

COMMONWEALTH OF VIRGINIA

Department of the Treasury

DAVID L. RICHARDSON TREASURER OF VIRGINIA P. O. BOX 1879 RICHMOND, VA 23218

December 19, 2024

Ms. Laura Wilborn Division of Legislative Automated Systems Old City Hall 1001 E. Broad St., Ste. 210 Richmond, Virginia 23219 Via E-mail

Dear Ms. Wilborn:

In accordance with the provisions of Section 2.2-2713 of the Code of Virginia, I hereby submit the annual report for the Debt Capacity Advisory Committee. The attached report provides the Governor and the General Assembly with a non-binding estimate of the maximum amount of new tax-supported debt that prudently may be authorized for fiscal years 2025 and 2026. In addition, the annual report reviews the amount and condition of obligations secured by a moral obligation and contingent liability pledge.

Sincerely.

Richard F. Rhodemyre IV Public Finance Manager

Enclosure



COMMONWEALTH of VIRGINIA

Stephen Cummings Secretary of Finance P.O. Box 1475 Richmond, Virginia 23218

December 19, 2024

The Honorable Glenn Youngkin Governor of Virginia Patrick Henry Building, 3rd Floor Richmond, Virginia 23219

The Honorable Susan Clarke Schaar Clerk of the Senate Senate of Virginia State Capitol, 1000 Bank St. Richmond, Virginia 23219

The Honorable G. Paul Nardo Clerk of the House of Delegates Virginia House of Delegates State Capitol, 1000 Bank St. Richmond, Virginia 23219

Dear Governor Youngkin, 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 annually review 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 2024.

The Honorable Glenn Youngkin The Honorable Susan Clarke Schaar The Honorable G. Paul Nardo December 19, 2024 Page 2 of 3

Based on the debt capacity model, the Committee estimates that up to \$1.31 billion in additional debt could be authorized and issued in each of fiscal years 2025 and 2026. This is the average amount that will allow the projection of debt service as a percentage of blended revenues to remain at or below five-percent during the 10-year model horizon. 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 2024 DCAC Model was calculated using the December 2024 Revenue Forecast produced by the Department of Taxation and a Transportation Trust Fund Revenue Forecast produced by the Department of Transportation based on Taxation's December 2024 Commonwealth Transportation Fund Revenue Forecast. As such, the proposed tax policy changes associated with the Governor's biennial budget are accounted for in the Model beginning in fiscal year 2025. Given that the majority of the proposed tax policy changes included in the Governor's biennial budget would result in reductions in revenues, should the proposed tax policy changes not be passed by the Virginia General Assembly, the Commonwealth's debt capacity would increase.

The DCAC Model has historically used an average of the most recent 12 quarters of Bond Buyer 11 Index yields for AA+ rated GO municipal bonds to estimate the model interest rate for the future issuances of GO bonds, with a 25 basis-point spread added to model future appropriation secured bond issuances. As a result, the standard model rate still includes one quarter of historically low yields from the first quarter of 2022 and has not yet fully caught up with the dramatic rate increases that have occurred over the last three years. As of December 5, 2024, the standard model rate for GO bonds was 3.46% with a model rate for appropriation supported bonds of 3.71%. Both rates lag current market rates. To address this issue, Treasury staff consulted with financial advisors and the Office of the Secretary of Finance to determine a more appropriate rate to use in the model. Based on these discussions, current market considerations, and interest rate uncertainty, a model rate of 4.00% for GO bonds and 4.25% for appropriation supported bonds was used in lieu of the standard model rate. Given the Commonwealth does not currently have any authorization to issue 9(b) GO bonds, all of the long-term future debt service currently included in the model is projected at the 4.25% appropriation supported interest rate.

The Committee acknowledged that the Commonwealth entered into fiscal year 2025 in a position of financial strength, with another large surplus in fiscal year 2024 and reserve fund balances growing to all-time highs. However, the Committee also acknowledged that there are a number of potential economic headwinds, regionally, nationally, and globally, that could lead to future instability, and that it is more important than ever that any new authorizations of tax-supported debt be planned carefully with the risk of economic downturns in mind. To the extent that there are material revenue or interest rate changes compared to the forecast and the assumed model rate of 4.25%, the Commonwealth's debt capacity could rise or fall in line with these changes. The 2024 DCAC Report includes additional sensitivity analyses in the Appendix that address these scenarios.

The Honorable Glenn Youngkin The Honorable Susan Clarke Schaar The Honorable G. Paul Nardo December 19, 2024 Page 3 of 3

The Committee also discussed Virginia's increasing debt levels over the last 10 years. In addition to the Commonwealth's existing debt, there is currently \$2.6 billion in previously authorized but yet to be issued tax-supported debt that is anticipated to be issued over the next four to five fiscal years. While this authorized but unissued debt is already factored into the debt capacity model, recent increases in construction costs and higher interest rates could result in the need for additional funding sources for previously authorized capital projects. These existing project authorizations should be taken into account when planning for any additional tax-supported debt authorizations during the budget process. However, the Committee did recognize the Commonwealth's prior supplemental cash funding for a number of existing capital projects.

The attached report provides the Governor and the General Assembly with a basis to assess the impact of future 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. In addition, it contains information on the rating agencies' assessment of the Commonwealth and how we compare to our other highly rated peer states. As such, the report encourages the continued use of fiscally prudent practices, as failure to follow these practices could result in a negative bond rating action.

Sincerely,

Stephen Cummings, Chairman Debt Capacity Advisory Committee

Sylm E. Com

Attachment

CC: Debt Capacity Advisory Committee Members

Commonwealth of Virginia



Debt Capacity Advisory Committee

Report to the Governor and the General Assembly

December 19, 2024

Debt Capacity Advisory Committee Members

The Honorable Stephen Cummings – Chairman Secretary of Finance

Scott Adams State Comptroller

Harold Greer Director, Joint Legislative Audit & Review Commission

Staci Henshaw Auditor of Public Accounts

Harold Hughey Citizen Member

April Kees Staff Director, Senate Finance & Appropriations Committee

Michael Maul
Director of the Department of Planning & Budget

Anne Oman Staff Director, House Appropriations Committee

David Richardson State Treasurer

Ronald Tillett Citizen Member

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 (the "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 director of the Senate Finance and Appropriations Committee, the staff director of the House Appropriations Committee, 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: economy, financial management, governance, budgetary and operating performance, and debt and pension liabilities. The Commonwealth's AAA bond rating, which it has held since 1938, facilitates access to the capital markets at the lowest borrowing cost. However, the ability to take on additional debt while maintaining the AAA 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 will 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 in 1991 was five percent - that is, 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, certain recurring non-general fund transfers including ABC profits, state revenues in the Transportation Trust Fund ("TTF"), and Virginia Health Care Fund revenues. Beginning with the 2010 Report, Blended Revenues also



include the relevant portion of sales tax and certain recurring non-general fund Appropriation Act transfers.

Revenue projections and growth rate assumptions are based on the Official December Revenue Forecast as provided by the Department of Taxation, and as such, include the proposed tax policy changes from the Governor's introduced biennial budget. Therefore, any modifications by the General Assembly to the proposed tax policies would alter revenue projections and impact debt capacity.

Tax-supported debt obligations in the model include general obligation ("GO") bonds (excluding those GO 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, and certain portions of long-term leases, long-term subscription-based information technology arrangements ("SBITAs") and installment purchases that are paid from general fund appropriations.

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.

The DCAC Model has historically used an average of the most recent 12 quarters of Bond Buyer 11 Index yields for AA+ rated GO municipal bonds to estimate the model interest rate for the future issuances of GO bonds, with a 25 basis-point spread added to model future appropriation secured bond issuances. As a result, the Base Model Rate still includes one quarter of historically low yields from the first quarter of 2022. As of December 5, 2024, the Base Model Rate for GO bonds was 3.46% with a Base Model Rate for appropriation supported bonds of 3.71%. Both rates continue to lag current market rates. To address this issue, Treasury staff consulted with financial advisors and the Office of the Secretary of Finance to determine a conservative rate to use in the model. Based on these discussions, current market considerations, and uncertainty surrounding Federal policy changes under the incoming administration, a model rate of 4.00% for GO bonds and 4.25% for appropriation supported bonds was used in lieu of the Base Model Rates. Given the Commonwealth does not currently have any authorization to issue 9(b) GO bonds, all of the longterm future debt service currently included in the model is projected at the 4.25% appropriation supported interest rate, which will be referred to hereafter as the Recommended Modified Model Rate. Interest rates have been at or below 4.25% for recent comparable appropriation supported bond issuances and current market outlooks project the potential for two to three additional interest rate cuts by the Federal Reserve Bank (the "Fed") in 2025, so the Recommended Modified Model Rate is conservative.



Potential Influencing Factors for Virginia's Fiscal Position

Fiscal year 2024 was another strong year financially for the Commonwealth. As is typical for the Commonwealth, individual income taxes accounted for more than two-thirds of the total general fund revenues at 69.0%, while sales and use tax accounted for 16.0% and corporate taxes accounted for 6.0%. Individual income tax revenues grew by 7.0% in fiscal year 2024, exceeding the official December 2023 forecast of 0.4% growth by more than \$1.2 billion. Sales and use tax revenues declined by 0.5% in fiscal year 2024 but were still well ahead of the official December 2023 forecast which called for a 4.6% decline. Corporate tax revenues fell 6.1% in fiscal year 2024, falling well short of the estimated 9.0% growth rate from the official December 2023 forecast. Overall, total general fund revenues (excluding transfers) grew 5.5% in fiscal year 2024 to \$29.4 billion, well ahead of the official December 2023 revenue forecast of \$28.3 billion, which called for a more modest 1.3% growth in general fund revenues for the year. As a result of the excess revenues, the Commonwealth once again made sizeable contributions to its operating reserves, resulting in total reserves of approximately \$4.7 billion as of fiscal year-end 2024, totaling nearly 16.0% of general fund revenues. In addition, the Commonwealth was able to earmark nearly \$3.0 billion in unreserved surplus cash to finance increased social spending on early childhood education and community and behavioral health services within the adopted 2025-2026 biennial budget bill. The Commonwealth's financial success has continued into fiscal year 2025. Through October of fiscal year 2025, general fund revenues are up by 8.6%, or \$731.8 million, as compared to this time in fiscal year 2024, driven mostly by growth in net individual income taxes of 14.2%. Similarly, the 2025 year-to-date general fund revenues are 4.6% ahead of the official fiscal year 2025 forecast included in the biennial budget bill. Despite Virginia's continued financial success, there are still a number of regional, national, and global headwinds and risks that could impact the Commonwealth's fiscal position going forward.

Inflation and interest rates continued to dominate the economic news cycle over the last year. After more than a year of aggressive interest rate increases by the Fed brought overnight borrowing rates to a high of 5.25%-5.50% in July of 2023, where they remained for more than a year, the Fed implemented rate decreases of 50 bps in September of 2024, 25 bps in November of 2024, and 25 bps in December of 2024, bringing the overnight borrowing rate down to 4.25-4.50%. U.S consumer price index ("CPI") inflation peaked at 9.1% in June of 2022 but has since returned to much lower levels as a result of the Fed's monetary tightening. Average U.S. CPI inflation for 2023 was down to 4.1% and as of November of 2024 had dropped to 2.7%, beginning to near the Fed's stated goal of 2.0% annual CPI inflation. The Fed's monetary policy also has a direct impact on underlying bond yields and ultimately the Commonwealth's borrowing costs. Bond yields increased dramatically during calendar years 2022 and 2023 as a result of the Fed's aggressive rate increases. However, bond yields have not moved in step with the overnight borrowing rate decreases in recent months. Despite the Fed decreasing overnight borrowing rates by 100 bps since September of 2024, the Bond Buyer 11 Index yield rose during this same time period, increasing from 3.8% in early to September of 2024 to a peak of 4.2% in early November of 2024. As of December 12, 2024, the Bond Buyer 11 Index yield had fallen back to approximately 3.9%, but remained slightly higher than where yields stood prior to the Fed's rate decreases. It is currently expected that the Fed will further cut overnight borrowing rates two times in calendar year 2025,



but the Fed's stance on rate cuts turned notably hawkish in December of 2024, and the timing and extent of any future cuts remains to be determined. Any changes in the underlying economic data or inflation rates could lead to reversals in the Fed's anticipated future actions and could impact the Commonwealth's borrowing rates.

Fears of a looming recession as a result of the Fed's monetary tightening also appear to have subsided as U.S. labor markets remain tight and consumer spending remains strong in the face of the higher rate environment. As the U.S economy wraps up 2024 and begins to head towards 2025, inflation remains low and it appears as if the Fed has succeeded in meeting its goal of a soft landing. Real U.S. gross domestic product ("GDP") increased 3.1% in fiscal year 2024, well ahead of the forecasted real GDP growth rate of 1.5%. U.S. job growth was also unexpectedly robust throughout fiscal year 2024 but has begun to cool in recent months. The national unemployment rate remained historically low at 3.8% at fiscal year-end 2024, although this was up slightly from 3.5% at fiscal year-end 2023, and had risen further to 4.2% in November of 2024. Consumer spending remained strong in fiscal year 2024. Consumer sentiment as measured by the University of Michigan Consumer Sentiment Index was up 6.2% in December of 2024 as compared to December of 2023. However, savings rates are beginning to decline and credit delinquencies are rising as a growing number of households report living paycheck to paycheck. Much of the economic growth in fiscal year 2024 was driven by higher earners while lower income individuals have begun to burn through savings and increase their consumer debt burdens. Thus, the fear of a potential recession still looms, particularly given the uncertainties surrounding Federal policy changes as a result of the 2024 U.S. presidential election.

The November 2024 U.S. general election saw a Republican sweep with Donald Trump winning the Presidency and Republicans controlling both the House and Senate. The Trump campaign ran on promises of Federal policy changes that could have an impact on both the U.S. and Virginia economies, including reducing the corporate tax rate from 21% to 15%, imposing tariffs on certain foreign imports, and significant reductions in Federal spending and workforce. It is unknown to what extent the President-Elect will be able to enact these policies, but the potential impacts of these policies should be considered when discussing Virginia's economic outlook and the outlook of the U.S. economy. Lower corporate tax rates would result in less demand for tax-exempt municipal bonds, thereby reducing the investor base for most of Virginia's debt issuances, which would result in higher borrowing costs. Tariffs on foreign imports could place upward inflationary pressures on U.S. consumer prices and impact the Fed's monetary policy, and as a result, borrowing rates. In addition, Virginia's economy is heavily influenced by the Federal government, with a large percentage of Virginia's workforce employed in either Federal or related government contracting jobs. A reduction in the Federal workforce could have an outsized impact on Virginia's revenues, the economy, and unemployment rates.



