.4)	(3.5)	3.2	1.9	0.7
	Oct Pessimistic			(3.5)	3.2	1.9	0.7
Unemployment Rate (%)	Official (Oct '20)	3.8	6.0	7.3	5.7	4.5	4.0
	Oct Standard	3.8	6.0	6.9	4.6	3.7	3.6
	Oct Pessimistic			6.9	5.0	4.5	4.2

The Official forecast is IHS Markit's October 2020 U.S. standard scenario.

The Oct Standard forecast is IHS Markit's October 2021 U.S. standard forecast.

The Oct Pessimistic forecast is IHS Markit's October 2021 U.S. pessimistic alternative scenario.

**SECTION 2**  
**THE VIRGINIA ECONOMY**

## Section 2 The Virginia Economy

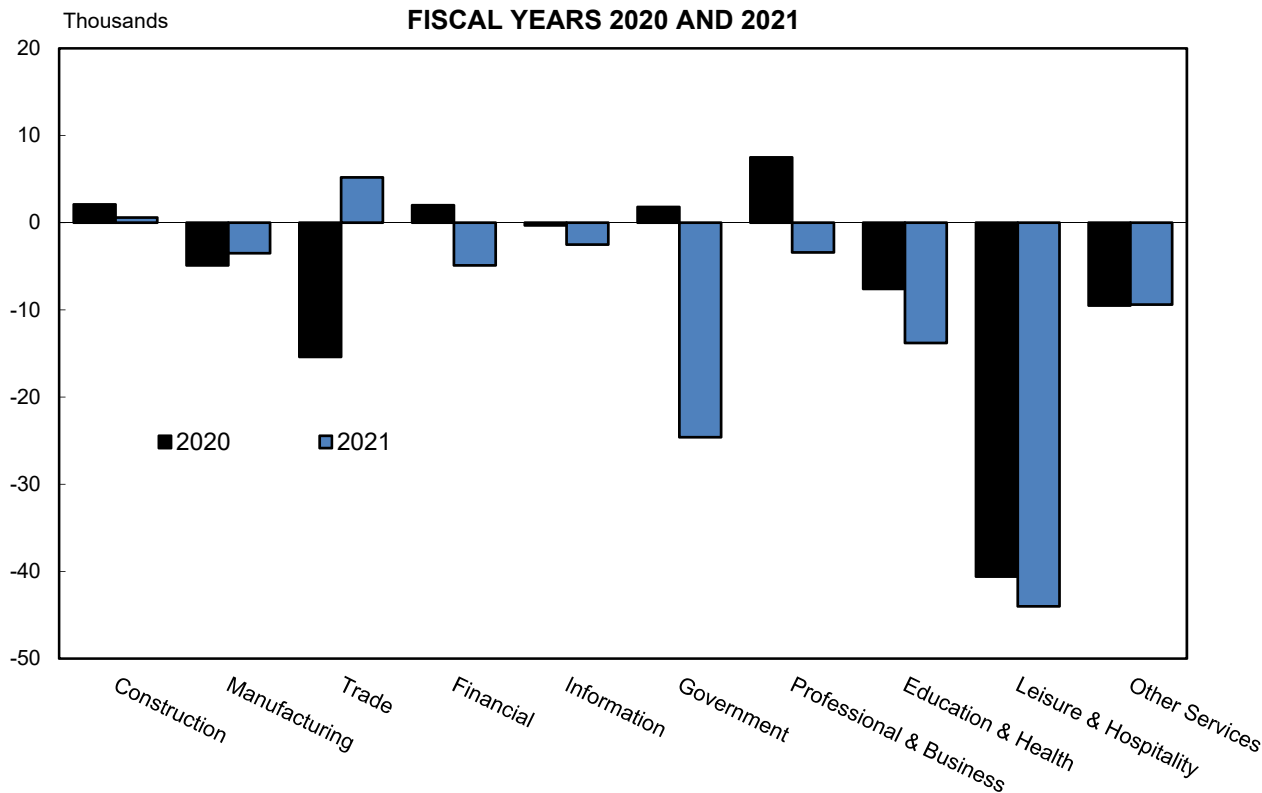
### Introduction

This section begins with a review of fiscal year 2021, comparing actual economic growth in Virginia to the official forecast for the year. The official forecast for Virginia was based on IHS Markit’s October 2020 U.S. standard forecast with modifications from both the JABE and the GACRE at their fall meetings. Following the review of fiscal year 2021, the October standard and pessimistic alternative forecasts are summarized.

### Review of Fiscal Year 2021

Payroll employment growth was below expectations in fiscal year 2021. In the official forecast, total nonagricultural employment was projected to fall 0.3 percent. Actual job losses were 100,500, a decrease of 2.5 percent. Higher-than-expected losses occurred in construction, information, financial activities, professional and business services, other services, and government. Figure 2.1 displays the change in employment by sector for fiscal year 2020 and 2021.

**Figure 2.1  
VIRGINIA JOB CHANGE BY SECTOR  
FISCAL YEARS 2020 AND 2021**



## Virginia Economy

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Table 2.1 displays fiscal year 2021 income and employment data. The official forecast for Virginia's fiscal year 2021 personal income was to advance at a 3.7 percent rate. However due to strong wages and salaries (49 percent of total personal income) and net transfer payments (12 percent of total personal income), personal income grew at a strong 6.2 percent forecasted rate. Outlays from both the federal and state government to households resulted in large net transfer payments, which grew 35.4 percent.

**Table 2.1 - Fiscal Year 2021 Virginia Forecast Performance (% Change)**

	<u>Forecast</u>	<u>Actual</u>	<u>Actual Minus Forecast</u>
<u>Income (% of Total)*</u>			
Total Personal Income	3.7	6.2	2.5
Wages and Salaries (49%)	3.3	4.6	1.3
Average Wage	3.5	7.2	3.7
Dividends, Interest, and Rent (19%)	3.1	(1.8)	(4.9)
Supplements to Wages and Salaries (11%)	2.6	3.8	1.2
Proprietor's Income (6%)	(4.6)	10.4	15.0
Net Transfer Payments (12%)	8.7	35.4	26.7
<u>Employment and Labor Markets (% of Total)</u>			
Total Nonagricultural Employment	(0.3)	(2.5)	(2.2)
Construction and Mining (5%)	1.9	0.3	(1.6)
Manufacturing (6%)	(3.8)	(1.5)	2.3
Trade, Transportation, and Utilities (17%)	(1.7)	0.8	2.5
Information (2%)	7.9	(3.7)	(11.6)
Financial Activities (5%)	1.8	(2.3)	(4.1)
Professional and Business Services (20%)	2.2	(0.4)	(2.6)
Education and Health Services (14%)	(1.8)	(2.5)	(0.7)
Leisure and Hospitality (9%)	(12.3)	(11.8)	0.5
Other Services (5%)	(0.7)	(5.0)	(4.3)
Government (18%)	5.0	(3.4)	(8.4)
Unemployment Rate (%)	6.9	5.7	(1.2)

The forecast data are based on the October 2020 IHS Markit's U.S. standard forecast and the corresponding Virginia state forecast developed as recommended by JABE and GACRE members.

## Economic Forecast for Fiscal Years 2022-2024

This section examines the outlook for the Virginia economy for fiscal years 2022 through 2024. Tables 2.2 and 2.3 compare the IHS Markit's October 2020 official forecast with two additional forecasts; the IHS Markit's October 2021 standard and alternative pessimistic forecast. Tables 2.4 and 2.5 provide an overview of regional employment in Virginia.

### **IHS Markit Virginia Standard Forecast**

This section compares IHS Markit's October 2021 forecast with the official forecast. In the official forecast, employment in the Commonwealth was projected to grow 1.0 percent in fiscal year 2022, then grow at a 1.4 percent rate in fiscal year 2023. Figure 2.2 compares employment growth in Virginia with that of the nation. Under the standard forecast, employment is expected to increase 2.8 percent in fiscal year 2022, then expand 1.1 percent in fiscal year 2023.

According to the October standard forecast, total nonagricultural employment is expected to increase 2.8 percent (107,900 jobs) in fiscal year 2022 and 1.1 percent (43,600 jobs) in fiscal year 2023. The financial, professional and business services and the leisure and hospitality sectors are expected to be the main drivers over the forecast horizon.

The October standard forecast has personal income growing 4.6 percent in fiscal year 2022, followed by a 3.9 percent pace in fiscal year 2023. Figure 2.3 compares national and state personal income. Income from wages and salaries is expected to grow 6.4 percent in fiscal year 2022 and 5.3 percent in fiscal year 2023. Growth of dividends, interest, and rental income is expected to increase 10.5 percent in fiscal year 2022 and 4.5 percent in fiscal year 2023.

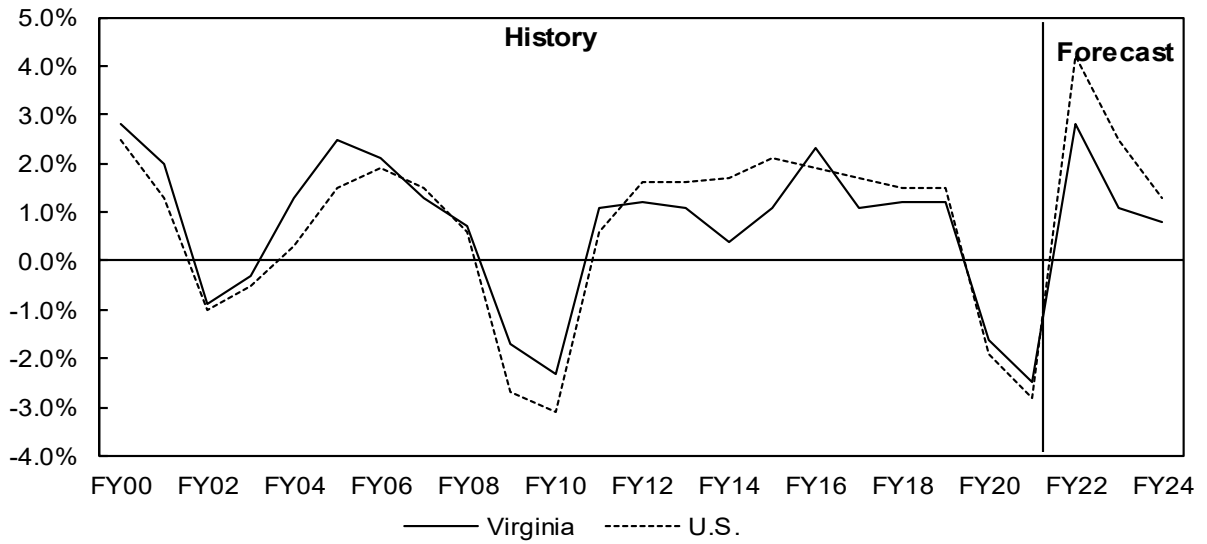
Tables 2.4 and 2.5 provide an overview of regional employment in Virginia. Northern Virginia, which represents 38 percent of all jobs in the state, total employment is expected to increase by 46,300 jobs or 3.2 percent in fiscal year 2022. On a percentage basis, education and health services, leisure and hospitality, and government are forecast to post the strongest gains.

Employment in the Norfolk-Virginia Beach-Newport News MSA (20 percent of state employment) is expected to increase by 23,500 jobs or 3.1 percent in fiscal year 2022. The trade, financial activities, professional and business services, and leisure and hospitality sectors are forecast to drive the gains.

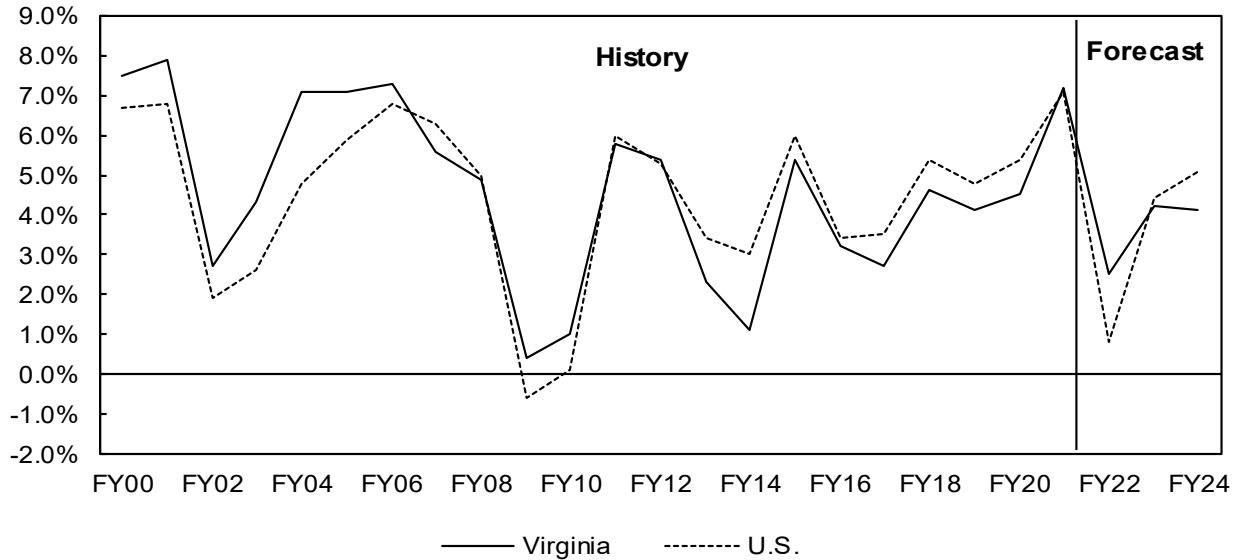
Employment in the Richmond-Petersburg MSA (17 percent of state employment) is expected to increase by 12,200 jobs or 1.9 percent in fiscal year 2022. On a percentage basis, education and health services, leisure and hospitality, and government are forecast to post the strongest gains.

Tabular data are presented throughout this section. More detailed tabular data are presented in Appendix A. Table A.1 shows quarterly national and Virginia historical data for major forecast variables from fiscal year 2019 through fiscal year 2021. Table A.2 shows quarterly national and Virginia data for the three forecasts through fiscal year 2024. Table A.3 displays national and Virginia annual historical and forecast data from fiscal year 2002 through fiscal year 2024. Table A.4 displays annual regional historical and forecast employment data from fiscal year 2002 through fiscal year 2024.

**Figure 2.2**  
**U.S. AND VIRGINIA EMPLOYMENT GROWTH**  
**HISTORY AND FORECAST - FISCAL YEARS 2000-2024**



**Figure 2.3**  
**U.S. AND VIRGINIA PERSONAL INCOME GROWTH**  
**HISTORY AND FORECAST - FISCAL YEARS 2000-2024**



## **Alternative Virginia Forecasts**

### **IHS Markit's Pessimistic Alternative Scenario**

In the Virginia pessimistic alternative forecast, economic growth significantly slows, as a broad loss in confidence leads to a drop in a range of investment and consumer spending categories. Employment grows 2.7 percent in fiscal year 2022, then grows 1.0 percent in fiscal year 2023. Total personal income grows 4.1 percent in fiscal year 2022 and 3.0 percent in fiscal year 2023, compared with 4.6 percent and 3.9 percent in the October standard forecast. Wages and salaries grow 5.9 percent and 4.5 percent in fiscal years 2022-23. These growth rates are below the rates in the October standard forecast.



## Virginia Economy

**Table 2.2 - Fiscal Years 2019-2024 Official and October IHS Forecasts**  
Virginia Economic Forecasts - Employment and Labor Markets (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Employment and Labor Markets (% of Total)</u>							
Total Nonagricultural Employment	Official (Oct '20)	1.3	(1.4)	(0.3)	1.0	1.4	0.9
	Oct Standard	1.2	(1.6)	(2.5)	2.8	1.1	0.8
	Oct Pessimistic			(2.5)	2.7	1.0	0.6
Construction and Mining (5%)	Official (Oct '20)	2.2	1.4	1.9	(0.4)	1.4	1.4
	Oct Standard	2.6	1.0	0.3	0.5	0.5	0.3
	Oct Pessimistic			0.3	0.1	(0.6)	(0.3)
Manufacturing (6%)	Official (Oct '20)	2.6	(1.9)	(3.8)	1.1	1.4	0.6
	Oct Standard	2.6	(2.0)	(1.5)	1.8	1.0	(0.3)
	Oct Pessimistic			(1.5)	2.4	(0.0)	0.2
Trade, Transportation, and Utilities (17%)	Official (Oct '20)	(0.2)	(1.5)	(1.7)	1.5	(4.7)	(3.1)
	Oct Standard	(0.2)	(2.3)	0.8	1.2	(4.7)	(1.3)
	Oct Pessimistic			0.8	2.0	(3.8)	(1.0)
Financial Activities (5%)	Official (Oct '20)	1.5	1.7	1.8	2.8	5.5	1.4
	Oct Standard	1.5	0.9	(2.3)	2.9	4.4	(0.7)
	Oct Pessimistic			(2.3)	1.9	3.7	(0.2)
Professional and Business Services (20%)	Official (Oct '20)	2.3	0.5	2.2	3.1	4.4	3.2
	Oct Standard	2.3	1.0	(0.4)	2.8	3.0	0.9
	Oct Pessimistic			(0.4)	1.7	1.8	0.7
Education and Health Services (14%)	Official (Oct '20)	2.0	(2.0)	(1.8)	3.6	1.1	0.8
	Oct Standard	1.7	(1.4)	(2.5)	3.5	0.6	0.4
	Oct Pessimistic			(2.5)	3.6	1.8	0.3
Leisure and Hospitality (9%)	Official (Oct '20)	0.8	(8.9)	(12.3)	6.9	4.7	3.1
	Oct Standard	1.0	(9.9)	(11.8)	4.8	6.3	9.5
	Oct Pessimistic			(11.8)	5.1	6.8	7.7
Government (18%)	Official (Oct '20)	0.9	(0.3)	5.0	(8.2)	(0.6)	0.5
	Oct Standard	1.0	0.2	(3.4)	2.3	(0.3)	(0.8)
	Oct Pessimistic			(3.4)	2.2	(0.4)	(1.0)
Unemployment Rate (%)	Official (Oct '20)	2.9	4.4	6.9	5.4	4.3	3.8
	Oct Standard	2.8	4.3	5.7	3.6	2.8	2.6
	Oct Pessimistic			5.7	3.8	3.4	3.2

The Official forecast is based on IHS Markit's October 2020 U.S. standard forecast with recommendations by JABE and GACRE.

The Oct Standard forecast is based on IHS Markit's October 2021 U.S. standard forecast.

The Oct Pessimistic forecast is based on IHS Markit's October 2021 U.S. pessimistic alternative scenario.

**Table 2.3 - Fiscal Years 2019-2024 Official and October IHS Forecasts**  
Virginia Economic Forecasts - Income (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Income (% of Total)</u>							
Total Personal Income	Official (Oct '20)	4.1	4.3	3.7	3.4	3.8	3.5
	Oct Standard	3.8	4.9	6.2	4.6	3.9	4.3
	Oct Pessimistic			6.2	4.1	3.0	3.4
Wages and Salaries (49%)	Official (Oct '20)	4.6	2.5	3.3	3.9	4.8	3.9
	Oct Standard	4.2	3.1	4.6	6.4	5.3	4.6
	Oct Pessimistic			4.6	5.9	4.5	3.4
Average Wage	Official (Oct '20)	3.3	4.0	3.5	2.9	3.4	3.0
	Oct Standard	3.0	4.9	7.2	3.5	4.2	3.7
	Oct Pessimistic			7.2	3.1	3.5	2.8
Dividends, Interest, and Rent (19%)	Official (Oct '20)	3.7	(0.4)	3.1	3.1	1.9	3.1
	Oct Standard	3.4	(0.2)	(1.8)	10.5	4.5	5.2
	Oct Pessimistic			(1.8)	9.0	3.9	5.5
Supplements to Wages and Salaries (11%)	Official (Oct '20)	3.5	1.4	2.6	5.8	5.5	4.7
	Oct Standard	2.6	1.8	3.8	5.9	6.2	5.3
	Oct Pessimistic			3.8	5.0	4.6	4.2
Proprietor's Income (6%)	Official (Oct '20)	3.6	3.4	(4.6)	(0.9)	(1.3)	1.9
	Oct Standard	3.8	2.9	10.4	(1.0)	(0.1)	0.1
	Oct Pessimistic			10.4	(2.6)	0.5	1.4
Net Transfer Payments (12%)	Official (Oct '20)	6.7	46.4	8.7	(0.3)	3.1	0.8
	Oct Standard	6.7	50.3	35.4	(13.0)	(6.3)	2.1
	Oct Pessimistic			35.4	(11.2)	(7.0)	(0.9)

The Official forecast is based on IHS Markit's October 2020 U.S. standard forecast with recommendations by JABE and GACRE.

The Oct Standard forecast is based on IHS Markit's October 2021 U.S. standard forecast.

The Oct Pessimistic forecast is based on IHS Markit's October 2021 U.S. pessimistic alternative scenario.

## Virginia Economy

**Table 2.4 - Fiscal Years 2019-2024 October Standard Forecast**  
Virginia Economic Forecast - Regional Employment (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Region by Sector (% of Total)</u>							
Northern Virginia (38%) *	Total Nonagricultural Employment	1.9	(1.0)	(2.3)	3.2	0.7	0.9
	Construction and Mining (6%) **	4.4	2.0	1.6	2.8	0.5	0.3
	Trade, Transportation, and Utilities (14%)	0.5	(2.1)	(2.0)	0.5	(6.7)	(1.8)
	Financial Activities (5%)	1.4	0.6	(2.2)	1.0	3.6	(0.6)
	Professional and Business Services (30%)	3.0	2.1	0.5	2.9	2.4	0.7
	Education and Health Services (11%)	2.7	(1.3)	(2.8)	3.3	(0.2)	0.5
	Leisure and Hospitality (8%)	0.8	(11.4)	(14.1)	7.2	6.8	10.2
	Government (16%)	1.5	0.3	(1.6)	4.1	(0.8)	(0.5)
Hampton Roads (20%)	Total Nonagricultural Employment	0.7	(2.0)	(2.5)	3.1	1.6	1.0
	Construction and Mining (5%)	2.2	0.6	2.5	(1.5)	0.5	0.3
	Trade, Transportation, and Utilities (17%)	(1.7)	(2.5)	1.3	4.1	(4.6)	(1.3)
	Financial Activities (5%)	1.2	0.6	(2.0)	5.1	3.9	(0.7)
	Professional and Business Services (15%)	2.0	(0.4)	(0.3)	4.4	3.8	1.0
	Education and Health Services (14%)	0.9	(1.5)	(4.1)	1.4	1.1	0.3
	Leisure and Hospitality (10%)	0.4	(9.6)	(8.5)	4.7	7.6	9.1
	Government (20%)	0.0	0.1	(3.5)	1.2	0.1	(0.6)
Richmond (17%)	Total Nonagricultural Employment	1.5	(1.8)	(3.7)	1.9	2.1	0.9
	Construction and Mining (6%)	3.2	(0.1)	(1.1)	(1.2)	0.5	0.3
	Trade, Transportation, and Utilities (19%)	0.1	(2.6)	2.4	(1.8)	(4.2)	(1.3)
	Financial Activities (8%)	4.0	2.9	(1.2)	1.5	5.1	(0.8)
	Professional and Business Services (17%)	2.0	0.0	(6.6)	(1.5)	3.4	1.0
	Education and Health Services (15%)	2.1	(0.9)	(3.4)	5.9	2.1	0.5
	Leisure and Hospitality (8%)	1.6	(10.2)	(12.9)	6.0	8.6	10.8
	Government (17%)	1.3	(0.5)	(3.7)	4.1	0.2	(0.9)
Balance (26%)	Total Nonagricultural Employment	0.5	(2.1)	(2.1)	2.6	0.7	0.5
	Construction and Mining (4%)	(0.6)	0.8	(2.6)	(0.6)	0.4	0.3
	Trade, Transportation, and Utilities (19%)	(0.3)	(2.3)	2.6	1.9	(3.0)	(0.7)
	Financial Activities (4%)	(1.0)	(0.6)	(4.4)	6.4	5.8	(1.0)
	Professional and Business Services (11%)	0.4	(0.8)	2.3	4.8	4.1	1.4
	Education and Health Services (16%)	0.8	(1.7)	(0.6)	3.9	0.1	0.2
	Leisure and Hospitality (8%)	1.3	(7.8)	(11.2)	1.0	2.6	7.8
	Government (20%)	0.8	0.7	(5.2)	0.1	(0.4)	(1.3)

The Oct Standard forecast from the Department of Taxation is based on IHS Markit's October 2021 U.S. standard forecast.

\* Represents the percentage share of Virginia in fiscal year 2021.

\*\* Represents the percentage share of total employment within the region in fiscal year 2021.

**Table 2.5 - Fiscal Years 2019-2024 October Pessimistic Scenario**  
Virginia Economic Forecast - Regional Employment (% Change)

		<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
<u>Region by Sector (% of Total)</u>							
Northern Virginia (38%) *	Total Nonagricultural Employment	1.9	(1.0)	(2.3)	3.1	0.6	0.6
	Construction and Mining (6%) **	4.4	2.0	1.6	2.5	(0.6)	(0.3)
	Trade, Transportation, and Utilities (14%)	0.5	(2.1)	(2.0)	1.6	(5.4)	(1.5)
	Financial Activities (5%)	1.4	0.6	(2.2)	0.2	3.0	(0.2)
	Professional and Business Services (30%)	3.0	2.1	0.5	2.1	1.5	0.5
	Education and Health Services (11%)	2.7	(1.3)	(2.8)	3.3	1.3	0.4
	Leisure and Hospitality (8%)	0.8	(11.4)	(14.1)	7.5	7.5	8.2
	Government (16%)	1.5	0.3	(1.6)	4.0	(1.0)	(1.0)
Hampton Roads (20%)	Total Nonagricultural Employment	0.7	(2.0)	(2.5)	3.0	1.5	0.8
	Construction and Mining (5%)	2.2	0.6	2.5	(1.8)	(0.5)	(0.2)
	Trade, Transportation, and Utilities (17%)	(1.7)	(2.5)	1.3	4.9	(3.7)	(1.0)
	Financial Activities (5%)	1.2	0.6	(2.0)	4.2	3.3	(0.2)
	Professional and Business Services (15%)	2.0	(0.4)	(0.3)	3.1	2.5	0.8
	Education and Health Services (14%)	0.9	(1.5)	(4.1)	1.4	2.0	0.2
	Leisure and Hospitality (10%)	0.4	(9.6)	(8.5)	5.0	8.1	7.6
	Government (20%)	0.0	0.1	(3.5)	1.2	0.1	(0.7)
Richmond (17%)	Total Nonagricultural Employment	1.5	(1.8)	(3.7)	1.7	2.0	0.7
	Construction and Mining (6%)	3.2	(0.1)	(1.1)	(1.5)	(0.6)	(0.3)
	Trade, Transportation, and Utilities (19%)	0.1	(2.6)	2.4	(0.8)	(3.0)	(1.0)
	Financial Activities (8%)	4.0	2.9	(1.2)	0.4	4.2	(0.3)
	Professional and Business Services (17%)	2.0	0.0	(6.6)	(2.4)	2.2	0.8
	Education and Health Services (15%)	2.1	(0.9)	(3.4)	5.9	3.8	0.4
	Leisure and Hospitality (8%)	1.6	(10.2)	(12.9)	6.4	9.2	8.9
	Government (17%)	1.3	(0.5)	(3.7)	4.1	0.1	(1.0)
Balance (26%)	Total Nonagricultural Employment	0.5	(2.1)	(2.1)	2.5	0.4	0.4
	Construction and Mining (4%)	(0.6)	0.8	(2.6)	(1.0)	(0.8)	(0.4)
	Trade, Transportation, and Utilities (19%)	(0.3)	(2.3)	2.6	2.4	(2.5)	(0.6)
	Financial Activities (4%)	(1.0)	(0.6)	(4.4)	5.1	4.7	(0.3)
	Professional and Business Services (11%)	0.4	(0.8)	2.3	2.6	2.2	1.2
	Education and Health Services (16%)	0.8	(1.7)	(0.6)	3.9	0.9	0.2
	Leisure and Hospitality (8%)	1.3	(7.8)	(11.2)	1.3	3.1	6.2
	Government (20%)	0.8	0.7	(5.2)	0.0	(0.4)	(1.4)

The Oct Pessimistic forecast from the Department of Taxation is based on IHS Markit's October 2021 U.S. pessimistic forecast.

\* Represents the percentage share of Virginia in fiscal year 2021.

\*\* Represents the percentage share of total employment within the region in fiscal year 2021.

**SECTION 3**  
**GENERAL FUND REVENUES**

**Section 3**  
**General Fund Revenues**

**General Fund Revenues**

This section reviews general fund revenue collections for fiscal year 2021, comparing actual collections with the official forecast for the year. Following this review, two general fund revenue forecasts are presented: the November standard and alternative pessimistic forecasts. The standard forecast is based on the IHS Markit October 2021 standard economic outlook. The basis for the pessimistic alternative forecast is the IHS October alternative pessimistic economic scenario. These updated forecasts are compared with the official forecast based on the IHS October 2020 outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

**Fiscal Year 2021 in Review**

In fiscal year 2021, total general fund revenues rose 14.4 percent, with a surplus of \$2,557.7 million – an 11.5 percent variance from the forecast. All major revenue sources finished the year above their respective forecasts with individual nonwithholding taxes responsible for about half of the surplus. In addition, individual refunds were lower than expected. Collectively, the five major sources ended the year \$2.498.1 million ahead of the forecast (11.6 percent variance). Collections of miscellaneous taxes and other revenues exceeded the forecast by \$59.9 million (7.5 percent variance).

Table 3.1 on the next page compares actual revenues for fiscal year 2021 with the official forecast. The official revenue forecast was based on the October 2020 IHS Markit standard U.S. forecast, the corresponding Virginia economic forecast developed by the Department of Taxation with recommendations from GACRE, and includes actions of the 2021 General Assembly Special Session 1 – Chapter 552.

Table 3.2 provides an evolutionary perspective of the fiscal year 2021 forecasts used by the Governor and General Assembly, in terms of their variance from actual collections. The variances for total revenues ranged from 11.1 percent in the December 2018 introduced forecast to 11.5 percent in the April 2021 official forecast.

