DEBT CAPACITY ADVISORY COMMITTEE
COMMONWEALTH OF VIRGINIA
December 17, 2013

1:00 P.M.
TREASURY BOARD CONFERENCE ROOM
James Monroe Building
101 North 14^{th} Street, 3^{rd} Floor
Richmond, Virginia 23219

Members Present:	Richard D. Brown, Chairman Elizabeth B. Daley Manju S. Ganeriwala Harold E. Greer Martha S. Mavredes Ronald L. Tillett Daniel S. Timberlake Robert P. Vaughn David A. Von Moll
Members Present Via Teleconference:	William K. Butler
Others Present:	Evelyn R. Whitley, Department of the Treasury Bradley L. Jones, Department of the Treasury Sherwanda Cawthorn, Department of the Treasury Bob Young, Department of the Treasury Janet A. Aylor, Department of the Treasury Rudy Burgess, Special Assistant to the Secretary of Finance Jason Powell, Senate Finance Committee Ty Wellford, Davenport & Co. Staci Henshaw, Auditor of Public Accounts Jeanine Black, Department of the Treasury Leslie English, Department of the Treasury

Call to Order and Opening Remarks

Chairman Brown called the meeting to order at 1:20 p.m. and welcomed everyone to the annual Debt Capacity Advisory Committee ("DCAC" or the "Committee") meeting. Chairman Brown introduced new Committee members, Martha S. Mavredes and Harold E. Greer. He also introduced Bradley L. Jones as a new Treasury staff member.

Public Comment Period and Approval of Minutes

Chairman Brown asked if there were any public comments. Hearing none, he asked the Committee for a motion to approve the minutes of the December 2012 meeting. Mr. Tillett made a motion to approve the minutes. The motion was seconded by Mr. Timberlake and it was approved unanimously.

Review of the DCAC Report

Ms. Whitley directed the Committee to the DCAC report (Exhibit 1) and highlighted the changes to the background information of the report. Ms. Whitley informed the Committee that a section was added to this year's report to address several potential challenges Virginia faces in the coming years. In discussion of the new section, Ms. Whitley referred to an October 2013 Fitch Ratings outlook report which stated that the biggest threat to state budgets is the federal government. Challenges related to the federal government fall into several categories including: the budget debate, debt ceiling, sequestration, government shutdown and tax reform. A recent report from Moody's Investors Service noted that states like Virginia and Maryland, which rely heavily on federal jobs, may see lower sales tax collections due to a reduction of federal employee disposable incomes.

Ms. Whitley added that with tax reform there has been discussion of a major overhaul of the U.S. tax code. The proposals discussed have included the reduction or elimination of the tax exemption on municipal bonds. Discussions have centered around a 28% limit on the value of deductions and the limit could even be applied retroactively to bonds outstanding and not just future issuances. The likely outcome would be that the demand for tax-exempt debt would deteriorate as the benefit of holding those bonds diminishes. Borrowing costs for state and local governments would increase as investors demand higher yields to compensate for the loss of tax benefits.

Ms. Whitley informed the Committee that an additional potential challenge to fiscal stability is the spotlight on pension liability. Pensions have become a topic that has generated national dialogue and pensions continue to put pressure on some states' budgets. Moody's and Standard & Poor's have introduced new methodology rating score cards. With the new score cards, pension funding is expected to become an increasingly important factor in state credit ratings.

Another potential challenge to fiscal stability that was highlighted by Ms. Whitley was the financial market's concerns regarding a headline bankruptcy. Detroit's Chapter 9 bankruptcy and default on its General Obligation ("GO") debt have shaken investors' confidence in municipal bonds. Ms. Whitley said the Detroit default hasn't become a direct factor for Virginia investors; however, it could change the perception of the full faith and credit pledge backing GO bonds, which could cause investors to demand a higher yield as compensation for the perceived higher risk.

Ms. Whitley concluded her remarks regarding potential challenges to fiscal stability by reminding the Committee of states' growing significant infrastructure needs, which consist of both maintaining existing assets and building new facilities. She highlighted that federal contributions toward these projects have been reduced and that the trend is likely to continue. With resources becoming tighter, she informed the Committee that states and localities are having to fund a larger share of their critical infrastructure needs, which is resulting in states and localities funding only their highest priority projects.

