

The Economic Outlook and Revenue Forecast through Fiscal Year 2018

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

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GOVERNOR'S CONFIDENTIAL WORKING PAPERS

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Introduction

At the time of last year's meeting, national economic growth had shown improvement and underlying fundamentals suggested a more robust expansion over the coming year. IHS Economics expected accelerating growth through 2015.

In Virginia, the economic recovery continued, albeit at a sluggish pace. Sequestration at the federal level was proving to be a drag on growth in the Commonwealth. Due to the uncertainty at the federal level, both the Joint Advisory Board of Economists (JABE) and the Governor's Council on Revenue Estimates (GACRE) recommended a "pessimistic plus" economic outlook for Virginia at last fall's meetings.

Economic conditions in the Commonwealth were slightly below expectations in fiscal year 2015. Employment growth was very close to forecast; however, income growth was below expectations. The fiscal year ended with a record surplus in general fund revenue collections, mainly attributable to strong net individual income tax collections.

The JABE met in October of this year to discuss the economic outlook for Virginia and review the most current forecasts: the IHS September standard forecast, and the alternative pessimistic scenario. As the September standard was close to the "pessimistic plus" outlook adopted last year, almost all members believed the September standard forecast was the most likely path for the Virginia economy in fiscal year 2016. Almost all members recommended that the forecast for fiscal years 2017 and 2018 should remain conservative.

The IHS U.S. October standard forecast replaces the U.S. September forecasts presented to JABE and was incorporated into the Virginia model. With the JABE recommendations, the standard forecast remains virtually unchanged for fiscal year 2016, while fiscal years 2017 and 2018 are moderately reduced.

The purpose of this meeting, as part of the regular fall forecasting process, is to review the most current economic forecasts of IHS Economics to determine the most likely path for the Virginia economy over the current and next biennium, and which of the general fund revenue forecasts seems most 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 2015. Summaries of IHS Economics October standard and alternative pessimistic national outlooks are presented.

Section 2 contains a review of Virginia's economic performance during fiscal year 2015. This is followed by a summary of the standard forecast developed by the Department of Taxation using the IHS Economics October standard national forecast. The section

closes with discussions of the alternative forecast for the Virginia economy, the IHS Economics pessimistic scenario.

Historical and forecast economic data are contained in Appendix A.

Section 3 contains a review of Virginia's general fund revenue collections during fiscal year 2015. This is followed by a summary of the October standard and pessimistic alternative revenue forecasts. Section 4 discusses non-general 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 begins with a review of fiscal year 2015, comparing actual U.S. economic growth to the official forecast for the year. The official forecast for fiscal year 2015 was based on IHS Economics November 2014 U.S. standard outlook as approved by the Joint Advisory Board of Economists (JABE) and the Governor's Advisory Council on Revenue Estimates (GACRE).

Following the review of fiscal year 2015, the October standard forecast is summarized. The section concludes with an overview of IHS Economics October 2015 pessimistic alternative scenario.

Tabular data are presented throughout this section. More detailed tabular data are presented in the appendices. Appendix A-1 shows quarterly historical data for major forecast variables from fiscal year 2013 through fiscal year 2015. Appendix A-2 shows quarterly data for the two forecasts through fiscal year 2018. Appendix A-3 displays annual historical and forecast data from fiscal year 2008 through fiscal year 2018. Appendix A-4 displays regional employment data from fiscal year 1996 through fiscal year 2018.

Review of Fiscal Year 2015

The economy performed close to expectations in fiscal year 2015. At the time of IHS Economics November 2014 forecast, the economy continued to improve and underlying fundamentals seemed to support a more robust expansion.

Following is a summary of key assumptions included in the November 2014 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 2015.

- Real GDP rose 2.7 percent for the fiscal year, ahead of the forecast of 2.5 percent growth.
- Total personal income rose 4.6 percent in fiscal year 2015, close to the forecast of 4.5 percent growth. Wages and salaries grew 4.9 percent, 0.1 percentage point below the forecast of 5.0 percent.

Table 1.1 - Fiscal Year 2015 U.S. Forecast Performance

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	Forecast	Actual	Actual Minus Forecast
Output, Income, and Spending (% Change)	rolecast	Actual	lolecast
<u> </u>	0.5	o =	2.2
Real GDP	2.5	2.7	0.2
Total Personal Income	4.5	4.6	0.1
Wages and Salaries (51%)	5.0	4.9	(0.1)
Average Wage	3.0	2.7	(0.3)
Real Consumer Spending	2.4	3.2	8.0
Employment and Labor Markets (% Change)			
Total Nonagricultural Employment	1.9	2.1	0.2
Construction (5%)	4.0	4.8	0.8
Manufacturing (9%)	1.1	1.6	0.5
Trade, Transportation, and Utilities (19%)	1.8	2.1	0.3
Information (2%)	1.7	1.8	0.1
Financial Activities (6%)	1.3	1.7	0.4
Professional and Business Services (14%)	3.9	3.4	(0.5)
Education and Health Services (15%)	2.1	2.3	0.2
Leisure and Hospitality (11%)	2.4	3.1	0.7
Other Services (4%)	0.8	1.5	0.7
Government (16%)	0.3	0.3	0.0
Unemployment Rate (%)	5.8	5.7	(0.1)
Interest Rates (% Change)			
3-Month Treasury Bills	0.1	0.0	(0.1)
30-Year Treasury Bonds	3.4	2.9	(0.5)
Prices (% Change)			
CPI	1.2	0.7	(0.5)
GDP Deflator	1.7	1.3	(0.4)
ODI Dellatoi	1.7	1.0	(0.4)

The Official forecast is IHS' Economics November 2014 U.S. standard scenario.

- Real consumer spending rose 3.2 percent in fiscal year 2015, ahead of the forecast of 2.4 percent.
- Total nonagricultural employment grew 2.1 percent, close to the forecast of 1.9 percent. Most sectors finished the year ahead of expectations. The largest variance from the forecast was in the construction sector, which grew 4.8 percent, ahead of the forecast of 4.0 percent growth. The only sector below forecast was professional and business services.

- The increase in the CPI of 0.7 percent trailed the forecast by 0.5 percentage point, while the GDP deflator increased 1.3 percent compared with the forecast of 1.7 percent.
- IHS Economics expected the Fed to keep the target federal funds rate steady at 0.0 percent to 0.25 percent until mid-2015, and end its quantitative easing program in 2014. The target rate remained unchanged at 0.0 percent and the Fed scaled back its quantitative easing program.

Recent Developments in the U.S. Economy

Most recent indicators suggest that the U.S. economy is poised for further growth. According to the first estimate, real GDP rose at an annualized rate of 1.5 percent in the third quarter of 2015, following 3.9 percent growth in the second quarter, and near consensus expectations. Real final sales to domestic purchasers, GDP less trade and inventories, rose 2.9 percent in the third quarter, which is well above the more recent trend.

Conditions in the labor market weakened somewhat in September. Payroll employment rose by only 142,000 jobs, far below expectations. In addition, gains in July and August were revised downward. In a separate report, the unemployment rate was unchanged at 5.1 percent as employment declined and more workers left the labor force. Initial claims for unemployment fell by 13,000 to 263,000 during the week ending October 3. The four-week moving average fell by 3,000 to 267,500. The level of claims is consistent with a healthy job market.

With four of the ten components decreasing, the Conference Board's index of leading indicators declined 0.2 percent in September following a slight increase in August. Despite the decline, the index is consistent with moderate economic growth.

Activity in the manufacturing sector weakened in September, with the Institute of Supply Management index falling from 51.1 to 50.2. It has remained above the expansionary threshold of 50.0 for 33 consecutive months.

Driven by falling oil prices, the CPI fell 0.2 percent in September and stands equal to September 2014. Core inflation (excluding food and energy prices) increased 0.2 percent in September and stands 1.9 percent above a year ago. The Federal Reserve announced at its October meeting that it will keep the federal funds target rate at 0.0 to 0.25 percent.

The IHS Economics U.S. Standard Forecast for Fiscal Years 2016-2018

Tables 1.2 and 1.3 at the end of this section compare the official November 2014 forecast with two other forecasts: the IHS Economics October 2015 standard and pessimistic alternative forecasts.

In the October standard forecast, growth is close to the official forecast. IHS Economics believes solid underlying fundamentals will allow the U.S. economy to continue its modest expansion, with real GDP growth of 1.9 percent in the third quarter of calendar year 2015 and 2.7 percent in the fourth quarter. Continued growth in employment and gradual acceleration in wage gains should support GDP growth. IHS Economics assigns a 65 percent probability to the standard scenario.

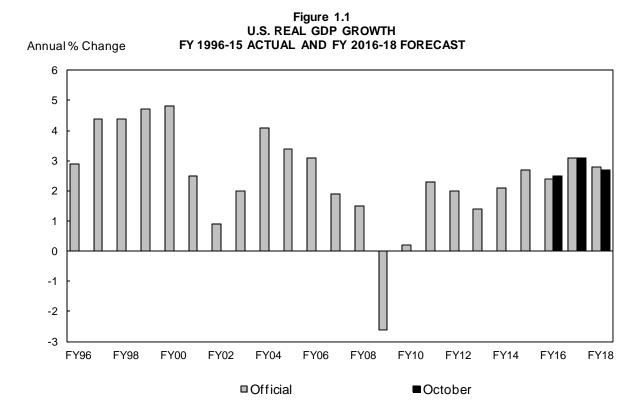
IHS expects real GDP growth of 2.5 percent in fiscal year 2016, slightly slower than fiscal year 2015, and close to the official forecast. It is then expected to pick up to 3.1 percent in fiscal year 2017, and 2.7 percent in fiscal year 2018. Figure 1.1 on the following page depicts GDP growth.

The outlook for the job market in the October standard forecast is slightly ahead of the official forecast in fiscal years 2016 through 2018. Payroll employment is expected to grow 1.8 percent in fiscal year 2016, 1.4 percent in fiscal year 2017, and 1.3 percent in fiscal year 2018. The October standard forecast expects the unemployment rate to fall more quickly than predicted in the official forecast. In the October forecast, the unemployment rate falls slightly to 5.1 percent in fiscal year 2016, and dips further to 4.9 percent in fiscal year 2018.

Total personal income is expected to rise by 4.3 percent in fiscal year 2016, slightly below the official forecast. Income growth then increases to 5.1 percent in fiscal year 2017, again below the official forecast. The October forecast for the largest component of personal income, wages and salaries, is lower than the official estimate in fiscal year 2016, and exceeds the official estimate in fiscal year 2017 and in fiscal year 2018. IHS Economics expects wages and salaries to rise 4.0 percent in fiscal year 2016.

Consumers are more likely to resume spending in the October standard forecast. Real consumer spending is expected to grow 3.3 percent in fiscal year 2016, compared with 2.9 percent in the official forecast. Growth rises to 3.2 percent in fiscal year 2017, close to the 3.1 percent in the official forecast.

IHS Economics assumes that recent volatility of worldwide equity markets will lead the Federal Reserve to postpone the first rate hike until December, with the federal funds rate target hitting 0.5 percent by the end of 2015, 1.5 percent by the end of 2016, and peaking at 3.25 percent by the end of 2018.



Alternative U.S. Forecast

IHS Economics Pessimistic Alternative Scenario

In the pessimistic scenario, the recent panic in global equity markets triggers a sharp downturn in the U.S. stock market. Consumer confidence declines in reaction to the stock market slump, and remains pessimistic. Oversupply in global oil markets causes the price of petroleum to remain depressed, contributing to layoffs in energy-related sectors of the US economy. Meanwhile, volatility in international markets causes risk-averse investors to seek security in U.S. assets, pushing up the value of the dollar, and in turn decreasing the competitiveness of U.S. exports. The Federal Reserve chooses to delay raising interest rates. The expected housing recovery stalls and the economy stagnates with real GDP increasing just 0.7% (annualized) in the first quarter of 2016, versus 2.9% in the baseline. Employers scale back on hiring, with nonfarm payroll employment rising by only 70,000 per month on average in 2016 (compared with 180,000 in the baseline).

Unemployment resumes its increase and remains elevated. Rates over 6% become a "new normal." IHS Economics assigns a 20 percent probability to the pessimistic scenario.

Real GDP increases by only 1.8 percent a year in fiscal years 2016 and 1.8 percent in 2017, before rising to 2.4 percent in fiscal year 2018. Total personal income increases by 3.8 percent in fiscal year 2016, 3.3 percent in fiscal year 2017 and 4.2 percent in 2018.

Wages and salaries grow by only 3.4 percent in fiscal year 2016 and 3.4 percent in 2017, and remain below the standard forecast through fiscal year 2018. The pessimistic scenario has employment growth dropping to 1.5 percent in fiscal year 2016, 0.6 percent in fiscal year 2017 and 0.9 percent in fiscal year 2018, lagging the standard forecast over the forecast horizon.

Table 1.2 - Fiscal Years 2013-2018 Official, October Standard and Pessimistic Forecasts
U.S. Economic Forecasts - Income and Other Indicators

		FY13	FY14	FY15	FY16	FY17	FY18
Output, Income, and Spending (% Change)							
Real GDP	Official (Nov '14) Oct Standard Oct Pessimistic	2.0 1.4	2.5 2.1	2.5 2.7 2.7	2.4 2.5 1.8	3.1 3.1 1.8	2.8 2.7 2.4
Total Personal Income	Official (Nov '14) Oct Standard Oct Pessimistic	4.0 3.5	2.7 2.3	4.5 4.6 4.6	4.5 4.3 3.8	5.4 5.1 3.3	5.4 5.4 4.2
Wages and Salaries (51%)	Official (Nov '14) Oct Standard Oct Pessimistic	3.9 3.8	3.6 3.7	5.0 4.9 4.9	4.7 4.0 3.4	5.0 5.2 3.4	5.1 5.2 4.4
Average Wage	Official (Nov '14) Oct Standard Oct Pessimistic	2.3 2.2	1.8 1.9	3.0 2.7 2.7	3.1 2.2 1.9	3.6 3.7 2.8	4.0 3.9 3.4
Real Consumer Spending	Official (Nov '14) Oct Standard Oct Pessimistic	2.1 1.4	2.4 2.1	2.4 3.2 3.2	2.9 3.3 2.9	3.1 3.2 2.3	2.9 2.9 2.3
Interest Rates (%)							
3-Month Treasury Bills	Official (Nov '14) Oct Standard Oct Pessimistic	0.1 0.1	0.0 0.0	0.1 0.0 0.0	0.9 0.3 (0.0)	2.5 1.3 (0.0)	3.5 2.3 0.2
30-Year Treasury Bonds	Official (Nov'14) Oct Standard Oct Pessimistic	3.0 3.0	3.7 3.7	3.4 2.9 2.9	4.1 3.1 2.9	4.4 3.4 2.7	4.6 3.6 2.8
Prices (% Change)							
CPI	Official (Nov '14) Oct Standard Oct Pessimistic	1.7 1.7	1.6 1.6	1.2 0.7 0.7	1.3 0.8 0.5	1.8 2.2 1.8	2.3 2.6 2.7
GDP Deflator	Official (Nov '14) Oct Standard Oct Pessimistic	1.7 1.8	1.5 1.6	1.7 1.3 1.3	1.8 1.6 1.5	1.8 1.9 1.4	1.9 2.0 1.8

The Official forecast for FY15 - FY18 is IHS' Economics November 2014 U.S. standard scenario.

The Oct Standard forecast is IHS' Economics October 2015 U.S. standard forecast.

The Oct Pessimistic forecast is IHS' Economics October 2015 U.S. pessimistic alternative scenario.

Table 1.3 - Fiscal Years 2013-2018 Official, October Standard and Pessimistic Forecasts
U.S. Economic Forecasts - Employment and Labor Markets

Employment and Labor Markets (% Change)		<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Total Nonagricultural Employment	Official (Nov '14) Oct Standard Oct Pessimistic	1.6 1.6	1.7 1.8	1.9 2.1 2.1	1.6 1.8 1.5	1.4 1.4 0.6	1.0 1.3 0.9
Construction (4%)	Official (Nov '14) Oct Standard Oct Pessimistic	2.4 2.4	3.2 4.4	4.0 4.8 4.8	6.2 2.9 2.4	6.8 5.8 3.5	6.1 5.2 3.2
Manufacturing (9%)	Official (Nov '14) Oct Standard Oct Pessimistic	1.2 1.2	0.6 0.9	1.1 1.6 1.6	0.9 0.1 (0.2)	0.2 0.9 (0.4)	0.2 1.0 0.8
Trade, Transportation, and Utilities (19%)	Official (Nov '14) Oct Standard Oct Pessimistic	1.3 1.3	2.0 1.9	1.8 2.1 2.1	1.2 1.8 1.6	0.9 0.7 0.1	0.6 0.6 0.5
Financial Activities (6%)	Official (Nov '14) Oct Standard Oct Pessimistic	1.2 1.3	1.0 1.2	1.3 1.7 1.7	(0.1) 1.3 0.5	(0.4) (1.1) (1.8)	(1.4) (1.1) (1.0)
Professional and Business Services (14%)	Official (Nov '14) Oct Standard Oct Pessimistic	3.4 3.3	3.7 3.1	3.9 3.4 3.4	3.9 3.2 2.3	3.7 4.5 1.7	1.6 2.7 2.2
Education and Health Services (15%)	Official (Nov '14) Oct Standard Oct Pessimistic	2.1 2.1	1.8 1.7	2.1 2.3 2.3	1.6 2.6 2.6	1.3 1.7 2.0	0.7 1.0 1.1
Leisure and Hospitality (10%)	Official (Nov '14) Oct Standard Oct Pessimistic	3.2 3.2	3.2 3.4	2.4 3.1 3.1	1.7 2.6 2.7	0.4 0.9 0.6	1.7 1.4 0.9
Government (16%)	Official (Nov '14) Oct Standard Oct Pessimistic	(0.4) (0.4)	(0.1) (0.2)	0.3 0.3 0.3	0.4 0.6 0.6	0.7 0.5 0.0	1.1 1.1 0.4
Unemployment Rate (%)	Official (Nov '14) Oct Standard Oct Pessimistic	7.8 7.8	6.8 6.8	5.8 5.7 5.7	5.6 5.1 5.3	5.4 5.0 5.6	5.3 4.9 5.7

The Official forecast for FY15 - FY18 is IHS' Economics November 2014 U.S. standard scenario.

The Oct Standard forecast is IHS' Economics October 2015 U.S. standard forecast.

The Oct Pessimistic forecast is IHS' Economics October 2015 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 2015, comparing actual economic growth in Virginia to the official forecast for the year. The official forecast for Virginia was based on IHS Economics November 2014 U.S. standard forecast with modifications from both the JABE and the GACRE at their fall meetings, which resulted in a slower growth, "pessimistic plus" forecast. Following the review of fiscal year 2015, the October standard and pessimistic forecasts are summarized.

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 2013 through fiscal year 2015. Table A.2 shows quarterly national and Virginia data for the three forecasts through fiscal year 2018. Table A.3 displays national and Virginia annual historical and forecast data from fiscal year 1996 through fiscal year 2018. Table A.4 displays annual regional historical and forecast employment data from fiscal year 1996 through fiscal year 2018.

The state and regional employment data used in the forecast are the result of a methodology that uses unemployment insurance tax records (ES-202) data to fine tune the current employment statistics (CES) survey data. To ensure that the most current Virginia employment data are used in the forecast, ES-202 data through the fourth quarter of calendar year 2014 have been incorporated into the CES employment data series. The revised employment series is then seasonally adjusted. This process yields a projection of the annual benchmark revisions that the Virginia Employment Commission will release early next calendar year. The table below compares the base CES employment data series with the series incorporating ES-202 data.

<u>FY15</u>	<u>CES</u>	ES202
Q1	0.5	0.6
Q2	0.7	0.7
Q3	0.9	0.9
Q4	1.1	1.0
Annual	0.8	0.8

Review of Fiscal Year 2015

Overview

In the official forecast for fiscal year 2015, employment and personal income in Virginia were expected to grow at a faster pace than in fiscal year 2014. Table 2.1 compares the official forecast and actual results for fiscal year 2015.

Table 2.1 - Fiscal Year 2015 Virginia Forecast Performance

Table 2.1 - Fiscal Year 2015 Virginia For	ecast Perfori	nance	
	Forecast	A atual	Actual Minus
la (0/ Oh)	<u>Forecast</u>	Actual	Forecast
Income (% Change)			
Total Personal Income	3.7	3.9	0.2
Wages and Salaries (51%)	3.4	3.0	(0.4)
Average Wage	2.5	2.2	(0.3)
Dividends, Interest, and Rent (20%)	3.3	3.7	0.4
Supplements to Wages and Salaries (12%)	3.1	1.9	(1.2)
Proprietor's Income (7%)	4.2	7.2	3.0
Net Transfer Payments (6%)	3.8	8.5	4.7
Employment and Labor Markets (% Change)			
Total Nonagricultural Employment	0.9	0.8	(0.1)
Construction and Mining (5%)	2.1	2.0	(0.1)
Manufacturing (6%)	0.3	0.4	0.1
Trade, Transportation, and Utilities (17%)	0.8	1.0	0.2
Information (2%)	(0.7)	(1.1)	(0.4)
Financial Activities (5%)	1.5	1.3	(0.2)
Professional and Business Services (18%)	0.8	0.7	(0.1)
Education and Health Services (13%)	1.4	1.5	0.1
Leisure and Hospitality (10%)	2.2	0.5	(1.7)
Other Services (5%)	0.2	0.7	0.5
Government (19%)	0.1	0.2	0.1
Unemployment Rate (%)	5.0	4.9	(0.1)

The forecast data are based on the November 2014 IHS' Economics U.S. standard forecast and the corresponding Virginia state forecast developed as recommended by JABE and GACRE members.

Following is a review of key assumptions included in the November 2014 official forecast compared with the actual outcome for the year.

<u>Income</u>

Total personal income increased 3.9 percent, 0.2 percentage point ahead of the forecast; net transfer payments, which increased by 8.5 percent, were 4.7 percentage points above the forecast; and proprietor's income, rose 7.2 percent instead of the predicted 4.2 percent. Dividends, interest, and rental income, which made up 20 percent of total personal income in fiscal year 2015, grew 3.7 percent, ahead of the forecast. Supplements to wages and salaries finished 1.2 percentage points behind the forecast. Wages and salaries, which accounted for 51 percent of total personal income in fiscal year 2015, grew 3.0 percent or 0.4 percentage points below the forecast.

Employment

Payroll employment growth slightly underperformed expectations in fiscal year 2015. In the official forecast, total nonagricultural employment was projected to increase 0.9 percent, with the average annual employment level rising by 33,800 jobs. Actual job gains were 29,300, an increase of 0.8 percent. Lower-than-expected gains for the leisure and hospitality sector, financial activities, and the professional and business services sector were offset by higher-than-expected gains in the trade, transportation, and utilities sector and the education and health services sector. Overall, five out of ten major employment sectors met or exceeded the official forecast in fiscal year 2015.

In terms of the number of jobs, the largest variance was concentrated in the leisure and hospitality sector, which was expected to gain 8,200 jobs, however, only gained 1,700 jobs. Professional and business services gained 4,500 jobs; this sector underperformed the forecasted gain of 5,200 jobs. Government added 1,400 jobs (state and local government gains more than offset a decline of 1,800 in federal government), instead of gaining the predicted 1,000 jobs. Figure 2.1 on the following page displays fiscal year 2015 job gains and losses by sector compared with fiscal year 2014.

Tables 2.4 and 2.5 provide an overview of regional employment in Virginia. On a regional basis, employment in Northern Virginia exceeded expectations. While the Richmond-Petersburg area and Hampton Roads underperformed expectations. In Northern Virginia, which represents 37 percent of all jobs in the state, total employment rose by 14,400 jobs, above the predicted amount of 10,900. The professional and business services sector added 2,800 new jobs in fiscal year 2015, up from a loss of 6,900 in fiscal year 2014. Education and health services added 4,900 jobs, up from 1,600 in fiscal year 2014. State and local government added 2,500 jobs, while the federal government lost 1,400 jobs.

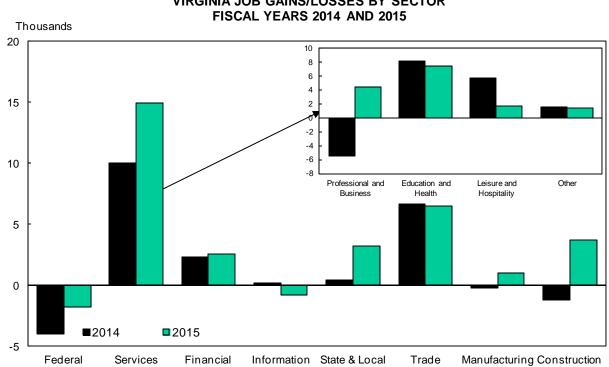


Figure 2.1
VIRGINIA JOB GAINS/LOSSES BY SECTOR
FISCAL YEARS 2014 AND 2015

Employment in the Norfolk-Virginia Beach-Newport News MSA (20 percent of state employment) was below expectations in fiscal year 2015, rising by 0.3 percent compared with the forecast of 1.4 percent growth. The region gained 2,000 jobs in fiscal year 2015, compared with 4,800 in 2014. The professional and business services sector outperformed the forecast, while all other sectors underperformed. Employment in the tourism industry and government, long staples of the area economy, both declined.

Employment in the Richmond-Petersburg MSA (16 percent of state employment) was below expectations by growing 1.2 percent in fiscal year 2015, behind the forecast of 1.7 percent. The region gained 7,500 jobs in fiscal year 2015, compared with 8,400 in 2014. Construction and state and local government posted employment gains, while leisure and hospitality lost jobs.

Outside of the three major metro areas, the remainder of the state (27 percent of state employment) increased 5,400 jobs in fiscal year 2015, close to the forecasted gain. Financial activities and construction posted employment gains, while trade and leisure and hospitality lost jobs.

Recent Developments in the Virginia Economy

In Virginia, payroll employment rose 0.9 percent in September from September of last year. Northern Virginia posted growth of 2.0 percent, Hampton Roads grew 0.8 percent, and Richmond-Petersburg fell 0.1 percent. The seasonally adjusted unemployment rate fell 0.2 percentage point to 4.3 percent in September, the lowest level since September 2008 when it was 4.3 percent.

The Virginia Leading Index rose 0.2 percent in September after rising 0.4 percent in August. Initial claims improved in September, while auto registrations and U.S. leading index declined. The indexes for Northern Virginia, Hampton Roads, Charlottesville, Harrisonburg, Winchester, Lynchburg, Blacksburg, Bristol, Richmond, and Staunton advanced, while the indexes for Roanoke declined.

The October Standard Forecast for Fiscal Years 2016 through 2018

This section compares the official forecast, IHS Economics November 2014 forecast with two other forecasts currently under consideration. Tables 2.2 and 2.3 compare the official forecast with IHS Economics October 2015 standard forecast and the pessimistic alternative scenario. The October standard forecast also incorporates the recommendations from the JABE members. Tables 2.4 and 2.5 show the October 2015 standard forecast and the pessimistic alternative scenario for regional employment. All four tables appear at the end of the section.

In the official forecast, economic growth in the Commonwealth was projected to moderately accelerate in fiscal year 2016 relative to fiscal year 2015. The October standard forecast concurs with this outlook and assumes that Virginia will grow slower than the nation in terms of employment and personal income. Federal government spending declined 0.3 percent in calendar year 2015 as the impact of sequestration phased out. Federal government spending is expected to move to a neutral position throughout the forecast horizon. Figure 2.2 on the next page compares employment growth in Virginia with that of the nation, while Figure 2.3 provides the same comparison for personal income.

As shown in Figure 2.4, according to the October standard forecast, total nonagricultural employment is expected to increase 1.5 percent (55,000 jobs) in fiscal year 2016, slightly above the official forecast of 1.4 percent growth. The professional and business services sector and the construction sector are expected to be the main drivers over the forecast horizon. Overall, employment is expected to increase 1.3 percent in fiscal year 2017, below the official forecast of 1.8 percent.

Figure 2.2
U.S. AND VIRGINIA EMPLOYMENT GROWTH
HISTORY AND FORECAST - FISCAL YEARS 1992-2018

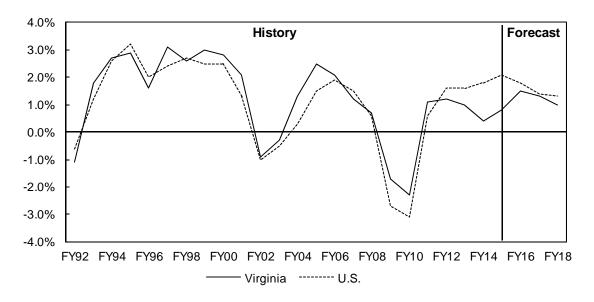
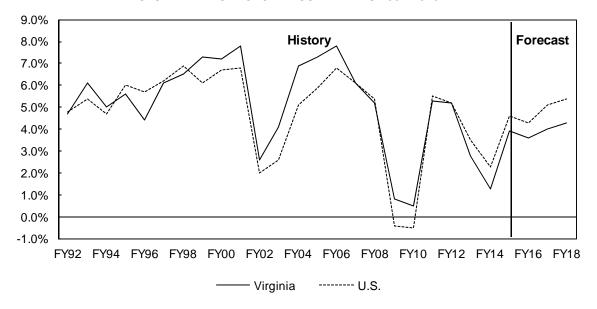


Figure 2.3
U.S. AND VIRGINIA PERSONAL INCOME GROWTH
HISTORY AND FORECAST - FISCAL YEARS 1992-2018



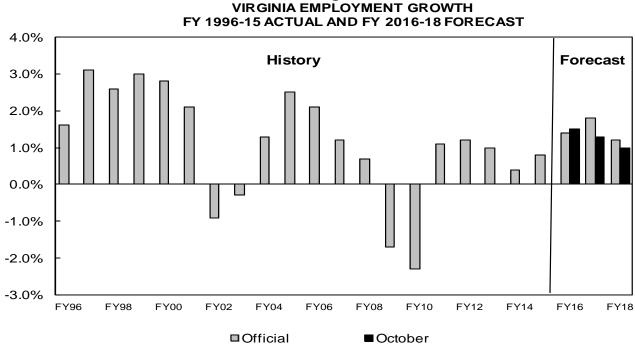


Figure 2.4

In the October standard forecast, total personal income is expected to grow somewhat slower in fiscal years 2016, 2017 and 2018 than in the official forecast. Growth of 3.6 percent is expected in fiscal year 2016, then trails the official forecast by about 0.7

percentage points in fiscal years 2017 and 2018. Personal income growth increases to 4.0 percent in fiscal year 2017 and to 4.3 percent by fiscal year 2018. Income from wages and salaries is expected to grow 3.8 percent in fiscal year 2016 and 4.3 percent in fiscal year 2017, 0.3 percentage points above and 0.3 percentage points less than the official forecast,

respectively. Growth of dividends, interest, and rental income is expected to increase 5.5 percent in fiscal year 2016, and then taper off to a 4.9 percent increase in fiscal year 2017.

The outlook for proprietor's income is quite different from the official forecast: the October standard forecast predicts a 4.3 percent increase in fiscal year 2016 and 2.2 percent in 2017, as opposed to much weaker growth in the official forecast. Net transfer payments are expected to increase 2.9 percent in fiscal year 2016, and then increase to 0.4 percent and 0.1 percent in fiscal years 2017 and 2018, respectively. Figures 2.5 and 2.6 on

the following page chart the annual percent change in personal income and wages and salaries, comparing the official forecast with the October standard forecast.



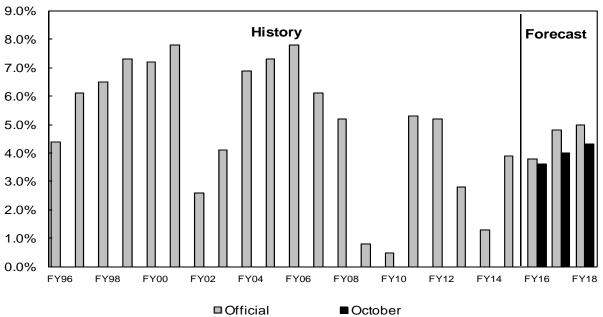
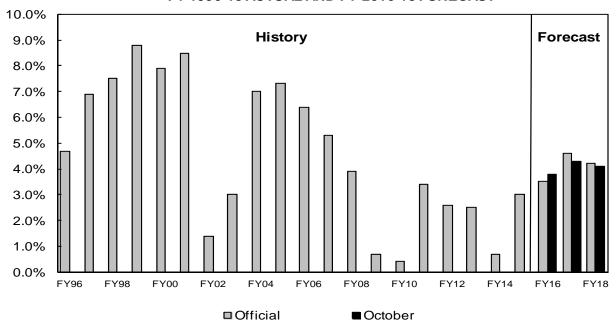


Figure 2.6
VIRGINIA WAGES AND SALARIES GROWTH
FY 1996-15 ACTUAL AND FY 2016-18 FORECAST



IHS' Economics' Pessimistic Alternative Scenario

In the Virginia pessimistic alternative forecast, economic growth significantly slows, the recent panic in global equity markets triggers a downturn in the US stock market. Consumer confidence falls and the housing recovery stalls. Employment growth is 1.2 percent in fiscal year 2016, falls to 0.5 percent in fiscal year 2017, and increases to 0.7 percent in fiscal year 2018. Total personal income grows 3.3 percent in fiscal year 2016 and 2.6 percent in fiscal year 2017, compared with 3.8 percent and 4.8 percent in the October standard forecast. Wages and salaries grow 3.4 percent, 3.1 percent and 3.5 percent in fiscal years 2016-18. These growth rates are between 0.4 and 1.2 percentage points below the October standard forecast.

Table 2.2 - Fiscal Years 2013-2018 Official, October Standard and Pessimistic Forecasts
Virginia Economic Forecasts - Employment and Labor Markets

Employment and Labor Markets (% Change)		<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Total Nonagricultural Employment	Official (Nov '14) Oct Standard Oct Pessimistic	1.0 1.0	0.6 0.4	0.9 0.8 0.8	1.4 1.5 1.2	1.8 1.3 0.5	1.2 1.0 0.7
Construction and Mining (5%)	Official (Nov '14) Oct Standard Oct Pessimistic	(1.0) (0.6)	(0.8) (0.6)	2.1 2.0 2.0	3.5 2.9 2.5	5.4 4.2 1.7	2.4 4.1 1.8
Manufacturing (6%)	Official (Nov '14) Oct Standard Oct Pessimistic	(0.1) (0.1)	0.2 (0.1)	0.3 0.4 0.4	1.3 0.5 0.1	1.2 1.1 (0.4)	0.4 1.3 1.1
Trade, Transportation, and Utilities (17%)	Official (Nov '14) Oct Standard Oct Pessimistic	0.5 0.5	1.8 1.1	0.8 1.0 1.0	0.6 1.1 1.0	1.0 0.2 (0.5)	0.6 0.0 (0.0)
Financial Activities (5%)	Official (Nov '14) Oct Standard Oct Pessimistic	3.0 3.0	1.6 1.2	1.5 1.3 1.3	(0.1) 1.7 0.7	(0.7) (1.3) (2.2)	(1.6) (1.4) (1.3)
Professional and Business Services (18%)	Official (Nov '14) Oct Standard Oct Pessimistic	1.3 1.3	(1.2) (0.8)	0.8 0.7 0.7	3.0 2.8 2.0	2.8 3.6 1.3	1.9 2.0 1.5
Education and Health Services (13%)	Official (Nov '14) Oct Standard Oct Pessimistic	3.0 2.9	2.4 1.7	1.4 1.5 1.5	2.0 2.0 2.0	2.6 1.9 2.3	2.4 1.1 1.3
Leisure and Hospitality (10%)	Official (Nov '14) Oct Standard Oct Pessimistic	2.5 2.4	1.4 1.6	2.2 0.5 0.5	0.9 1.6 1.7	1.2 0.7 0.5	1.2 1.2 0.8
Government (19%)	Official (Nov '14) Oct Standard Oct Pessimistic	(0.2) (0.2)	(0.1) (0.5)	0.1 0.2 0.2	1.1 (0.0) (0.0)	1.5 1.0 0.9	0.5 0.8 0.8
Unemployment Rate (%)	Official (Nov '14) Oct Standard Oct Pessimistic	5.7 5.7	5.2 5.4	5.0 4.9 4.9	4.9 4.6 4.7	4.8 4.3 4.8	4.7 4.0 4.6

The Official forecast for FY13-18 is based on IHS' Economics November 2014 U.S. standard forecast and as recommended by JABE and GACRE. The Oct Standard forecast from the Department of Taxation is based on IHS' Economics October 2015 U.S. standard forecast.

The Oct Pessimistic forecast from the Department of Taxation is based on IHS' Economics October 2015 U.S. pessimistic alternative scenario.

Table 2.3 - Fiscal Years 2013-2018 Official, October Standard and Pessimistic Forecasts
Virginia Economic Forecasts - Income

		FY13	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Income (% Change)							
Total Personal Income	Official (Nov '14)	3.3	1.4	3.7	3.8	4.8	5.0
	Oct Standard	2.8	1.3	3.9	3.6	4.0	4.3
	Oct Pessimistic			3.9	3.3	2.6	3.1
Wages and Salaries (52%)	Official (Nov '14)	2.9	0.9	3.4	3.5	4.6	4.2
	Oct Standard	2.5	0.7	3.0	3.8	4.3	4.1
	Oct Pessimistic			3.0	3.4	3.1	3.5
Average Wage	Official (Nov '14)	1.8	0.3	2.5	2.0	2.8	3.0
	Oct Standard	1.4	0.3	2.2	2.4	3.0	3.0
	Oct Pessimistic			2.2	2.2	2.5	2.7
Dividends, Interest, and Rent (21%)	Official (Nov '14)	7.6	2.0	3.3	4.5	6.9	7.4
,	Oct Standard	6.5	0.7	3.7	5.5	4.9	6.4
	Oct Pessimistic			3.7	4.7	0.4	1.9
Supplements to Wages and Salaries (12%)	Official (Nov '14)	3.1	1.9	3.1	7.0	5.6	6.9
-	Oct Standard	3.2	2.1	1.9	1.1	3.8	4.6
	Oct Pessimistic			1.9	1.4	4.5	4.6
Proprietor's Income (7%)	Official (Nov '14)	8.0	4.4	4.2	0.7	(0.2)	(0.7)
,	Oct Standard	5.5	2.4	7.2	4.3	2.2	3.7
	Oct Pessimistic			7.2	4.1	2.5	4.8
Net Transfer Payments (5%)	Official (Nov '14)	(5.4)	(0.4)	3.8	0.8	3.6	6.8
, , ,	Oct Standard	(7.2)	(2.0)	8.5	2.9	0.4	0.1
	Oct Pessimistic	· •		8.5	3.3	1.4	(0.2)

The Official forecast for FY13-18 is based on IHS' Economics November 2014 U.S. standard forecast and as recommended by JABE and GACRE. The Oct Standard forecast from the Department of Taxation is based on IHS' Economics October 2015 U.S. standard forecast.

The Oct Pessimistic forecast from the Department of Taxation is based on IHS' Economics October 2015 U.S. pessimistic alternative scenario.

