

Economic and Revenue Update

A Briefing for the Money Committees

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Topics for Discussion

- National and State Economic Indicators
- April Year-to-Date Revenue Collections, Fiscal Year 2018
- Next Significant Data Points
- Revenue Analysis
- Rating Agency PRAG Report
- Federal Tax Reform Interim Update

National and State Economic Indicators

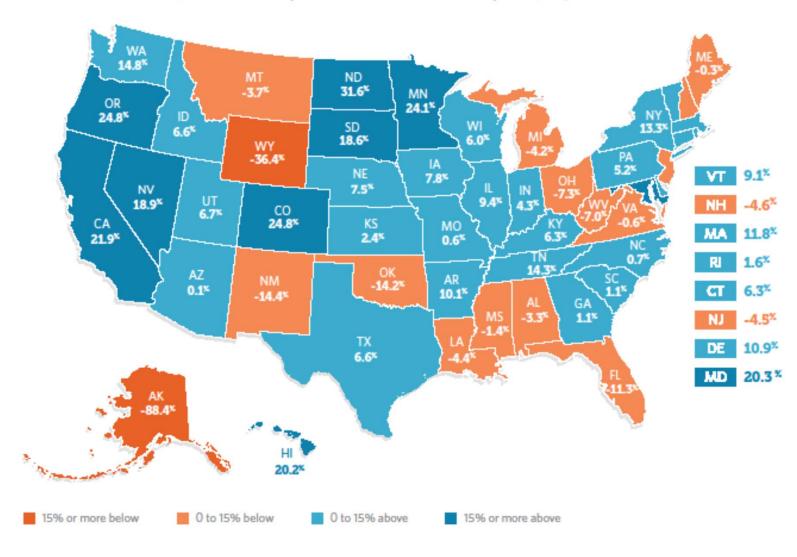
- According to the advance estimate, real GDP grew at an annualized rate of 2.3
 percent in the first quarter of 2018, following 2.9 percent in the fourth quarter.
- Payroll employment rose by 164,000 jobs in April, below expectations.
 - The March gain was revised up by 33,000 to 135,000.
- The national unemployment rate fell to 3.9 percent in April due to a contraction in the labor force.
- Initial claims for unemployment rose by 2,000 to 211,000 during the week ending April 28.
 - The four-week moving average fell by 7,750 to 221,500, the lowest level since March 3, 1973.
- The Conference Board's index of leading indicators rose 0.3 percent in March, following a 0.7 percent increase in February, suggesting the economic expansion should strengthen over the coming months.
- The Conference Board's index of consumer confidence rose 1.7 points to 128.7 in April. Both the expectations and current conditions components increased for the month.
- Conditions in the manufacturing sector were somewhat weaker than expected in April. The Institute of Supply Management index fell from 59.3 to 57.3, but remains in expansionary territory.

National and State Economic Indicators

- The CPI fell 0.1 percent in March after a 0.2 percent gain in February and stands 2.4 percent above March 2017.
 - Core inflation (excluding food and energy prices) rose 0.2 percent, and has increased 2.1 percent from last year.
- At its May meeting, the Federal Reserve left the federal funds target rate range unchanged at 1.50 to 1.75 percent.
- In Virginia, payroll employment rose 1.1 percent from March of last year. Northern Virginia posted growth of 1.8 percent; Hampton Roads grew 0.1 percent; and Richmond-Petersburg rose 0.6 percent.
- The seasonally adjusted unemployment rate fell 0.1 percentage point to 3.4 percent in March, the lowest rate since March 2008.
- The Virginia Leading Index fell less than 0.1 percent in March after increasing 0.6 percent in February.
 - The U.S. leading index and future employment improved in March, while auto registrations declined and initial claims for unemployment rose.
 - The indexes increased in Northern Virginia, Hampton Roads, Charlottesville, Bristol, Harrisonburg, and Staunton, while decreasing in Richmond, Lynchburg, Blacksburg, and Winchester. The Roanoke index was unchanged.

Real Tax Revenue in 34 States Has Recovered From Recession

Tax collections in Q4 2017 compared with each state's peak, adjusted for inflation

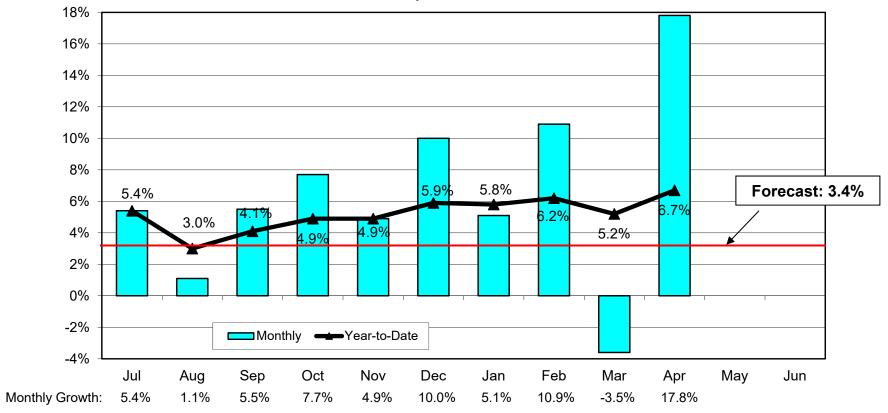


Source: Pew analysis of data licensed by the Nelson A. Rockefeller Institute of Government, which adjusts U.S. Census Bureau's quarterly summary of tax revenue.