Outside of macroeconomic factors and possible Federal policy changes, there are still a number of other potential headwinds that could impact the U.S. and global economies, including geopolitical instability, worsening natural disasters, and labor disputes. Military conflicts are continuing and tensions are rising. These conflicts threaten global trade and resources and cause uncertainty. Costs related to natural disasters continue to increase globally as the frequency and intensity of these events continues to rise. The recent impacts of Hurricane Helene in September of 2024 highlight the severe life-threatening and economic risks that these events pose. Southwest Virginia experienced significant damage, while the impact to North Carolina was catastrophic. Labor disputes have continued to rise in recent years, with the most recent major U.S. labor dispute coming from Eastern U.S. port workers. While this strike was temporarily ended on October 3, 2024, the dispute is still ongoing, with port workers planning to resume their strike on January 15, 2025 if an agreement is not finalized. Virginia operates one of the East Coast's largest ports, and a potential shutdown of the port could have a significant impact on both the Virginia and national economies.

While the economic outlook for the Commonwealth in 2025 is optimistic, as outlined above, there are a number of domestic and international risks that could unexpectedly upend the economy. As the Commonwealth plans for the future, these risks should continue to be considered.

2024 Debt Capacity Recommendations

The 2024 Base Model Average Solution debt capacity calculation (Appendix A-8) shows that an additional \$1.38 billion in tax-supported debt could be authorized and issued in each of fiscal years 2025 and 2026. However, it is important to note that the model uses the last 12 quarters of historic rates to estimate the model interest rate. This results in a Base Model Rate of 3.71% for appropriation supported bonds, which lags current market rates, as a full quarter of the historically low rates of early 2022 are still being factored into the rate calculation. Given this disconnect between the model rates and current market rates, Treasury Debt Management staff consulted with financial advisors and the Office of the Secretary of Finance to arrive at a Recommended Modified Model Rate of 4.25%. Therefore, it is the recommendation of the Committee that the Recommended Modified Model Rate (4.25%) Average Solution debt capacity calculation (Appendix A-10) be used to determine the amount of additional tax-supported debt that can prudently be authorized in each of fiscal years 2025 and 2026. The Recommended Modified Model Rate (4.25%) Average Solution debt capacity calculations show that \$1.31 billion in additional debt could be prudently authorized and issued in each of fiscal years 2025 and 2026. This amount of new authorization and issuance would cause projections of debt service as a percent of Blended Revenues to remain below the 5% debt capacity limit in each year of the ten-year projection period. It is important to note that the recommended debt capacity also includes the 2-year excess capacity requirement, which reduces the recommended average debt capacity solution and ensures additional capacity remains beyond the ten-year projection period.

Other Recommendations and Observations

- a) The Committee recognizes that a significant amount of 9(d) projects have been authorized over the last decade and that many project needs have been met with earlier bond authorizations and/or cash funding. Bonds issued for these 9(d) projects carry higher borrowing costs than the Commonwealth's 9(b) general obligation bonds, which require voter approval via referendum and are secured by the Commonwealth's full faith and credit. While the Committee acknowledges the benefits of 9(b) general obligation bonds, the Committee also acknowledges the hurdles associated with their approval, including the costs and additional time requirements needed for the referendum. Please see the charts on pages 13 and 14 for more information regarding the growing proportion of 9(d) debt.
- b) The Committee 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 leases and other forms of borrowing typically result in higher financing costs and are ultimately still viewed as tax-supported debt.
- c) The Commonwealth has seen construction costs increase dramatically over the last two years due to inflationary pressures, and as a result, there are now questions surrounding the actual cost of certain projects for which debt was previously authorized but has yet to be



issued. The Committee recognizes that the Governor's previous budgets included substantial cash funding to supplement previously authorized capital projects for which costs had materially increased. However, the Committee also recognizes the possibility that additional funding sources may still be needed to fully fund projects that were previously authorized and consideration should be given as to whether any existing authorizations of projects not under construction should be rescinded or amended.

d) The Committee is cognizant of the Commonwealth's increasing outstanding debt over the last 10-years, which can be seen graphically compared to U.S. and triple-AAA state medians, as calculated by Moody's, on pages 29 and 30 of this report. These sections also detail debt ratios of each of Virginia's triple-AAA peers. Between the 2015 and 2024 Moody's Medians Reports, Virginia remained steady nationally as the 12th highest ranked state in terms of total net tax-supported debt ("NTSD"). The Commonwealth's other comparative ratios also remained stable, with Virginia ranking 14th in NTSD per capita and 24th in NTSD as a percentage of personal income. These numbers only consider the debt outstanding as of the prior fiscal year-end and do not contemplate the additional \$3.3 billion of authorized and unissued tax-supported debt as of June 30, 2024, of which \$2.6 billion is net of 9(c) debt and is included in the DCAC Model.

Review of Tax-Supported Debt

General Fund Supported Debt

The State issues two types of tax-supported debt: GO 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 State-wide 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.). The GO pledge for 9(c) Bonds 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 long-term leases, certain long-term SBITAs, 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 debt service 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 was established by the General Assembly in Chapters 11, 12, 13 and 15 of the Acts of the Assembly, 1986 Special Session (the "1986 Special Session Acts"), as a special non-reverting fund administered and allocated by the Commonwealth Transportation Board ("CTB") for the purpose of increased funding for construction and other capital needs of state highways, airports, mass transit and ports. Chapters 1230 and 1275 of the Acts of the General Assembly of the Commonwealth of Virginia 2020 Regular Session ("Chapters



1230 and 1275") enacted numerous structural changes to the transportation funding system in the Commonwealth. These changes generally became effective July 1, 2020.

Under Chapters 1230 and 1275, transportation-related revenues are directed to a new special non-reverting fund known as the Commonwealth Transportation Fund, and the distribution of revenues is streamlined, based on codified formulas, to sub-funds established to meet the varying transportation needs and different modes of transportation in the Commonwealth. The TTF continues to be funded primarily from the initial base of revenues specified by the 1986 Special Session Acts, as amended, including the retail sales and use tax, motor fuels tax and motor vehicle related taxes and fees. Chapters 1230 and 1275 made changes to and added to these revenue sources.

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, federal transportation revenues, and debt related to 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 rating 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 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 various projects through the Capital Projects Revenue Bonds authorized by the General Assembly in 2007. Historically, transportation specific debt service as a percentage of TTF revenues has greatly exceeded 5%. Accordingly, to the extent the 5% measure is exceeded, capacity derived from the general fund is being utilized by transportation debt service. 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. From fiscal year 2015 through fiscal year 2024, TTF debt service as a percentage of TTF revenues ranged from 11.5% to 18.7%, although this ratio has steadily declined over the last ten years as existing debt from the 2007 authorization is paid off. Model projections at the Recommended Modified Model Rate of 4.25% indicate that TTF debt service as a percentage of TTF revenues will continue to exceed 5% going forward, with projected TTF debt service to TTF revenue ratios ranging from 8.0% to 10.6%. However, projected TTF debt service as a percentage of TTF revenues is estimated to continue to decline as existing tax-supported transportation debt is being paid off more quickly than new tax-supported transportation debt is being issued, although any new authorization of tax-supported transportation debt in the future could cause this trend to reverse.



Trends in Tax-Supported Debt

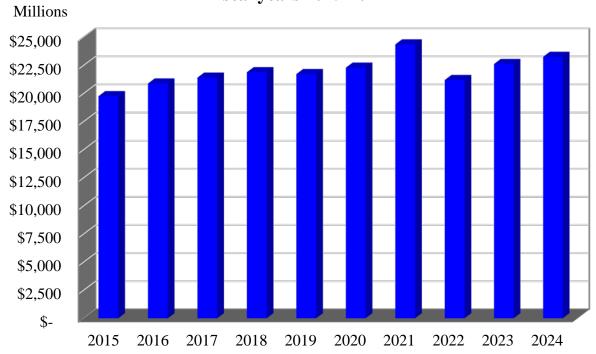
The total outstanding tax-supported debt of the Commonwealth increased by 17.7% over the last ten fiscal years, or about \$3.5 billion, increasing from \$19.8 billion in fiscal year 2015 to \$23.3 billion in fiscal year 2024. The Commonwealth's total tax-supported debt can be split into three primary categories: GO debt, Section 9(d) debt, and other long-term obligations, which consist primarily of pension liabilities, other post-employment benefits ("OPEB") liabilities, and compensated absences. While other long-term obligations are generally evaluated by rating agencies as part of an issuer's overall debt profile, they are not typically part of their calculations of debt ratios. Accordingly, they are not included in the Commonwealth's debt capacity calculation. Excluding the other long-term obligations, the remaining tax-supported debt has increased about \$3.6 billion, or 32.8%, over this same period. In fiscal year 2024, total taxsupported debt increased by approximately \$641 million, or 2.8%, driven primarily by a \$564 million increase in pension liabilities and the continued issuance of 9(d) bonds to finance higher education capital projects. When other long-term obligations are excluded, the remaining taxsupported debt increased by a more modest \$50.2 million, or 0.3%, in fiscal year 2024. Section 9(d) appropriation supported bonds related to transportation, public buildings, and higher education continued to make up the largest portion of the Commonwealth's tax-supported debt obligations as of fiscal year-end 2024, totaling \$12.4 billion, while outstanding G.O. debt remained relatively low at \$1.1 billion. Other Section 9(d) debt, which includes non-bonded 9(d) debt obligations such as long-term leases, SBITA's, and installment purchases, totaled \$1.2 billion at fiscal year-end 2024.

Despite the \$3.5 billion increase in tax-supported debt over the last decade, outstanding tax-supported debt as of fiscal year-end 2024 was still down by more than \$1.1 billion from its peak at fiscal year-end 2021. The primary driver of the recent decline in tax-supported debt was the use of surplus cash to pay down pension liabilities in fiscal year 2022. The overall growth in tax-supported debt over the last decade has been driven almost entirely by increased Section 9(d) debt, while outstanding GO debt and other long term obligations have actually declined over the last decade. While the majority of the growth in Section 9(d) debt has been organic, some of the growth is related to changes in accounting standards over this period, including changes to the reporting of long-term lease liabilities and the recognition of SBITAs as long-term liabilities. As a result of these accounting standard changes, other non-bonded Section 9(d) liabilities increased by \$767 million, or 194.3%, over the decade.

The graphs on the following pages provide historical perspective on the Commonwealth's outstanding tax-supported debt in total, outstanding tax-supported debt by category, and breakouts of the primary components that comprise Section 9(d) debt and other long-term obligations.

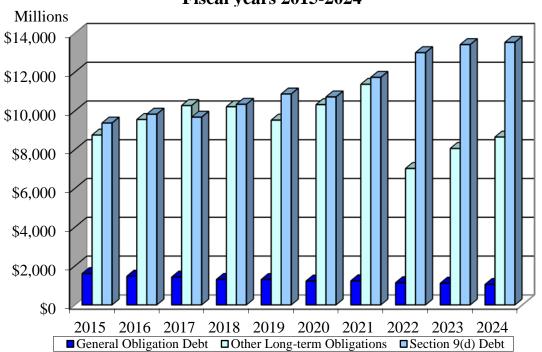


Outstanding Tax-Supported Debt Fiscal years 2015-2024 (1)



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

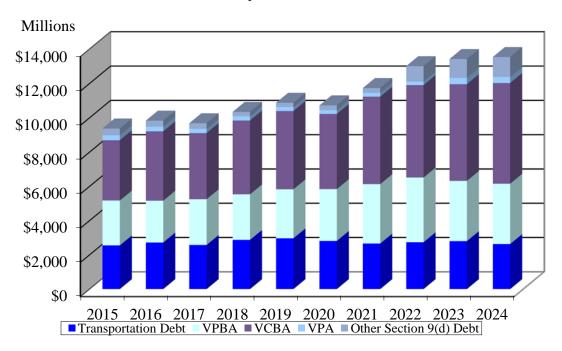
Outstanding Tax-Supported Debt by Category Fiscal years 2015-2024 (1)



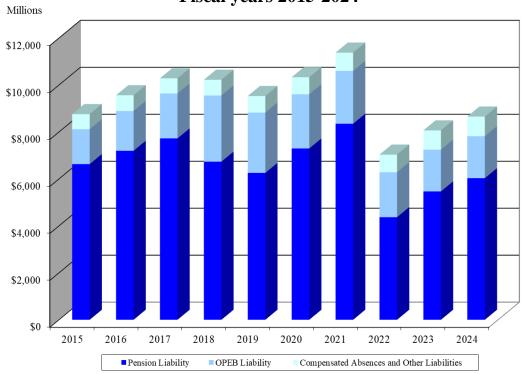
⁽¹⁾ Includes other long-term obligations such as pension liabilities, OPEB and compensated absences



Outstanding Section 9(d) Debt Fiscal years 2015-2024



Outstanding Other Long-Term Obligations Fiscal years 2015-2024





General Obligation Debt

GO debt, which had a June 30, 2024 balance outstanding of \$1.1 billion, peaked in fiscal year 2015 and has declined 34.7%, or \$559.1 million, over the last decade. This is due to the fact that the last 9(b) GO bond referendum approved by the voters occurred more than 20 years ago in 2002. Bonds from the 2002 authorization, which totaled \$1.0 billion, were issued as needed, with the final issuance occurring during fiscal year 2010. From fiscal year 2011 onward, any new issuances of GO debt came solely from the issuance of 9(c) GO bonds, which are regularly authorized by the General Assembly for qualifying revenue-producing capital projects and are not included in the debt capacity calculation as they are self-supporting. Despite the regular issuance of new 9(c) debt, total GO debt levels declined in all but one fiscal year from fiscal year 2015 through fiscal year 2024 as the payoff of existing 9(b) debt outpaced the issuance of new 9(c) debt. However, in fiscal year 2021, the outstanding GO balance increased by 1.0%, or \$12.2 million, as 9(c) bond issuances outpaced the payoff of 9(b) bonds. In fiscal year 2024, total GO debt outstanding decreased by 6.2%, or \$65.5 million, as 9(b) debt payoff once again outpaced the issuance of new 9(c) bonds.

Legal Debt Limit and Debt Margin

The Commonwealth's various forms of GO debt are subject to legal debt limitations under Article X, Section 9 of the Constitution. Total outstanding Section 9(a) GO bonds are limited to 30% of 115% of the current year's tax revenues. Total outstanding Section 9(b) and Section 9(c) GO bonds are each separately limited to 115% of the average of the last three fiscal years of tax revenues. In addition, annual authorization for any additional Section 9(b) GO bonds may not exceed 25% of 115% of the average of the last three fiscal years of tax revenues. The calculations for the Commonwealth's Legal Debt Limits and Debt Issuance Margins as of fiscal year-end 2024 can be found on page A-16 of the Appendices to this report.

