Commonwealth of Virginia

Debt Capacity Advisory Committee

Report to the Governor and General Assembly

December 19, 2003

COMMONWEALTH OF VIRGINIA

Office of the Governor

John M. Bennett
Secretary of Finance

P. O. Box 1475
Richmond, Virginia 23218

December 19, 2003

The Honorable Mark R. Warner
Governor of Virginia
State Capitol, 3rd Floor
Richmond, Virginia 23219

The Honorable Bruce F. Jamerson
Clerk of the House of Delegates
Virginia House of Delegates
State Capitol
Richmond, Virginia 23219

The Honorable Susan Clarke Schaar
Clerk of the Senate
Senate of Virginia
State Capitol
Richmond, Virginia 23219

Dear Governor Warner, Mr. Jamerson, and Ms. Schaar:

The Debt Capacity Advisory Committee (the "Committee") was established by Executive Order No. 38 in 1991 and was codified by the 1994 General Assembly (Chapter 27, Article 5, Sections 2.2-2712 through 2.2-2714). The Committee is required to annually review the size and condition of the Commonwealth's tax-supported debt and submit to you an estimate of the maximum amount of new tax-supported debt that prudently may be authorized for the next two years. In addition, the Committee is required to review annually the Commonwealth's moral obligation debt and other debt for which the Commonwealth has a contingent or limited liability. We are pleased to present our thirteenth annual report.

The Debt Capacity Model

In this report, we reaffirm our use of the Debt Capacity Model as the means of calculating the Commonwealth's tax-supported debt affordability. The Model calculates the maximum amount of incremental debt that may prudently be issued by the Commonwealth over the next ten years and features an additional two years of debt issuance capacity as a reserve beyond the end of the ten-year issuance period. The reserve is used as a hedge against variations in other assumptions used in the Model, such as interest rates and revenue growth. The Model uses the ratio of tax-supported debt service as a percentage of revenues as its base calculation. We reaffirm that the ratio of debt service as a percentage of revenues should be no greater than 5%. In our view, 5% is the maximum ratio consistent with maintaining the premier credit ratings on the Commonwealth's debt. The Model incorporates the official revenue estimates contained in the Governor's proposed budget submitted December 17, 2003. The Debt Capacity Model is attached as Exhibit A.

The concept of debt capacity management and the 5% maximum ratio were introduced in *An Assessment of Debt Management in Virginia*, a report issued by the Secretary of Finance in December 1990. The report also recommended the creation of the Debt Capacity Advisory Committee. The Debt Capacity Advisory Committee adopted the 5% maximum measure in 1991 and has fully endorsed this ratio every year since that time. The credit ratings assigned to the Commonwealth's obligations are, in part, based upon its sound debt management policies. Fitch Ratings, in a report issued this summer, specifically referenced the Commonwealth's conservative debt policies in affirming its AAA rating, as follows:

> "Virginia's AAA rating reflects its…careful attention to both the level and security of its debt obligations... The Commonwealth's superior credit standing has reflected its conservative approach both to debt and to financial operations." (*Fitch Ratings New Issue report, June 3, 2003)*

Moral Obligation or Contingent Liability Debt and Other Findings

The Committee also reviewed outstanding moral obligation debt and other debt for which the Commonwealth has a contingent or limited liability. The Committee reviewed the types of programs, statutory caps, outstanding amounts, and other financial data for those issuers that currently have debt outstanding that is backed by the Commonwealth's moral obligation pledge. The three issuers are the Virginia Housing Development Authority, the Virginia Public School Authority and the Virginia Resources Authority. Each of these issuers' outstanding moral obligation debt is currently within its statutory limit.

The Virginia Resources Authority has an authorization to issue up to $900 million of moral obligation debt. The Authority issues moral obligation bonds under its programs to provide low-cost financing to localities for water, wastewater, solid waste, storm water, public safety, brownfields remediation and airport projects.

The Committee reviewed the Virginia Resources Authority's (VRA) newly developed Virginia Pooled Financing Program (the "Financing Program"). The Financing Program utilizes a

Senior/Subordinated lien structure that results in a reduction in the amount of the VRA's moral obligation capacity utilized per bond issue. Under this split structure, 70% of bonds are designated as Senior-lien bonds, with the remaining 30% designated as Junior-lien bonds. All cash received from the underlying localities goes first to pay debt service on Senior-lien bonds resulting in more than 100% debt service coverage. The Senior-lien bonds are rated AAA by Moody's and Standard & Poor's. To further enhance the Senior-lien bonds, the VRA provided a $5 million equity back-stop as an additional operating reserve. The Junior-lien bonds are rated Aa2 and AA by Moody's and Standard & Poor's respectively and are the only portion of the issue backed by the Commonwealth's moral obligation.

The Virginia Public School Authority initiated a new primary issuance program in 1997 and does not expect to issue additional moral obligation bonds. The Virginia Housing Development Authority established a new multi-family housing program in 1999 that does not carry the Commonwealth's moral obligation pledge and it expects to issue all of its multi-family housing bonds under that program.

The Virginia Public School Authority is the only issuer of non-tax-supported debt that utilizes a sum sufficient appropriation as an additional credit enhancement. This represents a contingent liability for the Commonwealth. The Virginia Public School Authority issued its first series of Equipment Technology Notes utilizing the sum-sufficient appropriation in 2001, receiving a "double A plus" rating from each of the three major rating agencies.

Information on the amount of outstanding debt, statutory limits and debt ratings for moral obligation debt, and other debt for which the Commonwealth has a contingent or limited liability is shown in Exhibit D. Sensitivity analyses are also included which demonstrate the impact on tax-supported debt capacity resulting from the conversion of moral obligation debt to tax-supported debt. The sensitivity analyses are prepared using worst-case scenarios showing the impact of the conversion of all moral obligation debt. If any such debt were ever converted, however, it would occur on an issue-by-issue basis. Conversion would occur if the General Assembly appropriated funds to replenish a debt service reserve fund shortfall if requested by a moral obligation issuer. For example, an issuer would request that the Governor and General Assembly replenish the debt service reserve fund if, in the event of a default on the underlying revenue stream, the issuer was forced to draw on the debt service reserve fund to pay debt service.

The Committee also reviewed the current and historical debt position of the Commonwealth. Part of this review included other authority debt not supported by taxes. Data included in Exhibit C summarizes information considered by the Committee.

Review of the Transportation Debt Capacity Policy

In addition to the mandatory annual review of the Commonwealth's debt, the Committee reviewed the transportation debt capacity policy adopted by the Commonwealth Transportation Board (CTB) on November 20, 2003. The Department of Transportation prepared this policy pursuant to Chapters 533, 560 and 1042 of the 2003 Acts of Assembly. The debt issuance parameters of the CTB debt policy focus on Federal Highway Reimbursement Anticipation Notes ("FRANs"). FRANs are not considered to be tax-supported debt for purposes of the Debt Capacity Model. Other transportation debt issued by the CTB and considered to be tax-supported debt is factored into the Commonwealth's overall debt capacity and is not calculated individually.

The CTB adopted a debt capacity policy to determine a prudent amount of FRANs that could be issued based upon a debt service as a percentage of revenue calculation of 25%. The revenue measure used in this calculation is a six-year average of federal highway reimbursements. Pursuant to Chapter 1042, the DCAC is required to report the recommended transportation debt capacity policy to the Governor and General Assembly by January 1, 2004. A copy of the CTB's Debt Policy and other supporting materials are included as Exhibit E.

Recommendations

Historically, Virginia has followed a capital budgeting and approval process in which projects and the financing thereof have been approved during the even-year General Assembly Session during which a new biennial budget is adopted. The budget is amended, if necessary, during the odd- or second year. The Committee therefore has provided the following amounts for the current biennium since this report coincides with the 2004 General Assembly Session during which the new biennial budget for the 2004-2006 budget biennium will be considered.

The Committee notes that the period of time between the inception of capital projects and its permanent financing can vary greatly, usually spanning several years. Therefore the Committee has determined that consideration should be given to the projected issuance schedule when making its recommendations.

1. Model Results – Tax-Supported Debt Authorization

The Committee believes that based upon the Debt Capacity Model and the Governor's Official Revenue Forecast of December 17, 2003:

- A maximum of $661.91 million of tax-supported debt could prudently be authorized by the 2004 Session of the General Assembly; and

- A maximum of $661.91 million of tax-supported debt could prudently be authorized by the 2005 Session of the General Assembly.

This maximum amount of authorization is above and beyond the tax-supported debt that is currently authorized but unissued. The increase in debt issuance capacity from the amounts recommended in the 2002 Report is mainly attributable to the refunding of approximately $768.6 million of tax-supported bonds during Fiscal Year 2003, improved revenue forecasts due in part to the planned reform of the Commonwealth's tax system, and lower interest rates.

The Model results are sensitive to changes in interest rates and revenues. Specifically, a one percent change in general fund revenues in each and every year of the Model solution horizon will change the amount of annual debt capacity by approximately $10.9 million. A change in general fund revenues of $100 million in each and every year of the Model solution horizon will produce approximately $5.6 million of incremental annual debt capacity change. More detail on the Model's sensitivity to changes in interest rates and revenues can be found in Exhibit B.

The Committee notes that the average interest rates used in the Debt Capacity Model have decreased by approximately 22 basis points, or almost one quarter of a percentage point, since the December 2002 Report. The Bond Buyer 11 Index is the benchmark index used in the Model. The Model uses the average of the Bond Buyer 11 Index for the last eight quarters as its base interest rate for authorized but unissued general obligation bonds and adds an additional fifty basis points for non-general obligation bonds. The Committee notes that the effect of interest rate movements over any one year is mitigated since the base rate is an average of the last eight quarters.

