REPORT OF THE
DEPARTMENT OF THE TREASURY

ANNUAL REPORT OF THE DEBT CAPACITY ADVISORY COMMITTEE

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 72

COMMONWEALTH OF VIRGINIA
RICHMOND
2000

COMMONWEALTH of VIRGINIA
Office of the Governor

James S. Gilmore, III
Governor

Ronald L. Tillett
Secretary of Finance

December 31, 1999

The Honorable James S. Gilmore, III
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 Gilmore, 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 17, Article 1.1, Sections 2.1-304.7 through 2.1-304.7). 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 ninth 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 be prudently issued by the Commonwealth over the next ten years. 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 current premier credit ratings on the Commonwealth's debt. 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. In a report issued in September of this year, Moody's Investors Service specifically referenced the Commonwealth's financial and debt management policies in determining its ratings, as follows:

> "Conservative financial management and strong oversight of debt issuance have been a Commonwealth tradition. This tight management of its finances served the state well through the economic downturn of the early 1990's and continues to play an important role in the Commonwealth's creditworthiness. The Debt Capacity Advisory Committee created by executive order in 1991, annually estimates the amount of tax-supported debt that may be authorized and issued within the constraints of the state's resources. A history of positive financial results, spending restraint during economic weakness, prompt attention to adverse financial events, and planned, moderate debt issuance have contributed to the long record of high quality creditworthiness." (*Moody's Investors Service, Municipal Credit Research, New Issue Report, September 24, 1999*).

In 1999, the Committee approved criteria that govern which liabilities are included in the Model. Certain liabilities classified for accounting purposes as tax-supported debt and shown as such in the Commonwealth's Comprehensive Annual Financial Report (CAFR) do not meet the Committee's criteria for inclusion in the Model. These items include compensated absences, pension liabilities and other liabilities as shown on pages 5 and 7 of Exhibit C. The criteria are included along with other assumptions and variables included in the Model on pages 2 through 4 of Exhibit A. The Model incorporates the official revenue estimates contained in the Governor's proposed budget submitted December 17, 1999.

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 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 reviewed 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 three issuers in the Commonwealth that use the moral obligation pledge 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 within their statutory limit and none expects to request additional moral obligation debt authorization in the 2000 Session.

The Virginia Resources Authority will continue to issue moral obligation bonds under their current program to provide low-cost financing to localities for water, wastewater, solid waste and storm water projects. Legislation was adopted during the 1999 General Assembly Session that created a new Airport Revolving Fund program to be administered by the Authority. The Airport Revolving Fund program could utilize the Commonwealth's moral obligation pledge. The Authority is developing credit criteria and guidelines for the financing of airport projects, which will be reviewed by the Department of the Treasury. The Authority briefed the Committee on its airport financing initiatives during the Committee's meeting on November 18, 1999, and a copy of the presentation is attached as Exhibit E. The Authority has also instituted a new program to leverage the Virginia Water Facilities Revolving Fund to assist localities in financing qualified wastewater projects at subsidized interest rates that does not utilize the Commonwealth's moral obligation pledge.

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 the new indenture.

The Virginia Public School Authority is also 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. This program was developed by the Authority in 1997 and has received the highest double-A ratings available 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. Given the structure of the Commonwealth's moral obligation bond programs, such an occurrence is unlikely.

The Committee was briefed on the financing proposals Governor Gilmore will be submitting to the 2000 General Assembly for the "Innovative Progress: Improving Transportation in Virginia" transportation initiatives. Presentations were made by Department of Treasury staff and staff from the Office of the Secretary of Transportation on the securitization of a portion of the Commonwealth's anticipated payments from the Master Settlement Agreement with tobacco manufacturers and the Grant Anticipation Revenue Vehicles (GARVEEs). Copies of the presentations on these topics are attached as Exhibits F and G.

Finally, the Committee reviewed the current and historical debt position of the Commonwealth. Part of this review included other authority debt not supported by taxes. Certain data included in Exhibit C summarize information considered by the Committee.

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, and amended, if necessary, during the odd- or second year. The Committee therefore has provided the following amounts for the two year biennium since this report coincides with the 2000 General Assembly Session during which the 2001-2002 budget will be adopted.

1. Model Results - Tax-Supported Debt Authorization:

The Committee believes that based upon the Debt Capacity Model:

- A maximum of $670.77 million of tax-supported debt could prudently be authorized by the 2000 Session of the General Assembly; and
- A maximum of $670.77 million of tax-supported debt could prudently be authorized by the 2001 Session of the General Assembly.

This maximum amount of authorization is above and beyond the tax-supported debt currently authorized but unissued, most of which is assumed to be issued at some point in the future. The increase in debt capacity over the amounts recommended in the 1998 Report is mainly attributable to two variables:

- continued growth in revenues due to a strong and vibrant Virginia economy; and
- limited authorization of additional tax-supported debt during the 1999 General Assembly Session.

The Committee notes the change in the direction of market interest rates during the past year. Since December 1998, tax-exempt interest rates have risen almost one hundred basis points, or one percentage point, based on the Bond Buyer 11 General Obligation Bond Index. The Bond Buyer 11 Index is the benchmark index utilized in the Debt Capacity 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 recent rate increases are 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 when the pace of revenue growth may decline 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 over the next biennium 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, authorizations for debt issuance in excess of this amount could result in the Commonwealth exceeding the maximum ratio of 5%. Exhibit C contains narrative and tables, which summarize information regarding the Committee and tax-supported debt.

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 authorization for projects that is 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 may result in higher financing costs than if the financing had been completed through an established state program. In such cases, the Commonwealth is not in control of the process although it is responsible for debt service payments over the life of the bonds. Such bonds are normally considered tax-supported debt and are included in the Model.

4. Moral Obligation and Contingent Liability Debt:

We do not recommend any changes to the programs or levels of the statutory caps for the three issuers currently utilizing the moral obligation pledge of the Commonwealth. However, in regard to the Virginia Resources Authority's airport financing programs, the Authority has agreed that the State Treasurer will review any proposed guidelines or criteria prior to the issuance of obligations for the airport programs that utilize the Commonwealth's moral obligation pledge.

Conclusion

We trust this report and our recommendations are useful as we move forward together into the 2000 Session of the General Assembly. It has been our pleasure to advise you in 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,

Ronald L. Tillett, Chairman

Walter W. Craigie

David T. Ralston, Jr.

Mary G. Morris

Philip A. Leone

Walter J. Kucharski

Scott D. Pattison

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 IBCA, Moody's and Standard & Poor's, September 1999

- 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 5.19% for 9(b) and 9(c) General Obligation debt. 9(d) debt has an assumed interest rate of 5.69%.
    - 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, plus revenue equal to debt service on outstanding 9(c) debt.
  - 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

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 Model

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 without 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) Voter Approved	9(c) Higher Education	VPBA Projects	VPBA Jails	VCBA Equipment	VCBA 21st Century	9(d) Transportation	Other Long-Term Obligations[1]	Total
Authorized & Unissued as of December 31, 1999	$0.0	$38.8	$58.0	$120.1	$47.3	$37.7	$333.4	$40.5	$675.8
Assumed Issued[2]:									
FY 2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY 2001	0.0	0.0	0.0	106.0	47.3	25.2	0.0	14.5	193.0
FY 2002	0.0	9.3	23.2	14.1	0.0	6.4	164.6	0.0	217.7
FY 2003-2008	0.0	9.3	10.7	0.0	0.0	0.0	168.8	26.0	214.7
Total	$0.0	$18.6	$33.9	$120.1	$47.3	$31.6	$333.4	$40.5	$625.4
Authorized Debt Assumed Unissued	$0.0	$20.2 [5]	$24.1 [3]	$0.0	$0.0	$6.1 [4]	$0.0	$0.0	$50.4

[1] *Other Long-Term Obligations includes capital lease project: Private 1,000 Bed Medium Security Prison and VCCS capital leases for Blueridge ($2.5 mil) and Thomas Nelson ($12 mil).*

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

[3] *Projects to be funded with refunded reserve fund proceeds and excess interest earnings.*

[4] *Projects to be funded with excess interest earnings.*

[5] *Projects either completed or to be funded by other means. Will not be funded with 9(c) bond proceeds.*

* *Numbers may not add to totals due to rounding. Does not include Tax-Exempt Commercial Paper.*

Debt Capacity Model

DEBT CAPACITY MODEL
(Dollars in Millions)
December 31, 1999

Debt Capacity Maximum Ratio

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

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Fiscal Year	Revenues	Overall Capacity to Pay Debt Service	Annual Payments for Debt Service on Debt Issued	Annual Payments for Debt Service on All Planned Debt Issuances	Net Capacity to Pay Debt Service	Amount of Additional Debt that may Be Issued	Debt Service on the Amount of Additional Debt that may Be Issued	Remaining Capacity to Pay Debt Service	Total Debt Service as a % of Revenues
Actual 1995	7,758.23	387.91	227.49	N/A	160.42	N/A	N/A	160.42	2.93%
Actual 1996	8,203.92	410.20	254.90	N/A	155.30	N/A	N/A	155.30	3.11%
Actual 1997	9,088.43	454.42	274.25	N/A	180.17	N/A	N/A	180.17	3.02%
Actual 1998	9,753.64	487.68	317.53	N/A	170.15	N/A	N/A	170.15	3.26%
Actual 1999	10,728.92	536.45	325.48	N/A	210.96	N/A	N/A	210.96	3.03%
2000	11,648.42	582.42	361.77	3.94	216.71	$0.00	0.000	216.71	3.14%
2001	12,383.13	619.16	372.27	66.51	180.37	670.77	55.596	124.78	3.99%
2002	13,182.21	659.11	366.19	84.68	208.25	670.77	111.192	97.06	4.26%
2003	13,917.92	695.90	344.85	95.65	255.40	670.77	166.788	88.61	4.36%
2004	14,733.81	736.69	331.57	97.99	307.13	670.77	222.384	84.75	4.42%
2005	15,628.61	781.43	302.14	97.99	381.30	670.77	277.980	103.32	4.34%
2006	16,565.73	828.29	297.32	91.33	439.63	670.77	333.576	106.06	4.36%
2007	17,519.86	875.99	293.62	91.34	491.04	670.77	389.172	101.86	4.42%
2008	18,532.31	926.62	291.48	91.33	543.80	670.77	444.768	99.03	4.47%
2009	19,599.47	979.97	288.20	91.33	600.44	670.77	500.363	100.07	4.49%