Section 9(d) Appropriation Debt

Section 9(d) debt includes tax-supported bonds issued by the VCBA, the VPBA, the CTB, and certain obligations of the Virginia Port Authority ("VPA"). It also includes long-term lease and long-term SBITA liabilities that are paid for directly by general fund appropriations and certain general fund supported installment purchases. This debt category has shown significant dollar growth over the last ten fiscal years, increasing by \$4.2 billion during the decade. Total outstanding Section 9(d) debt as of June 30, 2024 was \$13.5 billion, which is equivalent to a 44.4% increase over the ten-year period from the \$9.4 billion that was outstanding at fiscal year-end 2015. The increase is attributed to significant authorizations for transportation bonds in 2007 that have been issued over the last 10 years, and significant authorizations of VCBA and VPBA bonds in 2008, 2009, 2010, 2013, 2014, 2016, 2018, 2019, and 2020. The implementation of GASB 87 in fiscal year 2022 and the implementation of GASB 96 in fiscal year 2023 also led to the recognition of approximately \$800 million of additional 9(d) debt in the form of long-term leases and SBITA's during the last three fiscal years. However, authorization of new 9(d) bonds has been mostly limited over the last four fiscal years. Despite limited new 9(d) authorizations in recent years, much of the larger prior 9(d) authorizations are still being issued today, resulting in another year of



significant 9(d) bond issuance totaling \$894.6 million in fiscal year 2024. Ultimately, the outstanding balance of Section 9(d) debt increased modestly by 0.9%, or \$115.7 million, from fiscal year 2023 to fiscal year 2024. As of fiscal year-end 2024, the Commonwealth had \$2.6 billion in authorized but unissued 9(d) debt, excluding \$400 million in authorization for the VPBA that is not expected to be issued, so it is expected that future 9(d) issuances will remain elevated despite the modest amount of new authorizations over the last four fiscal years.

Other Tax-Supported Long-Term Obligations

Other long-term obligations had previously experienced the greatest growth amongst the various tax-supported debt categories of the Commonwealth during the first half of the last decade. However, the Commonwealth used surplus cash balances to fund a significant portion of its net pension liabilities in fiscal year 2022, which helped offset much of the prior growth in this debt category. Due to this substantial reduction in pension liabilities, other long-term obligations declined by \$103.4 million, or 1.18%, over the last decade. At fiscal year-end 2024, other long-term obligations totaled \$8.7 billion, an increase of \$590.5 million, or 6.8%, as compared to the prior fiscal year. This increase was driven almost entirely by a \$563.7 million increase in pension liabilities. Despite the growth in fiscal year 2024, total other long-term obligations remained well below their peak level of \$11.7 billion that was recognized in fiscal year 2021.



Authorizations and Issuances of Tax-Supported Debt

Tax-supported debt of the Commonwealth must first be authorized through the State's legislative process, with approval from the Virginia General Assembly required. In the case of 9(b) GO bonds, additional State-wide approval from the Commonwealth's voters via referendum is also required. Once authorization for tax-supported debt is approved, the bonds may be issued by the Commonwealth's various issuing bodies, pending final approval of the terms and structure of the bonds by the governing boards of the relevant issuing bodies, and as necessary, the Office of the Governor and the Cabinet. However, bond issuances are based on the cash flow needs of authorized projects and are not market driven. As such, authorizations do not result in the immediate issuance of associated bonds, and it often takes years for an authorization to be fully issued. This has been particularly apparent over the last four fiscal years, as new authorizations of tax-supported debt have totaled only \$2.0 billion while issuances have totaled \$4.9 billion over this same period.

In the 2024 Appropriation Act, the Commonwealth authorized \$1.2 billion in additional taxsupported debt. However, \$400 million of new authorization for VPBA bonds to finance Water Quality Improvement Fund ("WQIF") projects is not expected to be utilized. The Commonwealth met certain fiscal year 2024 revenue triggers included within the 2024 Appropriation Act language which directs the Commonwealth to instead fund these WQIF projects with general fund cash. While the authorization for this WQIF bond funding has not yet been rescinded, actual authorizations for fiscal year 2024 are expected to total \$818.0 million. The Commonwealth also issued \$958.8 million in new money tax-supported bonds in fiscal year 2024. As of June 30, 2024, total authorized but unissued tax-supported debt (including the \$400 million in VPBA authorization for the WQIF funding) amounted to \$3.7 billion, including \$3.0 billion of 9(d) bonds that would flow into the 2024 debt capacity model calculation. However, since the WQIF projects are not expected to be bond funded, this \$400 million of authorization is excluded from the 2024 debt capacity calculation. Ultimately, \$2.6 billion of authorized but unissued tax-supported debt is modeled in the 2024 debt capacity calculation, so it is anticipated that annual issuances of taxsupported will continue to remain elevated. Further details on the Commonwealth's fiscal year 2024 authorizations and issuance of tax-supported debt are presented below.

Fiscal year 2024 Tax-Supported Debt Authorizations

Chapter 2 of the 2024 Special Session I of the Virginia General Assembly authorized an additional \$1.2 billion of tax-supported bonds to be issued as follows:

- Item C-50: \$308,037,036 in additional VCBA 21st Century capital project bonds.
- Item C-51: \$23,268,082 in additional VPBA bonds.
- Item C-53.50: \$400,000,000 in additional VPBA bonds for WQIF projects.
- Item C-56: \$75,010,140 in additional VPBA bonds.
- Item C-57: \$94,564,327 in additional VCBA 21st Century capital project bonds.
- Item C-58: \$124,285,000 in additional GO 9(c) bonds for higher education.
- Item 241: \$192,800,000 in additional VCBA 21st Century equipment bonds.



Fiscal year 2024 Tax-Supported Debt Issuances (New Money Only)

On March 6, 2024, the Commonwealth of Virginia issued \$64,145,000 of its General Obligation Bonds, Series 2024A, to finance revenue producing capital projects at public institutions of higher education within the Commonwealth. These bonds are Section 9(c) GO bonds and are not included in the DCAC model as they are self-supporting via project revenues.

On May 7, 2024, the VCBA issued \$642,215,000 of its Educational Facilities Revenue Bonds (21st Century College and Equipment Programs), Series 2024A, to finance certain capital projects and acquire equipment for public institutions of higher education in the Commonwealth.

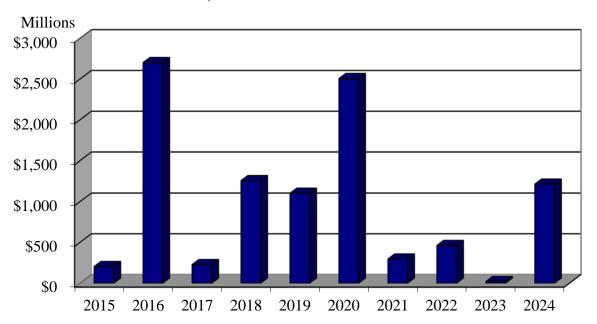
On June 12, 2024, the VPBA issued \$252,405,000 of its Public Facilities Revenue Bonds, Series 2024AC, to finance certain capital projects throughout the Commonwealth.

Historical Authorizations and Issuances of Tax-Supported Debt

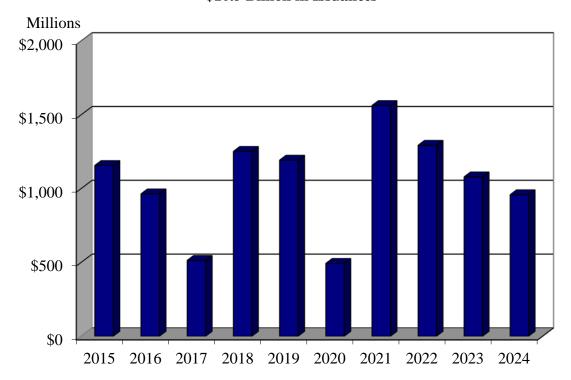
Over the last 10 fiscal years, \$10.0 billion of tax-supported debt was authorized across various programs, with the majority authorized for VCBA and VPBA projects, while \$10.5 billion of new tax-supported debt, exclusive of refundings, was issued. Authorizations ranged from a low of \$21.7 million in fiscal year 2023 to a high of more than \$2.7 billion in fiscal year 2016. Annual newmoney debt issuance ranged from a low of \$493.7 million in fiscal year 2020 to a high of \$1.6 billion in fiscal year 2021. In five of the ten years, authorizations were below \$500 million, while in the other five years, authorizations were above \$1 billion, with two years over \$2.5 billion. Issuances of less than \$1 billion in a fiscal year have occurred four times over the last ten years, with the remaining six years seeing more than \$1 billion issued. As can be seen in the authorization graph, significant authorizations can occur in both even and odd years and are not always related to a new two-year budget being passed. However, it is more common for higher authorizations to occur with the passage of a new two-year budget. The two charts on the following page illustrate the amounts of total tax-supported debt authorized and issued from fiscal years 2015 through 2024.



Tax-Supported Debt Authorizations Fiscal years 2015-2024 \$10.0 Billion in Authorizations



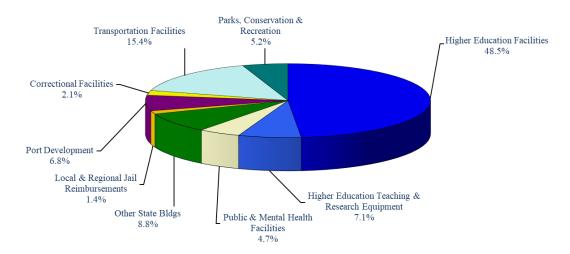
Tax-Supported Debt Issued Fiscal years 2015-2024 \$10.5 Billion in Issuances



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 \$10.47 billion issued, 57.6% 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 20.6%, which includes transportation facilities and port development. (Note: transportation projects financed with federal revenues are not considered tax-supported debt and are not included.)

Uses of Tax-Supported Debt Issued FY 2015 - FY 2024



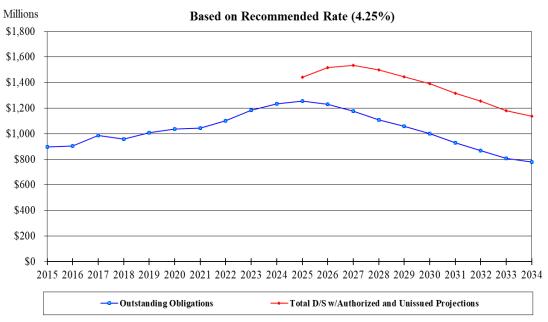
Ten-year Total = \$10.47 Billion



Debt Service

Amounts paid annually for debt service have steadily increased over the last ten years, increasing in all but one of the last ten fiscal years. It is worth noting that Virginia has no variable rate tax-supported debt outstanding as of June 30, 2024 and does not utilize short term financing, such as revenue anticipations notes, for operational needs. As a result, the Commonwealth's debt service has stability and has been mostly unaffected by the recent interest rate volatility. Future debt service payments, including payments on existing debt and estimated payments on authorized but unissued debt, are projected to increase through fiscal year 2027, and then decline annually through fiscal year 2034 as existing debt is retired. Annual debt service, including the estimated debt service on all currently authorized but unissued amounts and long-term lease liabilities and installment purchases, is illustrated below. Please note, that the following chart uses the Recommended Modified Model Rate of 4.25% to model debt service on all authorized and unissued tax-supported debt.

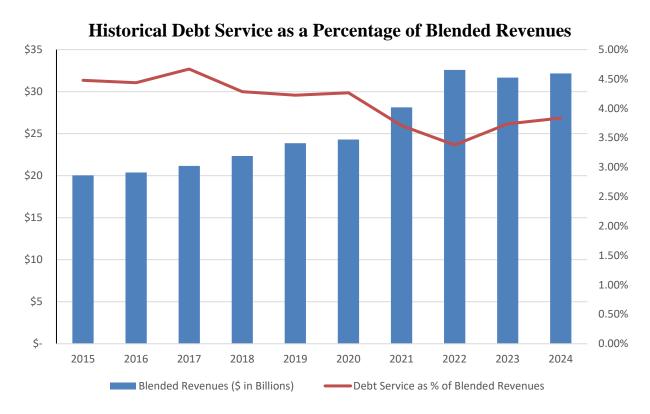




⁽¹⁾ Assumes authorized debt is issued in future periods at an interest rate of 4.25% in accordance with the Model's other standard assumptions. Past data includes lease revenue bonds issued by the Virginia Biotech Research Park Authority and Newport News Industrial Development Authority that are no longer outstanding.



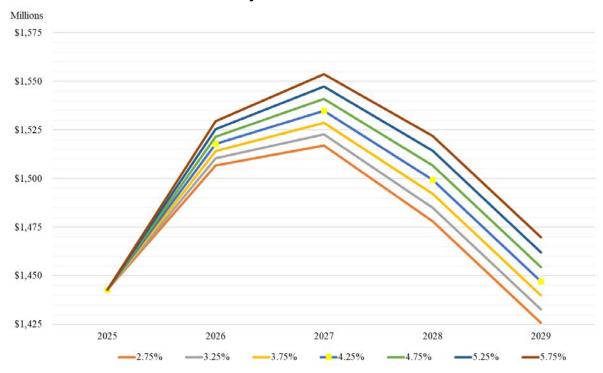
Although debt service has increased on an absolute basis over the last decade, revenues have increased sharply over the same period, while new debt has been issued at historically low rates and cash surpluses have been used to reduce borrowing needs. As a result, debt service as a percentage of Blended Revenues has been on a downward trend from its peak of nearly 4.7% in fiscal year 2017 to a ten-year low of 3.4% in fiscal year 2022. However, in fiscal years 2023 and 2024, debt service as a percentage of Blended Revenues began to climb again. A chart comparing the Commonwealth's last ten years of historical debt service as a percentage of Blended Revenues is presented below.



Projected debt service as a percentage of Blended Revenues, assuming all authorized and unissued tax supported debt is issued at the 4.25% recommended rate, is projected to continue to increase through fiscal year 2026 to a high of 4.2% before declining annually through fiscal year 2034 to a projected low of 2.4% in 2034.

While the Recommended Modified Model Rate of 4.25% is considered a reasonable and appropriate rate given current market conditions and future expectations for market rates, there is always great uncertainty in trying to predict future interest rate movements. Recent market volatility and recessionary fears make it more important than ever that Virginia consider the impacts various interest rates could have on the future debt service costs of the Commonwealth. The chart below illustrates the Commonwealth's total projected tax-supported debt service payments over the next 5 fiscal years at various rates ranging from 2.75% to 5.75%. A change in borrowing rates of 50 bps in either direction can increase/decrease the Commonwealth's maximum annual tax-supported debt service by anywhere from \$4 million to \$8 million annually. The Recommended Modified Model Rate of 4.25% is shown on the blue line highlighted with yellow markers.

Projected Tax-Supported Debt Service: Interest Rate Sensitivity Fiscal years 2025 – 2029



Review of Other Debt Not Supported by Taxes

In addition to the various forms of tax-supported debt discussed in the previous sections of this report, Virginia also has a substantial amount of other long-term obligations that are not supported by taxes. These other debts not supported by taxes include the 9(d) obligations of Virginia's higher education institutions for which general revenues of the institutions are pledged, obligations of the Commonwealth's various debt issuing agencies and authorities for which general tax revenues are not pledged as security for the debt, GARVEE's for which the debt is secured by Federal grants, Interstate 81 Revenue Bonds which are secured by special regional fuels taxes, the obligations of various State Foundations, certain portions of notes payable, certain portions of pension and OPEB liabilities, long-term lease liabilities, long-term SBITA's and installment purchases for which payments are not secured by general tax revenues, tuition benefits payable, and lottery prizes payable. While these debt obligations do not impact the State's debt capacity, they are still longterm obligations reported in the Commonwealth's Annual Comprehensive Financial Report and should be noted, particularly given the growth in these obligations. In addition, the rating agencies each maintain their own unique formulas for calculating tax-supported state debt burdens, so while these obligations may not be considered tax-supported debt by the Commonwealth, it is possible that rating agencies could consider certain obligations from within this category as tax-supported when considering the Commonwealth debt profile for rating purposes.

