COMMONWEALTH of VIRGINIA

Richard D. Brown
Secretary of Finance

P.O. Box 1475
Richmond, VA 23218

December 18, 2014

The Honorable Terence R. McAuliffe
Governor of Virginia
Patrick Henry Building, 3rd Floor
Richmond, Virginia 23219

The Honorable Paul G. Nardo
Clerk of the House of Delegates
Virginia House of Delegates
State Capitol Building, 3rd Floor
Richmond, Virginia 23219

The Honorable Susan Clarke Schaar
Clerk of the Senate
Senate of Virginia
State Capitol Building, 3rd Floor
Richmond, Virginia 23219

Dear Governor McAuliffe, Ms. Schaar, and Mr. Nardo:

The Debt Capacity Advisory Committee ("Committee" or "DCAC") is required pursuant to Section 2.2-2713 of the Code of Virginia to annually review the Commonwealth's tax-supported debt and submit to the Governor and General Assembly an estimate of the maximum amount of new tax-supported debt that prudently may be authorized and issued for the next two years. In addition, the Committee is required to review annually the Commonwealth's moral obligation debt and other debt for which the Commonwealth has a contingent or limited liability. I am pleased to present the report for 2014.

Based on the debt capacity model, the Committee estimates that up to $459 million in additional debt could be authorized and issued in fiscal years 2015 and 2016. This amount will cause projections of debt service as a percent of blended revenues over the ten-year model horizon to exceed five percent in six years and to be below in four years. This solution is based on a number of issuance assumptions contained in the model. Accordingly, if the assumptions change, the resulting capacity will also change.

The report provides the Governor and the General Assembly with a basis to assess the impact of debt authorization and issuance on the Commonwealth's fiscal position and enables informed decision-making on capital spending priorities. The report also provides historical perspective on the Commonwealth's authorization and issuance of tax-supported debt over the last decade. The information regarding potential fiscal challenges included in this year's report also offers the Governor and the General Assembly with supplemental materials to consider should the amount of proposed debt approach the $459 million capacity estimate.

Sincerely,

Richard D. Brown, Chairman
Debt Capacity Advisory Committee

Attachment

c: Debt Capacity Advisory Committee Members

Commonwealth of Virginia

Debt Capacity Advisory Committee

Report to the Governor and the General Assembly

December 18, 2014

Debt Capacity Advisory Committee Members

The Honorable Richard D. Brown – Chairman
Secretary of Finance

William K. Butler
Citizen Member

Elizabeth B. Daley
Staff Director, Senate Finance Committee

Manju S. Ganeriwala
State Treasurer

Harold E. Greer
Director, Joint Legislative Audit & Review Commission

Martha S. Mavredes
Auditor of Public Accounts

Ronald L. Tillett
Citizen Member

Daniel S. Timberlake
Director of the Department of Planning & Budget

Robert P. Vaughan
Staff Director, House Appropriations Committee

David A. VonMoll
State Comptroller

Background

Following the Commonwealth's increased use of debt in the 1980's, Governor Wilder issued Executive Order 38 (1991) which established the Debt Capacity Advisory Committee (Committee or DCAC). Subsequent to the Executive Order, the DCAC was codified in Section 2.2-2712 of the Code of Virginia. The Committee was initially comprised of the Secretary of Finance, the State Treasurer, the Auditor of Public Accounts, the Director of Planning and Budget, the Director of the Joint Legislative Audit and Review Commission, and two citizen members appointed by the Governor. Legislation enacted in 2010 added three additional members to the Committee: the staff directors of the Senate Finance and House Appropriations Committees, and the State Comptroller. The Secretary of Finance serves as Chairman.

The Committee is vested with the power and duty to annually review the size and condition of the Commonwealth's tax-supported debt and to submit to the Governor and the General Assembly, by January 1st of each year, an estimate of the maximum amount of new tax-supported debt that prudently may be authorized for the next biennium. The Committee's recommendations must consider the projected debt service requirements over the current fiscal year and the following nine fiscal years. The Committee must also review annually the amount and condition of obligations for which the Commonwealth has a contingent or limited liability, and for which the Commonwealth is permitted to replenish reserve funds if deficiencies occur (i.e., "Moral Obligation" debt).

Control of debt burden is one of several key factors evaluated by rating agencies in their assessment of a state's credit quality. Other factors include: economic vitality and diversity, fiscal performance and flexibility, and administrative capabilities of government. The Commonwealth's triple-A bond rating, which it has held since 1938, facilitates access to the capital markets at the lowest borrowing cost. But the ability to take on additional debt while maintaining the triple-A ratings is not unlimited. Higher debt service payments (a fixed expense) mean less flexibility to respond to economic cycles and address other budgetary needs. Because capacity is viewed with many other variables, there is no precise point at which increased debt levels result in a lower bond rating.

In 1991, after consideration of various alternatives to assess capacity, the Committee decided on a measure based on tax-supported debt service as a percent of revenues. This measure provides a direct comparison of the state's obligations to the resources available to pay them. Measuring the portion of the State's resources committed to debt-related fixed costs provides a measure of the State's budgetary flexibility and its ability to respond to economic downturns.

The target level selected by the Committee was five percent - that is, that debt service on tax-supported debt obligations should not exceed 5% of blended revenues. This measure is intended to ensure that annual debt service payments do not consume so much of the state's annual operating budget as to hinder the Commonwealth's ability to provide core government services. This basic measure has been endorsed by the DCAC in each subsequent year.

In the wake of the 2008 financial melt-down and the resulting economic downturn, coupled with the increased debt burden of several years of significant bonded debt authorizations, the December 18, 2009 DCAC Report to the Governor and the General Assembly conveyed there was no additional debt capacity. As a result of the findings in the 2009 DCAC Report, the Committee determined that a study should be completed to reevaluate the model and consider ways to smooth dramatic changes in capacity in times of extraordinary revenue fluctuations.

Following the 2010 study, the Committee considered various measures (e.g., debt per capita), as well as changes to the treatment of transportation debt in the model. Ultimately, the changes adopted by the Committee were the (i) inclusion in the model of the 0.25% sales tax enacted in 2004 and certain recurring transfers to the general fund from non-general funds, (ii) the reduction of debt service carried in the model for amounts expected to be paid from non-general fund sources, (iii) a change to the interest rate proxy used to estimate the debt service on future borrowings, and (iv) using a ten-year average capacity to arrive at the Committee's recommendation rather than basing it solely on the next two year period. This latter recommendation was an effort to smooth the effect of dramatic revenue fluctuations, and to facilitate long-term capital planning. The target measure of annual debt service payments to annual blended revenues remained unchanged at 5%.

It is important to note that maintaining debt service at less than 5% of revenues is merely a benchmark of affordability. Debt service requires annual appropriation and to the extent debt is authorized and issued, debt service will limit the amounts available for other budgetary needs.

Debt Capacity Model

The DCAC report is a resource that assists Commonwealth leaders with planning the issuance of future obligations within future resource constraints. The Committee's report provides elected officials with information to enable them to balance capital funding needs while maintaining fiscal discipline and budgetary flexibility. The DCAC report can guide decision-makers in the development and implementation of the capital budget. Report recommendations are all based on the Committee's analysis of the Debt Capacity Model results.

The Committee's Debt Capacity Model compares annual Blended Revenues from the Official Revenue Forecast to the (i) scheduled debt service payments on all outstanding tax-supported debt obligations, and (ii) estimates of the debt service payments on all currently authorized but yet to be issued tax-supported debt. A calculation is then made to determine the amount of additional debt that could be authorized and issued without causing total debt service to exceed 5% of the forecasted Blended Revenues.

Blended Revenues are comprised of general fund revenues, state revenues in the Transportation Trust Fund (TTF), and certain non-general fund transfers including ABC profits. Beginning with the 2010 Report, Blended Revenues also include the relevant portion of sales tax and certain recurring non-general fund Appropriation Act transfers.

Tax-supported debt obligations in the model include general obligation bonds (excluding those general obligation bonds issued pursuant to Article X, Section 9(c) of the Constitution of Virginia for which debt service is paid from project revenues), debt secured by the TTF, obligations issued by the Virginia Public Building Authority (VPBA) and the Virginia College Building Authority (VCBA) that are repaid from general fund appropriations, obligations payable under regional jail reimbursement agreements, bonded capital leases paid from a general fund appropriation, and other capital leases and installment purchases.

The impact of debt service related to authorized but not yet issued bond programs on future operating budgets is an important element of debt management and assessing the state's debt capacity. Accordingly, debt service estimates for those programs are included in the debt capacity calculations. These debt service estimates are based in part on draw schedules compiled by the Department of Planning and Budget or are based on information obtained from agencies on their authorized projects.

Potential Challenges to Fiscal Stability

Both the U.S. and Virginia economies have been in recovery for nearly five years. Although Virginia has seized opportunities through new private sector investment, new and enhanced global export relationships, and increased tourism, Virginia recently experienced a shortfall in its fiscal year 2014 revenues. While Commonwealth leaders promptly took action to address the shortfalls initially projected for fiscal years 2015 and 2016, Virginia faces several significant risks that will continue to impact future growth. As federal fiscal policies and other challenges loom, Virginia must remain conservative in its revenue projections, proactive in its financial management, strategic in its planning and innovative in its approach to continued growth.

Federal Fiscal Policy

This challenge was identified by the Committee last year and it remains a top concern. Fitch noted in their October 3, 2013 report, *2014 Outlook: U.S. States*, "The federal government remains the most significant threat to state budgets." In its May 22, 2014 report, *2014 State Debt Medians: Appetite for Borrowing Remains Weak*, Moody's similarly stated:

> "Uncertainty over federal fiscal policy has also put a damper on state debt plans. Over the past two years sequestration, threats to the municipal bond tax-exemption, and the government shutdown caused many states to put off debt issuance as the full economic impact of these developments remained unclear.

> States were reluctant to take on new debt service obligations, given that future economic growth and thus revenue growth could be jeopardized by federal inaction."

Federal fiscal policy challenges fall into two major categories: the budget debate (i.e., sequestration, debt ceiling, and government shut-down) and tax reform. Sequestration has led to reduced federal aid, and certain states, including Virginia, are more vulnerable to the negative effects of sequestration. Moody's noted in an August 20, 2013 report that, "States such as Maryland and Virginia, which rely heavily on federal jobs, may see lower sales tax collections as a result of lower federal employee disposable incomes. They are also likely to see accelerating declines in government-related employment as federal spending slows and government contracts decline." Moody's prediction was correct; Virginia began to experience the impact of sequestration in fiscal year 2014 and it is having a lasting effect through the current biennium. While Virginia's fiscal year 2014 revenue shortfall was caused primarily by underperforming non-withholding tax collections, weakness began showing that year in the withholding revenues. The underperformance of withholding revenues is in part due to sequestration and its impact on cuts to higher income jobs, which have thus far been replaced by lower wage jobs. The slight weakness in 2014 grew to cause major revenue gaps in the Commonwealth's August 2014 revenue reforecast for the current biennium. While Virginia forges its way to recovery, deeper federal cuts or another shutdown could derail the fragile economic recovery.

Last year, federal policymakers were discussing a major overhaul of the U.S. tax code and there have been proposals to reduce or even eliminate the tax exemption on municipal bonds. Tax reform discussions have included proposals to establish a 28% limit on the value of deductions and exemptions, and these limits could be applied to existing bonds. The likely outcome would be that the demand for tax-exempt municipal bonds would deteriorate as the benefit for holding those bonds diminishes.

Borrowing costs for state and local governments would increase as investors demand higher yields. Estimates of higher yields range from 40 to 75 basis points. A higher rate of interest would utilize more debt capacity and create additional strains on the budget.