Upon the conclusion of Ms. Whitley's comments regarding potential challenges to fiscal stability, Chairman Brown commented that he has not viewed analysis on the deductibility of [bond] interest. Chairman Brown asked Ms. Whitley if she has seen any analysis that would indicate the state by state impact of potential tax reforms, as reforms would likely have a greater impact in certain states such as Virginia. Ms. Whitley responded that she has not seen an analysis of this type. Ms. Ganeriwala stated that the PEW center may have data that addresses this subject. Chairman Brown said that if staff is able to obtain some type of analysis on the impact of tax reform that the information would be appreciated.

Following Chairman Brown's questions on the potential impact of tax reform, Mr. Tillett commented that he was glad that the additional information regarding potential fiscal challenges was added to the report. He then expressed the importance of the topics and said each has its own set of ramifications on how it will impact the future and what the fiscal climate may look like over the next 10 years. Chairman Brown concurred that the section is a good addition to the report and that consumers of the report will be informed of the additional factors that should be kept in mind when considering future debt authorizations. Mr. Tillett also commented that the interest rate issue is significant because of the way interest rates are utilized in the calculation of debt capacity. He added that rates are currently at historic lows, particularly in the last six to twelve months; however, there is currently a rising interest rate environment. He expressed concern that the interest rate for this year's model builds in the recent historic lows, yet rates are expected to increase when looking at the interest rate horizon. He continued that with the low rates built in the model, the result shows more capacity than what may be available five or ten years down the road should interest rates increase as anticipated. He stated that it's not a model issue or a calculation problem, rather it is a variable that should be treated with caution. Mr. Tillett added that he was glad staff also included this information in the report. Mr. Butler stated that he agreed with the comments.

Ms. Whitley then reviewed the 2013 Debt Capacity Recommendations section of the report. She advised members that the base calculation shows that an additional $560.13 million in debt could be authorized and issued in each fiscal year ("FY") 2014 and 2015. She expounded that when using the average solution, the 5% debt service to Blended Revenues target is exceeded in five years of the ten year model horizon. She also reviewed the other recommendations that the committee has historically reiterated, which included rescinding old authorizations not needed to fund the originally approved projects.

A review of current tax-supported debt was then provided by Ms. Whitley. She highlighted the changes FY 2013 actions and scheduled debt payments brought to the sections of the report and she reviewed the trends of tax-supported debt between FY 2004 and 2013. When reviewing the outstanding tax-supported debt graph (page 8 of Exhibit 1), she added that the graph includes other long-term obligations, i.e. pension fund liabilities, other post-employment benefits

("OPEB") and compensated absences. Ms. Whitley reiterated that Moody's has placed a greater emphasis on the status of pension funding and that this item is going to be a part of their rating analysis. Ms. Whitley then reviewed the graph providing a break-out of tax-supported debt by category: GO debt, 9(d) debt and OPEB and pension obligations). Ms. Daley asked why GO debt is amortized with level principal payments rather than level debt service payments. Ms. Whitley replied that the Virginia Constitution has a provision for GO debt that states a scheduled principal payment cannot exceed a prior scheduled principal payment by 100%. She further explained that with a typical level debt service schedule, the principal payment significantly increases over time, which would violate the Virginia Constitution.

Ms. Whitley continued reviewing the trends in tax-supported debt and discussed the various graphs in the report including the tax-supported debt authorized and issued during the last 10 years. Ms. Ganeriwala inquired about the increase in issuances in FY 2010 and asked if the increase was due to the Virginia College Building Authority ("VCBA") and Virginia Public Building Authority's ("VPBA") earlier increased authorizations. Following the discussion of recent tax-supported debt authorizations and issuances, Ms. Whitley reviewed the breakout of the uses of tax-supported debt issued between FY 2004 and 2013 and added that the graph on page 12 of Exhibit 1 does not include the GARVEE transportation debt. She then highlighted the tax-supported debt service chart portraying actual and projected debt service for FY 2004 through 2023. Ms. Ganeriwala commented that the actual and projected debt service chart gives reason for concern in that the Commonwealth's annual debt service payments are expected to exceed $1 billion by FY 2016.