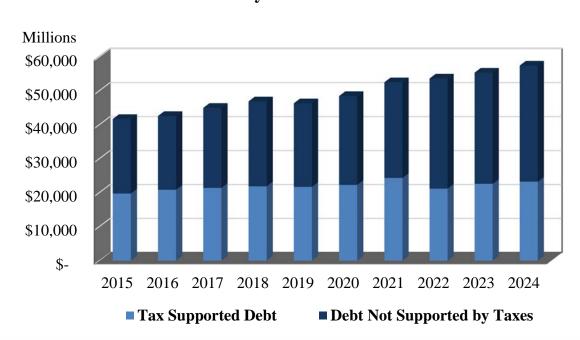
The Commonwealth's other debt not supported by taxes has grown significantly over the last ten fiscal years, increasing from \$21.9 billion in 2015 to \$34.2 billion in 2024, an increase of \$12.2 billion, or 55.8%. These other debts not supported by taxes have seen mostly steady growth throughout the last decade, with the exception of fiscal year 2022, when these debts increased sharply by 15.2%, or \$4.3 billion, driven primarily by a \$1.0 billion increase in the obligations of the Hampton Roads Transportation Accountability Commission ("HRTAC") and a \$2.5 billion increase in long-term lease liabilities related to the changes from GASB 87. In fiscal year 2024, other debt not supported by taxes increased by \$1.4 billion, or 4.4%, due primarily to a \$1.5 billion increase in the obligations of the Virginia Housing Development Authority. While most categories of debt not supported by taxes saw growth over the last ten fiscal years, the primary drivers were growing 9(d) higher education obligations, Virginia Public School Authority obligations, Virginia Housing Development Authority obligations, long-term lease liabilities, and obligations of HRTAC. Other debt not supported by taxes that carry either a moral obligation pledge or contingent liability pledge totaled \$3.8 billion as of June 30, 2024, and these obligations actually decreased by \$203.1 million over the last ten years, or (-5.1%). These moral obligation and contingent liability obligations could potentially be considered as tax-supported within the DCAC model in the event the underlying support of the Commonwealth were ever utilized to pay the debt service on these bonds. Further discussion on these liabilities, including sensitivity analysis regarding their potential impact on debt capacity, can be found on pages A-17 through A-19 of the attached Appendices.



Total Debt of The Commonwealth

As of June 30, 2024, Virginia's total debt outstanding was \$57.4 billion, which represented an increase of \$15.7 billion over the last ten years, or 37.7%. Virginia's total debt at fiscal year-end 2024 consisted of \$23.3 billion in tax-supported debt and \$34.2 billion of debt not supported by taxes. Virginia's total debt burden, broken out by tax-supported debt and debt not supported by taxes, is illustrated below.

Total Debt of the Commonwealth Fiscal years 2015-2024





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 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 GO ratings: Aa1 (Moody's), AA+ (S&P) and AA+ (Fitch). The appropriation-supported bonds carry the same outlooks as the GO ratings.

Virginia's triple-AAA ratings reflect the Commonwealth's substantial fiscal resources, careful management of operations and debt, and strong budgetary flexibility. Virginia also maintains a strong revenue base with a low debt burden relative to its economic resource base. As noted earlier in the report, Virginia ended fiscal year 2024 with another large surplus, increasing reserve fund balances to over \$4.7 billion, with projected reserve fund balances of nearly \$4.9 billion by fiscal year-end 2025. While Virginia has seen substantial growth in revenues in recent years and has bolstered reserve fund balances, rating agencies also note that Virginia is highly reliant on both individual income taxes and sales taxes, which together make up approximately 85% of the general fund revenues. Both of these tax sources are economically sensitive, and Virginia's high dependence on them can result in increased revenue volatility during times of economic downturn. Each of the rating agencies has continued to note Virginia's strong liquidity and the development of budget plans that use recent surpluses to finance additional spending in areas of critical need and reduce borrowing levels. The rating agencies also note Virginia's minimal carrying costs for debt service and retirement liabilities, which allow the Commonwealth increased flexibility to adjust expenditures to meet changing fiscal circumstances. Overall, Virginia's long-term debt burden is considered low and manageable by the rating agencies. Virginia's focus on developing structurally balanced budgets and the efforts to bolster reserve funds in recent years are seen as solid steps that have prepared the Commonwealth for any economic downturns that may arise in the future. Virginia's Constitution provides limitations on the use of the Revenue Stabilization Fund and requires its replenishment, which are factors that the rating agencies note as positives for Virginia's credit. Rating agencies also note the General Assembly's ability to raise taxes and the Governor's ability to implement budget cuts as additional flexibilities that allow for revenue generation and expense cutting in times of need.

Virginia's economic profile remains strong with a diverse mix of industries and a high level of wealth. However, Virginia's economy is significantly influenced by the federal government through both direct employment and contract spending. This relationship can have a positive impact on Virginia's revenues, as was the case during the pandemic, as the impacts to Virginia were less severe than in most states. However, that relationship also places Virginia at risk whenever potential federal government shutdowns or downsizing loom and typically causes economic recovery in Virginia to lag that of that nation. Other credit challenges noted in ratings reports relate to the general issue of controlling growing spending needs in the education and transportation sectors, planning for an aging population and related population declines in rural



areas, managing Medicaid costs, and combatting climate change and sea level rise. Except for the concentration of federal government related employment, many of these challenges span the municipal sector and are not unique to Virginia.

While Virginia finished fiscal year 2024 with another large surplus and record reserve funds, it will remain important for Virginia to continue to be conservative with its fiscal management going forward. Rating agencies continue to note that should the Commonwealth resort to structurally unbalanced budgeting practices during a recessionary period, where one-time revenues are utilized to fund ongoing expenses or reserve fund balances are substantially depleted, an action to lower the Commonwealth's rating could be considered.

It is conservative financial management that resulted in the award of Virginia's triple-AAA bond ratings and it is those bond ratings that result in Virginia's low cost of borrowing that helps create budget flexibilities. A loss of even one AAA rating would prove costly not only to Virginia's reputation, but it would also result in higher debt service costs and reduced budget flexibility.

Review of Comparative Ratios

Moody's Investors Service has compiled NTSD data for US states for more than 30 years. Moody's defines NTSD as debt secured by statewide taxes and other governmental revenue, net of obligations that are paid with revenue other than taxes and other governmental revenue, and that is accounted for in non-governmental activities (such as utility or higher education funds). Each year, Moody's releases a comparative NTSD ratios report for the prior fiscal year, its <u>State Debt Medians Report</u> (Moody's Medians). The <u>State Debt Medians 2024 Report</u> was published on October 7, 2024 and includes data as of each state's 2023 fiscal year end. This was a change beginning with the 2022 Moody's Medians report. Prior versions of the report included data as of the most recent calendar year end. In addition, Moody's made revisions beginning with the 2022 Moody's Medians report as to how NTSD was calculated to include unamortized bond premiums/discounts and accreted interest. As a result of these changes, Moody's revised its fiscal year end 2020 NTSD numbers, resulting in a substantial 15% increase in NTSD compared to what was previously reported for fiscal year end 2020. The 2024 Moody's Medians report has been reviewed and certain data and analytical opinions from the 2024 Moody's Medians report are incorporated herein.

The 2023 Moody's Medians report projected state debt issuances to remain muted in fiscal year 2023 as rates remained elevated and many states were still utilizing cash surpluses and federal stimulus to finance portions of their capital spending needs or pay down debt. As projected, the 2024 Moody's Medians report notes that total NTSD amongst the states declined by 1.3% in fiscal year 2023. Thirty-five states saw their NTSD decline in fiscal year 2023, compared to only nineteen the prior year. Moody's also noted that many states remain well positioned fiscally to weather potential economic downturns that may be looming, particularly the higher rated state credits. However, Moody's also noted that capital asset depreciation ratios indicate that some states which have delayed infrastructure investment in recent years may face increased demand for



investment in buildings, roads, and other infrastructure in coming years, which could result in higher state debt issuance in the near future.

The 2023 Moody's Medians report projected that adjusted net pension liabilities ("ANPLs") would decline again in fiscal year 2023 as a result of increased investment rates following Fed rate increases and monetary tightening. Once again, these projections proved accurate, as the 2024 Moody's Medians report noted total ANPLs amongst the states declined by more than \$400 billion in fiscal year 2023. Overall, the combined decrease in ANPLs and NTSD resulted in total state sector long-term liabilities declining by \$411 billion, or 17.5%, in fiscal year 2023. Moody's projects ANPLs to continue to decline further in fiscal year 2024 due to continued elevated investment returns in the current rate environment. Moody's noted that many states have increased their capacity for future debt issuances through recent cash financing of projects, the build-up of reserves, and record investment revenues, but new debt issuances in the near-term are still expected to be muted relative to historical levels.

Moody's reported that the fiscal year 2023 median nationwide NTSD per capita was \$1,189, an increase of \$11, or 0.9%, compared to the prior fiscal year. For triple-AAA rated states, the median in fiscal year 2023 was \$693, a decrease of \$7, or 1.0%, compared to the prior fiscal year. Growth in NTSD per capita continued to be muted or negative in many states as the use of operating surpluses to cash finance capital needs continued in fiscal year 2023. Moody's reported Virginia's NTSD per capita as \$2,035 for fiscal year 2023, down from \$2,047 in fiscal year 2022, the first decline for Virginia since fiscal year 2017. Virginia remained the 14th highest nationally in debt per capita in fiscal year 2023. The decline in Virginia's NTSD per capita level is likely attributable to the low levels of new tax-supported debt authorization in recent years as Virginia turned to cash to support a growing portion of its capital needs.

Moody's reported that median nationwide NTSD as a percentage of personal income for fiscal year 2023 decreased to 2.0% from 2.2% in fiscal year 2022. Over the last ten years, this metric has seen a steady decline nationwide, reflecting states' more restrained approaches to debt issuance over the last decade, with the abnormal increases in fiscal years 2021 and 2022 due mostly to a change in calculation methods by Moody's. On the other hand, Virginia has seen this metric remain flat and/or increase over this same period. However, Virginia's NTSD as a percentage of personal income decreased in fiscal year 2023 to 2.8% from 3.0% the prior year, Virginia's first decline in this metric since fiscal year 2017. Virginia's ranking for this metric remained unchanged at 18th highest nationally. Similar to NTSD per capita, it is likely that Virgnia's decline in NTSD as a percentage of personal income was a result of reduced authorization of new tax-supported debt in recent fiscal years. For triple-AAA rated states the NTSD as a percent of personal income decreased to 1.0% in fiscal year 2023 from 1.2% in fiscal year 2022.

The table and charts on the following two pages illustrate how Virginia compares to the 14 other triple-AAA states based on NTSD per capita and NTSD as a percentage of personal income.



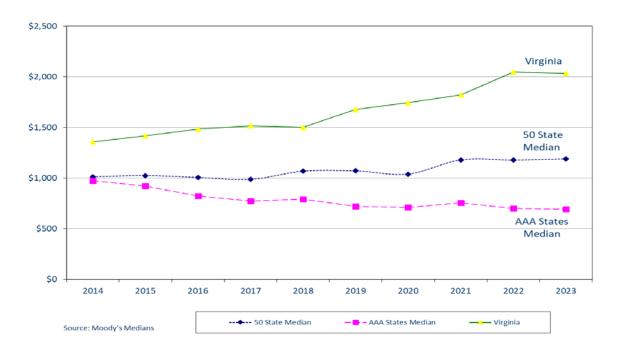
AAA/Aaa/AAA STATE DEBT BURDENS FROM 2014-2023 PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt per Capita

	2023										
	Ranking	<u>2023</u>	<u>2022</u>	<u>2021 ⁽¹⁾</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Delaware	5	\$4,526	\$4,266	\$4,143	\$3,400	\$3,289	\$3,206	\$2,587	\$2,544	\$2,385	\$2,438
Maryland	10	2,952	3,147	2,818	2,410	2,323	2,343	2,164	2,122	1,928	1,889
VIRGINIA	14	2,035	2,047	1,823	1,746	1,677	1,502	1,515	1,486	1,418	1,356
Ohio *	20	1,558	1,642	1,718 *	1,146 *	1,158 *	1,156 *	1,118 *	1,087 *	1,091 *	1,109 *
Minnesota *	21	1,542	1,638	1,462	1,400 *	1,406 *	1,415 *	1,430 *	1,480 *	1,527 *	1,538 *
Georgia	28	1,100	1,144	1,087	987	971	996	986	992	1,029	1,043
Florida *	34	711	661	756	710	780	812 *	889 *	961 *	1,038 *	973 *
Utah	35	693	827	899	866	720	792	772	824	921	1,060
Texas	37	654	680	682	365	379	389	410	383	383	406
North Carolina	38	635	700	686	581	586	531	611	659	721	739
South Dakota *	41	421	444	561	482	493	618	694	641 *	652 *	547 *
Iowa	42	408	392	408	157	150	207	219	228	239	250
Missouri	43	397	378	398	413	464	487	532	579	574	606
Indiana *	44	356	366	217	233	251	270	295	310	463 *	474 *
Tennessee*	48	271	294	285	266	292	305	312	322	298 *	327 *
Median All States		1,189	1,178	1,179	1,039	1,071	1,068	987	1,006	1,025	1,012
AAA Median		693	700	756	710	720	792	772	824	921	973
AAA Average		1,217	1,242	1,196	1,011	996	1,002	969	975	978	984

^{*} State was not triple triple A during entire 2014-2023 period.