The Committee recognizes that it cannot predict the future level of interest rates or the pace of revenue growth and recognizes the sensitivity of the Model results to such factors. Attached as Exhibit B are sensitivity analyses that demonstrate the impact on the Model of changes in external factors such as interest rates and revenues, or internal factors such as excess capacity. The Model calculates the maximum amount of tax-supported debt that could be prudently authorized and issued based on the assumptions incorporated in the Model. It does not constitute a recommendation of the

Committee that such amount actually be authorized. In the opinion of the Committee, debt issuance in excess of the recommended amounts could result in the Commonwealth exceeding the maximum ratio of 5%. See Exhibit C for further narrative.

The Committee makes no recommendations as to which projects, if any, should be chosen for debt financing or how they should be prioritized. These decisions are most appropriately made through the budgetary and legislative processes.

2. Consider Eliminating Authorizations Not Likely to be Issued:

The Committee endorses the efforts of the General Assembly and the Governor to continue to rescind authorizations for projects that are not likely to be used. The Committee recommends that unnecessary authorizations continue to be identified and rescinded, as appropriate.

3. Alternative Financing of State Projects:

We continue to support the use of traditional financing vehicles such as the Virginia Public Building Authority and the Virginia College Building Authority for financing state projects as opposed to capital lease-supported transactions. Certain state projects have been financed in the past using local and special purpose authorities, such as industrial development authorities or redevelopment and regional housing authorities. Due to the structure of such financings, they often result in higher financing costs than if the financing had been completed through an established state program. In such cases, the Commonwealth has limited control of the process, however such bonds are normally considered tax-supported debt and are included in the Model because the Commonwealth is responsible for debt service payments over the life of the bonds.

4. Moral Obligation and Contingent Liability Debt:

We make no specific recommendation on the programs or levels of the statutory caps for the three issuers currently utilizing the moral obligation pledge of the Commonwealth.

Conclusion

We trust this report and our recommendations are useful as we move forward together into the 2004 Session of the General Assembly. It has been our pleasure to advise you on including the concepts of debt affordability and debt capacity management into the Commonwealth's debt management programs. The Commonwealth of Virginia has become an acknowledged leader among states in the area of debt capacity management, and is repeatedly held out as an example of how the process should work.

Sincerely,

John M. Bennett, Chairman

Walter W. Craigie

William K. Butler, II

Jody M. Wagner

Philip A. Leone

Walter J. Kucharski

Richard D. Brown

Attachments

Exhibit A

The Debt Capacity Model

Commonwealth Debt

- Rating agencies view control of tax-supported debt as one of four key factors affecting credit quality.
  - control of debt burden
  - economic vitality and diversity
  - fiscal performance and flexibility
  - administrative capabilities of government

- Virginia's goal is to maintain AAA/Aaa/AAA ratings for General Obligation debt.
  - Commonwealth's "AAA" rating reaffirmed by Fitch Ratings, Moody's and Standard & Poor's (June 2003)

- Definition of tax-supported debt.
  - debt service payments made or ultimately pledged to be made from general government funds
  - corresponds with rating agency definition
  - contrast with debt not supported by taxes such as moral obligation debt

Debt Capacity Model
General Observations and Assumptions

- Virginia's Debt Affordability Model:
  - Debt Affordability Measure

    $$\frac{\text{Tax-Supported Debt Service}}{\text{Revenues}} \leq 5\%$$
  - 10-year issuance period
  - Incorporates currently authorized but unissued debt
  - Blended revenue growth rate
  - Term and structure:
    - 20-year bonds
    - Assumed interest rate of 4.83% for 9(b) and 9(c) General Obligation debt. 9(d) debt has an assumed interest rate of 5.33%.
    - Level debt service (except 9(b) debt)
    - 9(b) General Obligation debt is amortized on a level principal basis
  - Actual debt service of all issued tax-supported debt, including capital leases, installment purchases and regional jail reimbursement agreements (see page A-3 for liability inclusion criteria).
  - Blended Revenues:
    - General fund revenues and state revenues in Transportation Trust Fund added together, plus transfers of ABC and Lottery profits. For purposes of the Model, 9(c) revenues and debt service of self-supporting projects are offset and have a neutral impact on debt capacity.
  - Interest Rates:
    - Assumed issuance of authorized but unissued tax-supported debt and associated debt service, computed using estimated interest rates based on the average of the last eight quarters of The Bond Buyer 11 Bond Index for general obligation debt 9(b) and 9(c), and a 50 basis point higher rate for 9(d) debt.

Debt Capacity Model
General Observations and Assumptions

Debt Capacity Advisory Committee
Liabilities included in the Debt Capacity Model

1) Outstanding tax-supported debt as determined by the DCAC.

   - General obligation bonds (Section 9(a), 9(b), and 9(c)).
   - Obligations issued by the Commonwealth Transportation Board or Virginia Port Authority that are secured, in whole or in part, by the Transportation Trust Fund.
   - Obligations issued by the Virginia Public Building Authority and the Virginia College Building Authority secured, in whole or in part, by general fund appropriations.
   - Obligations payable under regional jail Reimbursement Agreements between the Treasury Board and localities, regional jail authorities or other combination of localities.
   - Capital leases (80% of total of first year amounts in Commonwealth CAFR for both primary government and component units).
   - Installment purchases (80% of total of first year amounts in Commonwealth CAFR for both primary government and component units).
   - Obligations for which the debt service is paid from amounts representing payments received from the Commonwealth on a capital lease.

2) Authorized but unissued tax-supported debt as determined by the DCAC.

   - The issuance of obligations to fund a project(s) must be authorized by an Act of the General Assembly (either an Act specifically authorizing the issuance of debt, or Appropriation Act language) with no contingency for subsequent General Assembly approval. If obligations are authorized but will require further action by the General Assembly before they can be issued, then such obligations will not be included in the Model. The practical application of this rule will be that if debt can be issued for a project without any further action on the part of the General Assembly, such debt will be considered as authorized for issuance.

Debt Capacity Advisory Committee
Liabilities included in the Debt Capacity Model

3) 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 fund as requested by the moral obligation issuer.

   - In the event that a moral obligation issuer has experienced an event of a default on the underlying revenue stream and such issuer has 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, one Model scenario showing annual tax-supported debt capacity with inclusion of the moral obligation debt (or portion thereof) in question.

   - Inclusion of the 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 such debt service reserve fund(s).

   - The subject debt will be removed from the Model once the General Assembly has not appropriated funds to replenish such debt service reserve fund(s).

Debt Capacity Model

Currently Authorized Tax-Supported Debt Issuance Assumptions

(Dollars in Millions)

	9(b)	9(c) Higher Education	VPBA	VCBA 21st Century Equipment	VCBA 21st Century Projects	9(d) Transportation	Total
Authorized & Unissued as of December 31, 2003	$ 969.3	$ 139.0	$ 467.6	$ 42.8	$ 262.1	$ 97.1	$ 1,977.7
Assumed Issued[1]:							
FY 2004	-	-	-	-	-	-	-
FY 2005	152.1	46.3	-	39.5	198.1	-	436.0
FY 2006	291.8	46.3	149.0	-	45.0	-	532.1
FY 2007	334.3	46.3	101.8	-	11.0	97.1	590.5
FY 2008-2010	171.3	-	216.8	-	-	-	388.1
Total	949.5	138.9	467.6	39.5	254.1	97.1	1,946.7
Authorized Debt Assumed Unissued	$ 19.8	$ 0.1	$ -	$ 3.3	$ 8.0	$ -	$ 31.1

[1] Debt is assumed issued when the first full year of debt service is paid.

Debt Capacity Model

DEBT CAPACITY MODEL

(Dollars in Millions)