10 Year Average:	$603.69	Excess Capacity:	$1,207.38

[1] Revenues include the actual fiscal year revenues per the Annual Reports of the Comptroller (1995-1999); and the Official and December Forecast of General Fund Revenues, transfers from the the Virginia Lottery, the Alcoholic Beverage Control Board, dated December 17, 1999; and, certain revenues from the Transportation Trust Fund official revenue forecasts as of December 17, 1999 and revenue equal to debt service on outstanding 9(c) debt.

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

[3] Equals the annual payments of principal and interest for all currently outstanding tax-supported debt issued through June 30, 1999 plus fiscal year 2000 issuances as of December 31, 1999.

[4] 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.

[5] 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 [2] - Column [3] - Column [4].

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

[7] Equal to annual amount of principal and interest to be paid on Column [6]

[8] Equals Column [5] minus Column [7].

[9] Equals the sum of all debt service payments divided by Revenues. (Column [3]+Column [4]+Column [7])/Column [1]

Debt Capacity Model

DEBT CAPACITY MODEL
REVENUE DATA
(Dollars In Millions)

Fiscal Year	General Fund		Transportation Trust Fund		General Fund Growth		Transportation Trust Fund Growth		ABC Profit Transfer		Lottery Profit Transfer		Revenues Sufficient to Pay 9(c) Debt Service Outstanding	Revenues Sufficient to Pay New 9(c) Debt Service	Total Revenue(14)	Blended Revenue Growth Rate(15)
Actual 1991	$5,552.69	(1)	$420.17	(12)	-0.42%	(1)	-5.35%	(12)	$26.20	(1)	$287.50	(1)	N/A	N/A	$6,286.56	1.53%
Actual 1992	5,623.21	(2)	425.37	(12)	1.27%	(2)	1.24%	(12)	23.73	(2)	290.80	(2)	N/A	N/A	6,363.12	1.22%
Actual 1993	6,134.57	(3)	450.72	(12)	9.09%	(3)	5.96%	(12)	26.82	(3)	297.00	(3)	N/A	N/A	6,909.11	8.58%
Actual 1994	6,503.76	(4)	494.30	(12)	6.02%	(4)	9.67%	(12)	20.73	(4)	303.50	(4)	N/A	N/A	7,322.29	5.98%
Actual 1995	6,881.12	(5)	546.50	(12)	5.80%	(5)	10.56%	(12)	19.01	(5)	311.60	(5)	N/A	N/A	7,758.23	5.95%
Actual 1996	7,283.56	(6)	561.76	(12)	5.85%	(6)	2.79%	(12)	26.00	(6)	332.60	(6)	N/A	N/A	8,203.92	5.74%
Actual 1997	8,133.55	(7)	588.08	(12)	11.67%	(7)	4.69%	(12)	23.80	(7)	343.00	(7)	N/A	N/A	9,088.43	10.78%
Actual 1998	8,811.04	(8)	603.00	(12)	8.33%	(8)	2.54%	(12)	20.70	(8)	318.90	(8)	N/A	N/A	9,753.64	7.32%
Actual 1999	9,737.70	(9)	643.82	(12)	10.52%	(9)	6.77%	(17)	25.50	(17)	321.90	(17)	N/A	N/A	10,728.92	10.00%
2000	10,591.70	(10)	653.76	(12)	8.77%	(10)	1.54%	(12)	23.00	(10)	310.30	(10)	69.66	0.00	11,648.42	8.57%
2001	11,289.70	(10)	690.03	(12)	6.59%	(10)	5.55%	(12)	22.40	(10)	310.30	(10)	70.70	0.00	12,383.13	6.31%
2002	12,062.60	(10)	718.19	(12)	6.85%	(10)	4.08%	(12)	23.00	(10)	310.30	(10)	67.38	0.74	13,182.21	6.45%
2003	12,772.00	(10)	748.95	(12)	5.88%	(10)	4.28%	(12)	21.50	(10)	310.30	(10)	63.69	1.48	13,917.92	5.58%
2004	13,564.40	(10)	774.85	(12)	6.20%	(10)	3.46%	(12)	21.50	(10)	310.30	(10)	61.27	1.48	14,733.81	5.86%
2005	14,426.80	(10)	813.19	(12)	6.36%	(10)	4.95%	(12)	21.50	(10)	310.30	(10)	55.33	1.48	15,628.61	6.07%
2006	15,326.20	(10)	854.01	(12)	6.23%	(10)	5.02%	(12)	21.50	(10)	310.30	(10)	52.24	1.48	16,565.73	6.00%
2007	16,245.77	(11)	890.62	(13)	6.00%	(11)	4.29%	(13)	21.50	(16)	310.30	(16)	50.18	1.48	17,519.86	5.76%
2008	17,220.52	(11)	928.80	(13)	6.00%	(11)	4.29%	(13)	21.50	(16)	310.30	(16)	49.71	1.48	18,532.31	5.78%
2009	18,253.75	(11)	968.63	(13)	6.00%	(11)	4.29%	(13)	21.50	(16)	310.30	(16)	43.81	1.48	19,599.47	5.76%

(1) Annual Report of the Comptroller, FY 91.
(2) Annual Report of the Comptroller, FY 92.
(3) Annual Report of the Comptroller, FY 93.
(4) Annual Report of the Comptroller, FY 94.
(5) Annual Report of the Comptroller, FY 95.
(6) Annual Report of the Comptroller, FY 96.
(7) Annual Report of the Comptroller, FY 97.
(8) Annual Report of the Comptroller, FY 98.
(9) Annual Report of the Comptroller, FY 99.
(10) Official and December Standard General Fund Forecast for FY 2000-2006 *(December 17, 1999)*
(11) Derived using 6% growth rate per Department of Taxation for years 2007-2009
(12) Department of Motor Vehicles.
(13) Derived using average TTF 10-year (1997-2006) growth rate for FY 2007-2009.
(14) Total Revenue=GF+TTF+ABC+Lottery+Existing 9(c) Revenues equivalent to corresponding 9(c) debt service + Estimated 9(c) Revenues.
(15) Blended Revenue Growth Rate=(Current FY Total Revenue/Prior FY Total Revenue)-1.
(16) FY 2007 - 2009 based on FY 2000-2006 Forecasts (per December Standard General Fund Forecast, December 17, 1999).
(17) Summary Report on General Fund And Lottery Revenue Collections for FY 98 & 99 (Appendix 1and 2 to 8/23/99 Governor's Report)

Debt Capacity Model

Annual Debt Service Requirements and Other Long-Term Obligations
Outstanding As of June 30, 1999 Plus Fiscal Year 2000 Issuance Through December 31, 1999
(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	Other Authorized Capital Lease Projects	Debt Service on Planned Issuances	Debt Service on Unallocated Debt Capacity	GRAND TOTAL
2000	$ 131,410	230,360	$0	$3,635	$309	$0	$0	$365,714
2001	131,272	240,998	38,889	3,631	1,982	22,011	55,596	494,380
2002	126,420	239,766	38,889	3,630	1,981	40,175	111,193	562,054
2003	121,229	223,620	38,889	3,637	4,139	48,961	166,789	607,262
2004	117,253	214,317	38,889	3,634	4,135	51,305	222,385	651,918
2005	109,752	192,385	38,889	3,634	4,136	51,308	277,982	678,084
2006	105,098	192,223	38,889	3,635	4,135	44,657	333,578	722,215
2007	101,412	192,209	38,889	3,633	4,139	44,657	389,174	774,113
2008	99,302	192,183	38,889	3,630	4,136	44,657	444,771	827,567
2009	91,827	196,375	38,889	3,634	4,137	44,657	500,367	879,885
TOTAL	$1,134,975	$2,114,436	$349,998	$36,333	$33,229	$392,385	$2,501,836	$6,563,192

The Debt Capacity Model

Parameters of the Model

(1) **Revenues** includes all general fund revenues (exclusive of transfers), ABC and Lottery profits transferred to the general fund, state tax revenues in the Transportation Trust Fund and revenue equal to debt service on outstanding 9(c) debt.

(2) **Overall Capacity to Pay Debt Service** is calculated as the product of the Debt Capacity Maximum Ratio and Revenues. It represents the maximum level of debt service allowed given the 5% debt service/revenues ratio. [Column 2 = Column 1 x .05]

(3) **Annual Payments for Debt Service on Debt Issued** is actual debt service on all tax-supported debt outstanding at the end of the most recent fiscal year and on any issuance to date since fiscal year end.