Net Tax-Supported Debt Per Capita Virginia Versus Moody's U.S. 50-State Median and other AAA States 2014 – 2023





 $^{^{(1)} \}textit{ Beginning in 2021 Moody's revised calculation to be based on fiscal year-end. Prior years were based on calendar year-end.}$

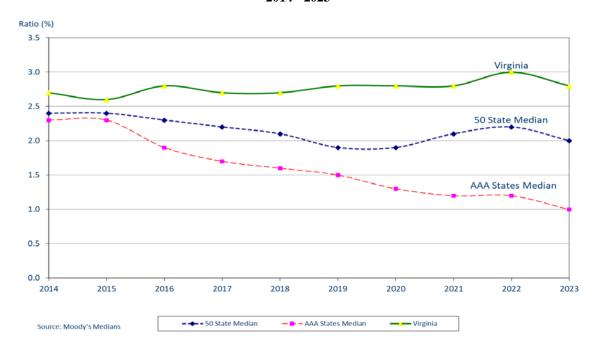
AAA/Aaa/AAA STATE DEBT BURDENS FROM 2014-2023 PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt as Percent of Personal Income

	2023																				
	Ranking	2023		2022		2021 ⁽¹	1)	2020		2019		2018		2017		2016		2015		2014	
Delaware	4	6.8	%	6.9	%	7.0	%	6.0	%	6.0	%	6.1	%	6.1	%	6.3	%	6.2	%	6.6	%
Maryland	12	3.9		4.4		4.1		3.5		3.6		3.7		3.6		3.5		3.4		3.5	
VIRGINIA	18	2.8		3.0		2.8		2.8		2.8		2.7		2.7		2.8		2.6		2.7	
Ohio *	21	2.5		2.8		3.0	*	2.1	*	2.3	*	2.5	*	2.5	*	2.5	*	2.6	*	2.7	*
Minnesota *	24	2.1		2.4		2.2		2.3	*	2.4	*	2.5	*	2.6	*	2.8	*	2.9	*	3.1	*
Georgia	27	1.8		2.0		2.0		1.9		2.0		2.1		2.2		2.3		2.5		2.6	
Utah	33	1.1		1.4		1.6		1.7		1.5		1.7		1.7		1.9		2.3		2.8	
Florida *	34	1.0		1.0		1.2		1.3		1.5		1.6	*	1.8	*	2.1	*	2.3	*	2.3	*
Texas	35	1.0		1.1		1.1		0.7		0.7		0.8		0.8		0.8		0.8		0.9	
North Carolina	36	1.0		1.2		1.2		1.2		1.2		1.1		1.4		1.5		1.7		1.8	
South Dakota *	40	0.8		0.8		0.9		0.8		0.9		0.9		1.1		1.0	*	1.1	*	0.9	*
Missouri	42	0.6		0.7		0.7		0.8		1.0		1.0		1.2		1.3		1.4		1.5	
Iowa	43	0.6		0.7		0.7		0.3		0.3		0.4		0.5		0.5		0.5		0.6	
Indiana*	44	0.6		0.6		0.4		0.5		0.5		0.6		0.6		0.7		0.8	*	0.8	*
Tennessee*	48	0.4		0.5		0.5		0.5		0.6		0.7		0.7		0.7		0.7	*	0.8	*
Median All States		2.0	%	2.2	%	2.1	%	1.9	%	1.9	%	2.1	%	2.2	%	2.3	%	2.4	%	2.4	%
AAA Median		1.0		1.2		1.2		1.3		1.5		1.6		1.7		1.9		2.3		2.3	
AAA Average		1.8		2.0		2.0		1.8		1.8		1.9		2.0		2.0		2.1		2.2	

^{*} State was not triple triple A during entire 2014-2023 period.

Net Tax-Supported Debt as Percentage of Personal Income Virginia Versus Moody's U.S. 50-State Median and other AAA States 2014 - 2023





 $^{^{(1)} \} Beginning\ in\ 2021\ Moody's\ revised\ calculation\ to\ be\ based\ on\ fiscal\ year-end.\ Prior\ years\ were\ based\ on\ calendar\ year-end.$

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-AAA states, a statutory requirement for a short amortization of debt mitigates the effect of the higher debt levels.

In terms of total NTSD, California remains at the top of the list with \$98.0 billion outstanding, followed by New York with \$67.6 billion. Nebraska remains at the bottom of the list with total NTSD of only \$86.6 million. Virginia's NTSD decreased by approximately \$100 million from \$17.8 billion to \$17.7 billion outstanding. Virginia remained ranked as the 12th highest amongst all states in total NTSD. However, it is important to note that Virginia has the 4th lowest capital asset depreciation ratio in the nation at 40%, meaning Virginia's future capital asset needs are lower than those 46 other states, reflecting Virginia's substantial commitment to financing its capital and infrastructure needs during recent periods of historically low interest rates.

Summary

Virginia ended fiscal year 2024 in yet another historically strong fiscal position with reserve funds at new all-time highs and revenue growth that continued to outpace budget expectations. While inflation has returned to lower levels and the fears of a recession have subsided, there are still local, national, and global potential risk factors that could lead to an economic recession to be cognizant of as the Commonwealth moves into the next budget cycle. Despite the Commonwealth's strong fiscal position, it remains as important as ever that Virginia continue to exercise fiscal prudence in its capital planning. Current economic outlooks are optimistic and expectations are that interest rates will continue to decline through fiscal year 2025, but there is still much uncertainty within the markets, particularly as the new Federal Administration transitions into power in January.

The Commonwealth's outstanding tax-supported debt continued to grow in fiscal year 2024, but remained below its peak levels from fiscal year 2021. Section 9(d) appropriation debt continues to make up the largest portion of the Commonwealth's tax-supported debt burden. Despite suppressed levels of authorization of new tax-supported debt in recent budgets, approximately \$3.3 billion (excluding debt authorizations that are not expected to be utilized) in authorized but unissued tax-supported debt remains to be issued. Debt service as a percentage of Blended Revenues has remained below the 5% target rate throughout the last decade and is projected to continue to fall below this target even with the future planned issuances of the Commonwealth's authorized but unissued tax-supported debt. Rating agencies consider the Commonwealth's debt burden to be low and well-managed and the Commonwealth saw its NTSD per capita and NTSD as a percentage of personal income both decrease in the 2024 Moody's Medians Report for the first time since fiscal year 2017. Rating agencies will continue to monitor the Commonwealth's budget process to confirm a structurally balanced budget is adopted and that a reliance on reserves is not needed to cover any potential unexpected future revenue shortfalls.



REPORT OF THE DEBT CAPACITY ADVISORY COMMITTEE December 19, 2024

It is important to note that one quarter of historically low interest rates is still being incorporated into the DCAC model, resulting in a Base Model Rate that lags current market rates. As a result, Treasury staff again consulted with financial advisors and the Office of the Secretary of Finance to determine a more appropriate interest rate to be used to model the Commonwealth's debt capacity for the next biennium. Ultimately, the Committee has utilized a Recommended Modified Model Rate of 4.25% to model future tax-supported debt issuances. The Commonwealth's resulting debt capacity increased from \$1.06 billion in fiscal year 2023 to \$1.31 billion in fiscal year 2024. The increase in capacity is a result of multiple factors, including historically low authorizations of new tax-supported debt over the last three fiscal years, stronger growth projections for many of the Commonwealth's revenue categories in the longer range of the December 2024 forecast, the issuance of nearly \$1 billion in tax-supported debt in fiscal year 2024 at rates below the 2023 Recommended Modified Model Rate of 4.75%, and the refunding of certain existing tax-supported bonds for debt service savings during fiscal year 2024.



Appendix A

Debt Capacity Calculation, Sensitivity Analysis and Moral Obligation Update

December 19, 2024

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 December 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 (3.46%) plus 25 basis points for 9(d) debt (3.71%).
 - Given the model rate still includes a quarter of abnormally low rates from Q1 2022, the 2024 Model was modified to utilize a 4.25% recommended rate for appropriation supported long-term debt.

Model Includes:

- Blended Revenues from Official Forecast:
 - General fund revenues, certain recurring non-general fund transfers including ABC profits, state revenues in the Transportation Trust Fund, and Virginia Healthcare Fund revenues.
- Actual and Projected Debt Service:
 - Actual debt service on all issued tax-supported debt, including long-term leases and installment purchases.
 - 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.

- Long-Term lease and SBITA liabilities that are paid for directly by the general fund or from general fund appropriations.
- Installment purchases (80% of total of first year amounts in Commonwealth ACFR for both primary government and component units).
- Obligations for which the debt service is derived from payments received from the Commonwealth on a long-term 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 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

(Dollars in Millions)

	9(b)	<u>v</u>	<u>PBA</u>	21st	CBA Century iipment	21st	/CBA t Century rojects	Trai	CPR ns portation	VTD portation	oute 58 sportation	<u>v</u>	<u>PA</u>	<u>Total</u>
Authorized & Unissued as of June 30, 2024	\$ -	\$	1,599.6	\$	192.8	\$	812.6	\$	146.6	\$ 24.7	\$ 226.4	\$	-	\$ 3,002.7
Issued Jul 1 - Dec 31, 2024	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
Assumed Issued:	 									 	 			
FY 2025	\$ _	\$	400.0	\$	95.15	\$	525.0	\$	_	\$ _	\$ -	\$	_	\$ 1,020.2
FY 2026	\$ -	\$	400.0	\$	97.65	\$	287.6	\$	146.6	\$ _	\$ 152.2	\$	_	\$ 1,084.1
FY 2027	\$ -	\$	399.6	\$	-	\$	-	\$	-	\$ -	\$ 74.2	\$	-	\$ 473.8
FY 2028	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2029	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2030	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2031	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2032	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2033	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
FY 2034	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -
Total Planned	\$ -	\$	1,199.6	\$	192.8	\$	812.6	\$	146.6	\$ -	\$ 226.4	\$	-	\$ 2,578.0
Subtotal Issued & Planned	\$ 	\$	1,199.6	\$	192.8	\$	812.6	\$	146.6	\$ 	\$ 226.4	\$	-	\$ 2,578.0
Authorized Debt														
Assumed Unissued ¹	\$ -	\$	400.0	\$	-	\$	-	\$	-	\$ 24.7	\$ -	\$	-	\$ 424.7

^{(1) \$400}M in VPBA bonds authorized in 2024 Appropriation Act for WQIF projects are assumed not to be issued as these projects are to be funded by surplus General Fund cash. NVTD authorized debt is assumed not to be issued.

^{* 9(}c) Debt is not included in the table above since it is excluded from the Model.

<u>Debt Capacity Model – An Explanation of Solution Pages</u>

Column Descriptions:

- (1) **Blended Revenues** include all general fund, certain recurring non-general fund transfers including ABC profits, state tax revenues in the Transportation Trust Fund, and Virginia Healthcare Fund revenues.
- (2) Base Capacity to Pay Debt Service is calculated as 5% of Blended Revenues. (Column $2 = \text{Column } 1 \times .05$)
- (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 (6/30/2024), excluding (i) 9(c) debt and (ii) the 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 and issued.
- (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.

 $(Column 11 = (Column 3 + Column 5 + Column 9) \div Column 1)$

Standard Base 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 \$1.38 billion.

Recommended Modified Model Rate 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.
- Replaces the Base Model Rate of 3.71% with a rate of 4.25%. This Recommended Modified Model Rate is based on current market rates and economic expectation, as well as consultation with the Commonwealth's financial advisors and the Office of the Secretary of Finance, and is recommended to better model the rates at which future tax-supported debt issuances are anticipated to occur.
- This solution results in an average annual capacity of \$1.31 billion.
- Accordingly, the Committee finds the additional tax supported debt that may prudently be authorized in each of fiscal years 2025 and 2026 is \$1.31 billion.

(Dollars in Millions)

December 19, 2024

Debt Capacity Maximum Ratio		December 19, 2024
Debt Service as a % of Revenue =	5.0%	Base Model Solution

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Base	Annual	Actual Outstanding	Annual Payments for	Actual & Projected	Net	Amount of	Debt Service on Amount of	Remaining	Total
		Capacity	Payments for	Debt Service	Debt Service	Debt Service	Capacity	Additional	Additional	Capacity	Debt Service
	Blended	to Pay	Debt Service	as a % of	on All Planned	as a % of	to Pay	Debt that may	Debt that may	to Pay	as a % of
Fiscal Year	Revenues	Debt Service	on Debt Issued	Revenues	Debt Issuances	Revenues	Debt Service	Be Issued	Be Issued	Debt Service	Revenues
2015	20,040.70	1,002.04	897.38	4.48%	N/A	4.48%	104.65	N/A	N/A	104.65	4.48%
2016	20,382.70	1,019.14	904.30	4.44%	N/A	4.44%	114.83	N/A	N/A	114.83	4.44%
2017	21,162.90	1,058.15	988.33	4.67%	N/A	4.67%	69.82	N/A	N/A	69.82	4.67%
2018	22,351.70	1,117.59	957.97	4.29%	N/A	4.29%	159.62	N/A	N/A	159.62	4.29%
2019	23,858.40	1,192.92	1,008.23	4.23%	N/A	4.23%	184.69	N/A	N/A	184.69	4.23%
2020	24,308.76	1,215.44	1,037.16	4.27%	N/A	4.27%	178.28	N/A	N/A	178.28	4.27%
2021	28,136.78	1,406.84	1,043.55	3.71%	N/A	3.71%	363.29	N/A	N/A	363.29	3.71%
2022	32,587.44	1,629.37	1,101.44	3.38%	N/A	3.38%	527.94	N/A	N/A	527.94	3.38%
2023	31,676.04	1,583.80	1,184.01	3.74%	N/A	3.74%	399.79	N/A	N/A	399.79	3.74%
2024	32,165.53	1,608.28	1,233.69	3.84%	N/A	3.84%	374.59	N/A	N/A	374.59	3.84%
2025	34,812.93	1,740.65	1,257.25	3.61%	185.66	4.14%	297.74	3,934.26	277.160	20.58	4.94%
2026	35,819.35	1,790.97	1,229.35	3.43%	284.46	4.23%	277.16	0.00	277.160	0.00	5.00%
2027	36,745.00	1,837.25	1,175.14	3.20%	353.23	4.16%	308.87	450.09	308.868	0.00	5.00%
2028	37,806.04	1,890.30	1,110.23	2.94%	381.38	3.95%	398.69	1,274.90	398.681	0.00	5.00%
2029	39,142.15	1,957.11	1,058.01	2.70%	381.38	3.68%	517.71	1,689.66	517.714	0.00	5.00%
2030	40,366.27	2,018.31	1,001.12	2.48%	381.38	3.42%	635.81	1,676.35	635.809	0.00	5.00%
2031	41,612.04	2,080.60	927.51	2.23%	381.38	3.15%	771.71	1,929.07	771.707	0.00	5.00%
2032	42,957.00	2,147.85	867.71	2.02%	381.38	2.91%	898.76	1,803.45	898.756	0.00	5.00%
2033	44,568.92	2,228.45	806.31	1.81%	365.98	2.63%	1,056.16	1,048.24	972.602	83.56	4.81%
2034	45,953.80	2,297.69	780.41	1.70%	350.16	2.46%	1,167.12	0.00	972.602	194.52	4.58%
							10 Vear		2 Vrs Eveess		

10 Year 2 Yrs Excess \$1,380.60 Avg Capacity: \$2,761.20 Average:

(Dollars in Millions)

December 19, 2024

Debt Capacity Maximum Ratio 5.0% Debt Service as a % of Revenue = **Base Model Average Solution**