December 17, 2003

Debt Capacity Maximum Ratio

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

Fiscal Year	[1] Blended Revenues	[2] Base Capacity to Pay Debt Service	[3] 9(c) Revenue Equal to Debt Service	[4] Total Capacity to Pay Debt Service	[5] Annual Payments for Debt Service on Debt Issued	[6] Annual Payments for Debt Service on All Planned Debt Issuances	[7] Actual & Projected Debt Service as a % of Revenues	[8] Net Capacity to Pay Debt Service	[9] Amount of Additional Debt that may Be Issued	[10] Debt Service on the Amount of Additional Debt that may Be Issued	[11] Remaining Capacity to Pay Debt Service	[12] Total Debt Service as a % of Revenues
Actual 1997	9,088.43	454.42	72.20	526.62	274.25	N/A	2.22%	180.17	N/A	N/A	180.17	3.02%
Actual 1998	9,753.64	487.68	75.69	563.37	317.53	N/A	2.48%	170.15	N/A	N/A	170.15	3.26%
Actual 1999	10,728.92	536.45	75.11	611.56	325.48	N/A	2.33%	210.96	N/A	N/A	210.96	3.03%
Actual 2000	11,875.81	593.79	68.54	662.33	344.43	N/A	2.32%	249.36	N/A	N/A	249.36	2.90%
Actual 2001	12,271.52	613.58	70.68	684.26	395.54	N/A	2.65%	218.04	N/A	N/A	218.04	3.22%
Actual 2002	12,003.78	600.19	67.36	667.55	413.58	N/A	2.88%	186.61	N/A	N/A	186.61	3.45%
Actual 2003	12,001.34	600.07	68.41	668.47	430.60	N/A	3.02%	169.47	N/A	N/A	169.47	3.59%
2004	12,760.50	638.03	55.24	693.26	261.04	49.97	2.00%	382.25	**0.00**	0.000	382.25	2.00%
2005	13,932.30	696.62	64.69	761.31	417.39	93.42	3.20%	250.50	**661.91**	54.748	195.75	3.60%
2006	14,789.80	739.49	65.30	804.79	395.44	143.77	3.20%	265.58	**661.91**	109.496	156.08	3.94%
2007	15,609.20	780.46	66.98	847.44	392.70	196.85	3.35%	257.89	**661.91**	164.244	93.65	4.40%
2008	16,307.50	815.38	66.49	881.86	380.70	216.65	3.26%	284.51	**661.91**	218.993	65.52	4.60%
2009	17,154.30	857.72	60.70	918.42	370.15	227.82	3.13%	320.44	**661.91**	273.741	46.70	4.73%
2010	18,036.28	901.81	55.19	957.00	346.94	215.36	2.81%	394.70	**661.91**	328.489	66.21	4.63%
2011	18,976.19	948.81	50.73	999.54	333.00	213.07	2.61%	453.47	**661.91**	383.237	70.24	4.63%
2012	19,967.06	998.35	44.70	1,043.05	311.00	210.77	2.39%	521.28	**661.91**	437.985	83.29	4.58%
2013	21,011.68	1,050.58	43.66	1,094.24	294.48	208.48	2.19%	591.28	**661.91**	492.733	98.55	4.53%

10 Year Average:	$595.71	Excess Capacity:	$1,191.44
			2.0000

[1] Revenues include the actual fiscal year revenues per the Annual Reports of the Comptroller (1997-2003), December Global Insight Standard Forecast of the General Fund, including certain Special Fund revenue as permitted by the Code of Virginia and transfers from the Virginia Lottery and the Alcoholic Beverage Control Board, dated December 17, 2003, and certain revenues from the Transportation Trust Fund official revenue forecasts as of December 2003.

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

[3] Self-supporting 9(c) Revenue Equal to 9(c) Debt Service.

[4] Total Capacity to Pay Debt Service equals Column [2] plus Column [3].

[5] Equals the annual payments of principal and interest for all currently outstanding tax-supported debt issued through December 31, 2003.

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

[7] Equals annual payments for debt service on debt issued and planned debt issuances less 9(c) revenue equal to debt service, divided by Revenues. 9(c) revenues and debt service are treated as offsetting.

[8] Equals the amount of revenue available to pay debt service after principal and interest on all currently outstanding and all planned issuances of tax-supported debt has been paid. Column [4] - Column [5] -Column [6]. 9(c) Revenues and debt service are treated as offsetting.

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

[10] Equal to annual amount of principal and interest to be paid on Column [9].

[11] Equals Column [8] minus Column [10].

[12] Equals the sum of all debt service payments (less 9(c) debt service) divided by Revenues. (Column [5] + Column [6] + Column [10] - Column 3) / Column [1].

Debt Capacity Model

DEBT CAPACITY MODEL REVENUE DATA

December 17, 2003

(Dollars In Millions)

Fiscal Year	General Fund	Transportation Trust Fund [10]	General Fund Growth	Transportation Trust Fund Growth	ABC Profit Transfer	Lottery Profit Transfer	Total Revenue [7]	Blended Revenue Growth Rate [8]
Actual 1993	6,134.57 (1)	450.72 (3)	9.09% (1)	5.96% (3)	26.82 (1)	297.00 (1)	6,909.11	8.58%
Actual 1994	6,503.76 (1)	494.30 (3)	6.02% (1)	9.67% (3)	20.73 (1)	303.50 (1)	7,322.29	5.98%
Actual 1995	6,881.12 (1)	546.50 (3)	5.80% (1)	10.56% (3)	19.01 (1)	311.60 (1)	7,758.23	5.95%
Actual 1996	7,283.56 (1)	561.76 (3)	5.85% (1)	2.79% (3)	26.00 (1)	332.60 (1)	8,203.92	5.74%
Actual 1997	8,133.55 (1)	588.08 (3)	11.67% (1)	4.69% (3)	23.80 (1)	343.00 (1)	9,088.43	10.78%
Actual 1998	8,811.04 (1)	603.00 (3)	8.33% (1)	2.54% (3)	20.70 (1)	318.90 (1)	9,753.64	7.32%
Actual 1999	9,737.70 (1)	643.82 (3)	10.52% (1)	6.77% (3)	25.50 (1)	321.90 (1)	10,728.92	10.00%
Actual 2000	10,831.53 (1)	689.78 (3)	11.23% (1)	7.14% (3)	30.20 (1)	324.30 (1)	11,875.81	10.69%
Actual 2001	11,160.73 (1)	753.29 (3)	3.04% (1)	9.21% (3)	28.10 (1)	329.40 (1)	12,271.52	3.33%
Actual 2002	10,743.02 (1)	749.33 (4)	-3.74% (1)	-0.53% (4)	25.40 (1)	367.20 (1)	11,884.95	-3.15%
Actual 2003	10,867.10 (1)	744.94 (4)	1.15% (1)	-0.59% (4)	14.20 (1)	375.10 (1)	12,001.34	0.98%
2004	11,592.00 (2)	773.40 (4)	6.67% (2)	3.82% (4)	9.00 (2)	386.10 (2)	12,760.50	6.33%
2005	12,719.60 (2)	806.00 (4)	9.73% (2)	4.22% (4)	11.70 (2)	395.00 (2)	13,932.30	9.18%
2006	13,512.40 (2)	862.10 (4)	6.23% (2)	6.96% (4)	13.30 (2)	402.00 (2)	14,789.80	6.15%
2007	14,300.00 (2)	893.90 (4)	5.83% (2)	3.69% (4)	13.30 (2)	402.00 (2)	15,609.20	5.54%
2008	14,972.20 (2)	920.00 (4)	4.70% (2)	2.92% (4)	13.30 (2)	402.00 (2)	16,307.50	4.47%
2009	15,788.00 (2)	951.00 (4)	5.45% (2)	3.37% (4)	13.30 (2)	402.00 (2)	17,154.30	5.19%
2010	16,646.20 (2)	974.78 (6)	5.44% (2)	2.50% (6)	13.30 (2)	402.00 (2)	18,036.28	5.14%
2011	17,561.74 (5)	999.14 (6)	5.50% (5)	2.50% (6)	13.30 (9)	402.00 (9)	18,976.19	5.21%
2012	18,527.64 (5)	1,024.12 (6)	5.50% (5)	2.50% (6)	13.30 (9)	402.00 (9)	19,967.06	5.22%
2013	19,546.66 (5)	1,049.73 (6)	5.50% (5)	2.50% (6)	13.30 (9)	402.00 (9)	21,011.68	5.23%

(1) Annual Reports of the Comptroller, FY 1993-2003.
(2) The December Global Insight Standard General Fund Forecast for FY 2004-2010, dated December 17, 2003, including certain Special Fund revenue as permitted by the Code of Virginia.
(3) Department of Motor Vehicles.
(4) Department of Taxation.
(5) Flat growth rate of 5.50% for years 2011-2013, per Department of Taxation on December 10, 2003.
(6) Flat growth rate of 2.50% for years 2010-2013, per Department of Taxation on December 10, 2003.
(7) Total Revenue = GF + TTF + ABC + Lottery Revenues.
(8) Blended Revenue Growth Rate = (Current FY Total Revenue / Prior FY Total Revenue) - 1.
(9) FY 2011 - 2013 based on FY 2004 - 2010 Forecasts per December Global Insight Standard General Fund Forecast, dated December 17, 2003.
(10) Does not include Highway Maintenance and Operating Fund, Federal Grants and Contracts or Toll Revenues.

Debt Capacity Model

Annual Debt Service Requirements and Other Long-Term Obligations
Outstanding As of June 30, 2003 Plus Fiscal Year 2004 Issuance Through December 31, 2003*
(Dollars in Thousands)

Fiscal Year Ending June 30	General Obligation Debt Sections 9(a), 9(b) and 9(c)	Other Tax-Supported Debt Section 9(d)	Capital Lease and Installment Purchases	Regional Jail Reimbursements	Debt Service on Planned Issuances	Debt Service on Unallocated Debt Capacity	GRAND TOTAL
2004	$ 129,935	309,298	47,336	2,633	0	0	489,202
2005	118,560	298,830	47,336	2,633	43,453	54,748	565,560
2006	114,624	280,817	47,336	2,637	93,800	109,496	648,710
2007	110,949	281,747	47,336	2,633	146,885	164,244	753,795
2008	108,726	271,969	47,336	2,632	166,687	218,993	816,343
2009	101,267	268,887	47,336	2,634	177,851	273,741	871,715
2010	94,009	252,936	47,336	2,633	165,389	328,489	890,792
2011	87,768	245,227	47,336	2,636	163,096	383,237	929,300
2012	73,640	237,359	47,336	2,636	160,803	437,985	959,759
2013	70,802	223,677	47,336	2,637	158,510	492,733	995,696
TOTAL	$ 1,010,280	$ 2,670,747	$ 473,360	$ 26,344	$ 1,276,474	$ 2,463,666	$ 7,920,871

* Preliminary and unaudited

The Debt Capacity Model

Parameters of the Model

(1) **Blended Revenues** include all general fund revenues (exclusive of transfers), ABC and Lottery profits transferred to the general fund and state tax revenues in the Transportation Trust Fund.