Banking Regulations

The new Basel III Liquidity Coverage Ratio (LCR) is set to take effect on January 1, 2015. The LCR is intended to make sure large banks hold a sufficient amount of High Quality Liquid Assets (HQLA) to cover certain cash outflows that could be experienced in a 30 day period. In the U.S., the Federal Reserve's Board of Governors is responsible for determining which assets qualify as HQLA. As the U.S.' LCR rule stands, no municipal bonds qualify as HQLA. Efforts have been made by state and local government organizations to convince the Federal Reserve that certain municipal bonds, such as highly rated Virginia bonds, should be permissible as HQLA. According to a September 11, 2014 *The Bond* Buyer article by Christine Albano, "*Muni Snub From HQLA Creates Buzz Among Buy-side Analysts*", "following the recession, bank

ownership has grown to $433 billion this year, or about 11.8% of outstanding muni debt, from $228 billion or 6.2% in 2009". The article attributed the growth comments to a daily fixed income report by Alan Schankel, a managing director of Janney Capital Markets. If the Federal Reserve does not adjust the current definition of HQLA, it is speculated that banks may reduce their current and future holdings of municipal bonds.

If banks determine holding these bonds is creating a cost due to their need to satisfy the LCR, their future holdings will come at a cost to municipal bond issuers. Municipal bond issuers, such as Virginia, will have to pay a higher interest rate to compensate banks for their inability to treat these investments as HQLA. The potential higher interest rates have the possibility of reducing debt capacity and creating even more strains on the budget.

Interest Rate Volatility

Following a year of interest rate volatility, financial market participants anticipated last year that interest rates would rise in 2014. Using the market participants' expectations of 30-Year Treasury Bond Yields, Treasury staff estimated that municipal bond interest rates might rise as much as 1% between December 2013 and December 2014.

Interest rates actually declined over that period. Virginia benefited from the low interest rate environment and took the opportunity to refinance certain outstanding obligations for debt service savings. Market sentiment is that rates will rise in the near future. When this occurs, borrowing costs will increase. With the large amount of debt already authorized but not yet issued, it is anticipated that a 1% rise in interest rates will cause a decline in capacity of $52 million annually.

Spotlight on Retirement Liability

As states and local governments have been attempting to recover from the Great Recession, they have faced sluggish and inconsistent revenue growth, which has forced tough financial decisions of how to spend limited resources. One critical item that occasionally receives delayed or reduced funding is pension contributions. In 2014, investment and retirement portfolios experienced strong returns. However, those pension funds that reduced or delayed contributions in recent years missed the additional investment return which would have reduced their current level of unfunded liabilities. Those pension funds will now be faced with an even greater contribution requirement in the future.

In Moody's November 20, 2014 report, *Fiscal 2013 Pension Medians – US States*, it was stated:

> "Of the 50 states, 34 contributed at least 90% of actuarially determined contribution (ADC), with 12 contributing between 60% to 90% and only four funding 60% or less of their pension costs. The states struggling the most with funding their ADC are New Jersey (A1 negative), Virginia (Aaa stable),

Pennsylvania (Aa3 stable) and California (Aa3 stable) at 28.0%, 41.2%, 51.7% and 55.7%, respectively".

However, according to Moody's ranking of fiscal year 2013 adjusted net pension liability per capita, Virginia ranked 31st with a result of $2,336 compared to a mean of $4,477 and a median of $3,010. While Virginia's recent pension reforms have been cited as positive improvements in recent rating agency reports, Commonwealth leaders should note that pension funding is being strongly considered as ratings decisions are made.

Financing Significant Infrastructure Needs

Virginia is not excluded from America's growing problem with aging infrastructure. As budgets remain tight, it is difficult for states and local governments to find additional funds necessary to maintain the increasingly deteriorating infrastructure. States are faced with a choice: to pay costly repairs now, or be faced with even higher replacement costs in the future.

Virginia has taken steps to revise its transportation funding and prepare for rising infrastructure costs. These efforts include a gas tax conversion, a sales tax increase, an increasing General Fund transfer and an increase in the car titling tax. These are all steps forward in securing revenues to address the transportation infrastructure. However, as federal contributions towards transportation and other projects are reduced and delayed, states and local governments must be prepared to fund a larger share of these critical projects. Virginia will have an increase in its gas tax rate if the Marketplace Equity Act is not passed by Congress by January 1st.

2014 Debt Capacity Recommendations

The 2014 Base Model Solution – Average debt capacity calculation (Appendix A-6) shows that an additional $459.45 million in debt could be authorized and issued in each 2015 and 2016. This amount will cause projections of debt service as a percent of Blended Revenues to exceed five percent in six years and to be at or below five percent in the other four years.

Other Recommendations

a) The Committee reiterates recommendations included in past reports for the General Assembly and the Governor to rescind any bond authorizations for projects that are not likely to be issued.

b) The Committee expresses its support in seeking the approval of 9(b) general obligation bonds, which must be approved by a voter referendum. With a higher bond rating than 9(d) appropriation-backed debt, general obligation bonds have lesser interest costs. The growing proportion of 9(d) debt compared to general obligation bonds has caught the

attention of the bond rating agencies and has resulted in comments in recent ratings of the Commonwealth. Please see the chart on page 11 for more information regarding the growing proportion of 9(d) debt.

c) The Committee also expresses its continued support of the use of traditional financing methods for state projects such as those offered through the issuance of general obligation bonds, or appropriation-supported programs through the VCBA or the VPBA, since bonded capital lease and other conduit borrowings typically result in higher financing costs, and are ultimately still viewed as tax-supported debt.

Review of Tax-Supported Debt

General Fund Supported Debt

The State issues two types of tax-supported debt: General Obligation Bonds and various kinds of appropriation-supported obligations. The Commonwealth's GO Bonds are secured by the full faith and credit of the Commonwealth and are rated in the highest rating category by the bond rating agencies. Several factors contribute to the high bond ratings, including the legal protections inherent in constitutionally-permitted debt, investor confidence in the pledge of the full faith and credit of the State, and the presumption of the availability of the government's full resources. GO bonds are the most transparent of the various types of State debt obligations and typically carry the lowest interest cost. GO bonds issued under Article X, Section 9(b) of the Constitution require approval by the voters through referendum.

Article X, Section 9(c) of the Constitution provides for the issuance of GO debt that is self-supporting (e.g. through tolls, dormitory fees, etc.) (9(c) Bonds). The GO pledge provides a back-stop in the event net project revenues are insufficient to service the debt. These bonds do not require voter approval, but do require a two-thirds majority approval by each house of the General Assembly. They also require the Governor to opine that net project revenues will be sufficient to pay debt service on the bonds. Because of the GO pledge, 9(c) debt is considered tax-supported debt for financial reporting purposes; however, it is not included in the debt capacity model. Only if the net revenues are insufficient and the GO pledge is invoked, will that debt be incorporated in the model. This has not occurred since 9(c) debt was first issued in 1973.

Commonwealth appropriation-supported debt includes bonded debt as well as certain capital leases and installment purchase obligations. Such debt is authorized by the General Assembly. Principal and interest payments on these obligations are made from annual appropriations from the general fund or the TTF. These bonds are rated slightly lower than Virginia's GO bonds, reflecting the marginally higher risk that amounts will not be annually appropriated. Depending upon market conditions, interest rates on appropriation-supported debt on any given day may range from 5 to 20 basis points higher than comparable GO bonds. The Commonwealth has increasingly relied on the use of appropriation-supported debt (e.g. VPBA and VCBA) to

provide financing for capital projects.

Transportation Debt

The rating agencies view all debt supported by state-wide, generally applied taxes and fees to be "Tax-Supported Debt". The Transportation Trust Fund is funded primarily from incremental revenues generated by increases in the retail sales and use tax, motor fuels tax and motor vehicle related taxes and fees enacted in the 1986 Special Session Acts, as well as other tax revenues subsequently dedicated to the TTF (e.g. one-third of the insurance license tax in 2007). As a result of legislation passed by the 2013 session of the General Assembly, the state's $0.175 per gallon on motor vehicle fuels tax on gasoline and diesel was eliminated and replaced with a tax of 3.5% on the wholesale price of gasoline and a 6.0% tax on the wholesale price of diesel (the fuel taxes). The TTF will receive 15% of the revenues generated from the fuel taxes and 4% of the fuel tax revenue will be deposited to the Priority Transportation Fund (a subset of the TTF). Those revenues, as well as the debt service supported by those revenues are included in the model calculation. Not included in the Debt Capacity Model are highway maintenance and operating revenues (HMO), federal transportation revenues, and debt related to Federal Revenue Anticipation Notes (FRANS) or Grant Anticipation Revenue Vehicles (GARVEEs) paid from federal transportation revenues.

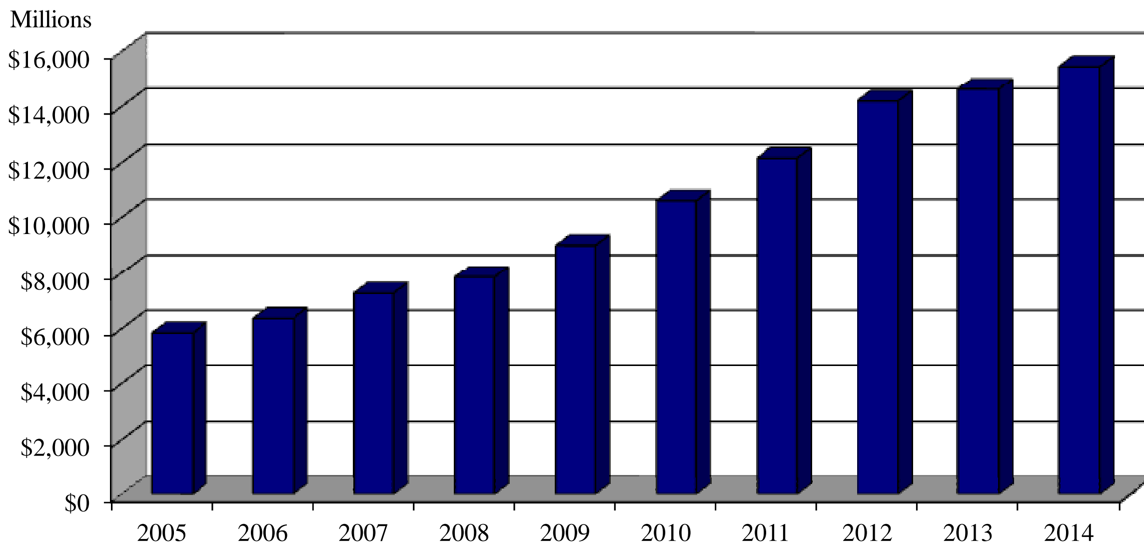
Transportation debt has been authorized and issued with a pledge that other available amounts, including the general fund, may be appropriated for their repayment. Since repayment is not limited solely to the TTF (though in practice, payments are made from the TTF), these bonds are viewed by ratings agencies the same as other appropriation-supported obligations of the Commonwealth. The strength of the Commonwealth appropriation pledge and the depth of resources available for repayment may result in a higher rating than if secured by the TTF alone.

The Commonwealth Transportation Board (CTB) has issued bonds to be repaid from the TTF for construction projects involving U.S. Route 28, the U.S. Route 58 Corridor Development Program, the Northern Virginia Transportation District Program, the Oak Grove Connector in Chesapeake, and most recently, the Capital Projects Revenue (CPR) Bonds approved by the General Assembly in 2007. Currently, debt service on debt paid by the TTF exceeds 5% of TTF revenues. Accordingly, to the extent the 5% measure is exceeded, capacity derived from the general fund is being utilized. This does not mean that general fund dollars are supplementing debt service payments on TTF debt; rather, it means that capacity derived from the general fund is being used to keep overall capacity for all tax-supported debt under the 5% target.