# General Fund Revenues

**Table 3.1**  
**Fiscal Year 2021 General Fund Collections: Actual and Official Forecast**  
(Dollars in Millions)

August 18, 2021

	Fiscal Year 2020		Fiscal Year 2021						
	Actual	% Growth	Official Forecast	Actual	Forecast Variance		% Growth Over FY 20		
					Dollars	Percent	Official	Actual	
<b>MAJOR TAX SOURCES</b>									
Corporate Income	\$ 1,011.7	7.2 %	\$ 1,288.7	\$ 1,515.7	\$ 227.0	17.6 %	27.4 %	49.8 %	
Individual Income Tax:									
Gross	17,182.5	1.3	17,711.6	19,229.9	1,518.3	8.6	3.1	11.9	
Withholding	13,378.1	3.0	13,739.6	14,012.9	273.3	2.0	2.7	4.7	
Nonwithholding	3,804.5	(4.3)	3,972.0	5,217.0	1,245.0	31.3	4.4	37.1	
Refunds	(1,830.9)	5.3	(2,265.6)	(1,926.2)	339.4	(15.0)	23.7	5.2	
Net	15,351.6	0.8	15,446.0	17,303.7	1,857.7	12.0	0.6	12.7	
Insurance Company Premiums	360.6	(5.6)	314.9	363.1	48.2	15.3	(12.7)	0.7	
State Sales & Use Tax	3,706.8	3.5	3,879.3	4,166.2	286.9	7.4	4.7	12.4	
Wills, Suits, Deeds, & Contract Fees	483.5	25.1	601.3	679.7	78.4	13.0	24.4	40.6	
Total Major Tax Sources	\$ 20,914.2	1.9 %	\$ 21,530.2	\$ 24,028.3	\$ 2,498.1	11.6 %	2.9 %	14.9 %	
<b>MISCELLANEOUS TAXES AND OTHER REVENUES</b>									
Alcoholic Beverage State Tax	\$ 226.4	13.2 %	\$ 233.5	\$ 254.0	\$ 20.5	8.8 %	3.1 %	12.2 %	
Bank Franchise Tax	26.7	(10.0)	24.0	26.8	2.8	11.8	(10.2)	0.4	
Beer & Beverage Excise Tax	40.8	0.3	40.8	42.0	1.2	3.0	0.1	3.1	
Corporate Franchise & Charter Fees	59.2	1.6	53.9	61.4	7.5	13.9	(8.9)	3.7	
Excess & Other Fees from Officers	(8.6)	(25.9)	(9.0)	(13.9)	(4.9)	54.9	4.1	61.2	
Estate & Gifts	0.1	na	0.0	0.8	0.8	n/a	n/a	n/a	
Institutional Revenues	2.6	(4.6)	2.1	2.3	0.2	7.5	(18.3)	(12.2)	
Interest & Rents	110.7	26.9	89.0	83.5	(5.5)	(6.2)	(19.6)	(24.6)	
Licenses & Permits	3.6	(9.9)	3.0	3.0	(0.0)	(0.1)	(15.5)	(15.7)	
Miscellaneous Taxes and Penalties	230.4	(6.3)	226.6	251.5	24.9	11.0	(1.6)	9.2	
Other Miscellaneous Revenues	34.8	23.8	28.1	37.7	9.6	34.2	(19.2)	8.4	
Public Service GR / Consumption Tax	97.0	(1.9)	98.6	101.1	2.5	2.5	1.6	4.2	
Total Misc. Taxes and Other Revenues	\$ 823.6	4.4 %	\$ 790.6	\$ 850.1	\$ 59.5	7.5 %	(4.0) %	3.2 %	
<b>TOTAL GF REVENUES</b>	<b>\$ 21,737.8</b>	<b>2.0 %</b>	<b>\$ 22,320.8</b>	<b>\$ 24,878.5</b>	<b>\$ 2,557.7</b>	<b>11.5 %</b>	<b>2.7 %</b>	<b>14.4 %</b>	
<b>TRANSFERS</b>									
A.B.C. Profits	\$ 137.5	5.2 %	\$ 159.5	\$ 177.9	\$ 18.4	11.5 %	16.0 %	29.4 %	
Sales Tax (0.25%)	406.0	3.4	421.6	458.4	36.8	8.7	3.8	12.9	
Transfers Per Appropriations Act	160.4	19.1	114.4	122.3	7.9	6.9	(28.7)	(23.8)	
Total Transfers	\$ 703.9	7.0 %	\$ 695.5	\$ 758.6	\$ 63.1	9.1 %	(1.2) %	7.8 %	
<b>TOTAL GENERAL FUND</b>	<b>\$ 22,441.7</b>	<b>2.2 %</b>	<b>\$ 23,016.3</b>	<b>\$ 25,637.1</b>	<b>\$ 2,620.8</b>	<b>11.4 %</b>	<b>2.6 %</b>	<b>14.2 %</b>	

The Official forecast is based on the October 2020 IHS Markit US Standard outlook and the corresponding Virginia economic outlook developed by the Department of Taxation with recommendations from GACRE. It includes actions from the 2021 GA Special Session, Chapter 552.

**Table 3.2**  
**Fiscal Year 2021 Actual Collections Over (Under) the Forecast**  
**Percent Variance**

	April 7 2021 Official		December 16 2020 Introduced		June 2020 Interim		April 24 2020 Official		December 17 2019 Introduced	
<b>Major Tax Sources (97%)</b>										
Corporate Income (6%)	17.6	%	25.0	%	45.5	%	48.7	%	48.7	%
Individual Income (70%)	12.0		11.5		12.0		7.1		7.0	
Insurance Company Premiums (1%)	15.3		8.7		7.6		(13.6)		(13.6)	
State Sales & Use Tax (17%)	7.4		15.4		24.5		7.0		7.0	
Wills, Suits, Deeds & Contracts (3%)	13.0		23.7		60.9		75.1		75.1	
<b>Total Major Tax Sources</b>	<b>11.6</b>	<b>%</b>	<b>13.2</b>	<b>%</b>	<b>16.7</b>	<b>%</b>	<b>9.8</b>	<b>%</b>	<b>9.8</b>	<b>%</b>
<b>Miscellaneous Taxes &amp; Other Revenues (3%)</b>	<b>7.5</b>	<b>%</b>	<b>7.5</b>	<b>%</b>	<b>12.3</b>	<b>%</b>	<b>5.2</b>	<b>%</b>	<b>5.7</b>	<b>%</b>
<b>Total Revenues</b>	<b>11.5</b>	<b>%</b>	<b>13.0</b>	<b>%</b>	<b>16.5</b>	<b>%</b>	<b>9.7</b>	<b>%</b>	<b>9.6</b>	<b>%</b>

Numbers in parentheses indicate collections as a percentage of total general fund revenues. These may not add to 100 percent due to rounding.

The April 7, 2021 official forecast is based on the October 2020 IHS Markit U.S. standard outlook and the corresponding Virginia economic outlook developed by the Department of Taxation with recommendations from the GACRE. It includes actions of the 2021 General Assembly - Chapter 552.

The December 16, 2020 forecast is based on the October 2020 IHS Markit U.S. standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from the GACRE.

The Interim June 2020 official forecast is based on the June 2020 IHS Markit U.S. standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from GACRE. It includes actions of the 2020 General Assembly Special Session 1 - Chapter 56.

The April 24, 2020 official forecast is based on the October 2019 IHS Markit U.S. standard outlook and the corresponding Virginia economic outlook developed by the Department of Taxation with recommendations from the GACRE. It includes actions of the 2020 General Assembly - Chapters 1283 and 1289.

The December 17, 2019 forecast is based on the October 2019 IHS Markit U.S. standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from the JABE and the GACRE.

## **Individual Income Taxes**

**Withholding:** In fiscal year 2021, withholding receipts (62 percent of total revenues) increased 4.7 percent, exceeding the forecast growth rate of 2.7 percent and \$273.3 million above the forecast.

**Nonwithholding:** Collections of individual nonwithholding (18 percent of total revenues) rose 37.1 percent in fiscal year 2021, exceeding the forecast of 4.4 percent growth and contributing \$1,245.0 million to the surplus. These payments are historically tied to non-wage income sources – mainly the financial markets -- and are extremely volatile. The annual estimate included reducing the forecasted collections by \$264.0 million for the nonwithholding collar. The nonwithholding collar is the 10-year average of nonwithholding payments as a percent of total revenues (17.2%), limited to 1 percent of general fund revenues.



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## **General Fund Revenues**

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**Refunds:** Individual income tax refunds were \$339.4 million less than expected in fiscal year 2021. The amount of refunds issued rose 5.2 percent over last year, compared with the forecast of 23.7 percent growth. During the fiscal year 2021 filing season, which began in February, the Department of Taxation issued 2.3 million refunds, the same number as the previous year, while the average check size grew about 2.0 percent.

### **Sales Taxes**

Collections of sales and use taxes (17 percent of total revenues) were \$286.9 million above the forecast. Collections rose 12.4 percent for the year, ahead of the forecast of 4.7 percent growth.

### **Corporate Income Taxes**

Corporate income tax collections (6 percent of total revenues), historically the most volatile revenue source, also exceeded the forecast. Collections were \$227 million above expectations in fiscal year 2021, with growth of 49.8 percent compared with the forecast of 27.4 percent.

### **Wills, Suits, Deeds, and Contract Fees**

Wills, Suits, Deeds, and Contract Fees (3 percent of total revenues), of which the primary component is the recordation tax, exceeded the forecast in fiscal year 2021 with a surplus of \$78.4 million. Collections finished the year with growth of 40.6 percent from fiscal year 2020 compared with the official forecast of a 24.4 percent increase.

### **Insurance Premiums Taxes**

Another major source to see a surplus, collections of taxes on the premiums of insurance companies (1 percent of total revenues) were \$48.2 million above the annual estimate. Collections grew 12.4 percent for the year compared with the forecast of 4.7 percent growth.

## **The General Fund Revenue Forecasts for Fiscal Years 2022-2024**

This section presents two general fund revenue forecasts. The standard forecast is based on the IHS Markit October 2021 standard economic outlook and the corresponding state forecast developed by TAX. The basis for the alternative forecast is the IHS Markit October alternative pessimistic economic scenario. These forecasts are compared with the official forecast based on the IHS Markit October 2020 standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

### **Standard General Fund Revenue Forecast**

Table 3.3 at the end of this section provides a comparison of the official revenue forecast with the November standard general fund forecast.

In the November standard forecast, total general fund revenues have been raised by \$3,191.2 million in fiscal year 2022. The increase from the official forecast comes mainly from upward revisions to corporate income, sales, withholding, and nonwithholding taxes. Revenues are now expected to increase 4.9 percent in fiscal year 2022 and 4.8 percent in fiscal year 2023 and 4.3 percent in fiscal year 2024.

### **Net Individual Income Taxes**

#### **Withholding**

The withholding revenue model is based on a direct relationship with wages and salaries (49 percent of total personal income) and net transfer payments (12 percent of total personal income) in Virginia. The historical data series in the withholding revenue model has been shortened to eliminate the strong growth due to high levels of defense spending prior to 2006.

Withholding in the November standard forecast has been increased by \$592.8 million in fiscal year 2022 for growth of 5.9 percent versus the 3.7 percent in the official forecast. Withholding collections are projected to increase by 5.1 percent in fiscal year 2023 and 4.6 percent in fiscal year 2024.

#### **Nonwithholding**

The revenue model for nonwithholding considers estimated and final payments independently. Estimated payments are modeled as a function of total proprietor's income, dividends, interest, and rental income, and the S&P 500 index, while final payments are driven solely by growth in the S&P 500 index.

The forecast for nonwithholding increases expected collections by \$1,378.7 million in fiscal year 2022 from the official forecast, raising growth from a 2.1 percent decrease to a 1.0 percent increase. The forecast predicts growth of 5.3 percent in fiscal year 2023 and 5.6 percent in fiscal year 2024. This includes a collar of 17.20 percent of total that is limited to one percent of total revenue in all three years.

#### **Refunds**

The forecast methodology for individual refunds relies on the revised outlook for withholding and nonwithholding, comparing taxable year individual income tax with taxable year refunds for the first and second half of a taxable year.

In the November standard revenue forecast, individual refunds are projected to grow 5.6 percent in fiscal year 2022 compared with the official forecast of a 5.3 percent decrease. The forecast reduces refunds by \$111.4 million in fiscal year 2022. Land preservation credits are projected to be \$83.7 million each year. The outlook for low income credits is

## **General Fund Revenues**

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\$152.2 million in fiscal year 2020, increasing by about \$4.0 million a year over the forecast horizon.

### **Sales**

The sales tax revenue model is based on a direct relationship with total personal income in Virginia. The November standard forecast increases sales tax collections by \$435.6 million in fiscal year 2022 for growth of 6.3 percent, compared with 2.9 percent in the official forecast. Growth in this source is expected to be 4.1 percent in fiscal year 2023 and 2.9 percent in fiscal year 2024.

### **Corporate**

The corporate revenue model considers gross payments and refunds separately. Gross payments are modeled as a function of Virginia specific pre-tax corporate profits and the S&P 500 index.

The November standard forecast increases corporate income tax collections by \$453.9 million from the official forecast in fiscal year 2022, an increase of 13.8 percent compared with the official rate of a 1.3 percent decrease. Collections are expected to rise by 1.5 percent in fiscal year 2023 and 1.9 percent in fiscal year 2024.

### **Wills, Suits, Deeds, and Contracts (Recordation)**

The revenue model for wills, suits, deeds and contracts is based on mortgage originations, mortgage refinancing and home prices in Virginia, along with the yield on 30-year treasury bonds. The outlook for recordation taxes drives the other components of this source.

The November standard forecast for this source is a 12.6 percent decrease in fiscal year 2022, an upward revision of \$126.7 million. The estimate assumes collections will remain flat in fiscal years 2023 and 2024.

### **The Pessimistic Alternative Forecast for Fiscal Years 2022 - 2024**

Table 3.4 at the end of this section compares the official forecast and the November alternative pessimistic general fund forecast.

The November alternative pessimistic forecast actually raises the total general fund revenue forecast by \$2,626.2 million in fiscal year 2022 for a 2.6 percent increase. Total revenue growth of 1.8 percent is forecasted for fiscal year 2023 and 2.8 percent for fiscal year 2024.

# General Fund Revenues

**Table 3.3**  
**The Official to November Standard General Fund Forecast for Fiscal Year 2022**  
(Dollars in Millions)

November 22, 2021

	Fiscal Year 2022					2020-2022 Biennium		
	Official Forecast	November Forecast	Change	% Growth Over FY21		Official Forecast	November Forecast	Change
				Official	November			
<b>MAJOR TAX SOURCES</b>								
Corporate Income	\$ 1,271.6	\$ 1,725.5	\$ 453.9	(1.3) %	13.8 %	\$ 2,560.3	\$ 3,241.2	\$ 680.9
Individual Income Tax:								
Gross	18,136.4	20,107.9	1,971.5	2.4	4.6	35,848.0	39,337.8	3,489.8
Withholding	14,245.9	14,838.7	592.8	3.7	5.9	27,985.5	28,851.6	866.1
Nonwithholding	3,890.5	5,269.2	1,378.7	(2.1)	1.0	7,862.5	10,486.2	2,623.7
Refunds	<u>(2,145.0)</u>	<u>(2,033.6)</u>	<u>111.4</u>	<u>(5.3)</u>	<u>5.6</u>	<u>(4,410.6)</u>	<u>(3,959.8)</u>	<u>450.8</u>
Net	15,991.4	18,074.3	2,082.9	3.5	4.5	31,437.4	35,378.0	3,940.6
Insurance Company Premiums	360.9	394.3	33.4	14.6	8.6	675.8	757.4	81.6
State Sales & Use Tax	3,992.2	4,427.8	435.6	2.9	6.3	7,871.5	8,594.0	722.5
Wills, Suits, Deeds, & Contract Fees	<u>467.0</u>	<u>593.7</u>	<u>126.7</u>	<u>(22.3)</u>	<u>(12.6)</u>	<u>1,068.3</u>	<u>1,273.4</u>	<u>205.1</u>
Total Major Tax Sources	\$ 22,083.1	\$ 25,215.6	\$ 3,132.5	2.6 %	4.9 %	\$ 43,613.3	\$ 49,243.9	\$ 5,630.7
<b>MISCELLANEOUS TAXES AND OTHER REVENUES</b>								
Alcoholic Beverage State Tax	\$ 242.9	\$ 258.3	\$ 15.4	4.0 %	1.7 %	\$ 476.4	\$ 512.3	\$ 35.9
Bank Franchise Tax	24.0	26.8	2.8	0.0	(0.1)	48.0	53.6	5.6
Beer & Beverage Excise Tax	40.8	42.0	1.2	0.0	(0.1)	81.6	84.0	2.4
Corporate Franchise & Charter Fees	53.9	62.3	8.4	0.0	1.5	107.8	123.7	15.9
Excess & Other Fees from Officers	(8.0)	(9.3)	(1.3)	11.1	33.3	(17.0)	(23.2)	(6.2)
Estate & Gifts	0.0	0.0	0.0	n/a	n/a	0.0	0.8	n/a
Institutional Revenues	2.1	2.2	0.1	0.0	(2.5)	4.2	4.5	0.3
Interest & Rents	89.4	89.1	(0.3)	0.4	6.7	178.4	172.6	(5.8)
Licenses & Permits	3.6	2.9	(0.7)	20.0	(3.2)	6.6	5.9	(0.7)
Miscellaneous Taxes and Penalties	239.8	258.5	18.7	5.8	2.8	466.4	510.0	43.6
Other Miscellaneous Revenues	28.9	38.4	9.5	2.8	1.9	57.0	76.1	19.1
Public Service GR / Consumption Tax	<u>98.6</u>	<u>103.5</u>	<u>4.9</u>	<u>0.0</u>	<u>2.4</u>	<u>197.2</u>	<u>204.6</u>	<u>7.4</u>
Total Misc. Taxes and Other Revenues	\$ 816.0	\$ 874.7	\$ 58.7	3.2 %	2.9 %	\$ 1,606.6	\$ 1,724.8	\$ 118.2
<b>TOTAL GF REVENUES</b>	<b>\$ 22,899.1</b>	<b>\$ 26,090.3</b>	<b>\$ 3,191.2</b>	<b>2.6 %</b>	<b>4.9 %</b>	<b>\$ 45,219.9</b>	<b>\$ 50,968.8</b>	<b>\$ 5,748.9</b>
<b>TRANSFERS</b>								
A.B.C. Profits	\$ 130.2	\$ 146.7	\$ 16.5	(18.4) %	(17.5) %	\$ 289.7	\$ 324.6	\$ 34.9
Sales Tax (0.375%)	433.8	487.3	53.5	2.9	6.3	855.4	945.7	90.3
Transfers Per Appropriations Act	<u>118.4</u>	<u>118.4</u>	<u>0.0</u>	<u>3.5</u>	<u>(3.2)</u>	<u>232.8</u>	<u>240.7</u>	<u>7.9</u>
Total Transfers	\$ 682.4	\$ 752.4	\$ 70.0	(1.9) %	(0.8) %	\$ 1,377.9	\$ 1,511.0	\$ 133.1
<b>TOTAL GENERAL FUND</b>	<b>\$ 23,581.5</b>	<b>\$ 26,842.7</b>	<b>\$ 3,261.2</b>	<b>2.5 %</b>	<b>4.7 %</b>	<b>\$ 46,597.8</b>	<b>\$ 52,479.8</b>	<b>\$ 5,882.0</b>

The Official forecast is based on the October 2020 IHS Markit Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from GACRE. It includes actions from the 2021 GA Special Session, Chapter 552.

The November forecast is based on the October 2021 IHS Markit Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from JABE.

# General Fund Revenues

**Table 3.3**  
**The November Standard General Fund Forecast for Fiscal Years 2022-24**  
(Dollars in Millions)

November 22, 2021

	Fiscal Year 2023		Fiscal Year 2024		2022-2024 Biennium	
	November Forecast	% Growth Over FY 22	November Forecast	% Growth Over FY 23	November Forecast	% Growth Over 20-22
<b>MAJOR TAX SOURCES</b>						
Corporate Income	\$ 1,751.0	1.5 %	\$ 1,784.9	1.9 %	\$ 3,535.9	9.1 %
Individual Income Tax:						
Gross	21,148.7	5.2	22,178.9	4.9	43,327.6	10.1
Withholding	15,598.2	5.1	16,315.2	4.6	31,913.4	10.6
Nonwithholding	5,550.5	5.3	5,863.7	5.6	11,414.2	8.9
Refunds	<u>(2,057.3)</u>	1.2	<u>(2,136.0)</u>	3.8	<u>(4,193.3)</u>	5.9
Net	19,091.4	5.6	20,042.9	5.0	39,134.3	10.6
Insurance Company Premiums	406.1	3.0	425.3	4.7	831.5	9.8
State Sales & Use Tax	4,608.9	4.1	4,741.9	2.9	9,350.8	8.8
Wills, Suits, Deeds, & Contract Fees	<u>593.7</u>	0.0	<u>593.7</u>	0.0	<u>1,187.4</u>	(6.8)
Total Major Tax Sources	\$ 26,451.1	4.9 %	\$ 27,588.7	4.3 %	\$ 54,039.9	9.7 %
<b>MISCELLANEOUS TAXES AND OTHER REVENUES</b>						
Alcoholic Beverage State Tax	\$ 261.6	1.3 %	\$ 269.2	2.9 %	\$ 530.8	3.6 %
Bank Franchise Tax	26.8	0.0	26.8	0.0	53.6	(0.1)
Beer & Beverage Excise Tax	42.0	0.0	42.0	0.0	84.0	(0.0)
Corporate Franchise & Charter Fees	62.3	0.0	62.3	0.0	124.6	0.7
Excess & Other Fees from Officers	(9.3)	0.0	(9.3)	0.0	(18.6)	(20.0)
Estate & Gifts	0.0	n/a	0.0	n/a	0.0	n/a
Institutional Revenues	2.2	0.0	2.2	0.0	4.4	(1.3)
Interest & Rents	98.4	10.4	110.0	11.8	208.4	20.7
Licenses & Permits	2.9	0.0	2.9	0.0	5.8	(1.6)
Miscellaneous Taxes and Penalties	259.7	0.5	260.0	0.1	519.7	1.9
Other Miscellaneous Revenues	38.4	0.0	38.4	0.0	76.8	0.9
Public Service GR / Consumption Tax	<u>103.5</u>	0.0	<u>103.5</u>	0.0	<u>207.0</u>	1.2
Total Misc. Taxes and Other Revenues	\$ 888.5	1.6 %	\$ 908.0	2.2 %	\$ 1,796.5	4.2 %
<b>TOTAL GF REVENUES</b>	<b>\$ 27,339.6</b>	<b>4.8 %</b>	<b>\$ 28,496.7</b>	<b>4.2 %</b>	<b>\$ 55,836.4</b>	<b>9.6 %</b>
<b>TRANSFERS</b>						
A.B.C. Profits	\$ 120.9	(17.6) %	\$ 123.8	2.4 %	\$ 244.7	(24.6) %
Sales Tax (0.375%)	507.3	4.1	522.0	2.9	1,029.3	8.8
Transfers Per Appropriations Act	<u>103.7</u>	<u>(12.4)</u>	<u>103.7</u>	<u>0.0</u>	<u>207.4</u>	<u>(13.8)</u>
Total Transfers	\$ 731.9	(2.7) %	\$ 749.5	2.4 %	\$ 1,481.4	(2.0) %
<b>TOTAL GENERAL FUND</b>	<b>\$ 28,071.5</b>	<b>4.6 %</b>	<b>\$ 29,246.2</b>	<b>4.2 %</b>	<b>\$ 57,317.8</b>	<b>9.2 %</b>

The November forecast is based on the October 2021 IHS Markit Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from JABE.

# General Fund Revenues

**Table 3.4**  
**The Official to November Pessimistic General Fund Forecast for Fiscal Year 2022**  
(Dollars in Millions)

November 22, 2021

	Fiscal Year 2022					2020-2022 Biennium		
	Official	Nov Pess	Change	% Growth Over FY21		Official	Nov Pess	Change
	Forecast	Forecast		Official	Nov Pess	Forecast	Forecast	
<b>MAJOR TAX SOURCES</b>								
Corporate Income	\$ 1,271.6	\$ 1,685.3	\$ 413.7	(1.3) %	11.2 %	\$ 2,560.3	\$ 3,201.0	\$ 640.7
Individual Income Tax:								
Gross	18,136.4	19,706.8	1,570.4	2.4	2.5	35,848.0	38,936.7	3,088.7
Withholding	14,245.9	14,445.5	199.6	3.7	3.1	27,985.5	28,458.4	472.9
Nonwithholding	3,890.5	5,261.3	1,370.8	(2.1)	0.8	7,862.5	10,478.3	2,615.8
Refunds	<u>(2,145.0)</u>	<u>(2,035.4)</u>	<u>109.6</u>	<u>(5.3)</u>	<u>5.7</u>	<u>(4,410.6)</u>	<u>(3,961.6)</u>	<u>449.0</u>
Net	15,991.4	17,671.4	1,680.0	3.5	2.1	31,437.4	34,975.1	3,537.7
Insurance Company Premiums	360.9	391.2	30.3	14.6	7.7	675.8	754.3	78.5
State Sales & Use Tax	3,992.2	4,383.0	390.8	2.9	5.2	7,871.5	8,549.2	677.7
Wills, Suits, Deeds, & Contract Fees	<u>467.0</u>	<u>519.7</u>	<u>52.7</u>	<u>(22.3)</u>	<u>(23.5)</u>	<u>1,068.3</u>	<u>1,199.4</u>	<u>131.1</u>
Total Major Tax Sources	\$ 22,083.1	\$ 24,650.6	\$ 2,567.5	2.6 %	2.6 %	\$ 43,613.3	\$ 48,678.9	\$ 5,065.7
<b>MISCELLANEOUS TAXES AND OTHER REVENUES</b>								
Alcoholic Beverage State Tax	\$ 242.9	\$ 258.3	\$ 15.4	4.0 %	1.7 %	\$ 476.4	\$ 512.3	\$ 35.9
Bank Franchise Tax	24.0	26.8	2.8	0.0	(0.1)	48.0	53.6	5.6
Beer & Beverage Excise Tax	40.8	42.0	1.2	0.0	(0.1)	81.6	84.0	2.4
Corporate Franchise & Charter Fees	53.9	62.3	8.4	0.0	1.5	107.8	123.7	15.9
Excess & Other Fees from Officers	(8.0)	(9.3)	(1.3)	11.1	33.3	(17.0)	(23.2)	(6.2)
Estate & Gifts	0.0	0.0	0.0	n/a	n/a	0.0	0.8	n/a
Institutional Revenues	2.1	2.2	0.1	0.0	(2.5)	4.2	4.5	0.3
Interest & Rents	89.4	89.1	(0.3)	0.4	6.7	178.4	172.6	(5.8)
Licenses & Permits	3.6	2.9	(0.7)	20.0	(3.2)	6.6	5.9	(0.7)
Miscellaneous Taxes and Penalties	239.8	258.5	18.7	5.8	2.8	466.4	510.0	43.6
Other Miscellaneous Revenues	28.9	38.4	9.5	2.8	1.9	57.0	76.1	19.1
Public Service GR / Consumption Tax	<u>98.6</u>	<u>103.5</u>	<u>4.9</u>	<u>0.0</u>	<u>2.4</u>	<u>197.2</u>	<u>204.6</u>	<u>7.4</u>
Total Misc. Taxes and Other Revenues	\$ 816.0	\$ 874.7	\$ 58.7	3.2 %	2.9 %	\$ 1,606.6	\$ 1,724.8	\$ 118.2
<b>TOTAL GF REVENUES</b>	<b>\$ 22,899.1</b>	<b>\$ 25,525.3</b>	<b>\$ 2,626.2</b>	<b>2.6 %</b>	<b>2.6 %</b>	<b>\$ 45,219.9</b>	<b>\$ 50,403.8</b>	<b>\$ 5,183.9</b>
<b>TRANSFERS</b>								
A.B.C. Profits	\$ 130.2	\$ 146.7	\$ 16.5	(18.4) %	(17.5) %	\$ 289.7	\$ 324.6	\$ 34.9
Sales Tax (0.375%)	433.8	487.3	53.5	2.9	6.3	855.4	945.7	90.3
Transfers Per Appropriations Act	<u>118.4</u>	<u>118.4</u>	<u>0.0</u>	<u>3.5</u>	<u>(3.2)</u>	<u>232.8</u>	<u>240.7</u>	<u>7.9</u>
Total Transfers	\$ 682.4	\$ 752.4	\$ 70.0	(1.9) %	(0.8) %	\$ 1,377.9	\$ 1,511.0	\$ 133.1
<b>TOTAL GENERAL FUND</b>	<b>\$ 23,581.5</b>	<b>\$ 26,277.7</b>	<b>\$ 2,696.2</b>	<b>2.5 %</b>	<b>2.5 %</b>	<b>\$ 46,597.8</b>	<b>\$ 51,914.8</b>	<b>\$ 5,317.0</b>

The Official forecast is based on the October 2020 IHS Markit Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from GACRE. It includes actions from the 2021 GA Special Session, Chapter 552.

The November Pessimistic forecast is based on the October 2021 IHS Markit Pessimistic Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from JABE.

# General Fund Revenues

**Table 3.4**  
**The November Pessimistic General Fund Forecast for Fiscal Years 2022-24**  
(Dollars in Millions)

November 22, 2021

	Fiscal Year 2023		Fiscal Year 2024		2022-2024 Biennium	
	Nov Pess Forecast	% Growth Over FY 22	Nov Pess Forecast	% Growth Over FY 23	Nov Pess Forecast	% Growth Over 20-22
<b>MAJOR TAX SOURCES</b>						
Corporate Income	\$ 1,667.4	(1.1) %	\$ 1,683.2	0.9 %	\$ 3,350.6	4.7 %
Individual Income Tax:						
Gross	20,139.7	2.2	20,583.2	2.2	40,722.9	4.6
Withholding	14,802.9	2.5	15,219.0	2.8	30,021.9	5.5
Nonwithholding	5,336.8	1.4	5,364.2	0.5	10,701.0	2.1
Refunds	<u>(2,132.3)</u>	4.8	<u>(2,211.0)</u>	3.7	<u>(4,343.3)</u>	9.6
Net	18,007.4	1.9	18,372.2	2.0	36,379.6	4.0
Insurance Company Premiums	398.7	1.9	413.3	3.7	811.9	7.6
State Sales & Use Tax	4,570.8	4.3	4,815.2	5.3	9,386.0	9.8
Wills, Suits, Deeds, & Contract Fees	<u>445.7</u>	<u>(14.2)</u>	<u>519.7</u>	<u>16.6</u>	<u>965.4</u>	<u>(19.5)</u>
Total Major Tax Sources	\$ 25,090.0	1.8 %	\$ 25,803.6	2.8 %	\$ 50,893.5	4.5 %
<b>MISCELLANEOUS TAXES AND OTHER REVENUES</b>						
Alcoholic Beverage State Tax	\$ 261.6	1.3 %	\$ 269.2	2.9 %	\$ 530.8	3.6 %
Bank Franchise Tax	26.8	0.0	26.8	0.0	53.6	(0.1)
Beer & Beverage Excise Tax	42.0	0.0	42.0	0.0	84.0	(0.0)
Corporate Franchise & Charter Fees	62.3	0.0	62.3	0.0	124.6	0.7
Excess & Other Fees from Officers	(9.3)	0.0	(9.3)	0.0	(18.6)	(20.0)
Estate & Gifts	0.0	n/a	0.0	n/a	0.0	n/a
Institutional Revenues	2.2	0.0	2.2	0.0	4.4	(1.3)
Interest & Rents	98.4	10.4	110.0	11.8	208.4	20.7
Licenses & Permits	2.9	0.0	2.9	0.0	5.8	(1.6)
Miscellaneous Taxes and Penalties	259.7	0.5	260.0	0.1	519.7	1.9
Other Miscellaneous Revenues	38.4	0.0	38.4	0.0	76.8	0.9
Public Service GR / Consumption Tax	<u>103.5</u>	<u>0.0</u>	<u>103.5</u>	<u>0.0</u>	<u>207.0</u>	<u>1.2</u>
Total Misc. Taxes and Other Revenues	\$ 888.5	1.6 %	\$ 908.0	2.2 %	\$ 1,796.5	4.2 %
<b>TOTAL GF REVENUES</b>	<b>\$ 25,978.5</b>	<b>1.8 %</b>	<b>\$ 26,711.6</b>	<b>2.8 %</b>	<b>\$ 52,690.0</b>	<b>4.5 %</b>
<b>TRANSFERS</b>						
A.B.C. Profits	\$ 120.9	(17.6) %	\$ 123.8	2.4 %	\$ 244.7	(24.6) %
Sales Tax (0.375%)	507.3	4.1	522.0	2.9	1,029.3	8.8
Transfers Per Appropriations Act	<u>103.7</u>	<u>(12.4)</u>	<u>103.7</u>	<u>0.0</u>	<u>207.4</u>	<u>(13.8)</u>
Total Transfers	\$ 731.9	(2.7) %	\$ 749.5	2.4 %	\$ 1,481.4	(2.0) %
<b>TOTAL GENERAL FUND</b>	<b>\$ 26,710.4</b>	<b>1.6 %</b>	<b>\$ 27,461.1</b>	<b>2.8 %</b>	<b>\$ 54,171.4</b>	<b>4.3 %</b>

The November Pessimistic forecast is based on the October 2021 IHS Markit Pessimistic Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from JABE.

**Legislative Changes Affecting the Forecast**

Table 3.5 below lists the legislative and policy changes that affect the revenue forecast for fiscal years 2022-2024.