^{@ 2018} The Pew Charitable Trusts

Growth in Total General Fund Revenue Collections

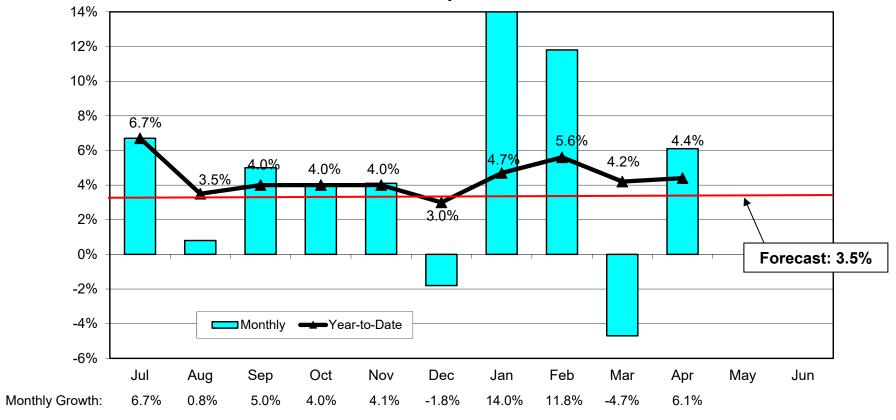
FY18 Monthly and Year-to-Date



- Total general fund revenues increased 17.8 percent in April.
 - Individual nonwithholding payments received ahead of the May 1st due date accounted for most of the increase.
- On a year-to-date basis, total revenues increased 6.7 percent, ahead of the annual forecast of a 3.4 percent increase.

Growth in Withholding Tax Collections

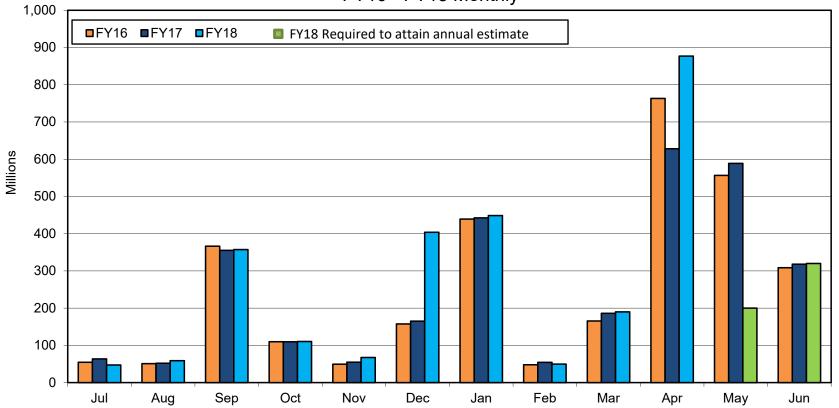
FY18 Monthly and Year-to-Date



- Collections increased 6.1 percent in April, a small amount of growth was due to an additional deposit day.
- Year-to-date, withholding collections increased 4.4 percent compared with the same period last year, ahead of the projected annual growth rate of 3.5 percent.

Nonwithholding Tax Collections

FY16 - FY18 Monthly



- To date, roughly 83 percent of the nonwithholding forecast has been collected, and collections increased 23.6 percent from the same period last year, ahead of the annual estimate of 4.3 percent growth.
- May receipts will mainly be final payments for tax year 2017 and continues to be a <u>significant</u> unknown positive affecting the revenue forecast.

Analysis of High Net Worth Individuals

In December and January

- 781 high-income tax payers (more than \$1.7 million in taxable income) submitted
 \$297 million in payments.
- This compares to the average of the last three years where 423 high-income taxpayers submitted \$162 million.
 - Previous peaks in payments were in FY07 and FY08 where an average of 478 high-income taxpayers submitted \$177 million.

From April 1 through May 10

- 22 have filed returns and requested \$1.1 million in refunds.
- 38 have filed returns and paid an additional \$1.5 million in payments.
- 175 have paid \$34.7 million via extension returns and have until November 1st to file returns.
- The remaining 546 have had no additional activity and have a six-month automatic extension to file their returns by November 1st.

Individual Income Tax Refunds

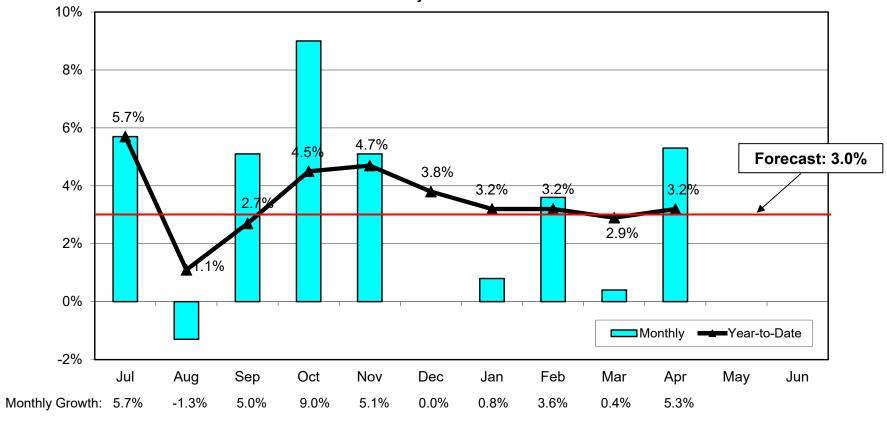
- As the main filing season continues, \$499.8 million in refunds were issued in April compared with \$469.1 million last April.
- Year-to-date, refunds increased 4.2 percent from the same period last year, as compared to the estimate of a 5.8 percent increase.
 - Since the filing season began in January, TAX has issued 2.3 million refunds, about 60,000 more than through April of last year.