Trends in Tax-Supported Debt

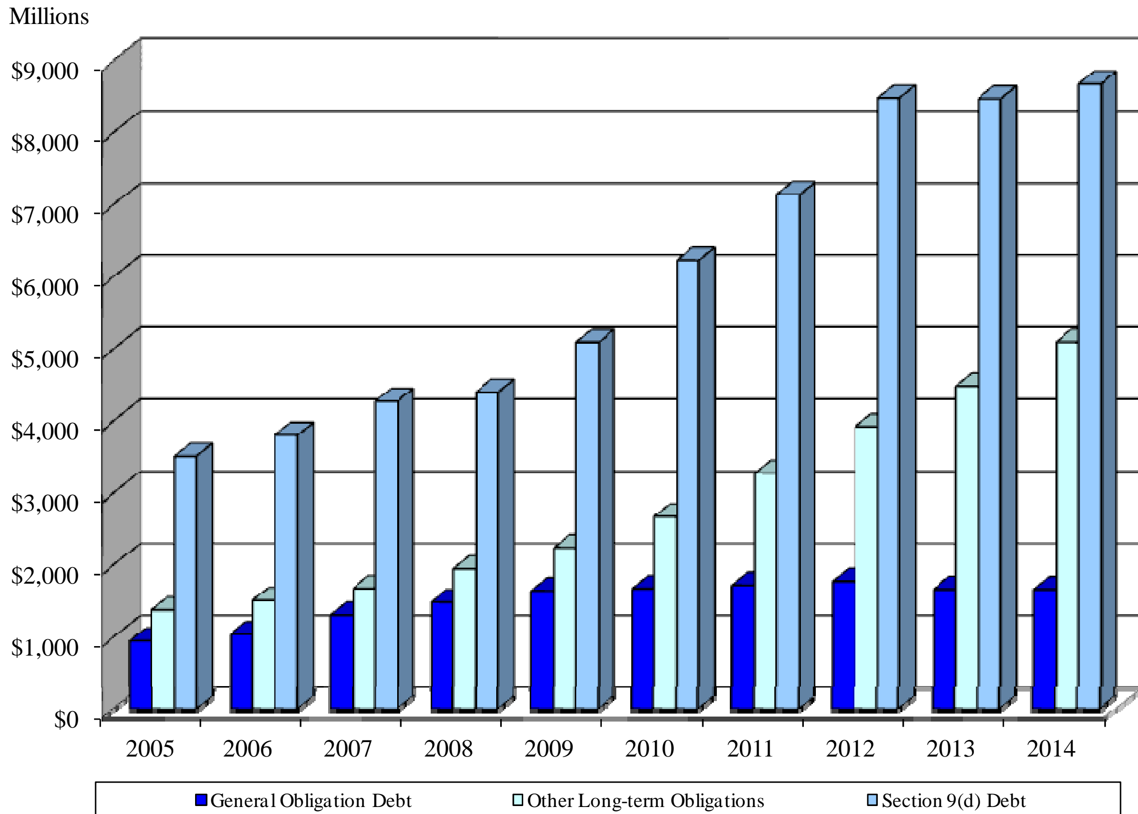
Outstanding tax-supported debt of the Commonwealth increased by 164%, or $9.6 billion, from $5.9 billion in fiscal year 2005 to $15.5 billion in fiscal year 2014. Between fiscal year 2013 and fiscal year 2014, outstanding tax-supported debt increased $815 million, which is equivalent to 6% growth over the last fiscal year. The table below includes long-term obligations such as pension liabilities, other post-employment benefits (OPEB) and compensated absences. These obligations are generally evaluated by rating agencies as part of an issuer's overall debt profile, but are not part of their calculations of debt ratios. Accordingly, they are not included in the Commonwealth's debt capacity calculation. The following chart provides a historical perspective on the Commonwealth's outstanding tax-supported debt, including these other long-term obligations.

Outstanding Tax-Supported Debt
Fiscal Years 2005-2014[1]



[1] Includes other long-term obligations such as pension liabilities, OPEBs and compensated absences.

Outstanding Tax-Supported Debt by Category
Fiscal Years 2005-2014[(1)]



(1) Includes other long-term obligations such as pension liabilities, OPEBs and compensated absences.

The chart above shows outstanding tax-supported debt separated into three major categories: GO bonds, debt obligations incurred pursuant to Article X, Section 9(d) of the Virginia Constitution (i.e. appropriation-supported debt), and other long-term obligations, which include pension liabilities and OPEB liabilities.

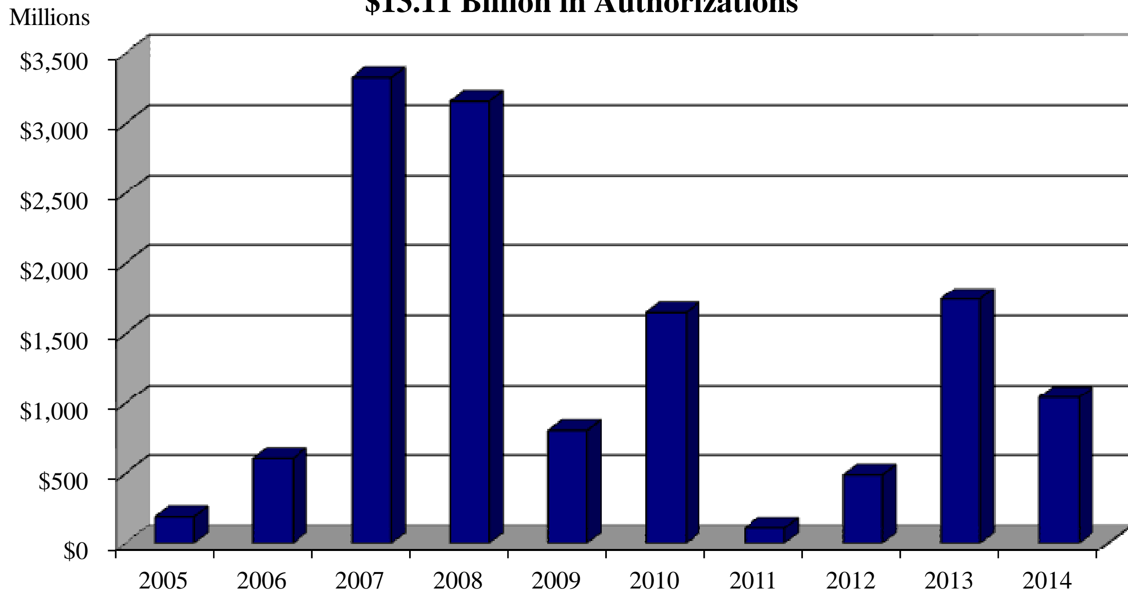
General obligation debt, which had a June 30, 2014 balance outstanding of $1.67 billion, has increased 75%, or $714 million, over the ten-year period. This is due in part to a $1 billion general obligation bond referendum approved by the voters in 2002. Bonds from the 2002 authorization were issued as needed, with the final issuance occurring during fiscal year 2010. Between fiscal years 2010 and 2012, increases in the general obligation debt outstanding came from the issuance of 9(c) bonds, which are regularly authorized by the General Assembly for qualifying revenue-producing capital projects, and are not included in the debt capacity calculation. However, with a lag between the timing of new authorizations and the issuance of the bonds and the continued payment of previously issued debt, the 2014 outstanding GO balance declined 0.1%, or $2 million, from fiscal year 2013.

Section 9(d) debt includes tax-supported bonds issued by the VCBA, the VPBA, the CTB, and certain obligations of the Virginia Port Authority. It also includes bonded capital leases, other long-term capital leases and installment purchases, and payments related to regional jail agreements. This debt category has shown the most significant dollar growth over the last ten years, increasing $5.17 billion during that period. Total outstanding Section 9(d) debt at June 30, 2014 was $8.68 billion compared to $3.52 billion at fiscal year-end 2005, which is equivalent to a 147% increase over the ten-year period. The increase is attributed to significant authorizations for transportation bonds in 2007, and VPBA and VCBA bonds in 2008, 2009, 2010 and 2013. An additional $796 million of VPBA and VCBA debt was authorized in fiscal year 2014; however, the 2014 authorizations have not yet had an impact on the outstanding balance of 9(d) debt. The outstanding balance of section 9(d) debt increased 2%, or $205 million, between fiscal year 2013 and fiscal year 2014.

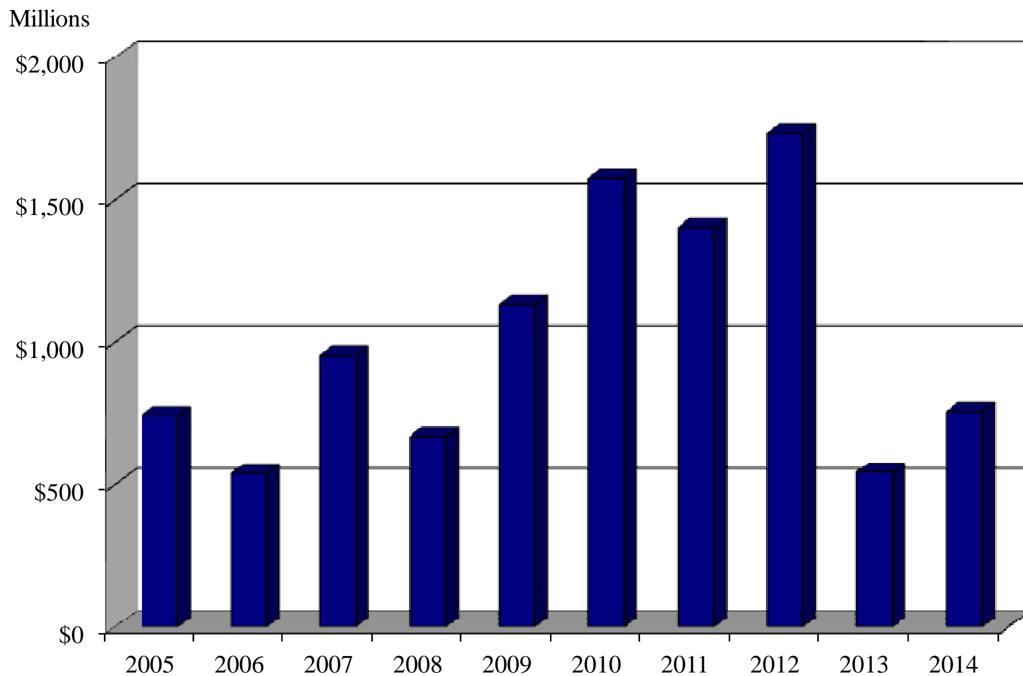
Other long-term obligations have also steadily increased, growing $3.72 billion, or 270%, from $1.38 billion at fiscal year-end 2005 to $5.10 billion at fiscal year-end 2014. The increase is partly due to the required inclusion of OPEB obligations beginning in 2008, but it is also related to increasing pension and OPEB obligations. Between fiscal year 2013 and fiscal year 2014, other long-term obligations increased $612 million, which is equivalent to 14% growth over the last fiscal year.