(2) **Base Capacity to Pay Debt Service** is calculated as the product of the Debt Capacity Maximum Ratio and Revenues. [Column 2 = Column 1 x .05]

(3) **9(c) Revenues** represents 9(c) revenue equal to debt service on outstanding 9(c) debt.

(4) **Total Capacity to Pay Debt Service** is calculated as the Base Capacity plus 9(c) revenues equivalent to 9(c) debt service. It represents the maximum level of debt service allowed given the 5% debt service/revenues ratio. [Column 4 = Column 1 x 5%+ Column 3]

(5) **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 and on any issuance to date since fiscal year end.

(6) **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 assumed to be issued within the ten-year period.

(7) **Actual and Projected 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 less 9(c) debt service equal to revenue, divided by Revenues. 9(c) Revenues and 9(c) Debt Service are treated as offsetting.

The Debt Capacity Model (continued)

Parameters of the Model

(8) **Net Capacity to Pay Debt Service** is Total Capacity to Pay Debt Service less Annual Payments for Debt Service on Debt Issued and Annual Payments for Debt Service on All Planned Debt Issuances. [Column 8= 4-5-6]

(9) **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 Overall Capacity to Pay Debt Service.

(10) **Debt Service on the Amount of Additional Debt that May Be Issued** is the estimated amount of debt service for the Additional Debt that may be Authorized and Issued.

(11) **Remaining Capacity to Pay Debt Service** is Net Capacity to Pay Debt Service less Debt Service on the Amount of Additional Debt that may be Authorized and Issued. [Column 11=8-10]

(12) **Total Debt Service as a % of Revenues** is 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 the Amount of Additional Debt that may be Authorized and Issued, divided by Revenues and 9(c) Revenues.

The Debt Capacity Model (continued)

Parameters of the Model

- Model solves for annual capacity, above and beyond authorized amounts assumed issued for the next ten fiscal years at the 5% debt service/revenues level over a ten-year period.

  $661.91 million is equal annual issuance capacity.

  - debt service/revenues ratio rises to a maximum of 4.73% in FY 2009
  - projected issuance never reaches 5% capacity and two years excess capacity is maintained at end of ten-year period

- Two years of excess capacity is a function of conservatism.

Exhibit B

The Debt Capacity Model
Sensitivity Analysis

The Debt Capacity Model Sensitivity Analysis

Excess Capacity Sensitivity

- Model solution provides for **two years of excess capacity** remaining at end of the ten-year Model period which results in the following annual debt capacity:

  2 Year Excess Capacity $661.91 million

- If the Model solution is altered to reduce the two years of excess capacity to **one year of excess capacity**, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.87% in fiscal year 2009.
  - $722.08 million of annual debt capacity is available for the ten-year Model period.

- If the Model solution is altered to reduce the two years of excess capacity to **no excess capacity**, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.99% in fiscal years 2009 and 2013.
  - $774.82 million of debt capacity is available in fiscal years 2005 through 2012. Annual debt capacity increases to $950.02 million in fiscal year 2013.

The Debt Capacity Model Sensitivity Analysis

Revenue Sensitivity

- If the Model solution is altered to increase or decrease General Fund revenues, the following incremental annual debt capacity changes are produced:

For each change of $100 million in each and every year	**$5.60 million**
For each 1% change of revenues in each and every year	**$10.94 million**

Interest Rate Sensitivity

- If the Model solution is altered to change interest rates, the following annual debt capacity figures are produced:

Add 100 basis points to base rate	**$596.91 million**
Subtract 100 basis points from base rate	**$735.13 million**

Exhibit C

Background Information

Background

Creation of the Debt Capacity Advisory Committee was recommended in *An Assessment of Debt Management in Virginia*, December 1990. The Committee was originally created in September 1991, by Executive Order #38. The Committee was subsequently codified under Chapter 43 of the 1994 Virginia Acts of Assembly, as amended.

The Committee's mandate is to annually review the size and condition of the Commonwealth's tax-supported debt and submit to the Governor and the General Assembly before January 1, an estimate of the maximum amount of new tax-supported debt that prudently may be authorized for the next biennium (Section 2.2-2714 Code of Virginia). This estimate is advisory and in no way binds the Governor or the General Assembly.

In developing its annual estimate and in preparing its annual report, the Committee shall, at a minimum, consider:

- the amount of tax-supported debt that, during the next fiscal year and annually for the following nine fiscal years, will be outstanding and the amount of tax-supported debt which has been authorized but not yet issued;
- a projected schedule of affordable, state tax-supported debt authorizations for the next biennium;
- projected debt service requirements during the next fiscal year and annually for the following nine fiscal years based on existing outstanding debt, previously authorized but unissued debt, and projected debt authorizations;
- the criteria that recognized bond rating agencies use to judge the quality of Commonwealth bond issues;

Background (Continued)

- any other factor that is relevant to (i) the ability of the Commonwealth to meet its projected debt service requirements for the next two fiscal years; (ii) the ability of the Commonwealth to support additional debt service in the upcoming biennium; (iii) the requirements of the statewide capital plan; and (iv) the interest rate to be borne by, the credit rating on, or any other factor affecting the marketability of such bonds; and
- the effect of authorizations of new tax-supported debt on each of the considerations listed above.

The Committee is also required to annually review the amount and condition of moral obligation debt and other debt for which the Commonwealth has a contingent or limited liability and make recommendations to ensure the prudent use of such obligations.

In addition, the Committee is also required to review the amount and condition of Commonwealth obligations that are not general obligations or moral obligations, and when appropriate, recommend limits on such additional obligations to the Governor and to the General Assembly.

Review of the December 2002 Report

The Committee issued its twelfth annual report to the Governor and the General Assembly on December 23, 2002. The report addressed the following issues:

- Reaffirmed the use of debt service on tax-supported debt and related long-term obligations as a percentage of revenues as the debt affordability measure used in Virginia's Debt Capacity Model. In addition, reaffirmed a maximum ratio of debt service as a percentage of revenues of 5%.

- Concluded that the Commonwealth could issue approximately \$482 million of tax-supported debt in each year from fiscal year 2004 through fiscal year 2012 above and beyond tax-supported debt already outstanding or authorized, while still holding the ratio to tax-supported debt service as a percentage of revenues below 5%.

- Recommended that \$481.92 million of tax-supported debt could be prudently authorized by the 2003 and 2004 Sessions of the General Assembly, representing a maximum authorized amount of \$963.84 million for the biennium.

- Made no recommendation as to which projects, if any, should be chosen for debt financing or how they should be prioritized. Reaffirmed that this decision was most appropriately made through the budgetary and legislative processes.

- Continued to recommend that Cabinet Secretaries work with the Secretary of Finance to develop a proposal for rescinding unnecessary authorizations for consideration in the 2003 General Assembly Session.

Review of the December 2002 Report (Continued)

- Continued to recommend the use of financing processes which promote the lowest possible cost of funds to the Commonwealth by by utilizing traditional financing vehicles such as the Virginia Public Building Authority and the Virginia College Building Authority whenever appropriate.

- Reviewed outstanding moral obligation debt and other debt for which the Commonwealth has a contingent or limited liability. The Committee reconfirmed that the Commonwealth is not unique in its use of moral obligation debt, as a number of other state issuers utilize the moral obligation pledge. The Committee continued to review the types of programs, statutory caps, outstanding amounts and other financial data for certain other states that utilize moral obligation bond programs and compared these to Commonwealth issuers. The Committee recommended no changes to either program and recommended no change to levels of statutory caps for the three issuers currently utilizing the moral obligation pledge of the Commonwealth.

Commonwealth Debt (per the Comprehensive Annual Financial Report, dollars in thousands)

	As of June 30, 2003	As of June 30, 2002
Tax-Supported Debt		
9(b) General Obligation [1]	$ 454,402	$ 451,700
9(c) General Obligation - Higher Education	349,185	376,462
9(c) General Obligation - Transportation	107,034	117,992
9(c) General Obligation - Parking Facilities	6,457	9,605
Commercial Paper	0	0
Commonwealth Transportation Board	1,072,229	1,043,900
Virginia Public Building Authority	956,496	958,141
Virginia Port Authority	222,221	94,060
Virginia College Building Authority - Equipment Leasing	0	9,165
Virginia College Building Authority - 21st Century & Equip	448,525	354,890
Innovative Technology Authority	9,965	10,590
Virginia Biotechnology Research Park Authority	84,335	87,245
Transportation Notes Payable	12,325	12,325
Capital Leases	301,487	248,075
Installment Purchases	52,624	55,529
Regional Jail Reimbursement Agreements	18,252	28,974
Compensated Absences [2]	477,775	489,575
Pension Liability [2]	655,463	439,372
Virginia Public Broadcasting Board	20,005	21,960
Virginia Aviation Board	3,627	0
Industrial Development Authority Obligations [3]	34,410	37,800
Other Liabilities [2]	20,082	20,284
Total Tax Supported Debt	$ 5,306,899	$ 4,867,644
Debt Not Supported By Taxes [2]		
Moral Obligation / Contingent Liability Debt		
Virginia Resources Authority	$ 704,693	$ 534,736
Virginia Housing Development Authority	915,890	1,278,338
Virginia Public School Authority - 1991 Resolution	345,435	432,117
Virginia Public School Authority - 1997 Resolution	1,524,155	1,242,895
Virginia Public School Authority - Equipment Technology Notes	133,500	99,860
Total Moral Obligation/Contingent Liability Debt	$ 3,623,673	$ 3,587,946
Other Debt Not Supported By Taxes		
9(d) Higher Education	$ 538,207	$ 421,125
Virginia College Building Authority - Pooled Bond Program	436,050	311,285
Virginia College Building Authority - Private College Program	363,520	368,905
Virginia Public School Authority	243,469	415,473
Virginia Public School Authority - Equipment Notes	28,140	51,335
Virginia Housing Development Authority	3,834,763	4,778,204
Virginia Port Authority	148,255	93,325
Virginia Equine Center	15,970	16,145
Hampton Roads Sanitation District	142,046	152,978
Virginia Biotechnology Research Park Authority	14,265	14,965
Virginia Resources Authority	215,431	223,837
Pocahontas Parkway Association Bonds	432,563	418,850
Federal Highway Reimbursement Anticipation Notes	864,715	375,000
Bond Anticipation Notes	1,303	895
Notes Payable	9,294	32,209
Other Long-Term Debt	293,304	332,142
Total Other Debt Not Supported By Taxes	$ 7,581,295	$ 8,006,673
Total Debt of the Commonwealth	$ 16,511,867	$ 16,462,263