Ms. Whitley then reviewed the state credit ratings. She reminded the Committee that in 2011, due to the economic linkage to the federal government, Moody's placed the U.S. and Virginia on negative outlook. She highlighted that in 2013, despite continued federal budget disputes, Moody's revised both the U.S. and Virginia to a stable outlook. She informed the Committee that ratings on the appropriation-supported programs are one notch below the Commonwealth's GO rating: Aa1 (Moody's), AA+ (Standard & Poor's) and AA+ (Fitch). The rating agency discussion was continued with her review of the Moody's 2013 State Debt Medians Report, which provides comparative state debt ratios. While the Moody's report highlighted that debt issuance growth has slowed or even declined for many states, it stated, "among these large borrowers, Virginia saw the highest percentage growth in net tax-supported debt, a 14% increase, which marks the Commonwealth's fourth consecutive year of double-digit growth." In addition to providing the quote from Moody's, Ms. Whitley continued her comments by stating that Moody's expounded that the growth is largely attributed to debt issued through the CTB and the VCBA and that Virginia has now slid from being ranked as the 26th highest debt per capita state in 2010 to the 19th highest debt per capita. The review of the Moody's report was capped by Ms. Whitley's comment that Virginia has increased from fifteenth last year in terms of highest total net tax-supported debt to twelfth this year.

Ms. Whitley continued her review of the DCAC report by discussing with the Committee the interest rate volatility that has been experienced over the past year. She informed the Committee that due to this volatility, a new section was added to this year's report. As part of the new section, she informed the Committee that Treasury staff included a graph of both historic and forecasted Treasury yields and compared this to the current interest rate used in the DCAC model calculation. She explained to the Committee that the Treasury yield forecast was obtained from a Bloomberg market participant survey and the Bond Buyer 11 Index forecast was completed by Treasury staff and was based on the average ratio of the prior three years. She reviewed with the Committee that the debt capacity calculation uses the twelve quarter average of the Bond Buyer 11 Index and then adds 25 basis points; for 2013, this equates to a rate of 4.17%. The Committee discussed the historic and forecasted interest rates. While there was discussion on the lack of reliability in a specific detailed interest rate forecast, the Committee generally agreed that interest rates are increasing and that the current DCAC model interest rate does include a period of historically low interest rates. Ms. Whitley stated that in an anticipated rising interest rate environment, it may be appropriate to adopt a stressed scenario to mitigate the effect of the rising interest rates.

Upon the conclusion of Ms. Whitley's review of the DCAC report, she asked Mr. Jones to walk the Committee through the model results and the sensitivity analysis sections of the report's appendix. Chairman Brown asked Mr. Jones if he had additional scenario analysis handouts prepared for the Committee. Mr. Jones confirmed that he did have additional scenarios to share with the Committee. Before Mr. Jones began his review, Chairman Brown commented that while the standard Bond Buyer 11 Index rate (with the typical 25 basis points adjustment) is used in the base model analysis, the Committee has the option to chose to recommend a different or lower capacity based on a sensitivity adjustment to the interest rate factor.

Chairman Brown's comments spurred comments and discussion among the Committee members regarding the previously reviewed interest rate forecast. Mr. Von Moll asked if the anticipated increase in interest rates described on page 5 of the report, which was related to the potential effects of tax reform, was included as the driving factor of the rising interest rate forecast. Ms. Whitley responded that the rates used in the forecast graph are only representative of what's currently going on in the market. She stated that the interest rate effects described on page five of the report are isolated to potential tax reform measures and are not factored into the interest rate forecast graph. Ms. Ganeriwala added that staff's forecast graph was done by attempting to use the three previous years' correlation of the Bond Buyer 11 Index rate to the 30-Year Treasury yield. She explained that the earlier correlation was applied to the Treasury's forward index to create a forecast for the Bond Buyer 11 Index. Ms. Ganeriwala explained to the Committee that the Bond Buyer 11 Index rate produced by the forecast is above the current 12 quarter average of the Bond Buyer 11 Index rate due to the historically low interest rates compared to what the current markets are indicating. Chairman Brown added that the analysis goes back to the comment Mr. Tillett made earlier about the recent historically low rates and their influence on the model in a rising interest rate environment. Mr. Tillett added to the discussion comments that current interest rate volatility should be a concern to the Committee. He stated that while we have a sophisticated model, the model solution is only based on the information inputs. Mr. Tillett concluded the discussion by suggesting that the Committee use its judgment of current market factors to determine a debt capacity recommendation and not just use the number that the base model produces.