The following two charts illustrate the amounts of tax-supported debt authorized and issued from years 2005 to 2014. In 2007, $3 billion was authorized for the transportation CPR program, and in 2008; $3 billion was authorized for the VPBA and VCBA programs. Significant 9(d) authorization was provided again in 2010 with VPBA and VCBA receiving authorization of nearly $1.5 billion. The amount of debt authorized in 2011 and 2012 declined compared to the significant amounts authorized in the prior years. However, in 2013, $1.74 billion in additional tax-supported debt was authorized, of which $748 million was for VCBA 9(d) projects, $382 million was for VPBA 9(d) projects, $596 million was for U.S. Route 58 9(d) transportation projects and the remainder was for 9(c) projects. The large 2013 authorizations were followed by a lesser but still significant authorization of over $1 billion, with VPBA and VCBA receiving authorizations of $511 million and $285 million, respectively and the balance being for 9(c) projects. Between fiscal year 2005 and fiscal year 2014, the General Assembly collectively authorized $13.11 billion of tax-supported debt.

Tax-Supported Debt Authorizations
Fiscal Years 2005-2014
$13.11 Billion in Authorizations



Tax Supported Debt Issued
Fiscal Years 2005-2014
$10.05 Billion in Issuances



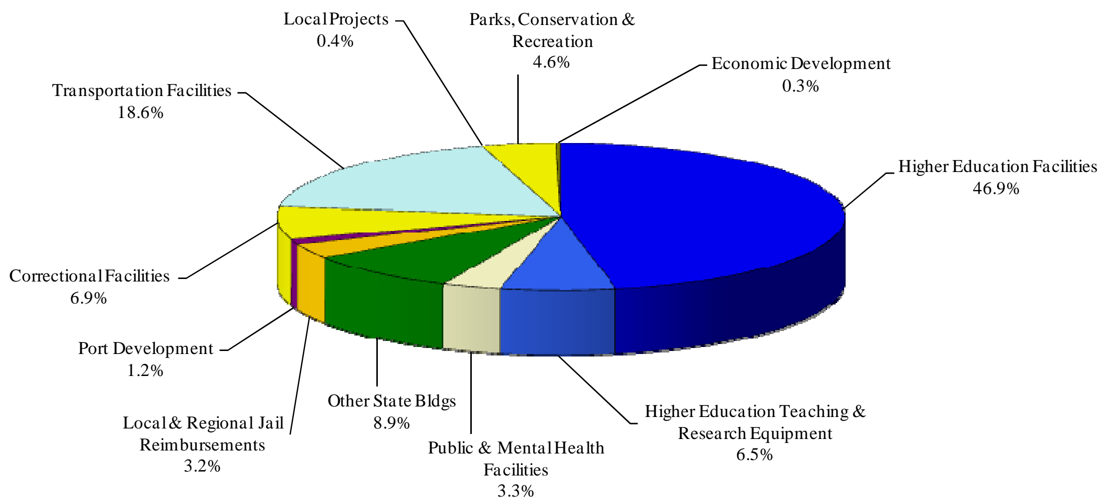
REPORT OF THE DEBT CAPACITY ADVISORY COMMITTEE
December 18, 2014

The amount of tax-supported debt issued in fiscal year 2014 was $757 million. The total 2014 tax-supported debt issuance amount was up from the 2013 level of $544 million, but it was below the four straight years of issuances of between $1.13 and $1.73 billion between 2009 and 2012. The increase in 2014 issuances over 2013 was largely the result of VCBA utilizing a portion of the significant authorizations it has received in recent years. Between fiscal year 2005 and fiscal year 2014, $10.05 billion in tax-supported debt was issued. With the June 30, 2014 authorized and unissued debt amounting to $5.44 billion, of which $4.79 billion is for 9(d) projects, it is likely that significant issuances will continue over the next several years.

Uses of Outstanding Tax-Supported Debt

The following chart illustrates how the Commonwealth has utilized its tax-supported debt over the last ten years. Of the total $10.0 billion, 53% has been used for capital projects and teaching and research equipment at state institutions of higher education. Transportation projects paid from the TTF is the next highest category at 19%. (Note: transportation projects financed with federal revenues are not considered tax-supported debt and are not included.)

Uses of Tax-Supported Debt Issued
FY 2005 - FY 2014

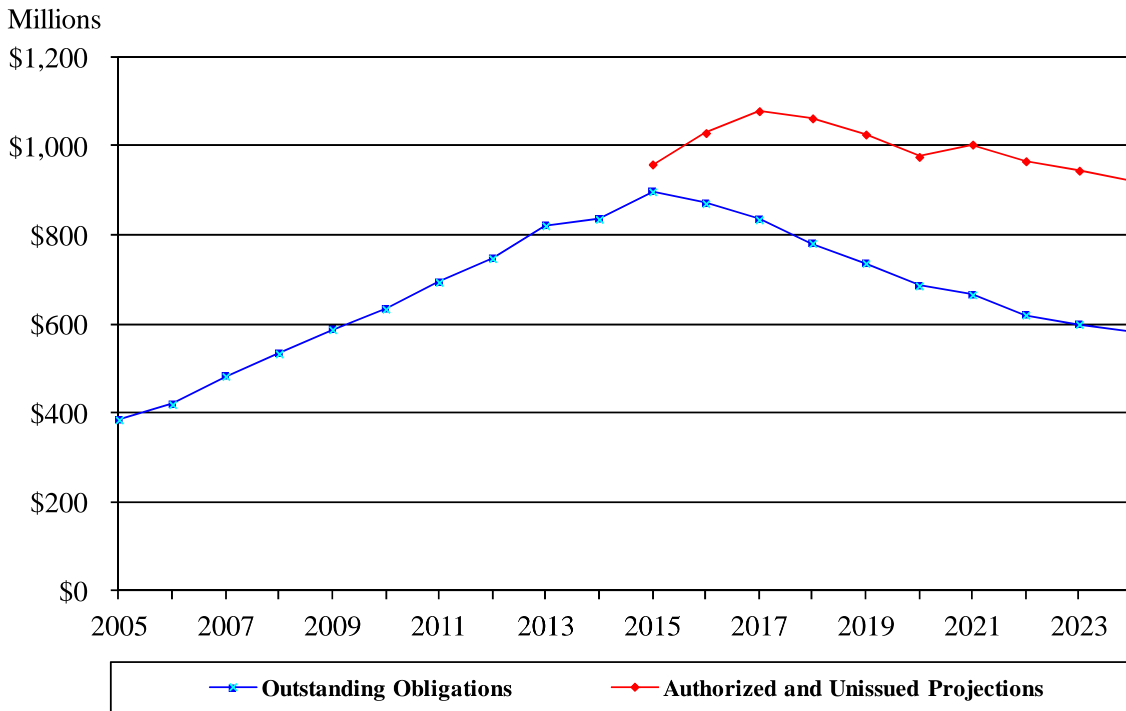


Ten-year Total = $10 Billion

Debt Service

Amounts paid annually for debt service have increased, both on an absolute basis and as a percentage of Blended Revenues. This trend is expected to continue as currently authorized debt is issued, and the amount of outstanding debt increases. Annual debt service, including the estimated debt service on all currently authorized but unissued amounts, is illustrated below.

Tax-Supported Debt Service: Actual and Projected
Fiscal Years 2005 – 2024(1)



(1) Assumes authorized debt is issued in future periods in accordance with the Model's current assumptions. Past data includes lease revenue bonds issued by the Virginia Biotech Research Park Authority, Innovative Technology Authority and Newport News Industrial Development Authority.

Review of State Credit Ratings

Credit ratings are the rating agencies' assessment of a governmental entity's ability and willingness to repay debt on a timely basis going forward. Credit ratings are an important factor in the public debt markets and generally influence the interest rates a borrower must pay. The prolonged fiscal policy debates on federal spending have resulted in actions relating to the U.S. sovereign rating, and in turn, the Commonwealth's bond rating. However, more recently the rating agencies have improved their outlook of Virginia. The Commonwealth is rated Aaa/Stable (Moody's), AAA/Stable (S&P), and AAA/Stable (Fitch).

Ratings on the Commonwealth's appropriation-supported programs are "one notch" below the general obligation rating: Aa1 (Moody's), AA+ (S&P) and AA+ (Fitch). Like the GO ratings, the appropriation-supported bonds now carry a stable outlook from the three rating agencies.

All three rating agencies continue to note Virginia's credit strengths: long-standing history of pro-active and conservative financial management, a manageable debt burden controlled through a debt affordability model, strong financial policies and practices, pension reform and a diverse economy that has fared better than the nation. They also cite as challenges: spending pressures from education and transportation needs, managing the effects of a sluggish economy, and the state economy's direct linkage to the U.S. government.

With the Commonwealth's recent revenue shortfall, it is apparent that the rating agencies are closely watching Virginia's actions. In an August 2014 G.O. ratings report, S&P applauded the Commonwealth's prompt action to address the shortfall; however, the report also criticized the plan by saying the "budget was not structurally balanced, as it relied on $493 million in carryover revenues from fiscal 2014 and funded only 80% of the state's pension actuarially required contribution." While S&P noted that these actions were based on a revised conservative revenue forecast and not all actions may be necessary, the report expressed concerns regarding the proposed depletion of the Rainy Day Fund, which was projected to decline from $687 million at fiscal year-end 2014 to $238 million by fiscal year-end 2016 based on the August 2014 revenue reforecast. It should be noted that another deposit estimated at $160 million will be made in fiscal year 2017 if the current revenue forecast holds true.

Review of Comparative Ratios

In its *2014 State Debt Medians Report* (Moody's Medians), Moody's notes that nationally outstanding net tax-supported debt grew at an average annual rate of 6.5% over the last ten years. However, after reaching a high of 10% growth in 2009, the annual growth has declined consecutively in each of the last four years and was just 0.4% during calendar year 2013. The low growth in net tax-supported debt (NTSD) in 2013 set a new low-point for that metric as measured across the last 20-years. Moody's noted that while there was a small amount of

growth in total NTSD, "approximately half of all states saw a decline in NTSD including historically large issuers like California."

Moody's attributed the slowing growth and in some cases the decline in NTSD to a new conservative attitude towards debt, constraints by states' own formal and informal debt policies, and uncertainty of over federal fiscal policy. With states still facing economic recoveries and tight budgets, Moody's noted "growing spending pressures coupled with inconsistent growth in revenue and uncertainty over future growth rates have forced states to take a cautious approach when considering the addition of new debt service costs to their budgets." While some states attitudes toward debt have changed, other states such as Florida and North Carolina only recently regained capacity to issue debt in line with their policies. As noted in the Potential Challenges to Fiscal Stability section, some states, such as Virginia, are experiencing the results of changes and inaction related to federal fiscal policy and this is causing many states to prioritize projects and cautiously move forward with debt.

Nationwide, median NTSD per capita actually decreased by 1.9% to $1,054 compared to $1,074 the prior year. In 2014, Virginia was ranked as having the 19th highest debt per capita with a level of $1,302 which declined only slightly from the 2013 level of $1,315. Nationally, NTSD as a percentage of personal income decreased to 2.6% compared to 2.8%, a level that had been maintained since 2011. Virginia experienced a decline in its NTSD as a percentage of personal income with its level of 2.7% in 2014 compared to 2.9% in 2013, which helped the Commonwealth's ranking fall from 22nd to 24th.

The following table and chart illustrate how Virginia compares to other triple-A states based on net tax-supported debt per capita.