Source: Department of the Treasury and Department of Accounts

(1) Voter approved

(2) NOT INCLUDED IN DEBT CAPACITY MODEL

(3) Newport News Industrial Development Authority for Virginia Advanced Shipbuilding & Carrier Integration Center

Tax-Supported Debt Issuances in Fiscal Year 2004
As of December 31, 2003

Issuer	Date Issued	Amount

As of December 17, 2003, no tax-supported debt of the Commonwealth has been issued in FY 2004. No tax-supported debt is anticipated to be issued through December 31, 2003.

Commonwealth Debt

Outstanding Tax-Supported Debt
As of December 31, 2003*
(Dollars in Thousands)

Tax-Supported Debt Included in the Model [1]		
9(b) General Obligation Bonds		$445,092
Bonds[2]	$445,092	
Commercial Paper	0	
9(c) Revenue-Supported GOBs		$462,676
Higher Education[2][3]	$349,185	
Transportation[2][3]	$107,034	
Parking Facilities[2]	$6,457	
Commercial Paper	0	
9(d) Obligations		$3,144,053
Transportation Board[2]	$1,072,229	
Virginia Public Building Authority[2][3]	885,596	
Port Authority[3]	212,801	
Virginia College Building Authority Equipment	0	
Virginia College Building Authority 21st Century	444,155	
Bonded Capital Leases and Lease Revenue Bonds[4]	267,885	
Virginia Aviation Board	3,484	
Virginia Public Broadcasting Board	18,995	
Regional Jail Reimbursement Agreements	18,252	
Transportation Notes Payable	12,325	
Capital Leases	155,707	
Installment Purchases	52,624	
Total Tax-Supported Debt Included in Model		$4,051,821
Additional Long-Term Obligations Included in the CAFR But Not Included in the Model		
Long-Term Obligations Not Included in Model		$1,153,320
Compensated Absences	$477,775	
Pension Liability	655,463	
Other Long-Term Liabilities	20,082	
Total Tax-Supported Debt (CAFR Plus Subsequent Issuance)		$5,205,141

(1) June 30, 2003 Balance Plus Fiscal Year 2004 Issuances and principal payments through December 31, 2003.

(2) Net of deferral on debt defeasance.

(3) Net of unamortized discount and/or premiums.

(4) Bonded Capital Leases include the capital lease obligations supporting lease revenue bonds for Innovative Technology Authority, Virginia Biotechnology Research Park Authority, Big Stone Gap Redevelopment and Housing Authority, Norfolk Redevelopment and Housing Authority, Brunswick County Industrial Development Authority, Norfolk Industrial Development Authority, and Newport News Industrial Development Authority.

*Preliminary and unaudited

Commonwealth Debt

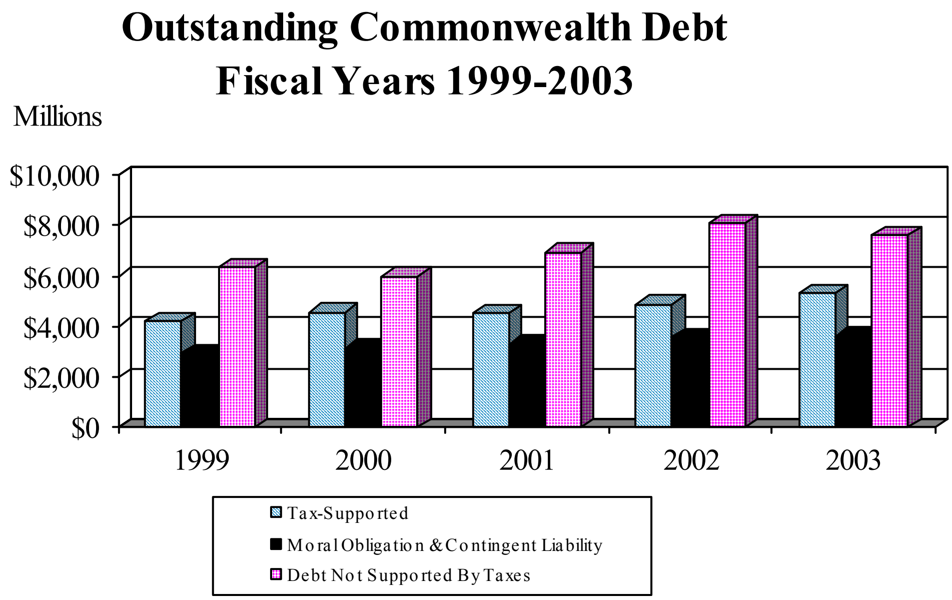
Authorized But Unissued Tax-Supported Debt as of December 31, 2003*

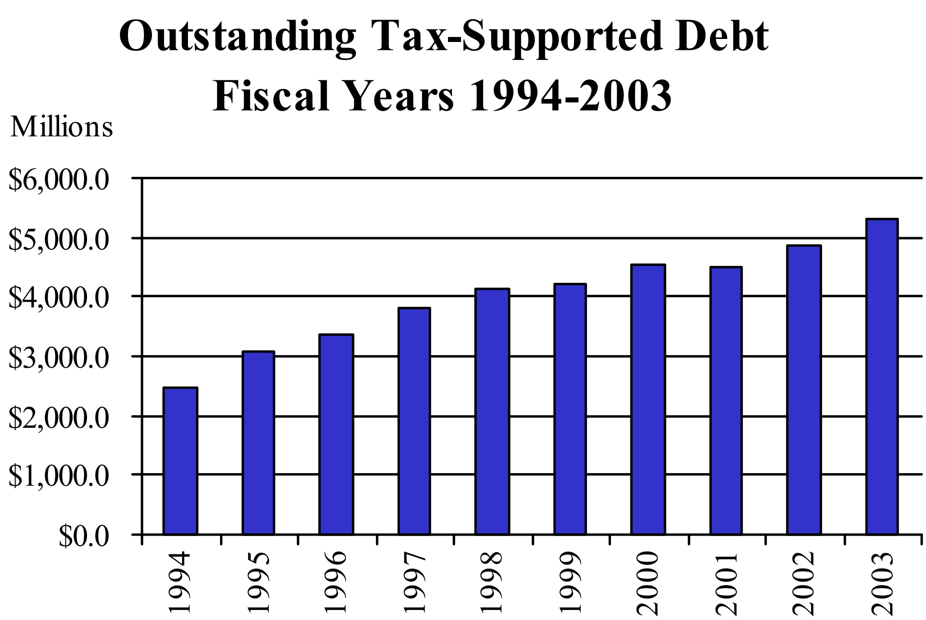
Dollars in Thousands

Section 9(b) Debt:		$ 969,297
Section 9(c) Debt:		
Higher Education Institutions Bonds		$ 138,950
Section (9d) Debt:		
Transportation Revenue Bonds (Northern Virginia Transportation District Program)	97,100	
Virginia Public Building Authority - Projects	403,267	
Virginia Public Building Authority - Jails & Juvenile Detention Facilities	64,286	
Virginia College Building Authority - 21st Century Equipment	42,776	
Virginia College Building Authority - 21st Century Projects	262,056	
Subtotal 9(d) Debt:		$ 869,485
Total		$ 1,977,732