Table 2.4 - Fiscal Years 2013-2018 October Standard Forecast

Virginia Economic Forecast - Regional Employment

		<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Region by Sector (% Change)					•		
Northern Virginia (37%) *	Total Nonagricultural Employment	1.5	(0.1)	1.0	2.2	1.7	1.2
	Construction and Mining (5%) **	0.5	0.8	0.2	(1.1)	4.8	4.7
	Trade, Transportation, and Utilities (15%)	0.8	0.5	1.7	1.9	0.2	(0.1)
	Financial Activities (5%)	3.0	0.9	0.0	0.7	(1.3)	(1.3)
	Professional and Business Services (27%)	1.1	(1.8)	0.7	3.2	3.2	1.6
	Education and Health Services (11%)	3.0	1.1	3.3	3.9	2.5	1.4
	Leisure and Hospitality (10%)	3.7	2.5	1.5	3.9	8.0	1.2
	Government (17%)	1.2	(8.0)	0.5	0.3	1.7	1.3
Hampton Roads (20%)	Total Nonagricultural Employment	1.2	0.6	0.3	1.6	1.0	0.7
	Construction and Mining (5%)	0.4	(0.7)	2.3	2.1	3.5	3.0
	Trade, Transportation, and Utilities (17%)	(0.0)	1.1	0.7	1.7	0.3	0.1
	Financial Activities (5%)	1.9	(0.1)	1.4	4.7	(1.3)	(1.7)
	Professional and Business Services (14%)	2.3	1.6	1.6	4.2	4.3	2.6
	Education and Health Services (14%)	3.4	2.7	8.0	2.0	1.7	1.0
	Leisure and Hospitality (11%)	1.1	1.1	(0.1)	1.5	0.6	0.9
	Government (20%)	(1.0)	(1.1)	(1.4)	(0.9)	0.1	(0.1)
Richmond (16%)	Total Nonagricultural Employment	1.8	1.4	1.2	0.6	1.4	1.0
	Construction and Mining (5%)	3.1	0.4	4.8	3.2	5.0	3.8
	Trade, Transportation, and Utilities (19%)	2.8	3.4	2.3	(0.1)	0.6	0.4
	Financial Activities (8%)	4.1	2.1	1.0	0.6	(1.3)	(1.3)
	Professional and Business Services (16%)	1.8	(0.4)	0.2	0.7	3.6	2.0
	Education and Health Services (15%)	2.9	2.8	1.6	0.9	2.2	1.2
	Leisure and Hospitality (9%)	3.2	2.3	(0.2)	0.2	0.9	1.4
	Government (17%)	(1.0)	(0.6)	1.4	0.2	1.4	1.1
Balance (27%)	Total Nonagricultural Employment	(0.2)	0.2	0.5	0.9	0.9	0.9
	Construction and Mining (5%)	(4.9)	(3.1)	2.4	8.8	3.4	4.0
	Trade, Transportation, and Utilities (18%)	(1.0)	0.3	(0.4)	0.5	(0.2)	(0.2)
	Financial Activities (4%)	2.8	1.9	4.1	1.7	(1.5)	(1.6)
	Professional and Business Services (10%)	0.5	0.2	(0.2)	1.5	4.2	3.0
	Education and Health Services (15%)	2.5	0.8	0.1	0.9	1.4	0.8
	Leisure and Hospitality (9%)	1.6	0.3	(0.1)	(0.5)	0.7	1.1
	Government (21%)	(0.9)	0.4	0.4	0.1	0.6	0.7

The October Standard forecast from the Department of Taxation is based on IHS' Economcis October 2015 U.S. standard forecast.

^{*} Represents the percentage share of Virginia in fiscal year 2015.

 $^{^{\}star\star}$ Represents the percentage share of total employment within the region in fiscal year 2015.

Table 2.5 - Fiscal Years 2013-2018 October Pessimistic Scenario

Virginia Economic Forecast - Regional Employment

Region by Sector (% Change)		<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Northern Virginia (37%) *	Total Nonagricultural Employment	1.5	(0.1)	1.0	2.0	0.9	0.8
rtomom viiginia (er /o)	Construction and Mining (5%) **	0.5	0.8	0.2	(1.6)	1.7	2.0
	Trade, Transportation, and Utilities (15%)	0.8	0.5	1.7	1.8	(0.5)	(0.1)
	Financial Activities (5%)	3.0	0.9	0.0	(0.2)	(2.1)	(1.1)
	Professional and Business Services (27%)	1.1	(1.8)	0.7	2.7	1.3	1.0
	Education and Health Services (11%)	3.0	1.1	3.3	3.8	3.0	1.7
	Leisure and Hospitality (10%)	3.7	2.5	1.5	4.0	0.6	0.8
	Government (17%)	1.2	(8.0)	0.5	0.3	1.7	1.3
Hampton Roads (20%)	Total Nonagricultural Employment	1.2	0.6	0.3	1.3	0.3	0.5
	Construction and Mining (5%)	0.4	(0.7)	2.3	1.7	1.3	0.9
	Trade, Transportation, and Utilities (17%)	(0.0)	1.1	0.7	1.6	(0.3)	0.0
	Financial Activities (5%)	1.9	(0.1)	1.4	3.5	(2.3)	(1.4)
	Professional and Business Services (14%)	2.3	1.6	1.6	3.2	1.5	2.0
	Education and Health Services (14%)	3.4	2.7	8.0	2.0	2.0	1.1
	Leisure and Hospitality (11%)	1.1	1.1	(0.1)	1.6	0.4	0.6
	Government (20%)	(1.0)	(1.1)	(1.4)	(0.9)	0.1	(0.0)
Richmond (16%)	Total Nonagricultural Employment	1.8	1.4	1.2	0.3	0.7	0.8
	Construction and Mining (5%)	3.1	0.4	4.8	2.8	2.7	1.8
	Trade, Transportation, and Utilities (19%)	2.8	3.4	2.3	(0.3)	(0.2)	0.3
	Financial Activities (8%)	4.1	2.1	1.0	(0.3)	(2.1)	(1.2)
	Professional and Business Services (16%)	1.8	(0.4)	0.2	(0.0)	1.3	1.4
	Education and Health Services (15%)	2.9	2.8	1.6	0.8	2.6	1.5
	Leisure and Hospitality (9%)	3.2	2.3	(0.2)	0.3	0.6	0.9
	Government (17%)	(1.0)	(0.6)	1.4	0.2	1.4	1.2
Balance (27%)	Total Nonagricultural Employment	(0.2)	0.2	0.5	0.6	0.2	0.7
	Construction and Mining (5%)	(4.9)	(3.1)	2.4	8.4	1.3	2.1
	Trade, Transportation, and Utilities (18%)	(1.0)	0.3	(0.4)	0.4	(0.6)	(0.1)
	Financial Activities (4%)	2.8	1.9	4.1	0.7	(2.4)	(1.4)
	Professional and Business Services (10%)	0.5	0.2	(0.2)	0.5	1.2	2.7
	Education and Health Services (15%)	2.5	0.8	0.1	0.9	1.6	0.9
	Leisure and Hospitality (9%)	1.6	0.3	(0.1)	(0.5)	0.5	8.0
	Government (21%)	(0.9)	0.4	0.4	0.1	0.5	0.5

The October Pessimistic scenario from the Department of Taxation is based on IHS' Economics October 2015 U.S. pessimistic alternative scenario.

^{*} Represents the percentage share of Virginia in fiscal year 2015.

^{**} Represents the percentage share of total employment within the region in fiscal year 2015.

SECTION 3 GENERAL FUND REVENUES

Section 3 General Fund Revenues

General Fund Revenues

This section reviews general fund revenue collections for fiscal year 2015, comparing actual results with the official forecast for the year. Following this review, two revised general fund revenue forecasts are presented: the November standard and alternative pessimistic forecasts. The standard forecast is based on the IHS October standard economic outlook. The basis for the alternative forecast is the IHS alternative pessimistic economic scenario. These updated forecasts are compared with the official forecast based on the IHS November 2014 outlook and the corresponding Virginia state forecast developed by the Department of Taxation, and reflects actions of the 2015 General Assembly.

Fiscal Year 2015 in Review

In fiscal year 2015, total general fund revenues rose 8.1 percent to \$17,735.6 million, exceeding the official forecast (4.7 percent growth) by \$549.6 million. Adjusting for the accelerated sales tax program, total revenues rose 7.9 percent, ahead of the economic-base forecast of 4.5 percent growth.

All major sources except the insurance premiums tax and corporate income tax contributed to the surplus, however, collections of individual nonwithholding and withholding accounted for most of the surplus in fiscal year 2015. Collections in nonwithholding were \$316.4 million above the estimate, a variance of 11.6 percent. Payroll withholding finished the year \$140.4 million above the estimate, a 1.3 percent variance. Individual refunds were \$55.5 million lower than forecast, a net positive for the Commonwealth. Wills, suits and deeds, mainly recordation taxes, exceeded its forecast by \$28.0 million. Sales tax collections also contributed \$17.6 million to the surplus. Payroll withholding and sales tax collections, 83 percent of total revenues and closely related to economic activity, finished a combined 1.1 percent from forecast. Only two major sources failed to reach expectations: corporate income taxes were \$9.0 million short of the forecast, and receipts of insurance premiums taxes fell \$19.9 million short of the estimate. Collectively, the five major sources ended the year \$529.2 million ahead of the forecast (3.2 percent variance). Also, collections of miscellaneous taxes and other revenues were \$20.5 million ahead of the forecast in fiscal year 2015 (3.0 percent variance).

Table 3.1 on the next page compares actual revenues for fiscal year 2015 with the official forecast. The official revenue forecast was based on the November 2014 IHS Economics' standard U.S. forecast, the corresponding Virginia economic forecast developed by the Department of Taxation with recommendations from GACRE, historical revenue collections data, and actions of the 2015 General Assembly.

Table 3.1
Fiscal Year 2015 General Fund Collections: Actual and Official Forecast (Dollars in Millions)

	Fiscal Year 2014			Fiscal Year 2015								
	Fiscal Teal 2014		_	Official				Forecast \		% Growth Over FY 14		
		Actual	% Growth	_	Forecast		Actual	[Oollars	Percent	Official	Actual
MAJOR TAX SOURCES												
Corporate Income	\$	757.5	(11.9) %	\$	840.9	\$	831.9	\$	(9.0)	(1.1) %	11.0 %	9.8 %
Individual Income Tax:												
Gross		13,009.2	4.9		13,629.1		14,086.0		456.9	3.4	4.8	8.3
Withholding		10,484.2	4.4		10,903.9		11,044.3		140.4	1.3	4.0	5.3
Nonwithholding		2,524.9	7.1		2,725.2		3,041.6		316.4	11.6	7.9	20.5
Refunds		(1,755.8)	<u>(1.6)</u>		(1,812.8)		(1,757.3)		<u>55.5</u>	(3.1)	<u>3.2</u>	<u>0.1</u>
Net		11,253.3	6.0		11,816.3		12,328.7		512.4	4.3	5.0	9.6
Insurance Company Premiums		320.4	26.7		320.5		300.6		(19.9)	(6.2)	0.0	(6.2)
State Sales & Use Tax		3,066.5	(1.8)		3,217.8		3,235.4		17.6	0.5	4.9	5.5
Wills, Suits, Deeds, & Contract Fees		310.8	(3.5)		318.3	_	346.3	_	28.0	8.8	2.4	11.4
Total Major Tax Sources	\$	15,708.5	3.6 %	\$	16,513.8	\$	17,043.0	\$	529.2	3.2 %	5.1 %	8.5 %
MISCELLANEOUS TAXES AND OTHER REVENUES												
Alcoholic Beverage State Tax	\$	157.4	9.8 %	\$	162.6	\$	166.0	\$	3.4	2.1 %	3.3 %	5.4 %
Bank Franchise Tax	·	22.5	19.4		16.8		19.0		2.2	13.2	(25.5)	(15.6)
Beer & Beverage Excise Tax		41.8	(2.7)		41.8		41.9		0.1	0.1	(0.0)	0.1
Corporate Franchise & Charter Fees		50.2	18.6		47.3		48.6		1.3	2.7	(5.8)	(3.3)
Excess & Other Fees from Officers		(7.1)	17.8		(8.9)		(6.8)		2.1	(23.8)	(24.9)	4.9
Estate & Gifts		0.2	(34.2)		0.0		0.1		0.1	n/a	(100.0)	(50.0)
Institutional Revenues		5.6	(3.4)		5.5		7.4		1.9	34.0	(2.5)	30.6
Interest & Rents		74.4	(4.1)		62.3		49.0		(13.3)	(21.3)	(16.3)	(34.1)
Licenses & Permits		4.0	(5.0)		4.0		4.1		0.1	1.5	(0.8)	0.7
Miscellaneous Taxes and Penalties		222.3	(0.5)		213.7		232.2		18.5	8.6	(3.9)	4.4
Other Miscellaneous Revenues		33.3	1.6		30.3		32.8		2.5	8.2	(9.1)	(1.6)
Public Service GR / Consumption Tax		98.2	3.9		96.8		98.5	_	1.7	1.8	(1.4)	0.4
Total Misc. Taxes and Other Revenues	\$	702.9	3.8 %	\$	672.2	\$	692.7	\$	20.5	3.0 %	(4.4) %	(1.5) %
TOTAL GF REVENUES	\$	16,411.4	3.6 %	\$	17,186.0	\$	17,735.6	\$	549.6	3.2 %	4.7 %	8.1 %
TRANSFERS												
A.B.C. Profits	\$	72.2	13.2 %	\$	83.3	\$	83.3	\$	0.0	0.0 %	15.4 %	15.4 %
Sales Tax (0.25%)	¥	334.0	56.0	Ψ	350.3	Ψ	352.4	Ψ	2.1	0.6	4.9	5.5
Transfers Per Appropriations Act		131.5	6.4		211.4		198.2		(13.2)	(6.2)	60.8	50.7
Total Transfers	\$	537.7	7.3 %	\$	645.0	\$	633.9	\$	(11.1)	(1.7) %	20.0 %	17.9 %
TOTAL OFNERAL FUND		10.040.1	07.6					•	, ,	, ,	50 51	0.4.51
TOTAL GENERAL FUND	\$.	16,949.1	<u>3.7</u> %	۵.	17,831.0	ъ.	18,369.5	\$_	538.5	<u>3.0</u> %	<u>5.2</u> %	<u>8.4</u> %

The Official forecast is based on the November 2014 IHS Economics US Standard outlook and the corresponding Virginia economic outlook developed by the Department of Taxation with recommendations from GACRE. It includes actions of the 2015 General Assembly Session.

Individual Income Taxes

Over 90 percent of the surplus in fiscal year 2015 was attributable to individual income taxes. Collections of net individual income taxes (69 percent of total revenues) rose 9.6 percent in fiscal year 2015, ahead of the annual forecast of 5.0 percent growth. Receipts of \$12,328.7 million were \$512.4 million above the official estimate, a variance of 4.3 percent from the forecast. Both withholding and nonwithholding exceeded their estimates, with nonwithholding accounting for the bulk of the surplus. In addition, refunds were lower than expected.

<u>Withholding:</u> In fiscal year 2015, withholding receipts (64 percent of total revenues) increased 5.3 percent, leading the forecast growth rate of 4.0 percent. Collections of \$11,044.3 million were \$140.4 million ahead of the forecast, a variance of 1.3 percent. The acceleration in withholding was broad-based and included strong growth in small businesses.

<u>Nonwithholding:</u> Collections of individual nonwithholding (16 percent of total revenues) jumped 20.5 percent in fiscal year 2015, far ahead of the annual forecast of 7.9 percent growth. Receipts of \$3,041.6 million were \$316.4 million above the annual estimate, a forecast variance of 11.6 percent.

The annual surplus in nonwithholding was a result of greater-than-expected final payments, which increased by 25.1 percent compared with expectations of 6.5 percent growth. These payments are historically tied to non-wage income sources – mainly the financial markets.

<u>Refunds:</u> Individual income tax refunds totaled \$1,757.3 million in fiscal year 2015, \$55.5 million less than expected. Refunds were essentially unchanged from last year, growing only 0.1 percent compared with the forecast of 3.2 percent growth.

Sales Taxes

Collections of sales and use taxes (19 percent of total revenues) were \$3,235.4 million in fiscal year 2015, \$17.6 million above the forecast, a variance of 0.5 percent. Collections rose 5.5 percent for the year compared with the forecast of 4.9 percent growth. Adjusting for accelerated sales tax payments received in June, sales tax collections grew 4.9 percent in fiscal year 2015, compared with the economic-base forecast of a 3.9 percent increase.

Corporate Income Taxes

Corporate income tax collections (5 percent of total revenues), historically the most volatile revenue source, fell short of the forecast. Collections of \$831.9 million were \$9.0 million below expectations, a forecast variance of 1.1 percent. The fiscal year increase of 9.8 percent trailed the forecast of 11.0 percent growth.

Wills, Suits, Deeds, and Contract Fees

Wills, Suits, Deeds, and Contract Fees (2 percent of total revenues), of which the primary component is the recordation tax, were well ahead of the forecast in fiscal year 2015. The recovering housing market boosted recordation receipts and caused a surplus in this source of \$28.0 million, a variance of 8.8 percent. Collections finished the year at \$346.3 million, an 11.4 percent increase from fiscal year 2014 and well above the official forecast of 2.4 percent growth.

Insurance Premiums Taxes

Another major source to see a deficit, collections of taxes on the premiums of insurance companies (2 percent of total revenues) were \$300.6 million in fiscal year 2015 – \$19.9 million below the annual estimate. The decline of 6.2 percent trailed the annual estimate of zero growth.

Miscellaneous Taxes and Other Revenues

Collectively, minor revenue sources finished the fiscal year \$20.5 million above the annual forecast. Collections of \$692.7 million were 1.5 percent below fiscal year 2014, but ahead of the forecast of a 4.4 percent decline. Most minor sources finished the year at or above forecast.

The Revised General Fund Revenue Forecasts for Fiscal Years 2016-2018

Two forecasts are presented for your consideration: the November standard forecast based on the IHS Economics October standard scenario, and the alternative forecast based on the IHS Economics U.S. October alternative pessimistic forecast. These are compared with the official forecast based on the November 2014 IHS Economics U.S. standard economic scenario adjusted per recommendations by the JABE, and the corresponding Virginia forecast developed by the Department of Taxation. It reflects actions of the 2015 General Assembly Session – Chapter 665.

November Standard General Fund Revenue Forecast

Table 3.2 at the end of this section provides a comparison of the official revenue forecast with the November standard general fund forecast. Changes from the official forecast are substantial.

In the November standard forecast, total general fund revenues have been raised by \$913.1 million in fiscal year 2016. The increase from the official forecast comes mainly from upward revisions to individual nonwithholding and withholding. Revenues are now expected to grow by 5.1 percent in fiscal year 2016, compared with a 0.1 percent decrease in the

official forecast. Revenues are expected to grow 3.0 percent in fiscal year 2017 and 3.7 percent in fiscal year 2018.

Net Individual Income Taxes

The outlook for net individual income taxes in fiscal year 2016 has been revised upward from the official forecast by \$775.2 million for growth of 5.4 percent. Collections in this source are predicted to increase 3.2 percent in fiscal year 2017 and 4.3 percent in fiscal year 2018.

Withholding

The withholding revenue model is based on a direct relationship with wages and salaries (53 percent of total personal income) and net transfer payments (6 percent of total personal income) in Virginia. Withholding in the November standard forecast has been raised by \$261.5 million in fiscal year 2016 for growth of 4.5 percent. Withholding collections are projected to increase by 4.0 percent in fiscal year 2017, and 3.5 percent in fiscal year 2018.

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.

Due to the significant surplus in nonwithholding in fiscal year 2015, the forecast for this source was raised substantially in the November standard forecast. The forecast for nonwithholding raises collections by \$495.7 million in fiscal year 2016 from the official forecast, changing growth from an 8.4 percent decline to an increase of 7.9 percent. The forecast predicts growth of 2.2 percent in fiscal year 2017 and 7.0 percent in fiscal year 2018. This is the baseline forecast and does not include a collar limiting it to a percentage of total revenue.

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. Historical data are adjusted for the land preservation tax credit and the low-income credit. Future values of these credits are estimated and these amounts are added to the base refund forecast.

In the November standard revenue forecast, individual refunds are projected to grow 3.7 percent in fiscal year 2016 compared with the official forecast of a 4.7 percent increase. The forecast removes \$18.0 million from refunds in fiscal year 2016. Land preservation credits are projected to be \$52.6 million in fiscal year 2016 and \$77.6 million each year over

the forecast horizon, below last year's level of \$100.0 million. The outlook for low income credits is \$135.0 million in fiscal year 2016, and \$125.0 million a year over the forecast horizon.

<u>Sales</u>

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 \$74.6 million in fiscal year 2016 for growth of 5.0 percent. Growth in this source is expected to be 4.9 percent in fiscal year 2017, and 3.5 percent in fiscal year 2018.

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 reduces corporate income tax collections by \$3.6 million from the official forecast in fiscal year 2016. Collections are expected to fall by 1.8 percent in fiscal year 2016, rise 0.8 percent in 2017, then fall 0.9 percent in fiscal year 2018.

Wills, Suits, Deeds, and Contracts (Recordation)

The revenue model for wills, suits, deeds and contracts is based on mortgage originations and median 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. Collections in this source have grown at double-digit rates in nine out of the last ten months. The November standard forecast for this source is 7.7 percent growth in fiscal year 2016, an upward revision of \$54.7 million. The estimate assumes growth of 1.7 percent in fiscal year 2017 followed by no growth over the forecast horizon.

Insurance

Collections in this source fell by 6.2 percent in fiscal year 2015, and finished the year with a \$19.9 million deficit. In the November standard forecast, insurance premiums growth is reduced from 8.7 percent to 5.7 percent in fiscal year 2016, a decrease of \$9.1 million. The model calls for a 4.0 percent increase in fiscal year 2017 and a 4.5 percent increase in fiscal year 2018.

Miscellaneous Taxes and Other Revenues

Collectively, minor revenue sources have been revised upward by \$21.2 million in fiscal year 2016 for an increase of 5.9 percent compared with 2.8 percent growth in the official forecast. The forecast expects collections of minor sources to fall 5.3 percent in fiscal year 2017 and rise 0.6 percent in fiscal year 2018.

Table 3.2
The Official and November Standard General Fund Forecast for Fiscal Year 2016
(Dollars in Millions)

November 12, 2015

				Fis	cal Ye	ar 2016					014-	2016 Bienniui	m	
		Official Forecast		November Forecast		Change	% Growth (Over FY 15 November		Official Forecast		November Forecast	(Change
MAJOR TAX SOURCES														
Corporate Income	\$	820.7	\$	817.1	\$	(3.6)	(1.3) %	(1.8) %	\$	1,652.6	\$	1,649.0	\$	(3.6
Individual Income Tax:														
Gross		14,060.3		14,817.5		757.2	(0.2)	5.2		28,146.3		28,903.5		757.2
Withholding		11,275.1		11,536.6		261.5	2.1	4.5		22,319.4		22,580.9		261.5
Nonwithholding		2,785.2		3,280.9		495.7	(8.4)	7.9		5,826.8		6,322.5		495.7
Refunds		(1,840.6)		(1,822.6)		<u>18.0</u>	<u>4.7</u>	<u>3.7</u>		(3,597.9)		(3,579.9)		18.0
Net		12,219.7		12,994.9		775.2	(0.9)	5.4		24,548.4		25,323.6		775.2
Insurance Company Premiums		326.8		317.7		(9.1)	8.7	5.7		627.4		618.3		(9.1
State Sales & Use Tax		3,323.1		3,397.7		74.6	2.7	5.0		6,558.5		6,633.2		74.6
Wills, Suits, Deeds, & Contract Fees	_	318.3	_	373.0	_	54.7	(8.1)	7.7	_	664.6		719.3	_	54.7
Total Major Tax Sources	\$	17,008.6	\$	17,900.4	\$	891.9	(0.2) %	5.0 %	\$	34,051.5	\$	34,943.4	\$	891.9
MISCELLANEOUS TAXES AND OTHE	R R	EVENUES												
Alcoholic Beverage State Tax	\$	166.1	\$	166.1	\$	0.0	0.1 %	0.1 %	\$	332.1	\$	332.1	\$	0.0
Bank Franchise Tax		20.5		20.7		0.2	7.8	8.8		39.5		39.7		0.2
Beer & Beverage Excise Tax		41.8		41.8		0.0	(0.1)	(0.1)		83.7		83.7		0.0
Corporate Franchise & Charter Fees		47.3		48.6		1.3	(2.6)	0.1		95.9		97.2		1.3
Excess & Other Fees from Officers		(8.9)		(6.8)		2.1	(31.3)	(0.3)		(15.7)		(13.6)		2.1
Estate & Gifts		0.0		0.0		0.0	n/a	n/a		0.1		0.1		n/a
Institutional Revenues		5.5		7.3		1.8	(25.4)	(1.0)		12.9		14.7		1.8
Interest & Rents		65.9		57.4		(8.5)	34.4	17.1		114.9		106.4		(8.5)
Licenses & Permits		4.0		4.0		0.0	(1.5)	(1.5)		8.1		8.1		0.0
Miscellaneous Taxes and Penalties		212.0		232.0		20.0	(8.7)	(0.1)		444.2		464.2		20.0
Other Miscellaneous Revenues		61.1		63.3		2.2	86.4	93.1		93.9		96.1		2.2
Public Service GR / Consumption Tax	_	96.8	_	98.9	_	2.1	(1.8)	0.4	-	195.3	_	197.4	_	2.1
Total Misc. Taxes and Other Revenues	\$	712.1	\$	733.3	\$	21.2	2.8 %	5.9 %	\$	1,404.8	\$	1,426.0	\$	21.2
TOTAL GF REVENUES	\$	17,720.7	\$	18,633.7	\$	913.1	(0.1) %	5.1 %	\$	35,456.3	\$	36,369.4	\$	913.1
TRANSFERS														
A.B.C. Profits	\$	80.2	\$	80.2	\$	0.0	(3.7) %	(3.7) %	\$	163.5	\$	163.5	\$	0.0
Sales Tax (0.375%)		362.9		370.0		7.1	3.0	5.0		715.3		722.4		7.1
Transfers Per Appropriations Act		121.4		121.4		0.0	(38.7)	(38.7)		319.6		319.6		0.0
Total Transfers	\$	564.5	\$	571.6	\$	7.1	(10.9) %	(9.8) %	\$	1,198.4	\$	1,205.5	\$	7.1

The Official forecast is based on the November 2014 IHS Economics Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from GACRE. It includes actions of the 2015 General Assembly Session -- Chapter 665.

The November forecast is based on the October 2015 IHS Economics US Standard outlook and includes recommendations from JABE. This is the Baseline forecast and does not have any adjustments for a collar in individual nonwithholding as it relates to total revenues.

Table 3.2

The November Standard General Fund Forecast for Fiscal Years 2017-2018
(Dollars in Millions)

November 12, 2015

		Fiscal Ye	ar 2017		Fiscal Ye	ar 2018		2016-2018	Biennium
		November	% Growth		November	% Growth		November	% Growth
		Forecast	Over FY 16		Forecast	Over FY 17		Forecast	Over 14-16
MAJOR TAX SOURCES									
Corporate Income	\$	825.5	1.0 %	\$	818.2	(0.9) %	\$	1,643.7	(0.3) %
Individual Income Tax:									
Gross		15,348.0	3.6		15,998.6	4.2		31,346.6	8.5
Withholding		11,993.6	4.0		12,410.2	3.5		24,403.8	8.1
Nonwithholding		3,354.4	2.2		3,588.4	7.0		6,942.8	9.8
Refunds		(1,942.3)	6.6		(2,018.4)	<u>3.9</u>		(3,960.7)	<u>10.6</u>
Net		13,405.7	3.2		13,980.2	4.3		27,385.9	8.1
Insurance Company Premiums		330.6	4.0		345.3	4.5		675.9	9.3
State Sales & Use Tax		3,565.2	4.9		3,688.6	3.5		7,253.7	9.4
Wills, Suits, Deeds, & Contract Fees	_	379.4	1.7	_	379.4	0.0	_	758.8	5.5
Total Major Tax Sources	\$	18,506.3	3.4 %	\$	19,211.7	3.8 %	\$	37,718.0	7.9 %
MISCELLANEOUS TAXES AND OTHER REVE	NUES								
Alcoholic Beverage State Tax	\$	169.6	2.1 %	\$	173.2	2.1 %	\$	342.8	3.2 %
Bank Franchise Tax		20.7	0.0		20.7	0.0		41.4	4.2
Beer & Beverage Excise Tax		41.8	0.0		41.8	0.0		83.6	(0.1)
Corporate Franchise & Charter Fees		48.6	0.0		48.6	0.0		97.2	0.0
Excess & Other Fees from Officers		(6.8)	0.0		(6.8)	0.0		(13.6)	0.2
Estate & Gifts		0.0	n/a		0.0	n/a		0.0	n/a
Institutional Revenues		7.3	0.0		7.3	0.0		14.6	(0.5)
Interest & Rents		46.3	(19.3)		46.3	0.0		92.6	(13.0)
Licenses & Permits		4.0	0.0		4.0	0.0		8.0	(0.7)
Miscellaneous Taxes and Penalties		233.8	0.8		234.7	0.4		468.5	0.9
Other Miscellaneous Revenues		30.6	(51.7)		30.6	0.0		61.2	(36.3)
Public Service GR / Consumption Tax	_	98.9	0.0	_	98.9	0.0	_	197.8	0.2
Total Misc. Taxes and Other Revenues	\$	694.8	(5.3) %	\$	699.3	0.6 %	\$	1,394.1	(2.2) %
TOTAL GF REVENUES	\$	19,201.1	3.0 %	\$	19,911.0	3.7 %	\$	39,112.1	7.5 %
TRANSFERS									
A.B.C. Profits	\$	78.9	(1.6) %	\$	79.5	0.8 %	\$	158.4	(3.1) %
Sales Tax (0.375%)		388.2	4.9		401.7	3.5		789.9	9.3
Transfers Per Appropriations Act	_	120.0	(1.2)	_	120.0	0.0	_	240.0	(24.9)
Total Transfers	\$	587.1	2.7 %	\$	601.2	2.4 %	\$	1,188.3	(1.4) %
TOTAL GENERAL FUND	\$	19,788.2	3.0 %	\$	20,512.2	3.7 %	\$	40,300.4	7.3 %

The November forecast is based on the October 2015 IHS Economics US Standard outlook and includes recommendations from JABE. This is the Baseline forecast and does not have any adjustments for a collar in individual nonwithholding as it relates to total revenues.

The November Pessimistic Alternative Forecast for Fiscal Years 2016 - 2018

Table 3.3 at the end of this section compares the official forecast and the November alternative pessimistic general fund forecast. The November alternative scenario increases the forecast by \$719.3 million in fiscal year 2016, as growth rises from a 0.1 percent decline in the official forecast to a 4.0 percent increase. The pessimistic forecast 0.3 percent growth in fiscal year 2017, and 3.3 percent growth in fiscal year 2018.

Individual Income Taxes

In the November alternative forecast, the outlook for net individual income taxes has been revised upward from the official forecast, as the projected increase is expected to be \$627.8 million greater than the official forecast in fiscal year 2016, for growth of 4.2 percent. A decline of 0.1 percent is predicted in fiscal year 2017 followed by 4.0 percent growth in fiscal year 2018.

Withholding

The withholding revenue model is based on a direct relationship with wages and salaries (53 percent of total personal income) and net transfer payments (6 percent of total personal income) in Virginia. Withholding in the November alternative forecast has been raised by \$234.5 million in fiscal year 2016 for growth of 4.2 percent, compared with the current forecast of 2.1 percent growth. Under this scenario, withholding collections are projected to increase by 3.3 percent in fiscal year 2017 and 3.1 percent in fiscal year 2018.

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 November alternative forecast for nonwithholding raises growth from an 8.4 percent decline to a 3.9 percent increase in fiscal year 2016, resulting in a \$375.3 million increase from the current official forecast. The forecast predicts an 8.6 percent decline in fiscal year 2017, and a 7.8 percent increase in fiscal year 2018. This is the baseline forecast and has no collar as it relates to total revenues.

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. Historical data are adjusted for the land preservation tax credit and the low-income credit. Future values of these credits are estimated and these amounts are added to the base refund forecast.

Individual refunds are projected to grow 3.7 percent in fiscal year 2016 compared with the official forecast of a 4.7 percent increase. The forecast takes \$18.0 million from refunds in fiscal year 2016. Land preservation credits are projected to be \$52.6 million in fiscal year 2016 and \$77.6 million each year over the forecast horizon, below last year's level of \$100.0 million. The outlook for low income credits is \$135.0 million in fiscal year 2016, and \$125.0 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 alternative forecast for sales tax collections increases the official forecast by \$64.9 million in fiscal year 2016 for growth of 4.7 percent. Growth in this source is expected to be 3.9 percent in fiscal year 2017 and 2.6 percent in fiscal year 2018.

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 pessimistic forecast reduces corporate collections by \$25.6 million from the official forecast in fiscal year 2016, a 4.4 percent decline. Collections are expected to fall by 1.9 percent in fiscal year 2017 and 0.5 percent in 2018.

Wills, Suits, Deeds, and Contracts (Recordation)

The revenue model for wills, suits, deeds and contracts is based on mortgage originations and median 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 alternative forecast calls for 3.5 percent growth in fiscal year 2016, an upward revision of \$40.0 million. The estimate assumes a decline of 5.8 percent in fiscal year 2017 and no growth in fiscal year 2018.

Insurance

The November standard forecast for taxes on the premiums of insurance companies is for growth of 5.7 percent in fiscal year 2016, a decrease of \$9.1 million from the current forecast. The model calls for 4.0 percent growth in fiscal year 2017 and 4.5 percent in 2018.

Miscellaneous Taxes and Other Revenues

Collectively, minor revenue sources have been raised \$21.2 million in fiscal year 2016 for growth of 5.9 percent compared with 2.8 percent in the official forecast. Collections in these sources are predicted to fall 5.3 percent in fiscal year 2017 and increase 0.6 percent in fiscal year 2018.

Table 3.3

The Official and November Pessimistic General Fund Forecast for Fiscal Year 2016
(Dollars in Millions)

November 12, 2015

	Fiscal Year 2016					ar 2016			2014-2016 Biennium					
		Official	ı	Nov Pess			% Growth (Official		Nov Pess		
		Forecast	_	Forecast	C	hange	Official	Nov Pess	_	Forecast	_	Forecast	C	hange
MAJOR TAX SOURCES														
Corporate Income	\$	820.7	\$	795.1	\$	(25.6)	(1.3) %	(4.4) %	\$	1,652.6	\$	1,627.0	\$	(25.6)
Individual Income Tax:														
Gross		14,060.3		14,670.1		609.8	(0.2)	4.1		28,146.3		28,756.1		609.8
Withholding		11,275.1		11,509.6		234.5	2.1	4.2		22,319.4		22,553.9		234.5
Nonwithholding		2,785.2		3,160.5		375.3	(8.4)	3.9		5,826.8		6,202.1		375.3
Refunds		(1,840.6)		(1,822.6)		<u>18.0</u>	<u>4.7</u>	<u>3.7</u>		(3,597.9)		(3,579.9)		<u>18.0</u>
Net		12,219.7		12,847.5		627.8	(0.9)	4.2		24,548.4		25,176.2		627.8
Insurance Company Premiums		326.8		317.7		(9.1)	8.7	5.7		627.4		618.3		(9.1)
State Sales & Use Tax		3,323.1		3,388.0		64.9	2.7	4.7		6,558.5		6,623.5		64.9
Wills, Suits, Deeds, & Contract Fees	_	318.3	_	358.3	_	40.0	(8.1)	3.5	_	664.6	_	704.6		40.0
Total Major Tax Sources	\$	17,008.6	\$	17,706.6	\$	698.1	(0.2) %	3.9 %	\$	34,051.5	\$	34,749.6	\$	698.1
MISCELLANEOUS TAXES AND OTHE	RR	EVENUES												
Alcoholic Beverage State Tax	\$	166.1	\$	166.1	\$	0.0	0.1 %	0.1 %	\$	332.1	\$	332.1	\$	0.0
Bank Franchise Tax		20.5		20.7		0.2	7.8	8.8		39.5		39.7		0.2
Beer & Beverage Excise Tax		41.8		41.8		0.0	(0.1)	(0.1)		83.7		83.7		0.0
Corporate Franchise & Charter Fees		47.3		48.6		1.3	(2.6)	0.1		95.9		97.2		1.3
Excess & Other Fees from Officers		(8.9)		(6.8)		2.1	(31.3)	(0.3)		(15.7)		(13.6)		2.1
Estate & Gifts		0.0		0.0		0.0	n/a	n/a		0.1		0.1		n/a
Institutional Revenues		5.5		7.3		1.8	(25.4)	(1.0)		12.9		14.7		1.8
Interest & Rents		65.9		57.4		(8.5)	34.4	17.1		114.9		106.4		(8.5)
Licenses & Permits		4.0		4.0		0.0	(1.5)	(1.5)		8.1		8.1		0.0
Miscellaneous Taxes and Penalties		212.0		232.0		20.0	(8.7)	(0.1)		444.2		464.2		20.0
Other Miscellaneous Revenues		61.1		63.3		2.2	86.4	93.1		93.9		96.1		2.2
Public Service GR / Consumption Tax	_	96.8	_	98.9	_	2.1	(1.8)	0.4	_	195.3	_	197.4	_	2.1
Total Misc. Taxes and Other Revenues	\$	712.1	\$	733.3	\$	21.2	2.8 %	5.9 %	\$	1,404.8	\$	1,426.0	\$	21.2
TOTAL GF REVENUES	\$	17,720.7	\$	18,439.9	\$	719.3	(0.1) %	4.0 %	\$	35,456.3	\$	36,175.6	\$	719.3
TRANSFERS														
A.B.C. Profits	\$	80.2	\$	80.2	\$	0.0	(3.7) %	(3.7) %	\$	163.5	\$	163.5	\$	0.0
Sales Tax (0.375%)		362.9		370.0		7.1	3.0	5.0		715.3		722.4		7.1
Transfers Per Appropriations Act		121.4		121.4		0.0	(38.7)	(38.7)		319.6		319.6		0.0
Total Transfers	\$	564.5	\$	571.6	\$	7.1	(10.9) %	(9.8) %	\$	1,198.4	\$	1,205.5	\$	7.1
TOTAL GENERAL FUND	\$	18,285.2	\$	19,011.5		726.4	(0.5) %	3.5 %	\$	36,654.7	\$	37,381.1	\$	726.4

The Official forecast is based on the November 2014 IHS Economics Standard Outlook and the corresponding Virginia state forecast developed by the Department of Taxation with recommendations from GACRE. It includes actions of the 2015 General Assembly Session -- Chapter 665.

The November Pessimistic forecast is based on the October 2015 IHS Economics US Pessimistic outlook and includes recommendations from JABE. This is the Baseline forecast and does not have any adjustments for a collar in individual nonwithholding as it relates to total revenues.