REPORT OF THE DEBT CAPACITY ADVISORY COMMITTEE
December 18, 2014

AAA/Aaa/AAA STATE DEBT BURDENS FROM 2005-2014
PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt per Capita (1)(2)

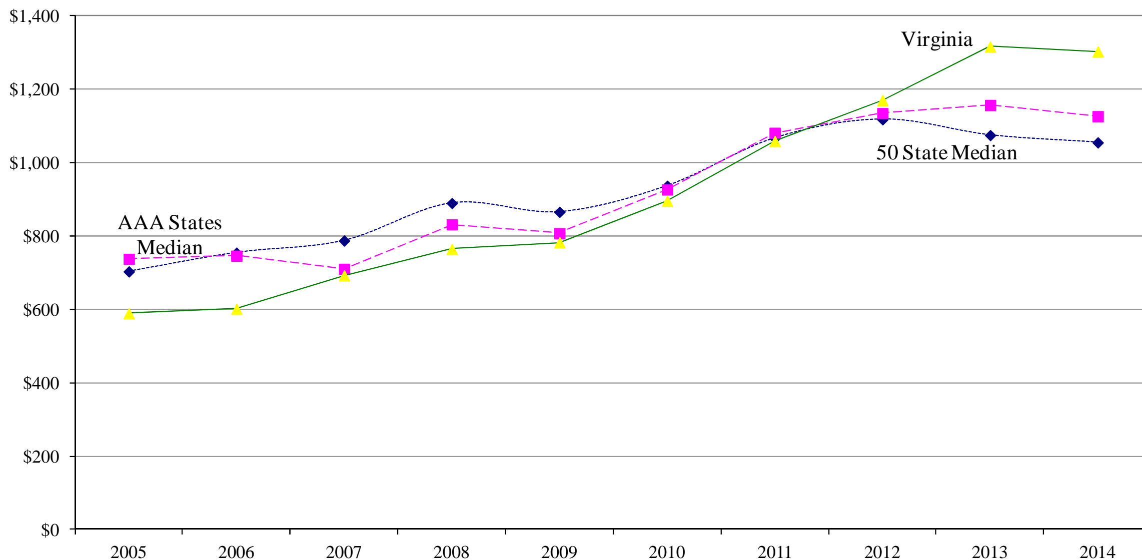
	2014 Ranking	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Delaware	8	$2,485	$2,536	$2,674	$2,676	$2,489	$2,128	$2,002	$1,998	$1,845	$1,865
Maryland	14	1,791	1,799	1,742	1,681	1,608	1,507	1,297	1,171	1,169	1,064
Alaska *	16	1,573	1,251 *	1,454 *	1,257 *	1,345 *	861 *	924 *	939 *	880 *	933 *
VIRGINIA	**19**	**1,302**	**1,315**	**1,169**	**1,058**	**895**	**782**	**764**	**692**	**601**	**589**
Utah	21	1,187	1,275	1,393	1,222	957	447	542	621	707	792
Georgia	25	1,064	1,061	1,099	1,103	1,120	984	954	916	784	803
North Carolina *	33	806	853	815	782	765	832 *	898	728	804 *	682 *
Missouri	36	668	699	741	775	780	670	675	613	496	449
Texas *	38	614	580 *	588 *	612 *	520 *	520 *	481 *	415 *	307 *	279 *
Iowa *	47	275	287	310	270	73 *	79 *	98 *	104 *	110 *	130 *
Median All States		1,054	1,074	1,117	1,066	936	865	889	787	754	703
AAA Median		1,126	1,156	1,134	1,081	926	807	831	710	746	737
AAA Average		1,177	1,166	1,199	1,144	1,055	881	864	820	770	759

** State was not triple triple A during entire 2005-2014 period.*

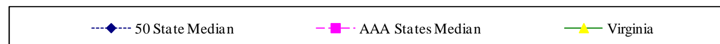
(1) Population is based on Census data from one year prior to each respective year's debt analyzed.

(2) Year refers to prior calendar year-end.

Net Tax-Supported Debt Per Capita
Virginia Versus Moody's U.S. 50-State Median and other AAA States
2005 – 2014



Source: Moody's Medians



Treasury

REPORT OF THE DEBT CAPACITY ADVISORY COMMITTEE
December 18, 2014

The following table and chart compare Virginia's net tax-supported debt as a percentage of personal income with that of other triple-A states.

AAA/Aaa/AAA STATE DEBT BURDENS FROM 2005-2014
PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt as Percent of Personal Income (1) (2)

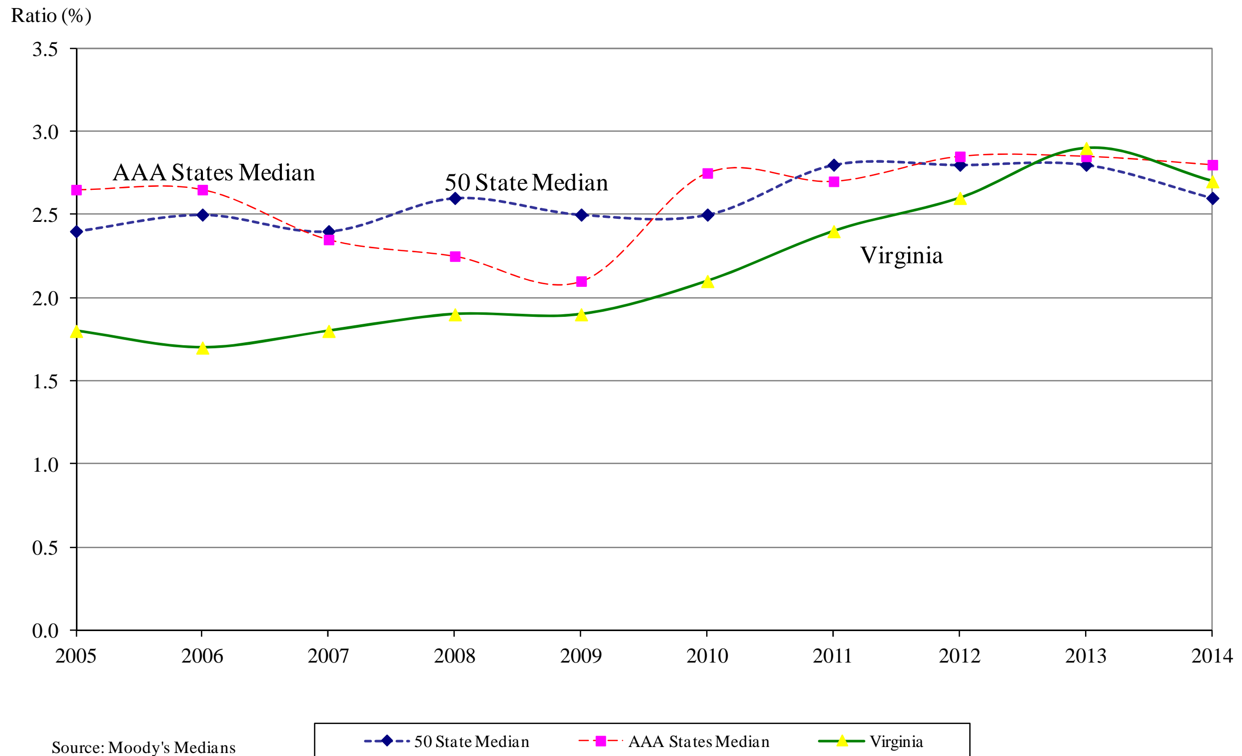
	2014 Ranking	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Delaware	8	5.7 %	6.2 %	6.8 %	6.8 %	6.2 %	5.4 %	5.2 %	5.5 %	5.3 %	5.5 %
Utah	16	3.4	3.8	4.4	3.9	3.2	1.5	1.9	2.3	2.7	3.2
Maryland	18	3.4	3.6	3.6	3.5	3.4	3.3	3.0	2.8	3.0	2.9
Alaska *	19	3.2	2.8 *	3.3 *	3.0 *	3.2 *	2.2 *	2.4 *	2.7 *	2.6 *	2.8 *
Georgia	22	2.9	3.0	3.1	3.3	3.3	3.0	3.0	3.0	2.7	2.8
VIRGINIA	**24**	**2.7**	**2.9**	**2.6**	**2.4**	**2.1**	**1.9**	**1.9**	**1.8**	**1.7**	**1.8**
North Carolina *	32	2.1	2.4	2.3	2.3	2.3	2.5 *	2.8	2.4	2.8 *	2.5 *
Missouri	36	1.7	1.8	2.0	2.2	2.2	2.0	2.1	1.9	1.6	1.5
Texas *	40	1.5	1.5 *	1.5 *	1.6 *	1.4 *	1.4 *	1.4 *	1.3 *	1.0 *	1.0 *
Iowa *	47	0.6	0.7	0.8	0.7	0.2 *	0.2 *	0.3 *	0.3 *	0.4 *	0.5 *
Median All States		2.6 %	2.8 %	2.8 %	2.8 %	2.5 %	2.5 %	2.6 %	2.4 %	2.5 %	2.4 %
AAA Median		2.8	2.9	2.9	2.7	2.8	2.1	2.3	2.4	2.7	2.7
AAA Average		2.7	2.9	3.0	3.0	2.8	2.3	2.4	2.4	2.4	2.5

** State was not triple triple A during entire 2005-2014 period.*

(1) Year refers to prior calendar year-end.

(2) Personal income is based on Census data from two years prior to each respective year's debt analyzed.

Net Tax-Supported Debt as Percentage of Personal Income
Virginia Versus Moody's U.S. 50-State Median and other AAA States
2005-2014



While these rankings are useful for comparison purposes, it is important to note that many other factors contribute to a state's overall credit rating. For example, while ratios for Delaware appear high compared to other triple-A states, a statutory requirement for a short amortization of debt mitigates the effect of the higher debt levels.

In terms of total net tax-supported debt, California remains at the top of the list with $94.5 billion outstanding followed by New York with $63.0 billion. Nebraska remains at the bottom of the list with only $22.7 million. Virginia remained twelfth this year with $10.8 billion outstanding.

Appendix A

Debt Capacity Calculation, Sensitivity Analysis and Moral Obligation Update

December 18, 2014

Debt Capacity Model – An Explanation of Model and Assumptions

Virginia's Debt Capacity Measure:

- Calculation:
  - Tax-Supported Debt Service $<$ 5% of Blended Revenues.
- Recommendation:
  - Expressed in terms of a ten-year average.

Model Characteristics:

- Covers a 10-year issuance period.
- Incorporates currently authorized but unissued debt.
- Uses Blended Revenues from Official Forecast.

Model Assumptions:

- Term and structure:
  - 20-year bonds with level debt service payments.
  - Interest rate based on the average of the last twelve quarters of The Bond Buyer 11 Bond Index for GO debt (3.84%) plus 25 basis points for 9(d) debt (4.09%).

Model Includes:

- Blended Revenues from Official Forecast:
  - General fund revenues, state revenues in Transportation Trust Fund, transfers of ABC profits and certain recurring non-general fund transfers.
- Actual and Projected Debt Service:
  - Actual debt service on all issued tax-supported debt, including capital leases, installment purchases and regional jail reimbursement agreements.
  - Debt service on authorized but unissued tax-supported debt.
    - Level debt service payments (except 9(b) General Obligation debt).
    - 9(b) General Obligation debt is amortized on a level principal basis.
    - VCBA Equipment Notes amortized over 7-year term.
    - CTB Bonds amortized over 25-year term.

Outstanding Tax-supported Debt as Determined by the DCAC includes:

- General obligation bonds (Section 9(a) and 9(b)). Self-supporting 9(c) projects are not included.
- Obligations issued by the Commonwealth Transportation Board or Virginia Port Authority that are secured by the Transportation Trust Fund.
- Obligations issued by the Virginia Public Building Authority and the Virginia College Building Authority secured, in whole or in part, by general fund appropriations.
- Obligations payable under regional jail reimbursement agreements between the Treasury Board and localities or regional jail authorities.
- Capital leases (80% of total of first year amounts in Commonwealth CAFR for both primary government and component units).