Net Individual Income Tax

 Through April, collections of net individual income tax rose 8.4 percent from the same period last year, ahead of the annual estimate of 3.4 percent growth.

Growth in Sales Tax Collections

FY18 Monthly and Year-to-Date



- Collections of sales and use taxes, reflecting mainly March sales, had a 5.3 percent increase in April.
- On a year-to-date basis, collections increased 3.2 percent, ahead of the annual estimate of 3.0 percent growth.

Net Corporate Income Tax Collections

- Collections of corporate income tax were \$181.0 million in April, compared with \$162.5 million last April.
 - Most of the activity in April is from companies making final tax year 2017 payments.
- On a year-to-date basis, collections in this source have increased 7.2 percent, ahead of the estimate of 5.7 percent growth.

Recordation Tax Collections

- Collections of wills, suits, deeds, and contracts mainly recordation tax collections – increased 10.2 percent in April.
 - On a year-to-date basis, collections are down 0.3 percent, behind the forecast of 3.3 percent growth.

Insurance Premiums Tax

- Insurance companies made their first estimated payment for tax year 2018 in April. Collections in this source were \$128.5 million compared with \$126.1 million in April of last year.
 - Estimated payments are due in June.
- For the fiscal year to-date, net insurance premiums tax collections are \$212.2 million compared with \$223.3 million during the same period last year.

Summary of Fiscal Year 2018 Revenue Collections

July through April

Percent Growth over Prior Year

	As a %					
	of Total	YTD	Annual		May-Jun Req'd	Prior Year
Major Source	Revenues	<u>Actual</u>	<u>Estimate</u>	<u>Variance</u>	to Meet Est.	<u>May-Jun</u>
Withholding	63.7 %	4.4 %	3.5 %	0.9 %	(1.2) %	7.2 %
Nonwithholding	16.3	23.6	4.3	19.3	(40.8)	4.8
Refunds	(10.2)_	4.2	5.8	(1.6)	15.7_	39.3
Net Individual	69.8	8.4	3.4	5.0	(16.7)	4.0
Sales	17.9	3.2	3.0	0.2	2.4	3.6
Corporate	4.5	7.2	5.7	1.5	0.8	12.3
Wills (Recordation) 2.1	(0.3)	3.3	(3.6)	18.2	2.9
Insurance	1.9	(5.0)	6.2	(11.2)	27.4	(4.9)
All Other Revenue	3.8	(0.9)	1.6	(2.5)	7.2	(0.9)
Total	100.0 %	6.7 %	3.4 %	3.3 %	(8.8) %	3.7 %