Table 3.3

The November Pessimistic General Fund Forecast for Fiscal Years 2017-2018
(Dollars in Millions)

November 12, 2015

		Fiscal Ye	ar 2017		Fiscal Yea	ar 2018		2016-2018	Biennium
		Nov Pess Forecast	% Growth Over FY 16		Nov Pess Forecast	% Growth Over FY 17		Nov Pess Forecast	% Growth Over 14-16
		i Orecasi	Over 1 1 10	_	i Orecasi	Over 1 17	_	TOTECASI	Over 14-10
MAJOR TAX SOURCES									
Corporate Income	\$	779.9	(1.9) %	\$	775.9	(0.5) %	\$	1,555.8	(4.4) %
Individual Income Tax:									
Gross		14,775.7	0.7		15,365.5	4.0		30,141.2	4.8
Withholding		11,888.2	3.3		12,254.0	3.1		24,142.2	7.0
Nonwithholding		2,887.5	(8.6)		3,111.5	7.8		5,999.0	(3.3)
Refunds		(1,942.3)	6.6		<u>(2,018.4)</u>	<u>3.9</u>		(3,960.7)	<u>10.6</u>
Net		12,833.4	(0.1)		13,347.1	4.0		26,180.5	4.0
Insurance Company Premiums		330.6	4.0		345.3	4.5		675.9	9.3
State Sales & Use Tax		3,521.1	3.9		3,611.6	2.6		7,132.7	7.7
Wills, Suits, Deeds, & Contract Fees	_	337.4	(5.8)	_	337.4	0.0	-	674.8	(4.2)
Total Major Tax Sources	\$	17,802.3	0.5 %	\$	18,417.3	3.5 %	\$	36,219.6	4.2 %
MISCELLANEOUS TAXES AND OTHER REVE	NUES								
Alcoholic Beverage State Tax	\$	169.6	2.1 %	\$	173.2	2.1 %	\$	342.8	3.2 %
Bank Franchise Tax		20.7	0.0		20.7	0.0		41.4	4.2
Beer & Beverage Excise Tax		41.8	0.0		41.8	0.0		83.6	(0.1)
Corporate Franchise & Charter Fees		48.6	0.0		48.6	0.0		97.2	0.0
Excess & Other Fees from Officers		(6.8)	0.0		(6.8)	0.0		(13.6)	0.2
Estate & Gifts		0.0	n/a		0.0	n/a		0.0	n/a
Institutional Revenues		7.3	0.0		7.3	0.0		14.6	(0.5)
Interest & Rents		46.3	(19.3)		46.3	0.0		92.6	(13.0)
Licenses & Permits		4.0	0.0		4.0	0.0		8.0	(0.7)
Miscellaneous Taxes and Penalties		233.8	0.8		234.7	0.4		468.5	0.9
Other Miscellaneous Revenues		30.6	(51.7)		30.6	0.0		61.2	(36.3)
Public Service GR / Consumption Tax	_	98.9	0.0	_	98.9	0.0	_	197.8	0.2
Total Misc. Taxes and Other Revenues	\$	694.8	(5.3) %	\$	699.3	0.6 %	\$	1,394.1	(2.2) %
TOTAL GF REVENUES	\$	18,497.1	0.3 %	\$	19,116.6	3.3 %	\$	37,613.7	4.0 %
TRANSFERS									
A.B.C. Profits	\$	78.9	(1.6) %	\$	79.5	0.8 %	\$	158.4	(3.1) %
Sales Tax (0.375%)		388.2	4.9		401.7	3.5		789.9	9.3
Transfers Per Appropriations Act	_	120.0	(1.2)	_	120.0	0.0	_	240.0	(24.9)
Total Transfers	\$	587.1	2.7 %	\$	601.2	2.4 %	\$	1,188.3	(1.4) %
TOTAL GENERAL FUND	¢	19,084.2	0.4_%	\$	19,717.8	3.3_%	•	38,802.0	3.8 %

The November Pessimistic forecast is based on the October 2015 IHS Economics US Pessimistic outlook and includes recommendations from JABE. This is the Baseline forecast and does not have any adjustments for a collar in individual nonwithholding as it relates to total revenues.

Legislative Changes Affecting the Forecast

Table 3.4 below lists the legislative and policy changes that affect the revenue forecast for fiscal years 2016-2018.

Table 3.4

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

,	FY16	FY17	FY18
CORPORATE INCOME TAX			
C. 781, 2009 - Single Sales Factor Apportionment HB2437 Manufacturers	(58.6)	(59.0)	(59.0)
C. 2, 2014 - Cap Scholarship HB321/SB121 2015 updated	(5.0)	(5.0)	(5.0)
C. 2, 2014 - Increase R&D Expenses Tax Credit HB1220/SB623	(1.0)	(1.0)	(1.0)
C. 2, 2014 - Increase Motion Picture Tax Credit HB460	(4.0)	(4.0)	(4.0)
2015 Federal TOPS Program	5.0	1.0	1.0
2015 Coal Credits Expiration		1.5	1.4
INDIVIDUAL INCOME TAX			
C. 3, 2006 - Cap Land Preservation Tax Credit (Total Cost)	(52.6)	(77.6)	(77.6)
C. 890, 2013 - Repeal Long-Term Care	1.0	1.0	1.0
C.2, 2014 - Accelerate Due Date for Employer Withholding	0.5	0.5	0.5
2014 Increase Neighborhood Assistance Credit	(2.0)	(2.0)	(2.0)
2015 Repeal Subtraction for land for open space (SB1012 2015)	0.5	0.4	0.4
STATE SALES AND USE TAX			
C. 806, 2013 - Diversion to Transportation	(103.1)	(107.8)	(111.6)
C. 806, 2013 - Additional 0.125% to Education - HB2313	(124.0)	(129.8)	(134.3)
C. 2, 2014 - Tax Satellite TV Equipment	9.6	9.6	9.6
C. 247, 2015 - Additional Enforcement of Sales Tax - SB1010	1.0	1.0	1.0
C. 382, 2015 Consolidation of Sales Tax Holidays - SB1319	1.0	1.0	1.0
C. 620, 2015 Sales Tax Exemption for Bullion - HB1648	(0.2)	(0.2)	(0.2)
WILLS, SUITS, DEEDS, AND CONTRACTS			
C. 847, 2007 - \$0.03 of Recordation Tax to Transportation	(44.6)	(45.4)	(45.4)
INSURANCE PREMIUMS TAX			
C. 847, 2007 - 1/3 of Insurance Premiums Tax to Transportation	(150.4)	(156.0)	(162.2)
SALES OF PROPERTY			
	10.0		
C. 3, 2012 - Sale of Brunswick Prison	10.0		

SECTION 4 NON-GENERAL FUND REVENUES

Section 4 Non-General Fund Revenues

Transportation Revenues

Most state taxes and fees used to finance the state's transportation programs are deposited into two funds: the Highway Maintenance and Operating Fund (HMOF) and the Transportation Trust Fund (TTF). The HMOF, which finances maintenance and operating costs, consists of traditional highway user taxes and fees. The TTF, which finances construction costs, consists of dedicated portions of highway user taxes and fees, as well as a portion of state sales and recordation taxes, interest earnings, and several miscellaneous sources. Within the TTF, which was created by a special session of the General Assembly in 1986, is the Priority Transportation Fund (PTF). This fund, which was created during the 2000 legislative session, consists of motor fuel tax revenues from insurance premiums, interest payments, and a portion of the motor fuels tax.

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 (The rate of 4.15 percent will be phased in over four years, beginning in fiscal year 2014.),
- licensing fees,
- 0.60 cent State Retail Sales and Use Tax (The share of existing general sales and use tax revenues used for transportation from a 0.50 percent to 0.675 percent, phased in over four years. In the event that the U.S. Congress does not pass the Marketplace Fairness Act by January 1, 2015, the share of sales tax revenues used for transportation will remain at 0.60 percent.),
- 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 2015 in Review

Table 4.1 compares actual collections in fiscal year 2015 to the official forecast for the Commonwealth Transportation Fund (CTF). Total transportation revenues totaled \$3.1 billion, an increase of \$330.9 million over last year. Revenue collections grew by 11.8 percent as compared to the official forecast of a 10.0 percent increase, resulting in a forecast variance of 1.6 percent.

Table 4.1
Actual Collections Compared to the Official Forecast for Fiscal Year 2015
(Millions of Dollars)

	FY2014	FY2015	FY2015		: Change 2015	Forecast	Variance
Revenue Sources	Actual	Actual	Forecast	Actual	Forecast	Amount	Percent
Motor Fuels Tax	649.7	715.1	\$712.1	10.1%	9.6%	\$3.0	0.4%
Road Use Tax	8.6	5.7	8.5	(33.7)	(1.2)	-2.8	-32.9
Vehicle Sales Tax	788.6	854.5	814.2	8.4	3.2	40.3	4.9
Vehicle Licenses	249.3	245.1	245.6	(1.7)	(1.5)	-0.5	-0.2
State Sales Tax	822.6	994.9	991.1	20.9	20.5	3.8	0.4
Recordation Tax	37.3	42.0	37.9	12.6	1.6	4.1	10.8
Insurance Premiums Tax	130.8	150.4	150.4	15.0	15.0	0.0	0.0
Int'l Registration Plan	59.6	66.0	60.2	10.7	1.0	5.8	9.6
Interest Earnings	7.2	7.5	14.3	4.2	98.6	-6.8	-47.6
Rental Tax	33.3	35.9	35.1	7.8	5.4	0.8	2.3
Aviation Fuels Tax	2.0	1.8	2.0	(10.0)	0.0	-0.2	-10.0
Miscellaneous	17.3	18.3	15.7	5.8	(9.2)	2.6	16.6
TOTAL	\$2,806.3	\$3,137.2	\$3,087.1	11.8%	10.0%	\$50.1	1.6%

As required by Section 33.1-23.03:8A(2) of the <u>Code of Virginia</u>, all revenues that exceed the official forecast are deposited into the Priority Transportation Fund.

Revenues from motor fuels taxes (23 percent of the CTF in fiscal year 2015) exceeded the forecast by \$3.0 million in fiscal year 2015. Motor fuels tax collections increased by 10.1 percent in fiscal year 2015.

Fiscal year 2015 is the second year of the new taxing regime for motor fuels. HB2313 (2013) eliminated the \$0.175 per gallon tax on motor fuels, and replaced it with a percentage-based tax of 3.5 percent for gasoline and 6 percent for diesel fuel. In addition, a provision of HB2313 required an additional 1.6 percent tax on gasoline given the U.S. Congress did not pass the Marketplace Fairness Act.

Gasoline consumption had been unusually weak in 2009 through 2013, a result of the struggling economy and elevated gas prices in 2010. Consumption has been increasing due to the improved economic outlook and the sharp decline in gasoline prices.

The market for diesel fuel is different than the market for gasoline. Most diesel fuel is purchased and consumed by motor carriers, and reflects movement of freight through the state rather than commuter passenger travel. Motor carriers are sensitive to prices and are likely to purchase fuel in a state that has lower fuel tax rates. Motor carriers respond to the general economy more than passenger traffic: they tend to travel more miles when the economy is in an expansion and less when the economy is in a recession.

Revenues from the motor vehicle sales and use tax (27 percent of the CTF in fiscal year 2015) increased by 8.4 percent in fiscal year 2015. HB2313 (2013) amends the tax on the sale of motor vehicles (the "titling tax"). Previously, the titling tax was 3 percent. A new rate of 4.15 percent will be phased in over four years. In fiscal year 2015, the rate was 4.05 percent. New car sales increased by 6.3 percent; however, used car sales were relatively flat, growing by only 0.7 percent.

Revenues from the transportation share of the state retail sales tax (32 percent of the CTF in fiscal year 2015) increased by 20.9 percent. HB2313 (2013) raised the state sales and use tax across the Commonwealth from 4 percent to 4.3 percent and designated the increased revenues to the Commonwealth Transportation Fund. The strong growth in fiscal year 2015 can be attributed to twelve months of the new tax rate (as opposed to eleven months in fiscal year 2014) and the inclusion of accelerated sales tax revenues in the transportation fund.

Motor vehicle license fees (8 percent of the CTF in fiscal year 2015) fell by 1.7 percent in fiscal year 2015.

International Registration Plan fees (2 percent of the CTF in fiscal year 2015), the registration fees paid by all interstate motor carriers driving through the Commonwealth, increased by 10.7 percent in fiscal year 2015. These fees are based on vehicle weight and the miles traveled in Virginia.

Collectively, all other taxes and revenues (8 percent of the CTF in fiscal year 2015) increased by 10.6 percent in fiscal year 2015.

Outlook for Key Tax Base Variables

Motor Fuel Consumption

Gasoline consumption increased by 3.5 percent and diesel fuel consumption increased by 0.1 percent in fiscal year 2015.

The recent improvement in the economic outlook and the sharp decline in motor fuels prices is expected to provide a short-term boost to motor fuels consumption. The decline in gasoline prices has driven a stronger demand for light-duty trucks and other less fuel efficient vehicles. However, the general outlook for motor gasoline is for declining consumption as average new vehicle fuel economy continues to improve. As new cars replace less-efficient older cars, the increase in the average fleet fuel economy is expected to outpace the growth in the driving age population and vehicle miles traveled and put continuing downward pressure on gasoline consumption.

In addition to improvements in fuel efficiency, the expected future decline in gasoline consumption is attributable in large part to some powerful secular changes in U.S. demographics and cultural in general:

- As the aging population leaves the workforce, the employment-population ratio has contracted.
- There is growing trend toward a portable workplace and the ability to work from home.
- Social media have provided powerful alternatives to face-to-face interaction requiring transportation (Internet apps, games, the ubiquitous mobile phone for talk and texting).
- There has been a general trend in young adults to drive less (related to points two and three above). See this report at the U.S. PIRG website for details.
- The US is experiencing accelerating urban population growth, which reduces the percapita dependence on gasoline.

Table 4.2

Motor Fuel Consumption, History and Forecast, Fiscal Years 2015 - 2018
(Percent Growth)

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Taxable Gallons - Gasoline				
Official	(0.5)	2.0	1.4	1.2
Standard	3.5	2.8	1.1	8.0
Alternative		1.6	1.6	3.5
Taxable Gallons - Diesel				
Official	1.6	1.3	(0.1)	1.4
Standard	0.1	4.7	2.8	1.0
Alternative		2.1	2.2	(0.2)

Vehicle Sales

The official forecast anticipated that fiscal year 2015 new car sales would continue to grow. New car sales increased by a solid 6.3 percent, well ahead of the forecast of a 3.6 percent increase.

Used car sales were expected to decline by 1.0 percent in fiscal year 2015. Used car sales increased by 0.7 percent in fiscal year 2015.

Table 4.3 shows the official and November 2015 forecast for new and used vehicles. The discussion of the vehicle sales outlook is divided into two sections: new taxable titles and used taxable titles.

Table 4.3
Virginia Vehicle Market, History and Forecast, Fiscal Years 2015 - 2018
(Percent Growth)

	<u>2015</u>	<u>2016</u>	2017	<u>2018</u>
New Taxable Titles				
Official	3.6	0.5	(3.4)	0.3
Standard	6.3	5.1	0.6	0.5
Alternative		0.7	(3.2)	3.1
Used Taxable Titles				
Official	(1.0)	1.4	2.5	(0.7)
Standard	0.7	1.9	2.6	8.0
Alternative		(0.5)	(0.4)	1.3

<u>New Taxable Titles</u>: In fiscal year 2015, close to 375,000 new vehicles were titled in Virginia, an increase of 22,000 from fiscal year 2014. New car sales finally hit the pre-recession sales level in fiscal year 2015.

The November forecast expects continued solid growth in fiscal year 2016 as sales are supported by a steadily improving job market, favorable financing conditions including long-term loans, favorable leasing terms, replacement demand, and broader credit availability than for other loan products.

<u>Used Taxable Titles</u>: About 1.1 million used cars were sold in Virginia in fiscal year 2015, an increase of 0.7 percent. 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.

November 2015 Standard Commonwealth Transportation Fund Forecast

Table 4.4 on the following pages presents a comparison of the November 2014 standard forecast and the official forecast. In the Virginia standard forecast, economic growth continues to improve, but performs below the national economy.

Beginning in fiscal year 2014, Chapter 766 (2013) provided a considerable influx of new revenues into the Commonwealth Transportation Fund:

- The bill eliminated the \$0.175 per gallon tax on motor fuels, and replaced it with a percentage-based tax of 3.5 percent for gasoline and 6 percent for diesel fuel.
 (Given that the U.S. Congress did not pass the Marketplace Fairness Act by January 1, 2015, the rate on gasoline rose to 5.1 percent.)
- The bill raised the state sales and use tax across the Commonwealth from 4 percent to 4.3 percent and designated the increased revenues to the Commonwealth Transportation Fund.
- The bill increased the share of existing general sales and use tax revenues used for transportation from 0.50 percent to 0.675 percent, phased in over four years. (Given that the U.S. Congress did not pass the Marketplace Fairness Act by January 1, 2015, the share of sales tax revenues used for transportation will remain at 0.60 percent.)
- The bill amended the tax on the sale of motor vehicles (the "titling tax"). Previously, the titling tax was 3 percent. A new rate of 4.15 percent will be phased in over four years.

The November forecast shows an increase of \$103.2 million in fiscal year 2016, an increase of \$123.4 million in fiscal year 2017, and an increase of \$127.8 million in fiscal year 2018, as compared to the official forecast. Revenue collections are estimated to increase by 7.3 percent, 3.0 percent, and 2.1 percent in fiscal years 2016 through 2018, respectively.

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Table 4.4

The Official and November Commonwealth Transportation Fund Forecast for Fiscal Year 2016
(Dollars in Millions)

	Fiscal '	Year 2015		Fi	scal Year 20	16	
	_		Official	November		% Growth ove	
	Actual	% Growth	Forecast	Forecast	Change	Official	November
lighway Maintenance & Operating	Fund						
Motor Fuels Tax \$	576.4	9.3 % \$	678.5 \$	706.0 \$	27.5	17.7 %	22.5
Road Tax	(1.8)	(460.0)	0.6	(0.1)	(0.7)	(133.3)	(94.4)
Motor Vehicle Sales And Use Tax	638.6	` 9.9 [´]	628.3	669.0 [°]	40.7	(1.6)	4.8
Motor Vehicle License Fees	223.3	(1.9)	222.7	222.7	0.0	(0.3)	(0.3)
Retail Sales and Use Tax	277.9	45.3 [°]	281.7	282.8	1.1	1.4	1.8
International Registration Plan	66.0	10.7	60.4	66.4	6.0	(8.5)	0.6
Recordation Tax (1 cent)	14.0	12.0	12.7	14.9	2.2	(9.3)	6.4
Miscellaneous	18.3	5.8	15.7	17.0	1.3	(14.2)	(7.1)
Total State Taxes and Fees \$		12.1 % \$	1,900.6		78.1	4.8 %	9.2
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ansportation Trust Fund							
Motor Fuels Tax \$		13.3 % \$	161.2 \$		6.5	16.2 %	20.9
Insurance Premiums Tax (1/3)	150.4	15.0	157.0	150.3	(6.7)	4.4	(0.1)
Road Tax	7.5	(6.3)	7.9	8.0	0.1	5.3	6.7
Motor Vehicle Sales And Use Tax	215.9	4.1	211.7	224.8	13.1	(1.9)	4.1
Motor Vehicle License Fees	21.8	0.5	21.9	21.7	(0.2)	0.5	(0.5)
Retail Sales and Use Tax	717.0	13.6	725.6	732.4	6.8	1.2	2.1
Recordation Tax (2 cents)	28.0	12.4	25.2	29.7	4.5	(10.0)	6.1
Interest Earnings	7.5	4.2	14.8	13.6	(1.2)	97.3	81.3
Rental Tax	35.9	7.8	35.6	37.9	2.3	(0.8)	5.6
Aviation Fuels Tax	1.8	(10.0)	2.0	1.9	(0.1)	11.1	5.6
Total State Taxes and Fees \$		11.4 % \$	1,362.9 \$		25.1	2.9 %	4.8
otal HMOF And TTF							
Motor Fuels Tax \$	715.1	10.1 % \$	839.7 \$	873.7 \$	34.0	17.4 %	22.2
Insurance Premiums Tax (1/3)	150.4	15.0	157.0	150.3	(6.7)	4.4	(0.1)
Road Tax	5.7	(32.9)	8.5	7.9	(0.6)	49.1	38.6
Motor Vehicle Sales and Use Tax	854.5	8.4	840.0	893.8	53.8	(1.7)	4.6
Motor Vehicle License Fees	245.1	(1.7)	244.6	244.4	(0.2)	(0.2)	(0.3)
International Registration Plan	66.0	10.7	60.4	66.4	6.0	(8.5)	0.6
Retail Sales and Use Tax	994.9	20.9	1,007.3	1,015.2	7.9	1.2	2.0
Recordation Tax (3 cents)	42.0	12.3	37.9	44.6	6.7	(9.8)	6.2
Interest Earnings	7.5	4.2	14.8	13.6	(1.2)	97.3	81.3
Rental Tax	35.9	7.8	35.6	37.9	2.3	(0.8)	5.6
Aviation Fuels Tax	1.8	(10.0)	2.0	1.9	(0.1)	11.1	5.6
Miscellaneous	18.3	5.8	15.7	17.0	1.3	(14.2)	(7.1)
otal State Taxes and Fees \$	3,137.2	<u>11.8</u> % \$	3,263.5	3,366.7	103.2	4.0 %	7.3
ransfers per the Appropriations A							
Retail Sales Tax - AST (TTF)	21.7	0.0	0.0	0.0	0.0	(100.0)	(100.0)
Total Transfers \$		0.0 \$	0.0 \$	0.0 \$	0.0	(100.0)	(100.0)
otal Transportation Fund \$	3,158.9	11.7 \$	3,263.5 \$	3,366.7 \$	103.2	3.3 %	6.6

The Official forecast is based on the November 2014 IHS Economics Pessimistic Plus outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.4

The Official and November Commonwealth Transportation Fund Forecast for Fiscal Year 2017
(Dollars in Millions)

	-	Official		November		Fiscal Year 201		wth over FY 16	_
	_	Forecast	_	Forecast		Change	Official	November	_
Highway Maintenance & Operating Fun	d								
Motor Fuels Tax	\$	685.5	\$	716.8	\$	31.3	1.0 %	1.5	%
Road Tax		0.6		(0.2)		(8.0)	0.0	*	
Motor Vehicle Sales And Use Tax		643.2		696.9		53.7	2.4	4.2	
Motor Vehicle License Fees		224.7		224.8		0.1	0.9	0.9	
Retail Sales and Use Tax		296.7		296.2		(0.5)	5.3	4.7	
International Registration Plan		60.6		61.7		1.1	0.3	(7.1))
Recordation Tax (1 cent)		12.7		0.0		(12.7)	0.0	(100.0))
Miscellaneous		15.7		17.0		1.3	0.0	0.0	
Total State Taxes and Fees (HMOF)	\$	1,939.7	\$	2,013.2	\$	73.5	2.1 %	1.7	%
Transportation Trust Fund									
Motor Fuels Tax	\$	162.8	\$	170.1	\$	7.3	1.0 %	1.4	%
Insurance Premiums Tax (1/3)		162.8		156.0		(6.8)	3.7	3.8	
Road Tax		7.8		8.1		0.3	(1.3)	1.3	
Motor Vehicle Sales And Use Tax		213.3		230.3		17.0	0.8	2.4	
Motor Vehicle License Fees		22.3		22.0		(0.3)	1.8	1.4	
Retail Sales and Use Tax		754.6		768.5		13.9	4.0	4.9	
Recordation Tax (2 cents)		25.2		45.4		20.2	0.0	52.9	
Interest Earnings `		17.3		12.1		(5.2)	16.9	(11.0))
Rental Tax		36.1		39.6		3.5	1.4	4.5	•
Aviation Fuels Tax		2.0		2.0		0.0	0.0	5.3	
Total State Taxes and Fees (TTF)	\$	1,404.2	\$	1,454.1	\$	49.9	3.0 %	4.8	- %
Total HMOF And TTF									
Motor Fuels Tax	\$	848.3	\$	886.9	\$	38.6	1.0 %	1.5	%
Insurance Premiums Tax (1/3)		162.8		156.0		(6.8)	3.7	3.8	
Road Tax		8.4		7.9		(0.5)	(1.2)	(0.0))
Motor Vehicle Sales and Use Tax		856.5		927.2		70.7	2.0	3.7	
Motor Vehicle License Fees		247.0		246.8		(0.2)	1.0	1.0	
International Registration Plan		60.6		61.7		1.1	0.3	(7.1))
Retail Sales and Use Tax		1,051.3		1,064.7		13.4	4.4	4.9	
Recordation Tax (3 cents)		37.9		45.4		7.5	0.0	1.8	
Interest Earnings		17.3		12.1		(5.2)	16.9	(11.0)	
Rental Tax		36.1		39.6		3.5	1.4	4.5	
Aviation Fuels Tax		2.0		2.0		0.0	0.0	5.3	
Miscellaneous	_	15.7	_	17.0		1.3	0.0	0.0	
Total State Taxes and Fees	\$_	3,343.9	\$_	3,467.3	\$_	123.4	2.5 %	3.0	_%
Transfers per the Appropriations Act									
Retail Sales Tax - AST (TTF)		0.0		0.0		0.0	n/a	n/a	
Total Transfers	\$ -	0.0	\$	0.0	\$	0.0	%	n/a	- %
Total Transportation Fund	\$	3,343.9		3,467.3		123.4			%

The Official forecast is based on the November 2014 IHS Economics Pessimistic Plus outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.4
The Official and November Commonwealth Transportation Fund Forecast for Fiscal Year 2018
(Dollars in Millions)

						Fiscal Year 2018				
	-	Official		November			% 0	Frowth o	over FY 17	_
	_	Forecast	-	Forecast		Change	Official		November	_
Highway Maintenance & Operating Fund	d									
Motor Fuels Tax	\$	693.9	\$	722.9	\$	29.0	1.2	%	0.9	%
Road Tax		0.6		(0.3)		(0.9)	0.0		(50.0))
Motor Vehicle Sales And Use Tax		647.3		707.1		59.8	0.6		1.5	
Motor Vehicle License Fees		223.9		224.5		0.6	(0.4)		(0.1))
Retail Sales and Use Tax		308.8		306.5		(2.3)	4.1		3.5	
International Registration Plan		60.8		62.8		2.0	0.3		1.8	
Recordation Tax (1 cent)		12.7		0.0		(12.7)	0.0		n/a	
Miscellaneous	_	15.7	_	17.0		1.3	0.0		0.0	
Total State Taxes and Fees (HMOF)	\$	1,963.7	\$	2,040.5	\$	76.8	1.2	%	1.4	%
Fransportation Trust Fund										
Motor Fuels Tax	\$	164.8	\$	171.7	\$	6.9	1.2	%	0.9	%
Insurance Premiums Tax (1/3)		170.7		162.2		(8.5)	4.9		4.0	
Road Tax		8.0		8.1		0.1	2.6		0.0	
Motor Vehicle Sales And Use Tax		214.6		233.6		19.0	0.6		1.4	
Motor Vehicle License Fees		22.1		22.0		(0.1)	(0.9)		0.0	
Retail Sales and Use Tax		785.5		795.4		9.9	4.1		3.5	
Recordation Tax (2 cents)		25.2		45.4		20.2	0.0		0.0	
Interest Earnings \		19.0		17.9		(1.1)	9.8		47.9	
Rental Tax		36.7		41.3		4.6	1.7		4.3	
Aviation Fuels Tax		2.0		2.0		0.0	0.0		0.0	
Total State Taxes and Fees (TTF)	\$	1,448.6	\$	1,499.6	\$	51.0	3.2	%	3.1	_
otal HMOF And TTF										
Motor Fuels Tax	\$	858.7	\$	894.6	\$	35.9	1.2	%	0.9	%
Insurance Premiums Tax (1/3)		170.7		162.2		(8.5)	4.9		4.0	
Road Tax		8.6		7.8		(0.8)	2.4		(1.3))
Motor Vehicle Sales and Use Tax		861.9		940.7		78.8	0.6		1.5	
Motor Vehicle License Fees		246.0		246.5		0.5	(0.4)		(0.1))
International Registration Plan		60.8		62.8		2.0	0.3		1.8	
Retail Sales and Use Tax		1,094.3		1,101.9		7.6	4.1		3.5	
Recordation Tax (3 cents)		37.9		45.4		7.5	0.0		0.0	
Interest Earnings		19.0		17.9		(1.1)	9.8		47.9	
Rental Tax		36.7		41.3		4.6	1.7		4.3	
Aviation Fuels Tax		2.0		2.0		0.0	0.0		0.0	
Miscellaneous	_	15.7	_	17.0	- ,	1.3	0.0	_	0.0	
otal State Taxes and Fees	\$_	3,412.3	\$	3,540.1	\$	127.8	2.0	% <u> </u>	2.1	_%
ransfers per the Appropriations Act										
Retail Sales Tax - AST (TTF)		0.0		0.0		0.0	n/a		n/a	
Total Transfers	\$	0.0	\$	0.0	\$	0.0		%	n/a	<u></u> %
Total Transportation Fund	\$	3,412.3	\$	3,540.1	\$	127.8	2.0	%	2.1	%

The Official forecast is based on the November 2014 IHS Economics Pessimistic Plus outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.4

The November Commonwealth Transportation Fund Forecast for Fiscal Years 2019 through 2022 (Dollars in Millions)

									. 10	verriber 3, 2	
				Fiscal	Years 20	19 th	rough 2022				
		FY 19	%	FY 20	%		FY 21	%		FY 22	%
		Forecast	Growth	Forecast	Growth		Forecast	Growth		Forecast	Growth
Highway Maintenance & Operating Fo	und										
Motor Fuels Tax	\$	733.1	1.4	\$ 746.8	1.9	\$	757.4	1.4	\$	766.1	1.1
Road Tax		(0.3)	0.0	(0.3)	0.0		(0.3)	0.0		(0.3)	0.0
Motor Vehicle Sales And Use Tax		706.0	(0.2)	697.8	(1.2)		695.4	(0.3)		694.0	(0.2)
Motor Vehicle License Fees		225.1	0.3	225.4	0.1		226.4	0.4		226.2	(0.1)
Retail Sales and Use Tax		318.4	3.9	330.5	3.8		342.9	3.8		355.7	3.7
International Registration Plan		63.2	0.6	63.2	0.0		63.5	0.5		63.8	0.5
Recordation Tax (1 cent)		0.0	n/a	0.0	n/a		0.0	n/a		0.0	n/a
Miscellaneous		17.0	0.0	17.0	0.0		17.0	0.0		17.0	0.0
Total State Taxes and Fees (HMOF)	\$	2,062.5	1.1	\$ 2,080.4	0.9%	\$	2,102.3	1.1%	\$	2,122.5	1.0%
Transportation Trust Fund											
Motor Fuels Tax		174.1	1.4	177.3	1.8		180.0	1.5		181.9	1.1
Insurance Premiums Tax (1/3)		169.2	4.3	186.9	10.5		194.4	4.0		202.6	4.2
Road Tax		8.3	2.5	8.4	1.2		8.5	1.2		8.6	1.2
Motor Vehicle Sales And Use Tax		233.2	(0.2)	230.6	(1.1)		229.9	(0.3)		229.4	(0.2)
Motor Vehicle License Fees		22.1	0.5	22.1	0.0		22.3	0.9		22.0	(1.3)
Retail Sales and Use Tax		826.3	3.9	857.8	3.8		890.4	3.8		923.2	3.7
Recordation Tax (2 cents)		45.4	0.0	45.4	0.0		45.4	0.0		45.4	0.0
Interest Earnings		17.9	0.0	17.9	0.0		17.9	0.0		17.9	0.0
Rental Tax		42.8	3.6	44.1	3.0		45.6	3.4		47.1	3.3
Aviation Fuels Tax		2.0	0.0	2.0	0.0		2.0	0.0		2.0	0.0
Total State Taxes and Fees (TTF)	\$	1,541.3	2.8	\$ 1,592.5	3.3%	\$	1,636.4	2.8%	\$	1,680.1	2.7%
Total HMOF And TTF											
Motor Fuels Tax		907.2	1.4	924.1	1.9		937.4	1.4		948.0	1.1
Insurance Premiums Tax (1/3)		169.2	4.3	186.9	10.5		194.4	4.0		202.6	4.2
Road Tax		8.0	2.6	8.1	1.3		8.2	1.2		8.3	1.2
Motor Vehicle Sales and Use Tax		939.2	(0.2)	928.4	(1.1)		925.3	(0.3)		923.4	(0.2)
Motor Vehicle License Fees		247.2	0.3	247.5	0.1		248.7	0.5		248.2	(0.2)
International Registration Plan		63.2	0.6	63.2	0.0		63.5	0.5		63.8	0.5
Retail Sales and Use Tax		1,144.7	3.9	1,188.3	3.8		1,233.3	3.8		1,278.9	3.7
Recordation Tax (3 cents)		45.4	0.0	45.4	0.0		45.4	0.0		45.4	0.0
Interest Earnings		17.9	0.0	17.9	0.0		17.9	0.0		17.9	0.0
Rental Tax		42.8	3.6	44.1	3.0		45.6	3.4		47.1	3.3
Aviation Fuels Tax		2.0	0.0	2.0	0.0		2.0	0.0		2.0	0.0
Miscellaneous		17.0	0.0	17.0	0.0		17.0	0.0		17.0	0.0
Total State Taxes and Fees	\$	3,603.8	1.8	\$ 3,672.9	1.9%	\$	3,738.7	1.8%	\$	3,802.6	1.7%
Transfers per the Appropriations Act											
Retail Sales Tax - AST (TTF)		0.0	n/a	0.0	n/a		0.0	n/a		0.0	n/a
Total Transfers		\$0.0	n/a	\$0.0	n/a		\$0.0	n/a		\$0.0	n/a
Total Transportation Fund	\$	3,603.8	1.8	\$ 3,672.9	1.9%	\$	3,738.7	1.8%	\$	3,802.6	1.7%

The November forecast is based on the October 2015 IHS Economics Standard outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

The Alternative Forecast

Table 4.5 on the following pages compares the official and November alternative Commonwealth Transportation Fund forecasts. Under the alternative forecast, total transportation fund revenues are expected to increase by \$48.8 million in fiscal year 2016, \$42.2 million in fiscal year 2017, and \$89.9 million in fiscal year 2018, as compared to the official forecast. Revenue collections are estimated to increase by 5.6 percent, 2.2 percent, and 3.4 percent in fiscal years 2016 through 2018, respectively.

This forecast is based on IHS Economics October 2015 alternative forecast and the corresponding Virginia state forecast.