- Installment purchases (80% of total of first year amounts in Commonwealth CAFR for both primary government and component units).
- Obligations for which the debt service is derived from payments received from the Commonwealth on a capital lease.
- That portion of outstanding moral obligation debt for which the underlying debt service reserve fund has been utilized to pay all or a portion of debt service, and for which the General Assembly has appropriated funds to replenish all or a portion of such debt service reserve.

Authorized but Unissued Tax-supported Debt Included in the DCAC Model:

- Must be authorized by an Act of the General Assembly with no contingency for subsequent General Assembly approval.

Moral Obligation Debt:

- In the event a moral obligation issuer has experienced an event of a default on an underlying revenue stream and been forced to draw on the debt service reserve fund to pay debt service, the Committee shall immediately meet and review the circumstances surrounding such event and report its findings to the Governor and the General Assembly.
- In the event this section is invoked, the Committee's Report to the Governor and General Assembly shall include a Model scenario showing annual debt capacity including that portion of the moral obligation debt.
- Inclusion of the moral obligation debt in the Model is in no way intended to bind the Governor or General Assembly to make future appropriations to replenish future draws on the debt service reserve fund(s).
- The subject debt will be removed from the Model once the General Assembly has not appropriated funds to replenish the debt service reserve fund(s).

Currently Authorized Tax-Supported Debt Issuance Assumptions
December 18, 2014
(Dollars in Millions)

	9(b)	VPBA	VCBA 21st Century Equipment	VCBA 21st Century Projects	CPR Transportation	NVTD Transportation	Route 58 Transportation	VPA	Total
Authorized & Unissued as of June 30, 2014	$ -	$ 1,084.7	$ 128.4	$ 1,400.6	$ 1,487.3	$ 24.7	$ 595.7	$ 65.0	$ 4,786.4
Issued Jul 1 - Dec 31, 2014	$ -	$ 162.6	$ -	$ -	$ 275.0	$ -	$ -	$ -	$ 437.6
Assumed Issued:									
FY 2015	$ -	$ 299.3	$ -	$ 545.0	$ -	$ -	$ -	$ 65.0	$ 909.3
FY 2016	$ -	$ 213.1	$ 128.4	$ 427.2	$ 300.0	$ 24.7	$ -	$ -	$ 1,093.4
FY 2017	$ -	$ 81.8	$ -	$ 428.4	$ 284.1	$ -	$ -	$ -	$ 794.3
FY 2018	$ -	$ 13.4	$ -	$ -	$ -	$ -	$ -	$ -	$ 13.4
FY 2019	$ -	$ -	$ -	$ -	$ 122.9	$ -	$ -	$ -	$ 122.9
FY 2020	$ -	$ -	$ -	$ -	$ -	$ -	$ 400.0	$ -	$ 400.0
FY 2021	$ -	$ -	$ -	$ -	$ 355.0	$ -	$ -	$ -	$ 355.0
FY 2022	$ -	$ -	$ -	$ -	$ 125.3	$ -	$ -	$ -	$ 125.3
FY 2023	$ -	$ -	$ -	$ -	$ -	$ -	$ 195.7	$ -	$ 195.7
FY 2024	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Planned	$ -	$ 607.6	$ 128.4	$ 1,400.6	$ 1,187.3	$ 24.7	$ 595.7	$ 65.0	$ 4,009.3
Subtotal Issued & Planned	$ -	$ 770.2	$ 128.4	$ 1,400.6	$ 1,462.3	$ 24.7	$ 595.7	$ 65.0	$ 4,446.9
Authorized Debt Assumed Unissued[1]	$ -	$ 314.5	$ -	$ -	$ 25.0	$ -	$ -	$ -	$ 339.5

[1] Assumed funded from premium from bonds sold and VPBA also assumes the $300 million for the G.A. building is not issued.

DEBT CAPACITY MODEL

(Dollars in Millions)

December 18, 2014

Base Model Solution

Debt Capacity Maximum Ratio

Debt Service as a % of Revenue = 5.0%

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Fiscal Year	**Blended Revenues**	**Base Capacity to Pay Debt Service**	**Annual Payments for Debt Service on Debt Issued**	**Actual Outstanding Debt Service as a % of Revenues**	**Annual Payments for Debt Service on All Planned Debt Issuances**	**Actual & Projected Debt Service as a % of Revenues**	**Net Capacity to Pay Debt Service**	**Amount of Additional Debt that may Be Issued**	**Debt Service on Amount of Additional Debt that may Be Issued**	**Remaining Capacity to Pay Debt Service**	**Total Debt Service as a % of Revenues**
2005	14,982.20	749.11	384.50	2.57%	N/A	2.57%	364.61	N/A	N/A	364.61	2.57%
2006	16,520.10	826.01	419.01	2.54%	N/A	2.54%	407.00	N/A	N/A	407.00	2.54%
2007	17,282.60	864.13	482.33	2.79%	N/A	2.79%	381.80	N/A	N/A	381.80	2.79%
2008	17,528.90	876.45	532.95	3.04%	N/A	3.04%	343.50	**N/A**	N/A	343.50	3.04%
2009	15,680.90	784.05	587.33	3.75%	N/A	3.75%	196.72	**N/A**	N/A	196.72	3.75%
2010	16,085.70	804.29	633.45	3.94%	N/A	3.94%	170.83	**N/A**	N/A	170.83	3.94%
2011	16,751.10	837.56	693.64	4.14%	N/A	4.14%	143.92	**N/A**	N/A	143.92	4.14%
2012	17,787.10	889.36	747.02	4.20%	N/A	4.20%	142.34	**N/A**	N/A	142.34	4.20%
2013	18,626.30	931.32	820.77	4.41%	N/A	4.41%	110.55	**N/A**	N/A	110.55	4.41%
2014	18,527.90	926.40	835.53	4.51%	N/A	4.51%	90.86	**N/A**	N/A	90.86	4.51%
2015	19,217.70	960.89	897.38	4.67%	61.63	4.99%	1.87	**0.00**	0.000	1.87	4.99%
2016	19,725.40	986.27	870.86	4.41%	158.61	5.22%	(43.20)	**0.00**	0.000	(43.20)	5.22%
2017	20,252.90	1,012.65	834.53	4.12%	244.20	5.33%	(66.09)	**0.00**	0.000	(66.09)	5.33%
2018	20,971.80	1,048.59	781.22	3.73%	281.31	5.07%	(13.95)	**0.00**	0.000	(13.95)	5.07%
2019	21,729.90	1,086.50	736.17	3.39%	290.08	4.72%	60.25	**676.50**	49.205	11.05	4.95%
2020	22,541.10	1,127.06	685.77	3.04%	290.08	4.33%	151.21	**760.66**	104.532	46.68	4.79%
2021	23,393.40	1,169.67	665.64	2.85%	337.93	4.29%	166.10	**788.65**	161.894	4.21	4.98%
2022	24,270.00	1,213.50	620.15	2.56%	345.87	3.98%	247.48	**789.56**	219.323	28.16	4.88%
2023	25,334.64	1,266.73	599.00	2.36%	345.87	3.73%	321.87	**789.56**	276.751	45.11	4.82%
2024	26,446.46	1,322.32	582.49	2.20%	338.82	3.48%	401.02	**789.56**	334.180	66.84	4.75%
							10 Year Average:	$459.45	2 Yrs Excess Avg Capacity:	$918.90	
										2.0000	

[1] Blended Revenues include the actual fiscal year revenues as reported in the Official December General Fund, Commonwealth Transportation Fund and VA Health Care Fund forecasts presented in years 2005-2014, Standard General Fund December Forecasts dated December 2014 which are based on US & Virginia economic outlook incorporating GACRE recommendations, including 0.25% sales tax increment adopted in 2004 t FY 2013 and 0.375% sales tax increment beginning in FY 2014 as adopted in 2013, the Virginia Health Care Fund forecast revenues as permitted by Section 32.1-366 of the Code of Virginia, certain recurring Trans Appropriation Act, transfers from Alcoholic Beverage Control Board and certain Transportation Trust Fund revenues from the Commonwealth Transportation Fund Official December revenue forecasts dated Dece

[2] Base Capacity to Pay Debt Service equals 5% of the Blended Revenues listed in Column [1].

[3] Equals the annual payments of principal and interest for outstanding tax-supported debt as of 6/30/14, excluding 9(c) debt, Build America Bonds (BABs) interest subsidy, and Non-General Fund portion of debt servic on certain Virginia College Building Authority (VCBA) Bonds.

[4] Equals Annual Payments for Debt Service on Debt Issued as a percentage of Blended Revenues. Column [3] / Column [1].

[5] Equals the annual estimated payments of principal and interest for all currently authorized tax-supported debt planned for issuance within the next ten fiscal years. See Assumed Issuances of Currently Authorized bu Unissued Tax-Supported Debt. Also includes debt service for long-term capital leases, installment purchase obligations and regional jail reimbursements Per Treasury Board Reimbursement Agreements.

[6] Equals annual payments for debt service on debt issued and planned debt issuances, divided by Blended Revenues. (Column [3] + Column [5]) / Column [1].

[7] Equals the amount of revenue available to pay additional debt service after principal and interest on all outstanding and all planned issuances of tax-supported debt has been paid. Column [2] - Column [3] -Column

[8] Equal to annual amount of additional principal that may be issued without violating the parameters of the model.

[9] Equal to annual estimated payments of principal and interest related to the amounts of additional debt that may be issued as noted in Column [8].

[10] Equals Column [7] minus Column [9].

[11] Equals the sum of all debt service payments divided by Blended Revenues. (Column [3] + Column [5] + Column [9]) / Column [1].

DEBT CAPACITY MODEL

(Dollars in Millions)

December 18, 2014

Base Model Solution - Average

Debt Capacity Maximum Ratio

Debt Service as a % of Revenue = **5.0%**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Fiscal Year	**Blended Revenues**	**Base Capacity to Pay Debt Service**	**Annual Payments for Debt Service on Debt Issued**	**Actual Outstanding Debt Service as a % of Revenues**	**Annual Payments for Debt Service on All Planned Debt Issuances**	**Actual & Projected Debt Service as a % of Revenues**	**Net Capacity to Pay Debt Service**	**Amount of Additional Debt that may Be Issued**	**Debt Service on Amount of Additional Debt that may Be Issued**	**Remaining Capacity to Pay Debt Service**	**Total Debt Service as a % of Revenues**
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2007	17,282.60	864.13	482.33	2.79%	N/A	2.79%	381.80	N/A	N/A	381.80	2.79%
2008	17,528.90	876.45	532.95	3.04%	N/A	3.04%	343.50	**N/A**	N/A	343.50	3.04%
2009	15,680.90	784.05	587.33	3.75%	N/A	3.75%	196.72	**N/A**	N/A	196.72	3.75%
2010	16,085.70	804.29	633.45	3.94%	N/A	3.94%	170.83	**N/A**	N/A	170.83	3.94%
2011	16,751.10	837.56	693.64	4.14%	N/A	4.14%	143.92	**N/A**	N/A	143.92	4.14%
2012	17,787.10	889.36	747.02	4.20%	N/A	4.20%	142.34	**N/A**	N/A	142.34	4.20%
2013	18,626.30	931.32	820.77	4.41%	N/A	4.41%	110.55	**N/A**	N/A	110.55	4.41%
2014	18,527.90	926.40	835.53	4.51%	N/A	4.51%	90.86	**N/A**	N/A	90.86	4.51%
2015	19,217.70	960.89	897.38	4.67%	61.63	4.99%	1.87	**0.00**	0.000	1.87	4.99%
2016	19,725.40	986.27	870.86	4.41%	158.61	5.22%	(43.20)	**459.45**	33.418	(76.61)	5.39%
2017	20,252.90	1,012.65	834.53	4.12%	244.20	5.33%	(66.09)	**459.45**	66.836	(132.92)	5.66%
2018	20,971.80	1,048.59	781.22	3.73%	281.31	5.07%	(13.95)	**459.45**	100.254	(114.20)	5.54%
2019	21,729.90	1,086.50	736.17	3.39%	290.08	4.72%	60.25	**459.45**	133.672	(73.42)	5.34%
2020	22,541.10	1,127.06	685.77	3.04%	290.08	4.33%	151.21	**459.45**	167.090	(15.88)	5.07%
2021	23,393.40	1,169.67	665.64	2.85%	337.93	4.29%	166.10	**459.45**	200.508	(34.40)	5.15%
2022	24,270.00	1,213.50	620.15	2.56%	345.87	3.98%	247.48	**459.45**	233.926	13.56	4.94%
2023	25,334.64	1,266.73	599.00	2.36%	345.87	3.73%	321.87	**459.45**	267.344	54.52	4.78%
2024	26,446.46	1,322.32	582.49	2.20%	338.82	3.48%	401.02	**459.45**	300.762	100.25	4.62%

10 Year Average:	$459.45	2 Yrs Excess Avg Capacity:	$1,378.35
			3.0000

Debt Capacity Model – An Explanation of Results Page

Column Descriptions:

(1) Blended Revenues include all general fund revenues, ABC profits transferred to the general fund, state tax revenues in the Transportation Trust Fund, the relevant portion of the sales tax and certain recurring non-general fund transfers.