Summary of Fiscal Year 2018 Revenue Collections

July through April

	Total	Revenue Collections Through:											
FY	Collections	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2000	10,788.5	699.1	1,435.8	2,503.0	3,210.6	3,977.8	5,080.0	6,067.5	6,704.5	7,374.1	8,411.9	9,663.1	10,788.5
2001	11,105.3	688.0	1,452.7	2,546.4	3,312.7	4,106.3	5,052.9	6,295.8	6,981.1	7,652.5	8,696.8	9,998.9	11,105.3
2002	10,679.0	705.4	1,483.7	2,485.4	3,315.4	4,136.9	5,071.2	6,184.7	6,794.7	7,459.8	8,388.0	9,414.6	10,679.0
2003	10,867.1	644.3	1,409.6	2,513.3	3,324.3	4,109.7	5,203.2	6,320.5	6,933.6	7,547.7	8,579.5	9,539.0	10,867.1
2004	11,917.9	699.3	1,553.7	2,724.3	3,618.2	4,449.1	5,570.2	6,721.0	7,377.9	8,130.2	9,393.7	10,423.6	11,917.9
2005	13,687.3	772.5	1,698.8	3,009.8	3,998.0	4,964.5	6,295.1	7,684.7	8,415.7	9,300.7	10,745.5	12,012.3	13,687.3
2006	14,834.3	840.5	1,987.8	3,445.8	4,510.5	5,537.3	7,006.6	8,542.7	9,306.7	10,273.3	11,758.2	13,253.6	14,834.3
2007	15,565.8	1,059.7	2,158.2	3,707.7	4,778.6	5,873.0	7,303.6	8,882.9	9,684.8	10,658.1	12,180.5	13,883.2	15,565.8
2008	15,767.0	1,095.6	2,231.1	3,842.1	5,023.2	6,085.2	7,540.8	9,175.5	9,916.1	10,920.8	12,664.1	14,131.9	15,767.0
2009	14,315.1	1,126.9	2,188.0	3,679.9	4,848.9	5,861.6	7,278.9	8,667.9	9,307.9	10,173.1	11,572.9	12,811.3	14,315.1
2010	14,219.5	1,036.2	2,027.7	3,407.0	4,482.0	5,465.7	6,960.9	8,258.9	8,861.4	9,752.5	11,157.9	12,394.4	14,219.5
2011	15,040.2	867.4	1,911.7	3,348.1	4,462.9	5,537.9	7,062.6	8,523.8	9,226.6	10,228.2	11,655.4	13,113.5	15,040.2
2012	15,846.7	955.4	2,080.6	3,573.2	4,722.6	5,903.2	7,356.7	8,868.2	9,692.1	10,770.1	12,347.9	13,927.3	15,846.7
2013	16,684.6	938.0	2,137.6	3,619.5	4,948.9	6,091.0	7,615.0	9,421.8	10,229.6	11,242.1	12,855.0	14,757.7	16,684.6
2014	16,411.4	1,059.9	2,201.4	3,722.3	4,980.1	6,134.4	7,670.6	9,371.5	10,151.7	11,242.9	13,017.7	14,526.7	16,411.4
2015	17,735.6	1,208.9	2,370.4	3,972.6	5,286.0	6,451.6	8,189.9	9,871.8	10,821.7	12,041.3	13,997.6	15,595.1	17,735.6
2016	18,040.1	1,088.3	2,309.0	4,066.3	5,312.6	6,538.5	8,318.1	10,111.0	11,048.9	12,360.6	14,185.1	15,883.0	18,040.1
2017	18,695.1	1,128.1	2,495.9	4,211.3	5,500.4	6,890.2	8,651.3	10,576.8	11,548.5	12,934.7	14,697.5	16,472.7	18,695.1
Average	14,566.7	923.0	1,951.9	3,354.3	4,424.2	5,450.8	6,846.0	8,308.2	9,055.7	10,003.5	11,461.4	12,877.9	14,566.7
% of Total	100.0%	6.3%	13.4%	23.0%	30.4%	37.4%	47.0%	57.0%	62.2%	68.7%	78.7%	88.4%	100.0%
2018													
HB/SB 29	19,328.2	1,188.6	2,572.0	4,382.3	5,770.2	7,227.8	9,165.2	11,189.5	12,267.0	13,605.4	15,682.0	-	-
% of Estimate		6.1%	13.3%	22.7%	29.9%	37.4%	47.4%	57.9%	63.5%	70.4%	81.1%	0.0%	0.0%

Total General Fund Revenue Growth Relative to Target With and Without Individual Nonwithholding

FY 2018 Revised Estimate Per House Bill 29, December 18, 2017 Commonwealth of Virginia/Department of Accounts
Summary Report on General Fund (GF) Revenue Collections
For the Fiscal Years 2017 and 2018
(Dollars in Thousands)

	•	∕ear-To-Date		% Annual			
Revenue	FY 2017	FY 2018	% Change	FY 2018 Estimate	Growth Reg By Est	Percent Variance	
Total GF Revenues	\$14,697,469	\$15,682,039	6.7	\$19,328,200	3.4	3.3	
Total GF Revenues Less Tax Dues/Estimated Payments	\$12,585,909	\$13,071,199	3.9	\$16,180,900	3.2	0.6	

- The first line represents the Total General Fund Revenues through April on page 1 of the revenue report from the Department of Accounts.
- The second line removes individual nonwithholding payments estimated and tax due payments – from the Total General Fund Revenues calculation.
 - On net, all the other major sources (withholding, sales, corporate, insurance and recordation) and minor sources are tracking within 0.6 percent (or \$80 \$100 million) of the annual estimate.
- The last deposit day in fiscal year 2018 could be worth \$300 million in gross deposits.

Next Significant Data Points

May

- Key payments from individual nonwithholding will be received.
- Continue to monitor tax refunds.

June

- Individual, corporate and insurance companies have estimated payments due June 15th.
- Continue to monitor tax refunds.

Revenue Analysis Based on Collections through April

(millions of dollars)

Source	FY18	FY19	FY20
Withholding	90.0	90.0	90.0
Nonwithholding	No additiona	al data availa	able
Refunds			
Net Individual	90.0	90.0	90.0
Sales	10.0	-	-
Corporate	20.0	20.0	20.0
Wills (Recordation)	(10.0)	(10.0)	(10.0)
Insurance	(25.0)	(15.0)	(15.0)
All Other	(25.0)	(25.0)	(25.0)
Total Revenues	60.0	60.0	60.0

- Payroll withholding is tracking toward 4.3% with two months remaining in the fiscal year. An adjustment is made to all three years to maintain growth rates close to the introduced budget.
- Nonwithholding receipts and refunds are incomplete through April. Additional data will be received from May - November to update this source and anticipate other adjustments, including the "collar".
- Sales tax appears to be headed to a small surplus. No out-year increases are included as new personal income and consumer spending forecasts will be developed in the fall.
- Other sources and minor sources have small additions and reductions that are made to all three years to maintain growth rates close to the introduced budget.