Upon the conclusion of the additional interest rate discussion, Mr. Jones began the review of the appendix by reminding the Committee of the assumptions used when calculating the model. He explained that the model's target is for tax-supported debt service to be less than 5% of Blended

Revenues and that the recommendation is based on a ten-year average. He then explained how, despite a rising interest rate environment, the interest rate used in the 2012 DCAC model was 4.18% compared to the 4.17% rate used in the 2013 DCAC model. He also offered the Committee a reminder of what is included in the model's Blended Revenues and which debt service payments are included and projected as part of outstanding tax-supported debt service. He explained that despite that 9(c) bonds are GO related, they are not included as tax-supported debt for purposes of the DCAC model calculation. This is due to the plan for 9(c) debt service to be paid for by the revenues generated by such projects.

Mr. Jones then asked the Committee to turn to page A-4 of the report so that he could review the assumptions used for currently authorized but yet to be issued debt. Prior to his review, Ms. Daley asked if the issuance assumptions included the $250 million a year issuance limit enacted during the previous General Assembly session. Mr. Jones confirmed that the limit was applied to the applicable VCBA and VPBA assumptions. Mr. Jones continued with his review noting that there is currently no remaining authorization for 9(b) GO debt. He expanded his comments by stating that with no authorization for 9(b) GO debt, new debt will be limited to more costly 9(d) appropriation backed debt. He reminded the Committee that 9(b) GO debt can only be authorized upon the approval of a voter referendum. He concluded his comments on the issuance assumptions by informing the Committee that all assumptions were recently vetted by the relevant state agencies and that the model results reflect the most up to date assumptions.

Mr. Jones asked the Committee to turn to page A-5 of the DCAC report so that he could review with them the base model solution. He explained that the base model solution results in a ten-year average capacity of $560.13 million, which is an increase of $23.03 million from last year's result. He also pointed out that in FY 2016, a capacity bottleneck is anticipated. He explained that revenues aren't expected to have as much growth that year and that payments on previously authorized but unissued debt are assumed to quickly increase. As a result, the 5% target is shown to be exceeded in that year. He continued his review of the model results by discussing the average base model solution found on page A-6 of the report. Mr. Jones stated that when looking at the average base model solution, in 5 of the 10 years modeled, the 5% threshold was exceeded. He explained that in FY 2017, debt service as a percentage of Blended Revenues is modeled to hit a peak of 5.48%. He mentioned that when comparing to the 2012 model results, the peak was 5.37% in FY 2016. Mr. Tillett asked, with the exception of the debt and revenue changes, were there any fundamental changes in the model. Ms. Whitley confirmed there were no fundamental changes.

Following the explanation of the average base model solution, Mr. Jones reviewed with the Committee the standard sensitivity analysis that is completed each year. This section included a review of the resulting capacity should the excess capacity target be reduced from two years to just one year or even no years of additional capacity. The resulting capacity was stated to be $611.06 million should the target be reduced to one year of excess capacity and the result increased to $672.16 million should the target excess capacity requirement be removed entirely. This was followed by a review of revenue sensitivity. The Committee was informed that assuming a change of $100 million in revenue in each and every year results in an incremental capacity change of $5.69 million. Assuming a 1% change in revenue in each and every year, results in an incremental change of $15.69 million. The sensitivity analysis review was completed after a discussion of interest rate sensitivity. The Committee was informed that if the borrowing rate was to decline 100 basis points, the average capacity would increase to $629.84 million. However, Mr. Jones said the more likely scenario would be an increase of 100 basis points to the borrowing rate, which would result in a decline in capacity to $498.85 million.

Before moving to the next topic, Ms. Mavredes asked for the Committee to return to its discussion regarding the average base model. She asked for clarification regarding the solution and in particular, why the FY 2014 amount of additional debt that may be issued is shown as zero. Mr. Jones stated that if bonds are issued in FY 2014, debt service payments would not begin until FY 2015. Therefore, based on the structure of the model, zero is used for FY 2014.