(2) Base Capacity to Pay Debt Service is calculated as 5% of Blended Revenues.
(Column 2 = Column 1 x .05)

(3) Annual Payments for Debt Service on Debt Issued is actual debt service on all tax-supported debt outstanding at the end of the most recent fiscal year (6/30/14), excluding (i) 9(c) debt, (ii) the subsidized portion of interest on Build America Bonds and (iii) non-general fund portion of debt service paid on certain VCBA bonds.

(4) Actual Outstanding Debt Service as a % of Revenues is the percentage of Blended Revenues required for payments on currently issued tax-supported debt included in the model.
(Column 4 = Column 3 ÷ Column 1)

(5) Annual Payments for Debt Service on All Planned Debt Issuances is the estimated amount of debt service for currently authorized and unissued tax-supported debt to be issued within the ten-year period.

(6) Actual and Planned Debt Service as a % of Revenues is the sum of Annual Payments for Debt Service on Debt Issued and Annual Payments for Debt Service on All Planned Debt Issuances as a percentage of Blended Revenues.
(Column 6 = (Column 3 + Column 5) ÷ Column 1)

(7) Net Capacity to Pay Debt Service is the capacity that remains to pay any additional debt service related to subsequent authorized and issued debt and is the Base Capacity to Pay Debt Service less Annual Payments for Debt Service on Debt Issued and less Annual Payments for Debt Service on All Planned Debt Issuances.
(Column 7 = Column 2 – Column 3 – Column 5)

(8) Amount of Additional Debt that May Be Issued is the amount of additional tax-supported debt (above and beyond that which is currently authorized but unissued) that may be issued in any given year without exceeding the Base Capacity to pay debt service.

(9) Debt Service on the Amount of Additional Debt that May Be Issued is the estimated amount of debt service for the Amount of Additional Debt that May be Issued, given the amount is authorized.

(10) Remaining Capacity to Pay Debt Service is the residual amount derived from the Net Capacity to Pay Debt Service less Debt Service on the Amount of Additional Debt that May be Issued.
(Column 10 = Column 7 – Column 9)

(11) Total Debt Service as a % of Revenues is the percentage of Blended Revenues used for the sum of Annual Payments for Debt Service on Debt Issued, Annual Payments for Debt Service on All Planned Debt Issuances and Debt Service on Amount of Additional Debt that May be Issued.
(Column 11 = (Column 3 + Column 5 + Column 9) ÷ Column 1)

Model Solution:

- Model solves for the additional annual capacity above and beyond amounts already authorized and assumed issued over the next ten fiscal years at the base capacity to pay debt service (5%), while maintaining two additional years of capacity at the end of the ten-year period.
- This solution results in an average annual capacity of $459.45 million.
- Accordingly, the Committee finds the additional tax supported debt that may prudently be authorized in each 2015 and 2016 is $459.45 million.

DEBT CAPACITY MODEL REVENUE DATA

December 2014

(Dollars In Millions)

Fiscal Year	General Fund	Transportation Trust Fund [4]	General Fund Growth	Transportation Trust Fund Growth	Virginia Health Care Fund	Total Blended Revenue [9]	Blended Revenue Growth Rate [10]
Actual 2002	11,071.60 (1)	749.33 (1)	-5.24% (1)	-0.53% (1)	N/A (1)	11,820.93	-4.95%
Actual 2003	11,256.40 (1)	745.00 (1)	1.67% (1)	-0.58% (1)	N/A (1)	12,001.40	1.53%
Actual 2004	12,342.50 (1)	799.70 (1)	9.65% (1)	7.34% (1)	N/A (1)	13,142.20	9.51%
Actual 2005	14,135.70 (1)	846.50 (1)	14.53% (1)	5.85% (1)	N/A (1)	14,982.20	14.00%
Actual 2006	15,318.30 (1)	912.90 (1)	8.37% (1)	7.84% (1)	288.90 (1)	16,520.10	10.26%
Actual 2007	16,028.30 (1)	969.00 (1)	4.63% (1)	6.15% (1)	285.30 (1)	17,282.60	4.62%
Actual 2008	16,261.30 (1)	968.70 (1)	1.45% (1)	-0.03% (1)	298.90 (1)	17,528.90	1.43%
Actual 2009	14,359.20 (1)	1,014.20 (1)	-11.70% (1)	4.70% (1)	307.50 (1)	15,680.90	-10.54%
Actual 2010	14,786.70 (1)	1,006.20 (1)	2.98% (1)	-0.79% (1)	292.80 (1)	16,085.70	2.58%
Actual 2011	15,452.30 (1)	1,015.40 (1)	4.50% (1)	0.91% (1)	283.40 (1)	16,751.10	4.14%
Actual 2012	16,348.00 (1)	1,060.20 (1)	5.80% (1)	4.41% (1)	378.90 (1)	17,787.10	6.18%
Actual 2013	17,109.20 (1)	1,083.60 (1)	4.66% (1)	2.21% (1)	433.50 (1)	18,626.30	4.72%
Actual 2014	16,949.10 (1)	1,189.00 (1)	-0.94% (1)	9.73% (1)	389.80 (1)	18,527.90	-0.53%
Forecasted for 2015	17,560.90 (2)	1,303.60 (5)	3.61% (2)	9.64% (5)	353.20 (7)	19,217.70	3.72%
Forecasted for 2016	18,023.40 (2)	1,360.60 (5)	2.63% (2)	4.37% (5)	341.40 (7)	19,725.40	2.64%
Forecasted for 2017	18,514.20 (2)	1,396.80 (5)	2.72% (2)	2.66% (5)	341.90 (7)	20,252.90	2.67%
Forecasted for 2018	19,188.40 (2)	1,441.00 (5)	3.64% (2)	3.16% (5)	342.40 (7)	20,971.80	3.55%
Forecasted for 2019	19,898.20 (2)	1,488.70 (5)	3.70% (2)	3.31% (5)	343.00 (7)	21,729.90	3.61%
Forecasted for 2020	20,659.10 (2)	1,538.50 (5)	3.82% (2)	3.35% (5)	343.50 (7)	22,541.10	3.73%
Forecasted for 2021	21,468.50 (2)	1,580.90 (5)	3.92% (2)	2.76% (5)	344.00 (7)	23,393.40	3.78%
Forecasted for 2022	22,304.30 (2)	1,621.10 (5)	3.89% (2)	2.54% (5)	344.60 (7)	24,270.00	3.75%
Forecasted for 2023	23,304.80 (3)	1,669.73 (6)	4.49% (3)	3.00% (6)	360.11 (8)	25,334.64	4.39%
Forecasted for 2024	24,350.32 (3)	1,719.82 (6)	4.49% (3)	3.00% (6)	376.31 (8)	26,446.46	4.39%

(1) Department of Taxation.
(2) December General Fund Forecast for FY 2015-2022, including A.B.C. Profits, 0.375% sales tax (enacted 2013), and certain recurring Transfers per the Appropriation Act.
(3) Based on flat growth rate of 4.50% for General Fund Revenues and Transfers, A.B.C. Profits excluded. A.B.C. Profits held flat at $71 million, per Department of Taxation.
(4) Does not include Highway Maintenance and Operating Fund, Federal Grants and Contracts or Toll Revenues.
(5) December Commonwealth Transportation Fund Forecast for FY 2015-2022, includes only Transportation Trust Fund Revenues.
(6) Based on flat growth rate of 3.00% for years 2023-2024, per Department of Taxation.
(7) December Virginia Health Care Fund Forecast for FY 2015-2022.
(8) Based on flat growth rate of 4.50% for Virginia Health Care Fund Revenues, per Department of Taxation.
(9) Total Blended Revenue = GF + TTF + Virginia Health Care Fund.
(10) Blended Revenue Growth Rate = (Current FY Total Blended Revenue / Prior FY Total Blended Revenue) - 1.

Debt Capacity Model - Sensitivity Analysis

2-Year Reserve Excess Capacity Sensitivity

- The Base Model solution provides for average debt capacity of $459.45 million over the model period, with two years of average capacity, beyond the 10-year model period.
  - If the Model solution is altered to reduce the two years of excess capacity to one year of excess capacity, the resulting debt capacity is $501.22 million.
  - If the Model solution is altered to reduce the two years of excess capacity beyond the model period to no excess capacity, the resulting average debt capacity is $551.34 million.

Revenue Sensitivity

- If the Model solution is altered to increase or decrease Blended Revenues, the following incremental average debt capacity changes occur:
  - Assuming a change of $100 million in each and every year, the incremental change is $5.73 million.
  - Assuming a 1% change of revenues in each and every year, the incremental change is $15.15 million.

Interest Rate Sensitivity

- If the Model solution is altered to change interest rates, the following changes to average debt capacity occur:
  - Add 100 basis points to base rate, and average capacity decreases to $407.42 million.
  - Subtract 100 basis points from base rate, and average capacity increases to $518.66 million.