Table 4.5

The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2016
(Dollars in Millions)

	Fisc	I Year 2015					scal Year 2016			
	Actual	% Growth		Official orecast		November Forecast	Change	% Growth ov Official	er FY 15 November	
inhaan Maintanan a 8 On antin		70 GIOWIII		Olecast		Tolecast	Change	Olliciai	November	
ighway Maintenance & Operating	g Funa									
Motor Fuels Tax	\$ 576.	4 9.3 % \$	Б	678.5	\$	695.5 \$	17.0	17.7 %	20.7	
Road Tax	(1.	3) (460.0)		0.6		(0.1)	(0.7)	(133.3)	(94.4)	
Motor Vehicle Sales And Use Tax	638.	9.9		628.3		647.5	19.2	(1.6)	1.4	
Motor Vehicle License Fees	223.	3 (1.9)		222.7		222.7	0.0	(0.3)	(0.3)	
Retail Sales and Use Tax	277.	9 45.3		281.7		277.3	(4.4)	1.4	(0.2)	
International Registration Plan	66.	0 10.7		60.4		66.4	6.0	(8.5)	0.6	
Recordation Tax (1 cent)	14.	12.0		12.7		14.9	2.2	(9.3)	6.4	
Miscellaneous	18.			15.7		17.0	1.3	(14.2)	(7.1)	
Total State Taxes and Fees	\$ 1,812.	7 12.1 % \$	5	1,900.6	\$	1,941.2 \$	40.6	4.8 %	7.1	
ansportation Trust Fund										
Motor Fuels Tax	\$ 138.		5	161.2	\$	165.2 \$	4.0	16.2 %	19.1	
Insurance Premiums Tax (1/3)	150.	4 15.0		157.0		150.3	(6.7)	4.4	(0.1)	
Road Tax	7.	5 (6.3)		7.9		8.0	0.1	5.3	6.7	
Motor Vehicle Sales And Use Tax	215.	9 4.1		211.7		224.8	13.1	(1.9)	4.1	
Motor Vehicle License Fees	21.	3 0.5		21.9		21.7	(0.2)	0.5	(0.5)	
Retail Sales and Use Tax	717.	13.6		725.6		718.0	(7.6)	1.2	0.1	
Recordation Tax (2 cents)	28.	12.4		25.2		29.7	4.5	(10.0)	6.1	
Interest Earnings	7.	5 4.2		14.8		13.6	(1.2)	97.3	81.3	
Rental Tax	35.	7.8		35.6		37.9	2.3	(8.0)	5.6	
Aviation Fuels Tax	1.	3 (10.0)		2.0		1.9	(0.1)	11.1	5.6	
Total State Taxes and Fees	\$ 1,324.	5 11.4 % \$	5	1,362.9	\$	1,371.1	8.2	2.9 %	3.5	
otal HMOF And TTF										
Motor Fuels Tax	\$ 715.	1 10.1 % \$	5	839.7	\$	860.7 \$	21.0	17.4 %	20.4	
Insurance Premiums Tax (1/3)	150.	4 15.0		157.0		150.3	(6.7)	4.4	(0.1)	
Road Tax	5.	7 (32.9)		8.5		7.9	(0.6)	49.1	38.6	
Motor Vehicle Sales and Use Tax	854.	5 8.4		840.0		872.3	32.3	(1.7)	2.1	
Motor Vehicle License Fees	245.	1 (1.7)		244.6		244.4	(0.2)	(0.2)	(0.3)	
International Registration Plan	66.	0 10.7		60.4		66.4	6.0	(8.5)	0.6	
Retail Sales and Use Tax	994.	9 20.9		1,007.3		995.3	(12.0)	1.2	0.0	
Recordation Tax (3 cents)	42.	12.3		37.9		44.6	6.7	(9.8)	6.2	
Interest Earnings	7.			14.8		13.6	(1.2)	97.3	81.3	
Rental Tax	35.			35.6		37.9	2.3	(0.8)	5.6	
Aviation Fuels Tax	1.			2.0		1.9	(0.1)	11.1	5.6	
Miscellaneous	18.	` ,		15.7		17.0	1.3	(14.2)	(7.1)	
otal State Taxes and Fees	\$ 3,137.	2 11.8 % \$	_	3,263.5	_ \$	3,312.3	48.8	4.0 %	5.6	
ansfers per the Appropriations A	Act									
Retail Sales Tax - AST (TTF)	21.	7 0.0		0.0		0.0	0.0	(100.0)	(100.0)	
, ,	\$ 21.		<u> </u>	0.0	\$	0.0 \$		(100.0)	(100.0)	
otal Transportation Fund	\$ 3,158.	9 11.7 \$	5	3.263.5	\$	3,312.3	48.8	3.3 %	4.9	

The Official forecast is based on the November 2014 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.5

The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2017
(Dollars in Millions)

						F: 1.V 004			
	-	Official		November		Fiscal Year 2017		wth over FY 16	-
	_	Forecast	_	Forecast		Change	Official	November	_
Highway Maintenance & Operating Fund	b								
Motor Fuels Tax	\$	685.5	\$	707.7	\$	22.2	1.0 %	1.8	%
Road Tax		0.6		(0.2)		(0.8)	0.0	*	
Motor Vehicle Sales And Use Tax		643.2		652.5		9.3	2.4	0.8	
Motor Vehicle License Fees		224.7		224.8		0.1	0.9	0.9	
Retail Sales and Use Tax		296.7		292.4		(4.3)	5.3	5.4	
International Registration Plan		60.6		61.7		1.1	0.3	(7.1)	
Recordation Tax (1 cent)		12.7		0.0		(12.7)	0.0	(100.0)	
Miscellaneous		15.7		17.0		` 1.3 [′]	0.0	0.0	
Total State Taxes and Fees (HMOF)	\$ -	1,939.7	\$	1,955.9	\$	16.2	2.1 %	0.8	%
Transportation Trust Fund									
Motor Fuels Tax	\$	162.8	\$	168.1	\$	5.3	1.0 %	1.8	%
Insurance Premiums Tax (1/3)		162.8		156.0		(6.8)	3.7	3.8	
Road Tax		7.8		8.1		0.3	(1.3)	1.3	
Motor Vehicle Sales And Use Tax		213.3		230.3		17.0	0.8	2.4	
Motor Vehicle License Fees		22.3		22.0		(0.3)	1.8	1.4	
Retail Sales and Use Tax		754.6		746.6		(8.0)	4.0	4.0	
Recordation Tax (2 cents)		25.2		45.4		20.2	0.0	52.9	
Interest Earnings		17.3		12.1		(5.2)	16.9	(11.0)	
Rental Tax		36.1		39.6		3.5	1.4	4.5	
Aviation Fuels Tax		2.0		2.0		0.0	0.0	5.3	
Total State Taxes and Fees (TTF)	\$ _	1,404.2	\$		\$	26.0	3.0 %	4.3	%
Total HMOF And TTF									
Motor Fuels Tax	\$	848.3	\$	875.8	\$	27.5	1.0 %	1.8	%
Insurance Premiums Tax (1/3)		162.8		156.0		(6.8)	3.7	3.8	
Road Tax		8.4		7.9		(0.5)	(1.2)	(0.0)	
Motor Vehicle Sales and Use Tax		856.5		882.8		26.3	2.0	1.2	
Motor Vehicle License Fees		247.0		246.8		(0.2)	1.0	1.0	
International Registration Plan		60.6		61.7		1.1	0.3	(7.1)	
Retail Sales and Use Tax		1,051.3		1,039.0		(12.3)	4.4	4.4	
Recordation Tax (3 cents)		37.9		45.4		7.5	0.0	1.8	
,		17.3		12.1		(5.2)	16.9	(11.0)	
Interest Earnings Rental Tax		36.1		39.6		3.5		,	
							1.4	4.5	
Aviation Fuels Tax Miscellaneous	_	2.0 15.7	_	2.0 17.0	_	0.0 1.3	0.0	5.3 0.0	_
Total State Taxes and Fees	\$	3,343.9	\$	3,386.1	\$	42.2	2.5 %	2.2	%
Transfers per the Appropriations Act	· -	-,	•	- ,	• •				•
Retail Sales Tax - AST (TTF)		0.0		0.0		0.0	n/a	n/a	
Total Transfers	\$	0.0	\$	0.0	\$	0.0	%	n/a	%
Total Transportation Fund	\$	3,343.9	\$	3,386.1	\$	42.2	2.5 %	2.2	%

The Official forecast is based on the November 2014 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.5
The Official and November Alternative Commonwealth Transportation Fund Forecast for Fiscal Year 2018
(Dollars in Millions)

		_					Fiscal Year 2018		
Motor Fuels Tax			Official Forecast		November Forecast		Change		
Road Tax	lighway Maintenance & Operating Fu	nd				•			
Motor Vehicle Sales And Use Tax 647.3 (22.3) 25.0 (0.4) 0.6 (0.4) 0.1 (0.1) Motor Vehicle License Fees 223.9 (224.5) 0.6 (0.4) (0.1)	Motor Fuels Tax	\$	693.9	\$	736.8	\$	42.9	1.2 %	4.1
Motor Vehicle License Fees 223,9 224,5 0.6 (0.4) (0.1) Retail Sales and Use Tax 308,8 304,4 (4.4) 4.1 4.1 4.1 Metail Sales and Use Tax 308,8 304,4 (4.4) 4.1 4.1 4.1 Metail Sales and Use Tax 12.7 0.0 (12.7) 0.0 n/a 1.8 Recordation Tax (1 cent) 12.7 0.0 (12.7) 0.0 0.0 0.0 Total State Taxes and Fees (HMOF) \$ 1,963.7 \$ 2,017.5 \$ 53.8 1.2 % 3.1 3.0 0.0 0.0 0.0 Total State Taxes and Fees (HMOF) \$ 1,963.7 \$ 2,017.5 \$ 53.8 1.2 % 3.1 3.1 3.0 0.0	Road Tax		0.6		(0.3)		(0.9)	0.0	(50.0)
Retail Sales and Use Tax 308.8 304.4 (4.4) 4.1 4.1 Intermational Registration Plan (cent) 60.8 62.8 2.0 0.3 1.8 Recordation Tax (1 cent) 12.7 0.0 (12.7) 0.0 n/a Miscellaneous 15.7 17.0 1.3 0.0 0.0 Total State Taxes and Fees (HMOF) 1,963.7 \$ 2,017.5 \$ 53.8 1.2 % 3.1 ansportation Trust Fund Motor Fuels Tax \$ 164.8 \$ 174.9 \$ 10.1 1.2 % 4.0 Insurance Premiums Tax (1/3) 170.7 162.2 (8.5) 4.9 4.0 Insurance Premiums Tax (1/3) 170.7 162.2 (8.5) 4.9 4.0 Road Tax 8.0 8.1 0.1 2.6 0.0 Motor Vehicle License Fees 22.1 22.0 (0.1) (0.9) 0.0 Motor Vehicle Sales And Use Tax 785.5 777.3 (8.2) 4.1 4.1 Recordati	Motor Vehicle Sales And Use Tax		647.3		672.3		25.0		3.0
International Registration Plan 60.8 62.8 2.0 0.3 1.8 Recordation Tax (1 cent) 12.7 0.0 (12.7) 0.0 n/a n/a					_				(0.1)
Recordation Tax (1 cent)							, ,		4.1
Miscellaneous	<u> </u>								_
Total State Taxes and Fees (HMOF) \$ 1,963.7 \$ 2,017.5 \$ 53.8 1.2 % 3.1	, ,				0.0		, ,		
Motor Fuels Tax		_				-			
Motor Fuels Tax	Total State Taxes and Fees (HMOF)	\$	1,963.7	\$	2,017.5	\$	53.8	1.2 %	3.1
Insurance Premiums Tax (1/3)	ansportation Trust Fund								
Road Tax		\$		\$		\$	-		
Motor Vehicle Sales And Use Tax 214.6 233.6 19.0 0.6 1.4 Motor Vehicle License Fees 22.1 22.0 (0.1) (0.9) 0.0 Retail Sales and Use Tax 785.5 777.3 (8.2) 4.1 4.1 Recordation Tax (2 cents) 25.2 45.4 20.2 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Aviation Fuels Tax \$ 858.7 \$ 911.7 \$ 53.0 1.2 % 4.1 Insurance Premiums Tax (1/3) 170.7 162.2 (8.5) 4.9 4.0 Road Tax 86.6 7.8 (0.8) 2.4 (1.3) Motor Vehicle Sales and Use Tax 861.9 905.9 44.0 0.6 2.6 Motor Vehicle License Fees 246.0 246.5 0.5 (0.4) (0.1)							, ,		
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Road Tax 8.6 7.8 (0.8) 2.4 (1.3) Motor Vehicle Sales and Use Tax 861.9 905.9 44.0 0.6 2.6 Motor Vehicle License Fees 246.0 246.5 0.5 (0.4) (0.1) International Registration Plan 60.8 62.8 2.0 0.3 1.8 Retail Sales and Use Tax 1,094.3 1,081.7 (12.6) 4.1 4.1 Recordation Tax (3 cents) 37.9 45.4 7.5 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 Atal State Taxes and Fees 3,412.3 3,502.2 89.9 2.0 3.4 ansfers per the Appropriations Act 0.0 0.0 0.0 n/a n/a Total T		\$		\$		\$			
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Motor Vehicle License Fees 246.0 246.5 0.5 (0.4) (0.1) International Registration Plan 60.8 62.8 2.0 0.3 1.8 Retail Sales and Use Tax 1,094.3 1,081.7 (12.6) 4.1 4.1 Recordation Tax (3 cents) 37.9 45.4 7.5 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 Atal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 Ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 0.0 0.0 n/a % n/a	Road Tax		8.6		7.8		(8.0)	2.4	(1.3)
International Registration Plan 60.8 62.8 2.0 0.3 1.8 Retail Sales and Use Tax 1,094.3 1,081.7 (12.6) 4.1 4.1 Recordation Tax (3 cents) 37.9 45.4 7.5 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 Interest Earnings 3.412.3 3.502.2 89.9 2.0 % 3.4 Interest Earnings 3.412.3 3.502.2 3.4 Interest Earnings 3.412.3 3.502.2 3.4 Interest Earnings 3.412.3	Motor Vehicle Sales and Use Tax		861.9		905.9		44.0		2.6
Retail Sales and Use Tax 1,094.3 1,081.7 (12.6) 4.1 4.1 Recordation Tax (3 cents) 37.9 45.4 7.5 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 0.0 tal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 0.0 \$ 0.0 n/a % n/a	Motor Vehicle License Fees		246.0		246.5		0.5	(0.4)	(0.1)
Recordation Tax (3 cents) 37.9 45.4 7.5 0.0 0.0 Interest Earnings 19.0 17.9 (1.1) 9.8 47.9 Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 Atal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 Ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 0.0 0.0 n/a % n/a	International Registration Plan								1.8
Interest Earnings	Retail Sales and Use Tax		1,094.3		1,081.7		(12.6)	4.1	4.1
Rental Tax 36.7 41.3 4.6 1.7 4.3 Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 tal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 0.0 0.0 n/a % n/a	Recordation Tax (3 cents)		37.9		45.4		7.5	0.0	0.0
Aviation Fuels Tax 2.0 2.0 0.0 0.0 0.0 0.0 Miscellaneous 15.7 17.0 1.3 0.0 0.0 tal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 0.0 0.0 n/a % n/a	Interest Earnings		19.0		17.9		(1.1)	9.8	47.9
Miscellaneous 15.7 17.0 1.3 0.0 0.0 tal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 ansfers per the Appropriations Act Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 \$ 0.0 \$ 0.0 \$ 0.0 \$ 0.0 \$ 0.0	Rental Tax		36.7		41.3		4.6	1.7	4.3
Intal State Taxes and Fees \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4 Intal State Taxes and Fees \$ 0.0	Aviation Fuels Tax		2.0		2.0		0.0	0.0	0.0
Retail Sales Tax - AST (TTF)	Miscellaneous	-	15.7		17.0	-	1.3	0.0	0.0
Retail Sales Tax - AST (TTF) 0.0 0.0 0.0 n/a n/a Total Transfers \$ 0.0 \$ 0.0 \$ 0.0 n/a % n/a	tal State Taxes and Fees	\$.	3,412.3	\$	3,502.2	\$	89.9	2.0 %	3.4
Total Transfers \$ 0.0 \$ 0.0 \$ 0.0 n/a % n/a			0.0		2.2		2.2		I -
		ф -		· ·		. _C			
tal Transportation Fund \$ 3,412.3 \$ 3,502.2 \$ 89.9 2.0 % 3.4	Total Transiers	Ф	0.0	Ф	0.0	Ф	0.0	rva %	īva
	otal Transportation Fund	\$	3,412.3	\$	3,502.2	\$	89.9	2.0 %	3.4

The Official forecast is based on the November 2014 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation and includes actions of the 2015 session of the General Assembly.

The November forecast is based on the October 2015 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

Table 4.4

TheNovember Alternative Commonwealth Transportation Fund Forecast for Fiscal Years 2019 through 2022
(Dollars in Millions)

	Fiscal Years 2019 through 2022										
-		FY 19	%		FY 20	%	JIS	FY 21	%	FY 22	%
		Forecast	Growth		Forecast	Growth		Forecast	Growth	Forecast	Growth
Highway Maintenance & Operating Fu	ınd										
Motor Fuels Tax	\$	754.9	2.5	\$	769.6	1.9	\$	780.9	1.5	\$ 790.1	1.2
Road Tax		(0.3)	0.0		(0.3)	0.0		(0.3)	0.0	(0.3)	0.0
Motor Vehicle Sales And Use Tax		710.9	5.7		750.6	5.6		773.1	3.0	773.6	0.1
Motor Vehicle License Fees		225.1	0.3		225.4	0.1		226.4	0.4	226.2	(0.1)
Retail Sales and Use Tax		315.7	3.7		326.5	3.4		337.6	3.4	348.3	3.2
International Registration Plan		63.2	0.6		63.2	0.0		63.5	0.5	63.8	0.5
Recordation Tax (1 cent)		0.0	n/a		0.0	n/a		0.0	n/a	0.0	n/a
Miscellaneous		17.0	0.0		17.0	0.0		17.0	0.0	17.0	0.0
Total State Taxes and Fees (HMOF)	\$	2,086.5	3.4	\$	2,152.0	3.1%	\$	2,198.2	2.1%	\$ 2,218.7	0.9%
Transportation Trust Fund											
Motor Fuels Tax		179.3	2.5		182.9	2.0		185.5	1.4	187.6	1.1
Insurance Premiums Tax (1/3)		169.2	4.3		186.9	10.5		194.4	4.0	202.6	4.2
Road Tax		8.3	2.5		8.4	1.2		8.5	1.2	8.6	1.2
Motor Vehicle Sales And Use Tax		233.2	(0.2)		230.6	(1.1)		229.9	(0.3)	229.4	(0.2)
Motor Vehicle License Fees		22.1	0.5		22.1	0.0		22.3	0.9	22.0	(1.3)
Retail Sales and Use Tax		806.0	3.7		834.1	3.5		862.5	3.4	890.7	3.3
Recordation Tax (2 cents)		45.4	0.0		45.4	0.0		45.4	0.0	45.4	0.0
Interest Earnings		17.9	0.0		17.9	0.0		17.9	0.0	17.9	0.0
Rental Tax		42.8	3.6		44.1	3.0		45.6	3.4	47.1	3.3
Aviation Fuels Tax		2.0	0.0		2.0	0.0		2.0	0.0	2.0	0.0
Total State Taxes and Fees (TTF)	\$	1,526.2	2.8	\$	1,574.4	3.2%	\$	1,614.0	2.5%	\$ 1,653.3	2.4%
Total HMOF And TTF											
Motor Fuels Tax		934.2	2.5		952.5	2.0		966.4	1.5	977.7	1.2
Insurance Premiums Tax (1/3)		169.2	4.3		186.9	10.5		194.4	4.0	202.6	4.2
Road Tax		8.0	2.6		8.1	1.3		8.2	1.2	8.3	1.2
Motor Vehicle Sales and Use Tax		944.1	4.2		981.2	3.9		1,003.0	2.2	1,003.0	0.0
Motor Vehicle License Fees		247.2	0.3		247.5	0.1		248.7	0.5	248.2	(0.2)
International Registration Plan		63.2	0.6		63.2	0.0		63.5	0.5	63.8	0.5
Retail Sales and Use Tax		1,121.7	3.7		1,160.6	3.5		1,200.1	3.4	1,239.0	3.2
Recordation Tax (3 cents)		45.4	0.0		45.4	0.0		45.4	0.0	45.4	0.0
Interest Earnings		17.9	0.0		17.9	0.0		17.9	0.0	17.9	0.0
Rental Tax		42.8	3.6		44.1	3.0		45.6	3.4	47.1	3.3
Aviation Fuels Tax		2.0	0.0		2.0	0.0		2.0	0.0	2.0	0.0
Miscellaneous		17.0	0.0		17.0	0.0		17.0	0.0	17.0	0.0
Total State Taxes and Fees	\$	3,612.7	3.2	\$	3,726.4	3.1%	\$	3,812.2	2.3%	\$ 3,872.0	1.6%
Transfers per the Appropriations Act											
Retail Sales Tax - AST (TTF)		0.0	n/a		0.0	n/a		0.0	n/a	0.0	n/a
Total Transfers		\$0.0	n/a		\$0.0	n/a		\$0.0	n/a	\$0.0	n/a
Total Transportation Fund	\$	3,612.7	3.2	\$	3,726.4	3.1%	\$	3,812.2	2.3%	\$ 3,872.0	1.6%

The November forecast is based on the October 2015 IHS Economics Alternative outlook and the corresponding Virginia state forecast developed by the Department of Taxation.

ABC Revenues and Profits Fiscal Year 2015

In fiscal year 2015, ABC's total revenue, excluding state tax receipts, was \$730.1 million. Gross sales of alcoholic beverages in the retail stores accounted for 97 percent of this income. The remaining 3 percent of income was generated largely through the Department's regulatory and licensing activities. Table 4.6 shows ABC's revenues, costs, and profits for fiscal years 2012 through 2015. 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
Department of Alcoholic Beverage Control Components
of the Enterprise Fund - Revenues, Expenses, and Disbursements
Fiscal Years 2012-2015 (\$ millions)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total Revenue*	632.9	662.4	689.5	730.1
Cost of Goods & Total Operating Expenses	501.1	528.1	549.7	578.3
Net ABC Profit	132.1	133.7	139.9	151.9
Transfer to the General Fund:				
Reimbursement for Appropriations as provided by the Acts of the Assembly	67.9	67.1	67.1	67.5
Net Profits for Distribution	64.2	67.4	72.9	84.6

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

ABC Revenues and Profit Forecast for 2016-2019

Comparisons of ABC's performance in fiscal year 2014, estimated performance for fiscal year 2015, and actual performance in fiscal year 2015, are included in Table 4.7 on the following page. Fiscal Year 2015 compared to 2014 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 2015 results for store sales, profits for distribution and state tax revenues along with the 2016 through 2019 forecasts. Profit forecasts in Table 4.8 are net of any transfers mandated by the Appropriation Act.

Table 4.7
A Comparison of Fiscal Year 2014 Results to Fiscal Year 2015 Estimated and Actual Results (\$ millions)

				Varia	ance	FY15 v. FY14		
	FY14 Actual	FY15 Est.	FY15 Actual	<u>Amount</u>	Percent	Estimate	<u>Actual</u>	
Total Store Sales*	800.5	837.0	848.1	11.1	1.3%	36.5	47.6	
Net ABC Profit for Distribution	72.9	74.8	84.6	9.8	13.1%	1.9	11.7	
State Tax Revenue**	157.5	162.6	165.9	3.3	2.0%	5.1	8.4	

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

In fiscal year 2016, ABC expects sales to continue to grow in both the retail and mixed beverage licensee (restaurant) segments. Sales from ABC's retail outlets continue to increase year over year, while sales to restaurants remain variable due to the slow economic recovery in Virginia and the nation. Factors such as holiday season sales and sales from restaurants have the potential to significantly impact the accuracy of ABC's sales forecast. Currently, ABC is experiencing slight growth in both retail and restaurant sales.

On the expense side, ABC is faced with mandated salary and benefit costs, energy inflation, 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. Personnel costs account for 60 percent of ABC non-merchandise expenditures, 17 percent are for continuous charges such as rent and utilities, 18 percent are for contractual services such as shipping product to stores and telecommunications, and 5 percent are for miscellaneous expenses such as depreciation and credit card discount fees.

In fiscal years 2016 through 2019, increases in expenditures are exacerbated by the need to make significant ongoing infrastructure improvements in order to improve our information technology infrastructure. Currently, several of the ABC's systems are dated and have reached their end-of-life, needing to be upgraded to maintain viability and to keep up with ABC's growing needs. Upgrading the outdated systems also addresses an Auditor of Public Accounts audit point, ensuring that ABC complies with state and industry security standards. 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.

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

Table 4.8

Forecast of ABC Store Sales, ABC State Tax on Alcohol, and Net Profits for Distribution

(\$ millions)

	Actual		Forecast						
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	2019				
Total ABC Store Sales: (1)	848.1	890.1	916.8	944.5	972.8				
Adjusted Net Profits for Distribution: (2) (3)	84.6	80.2	78.9	79.5	80.0				
ABC State Tax Revenues:(1)									
Spirits	139.8	141.6	145.1	148.7	152.4				
Wine (4)	26.1	24.5	24.5	24.5	24.5				
Total Tax Revenue:	165.9	166.1	169.6	173.2	176.9				

- (1) Excludes the 5 percent 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

Distribution of ABC Profits and ABC State Tax Revenues

During fiscal year 2015, ABC contributed \$151.9 million of net profits to the Commonwealth, and collected \$218.1 million of taxes on store sales, wine and beer and an additional \$39.2 million of general sales tax totaling \$409.2 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. Such programs include the Department of Behavioral Health and Developmental Services' programs for the treatment of alcoholics as well as testing services and the Breathalyzer Training Program. The transfers for these programs and others were \$67.5 million in fiscal year 2015. The remaining ABC profits are transferred into the General Fund as ABC profits. ABC expects to meet transfer requirements in fiscal year 2016 given the projected increase in gross sales. However, risks include reduced purchases due to continued slow economic growth, particularly during the holiday season 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 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. 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 2015

The Virginia Lottery transferred \$557.6 million to the Lottery Proceeds Fund during fiscal year 2015. The Lottery also transferred \$1.9 million for debt set-off to the Department of Taxation and \$12.4 million from unclaimed prizes to the Literary Fund.

Sales for fiscal year 2015 were \$1.8 billion, an increase of \$33.1 million (+1.8 percent) from fiscal year 2014, but \$26.4 million (-1.4 percent) less than the fiscal year 2015 forecast. Net income was \$4.8 million (-0.9 percent) less than fiscal year 2014, but \$4.3 million (+0.8 percent) more than forecast, primarily due to lower than expected prize expense rates. The additional \$4.3 million in profits that were in excess of the 2015 forecast will be part of the transfers to the Lottery Proceeds Fund for the 2016 fiscal year.

Forecast Overview - Fiscal Years 2016 through 2018

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

- the economic outlook as endorsed by the Joint Advisory Board of Economists, in particular with respect to long-term interest rates and US Treasury-issued bond vields:
- continued traditional lottery gaming competition from neighboring jurisdictions, as well as the increased competition from internet lottery sales and casino-style gaming in nearby jurisdictions including Maryland, Washington, D.C., North Carolina, West Virginia, and Delaware;
- no legislatively-mandated change in the overall compensation rate paid to retailers offering Lottery products;
- 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 games that appeal to consumers; and
- no new, non-traditional product-line offerings such as Keno or video lottery game offerings, and no expansion of internet gaming in Virginia.

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Table 4.9
Forecast of Lottery Sales and Transfers to the Lottery Proceeds Fund

	FY2016	FY2017	FY2018
Sales	1,902,078,979	1,957,100,000	1,957,100,000
- Prize Expense	1,154,839,816	1,198,420,000	1,198,420,000
 Retailer Compensation 	107,360,890	110,813,400	110,813,400
 Operating Expenses 	106,177,757	107,635,350	107,635,350
+ Other Income	1,000,000	1,000,000	1,000,000
Net Income	534,700,516	541,231,250	541,231,250
Other Transfers	4,255,031	-	-
Total Available	538,955,547	541,231,250	541,231,250

For fiscal year 2016, the Lottery is projecting sales of \$1.9 billion and net income (turnover to the Lottery Proceeds Fund) of \$534.7 million. Prize expense is estimated to be \$1.2 billion, or 60.7 percent of sales; retailer compensation is forecast to be \$107.4 million, or 5.64 percent of sales. This forecast takes into account current trends and simulation models for jackpot progressions and sales, and statistically expected prize expense rates. The estimated \$534.7 million net income, plus the residual \$4.3 million of fiscal year 2015 profits that will be transferred during fiscal year 2016, brings the total expected transfers to the Lottery Proceeds Fund for FY2016 to \$539.0 million.

For fiscal year 2017, the Lottery expects that sales will grow to \$2.0 billion, creating revenue for the Lottery Proceeds Fund of \$541.2 million for fiscal year 2017, and holds this annual profit estimate steady for fiscal year 2018 and through the next biennium.

Sales Projections for Fiscal Years 2016 through 2018

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, product life cycle, and the Lottery's future plans for each of the products.

Scratch Games

Scratch games account for 55 percent of total lottery sales. Sales of scratch games are expected to sustain the recent growth in prior years over the forecast period, as players continue to support the variety of games offered in Virginia. The key to the maintenance and growth of scratch sales over the forecast horizon will be actively managing our

comprehensive portfolio of games at various price points and prize levels, as well as continuing to maintain and expand our retail distribution network.

The Jackpot-Style Games: Mega Millions, Powerball, Bank a Million, and Cash 4 Life

About 12 percent of the Lottery's sales come from jackpot-style games - those games offering top prizes in the millions of dollars. The Lottery currently offers four such games - Mega Millions, Powerball, Bank a Million and Cash 4 Life. "Luck of the draw" plays a major role in the sales performance of Mega Millions and Powerball.

Another key determinant of sales levels for these games is the prevailing interest rate. The Lottery invests the prize pool for each jackpot prize in U.S. Treasury Bonds to create the necessary income stream. At a given level of sales and resulting cash pool, the higher the yield of the bonds, the higher an annuity jackpot prize may be advertised. Higher advertised jackpots lead to higher sales. Thus in periods of high interest rates, jackpots grow relatively quickly and sales are stable. In periods of low interest rates, jackpots grow slowly and sales decline. Current bond yields continue to be very low.

Bank a Million and Cash 4 Life, the other jackpot-style games currently offered in Virginia, offer a fixed prize to players without regard to the number of winners resulting from any single drawing.

Escalating efforts to expand multi-state jackpot game offerings among all U.S. Lottery states led to the 2010 breakthrough agreement between the two major consortia – Mega Millions and Powerball – that may lead to further product offerings with a national jackpot. Because there are so many states involved in these types of national agreements, these initiatives have experienced many delays and setbacks over the years. There are no anticipated changes to the national games at this time; if modified games or new products become available for sale in Virginia, a forecast adjustment may be recommended depending upon the timing and predictability of revenue. Because such national game initiatives require significant lead-time, no such forecast adjustments would be needed before fiscal year 2017.

Daily Games

The Lottery's other drawing games – those games sold through the network of Lottery computer terminals and where winners are determined by a random drawing – collectively referred to as "daily games," are Pick 3, Pick 4 and Cash 5. Daily games comprise about a third of total Lottery sales. Each of these products operates on approximately the same profit margin. While Pick 3 and Pick 4 are very mature products, total sales are forecast to continue increasing slightly. Some play is expected to continue to shift from Pick 3 to Pick 4 over time. Cash 5 is expected to continue to exhibit stable sales, an unusual phenomenon and contrary to the experiences of other U.S. lotteries that have seen their Cash 5 sales decline more significantly.

Other Products

Since fiscal year 2007, the Lottery has offered two new products to players: the limited-time offering of raffle tickets, and a new line of "print and play" style games. Raffle style games offer a fixed number of tickets for sale, and each ticket has an equal chance to win predetermined prizes. Fast play, or print and play, style games are printed at retailer terminals, and offer an instant-win experience for consumers. The Fast Play offerings will be re-branded in fiscal year 2016, with a new look, new game offerings, and a new name.

Net Income for Fiscal Years 2016 through 2018

The Lottery is forecasting net income of \$534.7 million for fiscal year 2016, and \$541.2 million for each fiscal year 2017 and 2018. The Lottery's largest expense, prizes to players, is expected to increase over this period as players continue to buy more of the higher price point scratch games, which pay a higher portion of sales back in prizes. Retailers should continue to earn commissions and incentives equal to about 5.6 percent of sales. Operating expenses are projected to remain low, forecast to stabilize around 5.5 percent of total sales – about half of the 10 percent statutory maximum.

Ongoing Risks to the Forecast

There are always 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.

A second risk is competition from other gaming opportunities available to consumers. Many state lotteries, including North Carolina, Kentucky and Maryland, have either initiated or are actively working to launch internet-based product offerings not available in Virginia. Increased competition from video lottery and casino offerings in Maryland, which began in 2010, may have an increasingly negative impact on traditional lottery product sales in Virginia – in particular, the casino just across the Virginia border at National Harbor on the Potomac River which is scheduled to open in fall 2016. This increase in competition for gaming dollars along the heavily populated northern Virginia border is in addition to the well-established competition from video lottery and table games offerings in West Virginia.

A third risk is the prospect of the Lottery being constrained even further in its ability to launch, promote and support products. For example, if the advertising budget were reduced to sub-optimal levels, sales would suffer.

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 for the expansion of the Lottery retailer network, advertising, and contractual commitments to vendor partners that are primarily based on percentage of sales agreements.

Unemployment Insurance Trust Fund

The unemployment benefit financing system calculates an employer's tax liability by computing the ratio of benefit charges to taxable wages for the last four fiscal years. An appropriate tax rate, subject to a maximum and minimum, is then assigned based on the employer's benefit ratio. A determining factor of tax schedules is the fund balance factor—a ratio related to the Trust Fund's solvency level. Generally, a lower fund balance factor means higher tax schedules.

The Unemployment Insurance (UI) Trust Fund also may receive tax revenues from two other sources—the pool tax and the fund-building tax. The pool tax is an added tax imposed on all employers to cover those benefits that cannot be charged to a particular employer because the employer is inactive or the employer is already subject to the maximum tax. When the fund balance factor exceeds 50 percent, interest income is used to offset these benefit charges. The fund-building tax of 0.2 percent is added to each employer's tax rate unless the fund balance factor exceeds 50 percent. UI tax collections were above the projection by \$0.7 million, or 0.1 percent, in fiscal year 2015. Projected interest revenues were \$1.7 million, or 15.7 percent, above the forecast because benefit payments were below forecast.

Discussion of Forecast

The estimates in Tables 4.10 and 4.11 represent projections from the Unemployment Insurance Benefit Financing Model. The current estimates' decrease in tax revenue in fiscal years 2016 through 2018 reflects decreases in the four year moving average of benefit charges overwhelming the fluctuations in the pool tax rate. In the Baseline Scenario, pool taxes of 0.11%, 0.13%, and 0.15% are projected for Calendar Years 2016--2018 respectively. The fund-building tax is not imposed after Calendar Years 2015. Interest revenues increase with increasing balances.

In the pessimistic Alternate Scenario, pool taxes of 0.12%, 0.20%, and 0.29% are projected for Calendar Years 2016--2018 respectively. A fund-building tax is imposed in Calendar Years 2017 and 2018. Tax revenues are lower in 2016 in the Alternate Scenario than the Baseline Scenario because employment is lower. Due to higher benefit payments in the Alternate Scenario, average benefit ratios are higher for fiscal Years 2016 through 2018. In fiscal year 2016, the higher tax rates in the Alternate Scenario are partly offset by lower employment, but still produce higher tax revenue than the Baseline Scenario. For fiscal years 2017 and 2018, despite continued lower employment, higher tax rates produce higher tax revenue than the Baseline Scenario. The Alternate Scenario produces lower interest revenue because balances are lower throughout the forecast period due to benefits rising faster than taxes.

Table 4.10
Financial Forecasts Fiscal Years 2016, 2017, and 2018
Baseline Scenario
(Millions of Dollars)

	<u>Fiscal `</u>	Year 2016 % Change From Actual	<u>Fisca</u>	al Year 2017 % Change From Estimated	<u>Fisca</u>	l Year 2018 % Change From Estimated
Day Cay	Standard	Fiscal Year	Standard	Fiscal Year	Standard	Fiscal Year
Revenue Source	Estimate	2015	Estimate	2016	Estimate	2017
Unemployment Insurance Tax	585.1	-16.0%	526.9	-9.9%	504.3	-4.3%
Interest on Trust Fund	17.4	61.1%	22.6	29.9%	26.9	19.0%
Total Revenue	602.5	-14.9%	549.5	-8.8%	531.2	-3.3%

Table 4.11
Financial Forecasts Fiscal Years 2016, 2017, and 2018
Pessimistic Alternate Scenario
(Millions of Dollars)

	Fiscal `	Year 2016	Fisca	l Year 2017	<u>Fisca</u>	l Year 2018
		% Change		% Change		% Change
		From Actual		From Estimated		From Estimated
	Standard	Fiscal Year	Standard	Fiscal Year	Standard	Fiscal Year
Revenue Source	Estimate	2015	Estimate	2016	Estimate	2017
Unemployment Insurance Tax	581.7	-16.5%	600.1	3.2%	690.4	15.0%
Interest on Trust Fund	16.6	53.7%	13.9	-16.3%	14.3	2.9%
Total Revenue	598.3	-15.4%	614.0	2.6%	704.7	14.8%

APPENDIX A ECONOMIC DATA

TABLE A.1 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES

	2012.3	2012.4	2013.1	2013.2	2013.3	History	ry 2014.1	2014.2	2014.3	2014.4	2015.1	2015.2
Real Gross Domestic Product, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	15,380.8 0.5 2.4	15,384.3 0.1 1.3	15,457.2 1.9 1.1	15,500.2 1.1 0.9	15,614.4 3.0 1.5	15,761.5 3.8 2.5	15,724.9 (0.9) 1.7	15,901.5 4.6 2.6	16,068.8 4.3 2.9	16,151.4 2.1 2.5	16,177.3 0.6 2.9	16,333.6 3.9 2.7
Real Consumer Spending, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	10,424.1 1.1 1.4	10,453.2 1.1 1.3	10,518.2 2.5 1.3	10,554.3 1.4 1.5	10,598.9 1.7 1.7	10,690.4 3.5 2.3	10,724.7 1.3 2.0	10,826.3 3.8 2.6	10,918.6 3.5 3.0	11,033.3 4.3 3.2	11,081.2 1.8 3.3	11,178.9 3.6 3.3
U.S. Personal Income, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	13,867.1 1.5 3.9	14,316.9 13.6 6.9	13,891.3 (11.4)	14,025.2 3.9 1.5	14,136.3 3.2 1.9	14,220.7 2.4 (0.7)	14,433.5 6.1 3.9	14,612.8 5.1 4.2	14,774.8 4.5 4.5	14,955.7 5.0 5.2	15,079.8 3.4 4.5	15,219.4 3.8 4.2
Virginia Personal Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	402,980.6 1.9 3.3	414,669.4 12.1 5.9	401,835.4 (11.8) 1.0	404,405.7 2.6 0.8	405,692.0 1.3 0.7	407,612.4 1.9 (1.7)	413,187.0 5.6 2.8	417,769.6 4.5 3.3	420,866.6 3.0 3.7	424,916.4 3.9 4.2	428,563.0 3.5 3.7	433,669.8 4.9 3.8
Virginia Wages and Salaries, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	207,833.3 2.2 1.6	212,339.7 9.0 4.7	210,348.8 (3.7) 1.6	210,927.9 1.1 2.0	210,380.4 (1.0) 1.2	210,552.3 0.3 (0.8)	212,407.7 3.6 1.0	213,769.3 2.6 1.3	214,499.5 1.4 2.0	217,240.1 5.2 3.2	219,340.5 3.9 3.3	221,512.0 4.0 3.6
Virginia Dividends, Interest, and Rent, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	80,603.8 2.1 9.3	86,669.3 33.7 14.6	79,897.2 (27.8) 2.2	80,512.9 3.1 0.4	81,401.1 4.5 1.0	81,489.0 0.4 (6.0)	82,940.3 7.3 3.8	83,992.6 5.2 4.3	84,266.9 1.3 3.5	85,034.5 3.7 4.4	85,699.4 3.2 3.3	87,164.0 7.0 3.8
Virginia Total Proprietor's Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	25,874.5 0.9 8.9	26,206.0 5.2 7.5	26,404.7 3.1 4.5	26,217.3 (2.8) 1.5	26,276.1 0.9 1.6	26,415.0 2.1 0.8	26,880.5 7.2 1.8	27,685.7 12.5 5.6	28,066.7 5.6 6.8	28,557.6 7.2 8.1	29,026.2 6.7 8.0	29,303.8 3.9 5.8

TABLE A.1 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES

	2012.3	2012.4	2013.1	2013.2	2013.3	History 2013.4	y 2014.1	2014.2	2014.3	2014.4	2015.1	2015.2
Total U.S. Employment, Millions, SA Annualized % Change % Change from Prior Year's Quarter	134.3 1.2 1.6	134.8 1.7 1.7	135.5 2.1 1.6	136.1 1.7 1.7	136.6 1.6 1.8	137.3 1.9 1.8	137.8 1.6 1.7	138.6 2.3 1.9	139.4 2.2 2.0	140.2 2.5 2.1	141.0 2.2 2.3	141.6 1.7 2.2
Virginia Total Nonag. Employment, Thousands, SA Annualized % Change % Change from Prior Year's Quarter	3,731.2 1.1 0.9	3,755.1 2.6 1.4	3,761.2 0.6 1.1	3,752.0 (1.0) 0.8	3,759.3 0.8 0.8	3,760.0 0.1 0.1	3,759.1 (0.1) (0.1)	3,777.8 2.0 0.7	3,781.2 0.4 0.6	3,784.6 0.4 0.7	3,793.4 0.9 0.9	3,814.2 2.2 1.0
CPI, All Urban, 1982-1984=1.0, SA Annualized % Change % Change from Prior Year's Quarter	2.3 1.8 1.7	2.3 1.9	2.3 1.4 7.7	2.3 (0.1)	2.3.4 -1.5.3	6. 4. t. c.	2.2. 4.1. 4.1.	4.2.2 4.2.2	4.2.1. 4.2.1.8	2.4 (0.9) 1.2	2.4 (3.1)	2.4 3.0 0.0
Refiner's Acquisition Cost of Oil, \$ per Barrel Quarterly Change Change from Prior Year's Quarter	97.5 (4.1) (3.1)	97.3 (0.2) (7.2)	101.2 3.9 (6.5)	99.4 (1.7) (2.2)	105.3 5.8 7.7	96.0 (9.2) (1.3)	97.7 1.7 (3.5)	101.1 3.4 1.6	96.4 (4.7) (8.9)	73.8 (22.6) (22.2)	48.0 (25.8) (49.7)	57.4 9.4 (43.7)
Before-Tax Corporate Profits, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	2,137.6 6.4 20.0	2,110.9 (4.9) 11.6	2,136.6 5.0 (1.5)	2,149.4 2.4 2.1	2,163.6 2.7 1.2	2,197.0 6.3 4.1	2,111.2 (14.7) (1.2)	2,227.6 23.9 3.6	2,279.5 9.7 5.4	2,212.8 (11.2) 0.7	2,252.3 7.3 6.7	2,393.7 27.6 7.5
S&P 500 Stock Market Index, Level Annualized % Change % Change from Prior Year's Quarter	1,402.2 16.3 14.2	1,418.2 4.6 15.7	1,514.5 30.1 12.4	1,609.8 27.6 19.2	1,675.3 17.3 19.5	1,770.4 24.7 24.8	1,834.3 15.2 21.1	1,900.4 15.2 18.1	1,976.0 16.9 17.9	2,012.0 7.5 13.6	2,063.5 10.6 12.5	2,102.0 7.7 10.6
30-Year Treasury Bonds, Level Quarterly Change Change from Prior Year's Quarter	2.7 (0.2)	2.9 0.1 (0.2)	3.1 0.3 (0.0)	3.1 0.0 0.2	3.7 0.6 1.0	3.8 0.0 0.0	3.7 (0.1) 0.5	3.4 (0.2) 0.3	3.3 (0.2) (0.5)	3.0 (0.3) (0.8)	2.5 (0.4)	2.9 0.3 (0.6)

TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLE!