Mr. Jones then proceeded to pass out several scenario and sensitivity analyses for the Committee's review and discussion. Mr. Jones first reviewed a modified base model solution (Exhibit 2). The modified base model was changed from the original to also include the estimated debt service payments related to the additional debt included in the Governor's final introduced budget bill. Building in those additional debt service requirements caused the debt capacity to decline to $525.54 million. Mr. Vaughn asked for clarification. Chairman Brown explained that the scenario is building in the Governor's proposed debt with most of the debt being in maintenance reserve and the equipment trust fund for higher education. Ms. Daley asked for confirmation that the original base model, which produced a capacity result of $560.13 million, does not include any portion of the Governor's proposed budget bill. Ms. Whitley confirmed her statement.

Mr. Jones then presented a sensitivity scenario that incorporated a 50 basis point increase to the current DCAC model interest rate (Exhibit 3). Chairman Brown referred back to the graph on page 20 of the report and asked how the 50 basis point increase compares. Mr. Jones responded that a 50 basis point increase to the current DCAC model interest rate would put it right in line with the adjusted Bond Buyer 11 Index rate as of December 5, which was 4.65%. Chairman Brown then asked how the 50 basis points increase compares to the anticipated rates one year from now. Mr. Jones said that the projected Bond Buyer 11 Index rate is anticipated to be 5.08%. Mr. Vaughn asked if Global Insight does an interest rate forecast based on Treasury yields because if they do he wondered how it compares to the projections done for purposes of the DCAC report. Ms. Whitley explained that the interest rate forecast prepared for the DCAC meeting was based on anticipated 30-Year Treasury yields gathered from Bloomberg. Chairman Brown offered that staff could look at the Bloomberg forecast and compare it to information available through Global Insight to see if there are any major differences.

Mr. Von Moll circled back to the Governor's introduced budget scenario and asked if the changes in that base model compared to the original base model are driven by revenue or debt issuance changes. Ms. Whitley responded that the changes are solely debt related. Mr. Timberlake also added that the revenues remain the same. Chairman Brown explained that all of model solutions are updated based on the recently released revenue forecast. He explained that the proposed debt in the budget bill is not included in any of the solutions, except for the one scenario, since only debt authorized by the General Assembly is typically included in the model.

Following the clarification of the Governor's proposed debt scenario, Mr. Jones directed the Committee's attention back to the 50 basis point increase sensitivity scenario. He went on to explain that if the current DCAC model interest rate is adjusted to be 50 basis points higher, the capacity would fall to $528.52 million. Mr. Vaughn asked how the Bond Buyer 11 Index rate has historically compared to the interest rate we actually obtain for an issuance. Ms. Whitley stated she would need to look up the information, but that generally the Bond Buyer 11 Index rate is higher than the actual interest rate obtained in the market. Ms. Daley then made a comment that it looks like every 50 basis point increase to the interest rate results in approximately a $30 million reduction in capacity.

Mr. Tillett asked Mr. Jones to clarify Treasury's one-year projection of where interest rates are expected to be compared to today's interest rate environment. Mr. Jones stated that as of December 2013 and based on the ratio of where Treasuries are projected to be, the adjusted Bond Buyer 11 Index is forecast to be 5.08%. He explained that this level is 92 basis points above what the current DCAC base model is using. Mr. Vaughn had further questions regarding the forecast of the Bond Buyer 11 Index rate compared to the Treasury yield as he mentioned the spread appears to increase. Ms. Whitley explained that the municipal bond rate is typically higher than Treasury yields, but that the spread between the Bond Buyer 11 Index rate and the Treasury yields is held constant through the forecast. The Committee continued with a discussion of interest rates. Mr. Tillett mentioned he thought the information provided is the best information available at this time and is consistent with market expectations.