Debt of the Commonwealth
(Dollars in Thousands)

	As of June 30, 2014	As of June 30, 2013
Tax-Supported Debt		
9(b) General Obligation [1]	$ 706,192	$ 752,493
9(c) General Obligation - Higher Education [2]	925,086	877,858
9(c) General Obligation - Transportation [2]	19,632	21,961
9(c) General Obligation - Parking Facilities [2]	17,045	17,538
Commonwealth Transportation Board	2,373,382	2,495,312
Virginia Public Building Authority	2,374,835	2,534,347
Virginia Port Authority	222,044	228,619
Virginia College Building Authority - 21st Century & Equip	3,286,119	2,725,259
Innovative & Entrepreneurship Investment Authority [3]	-	1,220
Virginia Biotechnology Research Park Authority	34,355	35,284
Transportation Notes Payable	-	8,000
Capital Leases	143,105	157,466
Installment Purchases	190,462	192,682
Regional Jail Reimbursement Agreements	-	837
Virginia Aviation Board	529	764
Economic Development Authority Obligations [4]	57,621	77,472
Subtotal Tax Supported Debt	$ 10,350,407	$ 10,127,112
Other Tax-Supported Debt		
Compensated Absences [2]	$ 601,757	$ 582,774
Pension Liability [2]	3,181,441	2,799,523
OPEB Liability [2]	1,270,479	1,076,157
Tax Refund Note [2]	-	20,319
Pollution Remediation Liability [2]	13,186	3,494
Other Liabilities [2]	36,632	29,606
Subtotal Tax Supported Debt Not Included in Capacity Model	$ 5,103,495	$ 4,511,873
Total Tax-Supported Debt	$ 15,453,902	$ 14,638,985

Source: Department of the Treasury and Department of Accounts

[1] Voter approved

[2] Not Included in Debt Capacity Model

[3] Formally called the Innovative Technology Authority

[4] Fairfax County Economic Development Authority Joint Venture with VDOT for Camp 30 Project

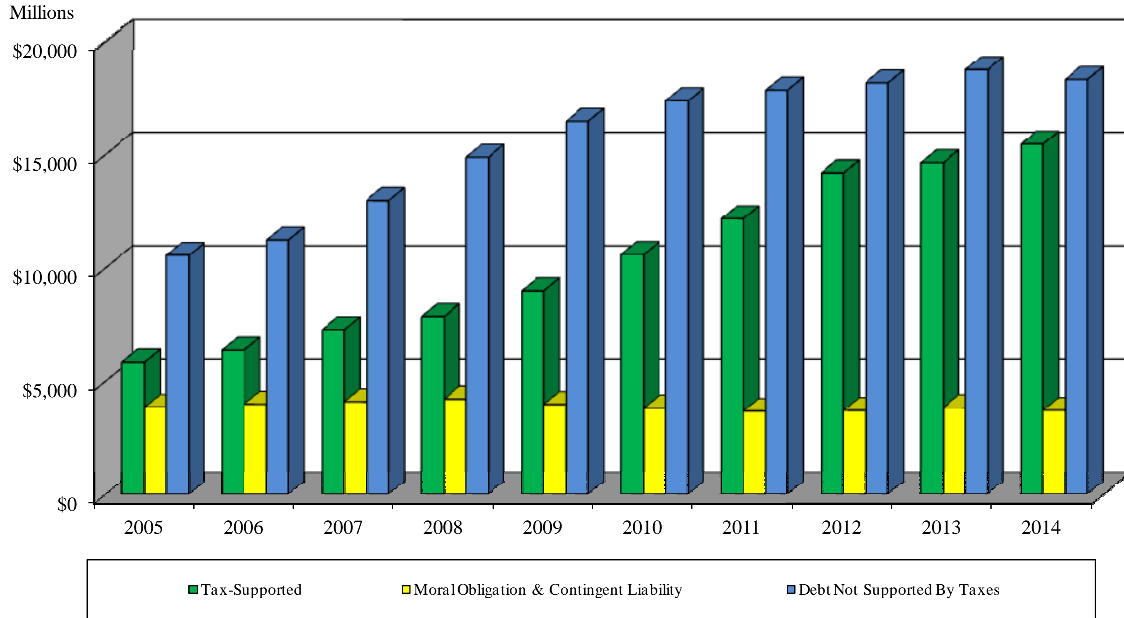
Debt of the Commonwealth
(Dollars in Thousands)

	As of June 30, 2014	As of June 30, 2013
Debt Not Supported by Taxes [1]		
Moral Obligation / Contingent Liability Debt		
Virginia Resources Authority	$ 831,165	$ 836,656
Virginia Public School Authority - 1997 Resolution	2,706,460	2,831,405
Virginia Public School Authority - Equipment Technology Notes	174,975	165,720
Total Moral Obligation/Contingent Liability Debt	$ 3,712,600	$ 3,833,781
Other Debt Not Supported By Taxes		
9(d) Higher Education	$ 1,826,602	$ 1,538,395
Virginia College Building Authority - Pooled Bond Program	1,759,970	1,773,190
Virginia Public School Authority - Stand Alone Program	290,577	244,527
Virginia Public School Authority - School Tax Credit Bond Program	353,400	353,400
Virginia Housing Development Authority	4,931,982	5,742,689
Virginia Port Authority	272,831	276,816
Hampton Roads Sanitation District	766,353	790,503
Virginia Resources Authority	2,536,711	2,582,923
Federal Highway Reimbursement Anticipation Notes	60,905	89,836
Grant Anticipation Notes (GARVEES)	746,812	473,733
Route 460 Funding Corporation of Virginia	317,305	314,662
Notes Payable	132,093	240,271
Other Long-Term Debt	252,729	285,813
Foundations	1,669,241	1,583,178
Pension Liability	57,400	48,798
OPEB Liability	18,709	15,688
Capital Lease Obligations	6,072	6,453
Compensated Absences	10,102	9,727
Tuition Benefits Payable	2,140,430	2,189,079
Lottery Prizes Payable	152,693	172,474
Total Other Debt Not Supported By Taxes	$ 18,302,917	$ 18,732,155
Grand Total of Tax Supported Debt and Debt Not Supported By Taxes	**$ 37,469,419**	**$ 37,204,921**

Source: Department of the Treasury and Department of Accounts

[1] Not Included In Debt Capacity Model

Outstanding Commonwealth Debt
Fiscal Years 2005-2014



Tax-Supported Debt Issued Fiscal Year 2015
Through December 31, 2014

Issuer	Date Issued	Par Amount
Virginia Public Building Authority, Public Facilities Revenue and Revenue Refunding Bonds, Series 2014A, Series 2014B (Taxable), and Series 2014C	September 17, 2014	$461,000,000
Commonwealth Transportation Board, Transportation Capital Projects Revenue Bonds, Series 2014	December 3, 2014	$274,980,000

Moral Obligation and Contingent Liability Debt

Moral Obligation Debt

Moral obligation debt refers to a bond issue structure originally created in the 1960s and utilized primarily by state housing finance agencies or state-administered municipal bond banks as additional credit enhancement for revenue bond issues. A government's moral obligation pledge provides a deficiency make-up for bondholders should underlying project revenues prove insufficient. The mechanics involve funding a debt service reserve fund when the bonds are issued. If a revenue deficiency exists, reserve fund monies are used to pay bondholders. The issuer then informs the legislative body and requests that it replenish the reserve fund before subsequent debt service is due. The legislative body "may", but is not legally required to, replenish the reserve fund. Rating agencies do not include moral obligation debt in tax-supported debt ratios as long as these bonds are self-supporting.

The Virginia Resources Authority (VRA) is the Commonwealth's only remaining moral obligation debt issuer. The VRA issues moral obligation bonds under its financing programs to provide low-cost financing to localities for water, wastewater, public safety, transportation, and other General Assembly authorized project categories. Due to increased demand for VRA's financing programs, the 2009 General Assembly approved an increase to VRA's moral obligation debt limit from $900 million to $1.5 billion.

Below are the statutory caps and outstanding amounts (in thousands):

Issuer	Statutory Cap	Outstanding at June 30, 2014	Available Authorization
Virginia Resources Authority	$1,500,000	$831,165	$668,835
Virginia Housing Development Authority	$1,500,000	$0	$1,500,000
Virginia Public School Authority	$800,000	$0	$800,000
Total	$3,800,000	$831,165	$2,968,835

Alternative financing programs were initiated by the Virginia Housing Development Authority and the Virginia Public School Authority. Neither of these entities expect to issue additional moral obligation debt.

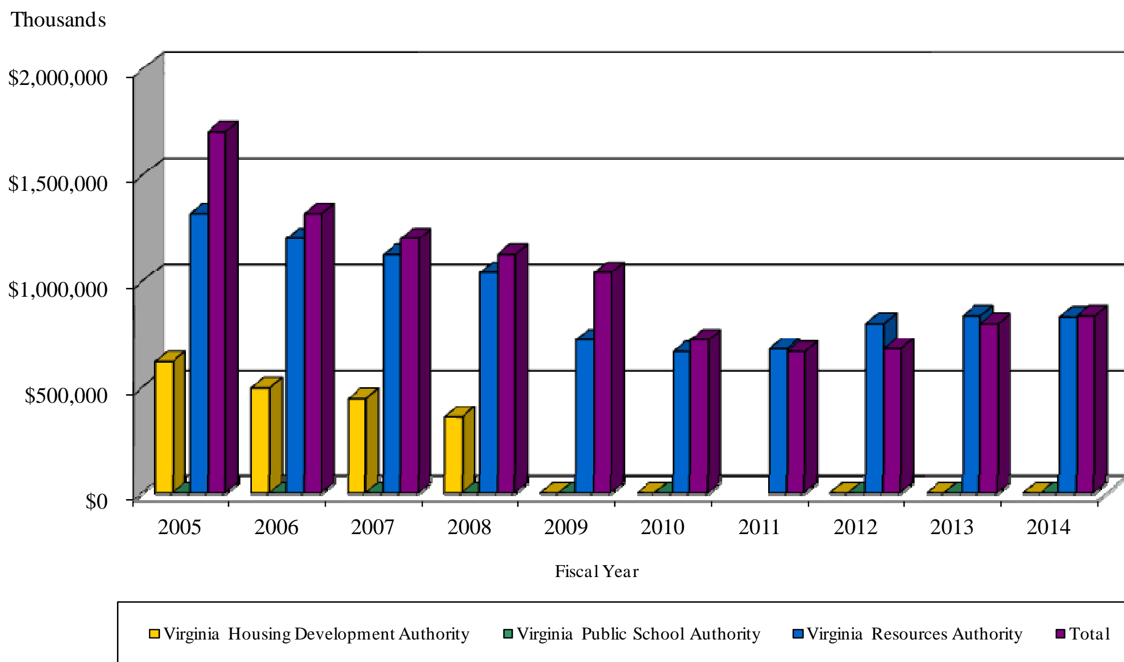
Moral Obligation Debt Sensitivity

A sensitivity analysis was completed for moral obligation debt. The analysis demonstrates the impact on tax-supported debt capacity as a result of the conversion of moral obligation debt to tax-supported debt. The sensitivity analysis is prepared using a worst-case scenario and shows the impact of the conversion of all moral obligation debt. However, conversion would only occur if the General Assembly appropriated funds to replenish a debt service reserve fund shortfall upon the request by a moral obligation issuer. Further, if any such debt were ever converted, it would be only

the amount necessary to cure the default of an underlying revenue stream (e.g., a locality participating in a pooled bond issue).

If the Model solution is altered to assume the conversion of all outstanding moral obligation debt as of June 30, 2014 to tax-supported debt, the resulting average debt capacity is $390.19 million.

Outstanding Moral Obligation Debt
Fiscal Years 2005-2014



Contingent or Limited Liability Debt

The Virginia Public School Authority (VPSA) under its 1997 Resolution, is the only issuer of non-tax-supported debt that utilizes a sum sufficient appropriation (SSA) as an additional credit enhancement. This represents a contingent liability for the Commonwealth. The Virginia Public School Authority had $2.71 billion of 1997 Resolution bonds outstanding as of June 30, 2014.

The SSA was codified during the 2001 General Assembly session (§22.1-167.3, Code of Virginia) to authorize the use of SSA for certain revenue notes issued by the Virginia Public School Authority under its Educational Technology Program. Notes outstanding as of June 30, 2014 equal $175.0 million.

Sum Sufficient Appropriation Sensitivity

A sensitivity analysis was completed for the VPSA's SSA debt. The analysis demonstrates the impact on tax-supported debt capacity as a result of the conversion of SSA debt to tax-supported debt.

If the Model solution is altered to assume the conversion of the VPSA's total outstanding debt secured by a sum sufficient appropriation as of June 30, 2014 to tax-supported debt, the resulting average debt capacity is $219.33 million.