(4) **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.

(5) **Net Capacity to Pay Debt Service** is Overall 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. [5= 2-3-4]

(6) **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.

The Debt Capacity Model (continued)

Parameters of the Model

(7) **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.

(8) **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. [8=5-7]

(9) **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. [9=(3+4+7)/1].

- 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.

  $670.77 million is equal annual issuance capacity.

  - debt service/revenues ratio rises to a maximum of 4.49% in FY 2009
  - projected issuance never reaches 5% capacity due to two years excess capacity 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 10-year period which results in the following annual debt capacity:

2 Year Excess Capacity	**$670.77 million**

- If the Model solution is altered to reduce the two years of excess capacity, the following annual debt capacity figures are produced:

1 Year Excess Capacity	**$731.75 million**
No Excess Capacity	**$803.60 million**

Revenue Sensitivity

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

For each change of $100 million per year	**$ 5.58 million**
For each 1% change per year of General Fund Revenues	**$10.19 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 rate	**$617.33 million**
Subtract 100 basis points from rate	**$730.21 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 2.1-304.3 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.

During the 1997 General Assembly Session, two specific sports facility authorities were provided access to certain additional tax revenues. The legislation provides that if the State Treasurer, with the concurrence of the Committee, finds that obligations issued to finance such facilities would be tax-supported debt or impact the Commonwealth's credit ratings, the obligations must be authorized by the General Assembly. The provisions sunset on January 1, 2002.

All Commonwealth debt-issuing agencies, institutions, boards, and authorities are required to provide to the State Treasurer quarterly reports containing information which the Committee deems necessary for it to carry out its required duties.

Review of the December 1998 Report

The Committee issued its seventh annual report to the Governor and the General Assembly on December 31, 1998. 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 $531 million of tax-supported debt in each year from fiscal year 2000 through fiscal year 2008 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 a maximum of $531 million of tax-supported debt could be prudently authorized by the 1999 and 2000 Sessions of the General Assembly, representing a maximum authorized amount of $1.06 billion 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 1999 General Assembly Session.

Review of the December 1998 Report (Continued)

- Continued to recommend changes in the financing method used for non-traditional lease-backed projects previously financed by local and special purpose authorities, such as industrial development authorities or redevelopment and regional housing authorities. Recommended the use of financing processes which promote the lowest possible cost of funds to the Commonwealth by allowing the Treasury staff to oversee the issuance process.

- Reviewed outstanding moral obligation debt and other debt for which the Commonwealth had 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 utilized 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 utilized moral obligation bond programs and compared these to Commonwealth issuers. The Committee recommended no changes to programs or levels of statutory caps for the three issuers that utilized the moral obligation pledge of the Commonwealth.

Commonwealth Debt

(Dollars in Thousands)

	As of June 30, 1999	As of June 30, 1998
Tax-Supported Debt		
9(b) General Obligation [1]	$ 534,765	$ 508,480
9(c) General Obligation - Higher Education	387,963	406,560
9(c) General Obligation - Transportation	141,541	148,607
9(c) General Obligation - Parking Facilities	11,660	12,280
Commercial Paper	33,000	64,000
Commonwealth Transportation Board	736,960	756,700
Virginia Public Building Authority	965,886	942,656
Virginia Port Authority	106,805	108,085
Virginia College Building Authority - Equipment	83,045	110,255
Virginia College Building Authority - 21st Century	165,145	107,365
Innovative Technology Authority	12,195	12,630
Virginia Biotechnology Research Park Authority	30,115	31,000
Transportation Notes Payable	12,325	12,325
Capital Leases	246,215	251,957
Installment Purchases	54,171	35,201
Regional Jail Reimbursements	62,635	65,510
Compensated Absences [2]	423,753	414,605
Pension Liability [2]	210,896	135,465
Other Liabilities [2]	2,882	0
Total Tax Supported Debt	$ 4,221,957	$ 4,123,681
Debt Not Supported By Taxes [2]		
Moral Obligation / Contingent Liability Debt		
Virginia Resources Authority	$ 326,641	$ 362,814
Virginia Housing Development Authority	1,503,910	1,333,427
Virginia Public School Authority - 1991 Resolution	514,487	542,373
Virginia Public School Authority - 1997 Resolution	600,995	355,000
Total Moral Obligation/Contingent Liability Debt	$ 2,946,033	$ 2,593,614
Other Debt Not Supported By Taxes		
9(d) Higher Education	$ 390,738	$ 325,725
Virginia College Building Authority - Pooled Bond Program	105,180	55,765
Virginia College Building Authority - Private College Program	280,750	237,215
Virginia Public School Authority - 1987 Resolution	436,880	494,180
Virginia Public School Authority - Stand Alone Program	147,970	152,250
Virginia Public School Authority - Equipment Notes	83,110	111,945
Virginia Public School Authority - 1990 Insured Resolution	23,770	25,590
Virginia Housing Development Authority	4,364,424	3,953,095
Virginia Port Authority	96,555	98,065
Virginia Equine Center	6,930	7,530
Medical College of Virginia Hospitals Authority	93,040	33,705
Hampton Roads Sanitation District	179,752	191,012
Virginia Biotechnology Research Park Authority	16,750	0
Pocahontas Parkway Association Bonds	381,706	0
Notes Payable	112,187	76,457
Other Long-Term Debt	18,014	0
Total Other Debt Not Supported By Taxes	$ 6,737,756	$ 5,762,534
Total Debt of the Commonwealth	$ 13,905,746	$ 12,479,829

Source: Department of the Treasury and Department of Accounts
[1] Voter approved
[2] NOT INCLUDED IN DEBT CAPACITY MODEL

Commonwealth Debt

Tax-Supported Debt Issuances in Fiscal Year 2000
As of December 31, 1999
(Dollars in Thousands)

Issuer	Date Issued	Amount
Norfolk Redevelopment & Housing Authority Educational Facility Revenue Bonds (Tidewater Community College Downtown Campus) Series 1999	September 15, 1999	$ 9,115
Commonwealth General Obligation Bonds Series 1999	October 20, 1999	$ 45,415
Virginia Public Building Authority Public Facilities Revenue Bonds Series 1999B	November 4, 1999	$ 27,730
Commonwealth Transportation Board Transportation Revenue Bonds Series 1999A and 1999B	December 1, 1999	$238,265
TOTAL		$320,525

Debt Capacity Model

Tax-Supported Debt
As of December 31, 1999
(Dollars in Thousands)

Tax-Supported Debt Included in the Model [3]		
9(b) General Obligation Bonds		$554,890
Bonds	$554,890	
Commercial Paper	0	
9(c) Revenue-Supported GOBs		$566,454
Higher Education	$413,253	
Transportation	141,541	
Parking Facilities	11,660	
Commercial Paper	0	
9(d) Obligations		$2,713,837
Transportation Board	$975,225	
Virginia Public Building Authority [1]	993,616	
Port Authority	106,805	
Virginia College Building Authority Equipment	83,045	
Virginia College Building Authority 21st Century	165,145	
Bonded Capital Leases [2]	209,235	
Regional Jails	34,980	
Transportation Notes Payable	12,325	
Capital Leases	79,290	
Installment Purchases	54,171	
Total Tax-Supported Debt Included in Model		$3,835,181
Additional Long-Term Obligations Included in the 6/30/99 CAFR But Not Included in the Model		
Long-Term Obligations Not Included in Model		$637,531
Compensated Absences	$423,753	
Pension Liability	210,896	
Other Long-Term Liabilities	2,882	
Total Tax-Supported Debt (CAFR plus Subsequent Issuance)		$4,472,712

(1) Net of unamortized discount

(2) 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 and Norfolk Industrial Development Authority.

(3) June 30, 1999 Balance Plus Fiscal Year 2000 Issuances through December 31, 1999.

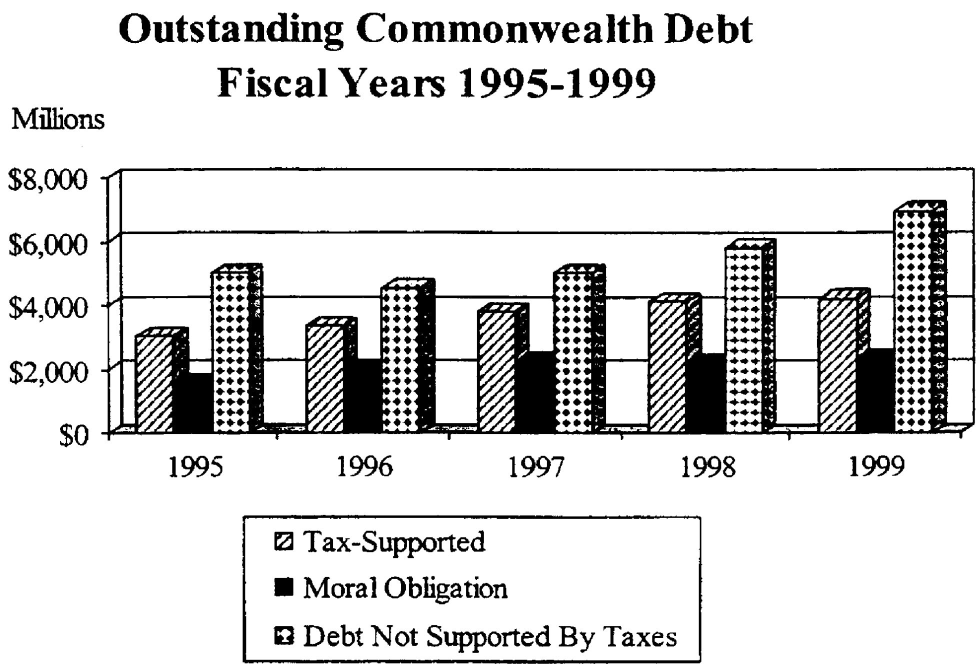
Authorized But Unissued Tax-Supported Debt as of December 31, 1999