Commonwealth of Virginia



Comparative Information on Reserves and Other Credit Factors for Triple-A Rated States



CELEBRATING OVER 30 YEARS OF SERVING CLIENTS

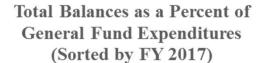
May 11, 2018

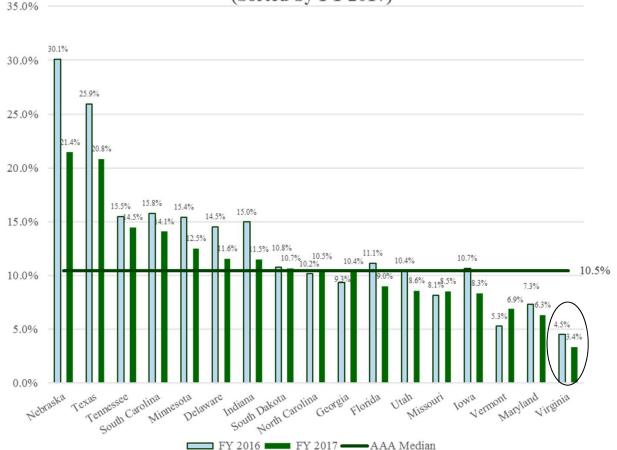
Table of Contents – Scope of Work

- I. Comparison of Budget Reserves
 - Rating Agency Criteria Related to Budget Reserves
 - Description and Comparison of Reserve Funds
 - Rating Agency Commentary on Reserves for Triple-A States
- II. Pricing and Debt Service Cost Comparison
- III. Rating Agency Credit Factors and Scorecards
 - S&P Scorecard
 - Moody's Scorecard
 - Fitch Scorecard
- IV. Recommendations
- Appendix A: S&P U.S. State Ratings Methodology Scoring of Rating Factors



Virginia's Total Balances Are Also Low Relative to Its Triple-A Peers





	FY 2016	FY 2017
Nebraska (Aa1/AAA/)	30.1%	21.4%
Texas (Aaa/AAA/AAA)	25.9%	20.8%
Tennessee (Aaa/AAA/AAA)	15.5%	14.5%
South Carolina (Aaa/AA+/AAA)	15.8%	14.1%
Minnesota (Aa1/AA+/AAA)	15.4%	12.5%
Delaware (Aaa/AAA/AAA)	14.5%	11.6%
Indiana (Aaa/AAA/AAA)	15.0%	11.5%
South Dakota (Aaa/AA+/AAA)	10.8%	10.7%
North Carolina (Aaa/AAA/AAA)	10.2%	10.5%
Georgia (Aaa/AAA/AAA)	9.3%	10.4%
Florida (Aa1/AAA/AAA)	11.1%	9.0%
Utah (Aaa/AAA/AAA)	10.4%	8.6%
Missouri (Aaa/AAA/AAA)	8.1%	8.5%
Iowa (Aaa/AAA/AAA)	10.7%	8.3%
Vermont (Aaa/AA+/AAA)	5.3%	6.9%
Maryland (Aaa/AAA/AAA)	7.3%	6.3%
Virginia (Aaa/AAA/AAA)	4.5%	3.4%
AAA Median	10.8%	10.5%
50-State Median	9.7%	8.0%



Source: The PEW Charitable Trust, *State Rainy Day Funds Grow Even as Total Balances Lag*, March 1, 2018. Pew analysis of data from the National Association of State Budget Officers "The Fiscal Survey of States" (Fall 2017).

Comparison of Rainy Day Fund Balances and Rainy Day Fund Balances as a Percent of Expenditures for Triple AAA Rated States*

	Rainy	Day Fund Bald (\$ in millions)	inces	Rainy Day Fund Balances (Percent of Expenditures)				
	FY 2016	FY 2017	FY 2018	FY 2016	FY 2017	FY 2018		
Delaware	215	221	232	5.5	5.4	5.6		
Georgia	2,033	N/A	N/A	9.3	N/A	N/A		
Indiana	1,468	1,474	1,434	9.8	9.5	9.2		
Iowa	729	605	624	10.1	8.3	8.6		
Maryland	832	832	859	5.0	4.8	5.0		
Missouri	291	294	304	3.2	3.2	3.3		
North Carolina	1,575	1,838	1,838	7.4	8.3	8.0		
South Dakota	143	157	165	9.8	10.2	10.4		
Tennessee	568	668	800	4.5	4.9	5.5		
Texas	9,715	10,297	10,457	18.0	19.2	19.1		
Utah	493	493	493	7.8	7.7	7.4		
Virginia	236	549	283	1.2	2.7	1.4		

Source: "The Fiscal Survey of States, Fall 2017", National Association of State Budget Officials.

*Hold AAA rating across all three rating agencies.

Economic Dependency

- Virginia is significantly dependent on federal activities.
 - Number 1 recipient of federal defense dollars.
- Virginia depends on two revenue sources for approximately 88% of its general fund dollars.
 - Net individual income tax (70%)
 - Sales tax (18%)
- Cash reserves are at historic lows.

Constitution of Virginia Article X. Taxation and Finance

Section 8. Limit of tax or revenue; Revenue Stabilization Fund.

No other or greater amount of tax or revenues shall, at any time, be levied than may be required for the necessary expenses of the government, or to pay the indebtedness of the Commonwealth.