Part Part		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Fiscal Year Blended Revenues to Pay Debt Service Place (architecture) Debt Service Debt Service Place (belt Service) as a % of Debt Service Place (belt Service) belt Hant may Debt Hant may Debt Hant may Debt Service Place (belt Service) Revenues 2015 20,040.70 1,002.04 897.38 4.48% N/A 1,0465 N/A N/A 104.65 4.48% 2016 20,382.70 1,019.14 904.30 4.44% N/A 4.67% 69.82 N/A N/A 114.83 A/A N/A 114.83 4.47% 69.82 A/G7% 1,117.59 987.97 4.29% N/A 4.23% 159.62 N/A N/A 114.69 4.29% 4.67% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 1.40 184.69 N/A N/A 184.69 4.23% 1.40 1.40 4.23% 1.40 1.40 4.23% 1.40 1.40 3.23 1.40 4.23% 1.42.9% 1.78.28			Base	Annual				Net	Amount of		Remaining	Total
Fiscal Year Revenues Debt Service on Debt Issued Revenues Debt Issued Be Issued Be Issued Debt Service Revenues 2015 20,040.70 1,002.04 897.38 4.48% N/A 4.48% 104.65 N/A N/A 104.65 4.48% 2016 20,382.70 1,019.14 904.30 4.44% N/A 4.44% 114.83 N/A N/A N/A 14.48% 2017 21,162.90 1,058.15 988.33 4.67% N/A 4.67% 69.82 N/A N/A 14.67% 69.82 N/A N/A 14.69% 4.29% 2018 22,351.70 1,117.59 957.97 4.29% N/A 4.23% 184.69 N/A N/A 159.62 N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% N/A N/A N/A 184.69 4.23% 20201 24,308.76 1,215.44 1,037			Capacity	Payments for	Debt Service	Debt Service	Debt Service	Capacity	Additional	Additional	Capacity	Debt Service
2015 20,040.70 1,002.04 897.38 4.48% N/A 4.48% 104.65 N/A N/A 104.65 4.48% 2016 20,382.70 1,019.14 904.30 4.44% N/A 4.44% 114.83 N/A N/A 114.83 4.44% 2017 21,162.90 1,058.15 988.33 4.67% N/A 4.67% 69.82 N/A N/A 69.82 4.67% 2018 22,351.70 1,117.59 957.97 4.29% N/A 4.29% 159.62 N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.27% 178.28 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.31% N/A 3.38% 527.94 N/A N/A <td< th=""><th></th><th>Blended</th><th>to Pay</th><th>Debt Service</th><th>as a % of</th><th>on All Planned</th><th>as a % of</th><th>to Pay</th><th>Debt that may</th><th>Debt that may</th><th>to Pay</th><th>as a % of</th></td<>		Blended	to Pay	Debt Service	as a % of	on All Planned	as a % of	to Pay	Debt that may	Debt that may	to Pay	as a % of
2016 20,382,70 1,019,14 904,30 4.44% N/A 4.44% 114.83 N/A N/A 114.83 4,44% 2017 21,162,90 1,058,15 988,33 4,67% N/A 4,67% 69.82 N/A N/A N/A 69.82 4,67% 2018 22,351,70 1,117,59 957,97 4,29% N/A 4,29% 159,62 N/A N/A N/A 159,62 4,29% 2019 23,858,40 1,192,92 1,008,23 4,23% N/A 4,23% 184,69 N/A N/A 184,69 N/A N/A 184,69 4,23% 2020 24,308,76 1,215,44 1,037,16 4,27% N/A 3,71% 363,29 N/A N/A 178,28 4,27% 2021 28,136,78 1,406,84 1,043,55 3,71% N/A 3,71% 363,29 N/A N/A 371% 2021 28,136,78 1,460,84 1,043,55 3,71% N/A 3,7	Fiscal Year	Revenues	Debt Service	on Debt Issued	Revenues	Debt Issuances	Revenues	Debt Service	Be Issued	Be Issued	Debt Service	Revenues
2017 21,162,90 1,058,15 988,33 4,67% N/A 4,67% 69,82 N/A N/A 69,82 4,67% 2018 22,351,70 1,117,59 957,97 4,29% N/A 4,29% 159,62 N/A N/A 159,62 4,29% 2019 23,858,40 1,192,92 1,008,23 4,23% N/A 4,23% 184,69 N/A N/A 184,69 4,23% 2020 24,308,76 1,215,44 1,037,16 4,27% N/A 4,27% 178,28 N/A N/A 178,28 4,27% 2021 28,136,78 1,406,84 1,043,55 3,71% N/A 3,71% 363,29 N/A N/A 363,29 3,71%	2015	20,040.70	1,002.04	897.38	4.48%	N/A	4.48%	104.65	N/A	N/A	104.65	4.48%
2018 22,351.70 1,117.59 957.97 4.29% N/A 4.29% 159.62 N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A 363.29 3.71% 3.28% 3.23 3.28% 3.27 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 3.74% 3.28% 3.27 N/A N/A 374.90 3.28% 3.27 3.28 3.27 3.28 3.27	2016	20,382.70	1,019.14	904.30	4.44%	N/A	4.44%	114.83	N/A	N/A	114.83	4.44%
2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.74% N/A N/A N/A 527.94 N/A N/A 399.79 3.74% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2.74 0.00 0.00 2.97 4.14% 2.97 4.00 0.00 2.97	2017	21,162.90	1,058.15	988.33	4.67%	N/A	4.67%	69.82	N/A	N/A	69.82	4.67%
2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A N/A 399.79 N/A N/A 374.59 3.84% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 284.46	2018	22,351.70	1,117.59	957.97	4.29%	N/A	4.29%	159.62	N/A	N/A	159.62	4.29%
2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 284.46 4.23% 277.16 1,380.60 97.260 179.90 4.50% 2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87	2019	23,858.40	1,192.92	1,008.23	4.23%	N/A	4.23%	184.69	N/A	N/A	184.69	4.23%
2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% N/A 3.84% 374.59 N/A N/A 374.59 N/A N/A 374.59 N/A N/A 374.59 3.84% 374.59 N/A N/A 374.59 3.84% 374.59 N/A 1.00 0.00 0.00 0.00 0.00 0.00 <td>2020</td> <td>24,308.76</td> <td>1,215.44</td> <td>1,037.16</td> <td>4.27%</td> <td>N/A</td> <td>4.27%</td> <td>178.28</td> <td>N/A</td> <td>N/A</td> <td>178.28</td> <td>4.27%</td>	2020	24,308.76	1,215.44	1,037.16	4.27%	N/A	4.27%	178.28	N/A	N/A	178.28	4.27%
2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 284.46 4.23% 277.16 1,380.60 97.260 179.90 4.50% 2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87 1,380.60 194.520 114.35 4.69% 2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2039 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71	2021	28,136.78	1,406.84	1,043.55	3.71%	N/A	3.71%	363.29	N/A	N/A	363.29	3.71%
2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 284.46 4.23% 277.16 1,380.60 97.260 179.90 4.50% 2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87 1,380.60 194.520 114.35 4.69% 2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.15% <td< td=""><td>2022</td><td>32,587.44</td><td>1,629.37</td><td>1,101.44</td><td>3.38%</td><td>N/A</td><td>3.38%</td><td>527.94</td><td>N/A</td><td>N/A</td><td>527.94</td><td>3.38%</td></td<>	2022	32,587.44	1,629.37	1,101.44	3.38%	N/A	3.38%	527.94	N/A	N/A	527.94	3.38%
2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 284.46 4.23% 277.16 1,380.60 97.260 179.90 4.50% 2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87 1,380.60 194.520 114.35 4.69% 2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15%	2023	31,676.04	1,583.80	1,184.01	3.74%	N/A	3.74%	399.79	N/A	N/A	399.79	3.74%
2026 35,819.35 1,790.97 1,229.35 3.43% 284.46 4.23% 277.16 1,380.60 97.260 179.90 4.50% 2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87 1,380.60 194.520 114.35 4.69% 2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% <td>2024</td> <td>32,165.53</td> <td>1,608.28</td> <td>1,233.69</td> <td>3.84%</td> <td>N/A</td> <td>3.84%</td> <td>374.59</td> <td>N/A</td> <td>N/A</td> <td>374.59</td> <td>3.84%</td>	2024	32,165.53	1,608.28	1,233.69	3.84%	N/A	3.84%	374.59	N/A	N/A	374.59	3.84%
2027 36,745.00 1,837.25 1,175.14 3.20% 353.23 4.16% 308.87 1,380.60 194.520 114.35 4.69% 2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% <td>2025</td> <td>34,812.93</td> <td>1,740.65</td> <td>1,257.25</td> <td>3.61%</td> <td>185.66</td> <td>4.14%</td> <td>297.74</td> <td>0.00</td> <td>0.000</td> <td>297.74</td> <td>4.14%</td>	2025	34,812.93	1,740.65	1,257.25	3.61%	185.66	4.14%	297.74	0.00	0.000	297.74	4.14%
2028 37,806.04 1,890.30 1,110.23 2.94% 381.38 3.95% 398.69 1,380.60 291.781 106.91 4.72% 2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2026	35,819.35	1,790.97	1,229.35	3.43%	284.46	4.23%	277.16	1,380.60	97.260	179.90	4.50%
2029 39,142.15 1,957.11 1,058.01 2.70% 381.38 3.68% 517.71 1,380.60 389.041 128.67 4.67% 2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2027	36,745.00	1,837.25	1,175.14	3.20%	353.23	4.16%	308.87	1,380.60	194.520	114.35	4.69%
2030 40,366.27 2,018.31 1,001.12 2.48% 381.38 3.42% 635.81 1,380.60 486.301 149.51 4.63% 2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2028	37,806.04	1,890.30	1,110.23	2.94%	381.38	3.95%	398.69	1,380.60	291.781	106.91	4.72%
2031 41,612.04 2,080.60 927.51 2.23% 381.38 3.15% 771.71 1,380.60 583.561 188.15 4.55% 2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2029	39,142.15	1,957.11	1,058.01	2.70%	381.38	3.68%	517.71	1,380.60	389.041	128.67	4.67%
2032 42,957.00 2,147.85 867.71 2.02% 381.38 2.91% 898.76 1,380.60 680.822 217.93 4.49% 2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2030	40,366.27	2,018.31	1,001.12	2.48%	381.38	3.42%	635.81	1,380.60	486.301	149.51	4.63%
2033 44,568.92 2,228.45 806.31 1.81% 365.98 2.63% 1,056.16 1,380.60 778.082 278.08 4.38%	2031	41,612.04	2,080.60	927.51	2.23%	381.38	3.15%	771.71	1,380.60	583.561	188.15	4.55%
	2032	42,957.00	2,147.85	867.71	2.02%	381.38	2.91%	898.76	1,380.60	680.822	217.93	4.49%
2034 45,953.80 2,297.69 780.41 1.70% 350.16 2.46% 1,167.12 1,380.60 875.342 291.78 4.37%	2033	44,568.92	2,228.45	806.31	1.81%	365.98	2.63%	1,056.16	1,380.60	778.082	278.08	4.38%
	2034	45,953.80	2,297.69	780.41	1.70%	350.16	2.46%	1,167.12	1,380.60	875.342	291.78	4.37%

10 Year Average: \$1,380.60

(Dollars in Millions)

Debt Capacity Maximum Ratio

December 19, 2024

Debt Service as a %	of Revenue =		5.0%	Recommen	ded Modified Mo	del Rate (4.25%	6) Solution				
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
				Actual	Annual	Actual &			Debt Service		
		Base	Annual	Outstanding	Payments for	Projected	Net	Amount of	on Amount of	Remaining	Total
	Dlandad	Capacity	Payments for Debt Service	Debt Service	Debt Service	Debt Service	Capacity	Additional	Additional	Capacity	Debt Service
Fiscal Year	Blended Revenues	to Pay Debt Service	on Debt Issued	as a % of Revenues	on All Planned Debt Issuances	as a % of Revenues	to Pay Debt Service	Debt that may Be Issued	Debt that may Be Issued	to Pay Debt Service	as a % of Revenues
2015	20,040.70	1,002.04	897.38	4.48%	N/A		104.65	N/A		104.65	
						4.48%			N/A	•••••	4.48%
2016	20,382.70	1,019.14	904.30	4.44%	N/A	4.44%	114.83	N/A	N/A	114.83	4.44%
2017	21,162.90	1,058.15	988.33	4.67%	N/A	4.67%	69.82	N/A	N/A	69.82	4.67%
2018	22,351.70	1,117.59	957.97	4.29%	N/A	4.29%	159.62	N/A	N/A	159.62	4.29%
2019	23,858.40	1,192.92	1,008.23	4.23%	N/A	4.23%	184.69	N/A	N/A	184.69	4.23%
2020	24,308.76	1,215.44	1,037.16	4.27%	N/A	4.27%	178.28	N/A	N/A	178.28	4.27%
2021	28,136.78	1,406.84	1,043.55	3.71%	N/A	3.71%	363.29	N/A	N/A	363.29	3.71%
2022	32,587.44	1,629.37	1,101.44	3.38%	N/A	3.38%	527.94	N/A	N/A	527.94	3.38%
2023	31,676.04	1,583.80	1,184.01	3.74%	N/A	3.74%	399.79	N/A	N/A	399.79	3.74%
2024	32,165.53	1,608.28	1,233.69	3.84%	N/A	3.84%	374.59	N/A	N/A	374.59	3.84%
2025	34,812.93	1,740.65	1,257.25	3.61%	185.66	4.14%	297.74	3,706.93	273.151	24.59	4.93%
2026	35,819.35	1,790.97	1,229.35	3.43%	288.47	4.24%	273.15	0.00	273.151	0.00	5.00%
2027	36,745.00	1,837.25	1,175.14	3.20%	359.72	4.18%	302.38	396.70	302.383	0.00	5.00%
2028	37,806.04	1,890.30	1,110.23	2.94%	389.17	3.97%	390.90	1,201.31	390.903	0.00	5.00%
2029	39,142.15	1,957.11	1,058.01	2.70%	389.17	3.70%	509.93	1,615.30	509.929	0.00	5.00%
2030	40,366.27	2,018.31	1,001.12	2.48%	389.17	3.44%	628.03	1,602.68	628.025	0.00	5.00%
2031	41,612.04	2,080.60	927.51	2.23%	389.17	3.16%	763.93	1,844.30	763.925	0.00	5.00%
2032	42,957.00	2,147.85	867.71	2.02%	389.17	2.93%	890.97	1,724.12	890.969	0.00	5.00%
2033	44,568.92	2,228.45	806.31	1.81%	373.76	2.65%	1,048.38	1,019.82	966.116	82.26	4.82%
2034	45,953.80	2,297.69	780.41	1.70%	357.94	2.48%	1,159.34	0.00	966.116	193.22	4.58%
							10 Year		2 Yrs Excess		

10 Year 2 Yrs Excess Average: \$1,311.12 Avg Capacity: \$2,622.23

(Dollars in Millions)

Debt Capacity Maximum Ratio

December 19, 2024

2 cor cup ucus mannin munc		20001127,2021
Debt Service as a % of Revenue =	5.0%	Recommended Modified Model Rate (4.25%) Average Solution