Mr. Tillett began the discussion regarding how the Committee's recommendation should be handled. He stated that he thought the information on interest rate sensitivity should be worked into the Committee's recommendation and the Committee should express caution when giving its recommendation due to the interest rate volatility. Chairman Brown referred the Committee back to page 20 of the report and highlighted that the current DCAC model interest rate is below where the adjusted Bond Buyer 11 Index rate is now and where it is projected to be a year from now. He said that the Committee may want to cushion its recommendation by adding some level of basis points to the DCAC model rate. He said this could be done in two ways. The first is to add whatever level of basis points the Committee decides and to then make a recommendation to the Governor and the General Assembly based on the resulting capacity. The second suggestion was that the Committee stay with the historical assumptions and in the cover letter to the Governor and the General Assembly the Committee could propose a lower amount due to the uncertainty of interest rates. Mr. Vaughn expressed interest in Chairman Brown's idea to mention the Committee's interest rate discussion in the cover letter and to express caution during this time of economic uncertainty. Ms. Ganeriwala concluded that what she was hearing was not to change the model, but rather there are two options for the cover letter as Secretary Brown mentioned. When Ms. Ganeriwala described the second option, she stated the letter could say the capacity is $560 million; however, because of all of the challenges, the Committee cautions the Governor and the General Assembly to err on the side of conservatism. Mr. Vaughn said he was very comfortable with that approach and Ms. Daley concurred adding that we should not dictate to the Governor or General Assembly what the debt amount should be. She also asked what the rating agencies may think about this change. Chairman Brown said rating agencies would not see it as a change in the model. Ms. Ganeriwala added that anytime you do something more conservative it is a positive for rating agencies, especially taking into account possible turbulent times ahead.

Chairman Brown offered a final proposal. He proposed that rather than change the model amount of $560 million, it could be discussed in the cover letter that the Committee is concerned about the volatility of interest rates. The Committee could recommend that the Governor and General Assembly be more cautious in these uncertain economic times about issuing the maximum amount of debt capacity. However, the Committee continued discussion on the approach to provide the caution recommendation and debated on whether it should provide a range of results should interest rates increase by set amounts. It was concluded that the Committee would express its concern for volatility by also providing an additional estimate for debt capacity should interest rates rise by 100 basis points. Mr. Butler stated that he agreed and supported this approach.

Chairman Brown then asked Mr. Jones to review the moral obligation debt and sum sufficient sensitivity analyses. As part of the moral obligation review, Mr. Jones discussed the state aid intercept provision that applies to the Virginia Public School Authority ("VPSA") and the Virginia Resources Authority ("VRA") debt. He explained how the state aid intercept provision provides a deterrent for localities not to default on their obligations to these authorities. Mr. Tillett asked in regards to Virginia Housing Development Authority's ("VHDA") and VPSA's statutory cap whether the authorities want to keep the cap on the books. Ms. Whitley responded in the past the authorities would rather not release the cap in case they need this source of funding at some point in the future. Mr. Tillett also asked if rating agencies care whether it's available. Ms. Whitley responded that rating agencies are not concerned with the available moral obligation caps for VPSA and VHDA. Mr. Jones explained that if all of the VRA's moral obligation debt is included in the model that the resulting capacity would decline to $490.41 million. Mr. Jones then reviewed the sum sufficient appropriation debt related to VPSA. He explained that if the entire amount of related debt is included in the model calculation that the resulting capacity would decline to $310.37 million.

<u>Other Business</u>

Chairman Brown asked the Committee members if there was anything else that needed to be brought before the group. With no additional business, Chairman Brown asked the group to focus their attention on adopting a recommendation of debt capacity.

<u>Motion to Adopt Final Report and Recommendation of Debt Authorization</u>

Chairman Brown then asked for a motion to adopt the final report and a cover letter that is to include: a recommendation that $560.13 million can be prudently authorized in 2014 and 2015, a statement that the Governor and the General Assembly should use caution when choosing to authorize additional debt, and an example of how much capacity is shown to be available should 100 basis points be added to the current DCAC model rate. Ms. Ganeriwala made the motion, which was seconded by Mr. Tillett. Chairman Brown took a roll call vote with the following votes being recorded:

Richard D. Brown	Yes
William K. Butler	Yes
Elizabeth B. Daley	Yes
Manju S. Ganeriwala	Yes
Harold E. Greer	Yes
Martha S. Mavredes	Yes
Ronald L. Tillett	Yes
Daniel S. Timberlake	Yes
Robert P. Vaughn	Yes
David A. Von Moll	Yes

With no further business, the meeting adjourned at 2:50 p.m.

Exhibits may be obtained by contacting the Department of Treasury at (804) 225-2142.