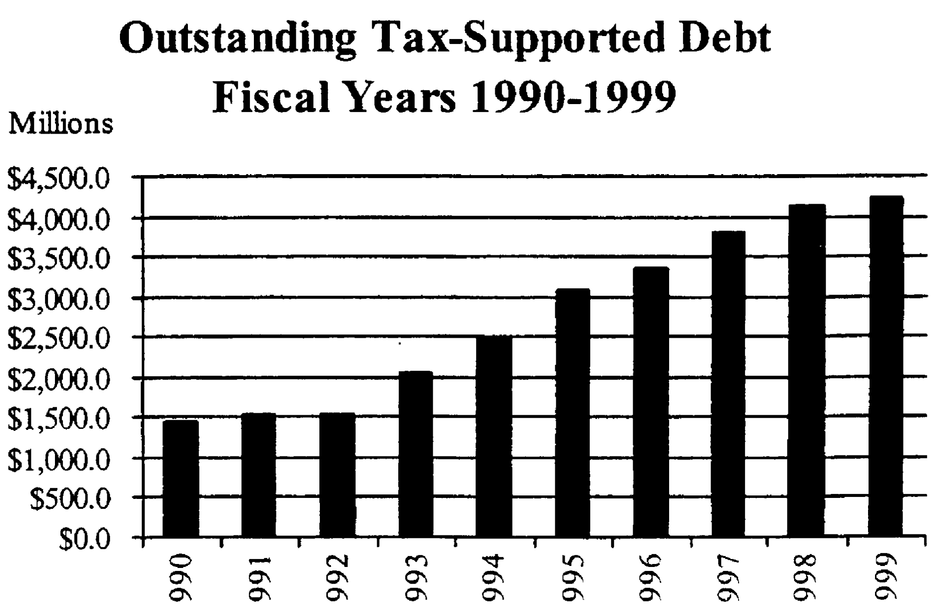
(Dollars in Thousands)

Section 9(b) Debt:	
Higher Educational Institutions Bonds	$ 0
Mental Health Facilities Bonds	0
Park and Recreational Facilities Bonds	0
Subtotal 9(b) Debt:	$ 0
Section 9(c) Debt:	
Higher Educational Institutions Bonds	$ 38,841
Section 9(d) Debt:	
Transportation Contract Revenue Bonds (Rt. 28)	$ 54,092
Transportation Revenue Bonds (Rt. 58)	102,429
Transportation Revenue Bonds (Northern Virginia Transportation District Program)	176,880
Virginia Public Building Authority - Projects	58,034
Virginia Public Building Authority - Jails	120,136
Virginia College Building Authority - Equipment	47,300
Virginia College Building Authority - 21st Century	37,664
Subtotal 9(d) Debt:	$596,535
Subtotal Bonded Debt	$635,376
Other Long-Term Obligations	$ 40,500*
Total	$675,876

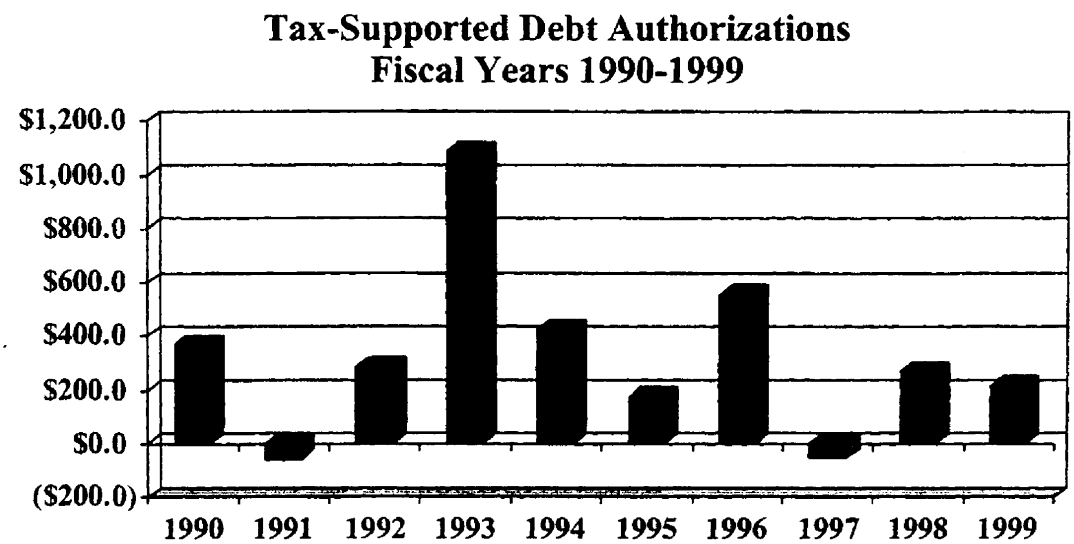
**Capital lease projects: Private 1,000 Bed Medium Security Prison-$26 million; VCCS capital leases for Thomas Nelson Community College-$12 million; and Blueridge Community College-$2.5 million*