Page		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Fiscal Year Revenues Debt Service on Debt Issuade Revenues Debt Issuades Revenues Debt Service Be Issuad Debt Service Revenues 2015 20,040,70 1,002,04 897,38 4.48% N/A 4.48% 104.65 N/A N/A 104.65 4.48% 2016 20,382,70 1,019,14 904,30 4.44% N/A 4.44% 114.83 N/A N/A 114.83 4.44% 2017 21,162.90 1,058.15 988.33 4.67% N/A 4.29% 159.62 N/A N/A 69.82 4.67% 2018 22,351.70 1,117.59 957.97 4.29% N/A 4.29% 159.62 N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 3.71% N/A 3.71%					Outstanding	Payments for	Projected			on Amount of	8	
2015 20,040,70 1,002,04 897,38 4,48% N/A 4,48% 104,65 N/A N/A 104,65 4,48% 2016 20,382,70 1,019,14 904,30 4,44% N/A 4,44% 114,83 N/A N/A 114,83 4,44% 2017 21,162,90 1,058,15 988,33 4,67% N/A 4,67% 69.82 N/A N/A 194,698 2,67% 2018 22,351,70 1,117,59 957,97 4,29% N/A 4,29% 159,62 N/A N/A N/A 159,62 4,29% 2019 23,858,40 1,192,92 1,008,23 4,23% N/A 4,23% 184,69 N/A N/A N/A 184,69 4,23% 2020 24,308,76 1,215,44 1,037,16 4,27% N/A 4,27% 178,28 N/A N/A 178,28 4,27% 2021 28,136,78 1,466,84 1,043,55 3,71% N/A 3,38% 527,94 <			•					•	1	•	•	
2016 20,382.70 1,019.14 904.30 4.44% N/A 4.44% 114.83 N/A N/A 114.83 4.44% 2017 21,162.90 1,058.15 988.33 4.67% N/A 4.67% 69.82 N/A N/A 69.82 4.67% 2018 22,351.70 1,117.59 957.97 4.29% N/A 4.29% 159.62 N/A N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 3.71% 363.29 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.38% 527.94 N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.34% 527.94 N/A <	Fiscal Year	Revenues	Debt Service	on Debt Issued		Debt Issuances	Revenues	Debt Service	Be Issued	Be Issued	Debt Service	Revenues
2017 21,162,90 1,058.15 988.33 4,67% N/A 4,67% 69.82 N/A N/A 69.82 4,67% 2018 22,351.70 1,117.59 957.97 4,29% N/A 4,29% 159.62 N/A N/A 159.62 4,29% 2019 23,858.40 1,192.92 1,008.23 4,23% N/A 4,23% 184.69 N/A N/A 184.69 4,23% 2020 24,308.76 1,215.44 1,037.16 4,27% N/A 4,27% 178.28 N/A N/A 178.28 4,27% 2021 28,136.78 1,406.84 1,043.55 3,71% N/A 3,71% 363.29 N/A N/A 363.29 3,71% 2022 32,587.44 1,629.37 1,101.44 3,88% N/A 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74% 3,74%	2015	20,040.70	1,002.04	897.38	4.48%	N/A	4.48%	104.65	N/A	N/A	104.65	4.48%
2018 22,351.70 1,117.59 957.97 4.29% N/A 4.29% 159.62 N/A N/A 159.62 4.29% 2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.38% 527.94 N/A N/A 563.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.74% N/A N/A 399.79 N/A N/A 399.79 3.74% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 374.59 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59	2016	20,382.70	1,019.14	904.30	4.44%	N/A	4.44%	114.83	N/A	N/A	114.83	4.44%
2019 23,858.40 1,192.92 1,008.23 4.23% N/A 4.23% 184.69 N/A N/A 184.69 4.23% 2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.74% 3.84% N/A 3.74% 3.97.9 N/A N/A 3.99.79 3.74% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.84% 3.74% 3.84%	2017	21,162.90	1,058.15	988.33	4.67%	N/A	4.67%	69.82	N/A	N/A	69.82	4.67%
2020 24,308.76 1,215.44 1,037.16 4.27% N/A 4.27% 178.28 N/A N/A 178.28 4.27% 2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12	2018	22,351.70	1,117.59	957.97	4.29%	N/A	4.29%	159.62	N/A	N/A	159.62	4.29%
2021 28,136.78 1,406.84 1,043.55 3.71% N/A 3.71% 363.29 N/A N/A 363.29 3.71% 2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 389.17 3.97% 390.90 1,311.12 <td>2019</td> <td>23,858.40</td> <td>1,192.92</td> <td>1,008.23</td> <td>4.23%</td> <td>N/A</td> <td>4.23%</td> <td>184.69</td> <td>N/A</td> <td>N/A</td> <td>184.69</td> <td>4.23%</td>	2019	23,858.40	1,192.92	1,008.23	4.23%	N/A	4.23%	184.69	N/A	N/A	184.69	4.23%
2022 32,587.44 1,629.37 1,101.44 3.38% N/A 3.38% 527.94 N/A N/A 527.94 3.38% 2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.00 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.70% 509.93	2020	24,308.76	1,215.44	1,037.16	4.27%	N/A	4.27%	178.28	N/A	N/A	178.28	4.27%
2023 31,676.04 1,583.80 1,184.01 3.74% N/A 3.74% 399.79 N/A N/A 399.79 3.74% 2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93	2021	28,136.78	1,406.84	1,043.55	3.71%	N/A	3.71%	363.29	N/A	N/A	363.29	3.71%
2024 32,165.53 1,608.28 1,233.69 3.84% N/A 3.84% 374.59 N/A N/A 374.59 3.84% 2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% <td< td=""><td>2022</td><td>32,587.44</td><td>1,629.37</td><td>1,101.44</td><td>3.38%</td><td>N/A</td><td>3.38%</td><td>527.94</td><td>N/A</td><td>N/A</td><td>527.94</td><td>3.38%</td></td<>	2022	32,587.44	1,629.37	1,101.44	3.38%	N/A	3.38%	527.94	N/A	N/A	527.94	3.38%
2025 34,812.93 1,740.65 1,257.25 3.61% 185.66 4.14% 297.74 0.00 0.000 297.74 4.14% 2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16%	2023	31,676.04	1,583.80	1,184.01	3.74%	N/A	3.74%	399.79	N/A	N/A	399.79	3.74%
2026 35,819.35 1,790.97 1,229.35 3.43% 288.47 4.24% 273.15 1,311.12 96.612 176.54 4.51% 2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% <td>2024</td> <td>32,165.53</td> <td>1,608.28</td> <td>1,233.69</td> <td>3.84%</td> <td>N/A</td> <td>3.84%</td> <td>374.59</td> <td>N/A</td> <td>N/A</td> <td>374.59</td> <td>3.84%</td>	2024	32,165.53	1,608.28	1,233.69	3.84%	N/A	3.84%	374.59	N/A	N/A	374.59	3.84%
2027 36,745.00 1,837.25 1,175.14 3.20% 359.72 4.18% 302.38 1,311.12 193.223 109.16 4.70% 2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 579.670 184.26 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% <td>2025</td> <td>34,812.93</td> <td>1,740.65</td> <td>1,257.25</td> <td>3.61%</td> <td>185.66</td> <td>4.14%</td> <td>297.74</td> <td>0.00</td> <td>0.000</td> <td>297.74</td> <td>4.14%</td>	2025	34,812.93	1,740.65	1,257.25	3.61%	185.66	4.14%	297.74	0.00	0.000	297.74	4.14%
2028 37,806.04 1,890.30 1,110.23 2.94% 389.17 3.97% 390.90 1,311.12 289.835 101.07 4.73% 2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 676.282 214.69 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2026	35,819.35	1,790.97	1,229.35	3.43%	288.47	4.24%	273.15	1,311.12	96.612	176.54	4.51%
2029 39,142.15 1,957.11 1,058.01 2.70% 389.17 3.70% 509.93 1,311.12 386.447 123.48 4.68% 2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 676.282 214.69 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2027	36,745.00	1,837.25	1,175.14	3.20%	359.72	4.18%	302.38	1,311.12	193.223	109.16	4.70%
2030 40,366.27 2,018.31 1,001.12 2.48% 389.17 3.44% 628.03 1,311.12 483.058 144.97 4.64% 2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 676.282 214.69 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2028	37,806.04	1,890.30	1,110.23	2.94%	389.17	3.97%	390.90	1,311.12	289.835	101.07	4.73%
2031 41,612.04 2,080.60 927.51 2.23% 389.17 3.16% 763.93 1,311.12 579.670 184.26 4.56% 2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 676.282 214.69 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2029	39,142.15	1,957.11	1,058.01	2.70%	389.17	3.70%	509.93	1,311.12	386.447	123.48	4.68%
2032 42,957.00 2,147.85 867.71 2.02% 389.17 2.93% 890.97 1,311.12 676.282 214.69 4.50% 2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2030	40,366.27	2,018.31	1,001.12	2.48%	389.17	3.44%	628.03	1,311.12	483.058	144.97	4.64%
2033 44,568.92 2,228.45 806.31 1.81% 373.76 2.65% 1,048.38 1,311.12 772.893 275.49 4.38%	2031	41,612.04	2,080.60	927.51	2.23%	389.17	3.16%	763.93	1,311.12	579.670	184.26	4.56%
	2032	42,957.00	2,147.85	867.71	2.02%	389.17	2.93%	890.97	1,311.12	676.282	214.69	4.50%
2034 45,953.80 2,297.69 780.41 1.70% 357.94 2.48% 1,159.34 1,311.12 869.505 289.83 4.37%	2033	44,568.92	2,228.45	806.31	1.81%	373.76	2.65%	1,048.38	1,311.12	772.893	275.49	4.38%
	2034	45,953.80	2,297.69	780.41	1.70%	357.94	2.48%	1,159.34	1,311.12	869.505	289.83	4.37%

10 Year Average: \$1,311.12

DEBT CAPACITY MODEL REVENUE DATA

December 2024 (Dollars In Millions)

					Transportation			Blended
			Transportation	General	Trust	Virginia	Total	Revenue
		General	Trust	Fund	Fund	Health Care	Blended	Growth
	Fiscal Year	Fund	Fund (3)	Growth	Growth	Fund	Revenue (8)	Rate (9)
2015	Actual 2015	18,369.50 (1)	1,324.50 (1)	8.38% (1)	11.40% (1)	346.70 (1)	20,040.70	8.31%
2016	Actual 2016	18,601.70 (1)	1,367.50 (1)	1.26% (1)	3.25% (1)	413.50 (1)	20,382.70	1.71%
2017	Actual 2017	19,348.40 (1)	1,431.40 (1)	4.01% (1)	4.67% (1)	383.10 (1)	21,162.90	3.83%
2018	Actual 2018	20,509.10 (1)	1,440.60 (1)	6.00% (1)	0.64% (1)	402.00 (1)	22,351.70	5.62%
2019	Actual 2019	21,965.50 (1)	1,497.00 (1)	7.10% (1)	3.92% (1)	395.90 (1)	23,858.40	6.74%
2020	Actual 2020	22,441.70 (1)	1,532.06 (1)	2.17% (1)	2.34% (1)	335.00 (1)	24,308.76	1.89%
2021	Actual 2021	25,637.10 (1)	1,885.78 (1)	14.24% (1)	23.09% (1)	613.90 (1)	28,136.78	15.75%
2022	Actual 2022	29,749.30 (1)	2,152.84 (1)	16.04% (1)	14.16% (1)	685.30 (1)	32,587.44	15.82%
2023	Actual 2023	28,725.50 (1)	2,242.04 (1)	-3.44% (1)	4.14% (1)	708.50 (1)	31,676.04	-2.80%
2024	Actual 2024	29,460.80 (1)	2,262.23 (1)	2.56% (1)	0.90% (1)	442.50 (1)	32,165.53	1.55%
2025	Forecasted for 2025	32,003.10 (2)	2,351.03 (4)	8.63% (2)	3.93% (5)	458.80 (6)	34,812.93	8.23%
2026	Forecasted for 2026	32,947.60 (2)	2,431.25 (4)	2.95% (2)	3.41% (5)	440.50 (6)	35,819.35	2.89%
2027	Forecasted for 2027	33,812.80 (2)	2,498.70 (4)	2.63% (2)	2.77% (5)	433.50 (6)	36,745.00	2.58%
2028	Forecasted for 2028	34,804.70 (2)	2,573.24 (4)	2.93% (2)	2.98% (5)	428.10 (6)	37,806.04	2.89%
2029	Forecasted for 2029	36,072.70 (2)	2,646.55 (4)	3.64% (2)	2.85% (5)	422.90 (6)	39,142.15	3.53%
2030	Forecasted for 2030	37,216.10 (2)	2,732.47 (4)	3.17% (2)	3.25% (5)	417.70 (6)	40,366.27	3.13%
2031	Forecasted for 2031	38,385.70 (2)	2,808.64 (4)	3.14% (2)	2.79% (6)	417.70 (7)	41,612.04	3.09%
2032	Forecasted for 2032	39,648.40 (2)	2,890.90 (4)	3.29% (2)	2.93% (6)	417.70 (7)	42,957.00	3.23%
2033	Forecasted for 2033	41,202.50 (2)	2,948.72 (5)	3.92% (2)	2.00% (5)	417.70 (7)	44,568.92	3.75%
2034	Forecasted for 2034	42,528.40 (2)	3,007.70 (5)	3.22% (2)	2.00% (5)	417.70 (7)	45,953.80	3.11%

- (1) Department of Taxation and Department of Transportation.
- (2) December General Fund Forecast for FY 2025-2034, including A.B.C. Profits, 0.375% sales tax (enacted 2013), and certain recurring Transfers per the Appropriation Act.
- (3) Does not include Highway Maintenance and Operating Fund, Federal Grants and Contracts or Toll Revenues.
- (4) Provided by Department of Transportation based on December Commonwealth Transportation Fund Forecast for FY 2025-2032.
- (5) Based on flat growth rate of 2.0% for years 2033-2034, per Department of Taxation.
- (6) December Virginia Health Care Fund Forecast for FY 2025-2030.
- (7) Held flat at final forecasted amount of Virginia Health Care Fund Revenues in FY30, per Department of Taxation.
- (8) Total Blended Revenue = GF + TTF + Virginia Health Care Fund.
- (9) Blended Revenue Growth Rate = (Current FY Total Blended Revenue / Prior FY Total Blended Revenue) 1.

<u>Debt Capacity Sensitivity Analysis – Recommended Modified Model Rate</u>

2-Year Reserve Excess Capacity Sensitivity

- The Recommended Modified Model Rate solution provides for average debt capacity of \$1.31 billion 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 \$1.43 billion.
 - 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 \$1.57 billion.

Revenue Sensitivity

- If the Recommended Modified Model Rate 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 \$5.65 million.
 - Assuming a 1% change of revenues in each and every year, the incremental change is \$25.98 million.

Interest Rate Sensitivity

- If the Recommend Modified Model Rate solution is altered to change interest rates, the following changes to average debt capacity occur:
 - Add 100 basis points to the recommended model rate, and average capacity decreases by \$117.69 million to \$1.19 billion.
 - Subtract 100 basis points from the recommended model rate, and average capacity increases by \$133.73 million to \$1.44 billion.
- The exhibit on the following page highlights the impacts of various interest rates, ranging from the base model rate of 2.75% to 5.75%, on the Commonwealth's debt capacity. The recommended modified model rate of 4.25% is highlighted in light blue.