'	2015.3	2015.4	2016.1	2016.2	0 2016.3	stober Stand 2016.4	October Standard Forecast	it 2017.2	2017.3	2017.4	2018.1	2018.2
Real Gross Domestic Product, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	16,410.1 1.9 2.1	16,521.8 2.7 2.3	16,641.6 2.9 2.9	16,760.4 2.9 2.6	16,894.3 3.2 3.0	17,030.3 3.3 3.1	17,157.4 3.0 3.1	17,276.4 2.8 3.1	17,383.0 2.5 2.9	17,495.9 2.6 2.7	17,616.3 2.8 2.7	17,724.6 2.5 2.6
Real Consumer Spending, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	11,279.9 3.7 3.3	11,368.9 3.2 3.0	11,458.8 3.2 3.4	11,546.5 3.1 3.3	11,640.5 3.3 3.2	11,731.5 3.2 3.2	11,824.1 3.2 3.2	11,912.7 3.0 3.2	11,996.3 2.8 3.1	12,080.1 2.8 3.0	12,168.9 3.0 2.9	12,242.5 2.4 2.8
U.S. Personal Income, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	15,391.2 4.6 4.2	15,551.2 4.2 4.0	15,746.9 5.1 4.4	15,915.0 4.3 4.6	16,112.5 5.1 4.7	16,319.2 5.2 4.9	16,566.3 6.2 5.2	16,788.0 5.5 5.5	16,997.0 5.1 5.5	17,211.2 5.1 5.5	17,452.8 5.7 5.4	17,663.4 4.9 5.2
Virginia Personal Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	437,019.8 3.1 3.8	440,093.5 2.8 3.6	444,456.5 4.0 3.7	448,402.0 3.6 3.4	451,274.1 2.6 3.3	456,586.6 4.8 3.7	463,056.3 5.8 4.2	469,366.0 5.6 4.7	472,457.8 2.7 4.7	476,637.1 3.6 4.4	482,812.5 5.3 4.3	488,373.8 4.7 4.0
Virginia Wages and Salaries, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	224,058.0 4.7 4.5	225,187.9 2.0 3.7	227,544.4 4.3 3.7	229,351.1 3.2 3.5	231,586.1 4.0 3.4	234,669.6 5.4 4.2	237,983.8 5.8 4.6	240,984.0 5.1 5.1	242,221.9 2.1 4.6	244,340.5 3.5 4.1	247,182.5 4.7 3.9	250,118.5 4.8 3.8
Virginia Dividends, Interest, and Rent, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	88,354.2 5.6 4.9	90,047.3 7.9 5.9	90,936.3 4.0 6.1	91,811.8 3.9 5.3	92,168.6 1.6 4.3	93,689.5 6.8 4.0	95,576.4 8.3 5.1	97,551.6 8.5 6.3	98,368.6 3.4 6.7	99,781.3 5.9 6.5	101,635.4 7.6 6.3	103,554.7 7.8 6.2
Virginia Total Proprietor's Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	29,444.9 1.9 4.9	29,758.2 4.3 4.2	30,085.5 4.5 3.6	30,594.3 6.9 4.4	30,509.9 (1.1)	30,562.7 0.7 2.7	30,462.9 (1.3)	30,950.4 6.6 1.2	31,979.9 14.0 4.8	31,837.1 (1.8) 4.2	31,602.1 (2.9) 3.7	31,539.2 (0.8) 1.9

TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLE!

					Oct	ober Standa	October Standard Forecast					
1	2015.3	2015.4	2016.1	2016.2	2016.3	2016.4	2017.1	2017.2	2017.3	2017.4	2018.1	2018.2
Total U.S. Employment,	142.2	1427	143.3	143.9	144.3	144.9	145.4	145.8	146.2	146 7	147.2	147.6
Appliated % Change	7.7				- - - - -	- - - - - -	† *		1.5		1 6	
	- (<u>†</u> •		9 9			† ·	- (<u>.</u>			- (
% Change from Prior Year's Quarter	2.0	8.	1.6	1.6	1.5	1.5	1.4	7.3	1.3	د .	1.2	1.2
Virginia Total Nonag. Employment.												
Thousands, SA	3,826.8	3,841.7	3,855.0	3,869.9	3,881.3	3,893.1	3,905.7	3,915.4	3,922.5	3,933.2	3,944.6	3,953.4
Annualized % Change	1.3	1.6	1.4	1.6	1.2	1.2	1.3	1.0	0.7	1.1	1.2	6.0
% Change from Prior Year's Quarter	1.2	1.5	1.6	1.5	4.	1.3	1.3	1.2		1.0	1.0	1.0
1982-1984=1.0, SA	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
Annualized % Change	1.5	(1.3)	3.1	2.4	2.5	2.4	1.7	2.9	2.7	2.0	4.1	2.4
% Change from Prior Year's Quarter	0.1	(0.0)	1.5	1.4	1.7	2.6	2.3	2.4	2.4	2.3	2.9	2.8
ان کی فیمی میں میں انتیاب میں میں اس میں کا دریابی انتیابی ا												
Sper Barrel	42.9	36.7	39.5	46.8	52.0	55.1	53.7	56.2	58.7	56.2	68.7	9.07
Quarterly Change	(14.6)	(6.1)	2.8	7.4	5.2	3.0	(1.4)	2.6	2.5	(2.5)	12.5	1.9
Change from Prior Year's Quarter	(53.5)	(37.1)	(8.5)	(10.6)	9.2	18.4	14.2	9.4	6.7	1.2	15.1	14.4
Before-Tax Corporate Profits,				•							1	
Billions \$, SAAR	2,435.1	2,510.8	2,530.4	2,593.3	2,611.3	2,613.6	2,525.9	2,543.6	2,540.3	2,531.9	2,530.5	2,500.0
Change from Prior Year's Quarter	- 89	13.5	12.3	. c	2.7	. 4 . 1	(0.2)	2 (6) (6)	(6.5)	(3.3)	(5.0)	(
))) i)	!)		į		!	
S&P 500 Stock Market Index,							1			0	1	1
Level	2,026.1	1,990.3	2,002.5	2,039.6	2,066.0	2,090.3	2,122.7	2,162.4	2,186.8	2,202.5	7.712.2	2,235.9
% Change from Prior Year's Quarter	(13.7)	(1.1)	(3.0)	(3.0)	2.0	5.0	0.9	6.0	5. t.	5.4	5.4 5.5	9. S.
	1					}	}		}		!	
30-Year Treasury Bonds,	Ċ	Č	Ċ	Ċ	Ċ	Ċ	Ċ	Ċ	L C	L C	Ċ	1
Level Quarterly Change	0.0	 1.0	3.2 0.2	5.5 0.1	5.5 0.0	5.5 0.0	4.0 0.0	4.0	5.5 0.1	0.0 0.0	0.0 0.0	5.7 0.1
Change from Prior Year's Quarter	(0.3)	0.1	0.7	0.4	0.4	0.3	0.2	0.1	0.2	0.2	0.2	0.2
SAAB. Second A Alimitation of Assault Body	0000											

TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLE!

	2015.3	2015.4	2016.1	2016.2	Pess 2016.3	imistic Alter 2016.4	Pessimistic Alternative Scenario 16.3 2016.4 2017.1	ario 2017.2	2017.3	2017.4	2018.1	2018.2
Real Gross Domestic Product, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	16,399.4 1.6 2.1	16,473.1 1.8 2.0	16,501.5 0.7 2.0	16,544.7 1.1 1.3	16,622.5 1.9 1.4	16,722.4 2.4 1.5	16,837.0 2.8 2.0	16,951.1 2.7 2.5	17,051.4 2.4 2.6	17,148.5 2.3 2.5	17,244.2 2.3 2.4	17,327.4 1.9 2.2
Real Consumer Spending, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	11,276.3 3.5 3.3	11,350.1 2.6 2.9	11,402.2 1.8 2.9	11,454.3 1.8 2.5	11,522.1 2.4 2.2	11,590.9 2.4 2.1	11,672.6 2.8 2.4	11,749.0 2.6 2.6	11,818.1 2.4 2.6	11,877.5 2.0 2.5	11,933.4 1.9 2.2	11,973.0 1.3 1.9
U.S. Personal Income, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	15,383.6 4.4 4.1	15,525.0 3.7 3.8	15,664.2 3.6 3.9	15,755.1 2.3 3.5	15,873.4 3.0 3.2	16,002.9 3.3 3.1	16,176.8 4.4 3.3	16,340.0 4.1 3.7	16,504.1 4.1 4.0	16,677.4 4.3 4.2	16,875.0 4.8 4.3	17,048.7 4.2 4.3
Virginia Personal Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	436,793.5 2.9 3.8	439,535.2 2.5 3.4	442,536.2 2.8 3.3	444,875.3 2.1 2.6	446,009.9 1.0 2.1	449,541.1 3.2 2.3	454,246.5 4.3 2.6	458,943.4 4.2 3.2	460,776.8 1.6 3.3	463,636.6 2.5 3.1	468,404.8 4.2 3.1	472,746.9 3.8 3.0
Virginia Wages and Salaries, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	223,866.0 4.3 4.4	224,722.7 1.5 3.4	226,209.7 2.7 3.1	227,239.3 1.8 2.6	228,713.2 2.6 2.2	231,073.7 4.2 2.8	233,840.3 4.9 3.4	236,334.8 4.3 4.0	237,286.2 1.6 3.7	239,114.6 3.1 3.5	241,648.9 4.3 3.3	244,275.1 4.4 3.4
Virginia Dividends, Interest, and Rent, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	88,350.9 5.6 4.8	89,887.3 7.1 5.7	90,147.8 1.2 5.2	89,986.6 (0.7) 3.2	89,183.5 (3.5) 0.9	89,486.4 1.4 (0.4)	90,140.4 3.0 (0.0)	90,896.5 3.4 1.0	90,619.6 (1.2) 1.6	90,986.0 1.6 1.7	91,846.2 3.8 1.9	92,992.1 5.1 2.3
Virginia Total Proprietor's Income, Millions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	29,426.7 1.7 4.8	29,724.6 4.1 4.1	30,012.3 3.9 3.4	30,530.6 7.1 4.2	30,464.3 (0.9) 3.5	30,555.9 1.2 2.8	30,534.0 (0.3) 1.7	31,115.9 7.8 1.9	32,246.7 15.3 5.9	32,204.6 (0.5) 5.4	32,054.6 (1.9) 5.0	32,058.3 0.0 3.0

TABLE A.2 - QUARTERLY NATIONAL AND VIRGINIA ECONOMIC VARIABLES

l	2015.3	2015.4	2016.1	2016.2	Pessir 2016.3	nistic Altern 2016.4	Pessimistic Alternative Scenario 16.3 2016.4 2017.1	rio 2017.2	2017.3	2017.4	2018.1	2018.2
Total U.S. Employment, Millions, SA Annualized % Change % Change from Prior Year's Quarter	142.2 1.7 2.0	142.6 1.0 1.7	142.8 0.7 1.3	143.0 0.5 1.0	143.1 0.3 0.6	143.4 0.7 0.6	143.7 0.8 0.6	144.0 0.8 0.6	144.3 1.0 0.8	144.7 1.0 0.9	145.0 1.0 1.0	145.4 0.9 1.0
Virginia Total Nonag. Employment, Thousands, SA Annualized % Change % Change from Prior Year's Quarter	3,826.8 1.3 1.2	3,838.3 1.2 1.4	3,842.5 0.4 1.3	3,847.9 0.6 0.9	3,850.3 0.3 0.6	3,855.0 0.5 0.4	3,863.1 0.8 0.5	3,870.5 0.8 0.6	3,875.6 0.5 0.7	3,883.8 0.8 0.7	3,892.8 0.9 0.8	3,899.2 0.7 0.7
CPI, All Urban, 1982-1984=1.0, SA Annualized % Change % Change from Prior Year's Quarter	2.4 4.1 1.0	2.4 (1.8)	2.3 2.3 2.5	2.4 9.0 9.9	2.2.± 4.±.±	2.2 4.2 7.0 7.0	2. t. 4. ö. e.	2.2.2 4.0.2	2 2 2 2 8 55 3 8 65	2. 2. 2. 2. 4. 4.	2.5 4.7 3.2	2.5 3.4 1.
Refiner's Acquisition Cost of Oil, \$ per Barrel Quarterly Change Change from Prior Year's Quarter	42.9 (14.6) (53.5)	34.1 (8.7) (39.7)	34.5 0.4 (13.5)	41.4 6.8 (16.1)	47.4 6.1 4.6	51.0 3.6 16.9	51.3 0.3 16.7	56.0 4.7 14.6	59.7 3.7 12.3	59.7 0.0 8.7	75.3 15.5 24.0	2.4 2.1.7
Before-Tax Corporate Profits, Billions \$, SAAR Annualized % Change % Change from Prior Year's Quarter	2,420.0 4.5 6.2	2,458.7 6.6 11.1	2,415.4 (6.9) 7.2	2,447.0 5.3 2.2	2,433.7 (2.2) 0.6	2,410.2 (3.8) (2.0)	2,318.0 (14.4) (4.0)	2,340.7 4.0 (4.3)	2,343.7 0.5 (3.7)	2,341.8 (0.3) (2.8)	2,338.3 (0.6) 0.9	2,307.3 (5.2) (1.4)
S&P 500 Stock Market Index, Level Annualized % Change % Change from Prior Year's Quarter	2,026.1 (13.7) 2.5	1,788.3 (39.3) (11.1)	1,636.3 (29.9) (20.7)	1,595.6 (9.6) (24.1)	1,629.3 8.7 (19.6)	1,691.9 16.3 (5.4)	1,749.0 14.2 6.9	1,806.0 13.7 13.2	1,841.1 8.0 13.0	1,874.0 7.3 10.8	1,911.7 8.3 9.3	1,931.5 4.2 7.0
30-Year Treasury Bonds, Level Quarterly Change Change from Prior Year's Quarter	3.0 0.1 (0.3)	3.0 (0.0) (0.0)	2.9 (0.1) 0.3	2.8 (0.1) (0.1)	2.8 (0.1)	2.7 (0.0) (0.2)	2.7 (0.0) (0.2)	2.7 0.0 (0.1)	2.7 0.0 (0.1)	2.7 (0.0)	2.7 0.0 0.0	3.0 0.3 0.3

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

						Hist	History						
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Real Gross Domestic Product, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	10,561.0 3.8 10,342.0 2.9	11,034.9 4.5 10,792.8 4.4	11,525.9 4.4 11,271.6 4.4	12,065.9 4.7 11,794.6 4.6	12,559.7 4.1 12,347.0 4.7	12,682.3 1.0 12,660.2 2.5	12,908.8 1.8 12,772.7 0.9	13,271.1 2.8 13,025.8 2.0	13,773.5 3.8 13,553.5 4.1	14,234.3 3.3 14,013.3 3.4	14,613.8 2.7 14,450.2 3.1	14,873.8 1.8 14,721.1
Real Consumer Spending, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	6,755.6 3.5 6,643.6 3.3	7,009.9 3.8 6,864.6 3.3	7,384.7 5.3 7,187.7 4.7	7,775.9 5.3 7,583.6 5.5	8,170.7 5.1 7,985.1 5.3	8,382.6 2.6 8,289.0 3.8	8,598.8 2.6 8,490.8 2.4	8,867.6 3.1 8,706.1 2.5	9,208.2 3.8 9,050.0 4.0	9,531.8 3.5 9,375.4 3.6	9,821.7 3.0 9,679.2 3.2	10,041.6 2.2 9,947.9 2.8
U.S. Personal Income, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	6,667.0 6.1 6,464.3 5.7	7,080.7 6.2 6,865.0 6.2	7,593.7 7.2 7,337.8 6.9	7,988.4 5.2 7,788.2 6.1	8,637.1 8.1 8,307.0 6.7	8,991.6 4.1 8,871.7 6.8	9,153.9 1.8 9,051.2 2.0	9,491.1 3.7 9,285.6 2.6	10,052.9 5.9 9,754.6 5.1	10,614.1 5.6 10,327.6 5.9	11,394.0 7.3 11,029.8 6.8	12,000.2 5.3 11,701.1 6.1
Virginia Personal Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	175,140.2 5.0 170,494.1 4.4	186,656.7 6.6 180,821.8 6.1	199,426.1 6.8 192,508.8 6.5	213,283.6 6.9 206,536.8 7.3	230,606.2 8.1 221,451.1 7.2	242,665.6 5.2 238,657.8 7.8	248,876.5 2.6 244,882.3 2.6	263,332.1 5.8 254,973.9 4.1	282,227.1 7.2 272,667.0 6.9	303,359.0 7.5 292,469.2 7.3	325,257.3 7.2 315,414.6 7.8	344,318.4 5.9 334,737.2 6.1
Virginia Wages and Salaries, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	96,626.2 5.9 93,584.9 4.7	103,770.6 7.4 100,075.5 6.9	112,115.3 8.0 107,560.1 7.5	120,992.0 7.9 117,062.7 8.8	132,384.5 9.4 126,298.8 7.9	138,736.6 4.8 137,029.1 8.5	140,596.7 1.3 138,927.5 1.4	147,600.8 5.0 143,048.7 3.0	158,793.2 7.6 153,069.0 7.0	169,119.0 6.5 164,251.0 7.3	178,959.9 5.8 174,765.4 6.4	188,704.1 5.4 183,998.6 5.3
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	38,378.6 5.4 37,218.8 4.3	40,748.0 6.2 39,706.5 6.7	42,866.6 5.2 41,838.8 5.4	43,715.6 2.0 43,123.3 3.1	47,519.3 8.7 45,538.8 5.6	48,580.5 2.2 48,593.9 6.7	49,033.8 0.9 48,533.9 (0.1)	51,936.1 5.9 50,488.6 4.0	53,596.6 3.2 52,668.5 4.3	58,157.5 8.5 55,345.5 5.1	65,644.2 12.9 61,892.8	71,783.8 9.4 68,791.1 11.1
Virginia Total Proprietor's Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	9,363.5 6.9 9,088.4	10,220.6 9.2 9,800.8 7.8	11,590.2 13.4 10,786.2 10.1	12,497.6 7.8 12,053.2 11.7	14,358.5 14.9 13,389.6 11.1	15,713.8 9.4 15,115.9 12.9	17,148.9 9.1 16,523.7 9.3	17,294.6 0.8 17,155.4 3.8	19,046.0 10.1 18,186.7 6.0	20,226.5 6.2 19,464.9 7.0	21,569.1 6.6 21,303.7 9.4	20,052.1 (7.0) 20,810.3 (2.3)
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates												

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

				History	ory				00	ober Stand	October Standard Forecast	#
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real Gross Domestic Product, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	14,830.4 (0.3) 14,945.8 1.5	14,418.8 (2.8) 14,549.8 (2.6)	14,783.8 2.5 14,573.8 0.2	15,020.6 1.6 14,913.9 2.3	15,354.6 2.2 15,216.2 2.0	15,583.3 1.5 15,430.6 1.4	15,961.7 2.4 15,750.6 2.1	16,360.7 2.5 16,182.8 2.7	16,831.6 2.9 16,583.4 2.5	17,328.2 3.0 17,089.6 3.1	17,779.4 2.6 17,555.0 2.7
Real Consumer Spending, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	10,007.2 (0.3) 10,072.5 1.3	9,847.0 (1.6) 9,886.8 (1.8)	10,036.3 1.9 9,911.7 0.3	10,263.5 2.3 10,171.0 2.6	10,413.2 1.5 10,343.7 1.7	10,590.4 1.7 10,487.4 1.4	10,875.7 2.7 10,710.1 2.1	11,227.2 3.2 11,053.0 3.2	11,594.3 3.3 11,413.5 3.3	11,953.3 3.1 11,777.2 3.2	12,282.9 2.8 12,122.0 2.9
U.S. Personal Income, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	12,502.2 4.2 12,329.8 5.4	12,094.8 (3.3) 12,275.3 (0.4)	12,477.1 3.2 12,212.0 (0.5)	13,254.5 6.2 12,883.2 5.5	13,915.1 5.0 13,555.6 5.2	14,068.4 1.1 14,025.1 3.5	14,694.2 4.4 14,350.8 2.3	15,310.4 4.2 15,007.4 4.6	16,023.4 4.7 15,651.1 4.3	16,890.6 5.4 16,446.5 5.1	17,771.0 5.2 17,331.1 5.4
Virginia Personal Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	357,348.4 3.8 352,106.0 5.2	352,367.7 (1.4) 354,793.0 0.8	364,452.1 3.4 356,633.0 0.5	386,767.3 6.1 375,655.3 5.3	404,103.4 4.5 395,069.7 5.2	404,886.4 0.2 405,972.8 2.8	419,184.9 3.5 411,065.2 1.3	434,836.5 3.7 427,004.0 3.9	450,179.8 3.5 442,493.0 3.6	470,379.3 4.5 460,070.8 4.0	491,334.1 4.5 480,070.3 4.3
Virginia Wages and Salaries, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	193,674.8 2.6 191,229.0 3.9	191,644.7 (1.0) 192,614.4 0.7	196,648.3 2.6 193,431.7 0.4	202,352.1 2.9 200,030.3 3.4	208,473.5 3.0 205,235.2 2.6	210,552.3 1.0 210,362.4 2.5	214,479.1 1.9 211,777.4 0.7	222,524.6 3.8 218,148.0 3.0	230,787.8 3.7 226,535.3 3.8	241,382.5 4.6 236,305.9 4.3	251,748.9 4.3 245,965.9 4.1
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	72,866.6 1.5 73,179.1 6.4	66,213.6 (9.1) 70,235.6 (4.0)	66,083.7 (0.2) 64,726.7 (7.8)	73,093.3 10.6 69,340.5 7.1	81,411.4 11.4 76,937.3	80,825.0 (0.7) 81,920.8 6.5	84,058.6 4.0 82,455.7 0.7	87,816.2 4.5 85,541.2 3.7	92,151.5 4.9 90,287.4 5.5	97,819.5 6.2 94,746.5 4.9	104,522.5 6.9 100,835.0 6.4
Virginia Total Proprietor's Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	19,830.6 (1.1) 19,793.6 (4.9)	18,592.9 (6.2) 19,026.4 (3.9)	20,504.0 10.3 19,648.6 3.3	23,396.6 14.1 21,714.1	25,793.4 10.2 24,808.7 14.3	26,328.3 2.1 26,175.6 5.5	27,797.6 5.6 26,814.3 2.4	29,383.3 5.7 28,738.6 7.2	30,438.1 3.6 29,970.7 4.3	31,307.6 2.9 30,621.5 2.2	31,414.5 0.3 31,739.6 3.7
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates											

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

		Oct 2015	October Pessimistic Scenario 015 2016 2017	nistic Scena 2017	ario 2018	
Real Gross Domestic Product, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	16,345.9 2.4 16,182.8 2.7	16,597.8 1.5 16,479.7 1.8	16,997.0 2.4 16,783.2 1.8	17,361.7 2.1 17,192.9 2.4	
Real Consumer Spending, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	11,221.6 3.2 11,053.0 3.2	11,492.4 2.4 11,370.7 2.9	11,779.3 2.5 11,633.7 2.3	11,994.6 1.8 11,900.5 2.3	
U.S. Personal Income, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	15,301.9 4.1 15,007.4 4.6	15,823.9 3.4 15,582.0 3.8	16,424.6 3.8 16,098.3 3.3	17,147.0 4.4 16,776.3 4.2	
Virginia Personal Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	434,640.4 3.7 427,004.0 3.9	445,740.6 2.6 440,935.1 3.3	459,400.8 3.1 452,185.3 2.6	475,523.1 3.5 466,391.3 3.1	
Virginia Wages and Salaries, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	222,360.3 3.7 218,148.0 3.0	228,309.0 2.7 225,509.4 3.4	236,644.0 3.7 232,490.5 3.1	245,745.5 3.8 240,581.2 3.5	
Virginia Dividends, Interest, and Rent, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	87,775.4 4.4 85,541.2 3.7	89,701.1 2.2 89,593.2 4.7	90,660.6 1.1 89,926.7 0.4	93,961.5 3.6 91,611.0	
Virginia Total Proprietor's Income, Millions \$, SAAR	Calendar Year % Change Fiscal Year % Change	29,370.3 5.7 28,738.6 7.2	30,390.8 3.5 29,923.6 4.1	31,525.3 3.7 30,667.5 2.5	31,897.8 1.2 32,141.0 4.8	
		1				

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

							History	ory					
	1	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total U.S. Employment, Millions, SA	Calendar Year % Change Fiscal Year % Change	119.8 2.1 118.5 2.0	122.9 2.6 121.3 2.4	126.1 2.6 124.6 2.7	129.2 2.5 127.7 2.5	132.0 2.2 130.8 2.5	132.1 0.0 132.5 1.3	130.6 (1.1) 131.1 (1.0)	130.3 (0.2) 130.4 (0.5)	131.7 1.1 130.8 0.3	134.0 1.7 132.8 1.5	136.4 1.8 135.3	137.9 1.1 137.3 1.5
Virginia Total Nonag. Employment, Thousands, SA	Calendar Year % Change Fiscal Year % Change	3,138.4 2.1 3,095.3 1.6	3,234.7 3.1 3,191.7 3.1	3,322.4 2.7 3,273.6 2.6	3,415.2 2.8 3,372.6 3.0	3,519.3 3.0 3,466.2 2.8	3,522.2 0.1 3,537.9 2.1	3,499.4 (0.6) 3,504.5 (0.9)	3,501.8 0.1 3,494.8 (0.3)	3,587.4 2.4 3,539.1 1.3	3,667.0 2.2 3,628.9 2.5	3,732.2 1.8 3,706.3 2.1	3,769.0 1.0 3,752.3 1.2
CPI, All Urban, 1982-1984=1.0, SA	Calendar Year % Change Fiscal Year % Change	1.6 2.9 1.5 2.7	2 1.6 2.3 6 2.8 2.8	6. t. t. t. 6. tv. 6. 8i	2.2 2.2 1.6 7.1	3.4 7.1 2.9	2 2 4 8 8 8 4 4 6	2	2.3 2.3 2.2 2.2	2.2 2.2 2.2	2.0 3.4 3.0	2 8 9 8 3 9 9 9 3 9 9 9	2.2 2.0 2.0 3.0
Refiner's Acquisition Cost of Oil, \$ per Barrel	Calendar Year Change Fiscal Year Change	20.7 3.5 18.2 1.1	19.1 (1.6) 21.0 2.8	12.5 (6.5) 15.7 (5.2)	17.4 4.9 12.6 (3.2)	28.2 10.8 24.2 11.7	23.0 (5.3) 27.2 3.0	24.0 1.1 21.4 (5.8)	28.6 4.6 27.6 6.2	36.9 8.3 3.2 3.2	50.3 13.4 42.6 11.8	60.1 9.8 58.1 15.5	68.0 7.9 59.1 1.0
Before-Tax Corporate Profits, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	738.8 7.8 715.9 9.8	796.9 7.9 760.2 6.2	728.1 (8.6) 775.7 2.0	766.2 5.2 738.8 (4.8)	747.1 (2.5) 771.8 4.5	690.7 (7.6) 727.8 (5.7)	788.9 14.2 685.6 (5.8)	969.5 22.9 890.0 29.8	1,254.6 29.4 1,113.7 25.1	1,653.3 31.8 1,448.5 30.1	1,851.4 12.0 1,775.3 22.6	1,748.4 (5.6) 1,820.0 2.5
S&P 500 Stock Market Index, Level	Calendar Year % Change Fiscal Year % Change	670.8 23.9 614.7 27.7	872.7 30.1 749.3 21.9	1,084.3 24.2 1,003.0 33.8	1,326.1 22.3 1,198.8	1,426.8 7.6 1,395.4 16.4	1,192.1 (16.4) 1,337.4 (4.2)	995.6 (16.5) 1,114.9 (16.6)	963.7 (3.2) 895.1 (19.7)	1,130.6 17.3 1,078.3 20.5	1,207.1 6.8 1,160.0 7.6	1,310.7 8.6 1,254.9 8.2	1,476.7 12.7 1,399.9 11.6
30-Year Treasury Bonds, Level	Calendar Year Change Fiscal Year Change	6.7 (0.2) 6.5 (1.0)	6.6 (0.1) 6.8 0.3	5.6 (1.0) 6.1 (0.7)	5.9 0.3 5.4 (0.7)	5.9 0.1 6.1 7.0	5.5 (0.4) 5.7 (0.5)	5.4 (0.1) 5.5 (0.1)	5.1 (0.4) 5.0 (0.5)	5.1 0.1 0.2 0.2	4.6 (0.6) 4.8 (0.4)	4.9 0.3 4.7 (0.1)	6.0) (0.0) 4.9 0.2
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	al Rates												

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

				History						Č	L	
	·	2008	2009	2010	2011	2012	2013	2014	2015	2016 2016	October Standard Forecast 315 2016 2017	2018
Total U.S. Employment, Millions, SA	Calendar Year % Change Fiscal Year % Change	137.2 (0.6) 138.1 0.6	131.2 (4.3) 134.3 (2.7)	130.3 (0.7) 130.1 (3.1)	131.8 1.2 130.9 0.6	134.1 1.7 133.0 1.6	136.4 1.7 135.2 1.6	139.0 1.9 137.6 1.8	141.9 2.1 140.6 2.1	144.1 1.5 143.0 1.8	146.0 1.3 145.1 1.4	147.8 1.2 146.9 1.3
Virginia Total Nonag. Employment, Thousands, SA	Calendar Year % Change Fiscal Year % Change	3,771.5 0.1 3,777.9 0.7	3,648.9 (3.3) 3,714.7 (1.7)	3,644.1 (0.1) 3,629.3 (2.3)	3,689.9 1.3 3,667.7	3,732.3 1.1 3,711.3	3,758.1 0.7 3,749.9 1.0	3,775.7 0.5 3,764.0 0.4	3,819.0 1.1 3,793.4 0.8	3,874.8 1.5 3,848.4 1.5	3,919.2 1.1 3,898.9 1.3	3,957.3 1.0 3,938.5 1.0
CPI, All Urban, 1982-1984=1.0, SA	Calendar Year % Change Fiscal Year % Change	2.2 3.8 2.1 7.	2.1 (0.3) 1.4	2.2 1.6 1.0	3.8 2.2 2.0 0.0	22.22 22.23 22.23 23.23	2.3 2.3 1.7	2.4 1.6 2.3 1.6	2.4 0.0 2.4 0.7	2. t 2. 0. 4. 8. 4. 8.	0, 0, 0, 0, 0, 4, 4, 0,	2 2 2 2 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5
Refiner's Acquisition Cost of Oil, \$ per Barrel	Calendar Year Change Fiscal Year Change	94.3 26.3 90.9 31.8	59.2 (35.1) 66.5 (24.4)	76.7 17.5 72.7 6.2	101.8 25.1 89.4 16.7	101.0 (0.8) 103.6 14.2	100.5 (0.5) 98.8 (4.7)	92.2 (8.2) 100.0 1.2	46.3 (46.0) 68.9 (31.1)	48.4 2.1 41.5 (27.4)	56.2 7.9 54.3 12.8	71.3 15.1 63.6 9.3
Before-Tax Corporate Profits, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	1,382.5 (20.9) 1,642.9 (9.7)	1,472.6 6.5 1,254.4 (23.6)	1,840.7 25.0 1,713.3 36.6	1,806.8 (1.8) 1,833.4 7.0	2,130.8 17.9 1,987.0 8.4	2,161.7 1.4 2,133.6 7.4	2,207.8 2.1 2,174.9 1.9	2,398.0 8.6 2,284.6 5.0	2,587.2 7.9 2,517.4 10.2	2,535.4 (2.0) 2,573.6 2.2	2,500.7 (1.4) 2,525.7 (1.9)
S&P 500 Stock Market Index, Level	Calendar Year % Change Fiscal Year % Change	1,220.9 (17.3) 1,426.7 1.9	946.7 (22.5) 965.8 (32.3)	1,139.3 20.3 1,085.6	1,268.9 11.4 1,230.5 13.4	1,379.6 8.7 1,287.9 4.7	1,642.5 19.1 1,486.2 15.4	1,930.7 17.5 1,795.1 20.8	2,045.5 5.9 2,038.4 13.6	2,049.6 0.2 2,014.6 (1.2)	2,168.6 5.8 2,110.3 4.8	2,245.3 3.5 2,210.7 4.8
30-Year Treasury Bonds, Level	Calendar Year Change Fiscal Year Change	4.3 (0.6) 4.6 (0.2)	4.1 (0.2) 3.9 (0.7)	4.0 4.4 6.0 7.0	3.9 (0.3) 4.2 (0.2)	2.9 (1.0) 3.2 (1.0)	3.4 0.5 3.0 (0.2)	3.3 (0.1) 3.7 0.7	2.9 (0.5) 2.9 (0.7)	3.3 9.4 0.2 0.2	6.0 6.0 7.0 7.0 7.0	3.3 9.3 0.2
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	al Rates											

A.3-5

TABLE A.3 - ANNUAL NATIONAL AND VIRGINIA ECONOMIC VARIABLES

		Octok	oer Pessimi	October Pessimistic Scenario	r io	
Total U.S. Employment, Millions, SA	Calendar Year % Change Fiscal Year % Change	141.9 2.0 140.6 2.1	143.1 0.9 142.7 1.5	144.2 0.7 143.5 0.6	145.5 0.9 144.9 0.9	
Virginia Total Nonag. Employment, Thousands, SA	Calendar Year % Change Fiscal Year % Change	3,818.2 1.1 3,793.4 0.8	3,848.9 0.8 3,838.9 1.2	3,873.2 0.6 3,859.7 0.5	3,901.4 0.7 3,887.8 0.7	
CPI, All Urban, 1982-1984=1.0, SA	Calendar Year % Change Fiscal Year % Change	2.4 (0.0) 0.7	2	2.2.2.1. 4.2.2.4.8.	2 2 2 2 2 2 3 2 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	
Refiner's Acquisition Cost of Oil, \$ per Barrel	Calendar Year Change Fiscal Year Change	45.6 (46.6) 68.9 (31.1)	43.6 (2.0) 38.2 (30.7)	56.7 13.1 51.4 13.2	79.9 23.3 68.1 16.7	
Before-Tax Corporate Profits, Billions \$, SAAR	Calendar Year % Change Fiscal Year % Change	2,381.2 7.9 2,284.6 5.0	2,426.6 1.9 2,435.3 6.6	2,336.0 (3.7) 2,375.6 (2.4)	2,311.7 (1.0) 2,332.8 (1.8)	
S&P 500 Stock Market Index, Level	Calendar Year % Change Fiscal Year % Change	1,995.0 3.3 2,038.4 13.6	1,638.2 (17.9) 1,761.6 (13.6)	1,817.5 10.9 1,719.0 (2.4)	1,942.1 6.9 1,889.6 9.9	
30-Year Treasury Bonds, Level	Calendar Year Change Fiscal Year Change	2.8 (0.5) 2.9 (0.7)	2.8 (0.0) 2.9 (0.0)	2.7 (0.1) 2.7 (0.2)	3.3 0.6 2.8 0.1	

TABLE A.3 - ANNUAL VIRGINIA ECONOMIC VARIABLES

							History	ory					
Virginia	l	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	189.5 3.8 184.1 2.1	201.5 6.3 197.5 7.3	203.7 1.1 201.1 1.8	210.5 3.3 208.4 3.6	221.6 5.3 215.2 3.3	228.4 3.1 226.3 5.2	224.9 (1.5) 226.7 0.2	227.6 1.2 224.1 (1.1)	241.1 5.9 234.5 4.7	254.2 5.4 247.7 5.6	260.0 2.3 260.0 4.9	250.7 (3.6) 255.9 (1.6)
Manufacturing Thousands, SA	Calendar Year % Change Fiscal Year % Change	370.9 (0.6) 371.7 (0.4)	374.5 1.0 372.0 0.1	375.6 0.3 376.0 1.1	366.9 (2.3) 370.6 (1.4)	363.6 (0.9) 366.7 (1.1)	341.3 (6.1) 354.6 (3.3)	320.1 (6.2) 328.4 (7.4)	305.0 (4.7) 313.8 (4.4)	298.7 (2.1) 299.3 (4.6)	295.8 (1.0) 298.0 (0.4)	288.1 (2.6) 292.7 (1.8)	277.8 (3.6) 282.9 (3.4)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	599.0 2.2 590.8 1.2	609.3 1.7 605.0 2.4	618.7 1.5 612.9 1.3	637.0 3.0 628.6 2.6	650.7 2.2 644.1 2.5	644.8 (0.9) 650.6 1.0	636.5 (1.3) 639.4 (1.7)	635.2 (0.2) (34.1 (0.8)	646.5 1.8 641.3	657.2 1.7 651.6 1.6	663.0 0.9 661.3	668.1 0.8 665.5 0.6
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	153.0 2.9 150.4 0.8	158.6 3.7 156.2 3.9	165.2 4.1 160.9 3.0	173.4 5.0 170.1 5.7	178.9 3.2 175.7 3.3	179.9 0.6 180.3 2.6	182.2 1.2 180.7 0.2	186.5 2.4 184.2 1.9	189.0 1.4 187.6 1.8	192.5 1.8 190.8 1.7	194.8 1.2 194.0	(0.6) (195.1 (0.6)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	447.8 5.3 435.5 5.7	470.9 5.1 460.5 5.7	507.7 7.8 488.1 6.0	538.5 6.1 524.2 7.4	567.9 5.5 552.7 5.4	559.5 (1.5) 569.2 3.0	547.0 (2.2) 552.0 (3.0)	549.3 0.4 545.2 (1.2)	578.5 5.3 561.4 3.0	606.0 4.8 593.6 5.7	628.5 3.7 618.6	646.3 2.8 637.6 3.1
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	296.4 3.2 290.9 2.7	310.6 4.8 303.9 4.5	318.3 2.5 314.7 3.6	328.4 3.2 323.6 2.8	335.1 2.1 331.1 2.3	350.4 4.6 342.4 3.4	366.8 4.7 358.8 4.8	374.3 2.0 371.4 3.5	384.9 2.8 379.3 2.1	396.4 3.0 390.0 2.8	411.1 3.7 403.7 3.5	428.2 4.2 418.7 3.7
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	270.5 1.6 267.9 2.6	278.6 3.0 275.4 2.8	281.8 1.2 279.4 1.5	287.1 1.9 284.9 2.0	297.1 3.5 291.9 2.4	301.2 1.4 300.1 2.8	303.9 0.9 301.3 0.4	308.5 1.5 305.9 1.5	320.1 3.8 314.3 2.8	329.4 2.9 325.1 3.4	338.8 2.8 334.4 2.9	345.3 1.9 342.4 2.4
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	596.2 (0.2) 594.6 (1.3)	596.6 0.1 597.2 0.4	602.0 0.9 597.8 0.1	611.2 1.5 606.1 1.4	624.6 2.2 618.5 2.0	629.2 0.7 627.6 1.5	634.9 0.9 631.5 0.6	637.5 0.4 636.0 0.7	650.9 2.1 643.6 1.2	661.9 1.7 656.6 2.0	674.8 2.0 668.5 1.8	683.0 1.2 679.5 1.6
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	l Rates												