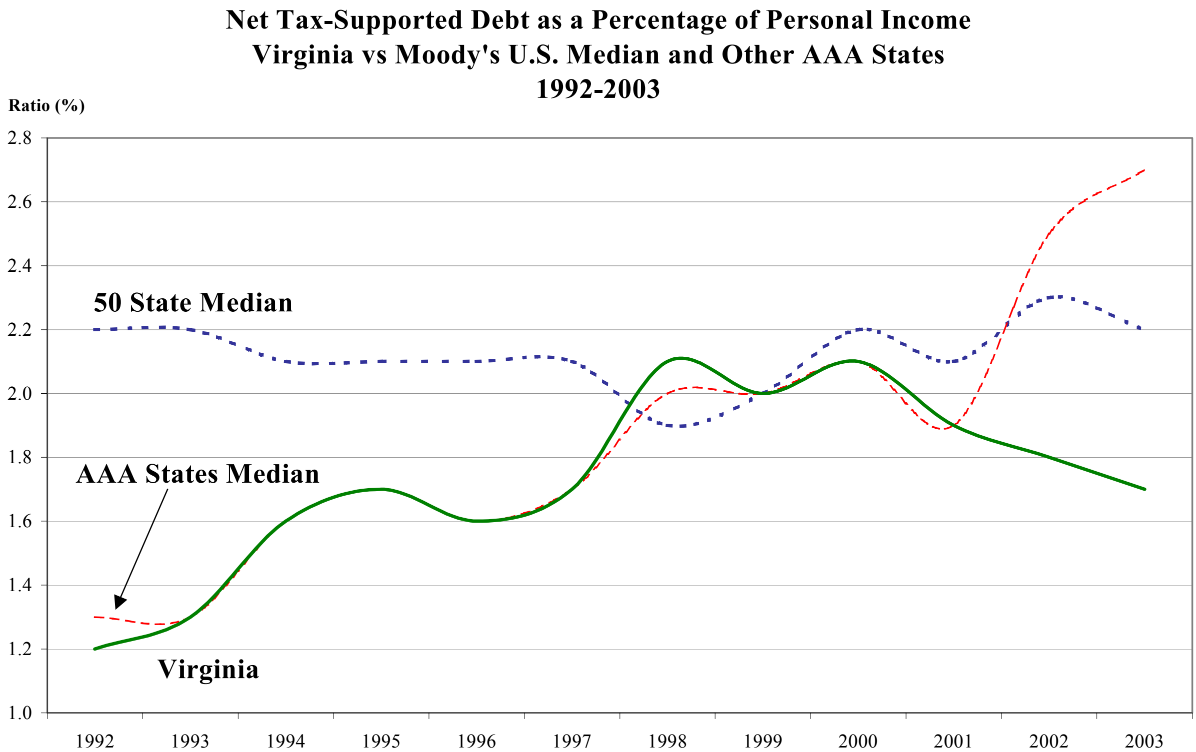
*Preliminary and unaudited

Commonwealth Debt

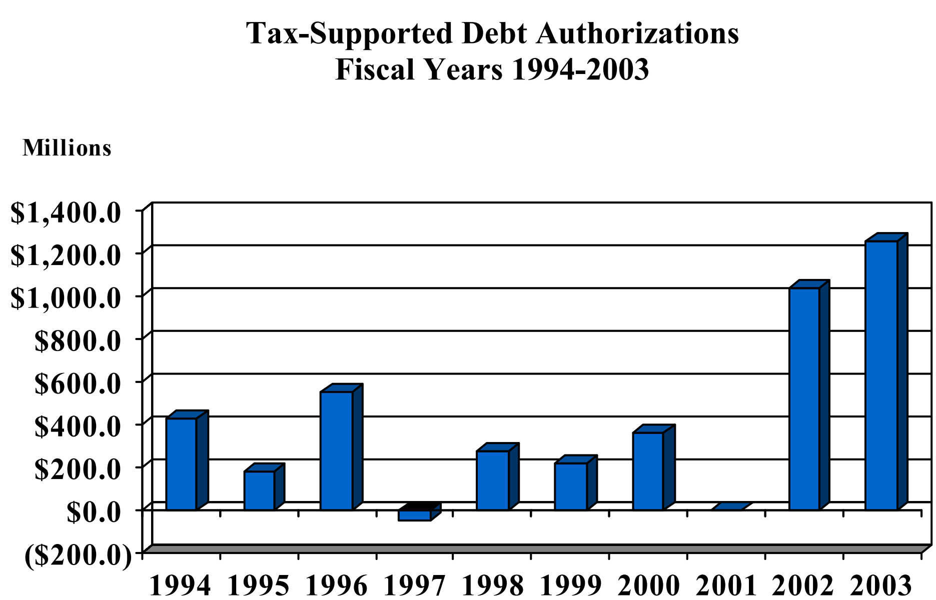




Commonwealth Debt

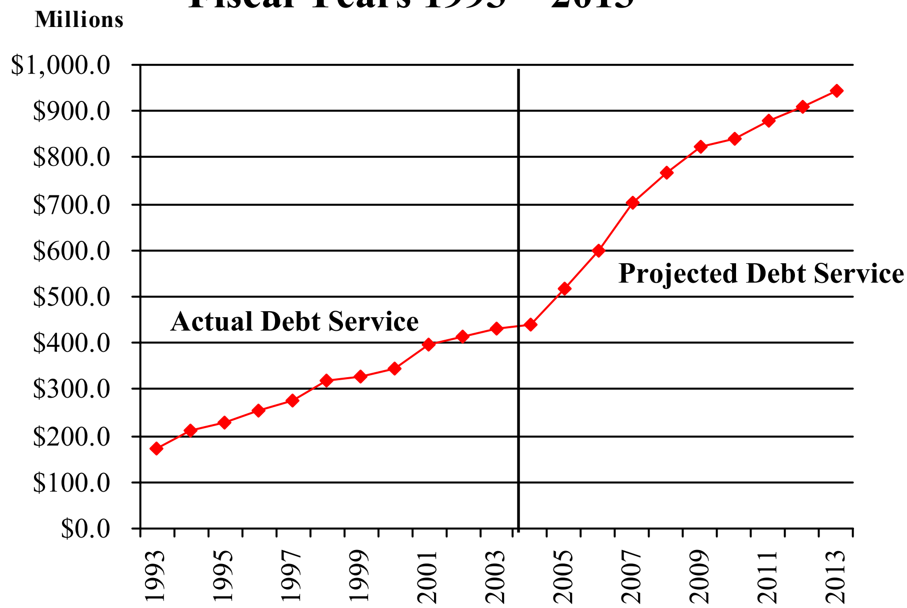


Source: Moody's Investors Service



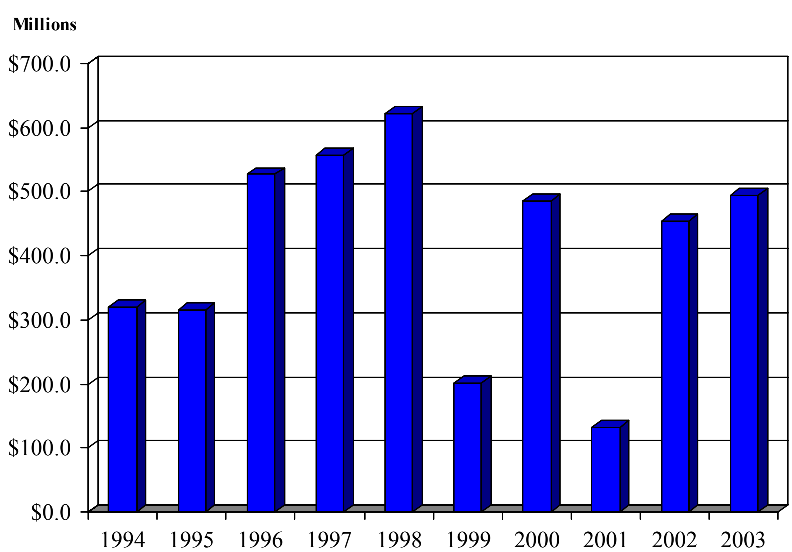
Commonwealth Debt

Tax-Supported Debt Service:Actual and Projected Fiscal Years 1993 – 2013*



* Includes Virginia Biotech Research Park Authority, Innovative Technology Authority and Newport News Industrial Development Authority. Does not include other capital leases, installment purchase obligations or regional jail reimbursement payments.

Trend in Tax-Supported Debt Issuance Fiscal Years 1994 - 2003



AAA/Aaa/AAA State Debt Burdens
1996 – 2003

AAA/Aaa/AAA STATE DEBT BURDENS FROM 1996-2003
PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt per Capita (1)

	2003	2002	2001	2000	1999	1998	1997	1996
Delaware	1,599	1,650	1,616	1,544	-	-	-	-
Maryland	977	879	819	895	953	849	875	832
Georgia	802	804	679	697	679	647	669	-
Utah	682	708	634	693	705	560	301	310
South Carolina	587	615	398	347	321	309	305	287
VIRGINIA	**546**	**566**	**537**	**570**	**516**	**519**	**414**	**366**
Missouri	368	347	288	245	233	238	276	255
Minnesota	-	576	546	513	525	489	520	-
North Carolina	-	375	340	343	273	229	151	142
AAA Median	682	615	546	570	521	504	360	299
AAA Average	794	724	651	650	526	480	439	365

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

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

	2003	2002	2001	2000	1999	1998	1997	1996
Delaware	4.9	5.3	5.5	5.2	-	-	-	-
Utah	2.8	3.0	2.8	3.3	3.6	3.1	1.7	1.8
Georgia	2.8	2.9	2.6	2.8	2.9	2.9	3.1	-
Maryland	2.7	2.6	2.6	3.0	3.3	3.1	3.3	3.4
South Carolina	2.3	2.5	1.8	1.6	1.6	1.6	1.6	1.6
VIRGINIA	**1.7**	**1.8**	**1.9**	**2.1**	**2.0**	**2.1**	**1.7**	**1.6**
Missouri	1.3	1.3	1.1	1.0	1.0	1.0	1.3	1.3
Minnesota	-	1.8	1.8	1.9	2.0	1.9	2.2	-
North Carolina	-	1.4	1.4	1.4	1.2	1.0	0.7	0.7
AAA Median	2.7	2.5	1.9	2.1	2.0	2.0	1.7	1.6
AAA Average	2.6	2.5	2.4	2.5	2.2	2.1	2.0	1.7

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

Exhibit D

Moral Obligation Debt
And
Contingent Liability Debt

Moral Obligation Debt

- Definition of 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 requesting 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 in tax-supported debt ratios as long as bonds are self-supporting.