**Table 3.5**  
**Summary of Recent Legislation Affecting General Fund Revenues**  
**(Millions of Dollars)**

	FY22	FY23	FY24
<b>CORPORATE INCOME TAX</b>			
2018 Allow Metallurgical Coal Credits -- HB665/SB378, 2018	(6.5)	(5.8)	(5.2)
Increase Existing R&D Expenses Tax Credit Cap -- HB884/SB58, 2016	(1.0)	(1.0)	(1.0)
New Large R&D Tax Credit -- HB884/SB58, 2016	(20.0)	(20.0)	(20.0)
Increase Existing R&D Expenses Tax Credit Cap -- SB110, 2020		(4.8)	(4.8)
<b>INDIVIDUAL INCOME TAX</b>			
Land Preservation Tax Credit (Total Cost)	83.7	83.7	83.7
Retain \$20,000 limit on LPTC	10.3	10.3	
Worker misclassification Audits -- Ch1289	2.6	2.6	2.6
1099K Threshold Change -- Ch1289	20.0	20.0	20.0
Texas Holdem -- Ch1289	0.6	0.6	0.6
Conformity CAA -- SB1146, 2021	(69.7)	(10.9)	4.3
Deductibility of PPE Loans, Rebuild VA -- SB1146, 2021	(24.8)	Unknown	Unknown
Enhanced Agriculture Equipment Credit -- SB1162, 2021	(1.0)	(1.0)	(1.0)
Conservation tillage and adv tech pesticide and fert application credits--SB1163	(1.3)	(1.3)	(1.3)
Additional Tax Revenue -- Lower E-filing Threshold	0.6	0.6	0.6
Housing Tax Credit -- SB1197, 2021	(15.0)	(15.0)	(15.0)
Conformity CARES Act	(7.5)	4.5	2.1
<b>STATE SALES AND USE TAX</b>			
ATV Sales Tax Increase -- C. 840, SB249; C. 838, HB 1441, 2018	0.2	0.2	0.2
Personal Hygiene exemption - HB2540, 2019	(3.7)	(3.9)	(4.0)
Tobacco Products Tax Increase -- C. 1289	0.2	0.4	0.8
PPE Sales and Use Tax Exemption -- SB 1403, 2021	(7.0)		
Sales Tax on Accomodation Fees -- SB1398,2021	2.1	2.5	2.6
<b>CORPORATE INCOME TAX</b>			
Deductibility of PPE Loans, Rebuild VA -- SB1146, 2021	(18.0)	Unknown	Unknown
<b>INSURANCE COMPANY PREMIUMS</b>			
Historic Rehab Tax Credit (\$5 mil) -- HB2460/SB1034, 2017 and Chapter 2, 2018	13.0	13.0	13.0
<b>OTHER TAXES</b>			
Sports Betting	11.7	11.7	11.7
Charitable Gaming Reform - SB 1127	(0.5)	(0.5)	(0.5)



**SECTION 4**  
**NON-GENERAL FUND REVENUES**

## **Section 4 Non-General Fund Revenues**

### **Transportation Revenues**

Chapter 1230, enacted during the 2020 session of the General Assembly, directed most transportation revenues to a new Commonwealth Transportation Fund. In addition to the financial structural changes made to the Commonwealth's transportation funding system, several changes were made to the funding mechanisms: the motor fuels tax was converted to a cents-per-gallon tax, the base registration fee was reduced, and a highway use fee for alternative fuel and fuel-efficient vehicles will be implemented in fiscal year 2021.

Revenues used for the Commonwealth's transportation program are derived from the following taxes and fees:

- Motor Fuels and Road Use Taxes,
- A 4.15 percent Vehicle Sales and Use Tax,
- Licensing fees,
- 0.60 cent State Retail Sales and Use Tax,
- 0.3 percent State Retail Sales and Use tax,
- 3.0 cents of the State Recordation Tax,
- One-third of State Insurance Premiums Tax,
- International Registration Plan Fees,
- Interest Earnings, and
- Other miscellaneous taxes and fees.

In addition, federal, local, and toll revenues are also used to finance transportation programs. These revenue sources, however, do not determine the fiscal capacity of the state's transportation program and, therefore, are not addressed here. Instead, the discussion focuses on revenues from state sources.

### **Fiscal Year 2021 in Review**

Table 4.1 on the following page compares actual collections in fiscal year 2021 to the official forecast for the Commonwealth Transportation Fund (CTF). Total transportation revenues totaled over \$4.1 billion, an increase of \$528.1 million over last year. Revenue collections grew by 14.6 percent, far outpacing the official forecast of 4.3 percent growth, resulting in a forecast variance of 9.9 percent.

The economic rebound following the depths of the COVID-19 slowdown, along with funds from the federal stimulus programs, boosted growth in the Commonwealth Transportation Fund, particularly in motor vehicle and retail sales tax collections.

## NON-GENERAL FUND REVENUES

**Table 4.1**  
**Actual Collections Compared to the Official Forecast for Fiscal Year 2021**  
**(Millions of Dollars)**

Revenue Sources	FY2020 Actual	FY2021 Actual	FY2021 Forecast	Percent Change 2020-2021		Forecast Variance	
				Actual	Forecast	Amount	Percent
Motor Fuels Tax	844.0	971.9	976.1	15.2	15.7	(4.2)	(0.4)
Road Use Tax	20.5	55.0	42.3	168.3	106.3	12.7	30.0
Vehicle Sales Tax	954.1	1,110.6	942.4	16.4	(1.2)	168.2	17.8
Vehicle Licenses	270.8	241.7	209.7	(10.7)	(22.6)	32.0	15.3
Highway User Fee	-	42.7	38.0	na	na	4.7	12.4
State Sales Tax	1,124.2	1,264.1	1,180.0	12.4	5.0	84.1	7.1
Recordation Tax	59.7	83.8	67.1	40.4	12.4	16.7	24.9
Insurance Premiums Tax	183.6	181.4	181.4	(1.2)	(1.2)	0.0	0.0
Int'l Registration Plan	70.4	121.4	71.0	72.4	0.9	50.4	71.0
Interest Earnings	19.8	5.9	10.1	(70.2)	(49.0)	(4.2)	(41.6)
Rental Tax	38.7	34.3	24.7	(11.4)	(36.2)	9.6	38.9
Aviation Fuels Tax	1.8	1.0	2.0	(44.4)	11.1	(1.0)	(50.0)
Miscellaneous	17.9	19.8	17.3	10.6	(3.4)	2.5	14.5
<b>TOTAL</b>	<b>\$3,605.5</b>	<b>\$4,133.6</b>	<b>\$3,762.1</b>	<b>14.6</b>	<b>4.3</b>	<b>371.5</b>	<b>9.9</b>

### Outlook for Key Tax Base Variables

#### Motor Fuel Consumption

Table 4.2 on the next page shows that gasoline consumption fell by 5.9 percent while diesel fuel consumption increased by 14.8 percent in fiscal year 2021 as the pandemic and resultant lockdowns affected gasoline consumption but demand for consumer goods boosted diesel consumption.

U.S. traffic volumes have almost returned to pre-pandemic levels, helping normalize gasoline consumption as more businesses re-open, domestic leisure travel resumes and workers return to offices. The volume of traffic on all roads was down by less than 4 percent in March compared with the same month two years ago, according to the Federal Highway Administration ("Traffic volume trends" FHWA, March 2021).

Traffic levels had been down 41 percent in April 2020 at the height of the first wave of the pandemic and were still down 11 percent as recently as December 2020 during the second wave. Car use likely increased further in April and May as social-distancing restrictions were relaxed and more service businesses and offices re-opened.

More driving means more fuel consumption. The volume of gasoline supplied to the domestic market, a proxy for consumption, was down by just 4 percent at 8.9 million barrels per day in the four weeks to May 14 compared with the pre-pandemic five-year average of 9.3 million b/d. The remaining driving and fuel deficits are likely to be erased over the third quarter as more employees return to central offices and domestic tourism recovers.

The rapid normalization of gasoline consumption has encouraged a strong resumption of motor fuel production, which is nearing pre-pandemic levels.

**Table 4.2**  
**Motor Fuel Consumption, History and Forecast, Fiscal Years 2021 - 2024**  
**(Percent Growth)**

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Taxable Gallons - Gasoline				
Official	(5.9)	(0.1)	0.5	0.1
Standard		4.4	0.1	(0.6)
Alternative		4.0	2.8	(0.8)
Taxable Gallons - Diesel				
Official	14.8	2.0	2.7	1.1
Standard		6.0	1.4	0.5
Alternative		(5.0)	1.0	0.0

## Vehicle Sales

New car sales increased by 11.4 percent and used car sales grew 8.7 percent in fiscal year 2021.

Table 4.3 on the following page shows the official and November 2021 forecasts for new and used vehicles. The discussion of the vehicle sales outlook is divided into two sections: new taxable titles and used taxable titles.

New Taxable Titles: In fiscal year 2021, over 398,000 new vehicles were titled in Virginia, an additional 40,900 units from fiscal year 2020.

Forecasts from Cox Automotive, Edmunds and J.D. Power/LMC Automotive predict vehicle sales from July through September were less than 3.4 million, down between 13 percent and 14 percent from the same time last year when volumes were depressed due to the coronavirus pandemic.

## NON-GENERAL FUND REVENUES

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The severe decline, including an expected 24 percent to 26 percent fall in September, is due to the ongoing shortage of semiconductor chips for new vehicles. The parts shortage has caused automakers to sporadically shutter plants for weeks, if not months. The lack of production combined with strong consumer demand has caused vehicle inventories to plummet to record lows.

The inventory shortages have worsened throughout the year. The sales pace in the U.S. market has fallen every month since reaching a peak of 18.3 million in April. September's seasonally adjusted annualized rate for new vehicle sales will be 12.2 million, down four million units from 2020 and about 800,000 units less than 2019. Cox analysts predict vehicle supply will improve mildly in the fourth quarter, and continue to improve throughout 2022, but won't return to "normal" until 2023 – if ever. Automakers have promised to keep leaner inventories in the future to boost vehicle profits and prices, which have been at record levels.

Used Taxable Titles: 1,141,638 used cars were sold in Virginia in fiscal year 2021, an increase of 91,780 units from fiscal year 2020. Inventory shortages for new vehicles continue to support robust used-car sales and values alike. After moderating for the final months of 2020, used-vehicle prices began to climb in the first quarter of 2021. NADA anticipates used-vehicle market activity will remain elevated into the summer as the industry continues to cope with new-vehicle production and inventory difficulties.

Used car sales generally follow a sales pattern similar to new car sales. As used car prices begin to moderate, sales of these vehicles should increase as lower prices relative to new cars make used vehicles more attractive to buyers.

**Table 4.3**  
**Virginia Vehicle Market, History and Forecast, Fiscal Years 2021 - 2024**  
**(Percent Growth)**

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
New Taxable Titles				
Official	11.4	(5.8)	13.0	(1.4)
Standard		(5.2)	5.7	(0.7)
Alternative		(11.7)	5.0	(1.3)
Used Taxable Titles				
Official	8.7	(1.5)	6.2	0.1
Standard		8.5	(2.1)	(3.2)
Alternative		5.9	(6.8)	(3.5)

**November 2021 Standard Commonwealth Transportation Fund Forecast**

Table 4.4 on the following pages presents a comparison of the November 2021 standard forecast to the November 2020 official forecast.

The November forecast shows an increase of \$598.7 million, \$565.5 million, and \$538.8 million in fiscal years 2022 through 2024, respectively.

# NON-GENERAL FUND REVENUES

**Table 4.4**  
**The Official and November Standard Commonwealth Transportation Fund Forecast for Fiscal Year 2022**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2021		Fiscal Year 2022				
	Forecast	% Growth	Official Forecast	November Forecast	Change	% Growth over FY 21 Official	November
<b>Commonwealth Transportation Fund</b>							
Motor Fuels Tax	\$ 971.9	15.2 %	\$ 1,238.5	\$ 1,282.4	\$ 43.9	27.4 %	31.9 %
Road Tax	55.0	168.3	47.2	68.2	21.0	(14.2)	24.0
Aviation Fuels Tax	1.0	(44.4)	2.0	2.0	0.0	100.0	100.0
Motor Vehicle Sales and Use Tax	1,110.6	16.4	899.6	1,174.0	274.4	(19.0)	5.7
Motor Vehicle Rental Tax(1)	34.3	(11.4)	29.7	40.7	11.0	(13.4)	18.7
Motor Vehicle License Fees	241.7	(10.7)	202.9	234.8	31.9	(16.1)	(2.9)
Highway User Fee	42.7	n/a	46.6	52.4	5.8	9.1	22.7
International Registration Plan	121.4	72.4	73.9	124.3	50.4	(39.1)	2.4
Retail Sales and Use Tax	1,264.1	12.4	1,214.7	1,346.6	131.9	(3.9)	6.5
Recordation Tax (3 cents)	83.8	40.4	57.0	81.0	24.0	(32.0)	(3.3)
Insurance Premiums Tax (1/3)	181.4	(1.2)	171.8	180.7	8.9	(5.3)	(0.4)
Interest Earnings	5.9	(70.2)	10.1	5.7	(4.4)	71.2	(3.4)
Miscellaneous	19.8	10.6	17.3	17.2	(0.1)	(12.6)	(13.1)
<b>Total State Taxes and Fees</b>	<b>\$ 4,133.6</b>	<b>14.6 %</b>	<b>\$ 4,011.3</b>	<b>\$ 4,610.0</b>	<b>\$ 598.7</b>	<b>(3.0) %</b>	<b>11.5 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.

## NON-GENERAL FUND REVENUES

**Table 4.4**  
**The Official and November Standard Commonwealth Transportation Fund Forecast for Fiscal Year 2023**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2023				
	Official Forecast	November Forecast	Change	% Growth over FY 22	
				Official	November
<b>Commonwealth Transportation Fund</b>					
Motor Fuels Tax	\$ 1,305.1	\$ 1,360.7	\$ 55.6	5.4 %	6.1 %
Road Tax	47.2	69.2	22.0	0.0	1.5
Aviation Fuels Tax	2.0	2.0	0.0	0.0	0.0
Motor Vehicle Sales and Use Tax	983.6	1,155.1	171.5	9.3	(1.6)
Motor Vehicle Rental Tax(1)	31.1	42.9	11.8	4.7	5.4
Motor Vehicle License Fees	202.9	236.6	33.7	0.0	0.8
Highway User Fee	53.1	59.7	6.6	13.9	13.9
International Registration Plan	73.8	124.2	50.4	(0.1)	(0.1)
Retail Sales and Use Tax	1,225.9	1,401.8	175.9	0.9	4.1
Recordation Tax (3 cents)	57.0	81.0	24.0	0.0	0.0
Insurance Premiums Tax (1/3)	177.5	196.0	18.5	3.3	8.5
Interest Earnings	10.1	5.7	(4.4)	0.0	0.0
Miscellaneous	17.3	17.2	(0.1)	0.0	0.0
<b>Total State Taxes and Fees</b>	<b>\$ 4,186.6</b>	<b>\$ 4,752.1</b>	<b>\$ 565.5</b>	<b>4.4 %</b>	<b>3.1 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.



# NON-GENERAL FUND REVENUES

**Table 4.4**  
**The Official and November Standard Commonwealth Transportation Fund Forecast for Fiscal Year 2024**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2024				
	Official Forecast	November Forecast	Change	% Growth over FY 23 Official	% Growth over FY 23 November
<b>Commonwealth Transportation Fund</b>					
Motor Fuels Tax	\$ 1,336.8	\$ 1,380.7	\$ 43.9	2.4 %	1.5 %
Road Tax	48.0	69.5	21.5	1.7	0.4
Aviation Fuels Tax	2.0	2.0	0.0	0.0	0.0
Motor Vehicle Sales and Use Tax	982.8	1,119.4	136.6	(0.1)	(3.1)
Motor Vehicle Rental Tax(1)	31.6	43.6	12.0	1.6	1.6
Motor Vehicle License Fees	206.0	240.3	34.3	1.5	1.6
Highway User Fee	53.1	62.7	9.6	0.0	5.0
International Registration Plan	72.2	122.6	50.4	(2.2)	(1.3)
Retail Sales and Use Tax	1,250.7	1,442.2	191.5	2.0	2.9
Recordation Tax (3 cents)	57.0	81.0	24.0	0.0	0.0
Insurance Premiums Tax (1/3)	184.3	203.8	19.5	3.8	4.0
Interest Earnings	10.1	5.7	(4.4)	0.0	0.0
Miscellaneous	17.3	17.2	(0.1)	0.0	0.0
<b>Total State Taxes and Fees</b>	<b>\$ 4,251.9</b>	<b>\$ 4,790.7</b>	<b>\$ 538.8</b>	<b>1.6 %</b>	<b>0.8 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.

**Alternative Forecast**

Table 4.5 on the following pages compares the November 2021 official and November alternative Commonwealth Transportation Fund forecasts. Under the alternative forecast, total transportation fund revenues are \$432.8 million higher in fiscal year 2022, \$400.9 million in fiscal year 2023, and \$381.1 million higher in fiscal year 2024.

This forecast is based on IHS Markit October 2021 alternative forecast and the corresponding Virginia state forecast.

## NON-GENERAL FUND REVENUES

**Table 4.5**  
**The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2022**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2021		Fiscal Year 2022				
	Forecast	% Growth	Official Forecast	November Forecast	Change	% Growth over FY 21 Official      November	
<b>Commonwealth Transportation Fund</b>							
Motor Fuels Tax	\$ 971.9	15.2 %	\$ 1,238.5	\$ 1,245.3	\$ 6.8	27.4 %	28.1 %
Road Tax	55.0	168.3	47.2	68.2	21.0	(14.2)	24.0
Aviation Fuels Tax	1.0	(44.4)	2.0	2.0	0.0	100.0	100.0
Motor Vehicle Sales and Use Tax	1,110.6	16.4	899.6	1,139.5	239.9	(19.0)	2.6
Motor Vehicle Rental Tax(1)	34.3	(11.4)	29.7	40.7	11.0	(13.4)	18.7
Motor Vehicle License Fees	241.7	(10.7)	202.9	230.0	27.1	(16.1)	(4.8)
Highway User Fee	42.7	n/a	46.6	52.4	5.8	9.1	22.7
International Registration Plan	121.4	72.4	73.9	124.3	50.4	(39.1)	2.4
Retail Sales and Use Tax	1,264.1	12.4	1,214.7	1,264.1	49.4	(3.9)	0.0
Recordation Tax (3 cents)	83.8	40.4	57.0	74.0	17.0	(32.0)	(11.7)
Insurance Premiums Tax (1/3)	181.4	(1.2)	171.8	180.7	8.9	(5.3)	(0.4)
Interest Earnings	5.9	(70.2)	10.1	5.7	(4.4)	71.2	(3.4)
Miscellaneous	19.8	10.6	17.3	17.2	(0.1)	(12.6)	(13.1)
<b>Total State Taxes and Fees</b>	<b>\$ 4,133.6</b>	<b>14.6 %</b>	<b>\$ 4,011.3</b>	<b>\$ 4,444.1</b>	<b>\$ 432.8</b>	<b>(3.0) %</b>	<b>7.5 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.

## NON-GENERAL FUND REVENUES

**Table 4.5**  
**The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2023**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2023				
	Official Forecast	November Forecast	Change	% Growth over FY 22	
				Official	November
<b>Commonwealth Transportation Fund</b>					
Motor Fuels Tax	\$ 1,305.1	\$ 1,347.6	\$ 42.5	5.4 %	8.2 %
Road Tax	47.2	69.2	22.0	0.0	1.5
Aviation Fuels Tax	2.0	2.0	0.0	0.0	0.0
Motor Vehicle Sales and Use Tax	983.6	1,091.0	107.4	9.3	(4.3)
Motor Vehicle Rental Tax(1)	31.1	42.9	11.8	4.7	5.4
Motor Vehicle License Fees	202.9	225.0	22.1	0.0	(2.2)
Highway User Fee	53.1	59.7	6.6	13.9	13.9
International Registration Plan	73.8	124.2	50.4	(0.1)	(0.1)
Retail Sales and Use Tax	1,225.9	1,333.0	107.1	0.9	5.5
Recordation Tax (3 cents)	57.0	74.0	17.0	0.0	0.0
Insurance Premiums Tax (1/3)	177.5	196.0	18.5	3.3	8.5
Interest Earnings	10.1	5.7	(4.4)	0.0	0.0
Miscellaneous	17.3	17.2	(0.1)	0.0	0.0
<b>Total State Taxes and Fees</b>	<b>\$ 4,186.6</b>	<b>\$ 4,587.5</b>	<b>\$ 400.9</b>	<b>4.4 %</b>	<b>3.2 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.

# NON-GENERAL FUND REVENUES

**Table 4.5**  
**The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2024**  
**(Dollars in Millions)**

November 1, 2021

	Fiscal Year 2024				
	Official Forecast	November Forecast	Change	% Growth over FY 23 Official	% Growth over FY 23 November
<b>Commonwealth Transportation Fund</b>					
Motor Fuels Tax	\$ 1,336.8	\$ 1,363.9	\$ 27.1	2.4 %	1.2 %
Road Tax	48.0	69.5	21.5	1.7	0.4
Aviation Fuels Tax	2.0	2.0	0.0	0.0	0.0
Motor Vehicle Sales and Use Tax	982.8	1,052.8	70.0	(0.1)	(3.5)
Motor Vehicle Rental Tax(1)	31.6	43.6	12.0	1.6	1.6
Motor Vehicle License Fees	206.0	225.0	19.0	1.5	0.0
Highway User Fee	53.1	62.7	9.6	0.0	5.0
International Registration Plan	72.2	122.6	50.4	(2.2)	(1.3)
Retail Sales and Use Tax	1,250.7	1,390.2	139.5	2.0	4.3
Recordation Tax (3 cents)	57.0	74.0	17.0	0.0	0.0
Insurance Premiums Tax (1/3)	184.3	203.8	19.5	3.8	4.0
Interest Earnings	10.1	5.7	(4.4)	0.0	0.0
Miscellaneous	17.3	17.2	(0.1)	0.0	0.0
<b>Total State Taxes and Fees</b>	<b>\$ 4,251.9</b>	<b>\$ 4,633.0</b>	<b>\$ 381.1</b>	<b>1.6 %</b>	<b>1.0 %</b>

The Official forecast is based on the October 2020 IHS Markit Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation. The Official forecast was adjusted during the mid-session to reflect collections.

The November forecast is based on the October 2021 IHS Markit Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

(1) Consistent with pages 4 and 5 of the monthly 10-page revenue report, includes distributions to Fund 04000 Commonwealth Transportation Fund and Fund 09830 WMATA Capital Fund.

**ABC Revenues and Profits Fiscal Year 2021**

In fiscal year 2021, ABC’s total revenue, excluding state tax receipts, was \$1.1 billion. Gross sales of alcoholic beverages in the retail stores accounted for 97.8 percent of the revenue. The remaining 2.2 percent of revenue was generated largely through the Department’s regulatory and licensing activities. Table 4.6 shows ABC’s revenues, costs, and profits for fiscal years 2018 through 2021. Along with the net ABC profits, Table 4.6 also shows transfers required by the Acts of the Assembly and net profits for distribution transferred to the General Fund.

**Table 4.6  
Alcoholic Beverage Control Authority Components  
of the Enterprise Fund - Revenues, Expenses, and Disbursements  
Fiscal Years 2018-2021 (\$ millions)**

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
<b>Total Revenue* (1)</b>	\$ 844.9	\$ 902.7	\$ 1,001.4	\$ 1,135.0
<b>Cost of Goods &amp; Total Operating Expenses (1)</b>	664.2	701.4	789.8	906.0
<b>Net ABC Profit (1)</b>	181.2	202.0	212.0	233.0
<b>Transfer to the General Fund:</b>				
<b>Reimbursement for Appropriations as provided by the Acts of the Assembly</b>	69.9	69.9	69.4	69.4
<b>Net Profits for Distribution</b>	\$ 109.3	\$ 126.7	\$ 142.7	\$ 179.0

\*These revenue figures exclude receipts collected under the state tax on alcoholic beverages and the general sales tax.

(1) Source is from ABC's Annual CAFR

**ABC Revenues and Profit Forecast for 2022-2024**

Comparisons of ABC’s performance in fiscal year 2020, estimated performance for fiscal year 2021, and actual performance in fiscal year 2021, are included in Table 4.7. Fiscal Year 2021 compared to 2020 shows an increase in sales, an increase in net ABC profits for distribution, and an increase in state tax revenue. Table 4.8 contains fiscal year 2021 results for store sales, profits for distribution and state tax revenues along with the 2022 through 2024 forecasts. Profit forecasts in Table 4.8 are net of any transfers mandated by the Appropriation Act.

## NON-GENERAL FUND REVENUES

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ABC's profit forecast is a factor of two elements: sales performance and trends in expenses. In both cases, forecasts beyond fiscal year 2022 are more prone to forecast error given the uncertainty with the economy and impacts on customer behavior and ABC's cost structure.

**Table 4.7**  
**A Comparison of Fiscal Year 2020 Results**  
**to Fiscal Year 2021 Estimated and Actual Results**  
(\$ millions)

	<u>FY20 Actual</u>	<u>FY21 Estimate</u>	<u>FY21 Actual</u>	<u>Variance</u>	
				<u>Amount</u>	<u>Percent</u>
<b>Total Store Sales*</b>	1,173.6	1,216.5	1,333.6	117.1	9.6
<b>Net ABC Profit for Distribution</b>	142.7	139.5	179.0	39.5	28.3
<b>State Tax Revenue**</b>	224.2	233.5	253.2	19.7	8.4

\*These figures include state tax on alcoholic beverages and exclude the general sales tax collected at ABC stores

\*\*State Tax Revenue does not include \$9.1m wine liter tax transferred to DBHDS

In fiscal year 2022, ABC expects sales to grow in the retail segment but at a lower rate due to ongoing and anticipated supply chain related issues. Like other industries, the spirits industry is challenged with materials needed for the production, bottling, and transportation of spirits. Manufacturers have indicated that bottles, glass, and plastic are in short support. Further compounding the issue is the shortage in labor, trucking, and congestion at U.S. ports. Many of these trends are expected to continue into mid-2022 and possibly 2023. In addition, sales growth projections are lower than the previous year's growth projections due to unprecedented growth of fiscal year 2021 including unexpected sales growth during the later stages of the pandemic, which resulted in multiple fiscal years' worth of sales growth occurring in a short period of time. Sales in the mixed beverage licensee (restaurant) segment have returned to pre-pandemic levels, reversing the COVID-driven decline, but remain fluid due to restaurant industry staffing concerns. Licensee revenue is projected to grow at a very modest rate, and overall other revenue will be down from 2021 due to the Games of Skill being discontinued. The forecast includes an assumption that the sale of ABC's old office and warehouse will be sold in fiscal year 2022 at a \$14.7 million gain.

On the expense side, ABC is faced with mandated salary and benefit costs, market-based increases in salaries and wages to remain competitive, automatic rent escalation, telecommunication and technology costs and growth in credit card discount fees that are all very difficult to influence in the short run. One of the challenges that ABC faces is the change in marketplace demand for workers and the increased wages and personnel costs associated with the demand for employees. The forecast represents the state-mandated pay increase for staff as well as additional costs to remain competitive with marketplace compensation. Maintaining strong wage structures amid an increasingly competitive

landscape is a priority to both retain and hire the talent to grow the Authority’s revenues. For fiscal year 2022 there are significant increases in amortization (\$2.4 million) for the point-of-sale/sales audit systems, depreciation expense on the completed new headquarters and distribution center (\$3.9 million) and ongoing support of new system projects, principally the licensing project.

Personnel costs account for 56 percent of ABC non-merchandise expenditures, 13 percent are for continuous charges such as rent and utilities, 21 percent are for contractual services such as credit card fees, shipping product to stores and telecommunications, and 10 percent are for miscellaneous expenses such as supplies and materials, equipment and depreciation. Upgrading the outdated systems also addresses an Auditor of Public Accounts audit point, ensuring that ABC complies with state and industry security standards. Relocation to a new central office building, along with relocation of the ABC’s warehouse, are also included in these ongoing infrastructure improvements. Changes in salary and benefit cost rates, as well as mandated Appropriations Act transfers, can also significantly impact the accuracy of ABC’s expense forecasts. Additionally, implementation of GASB Statement No. 87 will have a minimal impact on profit in fiscal year 2022 and beyond.

**Table 4.8**  
**Forecast of ABC Store Sales, ABC State Tax on Alcohol, and Net Profits for Distribution**  
**(\$ millions)**

	<u>Actual</u>	<u>Forecast</u>		
	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Total ABC Store Sales: (1)	1,333.6	1,350.0	1,366.6	1,407.6
Excess FY 2020 & 2021 Q4 profits (7)	11.1	1.1		
Adjusted Net Profits for Distribution: (2) (3) (5) (6)	167.9	145.6	120.9	123.8
<b>Total Adjusted Net Profits for Distribution</b>	<b>179.0</b>	<b>146.7</b>	<b>120.9</b>	<b>123.8</b>
ABC State Tax Revenues:(1)				
Spirits	220.4	224.8	227.5	234.4
Wine (4)	32.8	33.5	34.1	34.8
<b>Total Tax Revenue:</b>	<b>253.2</b>	<b>258.3</b>	<b>261.6</b>	<b>269.2</b>

- (1) Excludes the general sales tax and lottery sales
- (2) Does not include appropriation transfers mandated by Virginia Acts of Assembly
- (3) ABC develops forecasts on an accrual basis. The transfer of profits occurs on a cash basis. Variances often occur at year end when ABC has to transfer estimated profits on June 30th.
- (4) Wine figure excludes statutory transfers
- (5) Forecasted decline in FY 2022 Adjusted Net Profit is driven by increases in personal services costs including the Commonwealth mandated pay increase and market factors increasing the cost of labor, to include administration, retail and warehouse staffing. Other factors include depreciation expense for the new headquarters and distribution center, ongoing support for new system projects such as licensing, and increased costs for new store growth and benefits. FY 2022 Adjusted Net Profit includes a one-time benefit of \$14.7 million from the expected gain on the sale of the Hermitage Road headquarters and warehouse property
- (6) Forecasted decline in FY 2023 Adjusted Net Profit is driven by increased personal services costs to remain competitive, store growth and minimum wage increases to \$15/hour and compare to FY 2022 that includes a \$14.7 million gain on the sale of the old headquarters and warehouse.
- (7) Reflects the accrual-based transfer of the excess FY 2020 and FY 2021 Q4 profits deposited into the general fund in Q1.



## NON-GENERAL FUND REVENUES

### Distribution of ABC Profits and ABC State Tax Revenues

During fiscal year 2021, ABC contributed \$237.3 million (accrual basis) of net profits to the Commonwealth, and collected \$305.2 million of taxes on store sales, wine and beer and an additional \$73.9 million of general sales tax totaling \$616.4 million.

Net ABC profits are generally earmarked for deposit in the General Fund; certain appropriations have been made by the General Assembly to recover alcohol-related program costs. The transfers for these programs and others were \$69.4 million in fiscal year 2021. These appropriations are charged against net ABC profits before being transferred to the General Fund. The remaining ABC profits are transferred into the General Fund as ABC profits. ABC expects to meet transfer requirements in fiscal year 2022 given the projected increase in gross sales. However, risks include the impact of supply chain on inventory, reduced purchases and unforeseen increases in expenses.

In any given time period, amounts transferred to the General Fund will not correspond to net ABC profit earned, due to a 50-day interval before the profits are transferred to the Fund. This issue is exacerbated at year-end when ABC must estimate fourth quarter profits and make the transfer in advance of year-end closing.

**Virginia Alcoholic Beverage Control Authority**  
**Forecast (FY2022-FY2027) (1)**  
**As of 10/29/2021**  
*(in millions)*

	Actual FY2021	Forecast FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
<b>Revenue Sources:</b>							
		<i>Growth Rate</i>					
Alcoholic Beverages (Store Sales)	1,333.6	1,350.0	1,366.6	1,407.6	1,463.9	1,529.8	1,598.6
Less: State Taxes on Spirits & Wine	220.4	224.8	227.5	234.4	243.7	254.7	266.1
<b>Net Store Sales</b>	<b>1,113.2</b>	<b>1,125.2</b>	<b>1,139.1</b>	<b>1,173.2</b>	<b>1,220.2</b>	<b>1,275.1</b>	<b>1,332.5</b>
Other Revenue	24.2	35.9	22.9	23.4	23.8	24.3	24.8
<b>Total ABC Revenue</b>	<b>1,137.4</b>	<b>1,161.1</b>	<b>1,162.0</b>	<b>1,196.6</b>	<b>1,244.0</b>	<b>1,299.4</b>	<b>1,357.3</b>
<b>Cost of Goods Sold:</b>	642.9	650.7	658.7	678.5	705.6	737.4	770.5
<b>Operating Costs:</b>	257.2	295.4	305.9	314.7	325.0	336.1	347.6
<b>Infrastructure Projects (2):</b>			7.1	10.2	10.6	10.6	10.6
<b>ABC Net Profit</b>	<b>237.3</b>	<b>215.0</b>	<b>190.3</b>	<b>193.2</b>	<b>202.8</b>	<b>215.3</b>	<b>228.6</b>
<b>Profit Carryover from Prior Fiscal Year</b>		1.1					
<b>ABC Profit Requirement &amp; Mandatory Transfers (3)</b>		214.3					
<b>Over/(Under) Required Transfer</b>		1.8					

Notes:

- Forecast developed on accrual basis. The profit transfer occurs on a cash basis. Variances often occur at year end when ABC has to transfer estimated profits prior to June 30th.
- Infrastructure projects are ongoing and the depreciation/amortization impact with an increased impact beginning in FY23. These projects include the Body worn camera and ecommerce project. All live projects as well as projects that will be going live in FY22 were included in the FY22 base budget.
- Conference Report to House Bill 5005

## **Virginia Lottery**

Each fiscal year, the Lottery makes periodic transfers of net income (revenues from sales plus other income, minus expenses) to the Lottery Proceeds Fund, in accordance with the schedule included in the Appropriations Act. Expenses are comprised of prizes to players, commissions to retailers, ticket printing and distribution, contractual fees for gaming system operations, and administrative operating costs. The primary drivers of the net income transferred are sales of lottery products and prizes paid to players.