TABLE A.3 - ANNUAL VIRGINIA ECONOMIC VARIABLES

				History	>				Octob	October Standard Forecast	d Forecast	
Virginia	I	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	234.1 (6.6) 243.6 (4.8)	200.6 (14.3) 216.9 (10.9)	193.4 (3.6) 194.2 (10.5)	189.5 (2.0) 192.1 (1.1)	187.5 (1.0) 188.3 (1.9)	186.9 (0.3) 187.2 (0.6)	185.3 (0.9) 186.0 (0.6)	195.3 5.4 189.7 2.0	197.2 1.0 195.3 2.9	208.1 5.5 203.5 4.2	216.2 3.9 211.7 4.1
Manufacturing Thousands, SA	Calendar Year % Change Fiscal Year % Change	264.8 (4.7) 271.6 (4.0)	239.3 (9.6) 252.5 (7.0)	230.5 (3.7) 233.1 (7.7)	231.0 0.2 230.0 (1.3)	231.5 0.2 231.5 0.6	230.8 (0.3) 231.2 (0.1)	231.4 0.3 231.0 (0.1)	233.1 0.8 232.0 0.4	233.9 0.3 233.2 0.5	237.4 1.5 235.9 1.1	240.7 1.4 238.9 1.3
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	659.2 (1.3) 666.3 0.1	624.4 (5.3) 642.0 (3.7)	621.1 (0.5) 618.9 (3.6)	628.6 1.2 625.4 1.1	633.5 0.8 631.3 0.9	637.4 0.6 634.2 0.5	643.4 0.9 640.9 1.1	650.5 1.1 647.3 1.0	656.7 1.0 654.4 1.1	655.0 (0.3) 655.7 0.2	657.4 0.4 655.9 0.0
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	188.6 (2.6) 191.1 (2.1)	179.9 (4.6) 184.5 (3.4)	179.1 (0.5) 178.1 (3.5)	182.5 1.9 180.6 1.4	188.3 3.1 185.3 2.6	192.5 2.2 190.9 3.0	193.8 0.7 193.2 1.2	198.0 2.2 195.8 1.3	198.1 0.1 199.0 1.7	194.9 (1.6) 196.4 (1.3)	192.1 (1.5) 193.6 (1.4)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	657.0 1.7 653.3 2.5	640.1 (2.6) 649.8 (0.5)	650.3 1.6 641.3 (1.3)	667.5 2.6 660.0 2.9	678.5 1.6 673.2 2.0	679.1 0.1 681.8 1.3	678.0 (0.2) 676.3 (0.8)	688.3 1.5 680.8 0.7	712.0 3.5 699.6 2.8	733.3 3.0 724.5 3.6	742.8 1.3 739.1 2.0
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	447.8 4.6 439.6 5.0	455.9 1.8 452.6 3.0	463.1 1.6 458.0 1.2	469.7 1.4 467.7 2.1	480.4 2.3 473.6 1.3	491.4 2.3 487.3 2.9	499.5 1.6 495.4 1.7	506.9 1.5 502.8 1.5	519.5 2.5 513.1 2.0	525.3 1.1 522.9 1.9	532.5 1.4 528.7 1.1
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	349.3 1.2 348.6 1.8	341.6 (2.2) 345.0 (1.0)	341.3 (0.1) 339.5 (1.6)	349.1 2.3 345.5 1.8	358.9 2.8 354.2 2.5	366.0 2.0 362.8 2.4	370.3 1.2 368.6 1.6	372.2 0.5 370.3 0.5	378.2 1.6 376.4 1.6	381.1 0.8 379.1 0.7	386.3 1.4 383.5 1.2
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	694.4 1.7 687.5	700.0 0.8 698.9 1.7	704.7 0.7 703.4 0.6	710.3 0.8 705.6 0.3	709.9 (0.1) 711.3	708.3 (0.2) 709.6 (0.2)	706.7 (0.2) 706.0 (0.5)	706.2 (0.1) 707.4 0.2	710.5 0.6 707.2 (0.0)	717.3 0.9 714.3 1.0	721.8 0.6 719.8 0.8
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	l Rates											

TABLE A.3 - ANNUAL VIRGINIA ECONOMIC VARIABLES

		Octob	October Pessimistic Scenario	stic Scenar	.e	
Virginia	I	2015	2016	2017	2018	
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	195.2 5.4 189.7 2.0	194.3 (0.5) 194.4 2.5	199.5 2.7 197.7	204.8 2.6 201.2	
Manufacturing Thousands, SA	Calendar Year % Change Fiscal Year % Change	233.0 0.7 232.0 0.4	231.2 (0.8) 232.3 0.1	232.3 0.5 231.4 (0.4)	236.2 1.7 233.9	
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	650.6 1.1 647.3 1.0	653.1 0.4 653.5 1.0	650.0 (0.5) 650.5 (0.5)	650.0 (0.0) 650.4 (0.0)	
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	197.7 2.0 195.8 1.3	194.7 (1.5) 197.1 0.7	191.5 (1.6) 192.8 (2.2)	188.9 (1.4) 190.4 (1.3)	
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	687.6 1.4 680.8 0.7	698.7 1.6 694.7 2.0	709.5 1.5 703.9 1.3	717.2 1.1 714.1	
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	506.9 1.5 502.8 1.5	519.8 2.5 512.8 2.0	527.9 1.6 524.6 2.3	534.5 1.2 531.4 1.3	
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	372.3 0.5 370.3 0.5	378.3 1.6 376.6 1.7	380.0 0.5 378.6 0.5	383.0 0.8 381.6 0.8	
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	706.2 (0.1) 707.4 0.2	710.4 0.6 707.2 (0.0)	716.7 0.9 713.9 0.9	721.7 0.7 719.3 0.8	
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	il Rates					

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

						-	History						
Northern Virginia	I	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	955.9 3.7 935.0 2.7	992.9 3.9 976.3 4.4	1,033.4 4.1 1,011.7 3.6	1,090.1 5.5 1,059.0 4.7	1,159.1 6.3 1,125.7 6.3	1,176.5 1.5 1,176.8 4.5	1,165.2 (1.0) 1,169.5 (0.6)	1,180.4 1.3 1,166.0 (0.3)	1,233.8 4.5 1,207.0 3.5	1,278.8 3.6 1,256.7 4.1	1,309.7 2.4 1,298.6 3.3	1,325.6 1.2 1,318.8 1.6
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	56.7 4.8 54.6 0.8	60.4 6.6 59.1 8.2	63.1 4.4 61.2 3.5	67.8 7.6 65.5 7.1	74.7 10.1 71.2 8.8	79.9 7.0 77.9 9.3	79.4 (0.6) 79.8 2.5	79.8 0.4 78.4 (1.8)	87.1 9.1 83.7 6.7	94.0 8.0 90.4 8.1	96.7 2.8 97.1 7.4	89.0 (7.9) 93.2 (4.1)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	2.1 2.1 174.8 1.0	180.2 1.6 178.6 2.2	185.0 2.7 182.7 2.3	193.6 4.6 188.9 3.4	200.0 3.3 197.3 4.4	201.2 0.6 201.4 2.1	200.1 (0.6) 200.2 (0.6)	200.6 0.3 199.9 (0.2)	207.8 3.6 203.8 2.0	213.8 2.9 211.8 3.9	212.2 (0.7) 213.2 0.7	212.8 0.3 212.4 (0.4)
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	53.6 3.1 52.4 (1.2)	56.1 4.6 54.9 4.9	58.9 5.0 57.3 4.3	60.7 3.0 59.9 4.5	62.7 3.3 61.7 3.0	63.3 1.0 63.0 2.0	65.4 3.4 64.2 2.0	66.3 1.4 65.9 2.6	67.4 1.6 66.7 1.2	69.5 3.1 68.4 2.6	70.4 1.3 70.3 2.8	69.4 (1.4) 70.3 (0.0)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	210.2 7.9 201.4 6.9	222.0 5.6 217.4 8.0	240.9 8.5 230.8 6.2	263.4 9.4 251.4 8.9	286.1 8.6 275.1 9.4	287.2 0.4 290.4 5.6	277.9 (3.2) 281.9 (3.0)	284.3 2.3 277.9 (1.4)	307.5 8.2 295.4 6.3	324.0 5.4 316.8 7.2	338.0 4.3 331.6 4.7	348.6 3.1 343.7 3.7
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	77.7 3.0 76.2 2.5	82.6 6.3 80.0 5.0	85.6 3.7 84.4 5.5	89.7 4.8 87.4 3.6	95.9 6.9 92.7 6.1	101.2 5.4 98.5 6.3	105.2 3.9 103.4 5.0	107.4 2.1 106.7 3.1	110.3 2.7 108.3	115.6 4.9 113.1 4.5	119.1 3.0 117.3 3.7	122.9 3.2 121.1 3.3
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	84.2 1.0 83.4 1.6	87.8 4.3 86.3 3.5	88.6 0.9 88.0 1.9	91.3 3.1 89.9 2.2	97.1 6.3 94.2 4.8	99.0 2.0 98.4 4.4	101.2 2.2 99.8 1.5	103.8 2.5 102.3 2.5	108.8 4.8 106.4 4.0	111.6 2.6 110.6 4.0	113.2 1.4 1.5.3 1.5	115.9 2.4 1.4.4 1.8
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	170.9 (0.0) 171.0 0.2	169.1 (1.0) 170.4 (0.3)	168.1 (0.6) 167.7 (1.6)	171.5 2.0 169.3 0.9	176.8 3.1 174.9 3.3	180.1 1.9 178.1 1.8	184.6 2.5 182.5 2.4	191.2 3.5 187.1 2.5	198.2 3.7 195.2 4.3	203.5 2.6 200.6 2.8	209.8 3.1 207.1 3.3	215.1 2.5 212.5 2.6
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	al Rates												

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

					History				Oct	October Standard Forecast	rd Forecast	
Northern Virginia	ļ	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	1,328.7 0.2 1,329.1 0.8	1,305.8 (1.7) 1,316.6 (0.9)	1,317.5 0.9 1,307.0 (0.7)	1,344.6 2.1 1,332.0 1.9	1,369.3 1.8 1,357.0 1.9	1,378.6 0.7 1,377.8 1.5	1,381.1 0.2 1,377.1 (0.1)	1,406.5 1.8 1,391.5	1,434.8 2.0 1,421.9 2.2	1,455.1 1.4 1,445.8 1.7	1,471.1 1.1 1,463.4 1.2
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	80.7 (9.3) 84.9 (8.8)	70.0 (13.2) 74.9 (11.8)	68.2 (2.6) 68.2 (9.0)	67.9 (0.6) (8.2 (0.0)	68.2 0.6 68.2 0.0	68.9 0.9 68.5 0.5	69.0 0.2 69.0 0.8	69.1 0.1 69.2 0.2	69.2 0.1 68.4 (1.1)	73.6 6.4 71.7 4.8	77.0 4.6 75.1 4.7
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	210.9 (0.9) 212.8 0.2	200.7 (4.8) 205.5 (3.4)	200.6 (0.1) 199.4 (3.0)	204.5 2.0 203.0 1.8	206.6 1.0 205.5 1.3	207.6 0.5 207.1 0.8	209.2 0.8 208.1 0.5	214.0 2.3 211.7 1.7	216.6 1.2 215.7 1.9	215.9 (0.4) 216.2 0.2	216.6 0.4 216.1 (0.1)
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	66.9 (3.6) 68.0 (3.2)	64.5 (3.6) 65.5 (3.7)	64.8 0.5 64.4 (1.7)	65.5 1.1 65.3 1.4	66.9 2.2 66.0	68.6 2.5 68.0 3.0	68.6 0.0 68.6 0.9	68.7 0.1 68.6 0.0	68.8 0.1 69.1 0.7	67.7 (1.5) 68.2 (1.3)	66.9 (1.3) 67.3 (1.3)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	356.2 2.2 352.9 2.7	356.4 0.0 356.5 1.0	364.8 2.4 359.1 0.7	375.1 2.8 370.5 3.2	383.5 2.2 380.1 2.6	381.1 (0.6) 384.2 1.1	376.8 (1.1) 377.3 (1.8)	385.8 2.4 380.1 0.7	399.1 3.5 392.4 3.2	408.9 2.4 404.9 3.2	413.0 1.0 411.4 1.6
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	127.3 3.5 125.0 3.2	131.7 3.5 129.3 3.4	135.8 3.1 134.0 3.6	141.4 4.1 4.1 3.3 3.3	145.5 2.9 143.2 3.3	147.9 1.7 147.4 3.0	150.8 1.9 1.1	157.2 4.2 153.9 3.3	162.4 3.3 159.9 3.9	164.7 1.4 163.8 2.5	167.7 1.8 166.1 1.4
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	2.4 117.9 3.0	116.0 (2.3) 117.3 (0.4)	116.8 0.7 115.6 (1.4)	121.3 3.8 119.3 3.2	126.2 4.1 123.7 3.6	130.1 3.1 128.2 3.7	132.4 1.8 131.4 2.5	136.0 2.7 133.4 1.5	139.3 2.5 138.6 3.9	140.4 0.8 139.7 0.8	42.4 1.4 1.4 1.2
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	218.9 1.8 216.8 2.0	224.1 2.4 221.6 2.2	228.9 2.1 227.0 2.4	231.1 0.9 229.6 1.1	233.6 1.1 232.2 1.2	234.6 0.4 235.1 1.2	233.3 (0.6) 233.2 (0.8)	234.5 0.5 234.3 0.5	237.1 1.1 235.1 0.3	240.8 1.6 239.2 1.7	243.4 1.1 242.2 1.3
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates											

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

		Octo	October Pessimistic Scenario	stic Scena	io	
Northern Virginia	ļ	2015	2016	2017	2018	
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	1,406.3 1.8 1,391.5 1.0	1,425.5 1.4 1,418.7 2.0	1,436.8 0.8 1,430.9 0.9	1,448.4 0.8 1,442.8 0.8	
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	69.1 0.1 69.2 0.2	68.0 (1.6) 68.1 (1.6)	69.9 2.9 69.3	72.1 3.1 70.6 2.0	
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	214.0 2.3 211.7	215.3 0.6 215.4 1.8	213.9 (0.6) 214.2 (0.5)	213.8 (0.0) 214.0 (0.1)	
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	68.6 0.0 68.6 0.0	67.7 (1.4) 68.5 (0.2)	66.7 (1.5) 67.1 (2.1)	65.8 (1.2) 66.3 (1.1)	
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	385.5 2.3 380.1 0.7	393.1 2.0 390.2 2.7	397.5 1.1 395.3 1.3	400.4 0.7 399.3 1.0	
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	157.2 4.2 153.9 3.3	162.5 3.4 159.8 3.8	165.8 2.0 164.5 3.0	168.5 1.6 167.2 1.7	
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	136.0 2.7 133.4 1.5	139.3 2.4 138.7 4.0	140.0 0.5 139.5 0.6	141.2 0.8 140.6 0.8	
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	234.5 0.5 234.3 0.5	237.1 1.1 235.1 0.3	240.8 1.6 239.2 1.7	243.6 1.1 242.3 1.3	
SAAR: Seasonally Adjusted at Applied Rates	Rates					

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

							History	,					
Hampton Roads		1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2007
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	660.0 2.3 651.4 1.9	677.7 2.7 670.0 2.9	693.9 2.4 684.4 2.1	706.6 1.8 701.3 2.5	720.3 1.9 714.3 1.9	730.5 1.4 725.0 1.5	733.9 0.5 733.2 1.1	737.6 0.5 735.4 0.3	749.9 1.7 742.9 1.0	761.0 1.5 756.0 1.8	767.4 0.8 765.0 1.2	775.1 1.0 771.4 0.8
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	40.5 8.5 38.9 8.9	42.2 4.2 41.8 7.3	42.3 0.1 42.1 0.7	42.9 1.5 42.8 1.8	43.9 2.4 43.3 1.1	45.9 4.4 45.0 4.1	44.6 (2.8) 45.3 0.7	47.1 5.6 45.2 (0.4)	48.7 3.4 48.2 6.8	49.9 2.5 49.4 2.4	49.8 (0.2) 50.2 1.6	48.4 (2.7) 49.1 (2.2)
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	126.6 3.2 124.1 1.7	129.0 1.9 128.1 3.2	131.8 2.1 130.0 1.5	135.2 2.6 134.1 3.2	137.4 1.6 136.2 1.5	138.7 1.0 138.4 1.6	138.8 0.0 138.7 0.2	135.7 (2.3) 137.5 (0.9)	138.6 2.2 136.6 (0.6)	140.5 1.3 139.5 2.1	141.5 0.7 141.3	142.7 0.9 142.1 0.6
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	31.5 2.3 31.1 0.8	32.3 2.7 32.0 2.7	34.1 5.7 32.9 3.0	36.0 5.5 35.4 7.4	36.5 1.2 36.1 2.0	36.7 0.6 36.7 1.8	36.8 0.2 36.7 (0.1)	37.6 2.2 37.1 1.1	39.7 5.6 38.6 4.2	39.9 0.7 39.8 3.1	40.7 1.9 40.2 0.9	4.15 4.14 3.0
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	81.2 7.4 77.9 6.1	86.9 6.9 84.5 8.5	92.5 6.5 89.2 5.5	98.0 5.9 95.6 7.1	6.0 6.0 8.0 9.0 9.0	103.0 4.1 100.1 0.8	104.7 1.7 104.7 4.6	104.3 (0.4) 104.4 (0.3)	100.2 (3.9) 102.0 (2.3)	101.4 1.2 101.1 (0.9)	101.7 0.3 101.5 0.4	102.6 0.9 101.9 0.5
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	65.5 1.4 64.9 1.6	67.4 3.0 66.5 2.4	69.6 3.2 68.6 3.2	71.6 2.8 70.5 2.8	73.4 2.6 72.4 2.6	74.8 1.9 74.1 2.4	77.5 3.7 76.2 2.8	78.8 1.6 78.1 2.6	82.8 5.0 80.9 3.6	85.6 3.4 84.0 3.8	88.0 2.8 3.5 3.5	90.6 3.0 89.3 2.7
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	69.5 2.3 68.4 2.2	71.7 3.2 70.9 3.6	72.3 0.9 71.8	72.9 0.9 72.9 1.5	74.2 1.7 73.4 0.7	76.2 2.7 75.4 2.7	76.5 0.4 76.1 1.0	76.5 (0.0) 76.7 0.8	79.0 3.2 77.4 0.9	82.0 3.8 80.6 4.1	84.6 3.2 83.4 3.6	85.9 1.6 85.2 2.2
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	142.7 (1.5) 143.8 (1.4)	142.7 0.0 142.6 (0.9)	144.5 1.3 143.3 0.5	144.5 (0.0) 144.6 1.0	146.0 1.1 145.3 0.4	147.7 1.1 146.7 1.0	149.6 1.3 148.9 1.5	149.5 (0.0) 149.6 0.5	151.5 1.3 150.4 0.5	151.7 0.1 151.6 0.8	153.1 1.0 152.2 0.3	155.2 1.4 154.2 1.3
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	l Rates												

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

					History				Octr	October Standard Forecast	rd Forecast	
Hampton Roads		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	766.1 (1.2) 772.7 0.2	740.6 (3.3) 753.8 (2.4)	734.7 (0.8) 735.3 (2.5)	737.2 0.3 735.2 (0.0)	743.3 0.8 739.9 0.6	752.2 1.2 748.4 1.2	753.6 0.2 753.3 0.6	760.9 1.0 755.3 0.3	771.6 1.4 767.4 1.6	778.0 0.8 775.3 1.0	783.4 0.7 780.7 0.7
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	45.2 (6.5) 47.1 (4.1)	38.4 (15.2) 41.8 (11.2)	36.9 (3.9) 37.1 (11.1)	35.1 (4.7) 36.2 (2.6)	34.5 (1.6) 34.5 (4.5)	34.7 0.5 34.7 0.4	34.4 (0.9) 34.4 (0.7)	36.1 5.1 35.2 2.3	36.1 (0.2) 35.9 2.1	37.9 4.9 37.2 3.5	39.1 3.2 38.3 3.0
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	138.0 (3.3) 141.2 (0.7)	128.8 (6.6) 133.0 (5.8)	128.0 (0.6) 127.9 (3.9)	127.7 (0.2) 128.1 0.2	127.4 (0.3) 127.4 (0.6)	128.3 0.7 127.4 (0.0)	129.2 0.7 128.7 1.1	130.4 0.9 129.7 0.7	132.4 1.5 131.9	132.2 (0.1) 132.3 0.3	132.7 0.4 132.4 0.1
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	40.2 (3.3) 41.0 (0.9)	37.5 (6.7) 39.0 (5.0)	36.4 (2.8) 36.6 (6.2)	36.8 1.1 36.6 0.2	37.5 1.7 37.1	37.8 1.0 37.8 1.9	37.6 (0.7) 37.7 (0.1)	39.4 4.8 38.2 1.4	39.9 1.4 40.0 4.7	39.2 (1.9) 39.5 (1.3)	38.5 (1.7) 38.8 (1.7)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	104.7 2.0 104.0 2.0	99.5 (5.0) 102.6 (1.3)	97.9 (1.6) 98.0 (4.5)	98.6 0.7 98.1 0.1	99.7 1.2 99.2 1.1	102.5 2.8 101.5 2.3	104.2 1.6 103.1 1.6	106.6 2.3 104.8 1.6	111.4 4.5 109.2 4.2	115.6 3.8 113.9 4.3	117.6 1.7 116.8 2.6
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	91.7 1.2 91.2 2.2	93.7 2.2 92.8 1.7	94.7 1.1 94.1	98.0 3.4 96.4 2.4	100.4 2.5 99.0 2.8	104.2 3.8 102.4 3.4	105.6 1.4 105.2 2.7	107.0 1.3 106.1 0.8	109.4 2.3 108.2 2.0	110.5 1.0 110.1	0.11 1.12 1.00
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	85.9 (0.1) 86.5 1.5	83.3 (3.0) 84.2 (2.8)	83.4 0.1 83.0 (1.3)	83.3 (0.0) 83.5 0.5	84.0 0.8 83.6 0.2	85.3 1.6 84.6	85.2 (0.1) 85.5 1.1	86.1 1.1 85.4 (0.1)	87.1 1.1 86.7 1.5	87.6 0.6 87.2 0.6	88.6 1.1 88.1 0.9
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	157.1 1.2 156.0 1.2	158.2 0.7 158.1 1.3	159.3 0.7 159.0 0.6	159.6 0.2 158.8 (0.1)	159.2 (0.3) 159.9 0.7	157.4 (1.1) 158.4 (1.0)	155.5 (1.2) 156.5 (1.1)	153.3 (1.4) 154.3 (1.4)	153.1 (0.2) 152.9 (0.9)	153.1 0.0 153.1 0.1	152.9 (0.2) 153.0 (0.1)
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Il Rates											

A.4-5

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

-		Octob	er Pessimis	October Pessimistic Scenario		
Hampton Roads		2015	2016	2017	2018	
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change	760.7 0.9	766.5 0.8	769.7 0.4	773.3 0.5	
	Fiscal Year	755.3	765.4	767.9	771.6	
	% Cnange	S. O.	<u>.</u>	0.3	c: O	
Construction and Mining	Calendar Year	36.1	35.6	36.4	37.2	
Thousands, SA	% Change	5.1	(1.5)	2.3	2.1	
	Fiscal Year % Change	35.2	35.8 7 7	36.2	36.6 9.0	
		ì		2	9	
Trade, Transportation, and Utilities	Calendar Year	130.4	131.6	131.1	131.2	
Thousands, SA	% Change	0.0	0.0	(0.4)	0.0	
	riscal rear % Change	7.871 0.7	1.6	(0.3)	21.2 0.0	
		0	2	o o	1	
Financial Activities	Calendar Year	39.3	39.1 1.00	38.3 5.03	37.7	
Inousands, SA	% Change Fiscal Year	38.0	(0.5) 39.6)	(9.1.9) 38.6,	(1.6) 38 1	
	% Change	4. 1.4	3.5	(2.3)	(1.4)	
Professional and Business Services	Calendar Year	106.5	108.7	111.0	112.7	
Thousands, SA	% Change Fiscal Year	2.2 104.8	2.1	2.1 109.8	1.5	
	% Change	5.1.	3.2	1.5	2.0	
		?	!	?) İ	
Education and Health Services	Calendar Year	107.0	109.5	111.0	112.2	
Thousands, SA	% Change	1.3	2.3	4.1	1.1	
	Fiscal Year	106.1	108.2	110.4	111.6	
	% Change	8.0	2.0	2.0	1.1	
Leisure and Hospitality	Calendar Year	86.1	87.1	87.4	88.0	
Thousands, SA Thousands, SA	% Change	7:	1.	0.4	9.0	
	Fiscal Year	85.4	86.8	1.78	87.7	
	% Change	(0.1)	1.6	0.4	9.0	
to a contract of	Calendar Vear	1533	153 1	153.0	153 1	
Thousands, SA	% Change	(4.1)	(0.2)	0.1	(0.1)	
	Fiscal Year	154.3	152.9	153.1	153.1	
	% Change	(1.4)	(0.9)	0.1	(0.0)	
SAAR: Seasonally Adjusted at Annual Bates	Rates					

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

							History	2.0					
Richmond	!	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	528.3 2.1 522.9 1.9	543.8 2.9 535.6 2.4	551.7 1.5 548.1 2.3	565.1 2.4 558.1 1.8	578.8 2.4 572.3 2.6	580.3 0.2 581.6 1.6	578.2 (0.4) 578.6 (0.5)	578.7 0.1 576.8 (0.3)	593.8 2.6 586.2 1.6	606.0 2.1 600.7 2.5	615.2 1.5 609.6 1.5	622.7 1.2 620.6 1.8
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	33.0 5.6 32.1 6.6	35.8 8.5 34.6 7.7	35.4 (0.9) 35.5 2.6	36.9 4.2 36.4 2.7	38.8 5.1 37.7 3.6	39.2 1.0 39.3 4.2	39.1 (0.3) 38.9 (1.0)	39.2 0.2 39.0 0.3	40.7 3.8 39.6 1.4	43.1 5.9 42.2 6.5	44.0 2.2 43.7 3.8	45.0 2.1 44.5 1.8
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	101.5 2.9 99.9 2.2	104.1 2.6 103.0 3.2	105.2 1.0 104.4 1.3	108.0 2.7 106.5 2.0	110.6 2.4 109.7 3.0	109.9 (0.7) 110.7 0.9	109.6 (0.2) 109.4 (1.2)	109.5 (0.2) 109.5 0.1	110.4 0.8 110.3 0.8	110.4 0.0 109.8 (0.4)	112.6 2.0 111.6 1.6	2.3 2.3 113.9 2.1
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	39.9 5.1 39.1 4.0	40.4 1.2 40.5 3.5	40.1 (0.8) 39.7 (1.8)	43.5 8.5 41.8 5.1	9.44 9.3 6.1	46.8 4.3 45.9 3.6	46.5 (0.8) 47.1 2.6	46.2 (0.6) 45.9 (2.6)	46.7 1.1 46.7 1.8	46.5 (0.4) 46.5 (0.3)	46.3 (0.3) 46.5 (0.1)	45.6 (1.7) 46.0 (1.1)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	78.2 3.5 77.4 5.1	81.1 3.8 79.0 2.0	87.0 7.2 84.1 6.5	88.2 1.4 88.4 5.2	91.5 3.8 89.4 1.1	89.2 (2.5) 91.2 2.0	87.3 (2.1) 88.1 (3.4)	83.5 (4.4) 84.8 (3.7)	87.7 5.0 85.0 0.3	92.5 5.5 90.5 6.4	95.1 2.8 93.7 3.5	98.4 3.4 97.2 3.7
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	49.3 3.4 48.6 3.2	51.1 3.6 50.2 3.2	50.2 (1.8) 51.0 1.7	51.7 3.1 50.6 (0.8)	51.7 (0.1) 51.8 2.5	53.9 4.3 52.4 1.1	56.7 5.2 55.3 5.5	60.6 6.9 58.6 6.0	65.1 7.4 62.9 7.3	68.5 5.3 66.7 6.1	71.3 4.1 69.8 4.6	73.9 3.7 72.3 3.6
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	40.9 (0.2) 41.1 2.3	42.5 3.9 41.4 0.8	42.9 1.0 42.9 3.5	42.9 0.0 42.7 (0.4)	43.9 2.4 43.6 2.1	44.8 2.2.4 4.4.0	44.2 (1.5) 44.5 0.2	45.7 3.5 44.6 0.3	48.0 5.1 47.0 5.3	49.0 2.0 48.4 3.0	51.1 4.4 50.0 3.3	51.9 1.5 51.7 3.4
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	98.2 (0.6) 98.0 (2.4)	99.7 1.6 98.7 0.8	100.9 1.2 100.6 1.9	103.0 2.0 101.7	105.6 2.5 104.2 2.4	107.0 1.4 106.4 2.2	108.3 1.2 107.8 1.3	109.4 1.1 109.0 1.1	110.4 0.9 109.5 0.5	111.4 1.0 1.17 2.0	(0.8)	110.3 (0.9) 111.8 0.9
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates												

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

				_	History				Octo	October Standard Forecast	d Forecast	
Richmond		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year % Change	620.0 (0.4) 622.3 0.3	595.4 (4.0) 609.7 (2.0)	591.9 (0.6) 590.3 (3.2)	600.5 1.5 594.9 0.8	612.9 2.1 606.6 2.0	621.7 1.4 617.8 1.8	630.9 1.5 626.2 1.4	634.2 0.5 633.7 1.2	642.4 1.3 637.4 0.6	650.0 1.2 646.6 1.4	656.7 1.0 653.3 1.0
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	41.4 (8.0) 43.9 (1.5)	34.6 (16.4) 37.9 (13.5)	32.4 (6.4) 32.9 (13.3)	31.8 (1.9) 32.1 (2.2)	32.5 2.4 32.0 (0.3)	33.2 2.0 33.0 3.1	33.6 1.3 33.2 0.4	35.6 5.9 34.7 4.8	36.5 2.5 35.9 3.2	38.5 5.4 37.7 5.0	39.9 3.6 39.1
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	114.1 (0.9) 115.0 1.0	108.2 (5.1) 111.7 (2.9)	107.4 (0.8) 107.0 (4.2)	109.4 1.9 108.2 1.0	112.0 2.4 110.5 2.1	115.8 3.4 113.6 2.8	118.6 2.4 117.5 3.4	120.2 1.4 120.2 2.3	120.8 0.5 120.1 (0.1)	121.0 0.2 120.9 0.6	121.9 0.7 121.4 0.4
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year % Change	44.0 (3.5) 44.7 (2.7)	42.9 (2.4) 43.5 (2.6)	42.4 (1.0) 42.4 (2.6)	44.0 3.6 42.8 1.0	46.5 5.8 45.4 5.9	47.8 2.7 47.2 4.1	48.4 1.3 48.2 2.1	49.0 1.2 48.7 1.0	48.8 (0.4) 49.0 0.6	48.0 (1.5) 48.4 (1.3)	47.4 (1.4) 47.7 (1.3)
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	98.9 0.5 99.3 2.2	92.2 (6.7) 95.7 (3.7)	92.6 0.4 91.2 (4.7)	96.3 4.0 94.8 0.0	98.8 2.6 97.3 2.6	98.2 (0.7) 99.1 1.8	99.7 1.6 98.7 (0.4)	98.3 (1.4) 98.9 0.2	101.3 3.0 99.5 0.7	104.4 3.1 103.1 3.6	105.7 1.3 105.2 2.0
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	80.4 8.8 77.5 7.1	82.9 3.1 81.9 5.7	84.5 1.9 84.1 2.7	86.1 1.8 84.7 0.8	88.7 3.1 87.4 3.2	91.0 2.5 90.0 2.9	93.5 2.8 92.5 2.8	94.0 0.5 93.9 1.6	96.1 2.2 94.7 0.9	97.3 1.2 96.8 2.2	98.8 1.6 98.0
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	52.3 0.8 52.3 1.1	51.4 (1.8) 51.9 (0.8)	51.0 (0.8) 50.8 (2.1)	53.0 4.0 51.7 1.7	55.5 4.6 54.6 5.5	57.1 2.9 56.3 3.2	57.9 1.4 57.6 2.3	57.1 (1.4) 57.4 (0.2)	57.9 1.4 57.5 0.2	58.4 0.9 58.0 0.9	59.4 1.6 58.9 1.4
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	109.0 (1.2) 108.6 (2.9)	110.3 1.2 1.011	111.1 0.7 110.8 0.6	110.7 (0.3) 110.6 (0.1)	110.2 (0.5) 110.8 0.1	109.4 (0.7) 109.7 (1.0)	109.7 0.2 109.1 (0.6)	110.6 0.9 110.6	111.5 0.8 110.8 0.2	113.0 11.3 1.4	114.0 0.9 113.5
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates											

TABLE A.4 - ANNUAL VIRGINIA REGIONAL EMPLOYMENT

- - i		Octob	October Pessimistic Scenario	stic Scenar		
Kichmond	ļ	2015	2016	2017	2018	
Total Nonagricultural Employment Thousands, SA	Calendar Year % Change Fiscal Year	634.1 0.5 633.7	637.9 0.6 635.6	642.7 0.7 640.2	647.5 0.8 645.3	
	% Cnange	7.1	0.3). O	χ. Ο	
Construction and Mining Thousands, SA	Calendar Year % Change Fiscal Year % Change	35.6 5.9 34.7 4.8	36.0 1.1 35.7 2.8	37.0 2.8 36.7 2.7	37.9 2.5 37.3 1.8	
Trade, Transportation, and Utilities Thousands, SA	Calendar Year % Change Fiscal Year % Change	120.2 1.4 120.2 2.3	(0.2) (0.2) (0.3)	119.7 (0.2) 119.6 (0.2)	120.0 0.2 120.0 0.3	
Financial Activities Thousands, SA	Calendar Year % Change Fiscal Year	48.9 1.1 48.7	48.0 (1.9) 48.6	47.3 (1.5) 47.6	46.7 (1.3) 47.0	
	% Change	1.0	(0.3)	(2.1)	(1.2)	
Professional and Business Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	98.2 (1.5) 98.9 0.2	99.3 1.1 98.8 (0.0)	100.9 1.6 100.1 1.3	101.9	
Education and Health Services Thousands, SA	Calendar Year % Change Fiscal Year % Change	94.0 0.5 93.9 1.6	96.1 2.2 94.7 0.8	97.8 1.8 97.1 2.6	99.2 1.4 98.6 1.5	
Leisure and Hospitality Thousands, SA	Calendar Year % Change Fiscal Year % Change	57.1 (1.3) 57.4 (0.2)	57.9 1.4 57.6 0.3	58.2 0.6 58.0 0.6	58.8 0.9 58.5 0.9	
Government Thousands, SA	Calendar Year % Change Fiscal Year % Change	110.6 0.9 110.6	0.8 110.8 0.2 0.2	113.0 1.3 112.3	114.1 1.0 113.6	
SAAR: Seasonally Adjusted at Annual Rates SA: Seasonally Adjusted	Rates					

APPENDIX B GENERAL FUND DATA

_	2001 3	2001 4	2002 1	2002 2	2002 3	2002 4	2003 1	2003 2	2003 3	2003 4	2004 1	2004 2	20043	2004 4	2005 1	2005 2
Withholding Annual % Change	1,494.4	1,617.8	1,693.4	1,616.8 2.6	1,535.8 2.8	1,667.1	1,706.3 0.8	1,658.2 2.6	1,606.0	1,801.6	1,861.8	1,769.9	1,768.0	1,905.5 5.8	1,992.0 7.0	1,847.5
Nonwithholding Annual % Change	243.1 (6.8)	139.9	316.6 (20.0)	759.9 (25.7)	236.6 (2.7)	143.4	288.4 (8.9)	734.3 (3.4)	240.5	160.5	304.4	857.5 16.8	286.6 19.2	209.9 30.8	415.0 36.3	1,162.0 35.5
Gross Individual Income Tax Annual % Change	1,737.5	1,757.8	2,010.0 (2.2)	2,376.6 (8.6)	1,772.4 2.0	1,810.4	1,994.7 (0.8)	2,392.6	1,846.5 4.2	1,962.0 8.4	2,166.2	2,627.4 9.8	2,054.7	2,115.5 7.8	2,407.0	3,009.5
Individual Refunds Annual % Change	175.3 40.8	73.1	451.2 39.8	471.6 42.3	119.6 (31.8)	(9.1)	518.4	490.0	86.4 (27.8)	72.5 9.2	578.8 11.7	479.5 (2.1)	87.8 1.6	81.1	588.0	477.3 (0.5)
Net Individual Income Tax Annual % Change	1,562.2 (1.2)	1,684.7	1,558.8 (10.0)	1,905.1 (16.0)	1,652.8 5.8	1,744.0 3.5	1,476.3 (5.3)	1,902.6 (0.1)	1,760.2 6.5	1,889.5 8.3	1,587.3 7.5	2,147.9	1,966.9	2,034.3 7.7	1,819.0	2,532.2 17.9
Sales and Use Tax Annual % Change	575.0 0.3	579.1 2.7	551.9 (3.8)	723.8 28.9	457.6 (20.4)	576.6 (0.4)	564.9	737.0	488.6	620.0	622.9	830.8	524.3 7.3	727.0	736.0 18.2	958.8 15.4
Corporate Income Tax Annual % Change	77.5 (38.1)	37.9 37.0	26.7 (21.4)	148.1 (16.2)	89.8	55.9 47.3	16.3 (39.0)	181.4	112.9 25.8	38.0 (32.0)	44.3 171.7	230.5 27.1	122.0	124.9 228.4	90.0	279.9 21.4
Wills, Suits, Deeds, Contracts Annual % Change	51.9 32.7	54.9 37.8	49.4 34.2	58.2 12.2	65.3 25.8	74.3 35.2	63.7 28.9	82.6 42.0	93.6 43.4	79.5	67.7 6.3	99.7 20.7	113.8 21.5	150.6 89.3	141.9 109.6	189.8 90.4
Insurance Premiums Annual % Change	67.4	53.0 25.4	30.8 17.6	141.5 5.4	76.8 13.9	59.7 12.6	35.2 14.5	161.3 14.0	79.7	63.1	42.6 20.9	165.8 2.8	88.0 10.4	69.0 9.3	38.3 (10.1)	178.3 7.5
Interest Income Annual % Change	55.3 (8.4)	21.4 (43.0)	26.1 (42.0)	(2.3) (75.8)	40.3 (27.1)	22.8	8.4 (67.7)	10.1 (532.6)	29.8 (26.0)	11.1 (51.5)	13.9 65.3	6.6 (35.0)	27.1 (9.2)	22.1 99.7	23.8	10.8 64.5
Alcoholic Beverage Sales Annual % Change	11.6	29.9	34.7	51.3 3.9	11.8	31.2 4.5	36.4 4.9	49.3 (3.9)	12.9 9.1	32.9 5.3	37.3 2.4	55.0 11.6	12.6 (2.6)	34.8 5.8	38.1	59.0 7.2
All Other Revenues Annual % Change	84.4 (6.6)	124.8	110.3 (7.5)	193.6 (12.4)	118.9 40.8	125.5 0.5	143.3 29.9	195.2 0.8	146.5 23.2	111.8 (10.9)	144.0	251.3 28.7	155.2 6.0	122.6 9.6	118.5 (17.7)	177.9 (29.2)
Total General Fund Revenues Annual % Change	2,485.4 (2.4)	2,585.8	2,388.6 (8.1)	3,219.1 (6.8)	2,513.3	2,689.9	2,344.5 (1.8)	3,319.5 3.1	2,724.3 8.4	2,846.0 5.8	2,560.0 9.2	3,787.7	3,009.8	3,285.3 15.4	3,005.5	4,386.6 15.8