- Commonwealth Moral Obligation Debt Issuers:

  –Virginia Resources Authority

  –Virginia Housing Development Authority
  Multi-Family Housing Bonds

  –Virginia Public School Authority - 1991 Resolution

Moral Obligation Debt

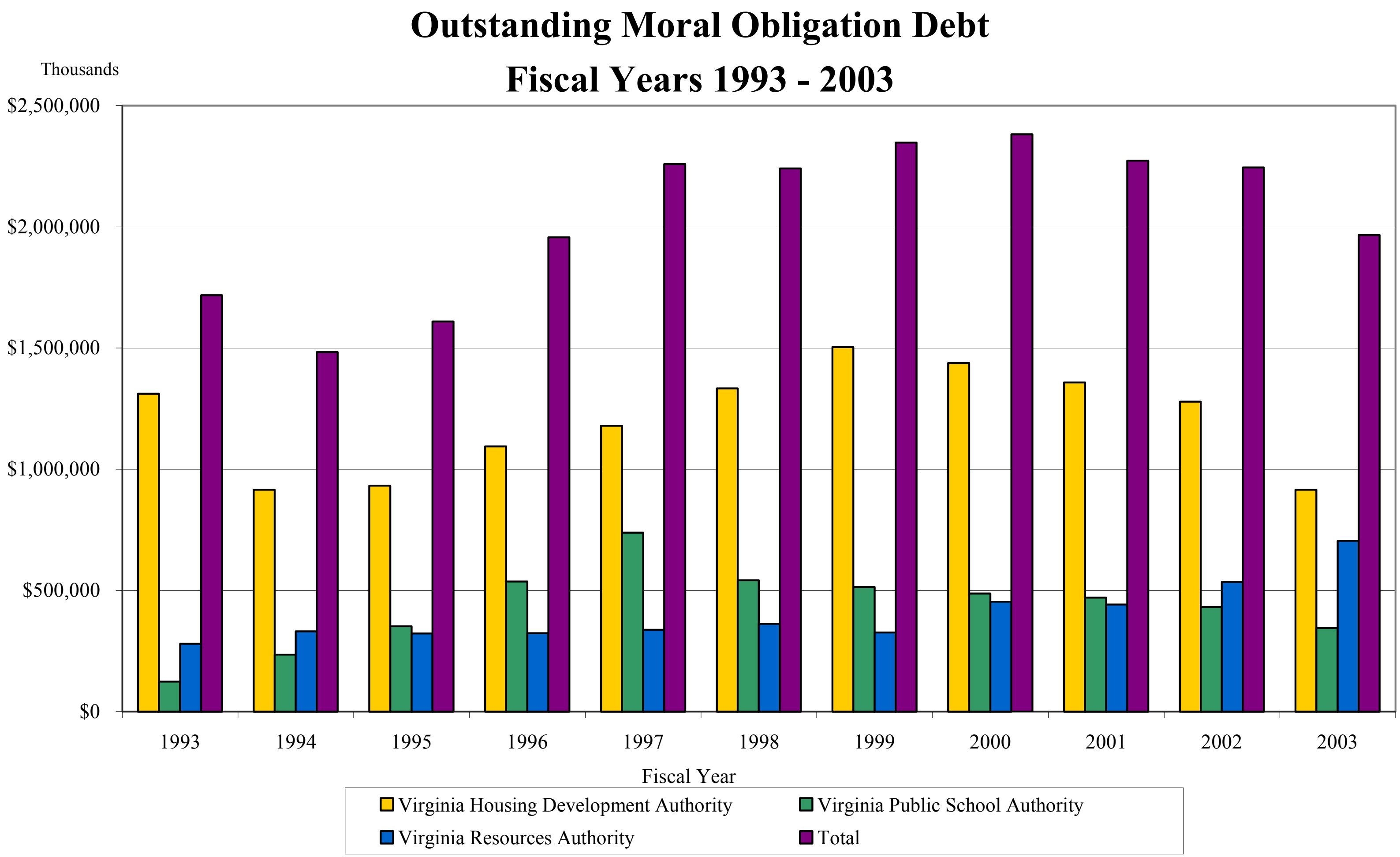
Issuer	Statutory Limit	Outstanding At June 30, 2003	Available Authorization
Virginia Resources Authority	$ 900,000	$ 704,693	$ 195,307
Virginia Housing Development Authority	1,500,000	915,890	584,110
Virginia Public School Authority	800,000	345,435	454,565
Total	$3,200,000	$1,966,018	$1,233,982

Dates upon which issuers expect to meet or exceed statutory borrowing cap:

VHDA:	N/A	- Alternative financing programs initiated in fiscal year 1999 do not require use of moral obligation. Does not expect to issue additional moral obligation debt.
VRA:	FY 2006	- Cap raised from $550 million to $900 million in 2001. Cap is not expected to be exceeded during the next biennium.
VPSA:	N/A	- Created the 1997 Resolution for pooled bond program. Does not expect to issue additional debt under 1991 Resolution.

Bond Ratings:	Fitch	Moody's	S&P
VHDA (Multi-Family):	N/R	Aa1	AA+
VRA:	N/R	Aa2	AA
VPSA (1991 Resolution):	AA+	Aa1	AA+

Moral Obligation Debt



(1) 1993-1998 stated net of unamortized discounts, premiums and issuance costs.
(2) 1999-2003 stated at par.

Contingent or Limited Liability Debt

- The only non-tax-supported debt obligations for which the Commonwealth has a contingent or limited liability are those which utilize a "sum sufficient appropriation" (SSA) to pay debt service.

- SSA was previously only used on certain revenue bonds issued by the Virginia Public School Authority under its 1997 Resolution. The Virginia Public School Authority had $1,524,155,000 of 1997 Resolution bonds outstanding as of June 30, 2003.

- The 2000 Appropriation Act (Chapter 1073) authorized the use of SSA for certain revenue notes issued by the Virginia Public School Authority under its Educational Technology Program. The SSA was codified during the 2001 General Assembly session. The Virginia Public School Authority issued its first series of notes enhanced by the SSA in the Spring of 2001. Notes outstanding as of June 30, 2003 equal $133,500,000.

Bond Ratings:	Fitch	Moody's	S&P
VPSA (1997 Resolution):	AA+	Aa1	AA+
VPSA (Equipment Technology Notes):	AA+	Aa1	AA+

Moral Obligation Debt

Excess Capacity Sensitivity

- The current Model solution provides for two years of excess capacity remaining at end of the 10-year Model period (excluding moral obligation debt) which results in annual debt capacity of $661.91 million.

Total Moral Obligation Debt Sensitivity

- If the Model solution is altered to assume conversion of the entire $3.2 billion statutory cap for all moral obligation debt to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues rises above 5% in fiscal year 2007 and falls to 4.99% in fiscal year 2008. As a result, there would be no capacity to issue additional debt until fiscal year 2008.
  - Annual debt issuance capacity is $254.67 million is fiscal year 2008, $436.13 in 2009 and $655.10 in years 2010 through 2013.

VHDA Sensitivity

- If the Model solution is altered to assume conversion of the VHDA's total outstanding moral obligation debt (as of 6/30/03) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.96% in fiscal year 2009.
  - $576.76 million of annual debt issuance capacity is available for the ten-year Model period.

Moral Obligation Debt

VRA Sensitivity

- If the Model solution is altered to assume conversion of the VRA's total statutory moral obligation cap of $900 million to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.96% in fiscal year 2009.
  - $579.22 million of annual debt issuance capacity is available for the ten-year Model period.

VPSA Sensitivity

- If the Model solution is altered to assume conversion of the VPSA's total outstanding moral obligation debt (as of 6/30/03) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.82% in fiscal year 2009.
  - $630.17 million of annual debt issuance capacity is available for the ten-year Model period.

Sum Sufficient Appropriation Sensitivity

VPSA Sensitivity

- If the Model solution is altered to assume conversion of the VPSA's total outstanding debt secured by a sum sufficient appropriation (as of 6/30/03) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as a percentage of revenues peaks at 4.99% in fiscal years 2008 and 2009.
  - Annual debt issuance capacity of $445.02 million is available through fiscal year 2009. For fiscal years 2010 through 2013, debt capacity would increase to $590.35 million per year.

Exhibit E

Commonwealth Transportation Board Debt Policy

As adopted on November 20, 2003

Virginia Department of Transportation
Considerations for Measuring Debt Capacity

Executive Summary

In July 2002, the Auditor of Public Accounts (the “APA”) issued its “Special Review of Cash Management and Capital Budgeting Practices,” citing that as a result of the Federal Highway Reimbursement Notes (“FRANs”), by 2006, “Transportation will be spending over 9 percent of its budget on debt service” and the “Commonwealth, as a whole, uses 5 percent as the debt capacity limit to maintain an AAA bond rating.” The APA recommended that Transportation establish a policy on how to decide when and if to issue future FRANs and further recommended that the General Assembly and the Governor consider having the Debt Capacity Advisory Committee review and recommend guidelines for Transportation to follow when issuing debt.

As such, Governor Warner proposed the 2003 Reform Agenda to reform the Virginia Department of Transportation, and as a result, Chapters 533 and 560 of the 2003 Acts of Assembly were enacted, which among other modifications, required the Commonwealth Transportation Board (the “CTB”) to adopt a debt management policy. In addition, the 2003 Appropriation Act (Chapter 1042 of the 2003 Acts of Assembly) calls for the Secretary of Transportation to develop a debt capacity model for transportation and to report the recommended model to the Governor and the General Assembly by January 1, 2004.