### **Actual Results - Fiscal Year 2021**

The Virginia Lottery transferred \$708.2 million to the Lottery Proceeds Fund during fiscal year 2021. The Lottery also transferred \$4.8 million for debt set-off to the Department of Taxation and \$10.3 million from unclaimed prizes to the Literary Fund.

Sales for fiscal year 2021 were \$3.3 billion, an increase of \$1.1 billion (+51.7 percent) from fiscal year 2020. Net income was \$766.7 million, \$171.4 million (+13.4 percent) more than fiscal year 2020, due to stronger sales and the introduction of iLottery.

Total transfers to the Lottery Proceeds Fund during fiscal year 2021 were as follows: \$8.8 million in residual profits from fiscal year 2020, and \$699.4 million in estimated profits from fiscal year 2021. The \$67.3 million of residual fiscal year 2021 profits, transferred in August 2021 after the 2021 fiscal year results were certified by the Auditor of Public Accounts, will be included in the total fiscal year 2022 transfers.

### **Forecast Overview - Fiscal Years 2022 through 2024**

The Virginia Lottery developed its sales and revenue forecasts based upon a variety of baseline assumptions, including:

- continued traditional lottery gaming competition from neighboring jurisdictions, as well as the competition from sports betting and casino-style gaming in Virginia and neighboring jurisdictions;
- no legislatively-mandated change in the overall compensation rate paid to retailers offering Lottery products, or other constraints on Lottery expenses including prizes;
- no additional legislatively mandated limitation on the administrative spending for the Lottery, other than the current statutory 10 percent spending cap in place since the Lottery's inception; and
- no new constraints on the Lottery's sales and marketing efforts, including the ability to advertise products, establish prizes paid to players, and offer licensed property and other lottery games of chance that appeal to consumers.

For fiscal year 2022, the Lottery is projecting sales of \$3.8 billion and net income (turnover to the Lottery Proceeds Fund) of \$776.1 million. Prize expense is estimated to be \$2.7 billion, or 70.7 percent of sales; retailer compensation is forecast to be \$149.7 million,

## **NON-GENERAL FUND REVENUES**

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or \$10.4 million more than the previous year. This forecast takes into account current trends, the expansion of the competitive gaming environment, simulation models for jackpot progressions and sales, and statistically expected prize expense rates. The total estimated \$776.1 million net income, plus the residual \$67.3 million of fiscal year 2021 profits that has been transferred during fiscal year 2022, brings the total expected transfers to the Lottery Proceeds Fund for fiscal year 2022 to \$843.4 million.

For fiscal year 2023, the Lottery expects that sales will sustain the growth anticipated in the current year, creating revenue for the Lottery Proceeds Fund of \$764.7 million in fiscal year 2023, and recommends holding this amount steady for the 2024 fiscal year.

For the next biennium, the expected transfers to the Lottery Proceeds Fund total \$1.5 billion.

### **Sales Projections for Fiscal Years 2022 through 2024**

For each fiscal year forecast, the Lottery total forecast is the sum of sales forecasts developed by the Lottery for each of its products. The methodology for each estimate is dependent upon the nature of the product. The data used in our models include such factors as: experiences of other U.S. and Canadian lotteries, variability of prize percentage, economic variables such as predicted interest rates, seasonal factors, promotions, and product life cycles.

For the current forecast period, the Lottery included projections of internet sales based on the limited actual sales activity since the games became available on July 1, 2020.

### ***Traditional Games***

Traditional-style lottery products include those available at approximately 5,300 retail sales partners across Virginia. These products include scratch-off tickets, draw-game tickets where players select numbers that may match future draw results for chances to win prizes, instant-win games printed at lottery terminals, and limited-offerings including raffle style games. Games include national and regional multi-state game offerings as well as Virginia-only style games.

### ***iLottery Products***

Beginning July 1, 2020, registered adult players within the geographic boundaries of Virginia may purchase Instant games online, for chances to win prizes. In addition to the online-only category of Instant games, several other traditional-style games are also available for purchase, including single- or multiple future drawings to games including Powerball and Mega Millions.

**Net Income for Fiscal Years 2022 through 2024**

The Lottery is forecasting net income of \$776.1 million for fiscal year 2022, and \$764.7 million for each year, fiscal year 2023 and 2024. The Lottery’s largest expense, prizes to players, is expected to increase over this period as sales increase and players buy more products designed with a higher portion of sales returned back in the form of prizes. Retailers should continue to earn commissions and incentives equal to about 6 percent of retail sales. Operating expenses are projected to remain low in proportion to sales, less than 5 percent of total sales – about half of the 10 percent statutory maximum.

**Table 4.10  
Forecast of Lottery Sales and Transfers to the Lottery Proceeds Fund  
(in \$ Millions)**

	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
Sales	3,753.7	3,796.3	3,796.3
- Prize Expense	2,655.0	2,692.3	2,692.3
- Retailer Compensation	149.7	153.8	153.8
- Operating Expenses	174.7	187.3	187.3
+ Other Income	1.8	1.8	1.8
<b>Net Income</b>	<b>776.1</b>	<b>764.7</b>	<b>764.7</b>
Other Transfers	67.3	-	-
<b>Total Available</b>	<b>843.4</b>	<b>764.7</b>	<b>764.7</b>

**Ongoing Risks to the Forecast**

There are a number of ongoing risks associated with the Virginia Lottery's forecast that could significantly affect the Lottery's transfer to the Lottery Proceeds Fund. The first is luck. Since the basis of many of the Lottery's products is a random drawing, in the relatively short period of one year, a wide range of outcomes can occur. If the Lottery experiences unusually high payouts in its daily games in any given year, sales may be higher than projected, but profits lower simply due to players winning more money. Luck is also a primary driver of sales for Mega Millions and Powerball. If jackpots are won with more frequency than expected, then sales will be lower than expected due to small jackpots. A long period without a jackpot win can generate much higher sales due to the growth of the jackpot; this was the case in January 2016 when the Powerball jackpot grew to a world record \$1,586 million, and again in fiscal year 2019 with Mega Millions setting a record of \$1,537 million. This type of sales activity is never anticipated as part of a forecast of expected results, and can have longer-term negative impacts on game sales.

## **NON-GENERAL FUND REVENUES**

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A second risk is competition from other gaming opportunities available to consumers. Mobile sports wagering became available in Virginia starting in January 2021. Four Virginia localities approved local referenda to establish land-based casino gaming, with a fifth referendum pending the outcome of the November 2021 election. While no firm dates are available, the casino operations are expected to begin during the 2022-2024 biennium. There was also a significant expansion of historical horse racing activity into the Northern Virginia region.

Other risks include the public health emergency and the potential for additional retail and consumer purchase disruption, the overall economic impacts from COVID in terms of employment, federal stimulus and disposable income, as well as potential legislative action related to gaming in Virginia.

The current estimates of sales and profits also presume that the Lottery's appropriation authority is sufficient to support its operations for activities including investments in technology, sales equipment necessary to sustain and expand the Lottery retailer network, advertising, and contractual commitments to vendor partners that are primarily based on percentage of sales agreements. Estimates also do not anticipate any change in the distribution of lottery profits, or any change in the prize allocations or prize types available to players.

# **APPENDIX A ECONOMIC DATA**

**TABLE A.1 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

	History											
	2018.3	2018.4	2019.1	2019.2	2019.3	2019.4	2020.1	2020.2	2020.3	2020.4	2021.1	2021.2
Real Gross Domestic Product, Billions \$, SAAR	18,679.6	18,721.3	18,833.2	18,982.5	19,112.7	19,202.3	18,952.0	17,258.2	18,560.8	18,767.8	19,055.7	19,368.3
Annualized % Change	1.9	0.9	2.4	3.2	2.8	1.9	(5.1)	(31.2)	33.8	4.5	6.3	6.7
% Change from Prior Year's Quarter	3.1	2.3	2.2	2.1	2.3	2.6	0.6	(9.1)	(2.9)	(2.3)	0.5	12.2
Real Consumer Spending, Billions \$, SAAR	12,900.6	12,955.5	12,975.1	13,088.8	13,192.3	13,249.0	13,014.5	11,756.4	12,820.8	12,927.9	13,282.7	13,665.6
Annualized % Change	2.7	1.7	0.6	3.5	3.2	1.7	(6.9)	(33.4)	41.4	3.4	11.4	12.0
% Change from Prior Year's Quarter	3.2	2.6	2.1	2.1	2.3	2.3	0.3	(10.2)	(2.8)	(2.4)	2.1	16.2
U.S. Personal Income, Billions \$, SAAR	17,821.1	17,998.3	18,238.9	18,345.4	18,464.7	18,648.5	18,842.2	20,348.7	19,777.4	19,542.0	21,867.3	20,575.1
Annualized % Change	5.2	4.0	5.5	2.4	2.6	4.0	4.2	36.0	(10.8)	(4.7)	56.8	(21.6)
% Change from Prior Year's Quarter	5.2	4.8	4.8	4.2	3.6	3.6	3.3	10.9	7.1	4.8	16.1	1.1
Virginia Personal Income, Millions \$, SAAR	487,585.6	491,882.7	497,697.8	500,614.0	503,441.2	508,650.2	516,718.6	545,523.0	532,894.7	533,888.6	586,029.4	550,829.3
Annualized % Change	4.3	3.6	4.8	2.4	2.3	4.2	6.5	24.2	(8.9)	0.7	45.2	(21.9)
% Change from Prior Year's Quarter	3.9	3.4	4.2	3.8	3.3	3.4	3.8	9.0	5.9	5.0	13.4	1.0
Virginia Wages and Salaries, Millions \$, SAAR	252,229.5	253,782.7	258,676.5	260,152.4	262,017.6	265,797.5	271,895.5	256,588.4	267,623.0	278,015.1	277,325.2	281,987.2
Annualized % Change	5.7	2.5	7.9	2.3	2.9	5.9	9.5	(20.7)	18.3	16.5	(1.0)	6.9
% Change from Prior Year's Quarter	4.2	3.3	4.9	4.6	3.9	4.7	5.1	(1.4)	2.1	4.6	2.0	9.9
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	100,807.3	102,262.4	101,725.5	102,240.0	102,003.3	102,081.0	101,960.3	100,140.3	98,691.2	99,907.2	99,774.5	100,701.3
Annualized % Change	4.1	5.9	(2.1)	2.0	(0.9)	0.3	(0.5)	(7.0)	(5.7)	5.0	(0.5)	3.8
% Change from Prior Year's Quarter	3.5	4.4	3.2	2.4	1.2	(0.2)	0.2	(2.1)	(3.2)	(2.1)	(2.1)	0.6
Virginia Total Proprietor's Income, Millions \$, SAAR	27,268.5	27,286.3	28,777.7	28,749.2	29,217.6	29,513.0	29,872.0	26,690.7	32,639.7	31,374.5	31,249.1	32,031.0
Annualized % Change	2.4	0.3	23.7	(0.4)	6.7	4.1	5.0	(36.3)	123.6	(14.6)	(1.6)	10.4
% Change from Prior Year's Quarter	2.2	0.3	6.7	6.1	7.1	8.2	3.8	(7.2)	11.7	6.3	4.6	20.0

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.1 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLE:**

	History											
	2018.3	2018.4	2019.1	2019.2	2019.3	2019.4	2020.1	2020.2	2020.3	2020.4	2021.1	2021.2
Total U.S. Employment, Millions, SA	149.2	149.7	150.2	150.6	151.1	151.7	151.9	133.7	140.9	142.6	143.4	145.1
Annualized % Change	1.5	1.3	1.2	1.1	1.4	1.6	0.3	(40.0)	23.3	5.1	2.1	4.8
% Change from Prior Year's Quarter	1.6	1.6	1.5	1.3	1.3	1.3	1.1	(11.2)	(6.8)	(6.0)	(5.6)	8.5
Virginia Total Nonag. Employment, Thousands, SA	4,014.9	4,002.7	4,030.6	4,059.1	4,060.5	4,051.3	4,073.5	3,661.7	3,816.6	3,848.2	3,872.0	3,908.4
Annualized % Change	0.5	(1.2)	2.8	2.9	0.1	(0.9)	2.2	(34.7)	18.0	3.4	2.5	3.8
% Change from Prior Year's Quarter	1.4	1.2	1.2	1.2	1.1	1.2	1.1	(9.8)	(6.0)	(5.0)	(4.9)	6.7
CPI, All Urban, 1982-1984=1.0, SA	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7
Annualized % Change	1.6	1.6	0.7	3.5	1.3	2.6	1.0	(3.1)	4.7	2.4	3.7	8.4
% Change from Prior Year's Quarter	2.6	2.2	1.6	1.8	1.8	2.0	2.1	0.4	1.3	1.2	1.9	4.8
Refiner's Acquisition Cost of Oil, \$ per Barrel	69.1	59.6	57.2	63.6	58.7	58.0	47.3	26.6	40.8	42.0	57.2	66.0
Quarterly Change	1.9	(9.5)	(2.4)	6.4	(4.9)	(0.7)	(10.7)	(20.7)	14.2	1.3	15.2	8.8
Change from Prior Year's Quarter	20.7	3.0	(4.8)	(3.6)	(10.4)	(1.6)	(9.9)	(37.0)	(17.9)	(16.0)	10.0	39.5
Before-Tax Corporate Profits, Billions \$, SAAR	2,273.2	2,304.5	2,234.6	2,289.3	2,214.9	2,279.5	1,988.8	1,818.9	2,448.4	2,480.1	2,711.3	3,069.0
Annualized % Change	3.3	5.6	(11.6)	10.2	(12.4)	12.2	(42.1)	(30.0)	228.4	5.3	42.8	64.2
% Change from Prior Year's Quarter	0.1	10.1	1.4	1.5	(2.6)	(1.1)	(11.0)	(20.5)	10.5	8.8	36.3	68.7
S&P 500 Stock Market Index, Level	2,851.0	2,692.0	2,722.1	2,882.9	2,958.6	3,086.4	3,069.3	2,928.8	3,321.6	3,554.3	3,862.6	4,182.5
Annualized % Change	23.7	(20.5)	4.5	25.8	10.9	18.4	(2.2)	(17.1)	65.5	31.1	39.5	37.5
% Change from Prior Year's Quarter	15.5	3.3	(0.4)	6.6	3.8	14.7	12.8	1.6	12.3	15.2	25.8	42.8
30-Year Treasury Bonds, Level	3.1	3.3	3.0	2.8	2.3	2.3	1.9	1.4	1.4	1.6	2.1	2.3
Quarterly Change	(0.0)	0.2	(0.3)	(0.2)	(0.5)	(0.0)	(0.4)	(0.5)	(0.0)	0.3	0.5	0.2
Change from Prior Year's Quarter	0.2	0.4	(0.0)	(0.3)	(0.8)	(1.0)	(1.1)	(1.4)	(0.9)	(0.6)	0.2	0.9

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted



**TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

	October Standard Forecast											
	2021.3	2021.4	2022.1	2022.2	2022.3	2022.4	2023.1	2023.2	2023.3	2023.4	2024.1	2024.2
<b>Real Gross Domestic Product,</b>												
Billions \$, SAAR	19,435.3	19,680.7	19,916.5	20,133.9	20,322.3	20,472.2	20,591.3	20,712.2	20,842.6	20,985.4	21,130.6	21,273.0
Annualized % Change	1.4	5.1	4.9	4.4	3.8	3.0	2.3	2.4	2.5	2.8	2.8	2.7
% Change from Prior Year's Quarter	4.7	4.9	4.5	4.0	4.6	4.0	3.4	2.9	2.6	2.5	2.6	2.7
<b>Real Consumer Spending,</b>												
Billions \$, SAAR	13,678.8	13,841.2	13,943.4	14,043.7	14,133.9	14,213.2	14,287.1	14,373.0	14,465.2	14,566.9	14,675.5	14,787.1
Annualized % Change	0.4	4.8	3.0	2.9	2.6	2.3	2.1	2.4	2.6	2.8	3.0	3.1
% Change from Prior Year's Quarter	6.7	7.1	5.0	2.8	3.3	2.7	2.5	2.3	2.3	2.5	2.7	2.9
<b>U.S. Personal Income,</b>												
Billions \$, SAAR	20,622.9	20,501.5	20,566.4	20,871.4	21,178.0	21,417.1	21,674.5	21,943.1	22,216.2	22,494.1	22,813.8	23,112.6
Annualized % Change	0.9	(2.3)	1.3	6.1	6.0	4.6	4.9	5.0	5.1	5.1	5.8	5.3
% Change from Prior Year's Quarter	4.3	4.9	(5.9)	1.4	2.7	4.5	5.4	5.1	4.9	5.0	5.3	5.3
<b>Virginia Personal Income,</b>												
Millions \$, SAAR	572,635.2	572,947.6	577,005.7	582,104.6	589,529.6	595,097.4	601,550.6	607,637.7	613,929.4	620,322.2	627,852.0	634,791.2
Annualized % Change	16.8	0.2	2.9	3.6	5.2	3.8	4.4	4.1	4.2	4.2	4.9	4.5
% Change from Prior Year's Quarter	7.5	7.3	(1.5)	5.7	3.0	3.9	4.3	4.4	4.1	4.2	4.4	4.5
<b>Virginia Wages and Salaries,</b>												
Millions \$, SAAR	287,683.9	291,713.5	295,943.0	299,813.2	304,326.0	307,562.6	311,212.7	314,462.6	318,010.3	321,525.8	325,366.2	329,249.5
Annualized % Change	8.3	5.7	5.9	5.3	6.2	4.3	4.8	4.2	4.6	4.5	4.9	4.9
% Change from Prior Year's Quarter	7.5	4.9	6.7	6.3	5.8	5.4	5.2	4.9	4.5	4.5	4.5	4.7
<b>Virginia Dividends, Interest, and Rent,</b>												
Millions \$, SAAR	108,748.7	109,765.5	110,747.3	111,739.0	113,125.6	114,394.1	115,801.7	117,321.3	118,815.1	120,328.9	121,853.7	123,419.0
Annualized % Change	36.0	3.8	3.6	3.6	5.1	4.6	5.0	5.4	5.2	5.2	5.2	5.2
% Change from Prior Year's Quarter	10.2	9.9	11.0	11.0	4.0	4.2	4.6	5.0	5.0	5.2	5.2	5.2
<b>Virginia Total Proprietor's Income,</b>												
Millions \$, SAAR	31,642.4	30,899.1	31,999.3	31,422.4	31,613.5	31,495.4	31,405.4	31,352.3	31,405.2	31,447.4	31,543.2	31,649.8
Annualized % Change	(4.8)	(9.1)	15.0	(7.0)	2.5	(1.5)	(1.1)	(0.7)	0.7	0.5	1.2	1.4
% Change from Prior Year's Quarter	(3.1)	(1.5)	2.4	(1.9)	(0.1)	1.9	(1.9)	(0.2)	(0.7)	(0.2)	0.4	0.9

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

	October Standard Forecast											
	2021.3	2021.4	2022.1	2022.2	2022.3	2022.4	2023.1	2023.2	2023.3	2023.4	2024.1	2024.2
Total U.S. Employment, Millions, SA	147.3	148.3	149.5	150.8	151.9	152.8	153.5	154.0	154.4	154.8	155.2	155.5
Annualized % Change	6.3	2.7	3.5	3.4	2.9	2.5	1.8	1.4	1.1	0.9	1.0	0.9
% Change from Prior Year's Quarter	4.6	4.0	4.3	4.0	3.1	3.1	2.7	2.1	1.7	1.3	1.1	1.0
Virginia Total Nonag. Employment, Thousands, SA	3,942.8	3,965.3	3,980.6	3,988.2	4,003.8	4,006.1	4,015.1	4,026.4	4,035.1	4,042.9	4,049.9	4,053.4
Annualized % Change	3.6	2.3	1.6	0.8	1.6	0.2	0.9	1.1	0.9	0.8	0.7	0.3
% Change from Prior Year's Quarter	3.3	3.0	2.8	2.0	1.5	1.0	0.9	1.0	0.8	0.9	0.9	0.7
CPI, All Urban, 1982-1984=1.0, SA	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
Annualized % Change	6.5	2.6	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.1	2.0	2.2
% Change from Prior Year's Quarter	5.3	5.3	4.8	3.2	2.1	1.9	2.0	2.1	2.1	2.1	2.1	2.1
Refiner's Acquisition Cost of Oil, \$ per Barrel	69.5	72.1	67.1	65.5	64.3	62.9	62.1	62.4	62.5	62.3	61.3	61.4
Quarterly Change	3.5	2.6	(5.0)	(1.6)	(1.2)	(1.5)	(0.8)	0.3	0.1	(0.2)	(1.0)	0.1
Change from Prior Year's Quarter	28.7	30.1	9.9	(0.5)	(5.2)	(9.3)	(5.0)	(3.1)	(1.8)	(0.6)	(0.8)	(1.0)
Before-Tax Corporate Profits, Billions \$, SAAR	2,792.1	2,768.9	2,789.1	2,828.7	2,855.8	2,846.8	2,909.0	2,917.1	2,942.1	2,969.7	3,070.7	3,105.4
Annualized % Change	(31.5)	(3.3)	2.9	5.8	3.9	(1.2)	9.0	1.1	3.5	3.8	14.3	4.6
% Change from Prior Year's Quarter	14.0	11.6	2.9	(7.8)	2.3	2.8	4.3	3.1	3.0	4.3	5.6	6.5
S&P 500 Stock Market Index, Level	4,421.2	4,360.1	4,452.7	4,498.8	4,473.3	4,433.8	4,423.0	4,440.6	4,484.4	4,522.6	4,543.7	4,550.0
Annualized % Change	24.9	(5.4)	8.8	4.2	(2.2)	(3.5)	(1.0)	1.6	4.0	3.4	1.9	0.6
% Change from Prior Year's Quarter	33.1	22.7	15.3	7.6	1.2	1.7	(0.7)	(1.3)	0.2	2.0	2.7	2.5
30-Year Treasury Bonds, Level	1.9	2.0	2.2	2.3	2.4	2.6	2.7	2.8	2.8	2.9	2.9	3.0
Quarterly Change	(0.3)	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Change from Prior Year's Quarter	0.6	0.4	0.1	0.0	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLE<sup>1</sup>**

	Pessimistic Alternative Scenario											
	2021.3	2021.4	2022.1	2022.2	2022.3	2022.4	2023.1	2023.2	2023.3	2023.4	2024.1	2024.2
Real Gross Domestic Product, Billions \$, SAAR	19,389.1	19,484.1	19,629.4	19,813.3	19,984.4	20,141.8	20,277.0	20,414.4	20,565.6	20,715.6	20,875.5	21,024.2
Annualized % Change	0.4	2.0	3.0	3.8	3.5	3.2	2.7	2.7	3.0	3.0	3.1	2.9
% Change from Prior Year's Quarter	4.5	3.8	3.0	2.3	3.1	3.4	3.3	3.0	2.9	2.8	3.0	3.0
Real Consumer Spending, Billions \$, SAAR	13,638.3	13,669.0	13,705.7	13,785.2	13,855.5	13,939.3	14,028.9	14,135.0	14,247.9	14,354.6	14,472.4	14,588.5
Annualized % Change	(0.8)	0.9	1.1	2.3	2.1	2.4	2.6	3.1	3.2	3.0	3.3	3.2
% Change from Prior Year's Quarter	6.4	5.7	3.2	0.9	1.6	2.0	2.4	2.5	2.8	3.0	3.2	3.2
U.S. Personal Income, Billions \$, SAAR	20,579.7	20,321.6	20,301.1	20,536.3	20,788.0	20,994.6	21,206.3	21,436.5	21,672.6	21,915.8	22,179.0	22,435.0
Annualized % Change	0.1	(4.9)	(0.4)	4.7	5.0	4.0	4.1	4.4	4.5	4.6	4.9	4.7
% Change from Prior Year's Quarter	4.1	4.0	(7.2)	(0.2)	1.0	3.3	4.5	4.4	4.3	4.4	4.6	4.7
Virginia Personal Income, Millions \$, SAAR	572,581.8	570,721.3	573,165.4	577,004.3	583,369.6	588,098.8	593,386.9	598,371.1	603,172.6	607,977.5	613,483.0	618,733.2
Annualized % Change	16.8	(1.3)	1.7	2.7	4.5	3.3	3.6	3.4	3.2	3.2	3.7	3.5
% Change from Prior Year's Quarter	7.4	6.9	(2.2)	4.8	1.9	3.0	3.5	3.7	3.4	3.4	3.4	3.4
Virginia Wages and Salaries, Millions \$, SAAR	287,581.0	290,578.2	294,064.8	297,477.0	301,340.6	304,029.1	306,991.7	309,482.5	312,015.0	314,461.0	317,172.4	319,948.1
Annualized % Change	8.2	4.2	4.9	4.7	5.3	3.6	4.0	3.3	3.3	3.2	3.5	3.5
% Change from Prior Year's Quarter	7.5	4.5	6.0	5.5	4.8	4.6	4.4	4.0	3.5	3.4	3.3	3.4
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	108,568.2	108,654.9	108,703.6	109,147.8	110,629.7	112,124.9	113,717.8	115,385.8	116,947.8	118,449.0	119,873.6	121,287.5
Annualized % Change	35.1	0.3	0.2	1.6	5.5	5.5	5.8	6.0	5.5	5.2	4.9	4.8
% Change from Prior Year's Quarter	10.0	8.8	8.9	8.4	1.9	3.2	4.6	5.7	5.7	5.6	5.4	5.1
Virginia Total Proprietor's Income, Millions \$, SAAR	31,377.6	30,461.6	31,368.7	30,830.0	31,145.7	31,163.0	31,145.4	31,175.4	31,354.0	31,506.1	31,681.3	31,849.1
Annualized % Change	(7.9)	(11.2)	12.5	(6.7)	4.2	0.2	(0.2)	0.4	2.3	2.0	2.2	2.1
% Change from Prior Year's Quarter	(3.9)	(2.9)	0.4	(3.7)	(0.7)	2.3	(0.7)	1.1	0.7	1.1	1.7	2.2

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

	Pessimistic Alternative Scenario											
	2021.3	2021.4	2022.1	2022.2	2022.3	2022.4	2023.1	2023.2	2023.3	2023.4	2024.1	2024.2
Total U.S. Employment, Millions, SA	147.3	148.0	149.1	150.1	150.9	151.8	152.4	152.9	153.3	153.6	153.9	154.3
Annualized % Change	6.3	1.9	3.0	2.8	2.3	2.2	1.8	1.3	0.9	0.9	0.9	0.8
% Change from Prior Year's Quarter	4.6	3.8	4.0	3.5	2.5	2.5	2.2	1.9	1.5	1.2	1.0	0.9
Virginia Total Nonag. Employment, Thousands, SA	3,943.5	3,955.4	3,977.7	3,981.7	3,993.7	3,995.7	4,005.2	4,016.5	4,022.2	4,027.0	4,030.2	4,030.0
Annualized % Change	3.6	1.2	2.3	0.4	1.2	0.2	1.0	1.1	0.6	0.5	0.3	(0.0)
% Change from Prior Year's Quarter	3.3	2.8	2.7	1.9	1.3	1.0	0.7	0.9	0.7	0.8	0.6	0.3
CPI, All Urban, 1982-1984=1.0, SA	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Annualized % Change	6.1	2.1	1.4	1.0	0.9	0.9	0.9	0.9	1.2	1.1	1.0	1.3
% Change from Prior Year's Quarter	5.2	5.1	4.5	2.6	1.4	1.1	0.9	0.9	1.0	1.0	1.0	1.2
Refiner's Acquisition Cost of Oil, \$ per Barrel	73.0	74.1	68.9	67.2	66.0	64.7	63.9	64.3	64.5	64.3	63.4	63.6
Quarterly Change	6.9	1.1	(5.2)	(1.7)	(1.1)	(1.3)	(0.8)	0.4	0.2	(0.1)	(0.9)	0.1
Change from Prior Year's Quarter	32.2	32.1	11.6	1.2	(6.9)	(9.3)	(5.0)	(2.9)	(1.6)	(0.4)	(0.4)	(0.7)
Before-Tax Corporate Profits, Billions \$, SAAR	2,757.7	2,671.9	2,637.9	2,644.6	2,649.6	2,616.4	2,659.9	2,655.4	2,680.2	2,687.5	2,778.9	2,801.7
Annualized % Change	(34.8)	(11.9)	(5.0)	1.0	0.8	(4.9)	6.8	(0.7)	3.8	1.1	14.3	3.3
% Change from Prior Year's Quarter	12.6	7.7	(2.7)	(13.8)	(3.9)	(2.1)	0.8	0.4	1.2	2.7	4.5	5.5
S&P 500 Stock Market Index, Level	4,421.2	4,280.0	4,267.4	4,271.1	4,233.8	4,198.9	4,183.7	4,201.6	4,240.0	4,255.2	4,261.4	4,272.2
Annualized % Change	24.9	(12.2)	(1.2)	0.3	(3.4)	(3.3)	(1.4)	1.7	3.7	1.4	0.6	1.0
% Change from Prior Year's Quarter	33.1	20.4	10.5	2.1	(4.2)	(1.9)	(2.0)	(1.6)	0.1	1.3	1.9	1.7
30-Year Treasury Bonds, Level	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.6
Quarterly Change	(0.3)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Change from Prior Year's Quarter	0.6	0.4	0.0	(0.1)	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