	20053	2005 4	2006 1	2006 2	2006 3	2006 4	2007 1	2007 2	2007 3	2007 4	2008 1	2008 2	20083	2008 4	2009 1
Withholding Annual % Change	1,897.2 7.3	1,996.5 4.8	2,131.5	2,028.5 9.8	1,970.4	2,110.3 5.7	2,292.5 7.6	2,192.2	2,062.9	2,244.9	2,411.8 5.2	2,213.9	2,175.8	2,384.3 6.2	2,306.6 (4.4)
Nonwithholding Annual % Change	349.0 21.8	225.7 7.5	483.9 16.6	1,435.1 23.5	356.4	264.8	512.5 5.9	1,648.3 14.9	394.1	260.1 (1.8)	556.6 8.6	1,650.4	406.5 3.1	243.3 (6.5)	458.8 (17.6)
Gross Individual Income Tax Annual % Change	2,246.3 9.3	2,222.2 5.0	2,615.5 8.7	3,463.6 15.1	2,326.8	2,375.2 6.9	2,805.0	3,840.4	2,457.0 5.6	2,505.1 5.5	2,968.4 5.8	3,864.3	2,582.2 5.1	2,627.6 4.9	2,765.4 (6.8)
Individual Refunds Annual % Change	50.5 (42.5)	62.5 (22.9)	638.4	531.2	110.2	109.8 75.6	740.4 16.0	599.5	83.6 (24.1)	143.9 31.1	811.3 9.6	641.1 6.9	127.2 52.0	141.3 (1.8)	873.2 7.6
Net Individual Income Tax Annual % Change	2,195.8 11.6	2,159.7 6.2	1,977.0 8.7	2,932.4 15.8	2,216.7	2,265.4	2,064.6	3,240.9 10.5	2,373.3	2,361.2	2,157.2 4.5	3,223.2 (0.5)	2,455.0 3.4	2,486.3 5.3	1,892.2 (12.3)
Sales and Use Tax Annual % Change	579.3 10.5	728.6	758.5 3.1	746.3 (22.2)	762.3 31.6	746.9 2.5	774.8 2.1	765.1 2.5	785.8	798.2	723.3 (6.6)	768.3	769.9 (2.0)	729.2 (8.6)	708.8 (2.0)
Corporate Income Tax Annual % Change	214.7 76.0	256.1 105.1	116.0 29.0	280.3	256.9 19.7	186.6 (27.2)	118.7	317.4	217.7 (15.2)	115.4 (38.1)	138.7 16.9	336.0	191.4 (12.1)	71.9 (37.7)	71.1 (48.7)
Wills, Suits, Deeds, Contracts Annual % Change	202.8 78.3	170.1 13.0	149.7 5.5	172.1 (9.3)	150.8 (25.7)	143.6 (15.6)	133.9 (10.5)	154.7 (10.1)	130.7 (13.3)	112.6 (21.6)	98.6 (26.4)	114.5 (26.0)	90.3 (30.9)	66.2 (41.2)	68.4 (30.6)
Insurance Premiums Annual % Change	84.1 (4.4)	72.1 4.4	36.3 (5.2)	181.3	87.9 4.5	61.4 (14.8)	38.0	197.6 9.0	101.7	61.5	32.1 (15.7)	201.5	0.0 (100.0)	75.6 22.9	(20.2) (163.0)
Interest Income Annual % Change	44.7 65.0	26.0	39.6 66.4	6.1 (43.9)	91.7 105.0	42.9 64.7	53.8 35.7	(12.4) (303.9)	105.5 15.1	66.2 54.4	37.5 (30.3)	(19.9) 60.5	74.6 (29.3)	25.4 (61.7)	23.3 (37.8)
Alcoholic Beverage Sales Annual % Change	13.5 7.4	36.4	40.6 6.5	62.4 5.8	14.3 5.5	38.0	42.1 3.6	67.5 8.2	13.8 (3.4)	39.6 4.5	45.5 8.0	3.6	12.8 (7.2)	41.5	47.1 3.5
All Other Revenues Annual % Change	110.9 (28.6)	111.7 (8.9)	148.8 25.7	180.2	127.2 14.7	111.1 (0.5)	128.6 (13.6)	176.9 (1.8)	113.6 (10.7)	144.0 29.6	147.2 14.4	152.6 (13.8)	85.8 (24.5)	102.9 (28.5)	103.4 (29.8)
Total General Fund Revenues Annual % Change	3,445.8 14.5	3,560.8	3,266.7 8.7	4,561.0 4.0	3,707.7 7.6	3,595.9 1.0	3,354.5 2.7	4,907.7 7.6	3,842.1 3.6	3,698.7	3,380.0 0.8	4,846.1 (1.3)	3,679.9 (4.2)	3,599.0 (2.7)	2,894.2 (14.4)

	2009 2	2009 3	2009 4	2010 1	20102	20103	2010 4	2011 1	2011 2	20113	2011 4	2012 1	2012 2	2012 3	20124
Withholding Annual % Change	2,271.5 2.6	2,125.0 (2.3)	2,328.6 (2.3)	2,416.4 4.8	2,306.1 1.5	2,219.1 4.4	2,459.9 5.6	2,538.5 5.1	2,417.6 4.8	2,308.0 4.0	2,510.9 2.1	2,640.7 4.0	2,580.0 6.7	2,292.0 (0.7)	2,606.4
Nonwithholding Annual % Change	1,201.8 (27.2)	311.3 (23.4)	217.8 (10.5)	373.0 (18.7)	1,004.6 (16.4)	292.9 (5.9)	204.6 (6.0)	435.7 16.8	1,245.4 24.0	348.0 18.8	222.8	468.9 7.6	1,318.3	362.4 4.1	201.3 (9.6)
Gross Individual Income Tax Annual % Change	3,473.3 (10.1)	2,436.3 (5.6)	2,546.4 (3.1)	2,789.4	3,310.7 (4.7)	2,512.0 3.1	2,664.5	2,974.2 6.6	3,663.0 10.6	2,655.9 5.7	2,733.7 2.6	3,109.6 4.6	3,898.3 6.4	2,654.4 (0.1)	2,807.7 2.7
Individual Refunds Annual % Change	825.8 28.8	150.8 18.6	182.3 29.1	947.1 8.5	714.4 (13.5)	123.1 (18.4)	160.9 (11.8)	888.2 (6.2)	697.1 (2.4)	105.7 (14.1)	132.1 (17.9)	862.9 (2.9)	(1.9)	98.2 (7.1)	108.9 (17.6)
Net Individual Income Tax Annual % Change	2,647.5 (17.9)	2,285.5 (6.9)	2,364.1 (4.9)	1,842.3 (2.6)	2,596.4 (1.9)	2,388.9	2,503.6 5.9	2,086.1	2,965.8	2,550.2 6.8	2,601.6	2,246.7 7.7	3,214.2 8.4	2,556.2 0.2	2,698.9
Sales and Use Tax Annual % Change	695.4 (9.5)	724.7 (5.9)	724.0 (0.7)	674.5 (4.8)	959.4 38.0	577.9 (20.3)	746.3 3.1	719.7 6.7	968.5	620.4	772.0 3.5	768.1 6.7	961.0 (0.8)	684.7 10.4	0.7
Corporate Income Tax Annual % Change	313.6 (6.7)	176.3 (7.9)	175.6 144.4	56.8 (20.2)	397.8 26.8	177.6 0.7	160.5 (8.6)	127.8 125.1	356.4 (10.4)	191.3 7.7	134.4 (16.3)	162.4 27.1	371.8 4.3	168.8 (11.8)	197.9 47.2
Wills, Suits, Deeds, Contracts Annual % Change	89.3 (22.0)	80.5 (10.9)	74.6 12.8	60.1 (12.2)	75.0 (16.0)	75.7 (5.9)	77.7 4.1	63.3 5.4	74.7 (0.4)	78.9	79.8	73.5 16.1	89.8 20.2	90.7	92.2 15.5
Insurance Premiums Annual % Change	199.6 (0.9)	0.0 N	75.1 (0.6)	(20.3)	207.1	0.0 A	80.5	(9.4) (53.7)	210.4	0.0 N	56.4 (29.9)	(15.2) 62.4	211.7	0.0 A	79.9 41.7
Interest Income Annual % Change	(19.0) (4.2)	40.3 (45.9)	26.4	33.3 42.8	(5.7)	25.7 (36.2)	21.6 (18.0)	23.8 (28.5)	10.0 (274.5)	29.5 14.5	17.0 (21.5)	19.9 (16.2)	10.8	26.9 (8.9)	15.1 (10.9)
Alcoholic Beverage Sales Annual % Change	71.8	12.3 (4.0)	42.2	47.5	73.0	12.8 3.9	43.2	48.7	74.3	13.8	45.0 4.2	50.6	77.0 3.6	15.7	46.1 2.6
All Other Revenues Annual % Change	143.7 (5.8)	87.4 1.9	71.8 (30.2)	97.5 (5.7)	164.1 14.2	89.4 2.4	81.1	105.7 8.4	151.9 (7.4)	89.1 (0.3)	77.2 (4.9)	107.3 1.6	140.3 (7.7)	76.6 (14.0)	88.2
Total General Fund Revenues Annual % Change	4,142.0 (14.5)	3,407.0 (7.4)	3,553.9 (1.3)	2,791.6 (3.5)	4,467.0 7.8	3,348.1 (1.7)	3,714.5 4.5	3,165.6 13.4	4,812.0 7.7	3,573.2 6.7	3,783.4	3,413.4 7.8	5,076.6 5.5	3,619.5 1.3	3,995.5 5.6

	2013 1	2013 2	20133	2013 4	2014 1	2014 2	2014 3	20144	2015 1	2015 2	2015 3
Withholding Annual % Change	2,761.1 4.6	2,591.9 0.5	2,403.1 4.8	2,659.9 2.1	2,803.7 1.5	2,617.5 1.0	2,554.4 6.3	2,820.0 6.0	2,875.3 2.6	2,794.7 6.8	2,666.5 4.4
Nonwithholding Annual % Change	575.7 22.8	1,668.3 26.5	372.8 2.9	260.6 29.4	496.7 (13.7)	1,394.8 (16.4)	427.7 14.7	327.6 25.7	602.1	1,684.2 20.7	472.0 10.3
Gross Individual Income Tax Annual % Change	3,336.8 7.3	4,260.1 9.3	2,775.9 4.6	2,920.4 4.0	3,300.5 (1.1)	4,012.4 (5.8)	2,982.1 7.4	3,147.6 7.8	3,477.4 5.4	4,478.9	3,138.5 5.2
Individual Refunds Annual % Change	827.8 (4.1)	684.2	118.6 20.8	156.9 44.2	820.2 (0.9)	660.1 (3.5)	123.5	156.8 (0.1)	790.5 (3.6)	686.5	122.9 (0.5)
Net Individual Income Tax Annual % Change	2,509.1 11.7	3,575.9 11.3	2,657.3 4.0	2,763.5 2.4	2,480.3 (1.1)	3,352.3 (6.3)	2,858.6 7.6	2,990.8	2,686.9	3,792.3 13.1	3,015.6 5.5
Sales and Use Tax Annual % Change	787.0 2.5	971.0	653.9 (4.5)	766.1 (1.4)	721.1 (8.4)	925.3 (4.7)	684.0	778.5	764.3 6.0	1,008.7	648.9 (5.1)
Corporate Income Tax Annual % Change	84.5 (48.0)	345.6 (7.0)	201.5 19.4	102.2 (48.4)	124.0 46.8	329.8 (4.6)	226.6 12.4	140.2 37.2	144.6 16.6	320.6 (2.8)	188.0 (17.0)
Wills, Suits, Deeds, Contracts Annual % Change	91.3 24.1	103.3 15.1	93.2	76.2 (17.3)	60.6	80.8 (21.8)	87.5 (6.1)	80.9	76.1 25.7	101.8 26.1	96.0 9.7
Insurance Premiums Annual % Change	(21.0) 37.7	203.3 (4.0)	0.0 A	90.3 12.9	3.5 (116.5)	226.7 11.5	0.0 N	75.5 NA	5.3 NA	219.9 NA	0.0 A
Interest Income Annual % Change	21.8	3.7 (65.4)	18.3 (31.7)	22.8 50.5	23.4	9.6 157.4	18.0 (2.0)	14.5 (36.6)	12.7 (45.9)	3.6 (62.4)	18.2
Alcoholic Beverage Sales Annual % Change	53.2	80.2	14.8 (5.8)	47.7 3.4	54.4 2.3	82.3	15.2 2.8	49.0	56.8 4.3	86.8	11.8 (22.6)
All Other Revenues Annual % Change	101.3 (5.6)	159.6 13.8	83.3	79.5 (9.8)	105.0 3.6	161.8	82.9 (0.5)	88.0 10.6	104.8 (0.2)	160.5 (0.8)	87.9 6.1
Total General Fund Revenues Annual % Change	3,627.1 6.3	5,442.5 7.2	3,722.3 2.8	3,948.3 (1.2)	3,572.3 (1.5)	5,168.5 (5.0)	3,972.6 6.7	4,217.2 6.8	3,851.4 7.8	5,694.3 10.2	4,066.3 2.4

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

		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Withholding	Calendar Year % Change Fiscal Year % Change	3,658.7 6.2 3,562.6 6.4	3,922.3 7.2 3,798.6 6.6	4,148.0 5.8 4,049.0 6.6	4,550.9 9.7 4,303.0 6.3	4,979.1 9.4 4,759.0 10.6	5,673.3 13.9 5,311.9	6,007.5 5.9 5,861.3 10.3	6,347.5 5.7 6,254.9 6.7	6,513.0 2.6 6,422.4 2.7	6,772.2 4.0 6,567.4 2.3	7,305.3 7.9 7,039.3 7.2
Nonwithholding	Calendar Year	772.3	794.6	890.4	1,084.4	1,317.7	1,596.4	1,640.6	1,801.7	1,456.4	1,423.7	1,658.4
	% Change	1.1	2.9	12.1	21.8	21.5	21.2	2.8	9.8	(19.2)	(2.2)	16.5
	Fiscal Year	775.3	783.4	878.1	1,041.9	1,284.7	1,487.8	1,669.7	1,806.8	1,459.5	1,402.7	1,562.8
	% Change	3.2	1.0	12.1	18.6	23.3	15.8	12.2	8.2	(19.2)	(3.9)	11.4
Gross Individual Income Tax	Calendar Year % Change Fiscal Year % Change	4,431.0 5.2 4,338.0 5.8	4,716.9 6.5 4,581.9 5.6	5,038.4 6.8 4,927.2 7.5	5,635.3 11.8 5,344.9 8.5	6,296.7 11.7 6,043.7	7,269.7 15.5 6,799.8	7,648.1 5.2 7,530.9 10.8	8,149.2 6.6 8,061.7 7.0	7,969.4 (2.2) 7,881.9 (2.2)	8,195.9 2.8 7,970.1 1.1	8,963.7 9.4 8,602.1 7.9
Individual Refunds	Calendar Year % Change Fiscal Year % Change	530.6 3.5 526.1 2.3	547.4 3.2 553.8 5.3	587.5 7.3 579.1 4.6	628.5 7.0 617.1 6.6	655.2 4.2 638.2 3.4	717.4 9.5 711.9	773.8 7.9 702.0 (1.4)	902.6 16.6 835.4 19.0	1,108.8 22.8 1,171.1 40.2	1,167.3 5.3 1,194.4 2.0	1,227.3 5.1 1,217.2 1.9
Net Individual Income Tax	Calendar Year	3,900.4	4,169.5	4,451.0	5,006.8	5,641.5	6,552.3	6,874.3	7,246.6	6,860.6	7,028.6	7,736.4
	% Change	5.5	6.9	6.8	12.5	12.7	16.1	4.9	5.4	(5.3)	2.4	10.1
	Fiscal Year	3,811.9	4,028.1	4,348.0	4,727.8	5,405.4	6,087.9	6,828.9	7,226.3	6,710.8	6,775.7	7,384.9
	% Change	6.3	5.7	7.9	8.7	14.3	12.6	12.2	5.8	(7.1)	1.0	9.0
Sales and Use Tax	Calendar Year	1,612.1	1,682.8	1,783.1	1,872.4	1,992.4	2,140.7	2,233.3	2,289.5	2,309.9	2,410.4	2,705.1
	% Change	9.0	4.4	6.0	5.0	6.4	7.4	4.3	2.5	0.9	4.4	12.2
	Fiscal Year	1,539.1	1,657.7	1,722.0	1,826.8	1,919.2	2,065.3	2,201.5	2,273.0	2,429.8	2,336.0	2,562.3
	% Change	6.8	7.7	3.9	6.1	5.1	7.6	6.6	3.2	6.9	(3.9)	9.7
Corporate Income Tax	Calendar Year	323.1	411.8	386.9	448.8	458.1	462.8	497.5	326.2	320.5	348.6	521.7
	% Change	(16.0)	27.4	(6.0)	16.0	2.1	1.0	7.5	(34.4)	(1.8)	8.8	49.7
	Fiscal Year	312.1	376.4	402.3	432.3	450.8	420.4	565.9	363.8	290.2	343.3	425.7
	% Change	(16.0)	20.6	6.9	7.4	4.3	(6.7)	34.6	(35.7)	(20.2)	18.3	24.0
Wills, Suits, Deeds, Contracts	Calendar Year	99.0	86.4	99.1	112.5	148.5	151.3	150.8	195.5	247.2	319.5	431.7
	% Change	(10.2)	(12.7)	14.7	13.5	32.0	1.9	(0.3)	29.6	26.4	29.3	35.1
	Fiscal Year	114.9	84.7	95.5	103.4	126.8	157.9	146.3	167.6	214.4	285.8	340.6
	% Change	15.4	(26.3)	12.7	8.3	22.6	24.5	(7.3)	14.6	27.9	33.3	19.1

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Withholding	Calendar Year % Change Fiscal Year % Change	7,733.2 5.9 7,513.0 6.7	8,240.8 6.6 8,053.7 7.2	8,792.5 6.7 8,565.5 6.4	9,185.8 4.5 8,933.6 4.3	9,031.7 (1.7) 9,138.1 2.3	9,401.4 4.1 9,176.2 0.4	9,775.0 4.0 9,635.1 5.0	10,119.1 3.5 10,039.7 4.2	10,415.9 2.9 10,251.3 2.1	10,795.6 3.6 10,484.2 2.3	11,044.3 5.3
Nonwithholding	Calendar Year % Change Fiscal Year % Change	2,151.8 29.7 2,073.5 32.7	2,540.3 18.1 2,493.8 20.3	2,815.0 10.8 2,782.0 11.6	2,856.7 1.5 2,861.2 2.8	2,189.8 (23.3) 2,310.4 (19.2)	1,875.2 (14.4) 1,906.8 (17.5)	2,251.8 20.1 2,178.6 14.3	2,350.9 4.4 2,357.9 8.2	2,877.3 22.4 2,807.7 19.1	2,646.9 (8.0) 2,524.9 (10.1)	3,041.6 20.5
Gross Individual Income Tax	Calendar Year % Change Fiscal Year % Change	9,884.9 10.3 9,586.6 11.4	10,781.0 9.1 10,547.5 10.0	11,607.5 7.7 11,347.4 7.6	12,042.5 3.7 11,794.7 3.9	11,221.4 (6.8) 11,448.5 (2.9)	11,276.6 0.5 11,082.9 (3.2)	12,026.8 6.7 11,813.7 6.6	12,470.0 3.7 12,397.6 4.9	13,293.3 6.6 13,059.0 5.3	13,442.5 1.1 13,009.2 (0.4)	14,086.0 8.3
Individual Refunds	Calendar Year % Change Fiscal Year % Change	1,178.3 (4.0) 1,234.2 1.4	1,389.6 17.9 1,282.6 3.9	1,567.4 12.8 1,559.8 21.6	1,720.8 9.8 1,679.9 7.7	2,032.1 18.1 1,967.4 17.1	1,945.5 (4.3) 1,994.7 1.4	1,823.1 (6.3) 1,869.3 (6.3)	1,754.0 (3.8) 1,784.7 (4.5)	1,787.6 1.9 1,719.1 (3.7)	1,760.5 (1.5) 1,755.8	1,757.3
Net Individual Income Tax	Calendar Year % Change Fiscal Year % Change	8,706.7 12.5 8,352.4 13.1	9,391.4 7.9 9,264.9 10.9	10,040.0 6.9 9,787.6 5.6	10,321.7 2.8 10,114.8 3.3	9,189.3 (11.0) 9,481.1 (6.3)	9,331.1 1.5 9,088.3 (4.1)	10,203.8 9.4 9,944.4 9.4	10,716.0 5.0 10,612.8 6.7	11,505.7 7.4 11,340.0 6.9	11,682.0 1.5 11,253.3 (0.8)	12,328.7 9.6
Sales and Use Tax	Calendar Year % Change Fiscal Year % Change	3,002.6 11.0 2,946.1 15.0	3,014.1 0.4 2,812.7 (4.5)	3,123.8 3.6 3,049.1 8.4	2,990.8 (4.3) 3,075.5 0.9	2,853.0 (4.6) 2,903.4 (5.6)	2,958.0 3.7 3,082.5 6.2	3,080.6 4.1 3,012.4 (2.3)	3,190.9 3.6 3,121.5 3.6	3,178.0 (0.4) 3,219.8 3.1	3,108.9 (2.2) 3,066.5 (4.8)	3,235.4
Corporate Income Tax	Calendar Year % Change Fiscal Year % Change	840.6 61.1 616.7 44.9	839.8 (0.1) 867.1 40.6	769.3 (8.4) 879.6 1.4	738.0 (4.1) 807.9 (8.2)	736.7 (0.2) 648.0 (19.8)	792.7 7.6 806.5 24.4	809.9 2.2 822.3 2.0	900.9 11.2 859.9 4.6	733.7 (18.6) 796.7 (7.3)	820.6 11.8 757.5 (4.9)	831.9 9.8
Wills, Suits, Deeds, Contracts	Calendar Year % Change Fiscal Year % Change	704.7 63.2 596.1 75.0	616.2 (12.6) 694.7 16.6	531.9 (13.7) 582.9 (16.1)	369.5 (30.5) 456.3 (21.7)	312.8 (15.3) 314.3 (31.1)	288.5 (7.8) 290.2 (7.7)	296.8 2.9 291.5 0.4	346.2 16.6 322.1 10.5	364.0 5.1 377.5 17.2	309.7 (14.9) 310.8 (17.7)	346.3 11.4

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

	1	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Insurance Premiums	Calendar Year	203.6	212.9	216.6	220.4	243.6	248.3	254.3	280.9	308.7	339.4	365.4
	% Change	9.1	4.6	1.7	1.8	10.5	1.9	2.4	10.5	9.9	6.6	7.7
	Fiscal Year	196.4	208.2	218.0	219.0	237.0	244.9	251.1	268.1	292.7	333.0	351.3
	% Change	8.9	0.9	4.7	0.5	8.2	3.4	2.5	6.8	9.2	13.8	5.5
Interest Income	Calendar Year	61.0	80.1	94.6	116.5	125.0	118.3	147.8	111.9	86.9	59.5	2.69
	% Change	16.1	31.4	18.1	23.1	7.3	(5.4)	24.9	(24.3)	(22.4)	(31.5)	17.3
	Fiscal Year	53.4	64.5	82.3	114.9	105.8	126.1	131.2	133.2	100.4	81.7	61.4
	% Change	11.1	20.8	27.5	39.7	(7.9)	19.2	4.0	1.5	(24.6)	(18.6)	(24.8)
Alcoholic Beverage Sales	Calendar Year	101.5	102.1	103.0	103.8	107.2	111.9	119.2	123.6	129.0	131.5	139.6
	% Change	(0.3)	0.5	0.9	0.8	3.2	4.4	6.5	3.7	4.3	1.9	6.2
	Fiscal Year	101.1	101.0	104.4	103.5	105.5	110.6	117.2	123.0	127.5	128.7	138.0
	% Change	(1.4)	(0.1)	3.4	(0.9)	1.9	4.8	0.9	4.9	3.6	1.0	7.2
All Other Revenues	Calendar Year	374.0	371.4	397.5	429.8	432.6	560.6	484.2	549.3	548.2	596.8	673.1
	% Change	15.5	(0.7)	7.0	8.1	9.0	29.6	(13.6)	13.5	(0.2)	8.9	12.8
	Fiscal Year	374.4	360.5	383.5	421.5	422.9	489.7	546.4	550.4	513.1	582.9	653.6
	% Change	22.6	(3.7)	6.4	6.6	0.3	15.8	11.6	0.7	(6.8)	13.6	12.1
Total General Fund Revenues	Calendar Year	6,674.7	7,116.9	7,531.8	8,311.0	9,148.7		10,761.3		10,810.9	11,234.2	12,642.8
	% Change	5.3	9.9	5.8	10.3	10.1		4.0		(2.8)	3.9	12.5
	Fiscal Year	6,503.4	6,881.1	7,356.1	7,949.3	8,773.5		10,788.5		10,679.0	10,867.1	11,917.9
	% Change	0.9	5.8	6.9	8.1	10.4	10.6	11.2	2.9	(3.8)	1.8	9.7
ABC Profits	Fiscal Year	20.7	19.0	26.0	23.8	20.7	25.5	30.1	28.1	25.4	14.2	16.8
	% Change	(22.8)	(8.2)	36.8	(8.5)	(12.9)	23.0	18.2	(8.8)	(9.6)	(44.1)	18.0
Transfers per Appropriations Act	Fiscal Year	388.0	273.4	443.0	364.2	367.9	371.1	407.4	354.5	702.0	1,028.5	0.966
	% Change	2.9	(29.5)	62.0	(17.8)	1.0	6.0	9.8	(13.0)	98.0	46.5	(3.2)

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Insurance Premiums	Calendar Year	372.8	366.9	398.8	309.2	254.5	267.3	257.4	276.4	272.6	305.6	
	% Change	2.0	(1.6)	8.7	(22.5)	(17.7)	5.0	(3.7)	7.4	(4.1)	12.1	
	Fiscal Year	373.6	373.8	384.9	396.9	255.0	261.9	281.6	252.9	262.2	320.4	300.6
	% Change	6.3	0.1	3.0	3.1	(35.7)	2.7	7.5	(10.2)	3.7	22.2	(6.2)
Interest Income	Calendar Year	105.4	180.2	213.1	117.6	71.0	75.0	80.2	72.7	9.99	65.4	
	% Change	51.2	71.0	18.2	(44.8)	(39.6)	5.5	7.0	(9.4)	(8.3)	(1.8)	
	Fiscal Year	83.9	116.5	175.9	189.3	104.2	94.3	81.1	77.2	67.5	74.1	48.7
	% Change	36.6	38.9	51.1	9.7	(44.9)	(6.5)	(14.0)	(4.9)	(12.5)	9.8	(34.3)
Alcoholic Beverage Sales	Calendar Year	147.0	155.2	163.1	169.8	173.4	176.5	181.8	189.4	195.9	200.9	
	% Change	5.3	9.6	5.0	4.1	2.2	4. 8.	3.0	4.2	3.4	5.6	
	Fiscal Year	144.5	153.0	161.8	168.9	173.2	175.1	178.9	186.4	195.2	199.2	207.8
	% Change	4.7	5.9	5.8	4.3	2.6	1 .	2.2	4.2	4.7	2.1	4.3
All Other Revenues	Calendar Year	518.9	567.4	563.1	488.5	406.3	432.1	423.9	412.4	423.7	437.7	
	% Change	(22.9)	9.3	(0.8)	(13.3)	(16.8)	6.4	(1.9)	(2.7)	2.7	3.3	
	Fiscal Year	574.1	551.6	543.9	557.4	435.7	420.7	428.1	413.9	425.7	429.6	436.2
	% Change	(12.2)	(3.9)	(1.4)	2.5	(21.8)	(3.4)	1.8	(3.3)	2.9	0.9	1.5
Total General Fund Revenues	ัฐ	14,398.7	15,131.3	15,803.1	15,505.0	13,997.0	14,321.2	15,334.3	16,105.0	16,740.2	16,930.7	
		13.9	5.1	4.4	(1.9)	(6.7)	2.3		2.0	3.9	1.	
	Fiscal Year	13,687.3	14,834.3	15,565.8	15,767.0	14,315.1	14,219.5		15,846.7		16,411.4	17,735.6
		14.8	8.4	4.9	1.3	(8.2)	(0.7)		5.4	5.3	(1.6)	8.1
ABC Profits	Fiscal Year	24.9	30.0	27.6	36.1	44.1	50.0	50.5	63.8	68.0	72.2	83.3
	% Change	48.9	20.4	(8.3)	31.0	22.2	13.4	1.0	26.3	9.9	6.2	15.4
Transfers per Appropriations Act	Fiscal Year % Change	714.6 (28.3)	835.6 16.9	792.7 (5.1)	776.4 (2.1)	362.4 (53.3)	517.2 42.7	361.6 (30.1)	437.5 21.0	356.6 (18.5)	465.5 30.5	550.6 18.3

APPENDIX C MODELS AND METHODOLOGIES

Corporate Income Tax

diffya(corp)

+ 1.00577 (0.33336)

Sum Sq	70506.8	Std Err	27.1007	LHS Mean	6.2354
R Sq	0.1736	R Bar Sq	0.1563	F 2, 96	10.0797
D.W.(1)	2.0837	D.W.(4)	2.2152		

Quarterly data for 99 periods from 1991Q1 to 2015Q3

diffya Year-over-year difference function corp Gross corporate income tax receipts virginia portion of national pre-tax profits

sp500va Virginia specific Standard and Poor's 500 stock index

Corporate Income Tax, Gross Receipts

Fisc	cal Year	<u>Actual</u>	Fitted	Residual	% Residual
2000	99Q3	153.2	117.1	36.1	23.6%
	99Q4	141.4	139.2	2.1	1.5%
	00Q1	75.1	79.1	(4.1)	-5.4%
	00Q2	251.7	208.3	43.3	17.2%
	Total	621.3	543.8	77.5	12.5%
2001	00Q3	145.1	153.9	(8.8)	-6.1%
	00Q4	102.3	138.9	(36.6)	-35.8%
	01Q1	73.0	73.1	(0.1)	-0.1%
	01Q2	193.3	250.7	(57.4)	-29.7%
	Total	513.7	616.5	(102.9)	-20.0%
2002	01Q3	100.2	140.5	(40.3)	-40.3%
	01Q4	117.7	97.5	20.2	17.2%
	02Q1	83.8	72.0	11.8	14.1%
	02Q2	171.8	194.3	(22.5)	-13.1%
	Total	473.4	504.2	(30.8)	-6.5%
2003	02Q3	117.7	108.3	9.4	8.0%
	02Q4	124.2	132.5	(8.3)	-6.7%
	03Q1	68.5	96.9	(28.4)	-41.5%
	03Q2	202.0	182.3	19.7	9.8%
	Total	512.4	520.0	(7.6)	-1.5%
2004	03Q3	135.8	129.9	5.8	4.3%
	03Q4	124.9	136.3	(11.5)	-9.2%
	04Q1	82.5	87.1	(4.5)	-5.5%
	04Q2	252.5	222.9	29.6	11.7%
	Total	595.7	576.2	19.5	3.3%
2005	04Q3	140.9	155.9	(15.1)	-10.7%
	04Q4	190.2	140.9	49.4	26.0%
	05Q1	109.7	108.7	1.0	0.9%
	05Q2	305.3	276.8	28.4	9.3%
	Total	746.1	682.3	63.8	8.5%
2006	05Q3	219.0	165.4	53.6	24.5%
	05Q4	262.8	219.9	42.9	16.3%
	06Q1	136.7	124.9	11.8	8.6%
	06Q2	368.3	322.4	45.9	12.5%
	Total	986.8	832.6	154.2	15.6%
000=	222	225 -			
2007	06Q3	283.8	234.5	49.3	17.4%
	06Q4	225.4	268.3	(42.9)	-19.0%
	07Q1	164.8	135.6	29.2	17.7%
	07Q2	356.2	368.9	(12.7)	-3.6%
	Total	1,030.2	1,007.3	22.9	2.2%

Corporate Income Tax, Gross Receipts

<u>Fis</u>	cal Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2008	07Q3	244.3	277.1	(32.8)	-13.4%
	07Q4	165.0	222.4	(57.4)	-34.8%
	08Q1	197.4	153.5	43.9	22.3%
	08Q2	361.7	341.1	20.6	5.7%
	Total	968.4	994.1	(25.6)	-2.6%
2009	08Q3	220.0	229.8	(9.8)	-4.5%
	08Q4	201.5	113.0	88.5	43.9%
	09Q1	113.6	177.1	(63.5)	-55.9%
	09Q2	339.2	347.9	(8.7)	-2.6%
	Total	874.3	867.8	6.5	0.7%
2010	09Q3	203.7	223.6	(19.9)	-9.7%
	09Q4	249.8	252.9	(3.1)	-1.2%
	10Q1	129.0	149.9	(20.9)	-16.2%
	10Q2	379.4	368.3	11.1	2.9%
	Total	961.9	994.7	(32.8)	-3.4%
2011	10Q3	227.0	225.2	1.8	0.8%
	10Q4	238.3	262.6	(24.3)	-10.2%
	11Q1	161.8	128.8	33.0	20.4%
	11Q2	390.4	382.9	7.5	1.9%
	Total	1,017.5	999.6	17.9	1.8%
2012	11Q3	241.8	223.3	18.5	7.6%
	11Q4	224.1	239.8	(15.6)	-7.0%
	12Q1	184.9	187.9	(3.0)	-1.6%
	12Q2	397.9	408.7	(10.7)	-2.7%
	Total	1,048.8	1,059.6	(10.9)	-1.0%
2013	12Q3	224.8	264.7	(39.9)	-17.8%
	12Q4	273.1	238.9	34.2	12.5%
	13Q1	134.1	184.9	(50.7)	-37.8%
	13Q2	375.1	403.3	(28.2)	-7.5%
	Total	1,007.1	1,091.9	(84.7)	-8.4%
2014	13Q3	242.2	228.5	13.7	5.7%
	13Q4	225.4	281.3	(55.9)	-24.8%
	14Q1	141.3	135.6	5.7	4.0%
	14Q2	356.1	382.5	(26.4)	-7.4%
	Total	965.0	1,027.8	(62.8)	-6.5%
2015	14Q3	256.6	251.9	4.7	1.8%
	14Q4	242.0	228.6	13.4	5.6%
	15Q1	159.4	151.7	7.7	4.8%
	15Q2	350.5	368.2	(17.7)	-5.1%
	Total	1,008.5	1,000.4	8.1	0.8%

Individual Income Tax - Withholding

diffya(with)

Sum Sq	153618	Std Err	41.0866	LHS Mean	85.4628
R Sq	0.3839	R Bar Sq	0.3636	F 3, 91	18.9013
D.W.(1)	2.0099	D.W.(4)	1.9796		

Quarterly data for 95 periods from 1992Q1 to 2015Q3

diffya Year-over-year difference function

with Withholding tax receipts

ywstran Virginia income from wages and salaries and transfer payments

q994 1 in 1994Q4; 0 in all other quarters

Individual Income Tax - Withholding

<u>Fis</u>	cal Year	Actual	<u>Fitted</u>	Residual	% Residual
2000	99Q3 99Q4 00Q1	1,351.5 1,521.9 1,513.7	1,310.6 1,513.4 1,521.1	40.9 8.5 (7.4)	3.0% 0.6% -0.5%
	00Q2	1,474.2	1,494.8	(20.6)	-1.4%
	Total	5,861.3	5,839.9	21.4	0.4%
2001	00Q3	1,444.0	1,486.7	(42.8)	-3.0%
	00Q4 01Q1	1,575.6 1,659.1	1,642.3 1,634.5	(66.7) 24.6	-4.2%
	01Q1 01Q2	1,659.1	1,588.9	(12.7)	1.5% -0.8%
	Total	6,254.9	6,352.5	(97.6)	-1.6%
2002	01Q3	1,494.4	1,508.6	(14.2)	-1.0%
	01Q4	1,617.8	1,650.0	(32.2)	-2.0%
	02Q1	1,693.4	1,686.3	7.1	0.4%
	02Q2	1,616.8	1,601.9	14.8	0.9%
	Total	6,422.4	6,446.9	(24.5)	-0.4%
2003	02Q3	1,535.8	1,558.0	(22.2)	-1.4%
	02Q4	1,667.1	1,666.2	0.8	0.1%
	03Q1	1,706.3	1,760.5	(54.2)	-3.2%
	03Q2	1,658.2	1,690.0	(31.8)	-1.9%
	Total	6,567.4	6,674.8	(107.4)	-1.6%
2004	03Q3	1,606.0	1,631.1	(25.1)	-1.6%
	03Q4	1,801.6	1,787.9	13.7	0.8%
	04Q1	1,861.8	1,829.1	32.7	1.8%
	04Q2	1,769.9	1,777.3	(7.3)	-0.4%
	Total	7,039.3	7,025.3	14.0	0.2%
2005	04Q3	1,768.0	1,727.8	40.3	2.3%
	04Q4	1,905.5	1,918.5	(13.0)	
	05Q1	1,992.0	1,974.2	17.8	0.9%
	05Q2	1,847.5	1,890.9	(43.4)	-2.4%
	Total	7,513.0	7,511.4	1.6	0.0%
2006	05Q3	1,897.2	1,884.2	13.0	0.7%
	05Q4	1,996.5	2,011.8	(15.3)	-0.8%
	06Q1	2,131.5	2,125.0	6.5	0.3%
	06Q2	2,028.5	1,968.3	60.1	3.0%
	Total	8,053.7	7,989.4	64.3	0.8%
2007	06Q3	1,970.4	1,996.9	(26.4)	-1.3%
	06Q4	2,110.3	2,108.5	1.8	0.1%
	07Q1	2,292.5	2,246.2	46.3	2.0%
	07Q2	2,192.2	2,136.8	55.4	2.5%
	Total	8,565.5	8,488.4	77.1	0.9%

Individual Income Tax - Withholding

Fisc	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2008	07Q3	2,062.9	2,088.2	(25.3)	-1.2%
	07Q4	2,244.9	2,217.7	27.2	1.2%
	08Q1	2,411.8	2,370.2	41.6	1.7%
	08Q2	2,213.9	2,331.9	(117.9)	-5.3%
	Total	8,933.6	9,008.0	(74.5)	-0.8%
2009	08Q3	2,175.8	2,168.0	7.7	0.4%
	08Q4	2,304.3	2,329.3	(25.0)	-1.1%
	09Q1	2,386.6	2,451.7	(65.1)	-2.7%
	09Q2	2,271.5	2,234.3	37.2	1.6%
	Total	9,138.1	9,183.2	(45.2)	-0.5%
2010	09Q3	2,125.0	2,212.4	(87.4)	-4.1%
	09Q4	2,328.6	2,362.5	(33.9)	-1.5%
	10Q1	2,416.4	2,474.4	(58.1)	-2.4%
	10Q2	2,306.1	2,348.7	(42.5)	-1.8%
	Total	9,176.2	9,398.0	(221.9)	-2.4%
2011	10Q3	2,219.1	2,235.1	(16.0)	-0.7%
	10Q4	2,459.9	2,431.9	27.9	1.1%
	11Q1	2,538.5	2,548.1	(9.5)	-0.4%
	11Q2	2,417.6	2,414.7	2.8	0.1%
	Total	9,635.1	9,629.8	5.3	0.1%
2012	11Q3	2,308.0	2,326.4	(18.4)	-0.8%
	11Q4	2,510.9	2,543.5	(32.6)	-1.3%
	12Q1	2,640.7	2,617.5	23.2	0.9%
	12Q2	2,580.0	2,484.5	95.6	3.7%
	Total	10,039.7	9,971.9	67.8	0.7%
2013	12Q3	2,292.0	2,363.8	(71.8)	-3.1%
	12Q4	2,606.4	2,609.3	(3.0)	-0.1%
	13Q1	2,761.1	2,671.7	89.4	3.2%
	13Q2	2,591.9	2,611.8	(19.9)	-0.8%
	Total	10,251.3	10,256.6	(5.3)	-0.1%
2014	13Q3	2,403.1	2,329.5	73.6	3.1%
	13Q4	2,659.9	2,608.5	51.4	1.9%
	14Q1	2,803.7	2,805.6	(1.9)	-0.1%
	14Q2	2,617.5	2,656.3	(38.8)	-1.5%
	Total	10,484.2	10,399.9	84.3	0.8%
2015	14Q3	2,554.4	2,470.0	84.4	3.3%
	14Q4	2,820.0	2,745.5	74.4	2.6%
	15Q1	2,875.3	2,906.2	(30.9)	-1.1%
	15Q2	2,794.7	2,726.2	68.5	2.5%
	Total	11,044.3	10,847.9	196.5	1.8%