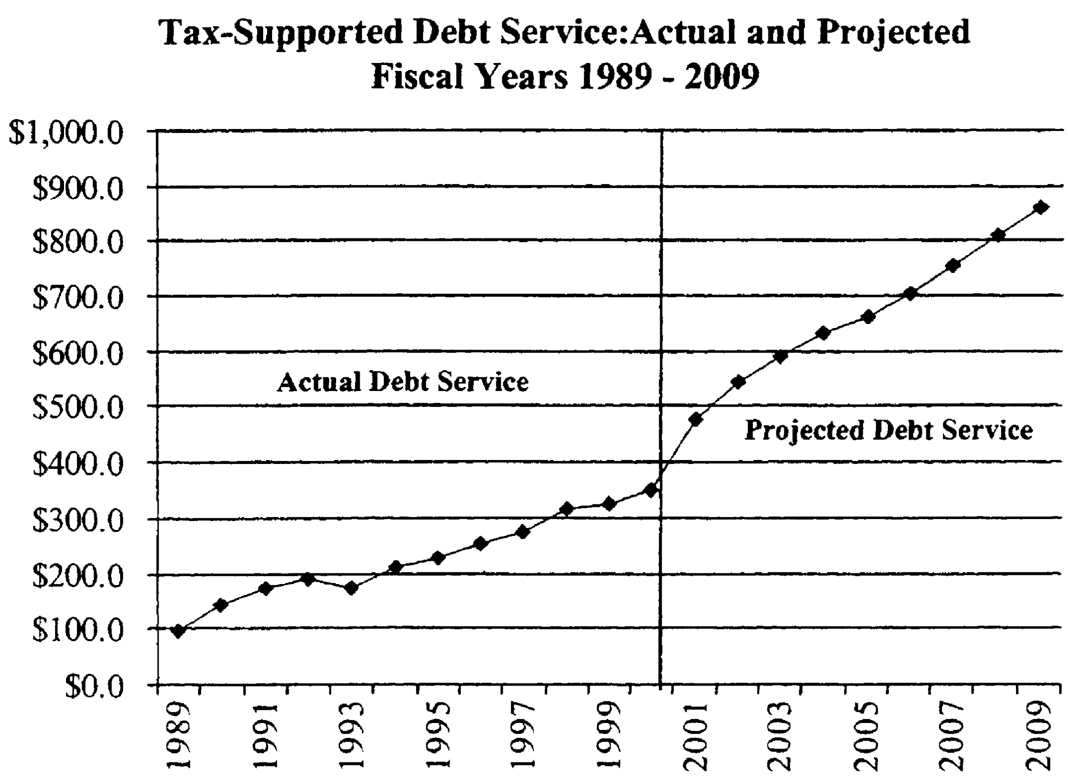
Commonwealth Debt



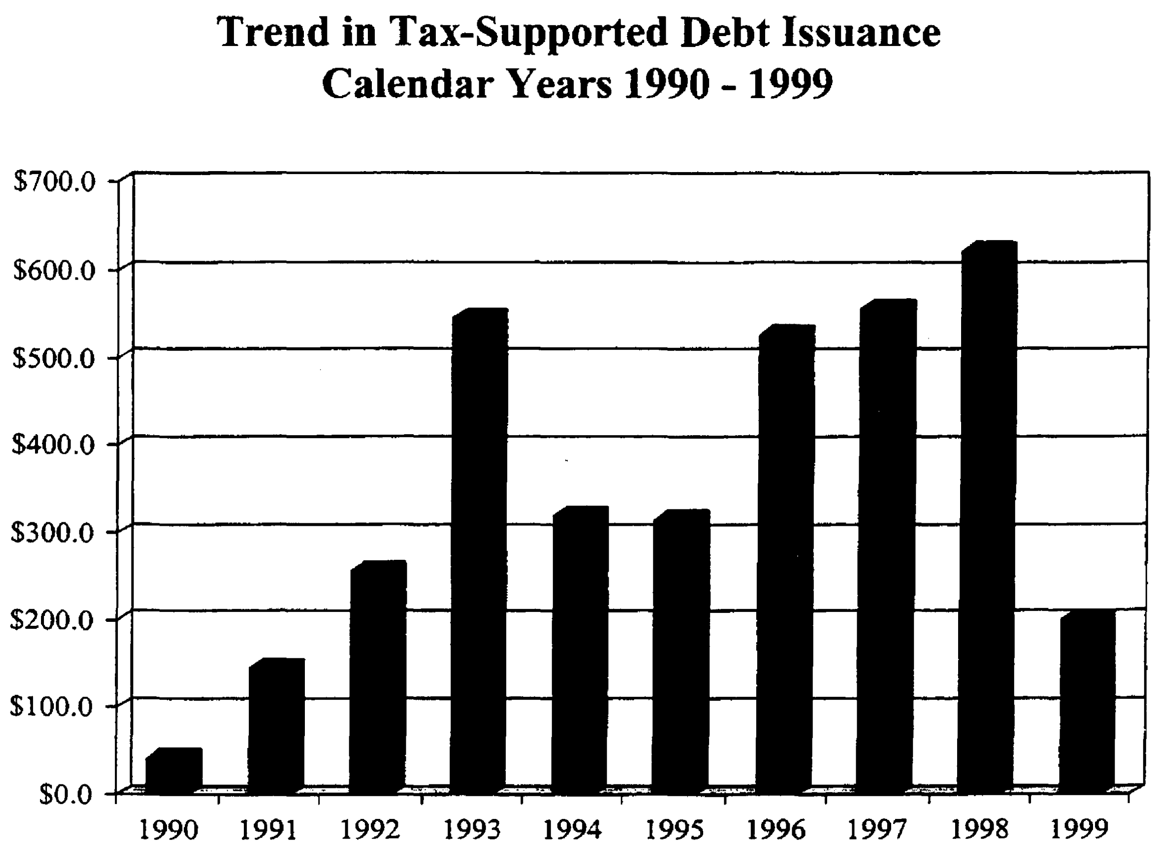


Commonwealth Debt





Commonwealth Debt



AAA/Aaa/AAA State Debt Burdens
1993 - 1999

AAA/Aaa/AAA STATE DEBT BURDENS FROM 1993-1999
PROVIDED BY MOODY'S INVESTORS SERVICE

Net Tax-Supported Debt per Capita (1)

	1999	1998	1997	1996	1995	1994	1993
Maryland	$953	$849	$875	$832	$828	$754	$725
Utah	705	590	301	310	271	248	246
Georgia	679	647	669	-	-	-	-
Minnesota	525	489	520	-	-	-	-
VIRGINIA	**516**	**519**	**414**	**366**	**370**	**337**	**261**
South Carolina	321	309	305	287	-	-	-
North Carolina	273	229	151	142	146	100	104
Missouri	233	238	276	255	232	236	234
Tennessee	214	203	187	165	155	135	139
AAA Median	$516	$489	$305	$287	$252	$242	$240
AAA Average	$491	$453	$411	$337	$334	$302	$285

(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)

	1999	1998	1997	1996	1995	1994	1993
Utah	3.6	3.1	1.7	1.8	1.7	1.6	1.7
Maryland	3.3	3.1	3.3	3.4	3.5	3.3	3.3
Georgia	2.9	2.9	3.1	-	-	-	-
Minnesota	2.0	1.9	2.2	-	-	-	-
VIRGINIA	**2.0**	**2.1**	**1.7**	**1.6**	**1.7**	**1.6**	**1.3**
South Carolina	1.6	1.6	1.6	1.6	-	-	-
North Carolina	1.2	1.0	0.7	0.7	0.8	0.6	0.6
Missouri	1.0	1.0	1.3	1.3	1.2	1.2	1.3
Tennessee	1.0	0.9	0.9	0.9	0.9	0.8	0.8
AAA Median	2.0	1.9	1.7	1.6	1.5	1.4	1.3
AAA Average	2.1	2.0	1.8	1.6	1.6	1.5	1.5

(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, 1999[1]	Available Authorization
Virginia Resources Authority	$ 550,000	$ 334,900	$ 215,100
Virginia Housing Development Authority	1,500,000	1,485,000	15,000
Virginia Public School Authority	800,000	526,570	273,430
Total	$2,850,000	$2,346,470	$ 503,530

[1] *Stated at par*

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

VHDA: N/A - Alternative financing programs initiated that do not require use of moral obligation, therefore VHDA does not expect to issue additional moral obligation debt.

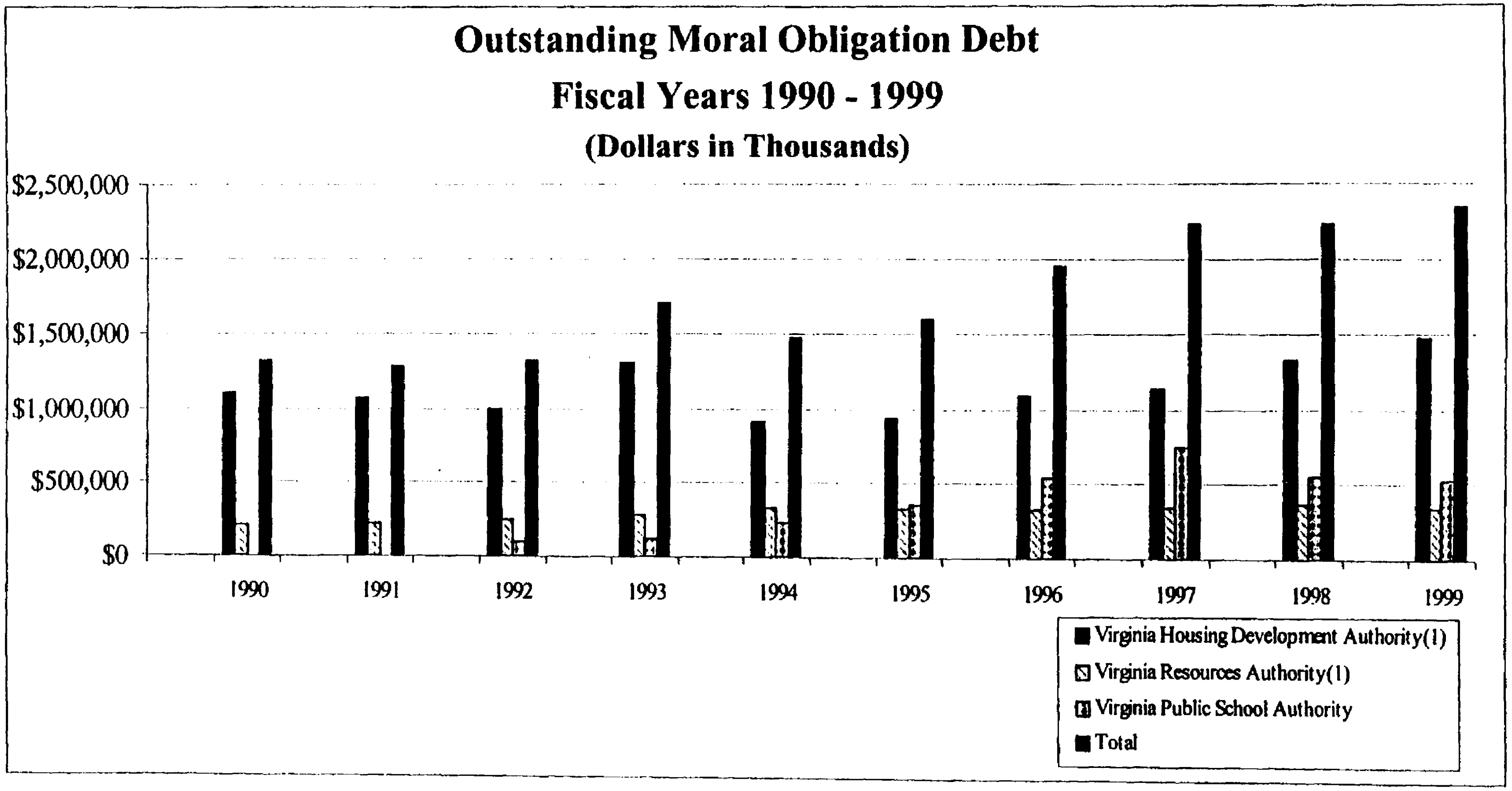
VRA: FY 2002 - Assumes issuance of $39.5 million in fiscal year 2000 and $85 million in fiscal year 2001. Current cap will not be exceeded during the current biennium.

VPSA: N/A - Created the 1997 Resolution for pooled bond program. Does not expect to issue additional debt under 1991 Resolution.

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

*Upgraded in August 1999 from Aa2 to Aa1

Moral Obligation Debt



Contingent or Limited Liability Debt

- To date, 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 included in the 1999 Appropriation Act.

- SSA only used on certain revenue bonds issued by the Virginia Public School Authority under its 1997 Resolution. The Virginia Public School Authority had $600,995,000 of 1997 Resolution bonds outstanding as of June 30, 1999.

Bond Ratings:	Fitch IBCA	Moody's	S&P
VPSA (1997 Resolution):	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 ten-year period (excluding moral obligation debt) which results in annual debt capacity of $670.77 million.