		History											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real Gross Domestic Product, Billions \$, SAAR	Calendar Year	15,236.3	15,649.0	15,891.5	16,254.0	16,553.3	16,932.1	17,390.3	17,680.3	18,079.1	18,606.8	19,032.7	18,384.7
	% Change	(2.6)	2.7	1.5	2.3	1.8	2.3	2.7	1.7	2.3	2.9	2.3	(3.4)
	Fiscal Year	15,356.4	15,414.4	15,795.3	16,088.3	16,372.0	16,707.5	17,216.8	17,520.9	17,857.6	18,362.3	18,804.2	18,631.3
	% Change	(2.4)	0.4	2.5	1.9	1.8	2.0	3.0	1.8	1.9	2.8	2.4	(0.9)
Real Consumer Spending, Billions \$, SAAR	Calendar Year	10,515.6	10,716.0	10,898.3	11,047.4	11,211.7	11,515.3	11,892.9	12,187.7	12,483.7	12,845.0	13,126.3	12,629.9
	% Change	(1.3)	1.9	1.7	1.4	1.5	2.7	3.3	2.5	2.4	2.9	2.2	(3.8)
	Fiscal Year	10,546.5	10,586.3	10,834.3	10,971.4	11,119.2	11,329.8	11,721.6	12,047.5	12,327.3	12,664.1	12,980.0	12,803.0
	% Change	(1.5)	0.4	2.3	1.3	1.3	1.9	3.5	2.8	2.3	2.7	2.5	(1.4)
U.S. Personal Income, Billions \$, SAAR	Calendar Year	12,080.4	12,594.5	13,339.3	14,014.3	14,193.7	14,976.6	15,685.2	16,096.9	16,850.2	17,706.0	18,424.4	19,627.6
	% Change	(3.2)	4.3	5.9	5.1	1.3	5.5	4.7	2.6	4.7	5.1	4.1	6.5
	Fiscal Year	12,262.5	12,260.8	12,992.2	13,658.2	14,124.4	14,525.5	15,386.1	15,881.0	16,439.6	17,278.4	18,100.9	19,076.0
	% Change	(0.5)	(0.0)	6.0	5.1	3.4	2.8	5.9	3.2	3.5	5.1	4.8	5.4
Virginia Personal Income, Millions \$, SAAR	Calendar Year	349,712.1	365,041.4	387,003.9	405,863.9	403,198.4	421,873.6	441,016.7	452,400.5	470,835.7	492,764.3	502,600.8	532,256.2
	% Change	(1.7)	4.4	6.0	4.9	(0.7)	4.6	4.5	2.6	4.1	4.7	3.6	5.9
	Fiscal Year	352,329.4	355,744.6	376,229.2	396,552.0	405,848.7	410,467.2	432,059.7	446,750.4	461,105.3	481,783.2	494,445.0	518,583.2
	% Change	0.4	1.0	5.8	5.4	2.3	1.1	5.3	3.4	3.2	4.5	3.8	4.9
Virginia Wages and Salaries, Millions \$, SAAR	Calendar Year	191,515.0	196,438.8	202,093.4	208,182.2	210,447.7	215,898.3	225,622.2	230,791.2	240,507.7	251,462.6	261,661.0	268,530.5
	% Change	(1.1)	2.6	2.9	3.0	1.1	2.6	4.5	2.3	4.2	4.6	4.5	2.6
	Fiscal Year	192,561.0	193,289.7	199,878.5	204,801.6	210,485.7	212,041.0	220,555.6	228,162.1	235,521.0	245,903.6	256,210.3	264,074.7
	% Change	0.7	0.4	3.4	2.5	2.8	0.7	4.0	3.4	3.2	4.4	4.2	3.1
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	Calendar Year	66,534.1	66,415.3	73,723.1	81,834.1	79,235.7	86,208.5	90,985.7	95,206.6	100,840.3	107,126.1	102,012.4	100,174.7
	% Change	(9.0)	(0.2)	11.0	11.0	(3.2)	8.8	5.5	4.6	5.9	6.2	1.6	(1.8)
	Fiscal Year	70,493.2	65,256.9	69,766.2	78,010.8	80,724.9	82,271.1	88,911.2	93,122.0	97,832.8	104,082.4	101,758.8	101,546.2
	% Change	(3.0)	(7.4)	6.9	11.8	3.5	1.9	8.1	4.7	5.1	6.4	3.4	(0.2)
Virginia Total Proprietor's Income, Millions \$, SAAR	Calendar Year	16,828.6	22,314.4	24,758.2	28,688.7	26,519.8	27,664.4	28,050.5	26,772.8	26,907.8	27,189.7	29,064.4	30,144.2
	% Change	(15.5)	32.6	11.0	15.9	(7.6)	4.3	1.4	(4.6)	0.5	1.0	7.0	3.7
	Fiscal Year	17,866.1	19,579.5	23,359.4	27,018.0	27,685.5	26,947.8	28,040.0	27,351.3	26,875.6	26,934.3	28,020.4	28,823.3
	% Change	(15.5)	9.6	19.3	15.7	2.5	(2.7)	4.1	(2.5)	(1.7)	0.2	3.8	2.9

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

		October Standard Forecast				Pessimistic Alternative Scenario			
		2021	2022	2023	2024	2021	2022	2023	2024
Real Gross Domestic Product, Billions \$, SAAR	Calendar Year	19,385.0	20,211.2	20,782.9	21,336.5	19,324.3	19,892.2	20,493.1	21,094.7
	% Change	5.4	4.3	2.8	2.7	5.1	2.9	3.0	2.9
	Fiscal Year	18,938.1	19,791.6	20,524.5	21,057.9	18,938.1	19,579.0	20,204.4	20,795.2
	% Change	1.6	4.5	3.7	2.6	1.6	3.4	3.2	2.9
Real Consumer Spending, Billions \$, SAAR	Calendar Year	13,617.1	14,083.5	14,423.0	14,843.5	13,563.9	13,821.4	14,191.6	14,649.2
	% Change	7.8	3.4	2.4	2.9	7.4	1.9	2.7	3.2
	Fiscal Year	13,174.2	13,876.8	14,251.8	14,623.7	13,174.2	13,699.5	13,989.7	14,415.8
	% Change	2.9	5.3	2.7	2.6	2.9	4.0	2.1	3.0
U.S. Personal Income, Billions \$, SAAR	Calendar Year	20,891.7	21,008.2	22,082.0	23,260.4	20,835.9	20,655.0	21,557.8	22,563.5
	% Change	6.4	0.6	5.1	5.3	6.2	(0.9)	4.4	4.7
	Fiscal Year	20,440.5	20,640.5	21,553.2	22,659.2	20,440.5	20,434.7	21,106.4	22,050.6
	% Change	7.2	1.0	4.4	5.1	7.2	(0.0)	3.3	4.5
Virginia Personal Income, Millions \$, SAAR	Calendar Year	570,610.4	585,934.3	610,860.0	638,251.5	570,040.5	580,409.5	600,727.0	621,388.1
	% Change	7.2	2.7	4.3	4.5	7.1	1.8	3.5	3.4
	Fiscal Year	550,910.5	576,173.3	598,453.8	624,223.7	550,910.5	573,368.2	590,806.6	610,841.6
	% Change	6.2	4.6	3.9	4.3	6.2	4.1	3.0	3.4
Virginia Wages and Salaries, Millions \$, SAAR	Calendar Year	284,677.4	301,911.2	316,302.8	330,992.3	284,367.9	299,227.9	310,737.5	321,187.2
	% Change	6.0	6.1	4.8	4.6	5.9	5.2	3.8	3.4
	Fiscal Year	276,237.6	293,788.4	309,391.0	323,537.9	276,237.6	292,425.2	305,461.0	315,899.1
	% Change	4.6	6.4	5.3	4.6	4.6	5.9	4.5	3.4
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	Calendar Year	104,747.5	112,501.5	118,066.7	124,259.2	104,424.7	110,151.5	116,125.1	122,009.8
	% Change	4.6	7.4	4.9	5.2	4.2	5.5	5.4	5.1
	Fiscal Year	99,768.6	110,250.1	115,160.7	121,104.2	99,768.6	108,768.6	112,964.5	119,139.5
	% Change	(1.8)	10.5	4.5	5.2	(1.8)	9.0	3.9	5.5
Virginia Total Proprietor's Income, Millions \$, SAAR	Calendar Year	31,455.4	31,632.7	31,402.6	31,647.9	31,279.8	31,126.8	31,295.2	31,871.4
	% Change	4.3	0.6	(0.7)	0.8	3.8	(0.5)	0.5	1.8
	Fiscal Year	31,823.6	31,490.8	31,466.7	31,511.4	31,823.6	31,009.5	31,157.4	31,597.6
	% Change	10.4	(1.0)	(0.1)	0.1	10.4	(2.6)	0.5	1.4

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

		History											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total U.S. Employment, Millions, SA	Calendar Year	131.3	130.3	131.9	134.2	136.4	138.9	141.8	144.3	146.6	148.9	150.9	142.3
	% Change	(4.3)	(0.7)	1.2	1.7	1.6	1.9	2.1	1.8	1.6	1.6	1.3	(5.7)
	Fiscal Year	134.4	130.2	131.0	133.1	135.2	137.5	140.4	143.1	145.5	147.7	149.9	147.1
	% Change	(2.7)	(3.1)	0.6	1.6	1.6	1.7	2.1	1.9	1.7	1.5	1.5	(1.9)
Virginia Total Nonag. Employment, Thousands, SA	Calendar Year	3,641.7	3,635.9	3,682.0	3,725.1	3,752.5	3,773.9	3,850.0	3,907.6	3,950.8	4,002.9	4,050.4	3,850.0
	% Change	(3.2)	(0.2)	1.3	1.2	0.7	0.6	2.0	1.5	1.1	1.3	1.2	(4.9)
	Fiscal Year	3,705.4	3,621.8	3,660.9	3,703.5	3,743.4	3,759.1	3,801.6	3,888.9	3,930.4	3,977.6	4,026.8	3,961.8
	% Change	(1.7)	(2.3)	1.1	1.2	1.1	0.4	1.1	2.3	1.1	1.2	1.2	(1.6)
CPI, All Urban, 1982-1984=1.0, SA	Calendar Year	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.6
	% Change	(0.3)	1.6	3.1	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	1.2
	Fiscal Year	2.1	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6
	% Change	1.4	1.0	2.0	2.9	1.7	1.6	0.7	0.7	1.9	2.2	2.1	1.6
Refiner's Acquisition Cost of Oil, \$ per Barrel	Calendar Year	59.2	76.7	101.8	101.0	100.5	92.2	48.4	40.6	50.7	64.5	59.4	39.2
	Change	(35.1)	17.5	25.1	(0.8)	(0.5)	(8.2)	(43.8)	(7.8)	10.1	13.8	(5.1)	(20.2)
	Fiscal Year	66.5	72.7	89.4	103.6	98.8	100.0	68.9	40.3	46.8	58.6	62.4	47.6
	Change	(24.4)	6.2	16.7	14.2	(4.7)	1.2	(31.1)	(28.6)	6.5	11.8	3.8	(14.7)
Before-Tax Corporate Profits, Billions \$, SAAR	Calendar Year	1,467.5	1,834.0	1,818.2	2,156.1	2,151.5	2,264.5	2,128.3	2,134.2	2,194.8	2,259.0	2,254.6	2,184.1
	% Change	6.4	25.0	(0.9)	18.6	(0.2)	5.2	(6.0)	0.3	2.8	2.9	(0.2)	(3.1)
	Fiscal Year	1,249.9	1,706.1	1,833.3	2,011.3	2,132.6	2,206.6	2,247.5	2,081.9	2,185.5	2,205.8	2,275.4	2,075.5
	% Change	(24.0)	36.5	7.5	9.7	6.0	3.5	1.9	(7.4)	5.0	0.9	3.2	(8.8)
S&P 500 Stock Market Index, Level	Calendar Year	946.7	1,139.3	1,268.9	1,379.6	1,642.5	1,930.7	2,061.2	2,092.4	2,448.2	2,744.7	2,912.5	3,218.5
	% Change	(22.5)	20.3	11.4	8.7	19.1	17.5	6.8	1.5	17.0	12.1	6.1	10.5
	Fiscal Year	965.8	1,085.6	1,230.5	1,287.9	1,486.2	1,795.1	2,038.4	2,025.7	2,266.6	2,627.1	2,787.0	3,010.8
	% Change	(32.3)	12.4	13.4	4.7	15.4	20.8	13.6	(0.6)	11.9	15.9	6.1	8.0
30-Year Treasury Bonds, Level	Calendar Year	4.1	4.3	3.9	2.9	3.4	3.3	2.8	2.6	2.9	3.1	2.6	1.6
	Change	(0.2)	0.2	(0.3)	(1.0)	0.5	(0.1)	(0.5)	(0.2)	0.3	0.2	(0.5)	(1.0)
	Fiscal Year	3.9	4.4	4.2	3.2	3.0	3.7	2.9	2.8	2.8	2.9	3.0	1.9
	Change	(0.7)	0.5	(0.2)	(1.0)	(0.2)	0.7	(0.7)	(0.1)	(0.0)	0.2	0.1	(1.1)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

		October Standard Forecast				Pessimistic Alternative Scenario			
		2021	2022	2023	2024	2021	2022	2023	2024
Total U.S. Employment, Millions, SA	Calendar Year	146.0	151.3	154.2	155.7	145.9	150.5	153.0	154.4
	% Change	2.6	3.6	1.9	1.0	2.6	3.1	1.7	0.9
	Fiscal Year	143.0	149.0	153.1	155.0	143.0	148.6	152.0	153.8
	% Change	(2.8)	4.2	2.7	1.3	(2.8)	3.9	2.3	1.1
Virginia Total Nonag. Employment, Thousands, SA	Calendar Year	3,922.1	3,994.7	4,029.9	4,056.9	3,919.8	3,987.2	4,017.7	4,032.0
	% Change	1.9	1.9	0.9	0.7	1.8	1.7	0.8	0.4
	Fiscal Year	3,861.3	3,969.2	4,012.8	4,045.3	3,861.3	3,964.6	4,002.8	4,027.4
	% Change	(2.5)	2.8	1.1	0.8	(2.5)	2.7	1.0	0.6
CPI, All Urban, 1982-1984=1.0, SA	Calendar Year	2.7	2.8	2.8	2.9	2.7	2.8	2.8	2.8
	% Change	4.3	3.0	2.1	2.1	4.2	2.4	0.9	1.2
	Fiscal Year	2.6	2.8	2.8	2.9	2.6	2.7	2.8	2.8
	% Change	2.3	4.6	2.0	2.1	2.3	4.3	1.1	1.0
Refiner's Acquisition Cost of Oil, \$ per Barrel	Calendar Year	66.2	65.0	62.3	61.4	67.6	66.7	64.2	63.7
	Change	27.1	(1.3)	(2.6)	(0.9)	28.4	(0.9)	(2.5)	(0.5)
	Fiscal Year	51.5	68.6	62.9	61.9	51.5	70.8	64.7	64.0
	Change	3.9	17.1	(5.6)	(1.0)	3.9	19.3	(6.0)	(0.8)
Before-Tax Corporate Profits, Billions \$, SAAR	Calendar Year	2,835.3	2,830.1	2,934.5	3,119.1	2,802.5	2,637.1	2,670.8	2,816.8
	% Change	29.8	(0.2)	3.7	6.3	28.3	(5.9)	1.3	5.5
	Fiscal Year	2,677.2	2,794.7	2,882.2	3,022.0	2,677.2	2,678.0	2,645.3	2,737.1
	% Change	29.0	4.4	3.1	4.9	29.0	0.0	(1.2)	3.5
S&P 500 Stock Market Index, Level	Calendar Year	4,206.6	4,464.7	4,467.6	4,548.3	4,186.6	4,242.8	4,220.1	4,277.4
	% Change	30.7	6.1	0.1	1.8	30.1	1.3	(0.5)	1.4
	Fiscal Year	3,730.3	4,433.2	4,442.7	4,525.2	3,730.3	4,309.9	4,204.5	4,257.2
	% Change	23.9	18.8	0.2	1.9	23.9	15.5	(2.4)	1.3
30-Year Treasury Bonds, Level	Calendar Year	2.1	2.4	2.8	3.0	2.1	2.2	2.4	2.7
	Change	0.5	0.3	0.4	0.2	0.5	0.1	0.2	0.2
	Fiscal Year	1.8	2.1	2.6	2.9	1.8	2.0	2.3	2.6
	Change	(0.1)	0.3	0.5	0.3	(0.1)	0.2	0.3	0.2

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted



**TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

Virginia		History											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Construction and Mining Thousands, SA	Calendar Year	190.4	183.0	178.5	176.7	177.0	178.4	184.8	188.3	193.5	198.4	203.4	202.4
	% Change	(14.6)	(3.9)	(2.5)	(1.0)	0.2	0.8	3.6	1.9	2.8	2.5	2.5	(0.5)
	Fiscal Year	206.1	184.0	181.5	177.3	176.8	177.1	180.9	187.1	190.9	196.0	201.1	203.2
	% Change	(11.4)	(10.7)	(1.4)	(2.3)	(0.3)	0.2	2.2	3.4	2.0	2.7	2.6	1.0
Manufacturing Thousands, SA	Calendar Year	239.5	230.6	231.1	231.7	231.2	232.3	234.1	233.2	234.9	240.5	243.5	233.7
	% Change	(9.6)	(3.7)	0.2	0.2	(0.2)	0.5	0.8	(0.4)	0.8	2.4	1.3	(4.1)
	Fiscal Year	252.7	233.3	230.1	231.6	231.5	231.6	232.9	234.0	233.8	237.0	243.3	238.4
	% Change	(7.0)	(7.7)	(1.3)	0.7	(0.1)	0.0	0.6	0.5	(0.1)	1.4	2.6	(2.0)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	623.9	620.7	628.2	633.0	634.6	640.9	652.8	660.7	661.5	661.1	658.6	636.3
	% Change	(5.3)	(0.5)	1.2	0.8	0.3	1.0	1.9	1.2	0.1	(0.1)	(0.4)	(3.4)
	Fiscal Year	641.5	618.5	625.0	630.9	633.2	637.8	644.9	659.4	661.4	661.5	659.9	644.6
	% Change	(3.7)	(3.6)	1.1	0.9	0.4	0.7	1.1	2.3	0.3	0.0	(0.2)	(2.3)
Financial Activities Thousands, SA	Calendar Year	179.9	179.1	182.5	188.3	192.5	194.0	197.7	201.0	205.1	208.3	212.1	209.4
	% Change	(4.6)	(0.5)	2.0	3.1	2.2	0.8	1.9	1.7	2.0	1.6	1.8	(1.2)
	Fiscal Year	184.5	178.1	180.6	185.3	190.9	193.2	195.7	199.3	203.0	206.9	210.0	212.0
	% Change	(3.4)	(3.5)	1.4	2.6	3.0	1.2	1.3	1.9	1.8	1.9	1.5	0.9
Professional and Business Services Thousands, SA	Calendar Year	640.4	650.7	667.8	678.7	681.6	682.4	702.6	715.6	730.4	749.6	767.5	757.9
	% Change	(2.6)	1.6	2.6	1.6	0.4	0.1	3.0	1.9	2.1	2.6	2.4	(1.3)
	Fiscal Year	650.2	641.7	660.4	673.6	682.6	679.8	689.7	711.2	722.5	740.8	757.9	765.5
	% Change	(0.5)	(1.3)	2.9	2.0	1.3	(0.4)	1.5	3.1	1.6	2.5	2.3	1.0
Education and Health Services Thousands, SA	Calendar Year	455.9	463.1	469.7	480.4	491.5	497.8	513.9	526.5	535.5	546.2	553.4	527.4
	% Change	1.8	1.6	1.4	2.3	2.3	1.3	3.2	2.5	1.7	2.0	1.3	(4.7)
	Fiscal Year	452.6	458.0	467.7	473.6	487.3	494.3	503.7	522.6	530.8	540.9	550.0	542.3
	% Change	3.0	1.2	2.1	1.3	2.9	1.4	1.9	3.8	1.6	1.9	1.7	(1.4)
Leisure and Hospitality Thousands, SA	Calendar Year	343.5	343.2	351.0	360.9	368.1	373.4	388.1	401.2	406.2	410.2	414.5	326.0
	% Change	(2.2)	(0.1)	2.3	2.8	2.0	1.4	3.9	3.4	1.2	1.0	1.0	(21.3)
	Fiscal Year	347.0	341.4	347.3	356.0	364.8	370.8	378.5	397.0	404.7	408.7	412.6	371.9
	% Change	(1.0)	(1.6)	1.8	2.5	2.5	1.7	2.1	4.9	1.9	1.0	1.0	(9.9)
Government Thousands, SA	Calendar Year	703.0	706.6	713.2	713.4	712.4	710.5	711.3	714.4	716.7	722.8	731.7	712.0
	% Change	1.1	0.5	0.9	0.0	(0.1)	(0.3)	0.1	0.4	0.3	0.9	1.2	(2.7)
	Fiscal Year	700.3	705.9	709.2	714.4	713.4	710.2	711.0	712.6	715.8	719.2	726.1	727.9
	% Change	1.7	0.8	0.5	0.7	(0.1)	(0.5)	0.1	0.2	0.4	0.5	1.0	0.2

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES**

Virginia		October Standard Forecast				Pessimistic Alternative Scenario			
		2021	2022	2023	2024	2021	2022	2023	2024
Construction and Mining Thousands, SA	Calendar Year	205.1	205.1	206.3	206.9	205.1	203.1	202.7	202.0
	% Change	1.3	0.0	0.6	0.3	1.3	(1.0)	(0.2)	(0.3)
	Fiscal Year	203.8	204.8	205.8	206.5	203.8	204.1	202.9	202.3
	% Change	0.3	0.5	0.5	0.3	0.3	0.1	(0.6)	(0.3)
Manufacturing Thousands, SA	Calendar Year	237.4	240.2	242.2	239.4	237.9	240.8	241.4	240.4
	% Change	1.6	1.2	0.8	(1.2)	1.8	1.2	0.3	(0.4)
	Fiscal Year	234.9	239.1	241.6	240.9	234.9	240.6	240.5	241.1
	% Change	(1.5)	1.8	1.0	(0.3)	(1.5)	2.4	(0.0)	0.2
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	662.3	639.4	623.3	606.9	661.6	650.9	636.8	617.9
	% Change	4.1	(3.5)	(2.5)	(2.6)	4.0	(1.6)	(2.2)	(3.0)
	Fiscal Year	649.7	657.3	626.3	618.1	649.7	663.0	637.9	631.3
	% Change	0.8	1.2	(4.7)	(1.3)	0.8	2.0	(3.8)	(1.0)
Financial Activities Thousands, SA	Calendar Year	207.8	219.8	221.1	222.4	207.8	215.8	218.1	220.1
	% Change	(0.8)	5.7	0.6	0.6	(0.8)	3.8	1.0	1.0
	Fiscal Year	207.1	213.0	222.5	220.9	207.1	211.1	218.8	218.3
	% Change	(2.3)	2.9	4.4	(0.7)	(2.3)	1.9	3.7	(0.2)
Professional and Business Services Thousands, SA	Calendar Year	770.6	799.1	808.7	822.5	770.0	782.7	790.9	800.0
	% Change	1.7	3.7	1.2	1.7	1.6	1.6	1.1	1.1
	Fiscal Year	762.1	783.2	806.7	813.7	762.1	775.0	789.2	794.5
	% Change	(0.4)	2.8	3.0	0.9	(0.4)	1.7	1.8	0.7
Education and Health Services Thousands, SA	Calendar Year	538.3	550.9	549.4	558.2	537.4	554.9	556.1	564.9
	% Change	2.1	2.3	(0.3)	1.6	1.9	3.3	0.2	1.6
	Fiscal Year	528.5	547.3	550.5	552.5	528.5	547.3	557.1	558.7
	% Change	(2.5)	3.5	0.6	0.4	(2.5)	3.6	1.8	0.3
Leisure and Hospitality Thousands, SA	Calendar Year	339.8	348.3	386.6	404.6	338.9	352.1	386.9	399.1
	% Change	4.2	2.5	11.0	4.7	3.9	3.9	9.9	3.1
	Fiscal Year	327.9	343.5	365.0	399.6	327.9	344.6	368.1	396.4
	% Change	(11.8)	4.8	6.3	9.5	(11.8)	5.1	6.8	7.7
Government Thousands, SA	Calendar Year	710.5	719.9	713.7	709.5	710.3	719.0	711.6	706.1
	% Change	(0.2)	1.3	(0.9)	(0.6)	(0.2)	1.2	(1.0)	(0.8)
	Fiscal Year	703.3	719.6	717.1	711.1	703.3	719.0	715.8	708.3
	% Change	(3.4)	2.3	(0.3)	(0.8)	(3.4)	2.2	(0.4)	(1.0)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

		History											
Northern Virginia		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Nonagricultural Employment Thousands, SA	Calendar Year	1,305.9	1,317.6	1,344.8	1,369.8	1,379.2	1,380.1	1,409.4	1,438.2	1,460.0	1,488.1	1,515.7	1,446.4
	% Change	(1.7)	0.9	2.1	1.9	0.7	0.1	2.1	2.0	1.5	1.9	1.9	(4.6)
	Fiscal Year	1,316.7	1,307.1	1,332.2	1,357.4	1,378.4	1,377.3	1,389.8	1,427.1	1,450.2	1,473.5	1,501.6	1,486.9
	% Change	(0.9)	(0.7)	1.9	1.9	1.5	(0.1)	0.9	2.7	1.6	1.6	1.9	(1.0)
Construction and Mining Thousands, SA	Calendar Year	70.0	68.2	67.8	68.2	68.9	68.8	69.5	71.7	73.7	76.4	79.7	79.5
	% Change	(13.2)	(2.6)	(0.6)	0.6	0.9	(0.1)	0.9	3.2	2.7	3.7	4.3	(0.2)
	Fiscal Year	74.9	68.2	68.2	68.2	68.5	69.0	68.6	70.9	72.6	74.9	78.2	79.7
	% Change	(11.8)	(9.0)	(0.0)	0.0	0.4	0.8	(0.6)	3.4	2.4	3.1	4.4	2.0
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	200.6	200.4	204.4	206.4	207.5	208.9	212.3	214.4	216.2	217.4	219.0	207.2
	% Change	(4.8)	(0.1)	2.0	1.0	0.5	0.7	1.7	1.0	0.8	0.6	0.7	(5.4)
	Fiscal Year	205.4	199.2	202.8	205.4	207.0	208.0	210.0	214.2	215.5	216.8	217.9	213.3
	% Change	(3.4)	(3.0)	1.8	1.3	0.8	0.5	1.0	2.0	0.6	0.6	0.5	(2.1)
Financial Activities Thousands, SA	Calendar Year	64.5	64.8	65.5	66.9	68.6	68.6	70.3	73.4	76.4	78.1	79.2	78.1
	% Change	(3.6)	0.5	1.1	2.2	2.5	0.0	2.5	4.3	4.1	2.2	1.5	(1.4)
	Fiscal Year	65.5	64.4	65.3	66.0	68.0	68.6	69.2	71.9	75.0	77.5	78.6	79.0
	% Change	(3.7)	(1.7)	1.4	1.1	3.0	0.9	0.9	3.8	4.4	3.3	1.4	0.6
Professional and Business Services Thousands, SA	Calendar Year	356.5	364.9	375.3	383.6	381.2	376.4	385.0	393.4	400.4	413.2	425.3	427.4
	% Change	0.0	2.4	2.8	2.2	(0.6)	(1.3)	2.3	2.2	1.8	3.2	2.9	0.5
	Fiscal Year	356.7	359.2	370.6	380.3	384.3	377.2	379.3	389.6	396.8	406.8	418.9	427.8
	% Change	1.0	0.7	3.2	2.6	1.1	(1.8)	0.6	2.7	1.9	2.5	3.0	2.1
Education and Health Services Thousands, SA	Calendar Year	131.7	135.8	141.4	145.5	147.9	149.9	155.6	161.2	165.6	170.2	174.7	164.5
	% Change	3.5	3.1	4.1	2.9	1.7	1.3	3.8	3.6	2.7	2.8	2.6	(5.8)
	Fiscal Year	129.3	134.0	138.5	143.2	147.4	148.6	152.0	159.0	163.5	167.9	172.5	170.3
	% Change	3.4	3.6	3.4	3.3	3.0	0.8	2.3	4.6	2.8	2.7	2.7	(1.3)
Leisure and Hospitality Thousands, SA	Calendar Year	116.0	116.8	121.3	126.2	130.1	132.7	139.5	145.0	146.8	148.1	149.1	113.0
	% Change	(2.3)	0.7	3.8	4.1	3.1	2.0	5.2	4.0	1.2	0.9	0.7	(24.2)
	Fiscal Year	117.3	115.6	119.3	123.7	128.2	131.4	135.1	143.4	146.3	147.7	148.9	132.0
	% Change	(0.4)	(1.4)	3.2	3.6	3.7	2.5	2.8	6.1	2.1	1.0	0.8	(11.4)
Government Thousands, SA	Calendar Year	224.1	228.9	231.1	233.6	234.6	233.2	234.5	235.4	237.1	240.5	242.9	239.1
	% Change	2.4	2.1	0.9	1.1	0.4	(0.6)	0.5	0.4	0.7	1.4	1.0	(1.6)
	Fiscal Year	221.6	227.0	229.6	232.2	235.1	233.3	233.8	234.9	236.5	238.1	241.8	242.5
	% Change	2.2	2.4	1.1	1.2	1.2	(0.8)	0.2	0.5	0.7	0.7	1.5	0.3

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

<b>Northern Virginia</b>		<b>October Standard Forecast</b>				<b>Pessimistic Alternative Scenario</b>			
		<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Total Nonagricultural Employment Thousands, SA	Calendar Year	1,479.6	1,505.5	1,516.4	1,526.8	1,478.6	1,503.7	1,512.5	1,516.3
	% Change	2.3	1.8	0.7	0.7	2.2	1.7	0.6	0.3
	Fiscal Year	1,452.7	1,499.0	1,509.3	1,523.0	1,452.7	1,497.5	1,506.7	1,516.0
	% Change	(2.3)	3.2	0.7	0.9	(2.3)	3.1	0.6	0.6
Construction and Mining Thousands, SA	Calendar Year	82.8	83.4	83.9	84.1	82.8	82.6	82.4	82.1
	% Change	4.1	0.8	0.6	0.3	4.1	(0.3)	(0.2)	(0.3)
	Fiscal Year	81.0	83.3	83.7	84.0	81.0	83.0	82.5	82.3
	% Change	1.6	2.8	0.5	0.3	1.6	2.5	(0.6)	(0.3)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	212.7	202.1	194.8	187.6	212.4	207.0	200.5	192.2
	% Change	2.7	(5.0)	(3.6)	(3.7)	2.5	(2.5)	(3.1)	(4.1)
	Fiscal Year	209.2	210.2	196.1	192.5	209.2	212.6	201.0	198.1
	% Change	(2.0)	0.5	(6.7)	(1.8)	(2.0)	1.6	(5.4)	(1.5)
Financial Activities Thousands, SA	Calendar Year	76.9	80.0	80.4	80.8	76.9	78.9	79.5	80.1
	% Change	(1.5)	4.0	0.5	0.5	(1.5)	2.5	0.8	0.8
	Fiscal Year	77.3	78.0	80.8	80.3	77.3	77.4	79.8	79.6
	% Change	(2.2)	1.0	3.6	(0.6)	(2.2)	0.2	3.0	(0.2)
Professional and Business Services Thousands, SA	Calendar Year	435.0	449.8	453.9	459.6	434.8	443.0	446.2	449.9
	% Change	1.8	3.4	0.9	1.3	1.7	1.9	0.7	0.8
	Fiscal Year	430.0	442.5	453.0	456.0	430.0	439.2	445.6	447.6
	% Change	0.5	2.9	2.4	0.7	0.5	2.1	1.5	0.5
Education and Health Services Thousands, SA	Calendar Year	168.8	171.2	170.1	173.5	168.4	172.8	172.7	176.2
	% Change	2.6	1.4	(0.7)	2.1	2.4	2.6	(0.1)	2.0
	Fiscal Year	165.5	170.9	170.5	171.3	165.5	170.9	173.1	173.7
	% Change	(2.8)	3.3	(0.2)	0.5	(2.8)	3.3	1.3	0.4
Leisure and Hospitality Thousands, SA	Calendar Year	118.9	123.8	137.9	144.9	118.6	125.3	138.0	142.7
	% Change	5.3	4.1	11.3	5.1	4.9	5.7	10.1	3.4
	Fiscal Year	113.4	121.5	129.8	143.0	113.4	121.9	131.0	141.7
	% Change	(14.1)	7.2	6.8	10.2	(14.1)	7.5	7.5	8.2
Government Thousands, SA	Calendar Year	244.1	248.0	246.2	244.1	244.0	247.3	244.6	241.6
	% Change	2.1	1.6	(0.7)	(0.8)	2.1	1.3	(1.1)	(1.2)
	Fiscal Year	238.7	248.6	246.6	245.3	238.7	248.2	245.7	243.3
	% Change	(1.6)	4.1	(0.8)	(0.5)	(1.6)	4.0	(1.0)	(1.0)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