DCAC - 2024 Model - Interest Rate Sensitivity Stress Testing

Interest Rate	to Recomm	ended Model Rate	Annual	Debt Capacity
2.75%	\$	207.43	\$	1,518.55
3.25%	\$	133.73	\$	1,444.85
3.75%	\$	64.70	\$	1,375.82
4.25%		N/A	\$	1,311.12
4.75%	\$	(60.70)	\$	1,250.42
5.25%	\$	(117.69)	\$	1,193.43
5.75%	\$	(171.25)	\$	1.139.87

Severe Economic Downturn Scenario Analysis

- If the Recommended Modified Model Rate solution is altered to project a severe economic downturn, the resulting debt capacity is \$1.00 billion, a decline of \$308.87 million.
- This scenario assumes a 2025 recession causes budgeted revenues to grow at half of their projected growth rate in fiscal year 2025 before declining sharply in fiscal year 2026. The assumed revenue decline of 5.39% in fiscal year 2026 was determined through consultation with the Commonwealth's financial advisor and is based on Virginia's historical revenue declines during the last three major recessions. The revenues used to model this scenario are presented below along with footnotes containing the assumptions for revenue growth.

DEBT CAPACITY MODEL REVENUE DATA

December 2024 (Dollars In Millions) Severe Economic Downturn Scenario

					Transportation			Blended
			Transportation	General	Trust	Virginia	Total	Revenue
		General	Trust	Fund	Fund	Health Care	Blended	Growth
	Fiscal Year	Fund	Fund (3)	Growth	Growth	Fund	Revenue (8)	Rate (9)
2025	Forecasted for 2025	30,731.95 (1)	2,306.63 (4)	4.31% (1)	1.96% (4)	450.65 (6)	33,489.23	4.12%
2026	Forecasted for 2026	29,075.50 (2)	2,182.30 (2)	-5.39% (2)	-5.39% (2)	426.36 (2)	31,684.16	-5.39%
2027	Forecasted for 2027	29,839.02 (3)	2,225.95 (5)	2.63% (3)	2.00% (5)	419.58 (7)	32,484.55	2.53%
2028	Forecasted for 2028	30,714.35 (3)	2,270.47 (5)	2.93% (3)	2.00% (5)	414.36 (7)	33,399.17	2.82%
2029	Forecasted for 2029	31,833.33 (3)	2,315.88 (5)	3.64% (3)	2.00% (5)	409.32 (7)	34,558.53	3.47%
2030	Forecasted for 2030	32,842.35 (3)	2,362.19 (5)	3.17% (3)	2.00% (5)	404.29 (7)	35,608.84	3.04%
2031	Forecasted for 2031	33,874.50 (3)	2,409.44 (5)	3.14% (3)	2.00% (5)	404.29 (7)	36,688.23	3.03%
2032	Forecasted for 2032	34,988.80 (3)	2,457.63 (5)	3.29% (3)	2.00% (5)	404.29 (7)	37,850.72	3.17%
2033	Forecasted for 2033	36,360.26 (3)	2,506.78 (5)	3.92% (3)	2.00% (5)	404.29 (7)	39,271.33	3.75%
2034	Forecasted for 2034	37,530.33 (3)	2,556.91 (5)	3.22% (3)	2.00% (5)	404.29 (7)	40,491.54	3.11%

- (1) Based on December GF forecast, assumes forecasted GF growth is cut in half for FY2025.
- (2) 5.39% decline in revenues based on avg. revenue declines for the Commonwealth during last three recessions (2002, 2009, 2014).
- $(3) \ Assumes \ projected \ growth \ rates \ from \ December \ 2024 \ GF \ forecast \ resume \ in \ FY27 \ through \ FY34.$
- (4) Based on December TTF forecast, assumes forecasted TTF growth is cut in half for FY2025.
- $(5)\ 2\%\ growth\ is\ based\ on\ long-term\ growth\ rate\ forecast\ for\ TTF\ revenues\ provided\ by\ Dept.\ of\ Taxation.$
- (6) Based on December VHCF forecast, assumes forecasted VHCF growth is cut in half for FY2025.
- (7) Assumes projected growth rates from December 2024 VHCF forecast resume in FY27 through FY34.
- (8) Total Blended Revenue = GF + TTF + Virginia Health Care Fund.
- (9) Blended Revenue Growth Rate = (Current FY Total Blended Revenue / Prior FY Total Blended Revenue) 1.

Debt of the Commonwealth

(Dollars in Thousands)

	As of June 30 2024	As of June 30 2023
Tax-Supported Debt	otile 50 Boar	othe 50 Hous
9(b) General Obligation (1)	\$ 120,065	\$ 173,122
9(c) General Obligation - Higher Education (2)	929,445	940,849
9(c) General Obligation - Transportation (2)	-	-
9(c) General Obligation - Parking Facilities (2)	3,582	4,646
Commonwealth Transportation Board	2,632,683	2,802,412
Virginia Public Building Authority	3,524,062	3,519,630
Virginia Port Authority	353,816	368,903
Virginia College Building Authority - 21st Century & Equipment	5,872,402	5,636,772
Virginia Biotechnology Research Park Authority	-	-
Long-Term Lease Liabilities (4)	614,948	604,124
Long-Term Subscription-Based Information Technology Arrangements (5)	237,263	183,467
Installment Purchases	309,686	313,824
Virginia Aviation Board	-	-
Economic Development Authority Obligations (3)	<u></u>	
Subtotal Tax Supported Debt	\$ 14,597,952	\$ 14,547,749
Other Tax-Supported Debt		
Compensated Absences (2)	\$ 809,085	\$ 790,099
Pension Liability (2)	6,030,110	5,466,431
OPEB Liability ⁽²⁾	1,788,543	1,777,127
Pollution Remediation Liability (2)	4,115	8,171
Other Liabilities (2)	23,575	23,103
Subtotal Tax Supported Debt Not Included in Capacity Model	\$ 8,655,428	\$ 8,064,931
Total Tax-Supported Debt	\$ 23,253,380	\$ 22,612,680

Source: Department of the Treasury and Department of Accounts

 $^{^{(1)}}$ Voter approved

 $^{^{(2)}}$ Not Included in Debt Capacity Model

⁽³⁾ Fairfax County Economic Development Authority Joint Venture with VDOT for Camp 30 Project

 $^{^{(4)}\,}GASB~87\,eliminated~Capital~Leases~beginning~FY22.~All~leases~over~12~months~now~considered~Long-Term~Lease$

 $^{^{(5)}}$ GASB 96 provided guidelines on the capitalization and recognition of related liabilities for subscription based IT assets beginning FY23

Debt of the Commonwealth

(Dollars in Thousands)

	As of June 30, 2024		As of June 30, 2023	
Debt Not Supported by Taxes (1)				
Moral Obligation / Contingent Liability Debt				
Virginia Resources Authority	\$	917,954	\$	906,848
Virginia Housing Development Authority		-		-
Virginia Public School Authority - 1997 Resolution		2,318,505		2,434,235
Virginia Public School Authority - School Tax Credit Bond Program		359,566		359,566
Virginia Public School Authority - Equipment Technology Notes	195,335		191,765	
Total Moral Obligation/Contingent Liability Debt	\$	3,791,360	\$	3,892,414
Other Debt Not Supported By Taxes				
9(d) Higher Education	\$	4,488,843	\$	4,425,416
Virginia College Building Authority - Pooled Bond Program		1,351,660		1,467,225
Virginia Public School Authority - Stand Alone Program		1,232,375		1,164,300
Virginia Housing Development Authority		6,266,161		4,763,715
Virginia Port Authority		251,788		259,020
Hampton Roads Sanitation District Commission		1,317,446		979,742
Hampton Roads Transportation Accountability Commission		2,799,940		2,562,835
Virginia Resources Authority		2,331,761		2,385,656
Grant Anticipation Notes (GARVEES)		768,265		873,808
I-81 Revenue Bonds		114,152		100,822
Notes Payable		306,904		322,835
Other Long-Term Debt		339,935		330,713
Foundations		1,643,054		2,056,375
Pension Liability		188,200		162,667
OPEB Liability		56,743		66,771
Long-Term Lease Liabilities (2)		5,043,742		4,937,423
Long-Term Subscription-Based Information Technology Arrangements (3)		374,475		378,728
Compensated Absences		15,082		15,244
Installment Purchase Obligations		-		-
Tuition Benefits Payable		1,301,781		1,384,699
Lottery Prizes Payable		192,722		198,128
Total Other Debt Not Supported By Taxes	\$	30,385,029	\$	28,836,122
Grand Total of Tax Supported Debt and Debt Not Supported By Taxes	\$	57,429,769	\$	55,341,216

Source: Department of the Treasury and Department of Accounts

⁽¹⁾ Not Included In Debt Capacity Model

 $^{^{(2)}\,}GASB\,87\,eliminated\,Capital\,Leases\,beginning\,FY22.\,All\,leases\,over\,12\,months\,now\,considered\,Long-Term\,Lease$

 $^{^{(3)}}$ GASB 96 provided guidelines on the capitalization and recognition of related liabilities for subscription based IT assets beginning FY23

COMPUTATION OF LEGAL DEBT LIMIT AND DEBT MARGIN

(in thousands)

	Fisc	Fiscal Year Ended June 30,		
<u>Taxes</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	
Individual and Fiduciary Income [1]	\$19,361,618	\$20,032,168	\$20,310,406	
Corporation Income [2]	1,978,697	2,031,120	1,907,065	
State Sales and Use [3]	5,080,554	5,291,556	5,283,496	
Total	\$26,420,869	\$27,354,844	\$27,500,967	
			#25 002 225	
Average tax revenues for the three fiscal years			\$27,092,227	
Section 9(a)(2) General Obligation Debt Issuance Limit and Margin [4	<u> </u>			
Debt Issuance Limit:				
30% of 1.15 times annual tax revenues for fiscal year 2024			\$9,487,834	
Less 9(a)(2) Bonds Outstanding:			0	
Debt Issuance Margin for Section 9(a)(2) General Obligation	n Bonds		\$9,487,834	
	<u> </u>			
Section 9(b) General Obligation Debt Issuance Limit and Margin:				
Debt Issuance Limit:				
1.15 times the average tax revenues for three fiscal years as calculated	above		\$31,156,061	
Less 9(b) Bonds Outstanding at June 30, 2024:				
Public Facilities Bonds [6]		\$120,065		
Transportation Facilities Refunding Bonds [5][6]		0		
Bond Anticipation Notes		0		
Total 9(b) Bonds Outstanding at June 30, 2024			120,065	
Debt Issuance Margin for Section 9(b) General Obligation B	Bonds		\$31,035,996	
Debt Authorization Limit:				
25% of 1.15 times average tax revenues for three fiscal years as calcula	ated above		\$7,789,015	
Less 9(b) debt authorized during the three prior fiscal years			0	
Maximum additional 9(b) debt that may be authorized	by the			
General Assembly (subject to referendum):			7,789,015	
Section 9(c) General Obligation Debt Issuance Limit and Margin:	_			
Debt Issuance Limit:	_			
1.15 times the average tax revenues for three fiscal years as calculated	above		\$31,156,061	
Less 9(c) Bonds Outstanding at June 30, 2024:			,,	
Parking Facilities [6]		\$3.582		
Transportation Facilities [6]		0		
Higher Educational Institutions [6]		929,445		
Bond Anticipation Notes		929,443		
Total 9(c) Bonds Outstanding at June 30, 2024			933.027	
Debt Issuance Margin for Section 9(c) General Obligation B	Ronds		\$30.223.034	
Dest issuance magniful section 7(c) General Congation D			Ψ30,223,03- 1	

^[1] Includes taxes imposed pursuant to Articles 2 and 9 of Chapter 3, Title 58.1 of the Code of Virginia.

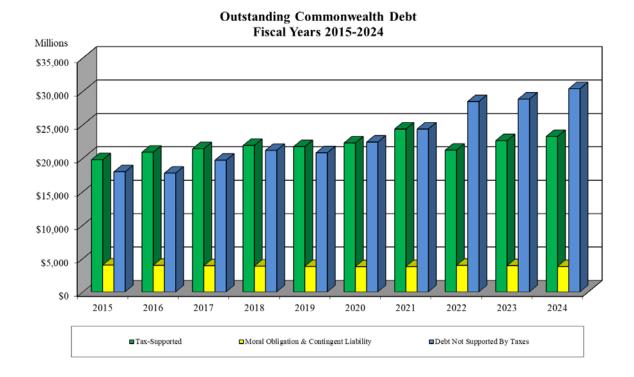
 $[\]hbox{\cite{beta:pursuant to Article 10 of Chapter 3, Title 58.1 of the Code of Virginia.}}$

^[3] Includes taxes imposed pursuant to Chapter 6, Title 58.1 of the Code of Virginia, less taxes identified in Sections 58.1-605 and 58.1-638.

^[4] Debt limit applies only to debt authorized pursuant to Article X, Section 9(a)(2) of the Constitution of Virginia.

^[5] These bonds refunded certain Section 9(c) debt and because the Governor did not certify the feasibility of the refinanced project, it must be applied against the Section 9(b) Debt Limit.

^[6] Net of unamortized discounts and premiums.



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 current 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 Available June 30, 2024 Authorization	
Virginia Resources Authority	\$1,500,000	\$917,954	\$582,046
Virginia Housing Development Authority	\$1,500,000	\$0	\$1,500,000
Virginia Public School Authority	\$800,000	\$0	\$800,000
Total	\$3,800,000	\$917,954	\$2,882,046

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 Recommended Modified Model Rate solution is altered to assume the conversion of all outstanding moral obligation debt as of June 30, 2024 to tax-supported debt, the resulting average debt capacity is \$1.23 billion, a decrease of \$76.50 million.

Contingent or Limited Liability Debt

The Virginia Public School Authority ("VPSA") is the only issuer of non-tax-supported debt that utilizes a sum-sufficient appropriation ("SSA") as an additional credit enhancement. SSA debt represents a contingent liability for the Commonwealth. The VPSA had \$2.3 billion of 1997 Resolution bonds outstanding as of June 30, 2024 and an additional \$359.6 million of School Tax Credit bonds outstanding. Both VPSA programs receive authorization to issue bonds with a SSA credit enhancement from the Code of Virginia, §22.1-167.2.

The use of SSA credit enhancement for VPSA's issuance of bonds or notes for the purpose of making grants to local school boards was codified during the 2001 General Assembly session (§22.1-167.3, Code of Virginia). As of June 30, 2024, outstanding notes for school technology and security amounted to \$195.3 million.

VPSA's bonds issued through its Stand-Alone Program are secured by the related local government's GO pledge. While these bonds are afforded the security enhancement of VPSA's ability to intercept state aid to the obligated locality for VPSA's use towards payment of debt service should the locality default on its payment to VPSA, the Stand-Alone Program bonds are not additionally secured by SSA.

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 all SSA debt to tax-supported debt.

If the Recommended Modified Model Rate solution is altered to assume the conversion of the VPSA's total outstanding debt secured by a sum sufficient appropriation as of June 30, 2024 to tax-supported debt, the resulting average debt capacity is \$1.07 billion, a decrease of \$239.45 million.