The CTB has issued two series of FRANs, $375 million in 2000 and $523.32 million in 2002. As of October 1, 2003, a total of $786.6 million of principal is outstanding. In 2002, the General Assembly authorized increasing the maximum amount outstanding from $800 million to $1.2 billion.

In response to the concern raised by the APA, it is important to recognize there are several reasons using the Commonwealth’s parameter of debt service not exceeding 5 percent of revenues would not be appropriate for FRANs. First, the Virginia Transportation Act of 2000 (the “VTA”), which authorized the issuance of FRANs, limits the maturity of FRANs to 10 years. Other Commonwealth debt is typically 20 to 25 years and the debt capacity model assumes 20-year debt. Annual debt service for a 10-year structure would be greater than a 20-year structure. Additionally, credit analysts at the three major bond rating agencies view the 10-year maturity limit on FRANs as a credit strength since it mitigates the reauthorization risk inherent with FRANs-type debt.

Second, FRANs are secured by a revenue stream, which by virtue of CTB policy is primarily dedicated for capital expenses. On the other hand, Commonwealth debt, backed by general fund revenue, is also used for operating purposes. The leveraging of federal highway revenues reduces amounts available for future capital projects but does not affect funds primarily available for operations—the Highway Maintenance and Operating Fund.

Third, FRANS, like other types of revenue debt in municipal finance are secured under a Master Trust Indenture, wherein there are requirements that must be met for issuance of additional debt commonly known as the “Additional Bonds Test”. The FRANs Indenture includes a strong additional bonds test, which requires at least three times debt service coverage. This is one of the primary reasons for the Aa2/AA/AA ratings garnered by FRANs. Lastly, the VTA also limits the principal amount outstanding to $1.2 billion.

In summary, any debt management policy governing FRAN issuance must be developed considering the structural and credit features of FRANs that distinguish this financing program from general debt of the Commonwealth rather than attempt to apply similar parameters to a unique and dissimilar debt program.

In developing a debt capacity policy for FRANs, the CTB will need to determine (1) a revenue measure (the amount of revenue that will be used in determining debt affordability); (2) a reasonable interest rate assumption (the interest rate to be used in projecting future debt service requirements); (3) the appropriate level of debt service-to-revenues; and (4) the size and frequency of bond issues. The final debt policy must be in compliance with both the additional bonds test per the Indenture and statutory maximum par amount outstanding. And most importantly CTB will want to balance the flexibility of having funds available for future projects with the ability to accelerate projects with proceeds from FRANs.

With this in mind, the Virginia Department of Transportation's Division of Innovative Finance and Revenue Operations worked with the CTB's financial advisor ("FA"), Public Resources Advisory Group, and Treasury Staff to review the policies of other states governing the issuance of Grant Anticipation Revenue Vehicles ("GARVEE") and GARVEE-like debt such as the CTB's FRAN program, and practices evaluated by the rating agencies.[1]

Recommendation

The measures recommended in the FA's report reflect the best practices applicable to the CTB. The recommended policies will help to ensure that the CTB's level of debt remains affordable and that the CTB maintains its ratings of AA/Aa2/AA by all three bond rating agencies. These policies will guide us each year as we determine the timing, size and best debt structure for each sale of FRANs. Working with our FA, VDOT will evaluate the terms and amount of bonds within the parameters of the CTB's debt policy and as they relate to the existing market conditions.

Interest Rate. The FA's report recommends the CTB use the two-year average of Municipal Market Data ("MMD") yields for a double-A credit with a 10-year maturity (3.95% at the time of the debt capacity analysis). Using current interest rates would capture only current market conditions and not reflect fluctuations in interest rates. Since the plan is to update the debt capacity each year, a two-year average would capture fluctuations in interest rates and also moderate the effect of interest rate movements over any one year. As part of a sensitivity analysis, the FA recommends the CTB measure the capacity with interest rates of 100 basis points greater and 100 basis points less than the two-year average.

Debt-Service-to-Revenue Percentage. The FA's report recommends CTB use a level of 25.0 percent debt service to revenues to measure debt capacity. Credit analysts view the 33.3 percent (3.0 times coverage) level to be strong when used for the additional bonds test, which uses the less conservative projected revenues measure. However, the 25.0 percent debt service-to-revenues level is more conservative and allows the CTB more flexibility in funding future projects. In comparing the amount of pay-as-you-go revenue available, using the six-year historical average, the 25 percent case (versus the current 33.3 percent per the Indenture) results in an average annual difference of about $28.8 million more in the 2004 through 2010 period and a total difference in this period of $201.8 million.

Revenue Measure: The FA's report recommends CTB use the six-year average of federal highway reimbursements to measure debt capacity. Based on the 3.95 percent interest rate and 25.0 percent debt service to revenues level, this will give the CTB an additional capacity of approximately $255.0 million through 2010, and a total capacity of about $1.24 billion. In addition, assuming the additional debt is issued in equal tranches through 2010 and comparing total debt service to the six-year historical average of federal highway receipts, the CTB will have an average of $469.2 million federal reimbursements to spend each year through 2010 for projects on a pay-as-you-go basis. If the CTB believes this will give it the adequate flexibility to fund projects in the future and also give it the flexibility to accelerate the projects, then using the six-year historical average of revenues to measure debt capacity would be conservative and prudent. Using the historical average captures the growth in revenues and therefore, allows for a growth in capacity, but does not assume the future growth generally built into projected revenues.

[1] Although the requirement is for a "debt capacity model" and "debt management policy", all CTB debt, other than the FRAN program, is considered in the overall Commonwealth Debt Capacity Model. As such, the debt capacity analysis and policy were developed for the FRAN program.

Commonwealth Transportation Board
Debt Policy

Purpose
The debt policy will establish the level of indebtedness the Commonwealth Transportation Board can reasonably expect to incur without jeopardizing its existing credit ratings and to ensure the efficient and effective use of debt financing of the CTB's transportation infrastructure development program. As such, the debt policy is to be used in conjunction with the Approved Budget, the Six Year Improvement Program (SYIP), and the Official Revenue Forecast.

Policy Statement
The use of debt financing will be kept to a minimum while focusing on (i) efficiency in timing and amount of debt issuance to support project cash flow needs; (ii) targeting the use of debt to fund activities that will accelerate project delivery and mitigate the impact of inflation; and (iii) management of debt within acceptable capacity limitations in order to maximize availability of future funding for new projects.

Non-FRAN debt will continue to be issued in accordance with Commonwealth of Virginia debt management policy as promulgated by the Debt Capacity Advisory Committee.

Future sales of FRANs will only be authorized in compliance with the following:

Interest Rate Measure
Two-Year average Municipal Market Data (MMD) double-A 10-year yield

Sensitivity Analysis:
100 basis points +/- the two-year average MMD double-A 10-year yield

Debt-Service-to-Revenue Percentage
Maximum debt service on any outstanding and planned sales assuming the Interest Rate Measure shall not exceed 25% of the Revenue Measure.

Revenue Measure
Capacity will be measured using the six-year average of federal highway reimbursements received in the preceding six federal fiscal years.

Maximum Maturity
10 years

Maximum Outstanding
The total principal amount outstanding may not exceed $1.2 billion.

Commonwealth Transportation Board
Commonwealth of Virginia
Federal Highway Reimbursement Anticipation Notes
FRAN Debt Capacity Model

Debt Service to Revenues: 25%
Additional Amount of Debt to be Issued 255,011.48

Term (Years) 10.00
Interest Rate 3.950%

Fiscal Year	Existing Debt Service	Additional Debt to be Issued	Total Principal Outstanding *	Debt Service on Add'l Debt	Total Debt Service	6-Yr Avg. Fed. Hwy. Revenue	Debt Service as % of Rev	Debt Service Coverage	Revenue for Pay-as-you-go Based on 6-yr Avg. **607,795.9**
2004	121,493.58	36,430.21	823,075.21	4,480.34	125,973.92	607,795.99	20.726%	4.82	481,822.06
2005	120,586.60	36,430.21	856,464.07	8,960.68	129,547.28	607,795.99	21.314%	4.69	478,248.70
2006	120,584.90	36,430.21	804,636.32	13,441.03	134,025.93	607,795.99	22.051%	4.53	473,770.06
2007	120,583.64	36,430.21	745,627.45	17,921.37	138,505.01	607,795.99	22.788%	4.39	469,290.98
2008	120,583.44	36,430.21	679,002.97	22,401.71	142,985.15	607,795.99	23.525%	4.25	464,810.84
2009	120,584.40	36,430.21	603,717.63	26,882.05	147,466.46	607,795.99	24.262%	4.12	460,329.53
2010	120,586.60	36,430.21	519,329.56	31,362.40	151,948.99	607,795.99	25.000%	4.00	455,846.99
2011	80,289.34	0.00	388,749.23	31,362.40	111,651.74	607,795.99	18.370%	5.44	
2012	66,868.11	0.00	251,877.92	31,362.40	98,230.50	607,795.99	16.162%	6.19	
2013	16,706.18	0.00	162,123.72	31,362.40	48,068.57	607,795.99	7.909%	12.64	
2014	0.00	0.00	68,243.07	26,882.05	26,882.05	607,795.99	4.423%	22.61	
	1,008,866.79	255,011.48		246,418.83	1,255,285.62				3,284,119.16
								Average	469,159.88

Attachment:
Debt Policy Analysis