		History											
<b>Hampton Roads</b>		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Nonagricultural Employment Thousands, SA	Calendar Year	742.4	737.2	740.3	747.0	756.5	758.4	766.9	772.6	782.8	792.3	797.5	755.7
	% Change	(3.3)	(0.7)	0.4	0.9	1.3	0.2	1.1	0.7	1.3	1.2	0.7	(5.2)
	Fiscal Year	755.3	737.4	738.1	743.3	752.5	757.6	760.9	770.8	777.7	788.6	794.4	778.3
	% Change	(2.4)	(2.4)	0.1	0.7	1.2	0.7	0.4	1.3	0.9	1.4	0.7	(2.0)
Construction and Mining Thousands, SA	Calendar Year	38.4	36.9	35.1	34.5	34.7	34.5	36.0	36.3	37.5	38.3	38.8	39.2
	% Change	(15.2)	(3.9)	(4.7)	(1.6)	0.5	(0.7)	4.4	0.9	3.4	2.1	1.4	1.1
	Fiscal Year	41.8	37.2	36.2	34.5	34.7	34.5	35.0	36.3	37.0	37.8	38.7	38.9
	% Change	(11.2)	(11.1)	(2.6)	(4.5)	0.4	(0.6)	1.6	3.6	2.0	2.2	2.2	0.6
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	128.6	127.9	127.6	127.1	127.8	128.8	130.9	133.1	133.4	131.0	130.1	125.1
	% Change	(6.6)	(0.6)	(0.2)	(0.3)	0.5	0.8	1.6	1.7	0.3	(1.9)	(0.6)	(3.8)
	Fiscal Year	132.8	127.7	128.0	127.3	127.1	128.3	129.9	132.0	133.5	132.5	130.3	127.0
	% Change	(5.7)	(3.9)	0.2	(0.6)	(0.1)	0.9	1.3	1.7	1.1	(0.8)	(1.7)	(2.5)
Financial Activities Thousands, SA	Calendar Year	37.5	36.4	36.8	37.4	37.8	37.8	38.0	37.8	37.9	39.0	39.4	38.7
	% Change	(6.7)	(2.8)	1.1	1.7	1.0	(0.2)	0.5	(0.6)	0.5	2.8	1.0	(1.8)
	Fiscal Year	39.0	36.6	36.6	37.1	37.8	37.8	38.0	37.8	37.8	38.6	39.1	39.3
	% Change	(5.0)	(6.2)	0.2	1.1	1.9	0.0	0.5	(0.5)	0.0	2.3	1.2	0.6
Professional and Business Services Thousands, SA	Calendar Year	99.7	98.1	98.7	99.9	102.7	104.6	105.2	104.6	109.3	113.7	115.0	111.6
	% Change	(4.9)	(1.6)	0.7	1.1	2.8	1.9	0.6	(0.6)	4.5	4.1	1.1	(3.0)
	Fiscal Year	102.7	98.2	98.3	99.3	101.6	103.4	104.8	104.7	106.8	111.9	114.1	113.6
	% Change	(1.3)	(4.5)	0.2	1.0	2.3	1.8	1.3	(0.0)	2.0	4.8	2.0	(0.4)
Education and Health Services Thousands, SA	Calendar Year	93.7	94.7	98.0	100.4	104.2	105.3	108.6	110.8	112.0	113.6	114.3	109.1
	% Change	2.2	1.1	3.4	2.5	3.8	1.1	3.2	2.0	1.0	1.5	0.6	(4.6)
	Fiscal Year	92.8	94.1	96.4	99.0	102.4	105.0	106.4	110.3	111.3	113.0	113.9	112.2
	% Change	1.7	1.4	2.4	2.8	3.4	2.5	1.3	3.7	0.9	1.5	0.9	(1.5)
Leisure and Hospitality Thousands, SA	Calendar Year	84.6	84.7	84.7	85.3	86.7	86.9	89.2	92.5	93.8	94.5	94.8	76.6
	% Change	(2.9)	0.0	(0.0)	0.7	1.6	0.3	2.6	3.7	1.4	0.8	0.3	(19.1)
	Fiscal Year	85.5	84.4	84.8	84.9	85.9	87.0	87.3	91.6	93.1	94.4	94.7	85.6
	% Change	(2.7)	(1.3)	0.5	0.2	1.2	1.3	0.4	4.9	1.7	1.3	0.4	(9.6)
Government Thousands, SA	Calendar Year	159.9	161.6	162.5	162.8	161.7	159.9	159.7	160.0	160.2	160.2	161.0	157.5
	% Change	1.1	1.1	0.6	0.1	(0.7)	(1.1)	(0.1)	0.2	0.1	0.0	0.5	(2.2)
	Fiscal Year	159.4	161.0	161.4	163.2	162.2	160.8	159.7	159.8	160.1	160.3	160.3	160.5
	% Change	1.7	1.0	0.3	1.1	(0.6)	(0.9)	(0.7)	0.1	0.2	0.2	0.0	0.1

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

<b>Hampton Roads</b>		<b>October Standard Forecast</b>				<b>Pessimistic Alternative Scenario</b>			
		2021	2022	2023	2024	2021	2022	2023	2024
Total Nonagricultural Employment Thousands, SA	Calendar Year	771.3	789.1	799.1	805.2	770.9	787.4	796.7	800.5
	% Change	2.1	2.3	1.3	0.8	2.0	2.1	1.2	0.5
	Fiscal Year	758.6	782.1	794.7	802.6	758.6	781.1	792.6	799.1
	% Change	(2.5)	3.1	1.6	1.0	(2.5)	3.0	1.5	0.8
Construction and Mining Thousands, SA	Calendar Year	39.7	39.3	39.5	39.7	39.7	39.0	38.9	38.8
	% Change	1.3	(1.1)	0.6	0.3	1.3	(2.0)	(0.1)	(0.3)
	Fiscal Year	39.9	39.3	39.5	39.6	39.9	39.1	39.0	38.9
	% Change	2.5	(1.5)	0.5	0.3	2.5	(1.8)	(0.5)	(0.2)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	133.2	130.4	127.1	123.9	133.1	132.4	129.6	125.9
	% Change	6.5	(2.2)	(2.5)	(2.5)	6.4	(0.5)	(2.1)	(2.8)
	Fiscal Year	128.6	133.8	127.7	126.1	128.6	134.9	129.8	128.5
	% Change	1.3	4.1	(4.6)	(1.3)	1.3	4.9	(3.7)	(1.0)
Financial Activities Thousands, SA	Calendar Year	39.2	41.6	41.9	42.1	39.2	41.0	41.3	41.7
	% Change	1.3	6.1	0.6	0.5	1.3	4.4	0.9	0.8
	Fiscal Year	38.5	40.5	42.1	41.8	38.5	40.2	41.5	41.4
	% Change	(2.0)	5.1	3.9	(0.7)	(2.0)	4.2	3.3	(0.2)
Professional and Business Services Thousands, SA	Calendar Year	115.7	121.4	123.1	125.5	115.6	118.6	120.1	121.7
	% Change	3.7	4.9	1.4	2.0	3.6	2.6	1.3	1.3
	Fiscal Year	113.3	118.3	122.7	124.0	113.3	116.8	119.8	120.8
	% Change	(0.3)	4.4	3.8	1.0	(0.3)	3.1	2.5	0.8
Education and Health Services Thousands, SA	Calendar Year	107.6	110.1	110.1	111.4	107.4	110.7	111.1	112.4
	% Change	(1.4)	2.3	0.0	1.2	(1.5)	3.0	0.4	1.1
	Fiscal Year	107.5	109.0	110.3	110.6	107.5	109.1	111.2	111.5
	% Change	(4.1)	1.4	1.1	0.3	(4.1)	1.4	2.0	0.2
Leisure and Hospitality Thousands, SA	Calendar Year	81.5	83.6	93.5	97.4	81.3	84.4	93.6	96.3
	% Change	6.3	2.6	11.9	4.2	6.1	3.8	10.9	2.8
	Fiscal Year	78.4	82.1	88.3	96.4	78.4	82.3	89.0	95.7
	% Change	(8.5)	4.7	7.6	9.1	(8.5)	5.0	8.1	7.6
Government Thousands, SA	Calendar Year	155.3	157.2	156.2	155.8	155.3	157.2	156.1	155.6
	% Change	(1.4)	1.3	(0.6)	(0.3)	(1.4)	1.2	(0.7)	(0.3)
	Fiscal Year	154.9	156.7	156.9	155.9	154.9	156.7	156.8	155.7
	% Change	(3.5)	1.2	0.1	(0.6)	(3.5)	1.2	0.1	(0.7)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

Richmond		History											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Nonagricultural Employment Thousands, SA	Calendar Year	595.2	591.6	600.1	612.1	621.7	632.2	650.0	662.2	669.8	679.7	686.9	651.8
	% Change	(4.0)	(0.6)	1.4	2.0	1.6	1.7	2.8	1.9	1.1	1.5	1.1	(5.1)
	Fiscal Year	609.5	590.1	594.6	606.0	617.2	627.0	639.1	658.9	666.1	674.0	684.3	672.2
	% Change	(2.0)	(3.2)	0.8	1.9	1.9	1.6	1.9	3.1	1.1	1.2	1.5	(1.8)
Construction and Mining Thousands, SA	Calendar Year	34.6	32.4	31.8	32.6	33.2	33.9	36.2	36.9	38.0	39.7	40.1	39.7
	% Change	(16.3)	(6.3)	(2.0)	2.4	1.9	2.0	6.9	2.0	2.9	4.4	1.1	(1.0)
	Fiscal Year	38.0	32.9	32.2	32.1	33.0	33.2	35.0	36.7	37.4	38.8	40.1	40.0
	% Change	(13.5)	(13.3)	(2.3)	(0.3)	3.1	0.6	5.4	4.7	1.9	3.9	3.2	(0.1)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	108.1	107.3	109.3	111.9	114.3	117.4	119.7	121.7	121.9	123.9	121.9	120.2
	% Change	(5.1)	(0.8)	1.8	2.4	2.2	2.7	2.0	1.7	0.2	1.6	(1.6)	(1.4)
	Fiscal Year	111.6	107.0	108.1	110.3	113.3	116.2	117.9	121.7	121.4	123.1	123.2	120.0
	% Change	(2.9)	(4.2)	1.1	2.1	2.7	2.6	1.5	3.2	(0.3)	1.4	0.1	(2.6)
Financial Activities Thousands, SA	Calendar Year	42.6	42.2	43.6	45.7	46.9	47.7	49.1	48.7	49.4	51.0	53.0	53.3
	% Change	(2.9)	(1.1)	3.3	5.0	2.6	1.6	2.9	(0.7)	1.5	3.1	4.0	0.6
	Fiscal Year	43.4	42.2	42.5	44.8	46.4	47.4	48.4	48.8	49.1	50.0	52.0	53.5
	% Change	(3.0)	(2.8)	0.8	5.3	3.6	2.1	2.2	0.8	0.7	1.8	4.0	2.9
Professional and Business Services Thousands, SA	Calendar Year	92.2	92.5	96.3	98.8	100.3	102.5	109.4	112.8	114.7	116.9	118.8	114.1
	% Change	(6.7)	0.3	4.0	2.6	1.6	2.2	6.7	3.2	1.6	1.9	1.6	(3.9)
	Fiscal Year	95.7	91.2	94.8	97.3	99.6	101.4	105.1	112.1	114.0	115.5	117.9	117.9
	% Change	(3.7)	(4.7)	4.0	2.6	2.3	1.8	3.7	6.7	1.6	1.4	2.0	0.0
Education and Health Services Thousands, SA	Calendar Year	82.9	84.5	86.1	88.7	91.0	93.3	95.6	97.1	98.5	99.6	102.1	97.1
	% Change	3.1	1.9	1.8	3.1	2.6	2.5	2.6	1.6	1.4	1.1	2.5	(4.9)
	Fiscal Year	81.9	84.1	84.7	87.4	90.0	92.3	94.2	96.7	97.9	98.8	101.0	100.0
	% Change	5.7	2.6	0.8	3.2	2.9	2.6	2.1	2.6	1.3	1.0	2.1	(0.9)
Leisure and Hospitality Thousands, SA	Calendar Year	52.9	52.5	54.6	57.1	58.8	59.7	62.6	65.1	66.4	67.4	68.5	52.8
	% Change	(1.9)	(0.8)	4.0	4.7	2.9	1.7	4.8	4.1	1.9	1.5	1.7	(22.9)
	Fiscal Year	53.5	52.3	53.2	56.1	58.0	59.3	60.8	64.3	66.0	66.9	68.0	61.1
	% Change	(0.7)	(2.3)	1.7	5.4	3.3	2.3	2.5	5.8	2.6	1.5	1.6	(10.2)
Government Thousands, SA	Calendar Year	110.3	111.1	110.7	110.2	109.4	109.8	109.5	110.6	110.6	111.4	112.6	109.2
	% Change	1.2	0.7	(0.3)	(0.5)	(0.7)	0.3	(0.3)	1.0	0.0	0.7	1.1	(3.0)
	Fiscal Year	110.1	110.8	110.6	110.8	109.7	109.3	109.8	110.1	110.7	110.7	112.2	111.6
	% Change	1.4	0.6	(0.1)	0.1	(1.0)	(0.3)	0.4	0.3	0.5	0.0	1.3	(0.5)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted

**TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT**

<b>Richmond</b>		<b>October Standard Forecast</b>				<b>Pessimistic Alternative Scenario</b>			
		2021	2022	2023	2024	2021	2022	2023	2024
Total Nonagricultural Employment Thousands, SA	Calendar Year	652.3	667.6	676.7	682.6	651.7	666.1	675.0	678.8
	% Change	0.1	2.3	1.4	0.9	(0.0)	2.2	1.3	0.6
	Fiscal Year	647.5	659.7	673.6	679.7	647.5	658.5	672.0	677.0
	% Change	(3.7)	1.9	2.1	0.9	(3.7)	1.7	2.0	0.7
Construction and Mining Thousands, SA	Calendar Year	39.4	39.2	39.4	39.5	39.5	38.8	38.7	38.6
	% Change	(0.6)	(0.6)	0.6	0.3	(0.6)	(1.6)	(0.2)	(0.3)
	Fiscal Year	39.6	39.1	39.3	39.5	39.6	39.0	38.8	38.7
	% Change	(1.1)	(1.2)	0.5	0.3	(1.1)	(1.5)	(0.6)	(0.3)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year	123.0	117.6	115.0	112.0	122.9	120.2	118.1	114.5
	% Change	2.3	(4.4)	(2.3)	(2.6)	2.3	(2.2)	(1.8)	(3.0)
	Fiscal Year	122.8	120.6	115.5	114.0	122.8	121.9	118.2	117.0
	% Change	2.4	(1.8)	(4.2)	(1.3)	2.4	(0.8)	(3.0)	(1.0)
Financial Activities Thousands, SA	Calendar Year	52.7	55.6	56.0	56.4	52.7	54.5	55.1	55.7
	% Change	(1.1)	5.5	0.7	0.7	(1.1)	3.4	1.2	1.1
	Fiscal Year	52.9	53.7	56.4	55.9	52.9	53.1	55.4	55.2
	% Change	(1.2)	1.5	5.1	(0.8)	(1.2)	0.4	4.2	(0.3)
Professional and Business Services Thousands, SA	Calendar Year	107.8	110.9	112.6	114.7	107.8	108.7	110.1	111.6
	% Change	(5.5)	2.9	1.5	1.9	(5.5)	0.8	1.3	1.3
	Fiscal Year	110.1	108.5	112.3	113.4	110.1	107.5	109.9	110.7
	% Change	(6.6)	(1.5)	3.4	1.0	(6.6)	(2.4)	2.2	0.8
Education and Health Services Thousands, SA	Calendar Year	98.9	104.1	104.2	106.4	98.7	105.2	105.9	108.2
	% Change	1.9	5.2	0.1	2.2	1.6	6.6	0.7	2.2
	Fiscal Year	96.6	102.3	104.4	105.0	96.6	102.3	106.2	106.6
	% Change	(3.4)	5.9	2.1	0.5	(3.4)	5.9	3.8	0.4
Leisure and Hospitality Thousands, SA	Calendar Year	55.8	57.4	65.6	68.8	55.6	58.1	65.6	67.8
	% Change	5.6	2.9	14.2	4.9	5.3	4.4	13.0	3.3
	Fiscal Year	53.2	56.4	61.3	67.9	53.2	56.6	61.8	67.3
	% Change	(12.9)	6.0	8.6	10.8	(12.9)	6.4	9.2	8.9
Government Thousands, SA	Calendar Year	109.4	112.3	111.6	111.0	109.3	112.3	111.4	110.7
	% Change	0.1	2.7	(0.7)	(0.5)	0.1	2.7	(0.8)	(0.6)
	Fiscal Year	107.5	111.9	112.2	111.2	107.5	111.9	112.0	110.9
	% Change	(3.7)	4.1	0.2	(0.9)	(3.7)	4.1	0.1	(1.0)

SAAR: Seasonally Adjusted at Annual Rates

SA: Seasonally Adjusted



**APPENDIX B  
GENERAL FUND DATA**

**TABLE B.1 - QUARTERLY GENERAL FUND REVENUES**  
(Millions of Dollars)

	2007 3	2007 4	2008 1	2008 2	2008 3	2008 4	2009 1	2009 2	2009 3	2009 4	2010 1	2010 2	2010 3	2010 4	2011 1
Withholding	2,062.9	2,244.9	2,411.8	2,213.9	2,175.8	2,384.3	2,306.6	2,271.5	2,125.0	2,328.6	2,416.4	2,306.1	2,219.1	2,459.9	2,538.5
Annual % Change	4.7	6.4	5.2	1.0	5.5	6.2	(4.4)	2.6	(2.3)	(2.3)	4.8	1.5	4.4	5.6	5.1
Nonwithholding	394.1	260.1	556.6	1,650.4	406.5	243.3	458.8	1,201.8	311.3	217.8	373.0	1,004.6	292.9	204.6	435.7
Annual % Change	10.6	(1.8)	8.6	0.1	3.1	(6.5)	(17.6)	(27.2)	(23.4)	(10.5)	(18.7)	(16.4)	(5.9)	(6.0)	16.8
Gross Individual Income Tax	2,457.0	2,505.1	2,968.4	3,864.3	2,582.2	2,627.6	2,765.4	3,473.3	2,436.3	2,546.4	2,789.4	3,310.7	2,512.0	2,664.5	2,974.2
Annual % Change	5.6	5.5	5.8	0.6	5.1	4.9	(6.8)	(10.1)	(5.6)	(3.1)	0.9	(4.7)	3.1	4.6	6.6
Individual Refunds	83.6	143.9	811.3	641.1	127.2	141.3	873.2	825.8	150.8	182.3	947.1	714.4	123.1	160.9	888.2
Annual % Change	(24.1)	31.1	9.6	6.9	52.0	(1.8)	7.6	28.8	18.6	29.1	8.5	(13.5)	(18.4)	(11.8)	(6.2)
Net Individual Income Tax	2,373.3	2,361.2	2,157.2	3,223.2	2,455.0	2,486.3	1,892.2	2,647.5	2,285.5	2,364.1	1,842.3	2,596.4	2,388.9	2,503.6	2,086.1
Annual % Change	7.1	4.2	4.5	(0.5)	3.4	5.3	(12.3)	(17.9)	(6.9)	(4.9)	(2.6)	(1.9)	4.5	5.9	13.2
Sales and Use Tax	785.8	798.2	723.3	768.3	769.9	729.2	708.8	695.4	724.7	724.0	674.5	959.4	577.9	746.3	719.7
Annual % Change	3.1	6.9	(6.6)	0.4	(2.0)	(8.6)	(2.0)	(9.5)	(5.9)	(0.7)	(4.8)	38.0	(20.3)	3.1	6.7
Corporate Income Tax	217.7	115.4	138.7	336.0	191.4	71.9	71.1	313.6	176.3	175.6	56.8	397.8	177.6	160.5	127.8
Annual % Change	(15.2)	(38.1)	16.9	5.8	(12.1)	(37.7)	(48.7)	(6.7)	(7.9)	144.4	(20.2)	26.8	0.7	(8.6)	125.1
Wills, Suits, Deeds, Contracts	130.7	112.6	98.6	114.5	90.3	66.2	68.4	89.3	80.5	74.6	60.1	75.0	75.7	77.7	63.3
Annual % Change	(13.3)	(21.6)	(26.4)	(26.0)	(30.9)	(41.2)	(30.6)	(22.0)	(10.9)	12.8	(12.2)	(16.0)	(5.9)	4.1	5.4
Insurance Premiums	101.7	61.5	32.1	201.5	0.0	75.6	(20.2)	199.6	0.0	75.1	(20.3)	207.1	0.0	80.5	(9.4)
Annual % Change	15.8	0.1	(15.7)	2.0	(100.0)	22.9	(163.0)	(0.9)	NA	(0.6)	0.4	3.7	NA	7.2	(53.7)
Interest Income	105.5	66.2	37.5	(19.9)	74.6	25.4	23.3	(19.0)	40.3	26.4	33.3	(5.7)	25.7	21.6	23.8
Annual % Change	15.1	54.4	(30.3)	60.5	(29.3)	(61.7)	(37.8)	(4.2)	(45.9)	3.9	42.8	(70.0)	(36.2)	(18.0)	(28.5)
Alcoholic Beverage Sales	13.8	39.6	45.5	70.0	12.8	41.5	47.1	71.8	12.3	42.2	47.5	73.0	12.8	43.2	48.7
Annual % Change	(3.4)	4.5	8.0	3.6	(7.2)	4.7	3.5	2.7	(4.0)	1.7	1.0	1.7	3.9	2.2	2.5
All Other Revenues	113.6	144.0	147.2	152.6	85.8	102.9	103.4	143.7	87.4	71.8	97.5	164.1	89.4	81.1	105.7
Annual % Change	(10.7)	29.6	14.4	(13.8)	(24.5)	(28.5)	(29.8)	(5.8)	1.9	(30.2)	(5.7)	14.2	2.4	12.9	8.4
Total General Fund Revenues	3,842.1	3,698.7	3,380.0	4,846.1	3,679.9	3,599.0	2,894.2	4,142.0	3,407.0	3,553.9	2,791.6	4,467.0	3,348.1	3,714.5	3,165.6
Annual % Change	3.6	2.9	0.8	(1.3)	(4.2)	(2.7)	(14.4)	(14.5)	(7.4)	(1.3)	(3.5)	7.8	(1.7)	4.5	13.4

**TABLE B.1 - QUARTERLY GENERAL FUND REVENUES**  
(Millions of Dollars)

	2011 2	2011 3	2011 4	2012 1	2012 2	2012 3	2012 4	2013 1	2013 2	2013 3	2013 4	2014 1	2014 2	2014 3	2014 4
Withholding	2,417.6	2,308.0	2,510.9	2,640.7	2,580.0	2,292.0	2,606.4	2,761.1	2,591.9	2,403.1	2,659.9	2,803.7	2,617.5	2,554.4	2,820.0
Annual % Change	4.8	4.0	2.1	4.0	6.7	(0.7)	3.8	4.6	0.5	4.8	2.1	1.5	1.0	6.3	6.0
Nonwithholding	1,245.4	348.0	222.8	468.9	1,318.3	362.4	201.3	575.7	1,668.3	372.8	260.6	496.7	1,394.8	427.7	327.6
Annual % Change	24.0	18.8	8.9	7.6	5.9	4.1	(9.6)	22.8	26.5	2.9	29.4	(13.7)	(16.4)	14.7	25.7
Gross Individual Income Tax	3,663.0	2,655.9	2,733.7	3,109.6	3,898.3	2,654.4	2,807.7	3,336.8	4,260.1	2,775.9	2,920.4	3,300.5	4,012.4	2,982.1	3,147.6
Annual % Change	10.6	5.7	2.6	4.6	6.4	(0.1)	2.7	7.3	9.3	4.6	4.0	(1.1)	(5.8)	7.4	7.8
Individual Refunds	697.1	105.7	132.1	862.9	684.1	98.2	108.9	827.8	684.2	118.6	156.9	820.2	660.1	123.5	156.8
Annual % Change	(2.4)	(14.1)	(17.9)	(2.9)	(1.9)	(7.1)	(17.6)	(4.1)	0.0	20.8	44.2	(0.9)	(3.5)	4.1	(0.1)
Net Individual Income Tax	2,965.8	2,550.2	2,601.6	2,246.7	3,214.2	2,556.2	2,698.9	2,509.1	3,575.9	2,657.3	2,763.5	2,480.3	3,352.3	2,858.6	2,990.8
Annual % Change	14.2	6.8	3.9	7.7	8.4	0.2	3.7	11.7	11.3	4.0	2.4	(1.1)	(6.3)	7.6	8.2
Sales and Use Tax	968.5	620.4	772.0	768.1	961.0	684.7	777.1	787.0	971.0	653.9	766.1	721.1	925.3	684.0	778.5
Annual % Change	0.9	7.3	3.5	6.7	(0.8)	10.4	0.7	2.5	1.0	(4.5)	(1.4)	(8.4)	(4.7)	4.6	1.6
Corporate Income Tax	356.4	191.3	134.4	162.4	371.8	168.8	197.9	84.5	345.6	201.5	102.2	124.0	329.8	226.6	140.2
Annual % Change	(10.4)	7.7	(16.3)	27.1	4.3	(11.8)	47.2	(48.0)	(7.0)	19.4	(48.4)	46.8	(4.6)	12.4	37.2
Wills, Suits, Deeds, Contracts	74.7	78.9	79.8	73.5	89.8	90.7	92.2	91.3	103.3	93.2	76.2	60.6	80.8	87.5	80.9
Annual % Change	(0.4)	4.2	2.8	16.1	20.2	14.9	15.5	24.1	15.1	2.8	(17.3)	(33.6)	(21.8)	(6.1)	6.1
Insurance Premiums	210.4	0.0	56.4	(15.2)	211.7	0.0	79.9	(21.0)	203.3	0.0	90.3	3.5	226.7	0.0	75.5
Annual % Change	1.6	NA	(29.9)	62.4	0.6	NA	41.7	37.7	(4.0)	NA	12.9	(116.5)	11.5	NA	NA
Interest Income	10.0	29.5	17.0	19.9	10.8	26.9	15.1	21.8	3.7	18.3	22.8	23.4	9.6	18.0	14.5
Annual % Change	(274.5)	14.5	(21.5)	(16.2)	8.0	(8.9)	(10.9)	9.2	(65.4)	(31.7)	50.5	7.3	157.4	(2.0)	(36.6)
Alcoholic Beverage Sales	74.3	13.8	45.0	50.6	77.0	15.7	46.1	53.2	80.2	14.8	47.7	54.4	82.3	15.2	49.0
Annual % Change	1.7	7.9	4.2	4.0	3.6	13.7	2.6	5.1	4.1	(5.8)	3.4	2.3	2.7	2.8	2.7
All Other Revenues	151.9	89.1	77.2	107.3	140.3	76.6	88.2	101.3	159.6	83.3	79.5	105.0	161.8	82.9	88.0
Annual % Change	(7.4)	(0.3)	(4.9)	1.6	(7.7)	(14.0)	14.3	(5.6)	13.8	8.7	(9.8)	3.6	1.4	(0.5)	10.6
Total General Fund Revenues	4,812.0	3,573.2	3,783.4	3,413.4	5,076.6	3,619.5	3,995.5	3,627.1	5,442.5	3,722.3	3,948.3	3,572.3	5,168.5	3,972.6	4,217.2
Annual % Change	7.7	6.7	1.9	7.8	5.5	1.3	5.6	6.3	7.2	2.8	(1.2)	(1.5)	(5.0)	6.7	6.8

**TABLE B.1 - QUARTERLY GENERAL FUND REVENUES**  
(Millions of Dollars)

	2015 1	2015 2	2015 3	2015 4	2016 1	2016 2	2016 3	2016 4	2017 1	2017 2	2017 3	2017 4	2018 1	2018 2	2018 3	2018 4
Withholding	2,875.3	2,794.7	2,666.5	2,829.2	3,029.1	2,781.5	2,777.0	2,966.4	3,231.3	2,920.7	2,888.1	3,026.9	3,441.1	3,184.5	2,920.9	3,259.3
Annual % Change	2.6	6.8	4.4	0.3	5.3	(0.5)	4.1	4.8	6.7	5.0	4.0	2.0	6.5	9.0	1.1	7.7
Nonwithholding	602.1	1,684.2	472.0	316.8	652.9	1,628.4	470.8	329.5	683.1	1,535.1	463.8	581.7	688.5	1,738.9	530.3	297.9
Annual % Change	21.2	20.7	10.3	(3.3)	8.4	(3.3)	(0.2)	4.0	4.6	(5.7)	(1.5)	76.6	0.8	13.3	14.4	(48.8)
Gross Individual Income Tax	3,477.4	4,478.9	3,138.5	3,146.1	3,682.0	4,409.8	3,247.8	3,295.9	3,914.4	4,455.8	3,351.8	3,608.6	4,129.5	4,923.4	3,451.2	3,557.2
Annual % Change	5.4	11.6	5.2	(0.0)	5.9	(1.5)	3.5	4.8	6.3	1.0	3.2	9.5	5.5	10.5	3.0	(1.4)
Individual Refunds	790.5	686.5	122.9	165.8	844.6	687.4	114.9	143.0	871.4	731.6	126.7	162.3	876.1	742.5	137.9	167.3
Annual % Change	(3.6)	4.0	(0.5)	5.8	6.8	0.1	(6.5)	(13.7)	3.2	6.4	10.3	13.5	0.5	1.5	8.8	3.1
Net Individual Income Tax	2,686.9	3,792.3	3,015.6	2,980.2	2,837.4	3,722.4	3,132.9	3,152.8	3,043.0	3,724.2	3,225.1	3,446.3	3,253.5	4,180.9	3,313.3	3,389.9
Annual % Change	8.3	13.1	5.5	(0.4)	5.6	(1.8)	3.9	5.8	7.2	0.0	2.9	9.3	6.9	12.3	2.7	(1.6)
Sales and Use Tax	764.3	1,008.7	648.9	831.6	781.5	1,033.9	649.9	827.1	820.0	1,060.1	667.2	865.2	832.2	1,097.2	717.2	888.1
Annual % Change	6.0	9.0	(5.1)	6.8	2.2	2.5	0.2	(0.5)	4.9	2.5	2.7	4.6	1.5	3.5	7.5	2.6
Corporate Income Tax	144.6	320.6	188.0	101.7	164.3	311.0	197.5	119.8	147.8	361.8	252.7	134.9	104.5	369.9	227.4	164.7
Annual % Change	16.6	(2.8)	(17.0)	(27.5)	13.6	(3.0)	5.1	17.8	(10.0)	16.3	27.9	12.6	(29.3)	2.2	(10.0)	22.1
Wills, Suits, Deeds, Contracts	76.1	101.8	96.0	90.4	78.7	104.0	109.6	98.5	80.4	105.9	107.1	94.2	83.1	110.5	97.4	93.5
Annual % Change	25.7	26.1	9.7	11.8	3.4	2.1	14.2	8.9	2.1	1.8	(2.3)	(4.4)	3.4	4.3	(9.1)	(0.8)
Insurance Premiums	5.3	219.9	0.0	87.4	8.1	243.5	0.0	90.2	7.0	243.7	0.0	94.7	(11.0)	254.3	0.0	93.2
Annual % Change	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Interest Income	12.7	3.6	18.2	14.6	15.7	3.5	25.0	10.8	18.9	0.9	28.2	21.6	10.7	1.0	42.6	20.5
Annual % Change	(45.9)	(62.4)	1.5	1.4	24.2	(1.9)	36.8	(26.2)	20.3	(73.4)	12.8	100.1	(43.6)	2.2	51.2	(5.5)
Alcoholic Beverage Sales	56.8	86.8	11.8	55.1	59.2	91.5	14.1	53.8	60.6	93.9	15.3	55.4	61.9	99.3	14.0	57.5
Annual % Change	4.3	5.5	(22.6)	12.5	4.3	5.3	20.3	(2.5)	2.3	2.6	7.9	3.1	2.1	5.8	(8.0)	3.8
All Other Revenues	104.8	160.5	87.9	90.6	97.6	169.7	82.2	87.1	105.8	169.8	86.8	70.7	105.4	162.3	90.8	88.6
Annual % Change	(0.2)	(0.8)	6.1	3.0	(6.9)	5.7	(6.5)	(3.9)	8.4	0.1	5.6	(18.8)	(0.4)	(4.4)	4.6	25.3
Total General Fund Revenues	3,851.4	5,694.3	4,066.3	4,251.8	4,042.5	5,679.5	4,211.3	4,440.0	4,283.4	5,760.3	4,382.3	4,782.9	4,440.2	6,275.4	4,502.7	4,796.0
Annual % Change	7.8	10.2	2.4	0.8	5.0	(0.3)	3.6	4.4	6.0	1.4	4.1	7.7	3.7	8.9	2.7	0.3