Total Moral Obligation Debt Sensitivity

- If the Model solution is altered to assume conversion of the entire $2.85 billion statutory cap for all moral obligation debt to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as percentage of revenues immediately peaks at 5.52% in fiscal year 2001, ultimately falling below 5% in fiscal year 2003. As a result, there is no capacity to authorize debt until fiscal year 2003.
  - $121.17 million of debt can be authorized and issued in fiscal year 2003. Capacity increases in fiscal year 2004 allowing $575.98 million of annual debt capacity to be available during fiscal years 2004 through 2009.

VHDA Sensitivity

- If the Model solution is altered to assume conversion of the VHDA's total outstanding moral obligation debt (as of 6/30/99) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as percentage of revenues peaks at 4.99% in fiscal year 2002.
  - $490.82 million of debt capacity is available in fiscal years 2001 and 2002. Capacity increases in fiscal year 2003 allowing $540.87 million of annual debt capacity to be available during fiscal years 2003 through 2009.

Moral Obligation Debt

VRA Sensitivity

- If the Model solution is altered to assume conversion of the VRA's total statutory moral obligation cap of $550 million to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as percentage of revenues peaks at 4.63% in fiscal year 2004. $618.02 million of annual debt capacity is available for the ten-year period of the Model.

VPSA Sensitivity

- If the Model solution is altered to assume conversion of the VPSA's total outstanding moral obligation debt (as of 6/30/99) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as percentage of revenues peaks at 4.66% in fiscal year 2004. $622.97 million of annual debt capacity is available for the ten-year period of the Model.

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 (1997 Resolution debt as of 6/30/99) to tax-supported debt, the following annual debt capacity figures are produced:
  - Debt service as percentage of revenues peaks at 4.69% in fiscal years 2003 and 2004. $614.76 million of annual debt capacity is available during the ten-year period of the Model.

Exhibit E

Virginia Resources Authority Presentation

VRA MORAL OBLIGATION BONDING AUTHORITY

Presentation to the Debt Capacity Advisory Committee
November 18, 1999

Virginia Resources AUTHORITY

Virginia Resources Authority
Howard P. Estes, Jr.
General Counsel

Overview of VRA

VRA, created in 1984, is authorized to assist in financing drinking water, wastewater, solid waste, storm water, and certain transportation projects.

- **Revolving Fund Programs**
  - **Clean Water projects**
    - **Until this year, solely a direct loan program**
    - **Leveraged program with Series 1999 issue**
  - **Drinking Water projects**
    - **A direct loan program**
  - **Airport projects - new**
    - **Funding sought for FY 2001**
    - **Likely will be leveraged**

Overview of VRA
(cont.)

- **Bond Programs**
  - **Backed by the Commonwealth's moral obligation**
  - **"AA" rating historically**
  - **Stand-alone Bond Program**
  - **Pooled Loan Bond Program - new**
- **Interim Financing Program** - new

Leveraging the Wastewater RLF

During each of the past five fiscal years, annual requests for assistance have exceeded available resources:

Fiscal Year	Number of Applications	Assistance Requested	Available Funding	Unmet Need
1994	27	$ 85,436,719	$ 63,308,790	$ 22,127,929
1995	21	104,700,877	50,860,353	53,840,534
1996	26	132,514,781	76,877,263	55,877,263
1997	23	81,913,341	53,578,140	28,335,201
1998	34	153,116,298	74,058,495	79,057,803
5 Year Average	26	$ 111,536,403	$ 63,736,608	$ 47,847,746

Leveraging the Wastewater RLF
(cont.)

- For FY1999, $111.6 million in bonds were issued that leveraged $66 million in available funds.
- Leveraging the program permitted all 19 approved projects to be funded.
- A "triple-triple" was received <u>without the moral obligation pledge</u>.
- For FY2000, approval for 19 projects at a total amount of $118.4 million is expected. Leveraging is again under consideration.

Profile of VRA Bonds

- VRA has issued bonds on behalf of local governmental entities for low-cost financing for water, wastewater, solid waste and storm water projects.
- 65 bond issues
- 93 loans
- Average loan size $6.82 million
- Average issuance per year $45.29 million

Cap On Moral Obligation Bonds
Section 62.1-204 *Code of Virginia*

- Initial cap set at $300,000,000 in 1984.
- Raised to $400,000,000 in 1989 session of General Assembly.
- Raised to $550,000,000 in 1994 session of General Assembly.
- No increase pending for 2000 session.

Status of Moral Obligation Bonding Authority

- Bonds issued since 1984
  - $629,372,061
- Bonds outstanding October 1, 1999
  - $326,335,676
- Board approved applications which closed after October 1, 1999
  - $4,500,000
- Available bonding authority as of October 1, 1999
  - $223,664,324

Pooled Loan Bond Program

- **General Benefits**
  - Localities proportionally share in the costs of issuance
  - Pooling will improve interest rates
  - Lower borrowing costs improve the feasibility of those projects that are related to economic development

- **Series 2000**
  - 11 localities submitted applications on Nov. 1
  - $48 million in projects
  - Credit review of projects has commenced
  - Moral obligation to be pledged

Airport-related Financing

- **Airport Revolving Fund**
  - MOA executed with Aviation Board
  - Anticipate funding in 2000 session
  - Any funding is likely to be leveraged
  - Will concentrate on smaller projects
- **Airport Bond Issues**
  - Necessary component of Governor's transportation and economic development initiatives
  - Credit criteria will be reviewed by Treasury staff
  - Moral obligation will be pledged <u>only</u> to those projects with low-risk profiles and clearly identifiable revenue streams

VRA Moral Obligation Capacity Assumption

- Total issues for FY 2000
  - Pool Issuance Spring 2000 -- $47,000,000
  - Stand-alone Issues 2000 -- $35,000,000
- Total issues for FY 2001
  - Pool Issuance Spring 2001 -- $50,000,000
  - Stand-alone Issues 2001 -- $35,000,000
- No cap increase needed until possibly the 2001 session

Conclusion

- Leveraging the Wastewater RLF provided relief on some bond issues that may have otherwise needed a moral obligation pledge.
- The Pooled Loan Bond Program provides financing support to the Governor's economic development initiatives and his efforts to improve environmental quality.
- The Airport Revolving Fund and stand-alone airport bond issues will not unduly burden VRA's moral obligation capacity.

Exhibit F

Department of Treasury Presentation on Governor's Transportation Initiatives

Governor's Transportation Initiatives

GOVERNOR'S PLAN

- On August 31, 1999, Governor Gilmore unveiled his six-year, $2.5 billion statewide transportation plan, *"Innovative Progress: Improving Transportation in Virginia"*.
- In addition to seeking increased funding for the Transportation Trust Fund, the plan creates the "Priority Transportation Fund" to provide a mechanism for directing additional funds to transportation projects deemed critical to the state's interests on a statewide basis.
- A major objective of the plan was the identification of creative financing mechanisms, consistent with sound financial practices, to fund transportation projects without tax increases.
- The plan also includes the commitment to ensure that any borrowings protect the Commonwealth's debt capacity and its triple-A bond ratings.
- Two of the innovative financing mechanisms included in the plan are:
  - Accelerate the receipt of federal funds through the issuance of GARVEEs to advance more than 90 statewide projects that are included in the Six-Year Transportation Improvement Plan.
  - Accelerate the receipt of tobacco settlement funds through securitization of a portion of the state's anticipated receipts from the Master Settlement Agreement in order to provide funding for the Priority Transportation Fund.

Governor's Transportation Initiatives

GARVEEs

- The plan accelerates federal highway grant funds by using "Grant Anticipation Revenue Vehicles" (GARVEEs).

- This financing vehicle allows transportation projects to be funded in anticipation of future federal highway aid.

- GARVEEs were made possible with the passage of the National Highway System Designation Act of 1995 (NHS Act) and the Transportation Equity Act for the 21st Century (TEA-21).

- This legislation served to make the federal revenue stream more predictable and includes certain guarantees of minimum funding levels.

- GARVEE bonds are repaid from the flow of federal highway dollars.

- GARVEEs have been used as follows:
  - — Ohio- $70 million for interstate system and national highway system
  - — Massachusetts- $600 million for highway project
  - — New Mexico- $100.2 million for national highway system
  - — Mississippi- $200 million for state highway system
  - — New Jersey- $151.5 million for mass transit

- Legislation will be introduced during the 2000 Session of the General Assembly to authorize the issuance of the GARVEE obligations.

- Proceeds will be used to advance $590 million of statewide projects in the Six-Year Transportation Improvement Plan.

Debt Capacity Model

GARVEE Comparison With Tax-Supported Debt

	9(c) GENERAL OBLIGATION BONDS	OTHER TRANSPORTATION (NVTD / ROUTE 58)	GARVEEs
Security	Revenue-supported with full faith and credit of the Commonwealth	Appropriation-supported	Appropriation-supported
Revenue Source	Project revenues	Recordation tax revenues Transportation Trust Fund	Federal Highway Assistance Grants
Revenue Coverage	Net project revenues greater than or equal to 110% of debt service	Appropriations equal to debt service	Over 5 times coverage- similar to an asset-backed revenue bond
Model Treatment	• Revenues - equal to debt service • Debt service - 100%	• Revenues - recordation tax revenues • Debt service - 100%	• Revenues - TBD • Debt service - TBD

Governor's Transportation Initiatives

SECURITIZATION OF A PORTION OF TOBACCO SETTLEMENT FUNDS

- The 1999 General Assembly adopted legislation (Chapters 880 and 962) requiring 50% of the Master Settlement Agreement (MSA) payments to be deposited into the Tobacco Indemnification and Community Revitalization Fund and used to (1) pay tobacco farmers for loss or decline in tobacco quota and (2) promote economic development in tobacco dependent communities.