The General Assembly shall establish the Revenue Stabilization Fund. The Fund shall consist of an amount not to exceed fifteen percent of the Commonwealth's average annual tax revenues derived from taxes on income and retail sales as certified by the Auditor of Public Accounts for the three fiscal years immediately preceding. The Auditor of Public Accounts shall compute the fifteen percent limitation of such fund annually and report to the General Assembly not later than the first day of December. "Certified tax revenues" means the Commonwealth's annual tax revenues derived from taxes on income and retail sales as certified by the Auditor of Public Accounts.

The General Assembly shall make deposits to the Fund to equal at least fifty percent of the product of the certified tax revenues collected in the most recently ended fiscal year times the difference between the annual percentage increase in the certified tax revenues collected for the most recently ended fiscal year and the average annual percentage increase in the certified tax revenues collected in the six fiscal years immediately preceding the most recently ended fiscal year. However, growth in certified tax revenues, which is the result of either increases in tax rates on income or retail sales or the repeal of exemptions therefrom, may be excluded, in whole or in part, from the computation immediately preceding for a period of time not to exceed six calendar years from the calendar year in which such tax rate increase or exemption repeal was effective. Additional appropriations may be made at any time so long as the fifteen percent limitation established herein is not exceeded. All interest earned on the Fund shall be part thereof; however, if the Fund's balance exceeds the limitation, the amount in excess of the limitation shall be paid into the general fund after appropriation by the General Assembly.

The General Assembly may appropriate an amount for transfer from the Fund to compensate for no more than one-half of the difference between the total general fund revenues appropriated and a revised general fund revenue forecast presented to the General Assembly prior to or during a subsequent regular or special legislative session. However, no transfer shall be made unless the general fund revenues appropriated exceed such revised general fund revenue forecast by more than two percent of certified tax revenues collected in the most recently ended fiscal year. Furthermore, no appropriation or transfer from such fund in any fiscal year shall exceed more than one-half of the balance of the Revenue Stabilization Fund. The General Assembly may enact such laws as may be necessary and appropriate to implement the Fund.

- The amendment ratified November 3, 1992 and effective January 1, 1993 -- Added the second, third, and fourth paragraphs.
- The amendment ratified November 2, 2010, and effective January 1, 2011 In the heading of the section, after "revenue", added "; Revenue
 Stabilization Fund". In paragraph two, deleted "ten" and added "fifteen" after "exceed" and after "compute the". In paragraph three, after "as the", deleted "ten" and added "fifteen" in the third sentence.

Revenue Stabilization Fund Activity Fiscal Years 1995 - 2018

(Dollars in millions)

								RSF			Balance as
								Constitutional	Has	Balance as	
		Appropriation	Appropriation			Amount over		Maximum Value		a Percent of	
	Beginning	(Mandatory	(Additional	Withdrawal to	Interest	RSF Maximum	Ending	- based on 3-	Reached	Fund	Certified
Fiscal Year		Deposit)	Deposit)	l		reverted to GF	Balance		Maximum?	Maximum	Revenues
1995	0.0	79.9		0.0	0.2	0.0	80.1			15.0%	1.3%
1995	80.1	0.0	0.0	0.0	4.9		85.0	533.6 570.8		14.9%	
1996	85.0	66.6	0.0	0.0	5.0		156.6	605.0	NO	25.9%	1.3%
1997			0.0	0.0	9.3		224.3	649.1			2.2%
	156.6									34.5%	
1999	224.3			0.0	13.4		361.5	706.3	NO	51.2%	
2000	361.5		0.0	0.0	19.0		574.6			73.9%	
2001	574.6		0.0	0.0	37.6		715.6		NO	82.7%	7.3%
2002	715.6		0.0	(467.7)	37.4		472.4	934.5		50.6%	
2003	472.4	0.0	0.0	(247.5)	22.6		247.5	963.0	NO	25.7%	2.6%
2004	247.5		0.0	0.0	5.6		340.1	958.3	NO	35.5%	3.3%
2005	340.1	0.0	134.5	0.0	7.7		482.3	977.8	NO	49.3%	4.0%
2006	482.3	584.2	0.0	0.0	17.3	\ /	1,064.7	1,064.7	YES	100.0%	8.1%
2007	1,064.7	0.0	106.7	0.0	52.7	, ,	1,189.8	1,189.8		100.0%	8.5%
2008	1,189.8			(351.5)	61.7	0.0	1,014.9	1,304.7	NO	77.8%	7.1%
2009	1,014.9		0.0	(490.0)	28.9		575.1	1,377.7	NO	41.7%	
2010	575.1	0.0	0.0	(295.1)	15.2		295.2	1,380.5	NO	21.4%	2.2%
2011	295.2	0.0	0.0	0.0	4.2	0.0	299.4	1,354.4		22.1%	
2012	299.4	0.0	0.0	0.0	4.2	0.0	303.6	2,018.1	NO	15.0%	2.1%
2013	303.6	132.7	0.0	0.0	3.7	0.0	440.0	2,095.2	NO	21.0%	2.8%
2014	440.0	244.6	0.0	0.0	2.9	0.0	687.5	2,215.1	NO	31.0%	4.5%
2015	687.5	243.2	0.0	(467.7)	4.7	0.0	467.7	2,287.7	NO	20.4%	2.8%
2016	467.7	0.0	0.0	(235.5)	3.3	0.0	235.5	2,385.7	NO	9.9%	1.4%
2017	235.5	605.6	0.0	(294.7)	2.4	0.0	548.8	2,456.5	NO	22.3%	3.1%
2018	548.8	0.0	0.0	(272.5)	5.5	0.0	281.8	2,566.1	NO	11.0%	1.5%