**TABLE B.1 - QUARTERLY GENERAL FUND REVENUES**  
(Millions of Dollars)

	2019 1	2019 2	2019 3	2019 4	2020 1	2020 2	2020 3	2020 4	2021 1	2021 2
Withholding	3,481.2	3,326.4	3,091.4	3,449.9	3,580.9	3,255.9	3,164.2	3,567.7	3,762.5	3,518.5
Annual % Change	1.2	4.5	5.8	5.8	2.9	(2.1)	2.4	3.4	5.1	8.1
Nonwithholding	727.0	2,421.6	617.6	359.0	801.7	2,026.2	982.4	357.6	903.1	2,973.9
Annual % Change	5.6	39.3	16.5	20.5	10.3	(16.3)	59.1	(0.4)	12.7	46.8
Gross Individual Income Tax	4,208.2	5,748.0	3,709.0	3,808.8	4,382.5	5,282.1	4,146.6	3,925.3	4,665.6	6,492.3
Annual % Change	1.9	16.7	7.5	7.1	4.1	(8.1)	11.8	3.1	6.5	22.9
Individual Refunds	739.2	693.7	158.5	191.9	838.8	641.7	280.7	190.8	696.6	758.1
Annual % Change	(15.6)	(6.6)	15.0	14.7	13.5	(7.5)	77.1	(0.6)	(17.0)	18.1
Net Individual Income Tax	3,469.0	5,054.2	3,550.5	3,616.9	3,543.7	4,640.5	3,865.9	3,734.5	3,969.0	5,734.3
Annual % Change	6.6	20.9	7.2	6.7	2.2	(8.2)	8.9	3.3	12.0	23.6
Sales and Use Tax	842.4	1,132.7	773.0	962.7	918.4	1,052.7	830.8	1,020.5	984.7	1,330.1
Annual % Change	1.2	3.2	7.8	8.4	9.0	(7.1)	7.5	6.0	7.2	26.3
Corporate Income Tax	101.4	449.8	246.8	220.7	116.3	427.9	335.8	307.7	137.0	735.1
Annual % Change	(2.9)	21.6	8.5	34.0	14.6	(4.9)	36.1	39.4	17.8	71.8
Wills, Suits, Deeds, Contracts	80.6	115.0	122.1	124.2	107.7	129.6	165.8	176.2	155.4	182.2
Annual % Change	(3.0)	4.1	25.4	32.9	33.6	12.7	35.9	41.9	44.3	40.6
Insurance Premiums	18.1	270.7	0.0	94.0	(12.0)	278.5	0.0	102.2	(25.5)	286.3
Annual % Change	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Interest Income	33.6	(9.7)	73.1	27.5	19.0	(9.2)	50.0	11.7	20.8	0.9
Annual % Change	214.9	(1,106.0)	71.7	34.5	(43.5)	(5.0)	(31.5)	(57.6)	9.3	(109.3)
Alcoholic Beverage Sales	64.8	104.5	17.4	61.1	71.1	117.6	15.8	71.0	79.1	130.3
Annual % Change	4.7	5.2	24.1	6.2	9.8	12.6	(9.6)	16.2	11.2	10.8
All Other Revenues	106.9	174.8	87.2	96.0	102.6	160.1	88.2	85.6	105.6	191.3
Annual % Change	1.5	7.7	(3.9)	8.4	(4.0)	(8.4)	1.1	(10.8)	2.9	19.5
Total General Fund Revenues	4,716.8	7,292.0	4,870.1	5,203.1	4,866.8	6,797.8	5,352.4	5,509.4	5,426.2	8,590.4
Annual % Change	6.2	16.2	8.2	8.5	3.2	(6.8)	9.9	5.9	11.5	26.4

**TABLE B.2 - ANNUAL GENERAL FUND REVENUES**  
(Millions of Dollars)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Withholding	Calendar Year	6,007.5	6,347.5	6,513.0	6,772.2	7,305.3	7,733.2	8,240.8	8,792.5	9,185.8	9,031.7	9,401.4
	% Change	5.9	5.7	2.6	4.0	7.9	5.9	6.6	6.7	4.5	(1.7)	4.1
	Fiscal Year	5,861.3	6,254.9	6,422.4	6,567.4	7,039.3	7,513.0	8,053.7	8,565.5	8,933.6	9,138.1	9,176.2
	% Change	10.3	6.7	2.7	2.3	7.2	6.7	7.2	6.4	4.3	2.3	0.4
Nonwithholding	Calendar Year	1,640.6	1,801.7	1,456.4	1,423.7	1,658.4	2,151.8	2,540.3	2,815.0	2,856.7	2,189.8	1,875.2
	% Change	2.8	9.8	(19.2)	(2.2)	16.5	29.7	18.1	10.8	1.5	(23.3)	(14.4)
	Fiscal Year	1,669.7	1,806.8	1,459.5	1,402.7	1,562.8	2,073.5	2,493.8	2,782.0	2,861.2	2,310.4	1,906.8
	% Change	12.2	8.2	(19.2)	(3.9)	11.4	32.7	20.3	11.6	2.8	(19.2)	(17.5)
Gross Individual Income Tax	Calendar Year	7,648.1	8,149.2	7,969.4	8,195.9	8,963.7	9,884.9	10,781.0	11,607.5	12,042.5	11,221.4	11,276.6
	% Change	5.2	6.6	(2.2)	2.8	9.4	10.3	9.1	7.7	3.7	(6.8)	0.5
	Fiscal Year	7,530.9	8,061.7	7,881.9	7,970.1	8,602.1	9,586.6	10,547.5	11,347.4	11,794.7	11,448.5	11,082.9
	% Change	10.8	7.0	(2.2)	1.1	7.9	11.4	10.0	7.6	3.9	(2.9)	(3.2)
Individual Refunds	Calendar Year	773.8	902.6	1,108.8	1,167.3	1,227.3	1,178.3	1,389.6	1,567.4	1,720.8	2,032.1	1,945.5
	% Change	7.9	16.6	22.8	5.3	5.1	(4.0)	17.9	12.8	9.8	18.1	(4.3)
	Fiscal Year	702.0	835.4	1,171.1	1,194.4	1,217.2	1,234.2	1,282.6	1,559.8	1,679.9	1,967.4	1,994.7
	% Change	(1.4)	19.0	40.2	2.0	1.9	1.4	3.9	21.6	7.7	17.1	1.4
Net Individual Income Tax	Calendar Year	6,874.3	7,246.6	6,860.6	7,028.6	7,736.4	8,706.7	9,391.4	10,040.0	10,321.7	9,189.3	9,331.1
	% Change	4.9	5.4	(5.3)	2.4	10.1	12.5	7.9	6.9	2.8	(11.0)	1.5
	Fiscal Year	6,828.9	7,226.3	6,710.8	6,775.7	7,384.9	8,352.4	9,264.9	9,787.6	10,114.8	9,481.1	9,088.3
	% Change	12.2	5.8	(7.1)	1.0	9.0	13.1	10.9	5.6	3.3	(6.3)	(4.1)
Sales and Use Tax	Calendar Year	2,233.3	2,289.5	2,309.9	2,410.4	2,705.1	3,002.6	3,014.1	3,123.8	2,990.8	2,853.0	2,958.0
	% Change	4.3	2.5	0.9	4.4	12.2	11.0	0.4	3.6	(4.3)	(4.6)	3.7
	Fiscal Year	2,201.5	2,273.0	2,429.8	2,336.0	2,562.3	2,946.1	2,812.7	3,049.1	3,075.5	2,903.4	3,082.5
	% Change	6.6	3.2	6.9	(3.9)	9.7	15.0	(4.5)	8.4	0.9	(5.6)	6.2
Corporate Income Tax	Calendar Year	497.5	326.2	320.5	348.6	521.7	840.6	839.8	769.3	738.0	736.7	792.7
	% Change	7.5	(34.4)	(1.8)	8.8	49.7	61.1	(0.1)	(8.4)	(4.1)	(0.2)	7.6
	Fiscal Year	565.9	363.8	290.2	343.3	425.7	616.7	867.1	879.6	807.9	648.0	806.5
	% Change	34.6	(35.7)	(20.2)	18.3	24.0	44.9	40.6	1.4	(8.2)	(19.8)	24.4
Wills, Suits, Deeds, Contracts	Calendar Year	150.8	195.5	247.2	319.5	431.7	704.7	616.2	531.9	369.5	312.8	288.5
	% Change	(0.3)	29.6	26.4	29.3	35.1	63.2	(12.6)	(13.7)	(30.5)	(15.3)	(7.8)
	Fiscal Year	146.3	167.6	214.4	285.8	340.6	596.1	694.7	582.9	456.3	314.3	290.2
	% Change	(7.3)	14.6	27.9	33.3	19.1	75.0	16.6	(16.1)	(21.7)	(31.1)	(7.7)
Insurance Premiums	Calendar Year	254.3	280.9	308.7	339.4	365.4	372.8	366.9	398.8	309.2	254.5	267.3
	% Change	2.4	10.5	9.9	9.9	7.7	2.0	(1.6)	8.7	(22.5)	(17.7)	5.0
	Fiscal Year	251.1	268.1	292.7	333.0	351.3	373.6	373.8	384.9	396.9	255.0	261.9
	% Change	2.5	6.8	9.2	13.8	5.5	6.3	0.1	3.0	3.1	(35.7)	2.7
Interest Income	Calendar Year	147.8	111.9	86.9	59.5	69.7	105.4	180.2	213.1	117.6	71.0	75.0
	% Change	24.9	(24.3)	(22.4)	(31.5)	17.3	51.2	71.0	18.2	(44.8)	(39.6)	5.5
	Fiscal Year	131.2	133.2	100.4	81.7	61.4	83.9	116.5	175.9	189.3	104.2	94.3
	% Change	4.0	1.5	(24.6)	(18.6)	(24.8)	36.6	38.9	51.1	7.6	(44.9)	(9.5)
Alcoholic Beverage Sales	Calendar Year	119.2	123.6	129.0	131.5	139.6	147.0	155.2	163.1	169.8	173.4	176.5
	% Change	6.5	3.7	4.3	1.9	6.2	5.3	5.6	5.0	4.1	2.2	1.8
	Fiscal Year	117.2	123.0	127.5	128.7	138.0	144.5	153.0	161.8	168.9	173.2	175.1
	% Change	6.0	4.9	3.6	1.0	7.2	4.7	5.9	5.8	4.3	2.6	1.1
All Other Revenues	Calendar Year	484.2	549.3	548.2	596.8	673.1	518.9	567.4	563.1	488.5	406.3	432.1
	% Change	(13.6)	13.5	(0.2)	8.9	12.8	(22.9)	9.3	(0.8)	(13.3)	(16.8)	6.4
	Fiscal Year	546.4	550.4	513.1	582.9	653.6	574.1	551.6	543.9	557.4	435.7	420.7
	% Change	11.6	0.7	(6.8)	13.6	12.1	(12.2)	(3.9)	(1.4)	2.5	(21.8)	(3.4)
Total General Fund Revenues	Calendar Year	10,761.3	11,123.6	10,810.9	11,234.2	12,642.8	14,398.7	15,131.3	15,803.1	15,505.0	13,997.0	14,321.2
	% Change	4.0	3.4	(2.8)	3.9	12.5	13.9	5.1	4.4	(1.9)	(9.7)	2.3
	Fiscal Year	10,788.5	11,105.3	10,679.0	10,867.1	11,917.9	13,687.3	14,834.3	15,565.8	15,767.0	14,315.1	14,219.5
	% Change	11.2	2.9	(3.8)	1.8	9.7	14.8	8.4	4.9	1.3	(9.2)	(0.7)
ABC Profits	Fiscal Year	30.1	28.1	25.4	14.2	16.8	24.9	30.0	27.6	37.2	44.2	50.0
	% Change	18.2	(6.8)	(9.6)	(44.1)	18.0	48.9	20.4	(8.3)	35.1	18.8	13.0

**TABLE B.2 - ANNUAL GENERAL FUND REVENUES**

(Millions of Dollars)

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Withholding	Calendar Year	9,775.0	10,119.1	10,415.9	10,795.6	11,165.7	11,554.0	12,066.9	12,805.8	13,348.9	13,568.7	
	% Change	4.0	3.5	2.9	3.6	3.4	3.5	4.4	6.1	4.2	1.6	
	Fiscal Year	9,635.1	10,039.7	10,251.3	10,484.2	11,044.3	11,306.3	11,895.4	12,540.5	12,987.8	13,378.1	14,012.9
	% Change	5.0	4.2	2.1	2.3	5.3	2.4	5.2	5.4	3.6	3.0	4.7
Nonwithholding	Calendar Year	2,251.8	2,350.9	2,877.3	2,646.9	3,075.1	3,081.5	3,263.7	3,255.6	4,125.2	4,167.9	
	% Change	20.1	4.4	22.4	(8.0)	16.2	0.2	5.9	(0.2)	26.7	1.0	
	Fiscal Year	2,178.6	2,357.9	2,807.7	2,524.9	3,041.6	3,070.1	3,018.5	3,472.9	3,976.8	3,804.5	5,217.0
	% Change	14.3	8.2	19.1	(10.1)	20.5	0.9	(1.7)	15.1	14.5	(4.3)	37.1
Gross Individual Income Tax	Calendar Year	12,026.8	12,470.0	13,293.3	13,442.5	14,240.8	14,635.5	15,330.6	16,061.4	17,474.1	17,736.6	
	% Change	6.7	3.7	6.6	1.1	5.9	2.8	4.7	4.8	8.8	1.5	
	Fiscal Year	11,813.7	12,397.6	13,059.0	13,009.2	14,086.0	14,376.4	14,913.9	16,013.4	16,964.7	17,182.5	19,229.9
	% Change	6.6	4.9	5.3	(0.4)	8.3	2.1	3.7	7.4	5.9	1.3	11.9
Individual Refunds	Calendar Year	1,823.1	1,754.0	1,787.6	1,760.5	1,765.7	1,790.0	1,892.1	1,923.8	1,783.4	1,952.0	
	% Change	(6.3)	(3.8)	1.9	(1.5)	0.3	1.4	5.7	1.7	(7.3)	9.5	
	Fiscal Year	1,869.3	1,784.7	1,719.1	1,755.8	1,757.3	1,820.7	1,861.0	1,907.6	1,738.2	1,830.9	1,926.2
	% Change	(6.3)	(4.5)	(3.7)	2.1	0.1	3.6	2.2	2.5	(8.9)	5.3	5.2
Net Individual Income Tax	Calendar Year	10,203.8	10,716.0	11,505.7	11,682.0	12,475.1	12,845.5	13,438.5	14,137.7	15,690.6	15,784.6	
	% Change	9.4	5.0	7.4	1.5	6.8	3.0	4.6	5.2	11.0	0.6	
	Fiscal Year	9,944.4	10,612.8	11,340.0	11,253.3	12,328.7	12,555.6	13,052.9	14,105.8	15,226.5	15,351.6	17,303.7
	% Change	9.4	6.7	6.9	(0.8)	9.6	1.8	4.0	8.1	7.9	0.8	12.7
Sales and Use Tax	Calendar Year	3,080.6	3,190.9	3,178.0	3,108.9	3,253.5	3,292.3	3,412.5	3,534.7	3,710.8	3,822.5	
	% Change	4.1	3.6	(0.4)	(2.2)	4.7	1.2	3.6	3.6	5.0	3.0	
	Fiscal Year	3,012.4	3,121.5	3,219.8	3,066.5	3,235.4	3,295.9	3,357.1	3,461.8	3,580.4	3,706.8	4,166.2
	% Change	(2.3)	3.6	3.1	(4.8)	5.5	1.9	1.9	3.1	3.4	3.5	12.4
Corporate Income Tax	Calendar Year	809.9	900.9	733.7	820.6	754.8	792.6	897.2	866.5	1,018.7	1,187.7	
	% Change	2.2	11.2	(18.6)	11.8	(8.0)	5.0	13.2	(3.4)	17.6	16.6	
	Fiscal Year	822.3	859.9	796.7	757.5	831.9	764.9	827.0	861.9	943.4	1,011.7	1,515.7
	% Change	2.0	4.6	(7.3)	(4.9)	9.8	(8.0)	8.1	4.2	9.5	7.2	49.8
Wills, Suits, Deeds, Contracts	Calendar Year	296.8	346.2	364.0	309.7	364.4	390.8	387.6	384.4	441.9	579.3	
	% Change	2.9	16.6	5.1	(14.9)	17.7	7.2	(0.8)	(0.8)	14.9	31.1	
	Fiscal Year	291.5	322.1	377.5	310.8	346.3	369.1	394.4	394.9	386.5	483.5	679.7
	% Change	0.4	10.5	17.2	(17.7)	11.4	6.6	6.9	0.1	(2.1)	25.1	40.6
Insurance Premiums	Calendar Year	257.4	276.4	272.6	305.6	312.6	341.9	345.4	336.5	382.8	368.8	
	% Change	(3.7)	7.4	(1.4)	12.1	2.3	9.4	1.0	(2.6)	13.8	(3.7)	
	Fiscal Year	281.6	252.9	262.2	320.4	300.6	339.1	340.9	337.9	382.0	360.6	363.1
	% Change	7.5	(10.2)	3.7	22.2	(6.2)	12.8	0.5	(0.9)	13.0	(5.6)	0.7
Interest Income	Calendar Year	80.2	72.7	66.6	65.4	49.2	55.0	69.6	74.7	124.5	71.5	
	% Change	7.0	(9.4)	(8.3)	(1.8)	(24.8)	11.9	26.6	7.2	66.8	(42.6)	
	Fiscal Year	81.1	77.2	67.5	74.1	48.7	52.2	55.6	61.4	87.0	110.4	83.3
	% Change	(14.0)	(4.9)	(12.5)	9.8	(34.3)	7.1	6.7	10.4	41.6	26.9	(24.5)
Alcoholic Beverage Sales	Calendar Year	181.8	189.4	195.9	200.9	210.5	218.6	225.1	232.7	247.7	275.4	
	% Change	3.0	4.2	3.4	2.6	4.8	3.8	3.0	3.4	6.5	11.2	
	Fiscal Year	178.9	186.4	195.2	199.2	207.8	217.6	222.4	231.8	240.8	267.2	296.1
	% Change	2.2	4.2	4.7	2.1	4.3	4.7	2.2	4.3	3.9	11.0	10.8
All Other Revenues	Calendar Year	423.9	412.4	423.7	437.7	443.8	436.6	433.2	447.1	465.0	436.5	
	% Change	(1.9)	(2.7)	2.7	3.3	1.4	(1.6)	(0.8)	3.2	4.0	(6.1)	
	Fiscal Year	428.1	413.9	425.7	429.6	436.2	445.8	444.9	425.2	461.1	446.0	470.8
	% Change	1.8	(3.3)	2.9	0.9	1.5	2.2	(0.2)	(4.4)	8.4	(3.3)	5.6
Total General Fund Revenues	Calendar Year	15,334.3	16,105.0	16,740.2	16,930.7	17,863.9	18,373.3	19,209.0	20,014.2	22,082.0	22,526.4	
	% Change	7.1	5.0	3.9	1.1	5.5	2.9	4.5	4.2	10.3	2.0	
	Fiscal Year	15,040.2	15,846.7	16,684.6	16,411.4	17,735.6	18,040.1	18,695.1	19,880.8	21,307.5	21,737.8	24,878.5
	% Change	5.8	5.4	5.3	(1.6)	8.1	1.7	3.6	6.3	7.2	2.0	14.4
ABC Profits	Fiscal Year	50.5	63.8	68.0	72.2	83.3	86.5	110.5	109.5	130.7	137.5	177.9
	% Change	1.0	26.3	6.6	6.2	15.4	3.8	27.7	(0.9)	19.4	5.2	29.4

**APPENDIX C**  
**MODELS AND METHODOLOGIES**





# GENERAL FUND METHODOLOGY

## Corporate Income Tax, Gross Receipts

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	241.8	231.9	9.8	4.1%
	11Q4	224.1	241.8	(17.6)	-7.9%
	12Q1	184.9	188.5	(3.6)	-1.9%
	12Q2	397.9	408.9	(11.0)	-2.8%
	Total	1,048.8	1,071.1	(22.4)	-2.1%
2013	12Q3	224.8	271.9	(47.1)	-20.9%
	12Q4	273.1	246.8	26.2	9.6%
	13Q1	134.1	190.2	(56.0)	-41.8%
	13Q2	375.1	411.1	(36.0)	-9.6%
	Total	1,007.1	1,120.0	(112.9)	-11.2%
2014	13Q3	256.6	268.1	(11.5)	-4.5%
	13Q4	242.0	243.3	(1.3)	-0.5%
	14Q1	159.4	155.3	4.1	2.6%
	14Q2	350.5	365.0	(14.5)	-4.1%
	Total	1,008.5	1,031.8	(23.2)	-2.3%
2015	14Q3	242.2	238.0	4.2	1.7%
	14Q4	225.4	296.1	(70.6)	-31.3%
	15Q1	141.3	154.4	(13.1)	-9.3%
	15Q2	356.1	400.8	(44.7)	-12.6%
	Total	965.0	1,089.3	(124.3)	-12.9%
2016	15Q3	233.5	251.2	(17.7)	-7.6%
	15Q4	219.5	231.6	(12.1)	-5.5%
	16Q1	186.3	147.5	38.8	20.8%
	16Q2	334.5	345.7	(11.2)	-3.4%
	Total	973.8	976.1	(2.2)	-0.2%
2017	16Q3	242.4	243.4	(1.0)	-0.4%
	16Q4	232.2	238.0	(5.8)	-2.5%
	17Q1	165.1	216.7	(51.6)	-31.3%
	17Q2	391.3	357.1	34.3	8.8%
	Total	1,031.1	1,055.2	(24.2)	-2.3%
2018	17Q3	272.8	267.0	5.9	2.2%
	17Q4	235.2	252.6	(17.4)	-7.4%
	18Q1	138.1	187.9	(49.8)	-36.0%
	18Q2	404.8	410.6	(5.8)	-1.4%
	Total	1,050.9	1,118.0	(67.1)	-6.4%
2019	18Q3	254.0	294.1	(40.1)	-15.8%
	18Q4	269.4	247.9	21.5	8.0%
	19Q1	135.0	137.8	(2.8)	-2.1%
	19Q2	416.3	417.0	(0.7)	-0.2%
	Total	1,074.7	1,096.9		
2020	19Q3	292.5	257.5	35.0	12.0%
	19Q4	311.9	293.0	18.9	6.1%
	20Q1	153.5	147.0	6.6	4.3%
	20Q2	478.3	392.4	85.9	18.0%
	Total	1,236.3	1,089.9	146.3	11.8%
2021	20Q3	361.2	323.2	37.9	10.5%
	20Q4	383.3	352.0	31.3	8.2%
	21Q1	179.2	230.5	(51.2)	-28.6%
	21Q2	756.4	614.6	141.8	18.8%
	Total	1,680.1	1,520.3	159.8	9.5%

Individual Income Tax - Withholding

diffya(with)

$$= 0.00186 * \text{diffya}(\text{ywstran}) + 81.8072$$

(2.29080)      (7.16780)

Sum Sq	309937	Std Err	74.3948	LHS Mean	103.006
R Sq	0.1018	R Bar Sq	0.0697	F 2, 56	3.1743
D.W.( 1)	1.6679	D.W.( 4)	1.9458		

Quarterly data for 59 periods from 2007Q1 to 2021Q3

diffya                      Year-over-year difference function  
with                              Withholding tax receipts  
ywstran                        Virginia income from wages and salaries and transfer payments

## GENERAL FUND METHODOLOGY

### Individual Income Tax - Withholding

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	2,308.0	2,311.9	(3.9)	-0.2%
	11Q4	2,510.9	2,511.4	(0.4)	0.0%
	12Q1	2,640.7	2,627.9	12.8	0.5%
	12Q2	2,580.0	2,494.2	85.8	3.3%
	Total	10,039.7	9,945.4	94.3	0.9%
2013	12Q3	2,292.0	2,375.8	(83.9)	-3.7%
	12Q4	2,606.4	2,647.8	(41.4)	-1.6%
	13Q1	2,761.1	2,720.2	40.9	1.5%
	13Q2	2,591.9	2,634.2	(42.3)	-1.6%
	Total	10,251.3	10,378.0	(126.7)	-1.2%
2014	13Q3	2,403.1	2,359.9	43.2	1.8%
	13Q4	2,659.9	2,626.9	32.9	1.2%
	14Q1	2,803.7	2,806.1	(2.4)	-0.1%
	14Q2	2,617.5	2,679.4	(61.9)	-2.4%
	Total	10,484.2	10,472.4	11.8	0.1%
2015	14Q3	2,554.4	2,487.7	66.7	2.6%
	14Q4	2,820.0	2,770.4	49.6	1.8%
	15Q1	2,875.3	2,921.7	(46.4)	-1.6%
	15Q2	2,794.7	2,769.2	25.4	0.9%
	Total	11,044.3	10,949.0	95.4	0.9%
2016	15Q3	2,666.5	2,691.8	(25.3)	-0.9%
	15Q4	2,829.2	2,932.6	(103.3)	-3.7%
	16Q1	3,029.1	2,984.2	44.9	1.5%
	16Q2	2,781.4	2,861.4	(80.0)	-2.9%
	Total	11,306.3	11,469.9	(163.7)	-1.4%
2017	16Q3	2,777.0	2,752.3	24.8	0.9%
	16Q4	2,966.4	2,956.6	9.8	0.3%
	17Q1	3,231.3	3,132.2	99.1	3.1%
	17Q2	2,920.7	2,930.8	(10.1)	-0.3%
	Total	11,895.4	11,771.8	123.6	1.0%
2018	17Q3	2,888.1	2,904.7	(16.6)	-0.6%
	17Q4	3,026.9	3,103.3	(76.4)	-2.5%
	18Q1	3,441.1	3,346.3	94.7	2.8%
	18Q2	3,064.5	3,050.6	13.9	0.5%
	Total	12,420.5	12,404.9	15.6	0.1%
2019	18Q3	3,040.9	3,030.9	10.0	0.3%
	18Q4	3,259.3	3,162.9	96.4	3.0%
	19Q1	3,481.2	3,578.5	(97.2)	-2.8%
	19Q2	3,326.4	3,211.3	115.1	3.5%
	Total	13,107.8	12,983.6	124.3	0.9%
2020	19Q3	3,091.4	3,169.4	(78.0)	-2.5%
	19Q4	3,449.9	3,385.9	64.0	1.9%
	20Q1	3,580.9	3,678.6	(97.7)	-2.7%
	20Q2	3,255.9	3,290.8	(34.9)	-1.1%
	Total	13,378.1	13,524.7	(146.7)	-1.1%
2021	20Q3	3,164.2	3,200.5	(36.3)	-1.1%
	20Q4	3,567.7	3,599.3	(31.6)	-0.9%
	21Q1	3,762.5	3,684.9	77.7	2.1%
	21Q2	3,518.5	3,568.0	(49.5)	-1.4%
	Total	14,012.9	14,052.7	(39.8)	-0.3%



# GENERAL FUND METHODOLOGY

## Individual Income Tax - Estimated Payments

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	315.5	294.4	21.2	6.7%
	11Q4	226.7	211.2	15.4	6.8%
	12Q1	370.3	397.2	(26.9)	-7.3%
	12Q2	522.6	477.6	45.0	8.6%
	Total	1,435.1	1,380.4	54.7	3.8%
2013	12Q3	299.0	320.9	(21.9)	-7.3%
	12Q4	178.2	250.1	(71.9)	-40.4%
	13Q1	492.6	407.8	84.8	17.2%
	13Q2	593.0	510.6	82.4	13.9%
	Total	1,562.8	1,489.4	73.4	4.7%
2014	13Q3	328.3	348.8	(20.4)	-6.2%
	13Q4	223.2	262.1	(38.9)	-17.4%
	14Q1	453.2	468.8	(15.6)	-3.4%
	14Q2	567.7	574.9	(7.2)	-1.3%
	Total	1,572.5	1,654.6	(82.0)	-5.2%
2015	14Q3	372.7	392.8	(20.1)	-5.4%
	14Q4	317.8	296.8	21.0	6.6%
	15Q1	516.7	504.2	12.5	2.4%
	15Q2	642.8	605.8	37.1	5.8%
	Total	1,850.0	1,799.6	50.4	2.7%
2016	15Q3	398.1	397.7	0.3	0.1%
	15Q4	383.8	309.5	74.3	19.3%
	16Q1	493.9	499.2	(5.3)	-1.1%
	16Q2	646.6	616.8	29.8	4.6%
	Total	1,922.3	1,823.2	99.1	5.2%
2017	16Q3	410.6	424.4	(13.8)	-3.4%
	16Q4	335.7	350.3	(14.6)	-4.3%
	17Q1	581.4	553.8	27.6	4.7%
	17Q2	621.0	674.2	(53.3)	-8.6%
	Total	1,948.7	2,002.7	(54.0)	-2.8%
2018	17Q3	415.5	469.9	(54.4)	-13.1%
	17Q4	643.1	408.0	235.1	36.6%
	18Q1	474.9	615.6	(140.6)	-29.6%
	18Q2	705.9	703.4	2.5	0.4%
	Total	2,239.5	2,196.9	42.5	1.9%
2019	18Q3	444.8	509.6	(64.9)	-14.6%
	18Q4	285.5	474.8	(189.3)	-66.3%
	19Q1	548.8	579.7	(30.9)	-5.6%
	19Q2	838.4	721.7	116.7	13.9%
	Total	2,117.4	2,285.8	(168.4)	-8.0%
2020	19Q3	579.2	498.8	80.4	13.9%
	19Q4	354.5	470.0	(115.5)	-32.6%
	20Q1	650.8	607.6	43.2	6.6%
	20Q2	772.4	743.6	28.8	3.7%
	Total	2,356.8	2,319.9	36.9	1.6%
2021	20Q3	606.0	533.6	72.5	12.0%
	20Q4	363.8	485.3	(121.5)	-33.4%
	21Q1	648.9	701.7	(52.8)	-8.1%
	21Q2	1,044.2	894.3	149.9	14.4%
	Total	2,662.9	2,614.9	48.0	1.8%

Individual Income Tax – Final Payments

pch(fp)

$$= 1.15535 * \text{pch}(\text{cysp500}) + 0.16945$$

(2.82334)      (0.02948)

Sum Sq	4606.59	Std Err	18.8243	LHS Mean	8.8363
R Sq	0.3801	R Bar Sq	0.3324	F 1, 13	7.9713
D.W.( 1)	2.3263	D.W.( 2)	1.1527		

Annual data for 15 periods from 2006 to 2020

pch	Percent change function
fp	Final payments
cysp500	Standard and Poor's 500 stock index, calendar year

### Individual Income Tax - Final Payments Percent Growth

<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>
2007	18.6	9.0	9.6
2008	4.5	7.7	(3.3)
2009	(30.0)	2.7	(32.7)
2010	(25.1)	10.2	(35.3)
2011	34.0	8.9	25.1
2012	5.2	7.3	(2.1)
2013	34.9	8.9	26.0
2014	(23.5)	10.9	(34.4)
2015	25.1	8.7	16.4
2016	(3.7)	7.2	(10.9)
2017	(6.8)	8.5	(15.3)
2018	15.3	9.7	5.6
2019	50.8	6.6	44.2
2020	(4.9)	10.8	(15.7)
2021	32.0	9.3	22.8



State Sales Tax

diff(sales)

$$= -0.00104 * \text{diff}(\text{yrpicva}) + 8.00595$$

(0.96076)                      (1.29443)

Sum Sq	76192.4	Std Err	39.0365	LHS Mean	4.3917
R Sq	0.0540	R Bar Sq	0.0161	F 2, 50	1.4262
D.W.( 1)	1.9860	D.W.( 4)	0.6670		

Quarterly data for 53 periods from 2007Q3 to 2020Q3

diff	Quarter-over-quarter difference function
sales	Sales tax receipts
yrpicva	Virginia personal income