Individual Income Tax – Estimated Payments

diffya(ep)

Sum Sq	95227.6	Std Err	31.8285	LHS Mean	13.8349
R Sq	0.3308	R Bar Sq	0.3023	F 4, 94	11.6151
D.W.(1)	1.7508	D.W.(4)	1.8175		

Quarterly data for 99 periods from 1991Q1 to 2015Q3

diffya Year-over-year difference function

ep Estimated payments

ywpptva Virginia total proprietor's income

yrdirva Virginia dividends, interest, and rental income

sp500 Standard and Poor's 500 stock index

Individual Income Tax - Estimated Payments

Fisca	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2008	07Q3	344.2	367.4	-23.2	-6.7%
	07Q4	260.9	297.6	-36.8	-14.1%
	08Q1	491.4	455.1	36.3	7.4%
	08Q2	514.5	510.9	3.6	0.7%
	Total	1,611.0	1,631.0	-20.0	-1.2%
2009	08Q3	374.4	331.0	43.4	11.6%
	08Q4	201.6	218.9	-17.3	-8.6%
	09Q1	412.2	414.8	-2.6	-0.6%
	09Q2	447.4	443.8	3.6	0.8%
	Total	1,435.6	1,408.5	27.1	1.9%
2010	09Q3	281.6	301.1	-19.6	-6.9%
	09Q4	173.4	185.2	-11.8	-6.8%
	10Q1	352.3	420.3	-68.1	-19.3%
	10Q2	444.6	462.3	-17.7	-4.0%
	Total	1,251.8	1,369.0	-117.1	-9.4%
2011	10Q3	254.8	301.6	-46.9	-18.4%
	10Q4	204.8	203.3	1.5	0.8%
	11Q1	351.3	413.8	-62.5	-17.8%
	11Q2	490.4	495.3	-4.9	-1.0%
	Total	1,301.3	1,414.0	-112.7	-8.7%
2012	11Q3	315.5	314.8	0.8	0.2%
	11Q4	226.7	242.0	-15.3	-6.8%
	12Q1	370.3	408.2	-37.9	-10.2%
	12Q2	522.6	529.9	-7.3	-1.4%
	Total	1,435.1	1,494.9	-59.8	-4.2%
2013	12Q3	299.0	358.0	-59.0	-19.7%
	12Q4	178.2	291.0	-112.8	-63.3%
	13Q1	492.6	400.9	91.7	18.6%
	13Q2	593.0	543.2	49.8	8.4%
	Total	1,562.8	1,593.2	(30.4)	-1.9%
2014	13Q3	328.3	338.4	-10.1	-3.1%
	13Q4	223.2	216.0	7.2	3.2%
	14Q1	453.2	498.1	-44.8	-9.9%
	14Q2	567.7	613.8	-46.1	-8.1%
	Total	1,572.5	1,666.3	(93.8)	-6.0%
2015	14Q3	372.7	366.9	5.8	1.5%
	14Q4	317.8	255.8	62.0	19.5%
	15Q1	516.7	497.8	18.9	3.7%
	15Q2	642.8	610.7	32.1	5.0%
	Total	1,850.0	1,731.2	118.8	6.4%

Individual Income Tax - Final Payments

pch(fp)

Sum Sq	6461.8	Std Err	18.4417	LHS Mean	10.8946
R Sq	0.4483	R Bar Sq	0.4193	F 1, 19	15.4412
D.W.(1)	1.5953	D.W.(2)	1.2513		

Annual data for 21 periods from 1994 to 2014

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>Actual</u>	<u>Fitted</u>	Residual
(1.5)		(1.5)
31.4	58.4	(27.0)
24.7	16.4	8.2
34.5	41.9	(7.4)
15.9	13.5	2.4
9.7	5.8	3.9
10.9	(6.0)	16.9
(37.8)	(38.9)	1.1
(4.3)	(10.4)	6.1
27.9	69.7	(41.9)
53.0	39.8	13.2
21.0	17.7	3.3
18.6	25.6	(7.1)
4.5	(1.1)	5.6
(30.0)	(46.5)	16.5
(25.1)	8.8	(34.0)
34.0	26.8	7.2
5.2	(2.0)	7.2
34.9	45.2	(10.3)
(23.5)	(16.9)	(6.6)
25.1	14.0	11.1
	(1.5) 31.4 24.7 34.5 15.9 9.7 10.9 (37.8) (4.3) 27.9 53.0 21.0 18.6 4.5 (30.0) (25.1) 34.0 5.2 34.9 (23.5)	(1.5) 31.4 58.4 24.7 16.4 34.5 41.9 15.9 13.5 9.7 5.8 10.9 (6.0) (37.8) (38.9) (4.3) (10.4) 27.9 69.7 53.0 39.8 21.0 17.7 18.6 25.6 4.5 (1.1) (30.0) (46.5) (25.1) 8.8 34.0 26.8 5.2 (2.0) 34.9 45.2 (23.5) (16.9)

State Sales Tax

diff(sales)

Sum Sq	39609.0	Std Err	20.2074	LHS Mean	5.3800
R Sq	0.2168	R Bar Sq	0.1926	F 3, 97	8.9500
D.W.(1)	2.2874	D.W.(4)	1.1275		

Quarterly data for 101 periods from 1990Q3 to 2015Q3

diff Quarter-over-quarter difference function

sales Sales tax receipts

yrpicva Virginia personal income

qd3 Quarterly dummy variable for quarter 3

State Sales Tax (Adjusted for AST)

Fisc	cal Year	<u>Actual</u>	Fitted	Residual	% Residual
2000	99Q3	550.0	536.7	13.3	2.4%
	99Q4	555.8	549.1	6.7	1.2%
	00Q1	542.4	557.8	(15.4)	-2.8%
	00Q2	553.3	553.0	0.3	0.1%
	Total	2,201.5	2,196.6	4.9	0.2%
2001	00Q3	573.6	571.7	1.8	0.3%
	00Q4	564.0	574.6	(10.5)	-1.9%
	01Q1	573.9	570.8	3.1	0.5%
	01Q2	561.5	571.1	(9.6)	-1.7%
	Total	2,273.0	2,288.2	(15.3)	-0.7%
2002	01Q3	575.0	578.3	(3.2)	-0.6%
	01Q4	579.1	572.3	6.8	1.2%
	02Q1	551.9	577.1	(25.2)	-4.6%
	02Q2	574.4	563.6	10.8	1.9%
	Total	2,280.4	2,291.3	(10.9)	-0.5%
2003	02Q3	585.6	582.0	3.6	0.6%
	02Q4	576.6	586.1	(9.5)	-1.6%
	03Q1	564.9	583.9	(19.0)	-3.4%
	03Q2	574.3	573.3	0.9	0.2%
	Total	2,301.3	2,325.3	(24.0)	-1.0%
2004	03Q3	627.7	592.4	35.3	5.6%
	03Q4	620.0	616.2	3.8	0.6%
	04Q1	622.9	628.0	(5.1)	-0.8%
	04Q2	663.3	623.5	39.8	6.0%
	Total	2,533.9	2,460.1	73.9	2.9%
2005	04Q3	667.9	667.2	0.7	0.1%
	04Q4	679.7	680.5	(0.8)	-0.1%
	05Q1	687.4	680.8	6.6	1.0%
	05Q2	725.5	689.4	36.1	5.0%
	Total	2,760.5	2,717.9	42.6	1.5%
2006	05Q3	718.3	734.1	(15.8)	-2.2%
	05Q4	721.8	733.2	(11.4)	-1.6%
	06Q1	754.9	732.0	22.9	3.0%
	06Q2	733.0	745.0	(12.0)	-1.6%
	Total	2,928.0	2,944.2	(16.2)	-0.6%
2007	06Q3	756.1	761.9	(5.7)	-0.8%
	06Q4	739.4	755.7	(16.3)	-2.2%
	07Q1	769.3	756.6	12.6	1.6%
	07Q2	752.1	761.5	(9.4)	-1.3%
	Total	3,016.9	3,035.7	(18.8)	-0.6%

State Sales Tax (Adjusted for AST)

Fisc	cal Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2008	07Q3	782.6	780.7	1.9	0.2%
	07Q4	794.4	776.2	18.1	2.3%
	08Q1	720.0	790.8	(70.8)	-9.8%
	08Q2	761.5	761.5	0.0	0.0%
	Total	3,058.5	3,109.3	(50.8)	-1.7%
2009	08Q3	768.8	759.2	9.6	1.2%
	08Q4	728.5	764.3	(35.8)	-4.9%
	09Q1	710.2	729.9	(19.6)	-2.8%
	09Q2	693.5	712.3	(18.8)	-2.7%
	Total	2,901.0	2,965.6	(64.6)	-2.2%
2010	09Q3	724.9	715.1	9.8	1.4%
	09Q4	723.2	715.5	7.6	1.1%
	10Q1	678.4	724.3	(46.0)	-6.8%
	10Q2	731.7	702.5	29.2	4.0%
	Total	2,858.1	2,857.4	0.7	0.0%
2011	10Q3	760.2	730.8	29.4	3.9%
	10Q4	746.3	758.3	(12.1)	-1.6%
	11Q1	719.7	763.6	(43.9)	-6.1%
	11Q2	777.5	737.0	40.5	5.2%
	Total	3,003.7	2,989.8	13.9	0.5%
2012	11Q3	774.3	776.5	(2.3)	-0.3%
	11Q4	772.0	783.8	(11.8)	-1.5%
	12Q1	768.1	776.8	(8.7)	-1.1%
	12Q2	809.0	772.5	36.5	4.5%
	Total	3,123.4	3,109.6	13.8	0.4%
2013	12Q3	807.1	810.2	(3.1)	-0.4%
	12Q4	777.1	828.5	(51.4)	-6.6%
	13Q1	787.0	773.2	13.8	1.7%
	13Q2	814.8	772.5	42.4	5.2%
	Total	3,186.0	3,184.3	1.7	0.1%
2014	13Q3	814.3	820.3	(5.9)	-0.7%
	13Q4	806.1	820.9	(14.8)	-1.8%
	14Q1	761.0	812.8	(51.9)	-6.8%
	14Q2	830.1	784.6	45.5	5.5%
	Total	3,211.5	3,238.6	(27.1)	-0.8%
2015	14Q3	838.3	821.4	16.9	2.0%
	14Q4	842.2	845.2	(3.0)	-0.4%
	15Q1	815.9	842.2	(26.3)	-3.2%
	15Q2	872.4	830.9	41.5	4.8%
	Total	3,368.8	3,339.7	29.1	0.9%

Recordation Taxes

diff(rec)

$$12.9235*diff(rtbond30y.1) - 3.50387*qd1 + 26.3005*qd2$$

(3.53679) (1.37184) (10.7838)

- 7.94525 (-5.55469)

Sum Sq	2020.9	Std Err	4.6868	LHS Mean	0.3612
R Sq	0.6870	R Bar Sq	0.6700	F 5, 92	40.3792
D.W.(1)	2.3424	D.W.(4)	1.3752		

Quarterly data for 39 periods from 2006Q1 to 2015Q3

diff Quarter-over-quarter difference function

rec Recordation tax receipts

refimort Mortgage refinancing originations

medhome Median home prices

rtbond30y.1 Yield on 30-year treasury bond, lagged one quarter qd1, qd2 Quarterly dummy variables for quarters 1 and 2

Recordation Taxes

<u>Fisc</u>	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2007	06Q3	150.8	156.5	(5.8)	-3.8%
	06Q4	143.6	146.4	(2.8)	-2.0%
	07Q1	133.9	139.0	(5.1)	-3.8%
	07Q2	154.7	147.8	6.9	4.4%
	Total	582.9	589.7	(6.8)	-1.2%
2008	07Q3	130.7	142.9	(12.2)	-9.4%
	07Q4	112.6	118.5	(5.9)	-5.2%
	08Q1	98.6	101.2	(2.6)	-2.7%
	08Q2	114.5	112.6	1.8	1.6%
	Total	456.3	475.3	(19.0)	-4.2%
2009	08Q3	90.3	95.4	(5.0)	-5.6%
	08Q4	66.2	79.1	(12.9)	-19.5%
	09Q1	68.4	64.2	4.2	6.1%
	09Q2	89.3	92.4	(3.1)	-3.5%
	Total	314.3	331.1	(16.9)	-5.4%
2010	09Q3	80.5	73.3	7.2	8.9%
	09Q4	74.6	70.6	4.0	5.4%
	10Q1	60.1	62.4	(2.3)	-3.9%
	10Q2	75.0	75.2	(0.2)	-0.2%
	Total	290.2	281.5	8.7	3.0%
2011	10Q3	75.7	74.7	1.0	1.4%
	10Q4	77.7	77.4	0.2	0.3%
	11Q1	63.3	52.9	10.4	16.5%
	11Q2	74.7	76.4	(1.7)	-2.2%
	Total	291.5	281.4	10.0	3.4%
2012	11Q3	78.9	71.1	7.8	9.9%
	11Q4	79.8	78.2	1.6	2.0%
	12Q1	73.5	78.8	(5.3)	-7.2%
	12Q2	89.8	93.8	(4.0)	-4.5%
	Total	322.1	322.0	0.1	0.0%
2013	12Q3	90.7	85.6	5.1	5.6%
	12Q4	92.2	88.3	3.9	4.2%
	13Q1	91.3	81.3	10.0	10.9%
	13Q2	103.3	109.6	(6.3)	-6.1%
	Total	377.5	364.8	12.6	3.3%
2014	13Q3	93.2	95.6	(2.4)	-2.6%
	13Q4	76.2	76.7	(0.5)	-0.6%
	14Q1	60.6	64.3	(3.8)	-6.2%
	14Q2	80.8	81.2	(0.4)	-0.5%
	Total	310.8	317.8	(7.0)	-2.3%
2015	14Q3	87.5	77.1	10.4	11.9%
	14Q4	80.9	82.9	(2.1)	-2.6%
	15Q1	76.1	76.2	(0.1)	-0.1%
	15Q2	101.8	100.7	1.1	1.1%
	Total	346.3	337.0	9.3	2.7%

Motor Fuels Tax

gas

Sum Sq	528281	Std Err	74.5711	LHS Mean	905.861
R Sq	0.6168	R Bar Sq	0.5966	F 5, 95 30.	5834
D.W.(1)	2.6128	D.W.(4)	0.4532		

diesel

GAS

Sum Sq	76641.0	Std Err	27.9652	LHS Mean	234.194
R Sq	0.7404	R Bar Sq	0.7351	F 2, 98	139.744
D.W.(1)	1.8025	D.W.(4)	0.4514		

PDCCENGAS	Gasoline and oil implicit price deflator
PDCCE	Consumer expenditures implicit price deflator
OVDDIOVA	Minute in an all and a second line and a

Taxable gallons of gasoline

CYRPICVA Virginia real personal income
SEASON_2 Dummy variable second quarter
SEASON_3 Dummy variable third quarter
DIESEL Taxable gallons of diesel

GDP96 Real gross domestic product
PPIRPP PPI, refined petroleum products

Gasoline Consumption

Fisc	al Year	<u>Actual</u>	Fitted	Residual	% Residual
2006	05Q3 05Q4	1,057.2 956.3	940.3 955.0	116.8 1.3	11.1% 0.1%
	06Q1	945.1	898.2	47.0	5.0%
	06Q2	987.0	1,009.6	(22.6)	-2.3%
	Total	3,945.6	3,803.2	142.4	3.6%
2007	06Q3	1,042.9	942.1	100.9	9.7%
	06Q4	981.0	967.3	13.7	1.4%
	07Q1 07Q2	960.3 1,026.9	921.1 1,035.8	39.2 (9.0)	4.1% -0.9%
	Total	4,011.1	3,866.3	144.8	3.6%
2008	07Q3	1,057.1	964.6	92.5	8.7%
	07Q4	1,006.3	973.6	32.8	3.3%
	08Q1	944.4	908.7	35.6	3.8%
	08Q2	945.5	1,005.7	(60.2)	-6.4%
	Total	3,953.3	3,852.6	100.7	2.5%
2009	08Q3 08Q4	1,037.1 986.9	924.7 961.3	112.4 25.6	10.8% 2.6%
	09Q1	937.4	929.3	8.1	0.9%
	09Q2	992.5	1,067.4	(75.0)	-7.6%
	Total	3,953.9	3,882.7	71.2	1.8%
2010	09Q3	1,010.7	993.6	17.1	1.7%
	09Q4	935.7	997.0	(61.3)	-6.5%
	10Q1	955.3	927.1	28.2	3.0%
	10Q2	1,082.9	1,036.0	46.9	4.3%
	Total	3,984.6	3,953.7	30.9	0.8%
2011	10Q3	841.3	974.3	(133.0)	-15.8%
	10Q4	1,021.0	995.0	26.1	2.6%
	11Q1	927.3	932.2	(4.9)	-0.5%
	11Q2	1,144.6	1,027.3	117.4	10.3%
	Total	3,934.3	3,928.7	5.5	0.1%
2012	11Q3	802.7	955.0	(152.2)	-19.0%
	11Q4	944.3	972.3	(28.0)	-3.0%
	12Q1	901.8	919.3	(17.4)	-1.9%
	12Q2	1,246.4	1,030.3	216.1	17.3%
	Total	3,895.3	3,876.8	18.5	0.5%
2013	12Q3	706.8	965.5	(258.6)	-36.6%
	12Q4	1,022.5	991.2	31.3	3.1%
	13Q1	904.7	931.0	(26.2)	-2.9%
	13Q2	1,153.5	1,039.5	114.0	9.9%
	Total	3,787.5	3,927.1	(139.5)	-3.7%
2014	13Q3	737.9	968.4	(230.5)	-31.2%
	13Q4	1,023.3	992.1	31.2	3.1%
	14Q1	977.4	937.0	40.3	4.1%
	14Q2	1,129.4	1,047.8	81.7	7.2%
	Total	3,868.0	3,945.3	(77.3)	-2.0%
2015	14Q3	856.3	985.6	(129.3)	-15.1%
	14Q4	989.3	1,017.6	(28.3)	-2.9%
	15Q1	914.5	988.2	(73.7)	-8.1%
	15Q2	1,241.9	1,117.2	124.7	10.0%
	Total	4,002.0	4,108.6	(106.6)	-2.7%

Diesel Fuel Consumption

Fisc	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2006	05Q3	313.8	274.1	39.7	12.6%
	05Q4	290.1	269.2	20.9	7.2%
	06Q1	282.6	269.6	13.0	4.6%
	06Q2	302.6	266.7	35.9	11.9%
	Total	1,189.1	1,079.7	109.4	9.2%
2007	06Q3	286.3	265.3	21.0	7.3%
	06Q4	310.3	270.3	40.0	12.9%
	07Q1	288.7	273.3	15.4	5.3%
	07Q2 Total	318.0 1,203.3	276.6 1,085.5	41.4 117.8	13.0% 9.8%
2008	07Q3	305.0	276.3	28.7	9.4%
	07Q4	286.7	271.2	15.4	5.4%
	08Q1	272.2	259.0	13.2	4.8%
	08Q2	262.1	250.1	12.0	4.6%
	Total	1,125.9	1,056.6	69.3	6.2%
2009	08Q3	290.3	238.3	51.9	17.9%
	08Q4 09Q1	264.6 231.6	236.9 252.0	27.7 (20.4)	10.5%
	09Q1 09Q2	247.9	273.0	(20.4)	-8.8% -10.1%
	Total	1,034.3	1,000.2	34.2	3.3%
	Total	1,034.3	1,000.2		3.576
2010	09Q3	252.3	276.2	(23.9)	-9.5%
	09Q4	232.3	271.1	(38.8)	-16.7%
	10Q1	249.6	265.0	(15.4)	-6.2%
	10Q2	278.3	266.0	12.3	4.4%
	Total	1,012.5	1,078.3	(65.8)	-6.5%
2011	10Q3	217.2	268.0	(50.8)	-23.4%
	10Q4	259.2	268.1	(8.9)	-3.4%
	11Q1	237.6	258.0	(20.5)	-8.6%
	11Q2	299.8	249.1	50.7	16.9%
	Total	1,013.8	1,043.3	(29.5)	-2.9%
2012	11Q3	184.8	243.2	(58.4)	-31.6%
	11Q4	257.0	245.5	11.5	4.5%
	12Q1	235.3	247.3	(12.1)	-5.1%
	12Q2	321.3	249.5	71.8	22.3%
	Total	998.3	985.5	12.8	1.3%
2013	12Q3	191.6	250.2	(58.6)	-30.6%
	12Q4	261.7	250.7	11.1	4.2%
	13Q1	240.4	251.7	(11.3)	-4.7%
	13Q2	323.7	256.3	67.4	20.8%
	Total	1,017.5	1,008.9	8.6	0.8%
2014	13Q3	204.7	262.4	(57.7)	-28.2%
	13Q4	260.1	268.8	(8.7)	-3.4%
	14Q1	257.0	266.4	(9.4)	-3.6%
	14Q2	307.9	272.4	35.5	11.5%
	Total	1,029.7	1,070.1	(40.4)	-3.9%
2015	14Q3	202.4	279.3	(76.9)	-38.0%
	14Q4	266.5	288.5	(22.0)	-8.2%
	15Q1	243.3	303.9	(60.6)	-24.9%
	15Q2	319.4	321.8	(2.4)	-0.8%
	Total	1,031.7	1,193.5	(161.8)	-15.7%

Motor Vehicle Sales and Use Tax

```
log(ttcarsq)
```

```
= 2.00134 * dlogya(pdcgdp)
(1.33007)
```

Sum Sq	0.4880	Std Err	0.0749	LHS Mean	5.9148
R Sq	0.6451	R Bar Sq	0.6206	F 6, 87	26.3530
D.W.(1)	0.4283	D.W.(4)	0.8816		

newcar

Sum Sq	0.0049	Std Err	0.0072	LHS Mean	0.0899
R Sq	0.8486	R Bar Sq	0.8407	F 5, 95	106.536
D.W.(1)	0.4713	D.W.(4)	0.5284		

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

RMCBLV Rate on commercial bank loans for new vehicles

New Taxable Titles (in thousands)

<u>Fisc</u>	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2006	05Q3	140.2	128.3	11.9	8.5%
2000	05Q4	89.0	92.9	(3.9)	-4.3%
	06Q1	97.9	97.1	0.7	0.8%
	06Q2	117.5	114.4	3.1	2.7%
	Total	444.6	432.7	11.9	2.7%
					,
2007	06Q3	120.2	117.1	3.1	2.6%
	06Q4	92.0	93.5	(1.5)	-1.6%
	07Q1	92.3	92.6	(0.3)	-0.4%
	07Q2	119.4	113.3	6.0	5.1%
	Total	423.9	416.6	7.3	1.7%
		400.0	440 =	(4.6)	4.407
2008	07Q3	109.3	110.5	(1.2)	-1.1%
	07Q4	85.7	86.4	(0.8)	-0.9%
	08Q1	83.4	85.9	(2.6)	-3.1%
	08Q2	99.1	100.4	(1.4)	-1.4%
	Total	377.4	383.3	(5.9)	-1.6%
2009	08Q3	91.8	96.8	(5.0)	-5.5%
	08Q4	57.2	66.3	(9.1)	-15.9%
	09Q1	55.8	69.0	(13.2)	-23.7%
	09Q2	68.8	79.2	(10.4)	-15.2%
	Total	273.5	311.3	(37.7)	-13.8%
0040	0000	07.0	00.0	4.0	4.00/
2010	09Q3 09Q4	87.9	86.8	1.0	1.2%
		55.7	60.9	(5.2)	-9.4%
	10Q1	59.9	66.9	(7.1)	-11.8%
	10Q2 Total	81.5 284.9	87.2 301.9	(5.7) (17.0)	-7.0% -6.0%
	TOTAL	204.9	301.9	(17.0)	-0.0%
2011	10Q3	79.9	92.4	(12.5)	-15.7%
	10Q4	67.2	74.7	(7.5)	-11.1%
	11Q1	76.0	84.3	(8.4)	-11.0%
	11Q2	85.8	96.0	(10.2)	-11.8%
	Total	308.9	347.4	(38.5)	-12.5%
2012	11Q3	83.2	97.2	(14.0)	-16.9%
2012	11Q4	74.8	80.8	(6.0)	-8.1%
	12Q1	81.6	89.6	(8.0)	-9.7%
	12Q2	95.4	97.6	(2.2)	-2.3%
	Total	335.0	365.2	(30.2)	-9.0%
				(/	
2013	12Q3	95.1	99.4	(4.3)	-4.5%
	12Q4	81.6	80.3	1.2	1.5%
	13Q1	86.8	83.9	2.9	3.3%
	13Q2	99.1	98.9	0.3	0.3%
	Total	362.6	362.5	0.1	0.0%
2014	13Q3	99.5	98.2	1.3	1.3%
	13Q4	81.1	74.0	7.1	8.8%
	14Q1	81.4	74.8	6.6	8.1%
	14Q2	90.5	94.1	(3.6)	-3.9%
	Total	352.5	341.1	11.4	3.2%
2045	1402	100.0	00.0	0.7	0.60/
2015	14Q3 14Q4	102.3 84.6	98.6 83.0	3.7 1.7	3.6% 2.0%
	14Q4 15Q1	83.9	81.7	2.2	2.6%
	15Q1 15Q2	103.8	103.2	0.6	0.6%
	Total	374.6	366.4	8.2	2.2%
	iolai	514.0	500.4	0.2	2.2/0

Used Taxable Titles (in thousands)

Fisc	al Year	Actual	Fitted	Residual	% Residual
2006	05Q3	335.8	311.8	24.0	7.2%
2000	05Q4	272.0	267.1	4.9	1.8%
	06Q1	307.0	309.7	(2.7)	
	06Q2	320.8	328.2	(7.4)	
	Total	1,235.6	1,216.7	18.9	1.5%
	. 0 (0.1	.,200.0	.,		
2007	06Q3	311.6	311.6	0.0	0.0%
	06Q4	269.9	256.5	13.3	4.9%
	07Q1	299.5	294.0	5.5	1.8%
	07Q2	323.4	315.4	8.0	2.5%
	Total	1,204.3	1,177.5	26.8	2.2%
2008	07Q3	303.9	310.6	(6.7)	-2.2%
	07Q4	254.1	255.9	(1.9)	-0.7%
	08Q1	285.3	276.9	8.4	2.9%
	08Q2	297.4	310.8	(13.4)	-4.5%
	Total	1,140.7	1,154.3	(13.6)	-1.2%
2009	08Q3	278.0	298.7	(20.7)	-7.4%
2009	08Q3 08Q4	212.2	252.7	(40.5)	
	09Q1	255.8	258.2	(2.4)	
	09Q2	271.2	265.7	5.4	2.0%
	Total	1,017.2	1,075.4	(58.2)	
	Total	1,017.2	1,075.4	(50.2)	-3.770
2010	09Q3	277.1	252.0	25.0	9.0%
	09Q4	219.5	223.0	(3.5)	-1.6%
	10Q1	266.5	260.8	5.8	2.2%
	10Q2	294.8	280.0	14.7	5.0%
	Total	1,057.9	1,015.8	42.0	4.0%
2011	10Q3	289.2	281.2	8.1	2.8%
	10Q4	237.9	240.2	(2.3)	-1.0%
	11Q1	289.1	281.6	7.5	2.6%
	11Q2	289.8	315.1	(25.3)	-8.7%
	Total	1,106.0	1,118.1	(12.0)	-1.1%
2012	11Q3	276.8	323.8	(47.0)	-17.0%
2012	11Q4	237.4	261.0	(23.7)	
	12Q1	296.0	282.5	13.5	4.6%
	12Q2	285.8	310.3	(24.5)	
	Total	1,096.0	1,177.6	(81.6)	
0040	4000	201.0	00= 4	(40.0)	4 70/
2013	12Q3	281.8	295.1	(13.3)	
	12Q4	237.1	268.2	(31.1)	
	13Q1	280.8	259.4	21.4 27.7	7.6% 9.1%
	13Q2 Total	305.5 1,105.1	277.8 1,100.5	4.6	0.4%
	. 0 (0.1	.,	1,100.0		0.170
2014	13Q3	290.0	271.9	18.1	6.2%
	13Q4	241.6	215.8	25.8	10.7%
	14Q1	271.0	281.8	(10.8)	
	14Q2	307.7	306.2	1.5	0.5%
	Total	1,110.3	1,075.8	34.6	3.1%
2015	14Q3	289.1	300.4	(11.3)	-3.9%
	14Q4	250.1	246.5	3.5	1.4%
	15Q1	271.6	273.8	(2.2)	
	15Q2	306.8	292.8	14.1	4.6%
	Total	1,117.6	1,113.5	4.1	0.4%

Motor Vehicle License Revenues

vehreg1

Sum Sq	3E+11	Std Err	57836.8	LHS Mean	1209095
R Sq	0.8451	R Bar Sq	0.8402	F 3, 95	172.781
D.W.(1)	1.8820	D.W.(4)	2.2569		

vehreg2

Sum Sq	5E+10	Std Err	22279.9	LHS Mean	233278
R Sq	0.8149	R Bar Sq	0.8111	F 2, 96	211.360
D.W.(1)	0.9278	D.W.(4)	1.4419		

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

One Year Registrations

Fisc	al Year	Actual	<u>Fitted</u>	Residual	% Residual
2006	05Q3	1,453,834	1,354,836	98,998	6.8%
	05Q4	1,131,645	1,145,143	(13,498)	-1.2%
	06Q1	1,282,905	1,270,685	12,220	1.0%
	06Q2	1,411,435	1,448,880	(37,445)	-2.7%
	Total	5,279,819	5,219,544	60,275	1.1%
2007	06Q3	1,412,785	1,429,625	(16,840)	-1.2%
	06Q4	1,153,708	1,141,009	12,699	1.1%
	07Q1	1,280,834	1,278,164	2,670	0.2%
	07Q2	1,325,940	1,399,276	(73,336)	-5.5%
	Total	5,173,267	5,248,074	(74,807)	-1.4%
2008	07Q3	1,408,511	1,404,592	3,919	0.3%
	07Q4	1,231,785	1,165,366	66,419	5.4%
	08Q1	1,312,356	1,281,593	30,763	2.3%
	08Q2	1,391,387	1,326,718	64,669	4.6%
	Total	5,344,039	5,178,270	165,769	3.1%
2009	08Q3	1,362,010	1,401,558	(39,548)	-2.9%
	08Q4	1,061,494	1,236,005	(174,511)	-16.4%
	09Q1	1,268,629	1,312,154	(43,525)	-3.4%
	09Q2	1,387,221	1,380,941	6,280	0.5%
	Total	5,079,354	5,330,658	(251,304)	-4.9%
2010	09Q3	1,278,480	1,356,807	(78,327)	-6.1%
	09Q4	1,047,572	1,087,873	(40,301)	-3.8%
	10Q1	1,215,359	1,268,369	(53,010)	-4.4%
	10Q2	1,318,585	1,378,137	(59,552)	-4.5%
	Total	4,859,996	5,091,186	(231,190)	-4.8%
2011	10Q3	1,339,471	1,293,394	46,077	3.4%
	10Q4	1,072,468	1,076,595	(4,127)	-0.4%
	11Q1	1,241,276	1,229,980	11,296	0.9%
	11Q2	1,287,951	1,324,722	(36,771)	-2.9%
	Total	4,941,166	4,924,691	16,475	0.3%
2012	11Q3	1,320,807	1,337,275	(16,468)	-1.2%
	11Q4	1,054,684	1,094,808	(40,124)	-3.8%
	12Q1	1,235,555	1,248,060	(12,505)	-1.0%
	12Q2	1,251,833	1,297,164	(45,331)	-3.6%
	Total	4,862,879	4,977,307	(114,428)	-2.4%
2013	12Q3	1,330,752	1,327,465	3,287	0.2%
	12Q4	1,059,221	1,083,140	(23,919)	-2.3%
	13Q1	1,207,727	1,246,908	(39,181)	-3.2%
	13Q2	1,370,117	1,264,099	106,018	7.7%
	Total	4,967,817	4,921,613	46,204	0.9%
2014	13Q3	1,286,444	1,334,343	(47,899)	-3.7%
	13Q4	1,070,701	1,085,684	(14,983)	-1.4%
	14Q1	1,177,663	1,225,606	(47,943)	-4.1%
	14Q2	1,324,308	1,367,813	(43,505)	-3.3%
	Total	4,859,116	5,013,446	(154,330)	-3.2%
2015	14Q3	1,303,376	1,303,461	(85)	0.0%
	14Q4	1,043,487	1,099,780	(56,293)	-5.4%
	15Q1	1,125,800	1,199,617	(73,817)	-6.6%
	15Q2	1,353,553	1,335,647	17,906	1.3%
	Total	4,826,216	4,938,506	(112,290)	-2.3%

Two Year Registrations

Fisc	al Year	<u>Actual</u>	<u>Fitted</u>	Residual	% Residual
2006	05Q3	296,499	257,540	38,959	13.1%
2000	05Q4	226,698	226,623	75	0.0%
	06Q1	255,918	246.673	9,245	3.6%
			266,228	,	6.0%
	06Q2	283,167	•	16,939	
	Total	1,062,282	997,064	65,218	6.1%
2007	06Q3	299,315	258,173	41,142	13.7%
	06Q4	241,409	218,541	22,868	9.5%
	07Q1	270,725	243,065	27,660	10.2%
	07Q2	273,826	286,486	(12,660)	-4.6%
	Total	1,085,275	1,006,265	79,010	7.3%
2008	07Q3	278,906	295,052	(16,146)	-5.8%
	07Q4	235,108	237,660	(2,552)	-1.1%
	08Q1	244,137	261,686	(17,549)	-7.2%
	08Q2	277,234	290,358	(13,124)	-4.7%
	Total	1,035,385	1,084,756	(49,371)	-4.8%
2009	0903	245 000	207 269	19 620	E 00/
2009	08Q3	315,988	297,368	18,620	5.9%
	08Q4	238,209	249,756	(11,547)	-4.8%
	09Q1	276,699	273,860	2,839	1.0%
	09Q2	302,018	282,678	19,340	6.4%
	Total	1,132,914	1,103,661	29,253	2.6%
2010	09Q3	278,398	280,587	(2,189)	-0.8%
	09Q4	224,169	244,575	(20,406)	-9.1%
	10Q1	258,263	251,999	6,264	2.4%
	10Q2	296,929	285,480	11,449	3.9%
	Total	1,057,759	1,062,641	(4,882)	-0.5%
2011	10Q3	305,619	311,076	(5,457)	-1.8%
	10Q4	240,029	247,125	(7,096)	-3.0%
	11Q1	274,668	278,772	(4,104)	-1.5%
	11Q2	288,437	305,858	(17,421)	-6.0%
	Total	1,108,753	1,142,831	(34,078)	-3.1%
2012	1102	200 202	200.460	10 112	C 10/
2012	11Q3	298,282	280,169	18,113	6.1%
	11Q4	234,104	235,581	(1,477)	-0.6%
	12Q1	286,257	263,614	22,643	7.9%
	12Q2	296,383	301,673	(5,290)	-1.8%
	Total	1,115,026	1,081,037	33,989	3.0%
2013	12Q3	329,923	302,551	27,372	8.3%
	12Q4	252,382	248,621	3,761	1.5%
	13Q1	285,852	277,102	8,750	3.1%
	13Q2	328,063	294,691	33,372	10.2%
	Total	1,196,220	1,122,966	73,254	6.1%
2014	13Q3	308,108	296,518	11,590	3.8%
2017	13Q4	255,044	243,750	11,294	4.4%
	14Q1	280,728	286,631	(5,903)	-2.1%
	14Q1	326,511	301,224	25,287	7.7%
	Total	1,170,391	1,128,123	42,268	3.6%
2045	1400	000 047	200 504	7.040	0.40/
2015	14Q3	330,347	322,534	7,813	2.4%
	14Q4	256,512	258,778	(2,266)	-0.9%
	15Q1	270,965	286,298	(15,333)	-5.7%
	15Q2	339,195	327,272	11,923	3.5%
	Total	1,197,019	1,194,883	2,136	0.2%

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

 $R^2 = 98.7\%$

THE Unemployment Insurance Trust Fund

Equation Specifications for Taxable Wages:

$$(TAX_x/TOT_x) = f(TBAAW_x, MTWB, QI_x)$$

The proportion of taxable wages (TAX) to total wages (TOT) in a given quarter is linearly related to the ratio of the maximum taxable wage base to the average annual wage (TBAAW), the maximum taxable wage base (MTWB), and the rate of insured unemployment (QI).

There are four equations—one for each quarter. The ratios derived by the equations are applied to the projections for total wages to produce taxable wages. Total wages are derived by multiplying covered employment by the average quarterly wage. Projected tax rates are then applied to taxable wages to obtain projections for tax contributions.

The following pages give specifications for the quarterly equations currently used in the model. There are 12 observations used in the equations, the years 2002 to 2013 inclusive.

First Quarter

The first quarter regression equation, with t statistics in brackets, is:

$$(TAX_1/TOT_1) = 0.166 + 1.987 (TBAAW_1)$$

[27.801] [59.713]

The summary statistics are:

Adjusted R^2 0.997 MSE 6.275 x 10^{-6}

Second Quarter

The second quarter regression equation, with t statistics in brackets, is:

$$(TAX_2/TOT_2) = -0.051 + 1.139 (TBAAW_2) - 0.004 (QI_2)$$

[-5.887] [26.841] [-2.62]

The summary statistics are:

Adjusted R^2 0.986 MSE 9.086 x 10^{-6}

Third Quarter

The third quarter regression equation, with t statistics in brackets, is:

$$(TAX_3/TOT_3) = -0.011 + 0.64 (TBAAW_3) - 0.007 (QI_3)$$

[-1.335] [16.483] [-4.18]

The summary statistics are:

MSE 7.826 x 10⁻⁶

Fourth Quarter

The fourth quarter regression equation, with t statistics in brackets, is:

$$(TAX_4/TOT_4) = -0.015 + 0.586 (TBAAW_4) - 0.006 (QI_4)$$

[-3.723] [27.73] [-6.734]

The summary statistics are:

Adjusted R² 0.989

MŚE 1.745×10^{-6}