- This legislation also required 10% of the MSA payments to be deposited into the Virginia Tobacco Settlement Fund. This Fund is administered by a foundation which will distribute these monies for anti-smoking efforts targeted at minors.

- Under the Governor's Innovative Progress Plan, the remaining unallocated 40% of the MSA payments will be securitized and the proceeds used for the proposed Priority Transportation Fund.

- Securitization is a commonly used financing method by which monies to be received over time may be received upfront. This approach provides funds faster and diversifies the risk associated with the continuing flow of MSA payments.

- Securitization of 40% of the MSA provides "upfront" funds and a continuing stream of "residual payments".

- The plan anticipates the receipt of proceeds immediately through the securitization as opposed to over time to fund $600 million of projects. Additional funding will be obtained over the life of the obligations from residual payments (the difference between the annual MSA receipts and the debt service on the securitized obligations).

- Legislation will be introduced during the 2000 Session of the General Assembly to establish the entity to conduct this transaction and authorize the securitization.

- The securitization obligations would **not** be tax-supported debt of the Commonwealth and would **not** impact the Commonwealth's debt capacity.

Exhibit G

Office of the Secretary of Transportation GARVEE Presentation

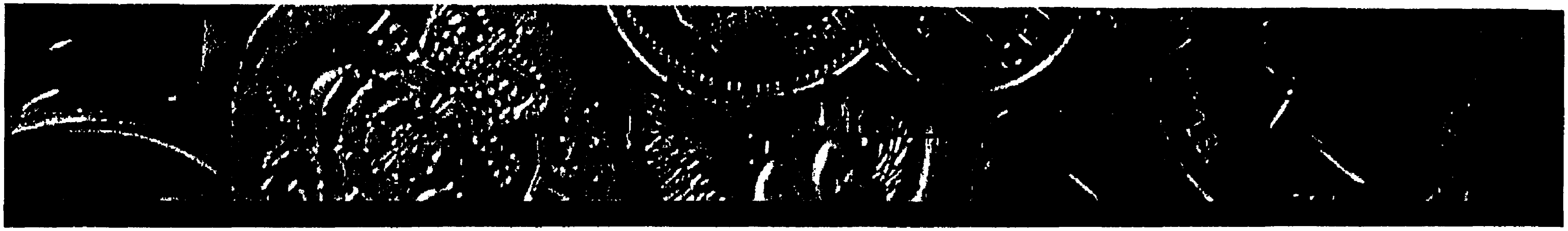
Arthur N. Bowen, III

Debt Capacity Advisory Committee

December 21, 1999

- VDOT has developed legislation authorizing the CTB to issue Indirect GARVEEs in an amount not to exceed $590 million, not including financing costs
- The term GARVEE is an acronym for Grant Anticipation Revenue Vehicles. This has become a term of art referring to any debt instrument secured by future federal-aid highway funds
- GARVEEs will be used to accelerate our receipt of federal funds to advance 90 projects delayed in this year's update of the Six Year Improvement Program

- The timelines of these projects all had been adjusted from the FY 99-04 program schedule because of financial constraints



- To date GARVEEs have been used in the Following States:
  - State of Ohio in May 1998 issued $70 million. Ratings: Aa3/AA-/AA-
  - Commonwealth of Massachusetts in June 1998 issued $600 million. Ratings: Aa3/AA/AAA(Duff & Phelps)
  - New Mexico Finance Authority in September 1998 issued $100.23 million. Ratings: A3/A-
  - State of Mississippi in June 1999 issued $200 million. Ratings: Aa1/AAA/AAA
  - New Jersey Transit Corp in March 1999 issued $151.5 million. Ratings: A1/A/A (Secured by FTA funding)

The following states are considering GARVEEs

Arkansas	$575 million
Arizona	$500 million
Colorado	$1.5 billion
Florida	$1.0 billion
Virginia	$590 million

There are Two Types of GARVEE Structures

- Direct GARVEEs
- Indirect GARVEEs

Direct GARVEE

- Notes are issued for a specific project that is eligible for federal aid

- Project Must be approved as a federal aid debt financed project and submitted as an advance construction project

- Debt service is paid from eligible categories of federal aid funds
- Requires state match on debt service payments

Indirect GARVEE

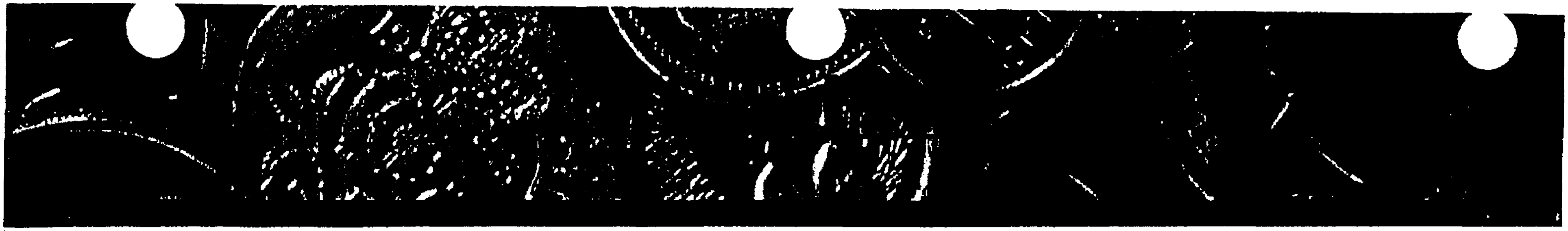
- Notes are issued for federal-aid and/or state funded projects
- No specific federal authorization required for projects financed through indirect GARVEEs
- Debt service is paid from federal aid reimbursements received for eligible projects that were financed by the state on a pay-as-you-go basis

Indirect GARVEE

- No state match on debt service payments
- State must continually coordinate its highway capital program and federal grants management to ensure a constant high volume of eligible highway projects are advanced to generate sufficient federal aid to pay debt service
- Will require adjustment of state highway fund allocations in SYIP to allow for projected debt service payments from federal aid reimbursements which are deposited into the state highway fund

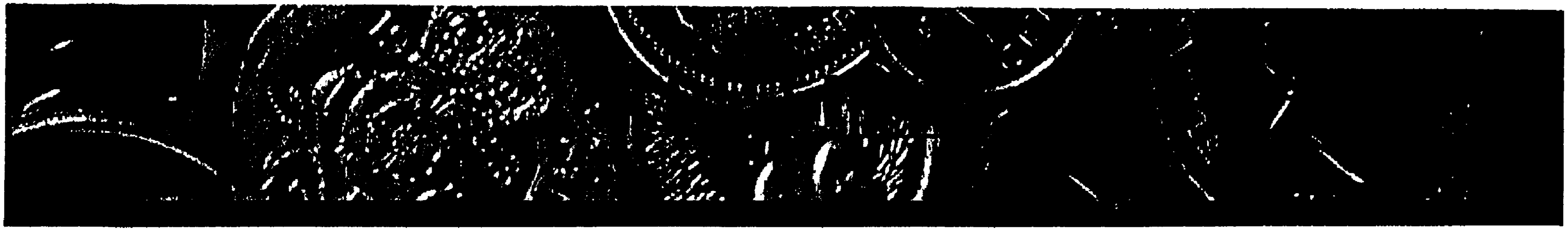
Advantages

- Capitalize today a project that would otherwise be cash-funded over a longer period without utilizing state GO, toll or transportation revenue bond financing
- Provides a closer match of funding for large scale construction projects to actual pace of expenditure requirements for such projects
- May produce savings over pay-as-you-go funding approach, depending on rate of inflationary increases in highway construction costs
- Can accelerate project delivery



Security Structure

- An important concern for states is whether the inclusion of a state backup on the GARVEEs would impact the state's credit ratings and debt capacity.
- With appropriate structuring, primarily through the use of excess coverage, stand-alone transactions can achieve investment-grade ratings.
- Legislation will allow for back-up security from the TTF at the CTB's discretion.