1. Interest earnings and ending fund balance for FY 2018 are estimates.

- 2. From FY 1995 until 2010, the fund maximum cap was calculated as 10% of the average of total income and sales tax revenues for the past three years. A constitutional amendment approved by Virginia voters on November 2, 2010, became effective January 1, 2011, thus increasing the cap from 10% to 15% beginning FY 2012.
- 3. The fund balance exceeded the fund maximum twice (FY 2006 and 2007). The amount in excess of the fund maximum was reverted to the general fund.

Where will the Revenue Stabilization Fund be in FY 2018?

(based on the current revenue forecast)

- The \$218.8 million balance estimated for the end of FY 2018 will be only 11 percent of the constitutionally permitted balance of \$2,566.1 million.
- 11 percent is the second lowest percentage of the fund maximum in the history of the RSF.
- The estimated FY 2018 balance is only 1.5 percent of Virginia's annual certified revenues, which is only the fourth time in the RSF's 24-year history that it has fallen below two percent.
- If actual collections exceed the revenue forecast, approximately one of every two dollars collected after the first \$100 million will be required to be deposited to the RSF.

Section IV Recommendations



Recommendations to Maintain Aaa/AAA/AAA Ratings – Improve Budgetary Performance

- The Commonwealth's score for budgetary performance, which incorporates reserve levels and structural balance, is overall weaker than its triple-A peers.
 - S&P assigns an overall score of 1.6 for Budgetary Performance, which puts this score at a 'AA' level.
 - Moody's assigns a 'Aa' rating to both (i) Structural Balance and (ii) Liquidity and Fund Balance credit factors.
- To remove the negative outlook from S&P and maintain the triple-triple-A ratings, the Commonwealth needs to rebuild reserves and demonstrate sustainable structural balance before the end of the biennium.



Recommendations to Maintain Aaa/AAA/AAA Ratings – Improve Budgetary Performance by Rebuilding Reserves

- The Commonwealth reserves are comprised of balances in the Revenue Stabilization Fund and the newly established Revenue Reserve Fund (together, the "Reserves").
- PRAG recommends that the Commonwealth adopt a plan to phase-in the rebuilding of Reserves relative to revenues or expenditures to a level of at least 8%.
 - The Commonwealth currently anticipates ending fiscal year 2018 with \$281.7 million in its Revenue Stabilization Fund, or 1.39% of expenditures.
 - At this level, PRAG estimates that S&P assigns the Commonwealth the lowest score among the 14 states rated 'AAA' by S&P for the Budget Reserve rating factor.
 - Moody's also cites drawing down reserves to an inadequate level as a factor that could lead to a downgrade.
- The Commonwealth's new Revenue Reserve Fund is a step in the right direction.
 - Given the revenue surplus for 2017, the Commonwealth expects to deposit a minimum of \$156.4 million to the Revenue Reserve Fund, increasing the Reserves to about 2.2%.
 - With revenues exceeding estimates for 2018, the PRAG recommends that the Commonwealth consider depositing 100% of the surplus into the Revenue Reserve Fund, potentially bringing Reserves closer to the 4% level.
 - PRAG believes S&P will view additional funding of the Revenue Reserve Fund positively, as it mitigates the withdrawals from the Revenue Stabilization Fund.



Recommendations to Maintain Aaa/AAA/AAA Ratings – Improve Budgetary Performance by Rebuilding Reserves (Continued)

- PRAG recommends that the Commonwealth develop a plan to rebuild Reserves to a level at or above 8%, which would bring the Commonwealth's score in line with the median of the 'AAA' rated states by S&P.
- PRAG recommends that the Commonwealth initially establish target levels between 4% and 8% in the short-term, which based on S&P criteria should gradually improve the Budget Reserve score, with the overall future target level above 8%.



Recommendations to Maintain Aaa/AAA/AAA Ratings – Improve Budgetary Performance by Demonstrating Structural Balance

- The Commonwealth needs to consistently demonstrate structural balance rather than relying on one-time measures and draws on its Reserves to balance its budget.
- With the revenue surplus in fiscal year 2017 and year-to-date revenues exceeding estimates in fiscal year 2018, the pressure on the Commonwealth's financial performance has eased.
- However, with significant uncertainty on the Federal level and potential impact on the Virginia economy, the Commonwealth should closely monitor economic trends and ensure that its revenue forecasts are in line with the latest trends and expenditures are adjusted accordingly to achieve structural balance.
- Because the Commonwealth has not yet determined the full impact of the Tax Cuts and Jobs Act of 2017, the Commonwealth should adopt a balanced budget based on current assumptions.
- The Commonwealth should limit the use of one-time measures to balance the budget.
 - The Commonwealth should refrain from continuing drawdowns of the Reserves, until the combined Reserves can be maintained at a level that is consistent with its triple-A peers.
 - The Commonwealth should not reduce its funding of the actuarially determined contribution to its pensions, as it did in the 2014-2016 biennium and which would also hurt its debt and pensions scoring.
 - The Commonwealth should refrain from budgeting mid-year salary increases in the second year of the biennium.