## GENERAL FUND METHODOLOGY

### State Sales Tax

Fiscal Year		Actual	Fitted	Residual	% Residual
2012	11Q3	241.8	231.9	9.8	4.1%
	11Q4	224.1	241.8	(17.6)	-7.9%
	12Q1	184.9	188.5	(3.6)	-1.9%
	12Q2	397.9	408.9	(11.0)	-2.8%
	Total	1,048.8	1,071.1	(22.4)	-2.1%
2013	12Q3	224.8	271.9	(47.1)	-20.9%
	12Q4	273.1	246.8	26.2	9.6%
	13Q1	134.1	190.2	(56.0)	-41.8%
	13Q2	375.1	411.1	(36.0)	-9.6%
	Total	1,007.1	1,120.0	(112.9)	-11.2%
2014	13Q3	242.2	238.0	4.2	1.7%
	13Q4	225.4	296.1	(70.6)	-31.3%
	14Q1	141.3	154.4	(13.1)	-9.3%
	14Q2	356.1	400.8	(44.7)	-12.6%
	Total	965.0	1,089.3	(124.3)	-12.9%
2015	14Q3	256.6	268.1	(11.5)	-4.5%
	14Q4	242.0	243.3	(1.3)	-0.5%
	15Q1	159.4	155.3	4.1	2.6%
	15Q2	350.5	365.0	(14.5)	-4.1%
	Total	1,008.5	1,031.8	(23.2)	-2.3%
2016	15Q3	233.5	251.2	(17.7)	-7.6%
	15Q4	219.5	231.6	(12.1)	-5.5%
	16Q1	186.3	147.5	38.8	20.8%
	16Q2	334.5	345.7	(11.2)	-3.4%
	Total	973.8	976.1	(2.2)	-0.2%
2017	16Q3	242.4	243.4	(1.0)	-0.4%
	16Q4	232.2	238.0	(5.8)	-2.5%
	17Q1	165.1	216.7	(51.6)	-31.3%
	17Q2	391.3	357.1	34.3	8.8%
	Total	1,031.1	1,055.2	(24.2)	-2.3%
2018	17Q3	272.8	267.0	5.9	2.2%
	17Q4	235.2	252.6	(17.4)	-7.4%
	18Q1	138.1	187.9	(49.8)	-36.0%
	18Q2	404.8	410.6	(5.8)	-1.4%
	Total	1,050.9	1,118.0	(67.1)	-6.4%
2019	18Q3	254.0	294.1	(40.1)	-15.8%
	18Q4	269.4	247.9	21.5	8.0%
	19Q1	135.0	137.8	(2.8)	-2.1%
	19Q2	416.3	417.0	(0.7)	-0.2%
	Total	1,074.7	1,096.9	(22.2)	-2.1%
2020	19Q3	292.5	257.5	35.0	12.0%
	19Q4	311.9	293.0	18.9	6.1%
	20Q1	153.5	147.0	6.6	4.3%
	20Q2	478.3	392.4	85.9	18.0%
	Total	1,236.3	1,089.9	146.3	11.8%
2021	20Q3	361.2	323.2	37.9	10.5%
	20Q4	383.3	352.0	31.3	8.2%
	21Q1	179.2	230.5	(51.2)	-28.6%
	21Q2	756.4	614.6	141.8	18.8%
	Total	1,680.1	1,520.3	159.8	9.5%

Recordation Taxes

diff(rec)

$$\begin{aligned}
 &= 0.02959 * \text{diff}(\text{mortorigin}) - 0.08420 * \text{diff}(\text{mortrefi}) \\
 &\quad (0.10831) \qquad\qquad\qquad (0.89158) \\
 &+ 0.70813 * \text{diff}(\text{homepriceind}) - 16.9708 * \text{diff}(\text{rtbond30y.1}) \\
 &\quad (3.56349) \qquad\qquad\qquad (4.15966) \\
 &- 8.04480 * \text{qd1} + 25.3192 * \text{qd2} - 5.08005 \\
 &\quad (3.09472) \quad (9.6106) \quad (3.27240)
 \end{aligned}$$

Sum Sq	2694.76	Std Err	7.6539	LHS Mean	1.2631
R Sq	0.7867	R Bar Sq	0.7589	F	6, 46 28.2779
D.W.( 1)	1.8325	D.W.( 4)	1.7115		

Quarterly data for 53 periods from 2008Q3 to 2021Q3

diff	Quarter-over-quarter difference function
rec	Recordation tax receipts
mortorigin	Total mortgage originations
mortrefi	Total mortgage refinancing
homepriceind	Home price index
rtbond30y.1	Yield on 30-year treasury bond, lagged one quarter
qd1, qd2	Quarterly dummy variables for quarters 1 and 2

## GENERAL FUND METHODOLOGY

### Recordation Taxes

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	78.9	71.9	7.0	8.9%
	11Q4	79.8	85.0	(5.2)	-6.5%
	12Q1	73.5	77.8	(4.3)	-5.8%
	12Q2	89.8	90.7	(0.9)	-1.0%
	Total	322.1	325.4	(3.4)	-1.0%
2013	12Q3	90.7	87.5	3.2	3.5%
	12Q4	92.2	88.7	3.5	3.8%
	13Q1	91.3	80.8	10.5	11.5%
	13Q2	103.3	110.7	(7.4)	-7.2%
	Total	377.5	367.8	9.7	2.6%
2014	13Q3	93.2	97.9	(4.7)	-5.1%
	13Q4	76.2	79.1	(2.8)	-3.7%
	14Q1	60.6	65.6	(5.0)	-8.2%
	14Q2	80.8	87.9	(7.1)	-8.8%
	Total	310.8	330.4	(19.7)	-6.3%
2015	14Q3	87.5	79.7	7.8	9.0%
	14Q4	80.9	87.1	(6.2)	-7.7%
	15Q1	76.1	76.2	(0.0)	-0.1%
	15Q2	101.8	103.3	(1.4)	-1.4%
	Total	346.3	346.2	0.1	0.0%
2016	15Q3	96.0	93.9	2.1	2.2%
	15Q4	90.4	91.4	(1.0)	-1.1%
	16Q1	78.7	77.9	0.8	1.0%
	16Q2	104.0	105.0	(1.1)	-1.0%
	Total	369.1	368.3	0.8	0.2%
2017	16Q3	109.6	104.1	5.6	5.1%
	16Q4	98.5	112.9	(14.4)	-14.6%
	17Q1	80.4	76.8	3.6	4.5%
	17Q2	105.9	102.0	3.9	3.7%
	Total	394.4	395.7	(1.4)	-0.3%
2018	17Q3	107.1	105.8	1.3	1.2%
	17Q4	94.2	105.8	(11.6)	-12.3%
	18Q1	83.1	85.0	(1.9)	-2.3%
	18Q2	110.5	101.9	8.6	7.8%
	Total	394.9	398.5	(3.6)	-0.9%
2019	18Q3	97.4	106.9	(9.5)	-9.8%
	18Q4	93.5	94.4	(1.0)	-1.1%
	19Q1	80.6	80.3	0.3	0.4%
	19Q2	115.0	109.4	5.6	4.9%
	Total	386.5	391.1	(4.6)	-1.2%
2020	19Q3	122.1	116.8	5.3	4.3%
	19Q4	124.2	128.0	(3.8)	-3.1%
	20Q1	107.7	115.5	(7.8)	-7.2%
	20Q2	129.6	133.2	(3.6)	-2.8%
	Total	483.5	493.4	(9.9)	-2.0%
2021	20Q3	165.8	140.1	25.7	15.5%
	20Q4	176.2	167.7	8.5	4.8%
	21Q1	155.4	163.7	(8.2)	-5.3%
	21Q2	182.2	185.2	(3.0)	-1.6%
	Total	679.7	656.7	23.0	3.4%

**Motor Fuels Tax**

gas

$$\begin{aligned}
 = & - 0.00036 * \text{cyrpicva} + 0.45517 * \text{xtnemva} + 24.3433 * \text{jpc} \\
 & \quad (0.31375) \quad (4.05015) \quad (1.20349) \\
 & - 25.2019 * \text{jpgdp} - 0.82405 * \text{jpcsvtspub} + 137.529 * \text{season}_2 \\
 & \quad (1.44728) \quad (0.31615) \quad (5.67867) \\
 & - 15.0193 * \text{season}_3 + 51.1748 * \text{season}_4 - 450.403 \\
 & \quad (0.61596) \quad (2.09031) \quad (1.25201)
 \end{aligned}$$

Sum Sq	715265	Std Err	87.2308	LHS Mean	954.531
R Sq	0.4767	R Bar Sq	0.4321	F 8, 94	10.7027
D.W.( 1)	2.7782	D.W.( 4)	0.4860		

diesel

$$\begin{aligned}
 = & 0.14667 * \text{xtnemva} - 0.00029 * \text{cyrpicva} + 37.0680 * \text{season}_2 \\
 & \quad (4.27700) \quad (2.49369) \quad (4.72449) \\
 & - 5.84377 * \text{season}_3 + 9.10815 * \text{season}_4 - 180.591 \\
 & \quad (0.74517) \quad (1.14915) \quad (2.08604)
 \end{aligned}$$

Sum Sq	77515.6	Std Err	28.2689	LHS Mean	258.926
R Sq	0.4185	R Bar Sq	0.3886	F 5, 97	13.9647
D.W.( 1)	1.5043	D.W.( 4)	0.5669		

GAS	Taxable gallons of gasoline
PDCCENGAS	Gasoline and oil implicit price deflator
PDCCE	Consumer expenditures implicit price deflator
CYRPICVA	Virginia real personal income
SEASON_2	Dummy variable second quarter
SEASON_3	Dummy variable third quarter
SEASON_4	Dummy variable fourth quarter
DIESEL	Taxable gallons of diesel
GDP96	Real gross domestic product
PPIRPP	PPI, refined petroleum products

## NON-GENERAL FUND METHODOLOGY

### Gasoline Consumption

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	802.7	907.0	(104.2)	-13.0%
	11Q4	944.3	977.2	(32.8)	-3.5%
	12Q1	901.8	930.1	(28.2)	-3.1%
	12Q2	1,246.4	1,061.0	185.4	14.9%
	Total	3,895.3	3,875.2	20.1	0.5%
2013	12Q3	706.8	910.2	(203.4)	-28.8%
	12Q4	1,022.5	982.5	40.0	3.9%
	13Q1	904.7	942.1	(37.4)	-4.1%
	13Q2	1,153.5	1,071.1	82.4	7.1%
	Total	3,787.5	3,905.9	(118.4)	-3.1%
2014	13Q3	737.9	919.9	(182.0)	-24.7%
	13Q4	1,023.3	978.2	45.1	4.4%
	14Q1	977.4	928.3	49.1	5.0%
	14Q2	1,129.4	1,068.6	60.8	5.4%
	Total	3,868.0	3,895.0	(26.9)	-0.7%
2015	14Q3	856.3	915.1	(58.8)	-6.9%
	14Q4	989.3	973.4	15.8	1.6%
	15Q1	914.5	918.0	(3.5)	-0.4%
	15Q2	1,241.9	1,066.3	175.6	14.1%
	Total	4,002.0	3,872.8	129.2	3.2%
2016	15Q3	796.4	930.9	(134.5)	-16.9%
	15Q4	1,038.5	1,001.8	36.7	3.5%
	16Q1	959.3	952.5	6.8	0.7%
	16Q2	1,205.6	1,096.4	109.2	9.1%
	Total	3,999.8	3,981.5	18.3	0.5%
2017	16Q3	824.9	951.9	(127.0)	-15.4%
	16Q4	1,056.9	1,014.9	42.0	4.0%
	17Q1	947.0	969.5	(22.5)	-2.4%
	17Q2	1,292.9	1,111.2	181.7	14.1%
	Total	4,121.7	4,047.5	74.2	1.8%
2018	17Q3	827.5	962.1	(134.5)	-16.3%
	17Q4	1,057.0	1,020.4	36.7	3.5%
	18Q1	963.3	985.0	(21.7)	-2.3%
	18Q2	1,263.8	1,126.3	137.5	10.9%
	Total	4,111.7	4,093.7	18.0	0.4%
2019	18Q3	822.9	974.5	(151.6)	-18.4%
	18Q4	983.3	1,025.5	(42.2)	-4.3%
	19Q1	1,095.8	981.2	114.6	10.5%
	19Q2	1,216.8	1,132.3	84.5	6.9%
	Total	4,118.7	4,113.5	5.2	0.1%
2020	19Q3	869.6	982.2	(112.6)	-12.9%
	19Q4	1,032.1	1,038.6	(6.5)	-0.6%
	20Q1	961.1	995.5	(34.4)	-3.6%
	20Q2	950.7	941.9	8.8	0.9%
	Total	3,813.6	3,958.2	(144.7)	-3.8%
2021	20Q3	722.4	880.1	(157.7)	-21.8%
	20Q4	888.7	950.3	(61.6)	-6.9%
	21Q1	915.7	885.9	29.8	3.3%
	21Q2	1,061.9	1,052.5	9.4	0.9%
	Total	3,588.7	3,768.8	(180.1)	-5.0%

## NON-GENERAL FUND METHODOLOGY

### Diesel Fuel Consumption

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	184.8	239.0	(54.2)	-29.3%
	11Q4	257.0	255.6	1.3	0.5%
	12Q1	235.3	247.3	(12.0)	-5.1%
	12Q2	321.3	283.8	37.5	11.7%
	Total	998.3	1,025.7	(27.4)	-2.7%
2013	12Q3	191.6	242.0	(50.4)	-26.3%
	12Q4	261.7	258.4	3.4	1.3%
	13Q1	240.4	254.6	(14.2)	-5.9%
	13Q2	323.7	290.2	33.5	10.4%
	Total	1,017.5	1,045.2	(27.7)	-2.7%
2014	13Q3	204.7	248.4	(43.7)	-21.4%
	13Q4	260.1	263.5	(3.4)	-1.3%
	14Q1	257.0	252.9	4.2	1.6%
	14Q2	307.9	291.9	16.0	5.2%
	Total	1,029.7	1,056.6	(26.9)	-2.6%
2015	14Q3	202.4	248.6	(46.2)	-22.8%
	14Q4	266.5	262.9	3.7	1.4%
	15Q1	243.3	254.5	(11.2)	-4.6%
	15Q2	319.4	295.3	24.1	7.5%
	Total	1,031.7	1,061.3	(29.6)	-2.9%
2016	15Q3	210.4	256.5	(46.1)	-21.9%
	15Q4	257.7	274.0	(16.3)	-6.3%
	16Q1	238.9	264.6	(25.7)	-10.7%
	16Q2	291.1	303.6	(12.5)	-4.3%
	Total	998.1	1,098.7	(100.6)	-10.1%
2017	16Q3	229.6	261.4	(31.9)	-13.9%
	16Q4	263.7	276.6	(12.9)	-4.9%
	17Q1	254.0	269.1	(15.1)	-6.0%
	17Q2	328.1	307.9	20.2	6.2%
	Total	1,075.4	1,115.0	(39.7)	-3.7%
2018	17Q3	200.4	265.2	(64.8)	-32.3%
	17Q4	270.8	279.0	(8.2)	-3.0%
	18Q1	258.8	274.0	(15.3)	-5.9%
	18Q2	330.4	314.5	15.9	4.8%
	Total	1,060.4	1,132.7	(72.3)	-6.8%
2019	18Q3	241.9	271.3	(29.4)	-12.2%
	18Q4	249.3	283.8	(34.6)	-13.9%
	19Q1	289.0	277.4	11.6	4.0%
	19Q2	323.0	318.8	4.2	1.3%
	Total	1,103.2	1,151.3	(48.2)	-4.4%
2020	19Q3	241.9	275.7	(33.8)	-14.0%
	19Q4	236.6	288.5	(51.8)	-21.9%
	20Q1	252.0	280.9	(29.0)	-11.5%
	20Q2	252.0	249.4	2.5	1.0%
	Total	982.5	1,094.6	(112.1)	-11.4%
2021	20Q3	242.2	233.8	8.3	3.4%
	20Q4	272.9	253.7	19.2	7.0%
	21Q1	290.1	235.9	54.2	18.7%
	21Q2	322.3	289.6	32.7	10.1%
	Total	1,127.5	1,013.1	114.4	10.1%

## NON-GENERAL FUND METHODOLOGY

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### Motor Vehicle Sales and Use Tax

log(ttcarsq)

$$\begin{aligned} &= 6.64922 * \text{dlogya}(\text{pdcgdp}) \\ &\quad (6.21153) \\ &+ 1.12389 * \text{movavg}(2, \text{dlogya}(\text{xtnemva}.4)) \\ &\quad (2.64125) \\ &- 0.00000 * \text{diffya}(\text{yrpicva}) + 0.07628 * \text{season}_2 \\ &\quad (0.97933) \quad (3.53751) \\ &+ 0.08047 * \text{season}_3 - 0.09550 * \text{season}_4 + 5.80082 \\ &\quad (3.72994) \quad (4.38292) \quad (218.817) \end{aligned}$$

Sum Sq	0.4724	Std Err	0.0737	LHS Mean	5.9425
R Sq	0.6058	R Bar Sq	0.5786	F 6, 87 2	2.2825
D.W.( 1)	0.8309	D.W.( 4)	1.3868		

newcar

$$\begin{aligned} &= 0.00594 * \text{suvlv} + 0.01653 * \text{season}_2 + 0.01925 * \text{season}_3 \\ &\quad (17.9958) \quad (10.1402) \quad (11.9378) \\ &- 0.00917 \\ &\quad (1.77802) \end{aligned}$$

Sum Sq	0.0066	Std Err	0.0074	LHS Mean	0.0909
R Sq	0.8059	R Bar Sq	0.8011	F 3,121	167.456
D.W.( 1)	0.4637	D.W.( 4)	0.4856		

TTCARSQ	Total taxable titles
PDIGDP	GDP price deflator
XTNEMVA	Virginia non-agricultural employment
YRPICVA	Virginia real personal income
SEASON_2	Dummy variable second quarter
SEASON_3	Dummy variable third quarter
SEASON_4	Dummy variable fourth quarter
NEWCAR	New taxable titles
SUVLV	U.S. new light vehicle sales
RMCLV	Rate on commercial bank loans for new vehicles



## NON-GENERAL FUND METHODOLOGY

### New Taxable Titles (in thousands)

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	83.2	95.6	(12.4)	-14.9%
	11Q4	74.8	80.1	(5.4)	-7.2%
	12Q1	81.6	88.1	(6.5)	-7.9%
	12Q2	95.4	96.3	(0.9)	-0.9%
	Total	335.0	360.1	(25.1)	-7.5%
2013	12Q3	95.1	98.6	(3.4)	-3.6%
	12Q4	81.6	80.9	0.7	0.8%
	13Q1	86.8	83.4	3.3	3.8%
	13Q2	99.1	97.7	1.4	1.4%
	Total	362.6	360.6	2.0	0.5%
2014	13Q3	99.5	96.8	2.7	2.7%
	13Q4	81.1	74.4	6.7	8.2%
	14Q1	81.4	74.4	7.0	8.6%
	14Q2	90.5	93.8	(3.2)	-3.6%
	Total	352.5	339.4	13.1	3.7%
2015	14Q3	102.3	98.8	3.5	3.4%
	14Q4	84.6	84.8	(0.1)	-0.2%
	15Q1	83.9	83.1	0.8	0.9%
	15Q2	103.8	104.7	(0.9)	-0.9%
	Total	374.6	371.4	3.2	0.9%
2016	15Q3	109.5	108.0	1.4	1.3%
	15Q4	91.6	88.9	2.7	3.0%
	16Q1	88.6	87.4	1.2	1.3%
	16Q2	101.4	101.5	(0.1)	-0.1%
	Total	391.0	385.9	5.2	1.3%
2017	16Q3	108.2	105.4	2.7	2.5%
	16Q4	92.3	88.5	3.8	4.1%
	17Q1	92.0	89.5	2.5	2.8%
	17Q2	98.4	102.8	(4.4)	-4.5%
	Total	390.9	386.2	4.7	1.2%
2018	17Q3	103.5	106.1	(2.6)	-2.5%
	17Q4	88.7	88.6	0.0	0.0%
	18Q1	87.7	87.7	0.0	0.0%
	18Q2	97.8	104.4	(6.6)	-6.7%
	Total	377.7	386.8	(9.1)	-2.4%
2019	18Q3	102.4	105.9	(3.6)	-3.5%
	18Q4	90.5	88.3	2.3	2.5%
	19Q1	87.7	88.9	(1.2)	-1.3%
	19Q2	99.4	106.1	(6.8)	-6.8%
	Total	379.9	389.2	(9.3)	-2.4%
2020	19Q3	104.4	109.1	(4.7)	-4.5%
	19Q4	91.1	91.8	(0.6)	-0.7%
	20Q1	87.9	83.4	4.5	5.1%
	20Q2	73.8	68.9	4.9	6.7%
	Total	357.2	353.2	4.1	1.1%
2021	20Q3	98.5	107.3	(8.8)	-8.9%
	20Q4	94.6	91.7	2.9	3.1%
	21Q1	91.9	94.8	(2.9)	-3.1%
	21Q2	113.1	116.8	(3.7)	-3.2%
	Total	398.1	410.6	(12.4)	-3.1%

## NON-GENERAL FUND METHODOLOGY

### Used Taxable Titles (in thousands)

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	276.8	318.1	(41.3)	-14.9%
	11Q4	237.4	258.0	(20.6)	-8.7%
	12Q1	296.0	289.3	6.7	2.3%
	12Q2	285.8	302.5	(16.7)	-5.8%
	Total	1,096.0	1,167.9	(72.0)	-6.6%
2013	12Q3	281.8	304.7	(22.9)	-8.1%
	12Q4	237.1	261.9	(24.9)	-10.5%
	13Q1	280.8	294.6	(13.8)	-4.9%
	13Q2	305.5	307.4	(1.9)	-0.6%
	Total	1,105.1	1,168.6	(63.5)	-5.7%
2014	13Q3	290.0	307.9	(17.9)	-6.2%
	13Q4	241.6	270.6	(29.0)	-12.0%
	14Q1	271.0	300.0	(29.0)	-10.7%
	14Q2	307.7	315.3	(7.6)	-2.5%
	Total	1,110.3	1,193.9	(83.5)	-7.5%
2015	14Q3	289.1	308.5	(19.4)	-6.7%
	14Q4	250.1	243.4	6.7	2.7%
	15Q1	271.6	266.8	4.8	1.8%
	15Q2	306.8	274.2	32.6	10.6%
	Total	1,117.6	1,092.8	24.7	2.2%
2016	15Q3	297.5	269.3	28.1	9.5%
	15Q4	257.4	226.4	31.0	12.1%
	16Q1	291.0	260.1	30.9	10.6%
	16Q2	309.5	278.3	31.3	10.1%
	Total	1,155.4	1,034.1	121.3	10.5%
2017	16Q3	304.0	279.8	24.2	8.0%
	16Q4	266.9	247.7	19.2	7.2%
	17Q1	305.4	293.9	11.5	3.8%
	17Q2	317.8	299.1	18.7	5.9%
	Total	1,194.1	1,120.5	73.6	6.2%
2018	17Q3	304.6	302.3	2.3	0.8%
	17Q4	261.4	254.0	7.3	2.8%
	18Q1	290.8	292.2	(1.4)	-0.5%
	18Q2	317.2	318.9	(1.8)	-0.6%
	Total	1,173.9	1,167.5	6.5	0.6%
2019	18Q3	301.0	317.0	(16.0)	-5.3%
	18Q4	258.2	261.9	(3.7)	-1.4%
	19Q1	296.1	287.2	8.9	3.0%
	19Q2	322.8	295.8	27.0	8.4%
	Total	1,178.2	1,161.9	16.3	1.4%
2020	19Q3	312.3	293.3	19.0	6.1%
	19Q4	271.1	241.9	29.2	10.8%
	20Q1	273.3	285.6	(12.2)	-4.5%
	20Q2	193.1	297.6	(104.4)	-54.1%
	Total	1,049.9	1,118.4	(68.5)	-6.5%
2021	20Q3	294.4	279.7	14.7	5.0%
	20Q4	249.2	237.2	12.0	4.8%
	21Q1	274.4	271.6	2.7	1.0%
	21Q2	323.7	326.7	(3.0)	-0.9%
	Total	1,141.6	1,115.3	26.4	2.3%

Motor Vehicle License Revenues

vehreg1

$$= 0.93937 * \text{vehreg1}[-4] - 0.15383 * \text{vehreg2}[-8]$$

(21.2066)                      (1.74695)

$$+ 46985.5 * \text{origvtff} + 106354$$

(1.46348)                      (2.15260)

Sum Sq	5E+11	Std Err	62362.0	LHS Mean	1197244
R Sq	0.8073	R Bar Sq	0.8025	F 3,119	166.207
D.W.( 1)	1.7600	D.W.( 4)	2.4324		

vehreg2

$$= 1.19469 * (\text{vehreg2.8} * \text{renew}) - 1199.63 * \text{qd2} + 15661.4$$

(26.5630)                      (0.19431)                      (1.65130)

Sum Sq	1E+11	Std Err	29333.6	LHS Mean	260548
R Sq	0.8577	R Bar Sq	0.8553	F 2,120	361.519
D.W.( 1)	0.6776	D.W.( 4)	1.6831		

VEHREG1	One year registrations
VEHREG2	Two year registrations
RENEW2	Percent of two year renewals who maintain the two year interval
QD2	Dummy variable second quarter

## NON-GENERAL FUND METHODOLOGY

### One Year Registrations

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	1,320,807	1,322,500	(1,693)	-0.1%
	11Q4	1,054,684	1,080,267	(25,583)	-2.4%
	12Q1	1,235,555	1,233,438	2,117	0.2%
	12Q2	1,251,833	1,272,113	(20,280)	-1.6%
	Total	4,862,879	4,908,318	(45,439)	-0.9%
2013	12Q3	1,330,752	1,301,668	29,084	2.2%
	12Q4	1,059,221	1,061,684	(2,463)	-0.2%
	13Q1	1,207,727	1,226,039	(18,312)	-1.5%
	13Q2	1,370,117	1,239,491	130,626	9.5%
	Total	4,967,817	4,828,883	138,934	2.8%
2014	13Q3	1,286,444	1,311,866	(25,422)	-2.0%
	13Q4	1,070,701	1,066,661	4,040	0.4%
	14Q1	1,177,663	1,198,625	(20,962)	-1.8%
	14Q2	1,324,308	1,348,824	(24,516)	-1.9%
	Total	4,859,116	4,925,976	(66,860)	-1.4%
2015	14Q3	1,303,376	1,266,559	36,817	2.8%
	14Q4	1,043,487	1,075,071	(31,584)	-3.0%
	15Q1	1,125,800	1,170,633	(44,833)	-4.0%
	15Q2	1,353,553	1,302,111	51,442	3.8%
	Total	4,826,216	4,814,374	11,842	0.2%
2016	15Q3	1,310,587	1,285,095	25,492	1.9%
	15Q4	1,091,163	1,049,352	41,811	3.8%
	16Q1	1,203,707	1,122,901	80,806	6.7%
	16Q2	1,305,838	1,329,585	(23,747)	-1.8%
	Total	4,911,295	4,786,934	124,361	2.5%
2017	16Q3	1,284,089	1,289,025	(4,936)	-0.4%
	16Q4	1,065,690	1,093,638	(27,948)	-2.6%
	17Q1	1,194,429	1,196,798	(2,369)	-0.2%
	17Q2	1,302,104	1,283,483	18,621	1.4%
	Total	4,846,312	4,862,945	(16,633)	-0.3%
2018	17Q3	1,242,320	1,264,737	(22,417)	-1.8%
	17Q4	1,041,436	1,068,376	(26,940)	-2.6%
	18Q1	1,199,940	1,184,018	15,922	1.3%
	18Q2	1,266,694	1,280,767	(14,073)	-1.1%
	Total	4,750,390	4,797,899	(47,509)	-1.0%
2019	18Q3	1,234,621	1,223,566	11,055	0.9%
	18Q4	1,067,739	1,043,766	23,973	2.2%
	19Q1	1,182,279	1,187,765	(5,486)	-0.5%
	19Q2	1,263,417	1,246,115	17,302	1.4%
	Total	4,748,056	4,701,211	46,845	1.0%
2020	19Q3	1,263,017	1,218,453	44,564	3.5%
	19Q4	1,057,058	1,064,976	(7,918)	-0.7%
	20Q1	1,086,420	1,164,070	(77,650)	-7.1%
	20Q2	965,886	1,235,904	(270,018)	-28.0%
	Total	4,372,381	4,683,402	(311,021)	-7.1%
2021	20Q3	1,166,725	1,235,165	(68,440)	-5.9%
	20Q4	961,479	1,049,977	(88,498)	-9.2%
	21Q1	1,017,152	1,072,947	(55,795)	-5.5%
	21Q2	1,031,040	956,599	74,441	7.2%
	Total	4,176,396	4,314,687	(138,291)	-3.3%

## NON-GENERAL FUND METHODOLOGY

### Two Year Registrations

	<u>Fiscal Year</u>	<u>Actual</u>	<u>Fitted</u>	<u>Residual</u>	<u>% Residual</u>
2012	11Q3	298,282	296,763	1,519	0.5%
	11Q4	234,104	242,807	(8,703)	-3.7%
	12Q1	286,257	276,730	9,527	3.3%
	12Q2	296,383	315,253	(18,870)	-6.4%
	Total	1,115,026	1,131,554	(16,528)	-1.5%
2013	12Q3	329,923	323,847	6,076	1.8%
	12Q4	252,382	258,587	(6,205)	-2.5%
	13Q1	285,852	293,052	(7,200)	-2.5%
	13Q2	328,063	306,804	21,259	6.5%
	Total	1,196,220	1,182,291	13,929	1.2%
2014	13Q3	308,108	316,547	(8,439)	-2.7%
	13Q4	255,044	252,692	2,352	0.9%
	14Q1	280,728	304,583	(23,855)	-8.5%
	14Q2	326,511	314,710	11,801	3.6%
	Total	1,170,391	1,188,533	(18,142)	-1.6%
2015	14Q3	330,347	348,029	(17,682)	-5.4%
	14Q4	256,512	270,878	(14,366)	-5.6%
	15Q1	270,965	304,180	(33,215)	-12.3%
	15Q2	339,195	346,231	(7,036)	-2.1%
	Total	1,197,019	1,269,318	(72,299)	-6.0%
2016	15Q3	326,940	326,324	616	0.2%
	15Q4	268,453	273,527	(5,074)	-1.9%
	16Q1	303,775	299,082	4,693	1.5%
	16Q2	333,097	344,687	(11,590)	-3.5%
	Total	1,232,265	1,243,619	(11,354)	-0.9%
2017	16Q3	344,522	348,451	(3,929)	-1.1%
	16Q4	284,256	274,988	9,268	3.3%
	17Q1	314,861	289,368	25,493	8.1%
	17Q2	345,999	357,307	(11,308)	-3.3%
	Total	1,289,638	1,270,113	19,525	1.5%
2018	17Q3	328,067	345,061	(16,994)	-5.2%
	17Q4	310,698	286,868	23,830	7.7%
	18Q1	372,289	322,013	50,276	13.5%
	18Q2	402,900	351,239	51,661	12.8%
	Total	1,413,954	1,305,182	108,772	7.7%
2019	18Q3	405,809	362,555	43,254	10.7%
	18Q4	350,744	302,592	48,152	13.7%
	19Q1	385,882	333,043	52,839	13.7%
	19Q2	417,039	364,077	52,962	12.7%
	Total	1,559,474	1,362,266	197,208	12.6%
2020	19Q3	418,853	346,183	72,670	17.3%
	19Q4	350,465	328,901	21,564	6.2%
	20Q1	373,041	390,182	(17,141)	-4.6%
	20Q2	361,360	420,691	(59,331)	-16.4%
	Total	1,503,719	1,485,957	17,762	1.2%
2021	20Q3	389,820	423,534	(33,714)	-8.6%
	20Q4	399,497	368,745	30,752	7.7%
	21Q1	495,651	403,707	91,944	18.6%
	21Q2	493,669	434,759	58,910	11.9%
	Total	1,778,637	1,630,745	147,892	8.3%

## **NON-GENERAL FUND METHODOLOGY**

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### **ABC Revenue Estimating Methodology**

Distilled spirit sales revenues are a function of the price of product and quantity sold. Both are forecasted using separate models with quarterly data from 1981 through the present. The price of distilled spirits is a function of the cost of product and the appropriate state and federal taxes and mark-ups. Sales estimates serve as the basis for the development of pro forma profit and loss statements. Sales performance can be significantly influenced by changes in consumer behavior (primarily during the holiday period) and severe weather that are both impossible to accurately forecast. Expenses are estimated based on anticipated budget requirements during the forecasting period. Variations in anticipated expenses are often the source of forecasting error, particularly in the later years of the forecast.

### **Average Price of Distilled Spirits**

The average sales price per gallon of distilled spirits sold was calculated for each quarter. This was adjusted to account for changes in mark-up, state taxes, and the Federal Excise Tax on distilled spirits. The resulting base price was forecasted using an ARIMA model that was found to fit the data better than previous regression-based forecasting methods.

Statistical Results:

Mean Squared Error = .04

$R^2 = 98.1\%$

### **Quantity of Liquor Demanded**

Again, a variety of modeling techniques and data were evaluated to forecast the demand for distilled spirits. The Winter's Multiplicative exponential smoothing method provided the best fit for the data.

Statistical Results:

Mean Squared Error = .001

$R^2 = 98.7\%$