<u>Credit</u>

- Based on current projection of federal aid reimbursements, we should achieve at least 6 times coverage as shown in an example in the Appendix
- At this level of coverage, AA ratings should be attainable <u>without</u> pledging the TTF

- The timing and sizes of actual issues will be determined based on project schedules and projected expenditures

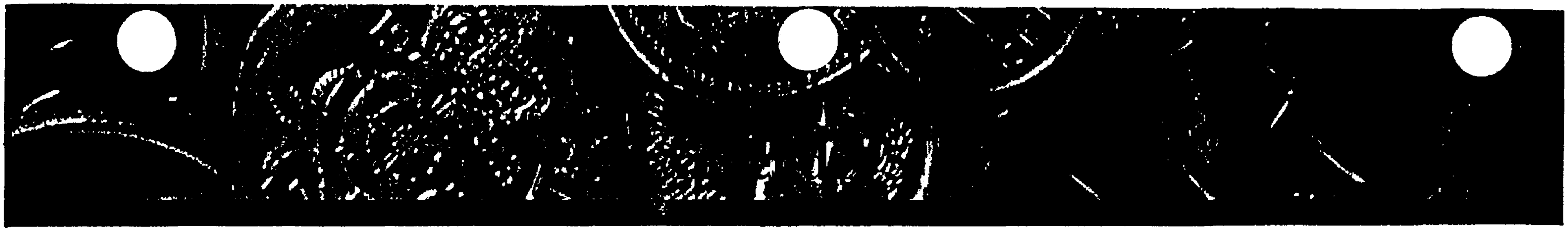
- The actual terms and structure of the GARVEEs will be determined based on market conditions at the time of the sale

- The $590 million figure is based on the amounts required to bring these 90 projects back as close as possible to their original development schedule

- The remaining costs for the 90 projects will be provided from current and future allocations

Six-Year Improvement Program ("SYIP") Allocations

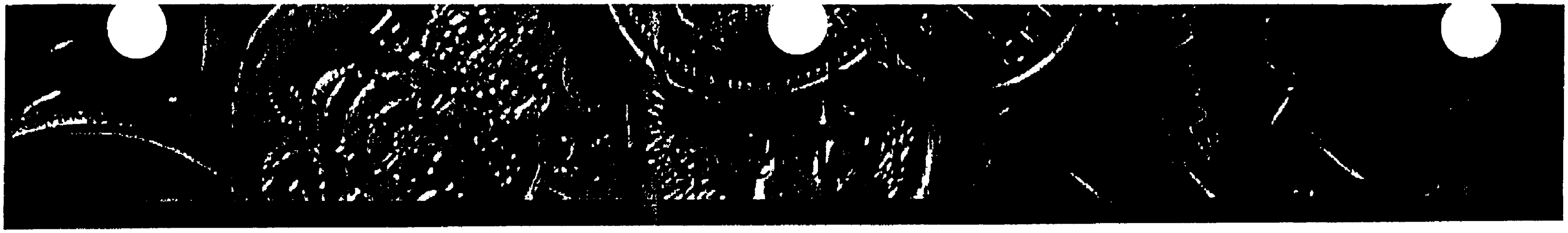
- Debt service on Indirect GARVEEs is from federal reimbursement of state funds expended on federal projects
- GARVEE issuance will require allocations in the SYIP from state highway funds for annual debt service requirements



Allocation Options

- "Off the Top"
- Pro Rata by System
- Pro Rata by System by District

Appendix



Federal Aid Reimbursements, FY 89 - FY 98				
FY 89				374,206
FY 90				314,304
FY 91				304,772
FY 92				303,111
FY 93				208,571
FY 94				237,630
FY 95				384,256
FY 96				346,132
FY 97				410,913
FY 98				446,788
Avg. annual reimbursement: $333,068				
Avg. annual increase: 4.71%				

Projected Federal Aid Reimbursements, FY 99 - FY 04				
FY 99**				558,639
FY 00				507,241
FY 01				497,331
FY 02				520,755
FY 03				545,283
FY 04				570,966
FY 99 Actual				
Avg. annual increase: 4.71%				

Single Issue of $590 million [assuming current market conditions]

- Issuance Amount: $594,165,000 includes issuance costs and underwriter's discount
- Final Maturity: 2011 (10 years)
- Security: First lien pledge of federal aid reimbursements subject to annual appropriation
- Add'l Bonds Test: No parity debt after $594 million issued
- Rating Assumption: Aa3/AA-
- Annual Debt Svc: $76.4 million
- Interest Cost: 5.09%
- Total Debt Svc: $764.4 million
- Coverage: 6.51x

PROJECT COSTS AND PERCENTAGES BY DISTRICT AND SYSTEM

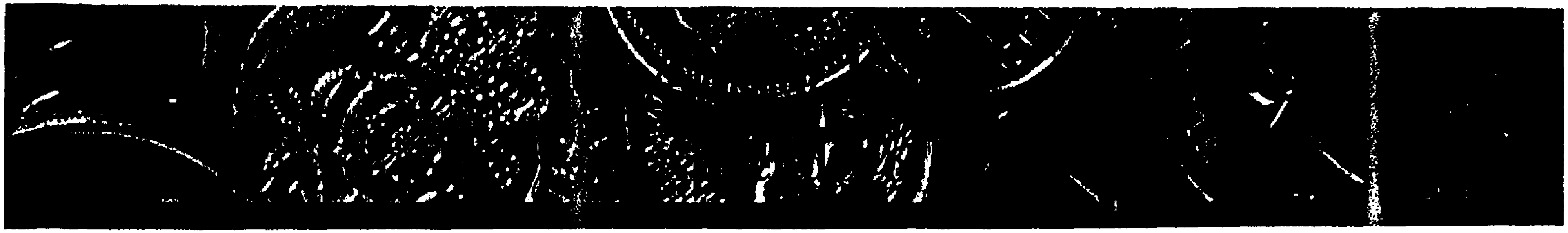
FOR STATEWIDE PROJECTS ADVANCED BY GOVERNOR GILMORE

(000's)

DISTRICT	% of TOTAL	INTERSTATE	% of TOTAL	PRIMARY	% of TOTAL	URBAN	% of TOTAL	TOTALS
Bristol	0.5%	150	7.0%	28,450	3.0%	1,655	5.0%	**30,255**
Culpeper	0.0%	0	1.0%	2,027	1.0%	750	1.0%	**2,777**
Fredericksburg	11.0%	17,400	14.0%	54,700	0.0%	0	12.0%	**72,100**
Lynchburg	0.0%	0	29.0%	108,534	0.5%	260	18.0%	**108,794**
Northern Virginia	61.0%	92,000	12.0%	44,900	1.0%	900	23.0%	**137,800**
Richmond	7.5%	11,500	21.0%	79,351	22.5%	13,770	18.0%	**104,621**
Salem	0.0%	0	7.0%	24,922	10.0%	6,025	5.0%	**30,947**
Staunton	1.0%	1,300	3.0%	12,100	3.0%	1,995	3.0%	**15,395**
Suffolk	19.0%	29,400	6.0%	22,566	59.0%	35,960	15.0%	**87,926**
TOTALS	**100.0%**	**151,750**	**100.0%**	**377,550**	**100.0%**	**61,315**	**100.0%**	**590,615**

" Off the Top" Allocation

- Debt service allocations made prior to allocation to the primary, secondary and urban systems and the unpaved road fund
- Allocations to each of these systems would be impacted to provide for debt service
- None of the projects funded from the proceeds is included in the secondary system or the unpaved road fund



"Off the Top" Allocation

- Certain urban areas will benefit from the note proceeds, however the urban system reduction would be distributed proportionally to all cities across the state
- Projected dollar impact to the various systems

– Primary	$28.7 million
– Urban	$21.5 million
– Secondary Construction	$21.5 million
– Secondary Unpaved	$ 4.3 million
Total	$76.0 million

Pro Rata Allocation by System

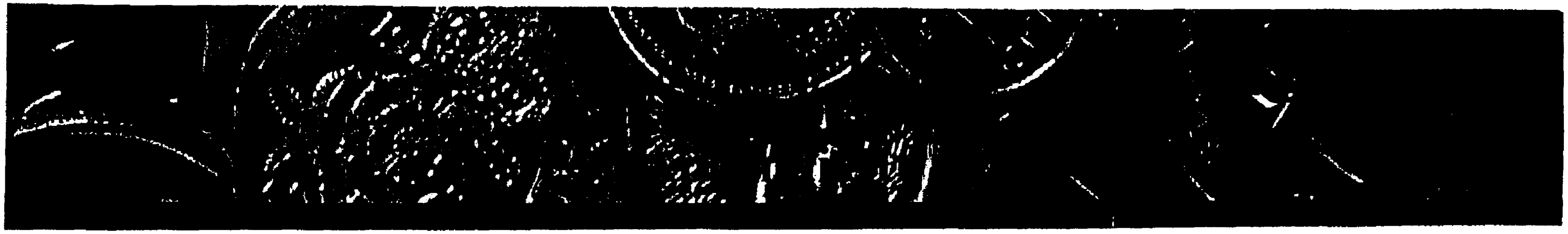
- Annual debt service would be allocated from the interstate, primary, and urban systems before district allocation, excluding secondary roads and unpaved roads since none of the 90 projects are secondary improvements
- This method would divide the funding proportionately by system
- Those districts with few or no improvements within the particular systems would also be impacted on an equal basis

PAYBACK FIGURES BASED ON SYSTEM BREAKS (000's)			
SYSTEM	**TOT. COST**	**% OF TOTAL**	**PAYBACK**
INTERSTATE	151,750	26.0%	19,760
PRIMARY	377,550	64.0%	48,640
URBAN	61,315	10.0%	7,600
TOTALS	**590,615**	**100.0%**	**76,000**

Pro Rata Allocation by System by District

- Annual debt service requirement would be allocated first from the system, then from the nine construction districts after secondary roads and unpaved roads are taken care of

- This method would divide the funding required proportionately by system and district, making each system and district responsible for repayment based on project benefit



PAYBACK FIGURES BASED ON SYSTEM AND DISTRICT BREAKS (000's)				
DISTRICT	**INTERSTATE**	**PRIMARY**	**URBAN**	**TOTALS**
BRISTOL	99	3,405	228	3,732
CULPEPER	0	486	76	562
FREDERICKSBURG	2,173	6,810	0	8,983
LYNCHBURG	0	14,106	38	14,144
NORTHERN VIRGINIA	12,054	5,837	76	17,967
RICHMOND	1,482	10,214	1,710	13,406
SALEM	0	3,405	760	4,165
STAUNTON	198	1,459	228	1,885
SUFFOLK	3,754	2,918	4,484	11,156
TOTALS	**19,760**	**48,640**	**7,600**	**76,000**