Recommendations to Maintain Aaa/AAA/AAA Ratings – Improve Budgetary Performance by Demonstrating Structural Balance (Cont'd)

- S&P assigns a weaker score to the Commonwealth's Structural Budget Performance and if the Commonwealth does not demonstrate structural balance going forward, S&P will further weaken the score for Structural Budget Performance.
- Based on the S&P methodology, an indicative credit score of 1.0 to 1.5 translates to a 'AAA' rating, and S&P currently assigns an overall indicative credit score of 1.5 to the Commonwealth, which is the weakest point of the 'AAA' range.
 - If the Structural Budget Performance score is assigned the weakest score, this would increase the Commonwealth's overall indicative credit score and translate to an indicative credit level of 'AA+'.
- To improve its Structural Budget Performance, the Commonwealth would need to regularly record surpluses in periods of positive economic growth and use surpluses to fund reserves and other non-recurring items.
- The Commonwealth may want to consider adopting appropriation limits, where expenditures are limited to a certain percentage of budgeted revenues.
 - Among its triple-A peers, Delaware has an appropriation limit of 98% and Iowa has an appropriation limit of 99% of revenues.
- If the Commonwealth demonstrates a commitment to building its reserves and returning to structural balance, PRAG believes S&P will change the outlook to stable and the Commonwealth will be able to maintain its triple-triple-A status.



Fully Funding the Revenue Reserve at 2% of Operating Appropriations by End of FY 2020

Fiscal Year	Fiscal Year Operating Appropriations before Revenue Cash Reserve	Annual Deposits	Cumulative Balance	% of Operating Appropriations	Fiscal Year Ending Balance in Revenue Stabilization Fund		Fiscal Year Ending Balance in Revenue Stabilization Fund + Revenue Reserve	
FY 2018	20,299,447,487	156,395,372	156,395,372	0.8%	281,784,246	1.4%	438,179,618	2.2%
FY 2019	20,821,213,958	50,000,000	206,395,372	1.0%	284,611,509	1.4%	491,006,881	2.4%
FY 2020	21,334,283,087	220,700,000	427,095,372	2.0%	287,457,624	1.3%	714,552,996	3.3%

8% of Annual Operating

Expenses 1,706,742,647

Additional Funds Needed to Reach 8% of Annual Operating

Expenses 992,189,651

Background

- The Tax Cuts and Jobs Act of 2017 (TCJA) is the most substantial federal tax legislation since 1986.
- Certain provisions, such as rate and bracket changes, have no Virginia impact.
- Many provisions do have a Virginia impact.

Background on Chainbridge

- Has been developing and delivering tax policy analysis tools for state government clients for nearly two decades.
- Eric Cook, PhD, revenue estimator at the U.S.
 Congressional Joint Committee on Taxation during federal tax reform efforts leading to the Tax Reform Act of 1986.
- Directed development of tax modeling projects for state government clients (Price Waterhouse and KPMG), left KPMG to form Chainbridge in 2000.

Chainbridge: Approach

- Construct two microsimulation models (individual income tax)
- For each individual, business or international provision:
 - Determine the likely impact that the provision has on Virginia
 - Determine whether an on-model (using the microsimulation models) or off-model approach would be employed
 - Generate the revenue estimates and prepare a report presenting the results

Chainbridge: Estimating Approach

- Different from economic forecasting model
- Database includes Virginia TY 2015 returns matched with federal returns for Virginia residents (as opposed to current Virginia Tax model with state data only), extrapolated to future years
- Allows tax to be recalculated for alternative scenarios using federal data and federal law (including indexing provisions), and to minimize combined Virginia and federal taxes

Overall Impact

- The TCJA results in significant tax cuts for individuals and businesses at the federal level.
- Offset by increases in individual and business taxes for the Commonwealth.

Impact on the Decision to Either Itemize or Take the Standard Deduction

Virgir	Virginia		eduction Returns	Standard D Number of		Number Switching from
Adjusted Gro	ss Income	(Prior Law)	(New Law)	(Prior Law)	(New Law)	Itemized to Standard
< 0	25,000	232,957	77,651	893,850	1,049,156	155,306
25,000	50,000	172,199	94,442	620,794	698,551	77,757
50,000	75,000	209,331	127,340	289,086	371,077	81,991
75,000	100,000	204,205	125,902	151,932	230,235	78,303
100,000	125,000	182,734	105,273	71,134	148,595	77,461
125,000	150,000	143,671	89,384	27,874	82,160	54,286
150,000	175,000	106,783	71,504	12,158	47,438	35,280
175,000	200,000	77,565	54,641	5,782	28,705	22,923
200,000	250,000	100,557	73,970	4,218	30,805	26,587
250,000	500,000	120,865	93,769	1,549	28,646	27,097
500,000	1,000,000	25,235	21,024	350	4,561	4,211
1,000,000	> 1,000,000	10,533	9,468	275	1,340	1,065
TOTALS		1,586,635	944,368	2,079,002	2,721,269	642,267