



**REPORT OF THE  
CAPITAL DEBT AFFORDABILITY COMMITTEE  
ON  
RECOMMENDED DEBT AUTHORIZATIONS**

**FOR FISCAL YEAR 2009**

**SUBMITTED TO  
THE GOVERNOR AND GENERAL ASSEMBLY  
OF MARYLAND**

**October 2007**

September 28, 2007

The Honorable Martin O'Malley  
Governor of Maryland  
State House  
Annapolis, Maryland 21404

The Honorable Thomas V. M. Miller, Jr.  
President of the Senate of Maryland  
State House  
Annapolis, Maryland 21404

The Honorable Michael E. Busch  
Speaker of the House  
State House  
Annapolis, Maryland 21404

Gentlemen:

The Capital Debt Affordability Committee, created pursuant to Section §8-104, *et seq.*, of the State Finance and Procurement Article, is required to submit to the Governor and the General Assembly each year an estimate of the maximum amount of new general obligation debt that prudently may be authorized for the next fiscal year. The Committee is also charged with making a recommendation regarding additional funding for school construction, including a multiyear funding recommendation that will provide stability in the annual funding for school construction. Finally, the Committee is required to submit an estimate of the amount of new academic facilities bonds that prudently may be authorized.

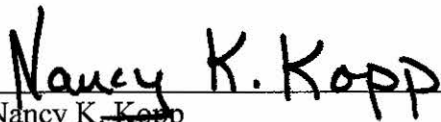
The Committee recommends a \$935 million limit for new general obligation debt authorizations by the 2008 General Assembly to support the 2009 capital program, with the projection of an annual increase of 3% in future years. The \$935 million also includes \$3 million previously authorized for the Southern Maryland Regional Strategy-Action Plan for Agriculture.

The Committee has reviewed the additional school construction funding needs as identified in the 2004 Task Force to Study Public School Facilities Report and recommends that of the \$935 in general obligation debt authorization, at least \$300 should be allocated for school construction for fiscal year 2009.

Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee recommends a limit of \$33 million for new academic facilities bonds for the University System of Maryland for fiscal year 2009.

The General Assembly requested the 2007 Capital Debt Affordability Committee to review affordability criteria, the effect of diminished capacity on the capital program, the demand for large and multi-year capital projects, the availability of resources to support capital project debt service, and the advantages and disadvantages of adopting a capital biennial budget. The Committee considered each of these topics and its findings are in Section VII of the report.

We are pleased to present to you the Committee's annual report, with the recommendations relating to the fiscal 2009 capital program.



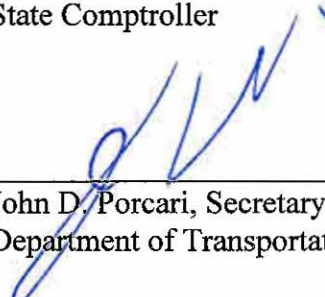
Nancy K. Kopp  
State Treasurer  
Chair



Peter Franchot  
State Comptroller



T. Eloise Foster, Secretary  
Budget and Management



John D. Porcari, Secretary  
Department of Transportation



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Public Member

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## EXECUTIVE SUMMARY

The Capital Debt Affordability Committee (CDAC or the Committee), established by Chapter 43 of the Laws of Maryland 1978 and codified in Section §8-104 *et seq.* of the State Finance and Procurement Article, is charged with reviewing:

1. the size and condition of State tax-supported debt on a continuing basis, and advising the Governor and General Assembly each year regarding the maximum amount of new general obligation debt that prudently may be authorized for the next fiscal year
2. higher education debt and annual estimates concerning the prudent maximum authorization of academic facilities bonds to be issued by the University System of Maryland, Morgan State University and St. Mary's College of Maryland
3. additional school construction funding needs as identified in the 2004 Task Force to Study Public School Facilities report, and making a specific recommendation regarding funding for school construction when recommending the State's annual debt limit.

In addition, the General Assembly requested the 2007 Capital Debt Affordability Committee to review affordability criteria, the effect of diminished capacity on the demands of the capital program and the availability of other resources to support capital project debt service.

To develop its recommendations, the CDAC met on June 22, July 25 and August 22, 2007. At the June 22 meeting, the Committee reviewed the size, condition and projected issuances of tax-supported debt including General Obligation Bonds, Consolidated Transportation Bonds, GARVEE Bonds, Maryland Stadium Authority Bonds and Bay Restoration Bonds. The Committee conducted a similar review of the debt of higher education institutions at the August 22 meeting. At the July meeting, the Committee addressed the charge of the General Assembly. Also at the July meeting, the Committee reviewed the State of Maryland Capital Program and school construction needs during the next five fiscal years and considered the criteria used by bond rating agencies. At both the June 22 and July 25 meetings, CDAC analyzed the assumptions of the affordability criteria and evaluated their sensitivity using different authorization scenarios.

**The Committee recommends a \$935 million limit for new general obligation debt authorizations by the 2008 General Assembly to support the 2009 capital program, with the projection of an annual increase of 3% in future years.** The \$935 million represents a 15% increase over the fiscal year 2007 authorization. The \$935 million also includes \$3 million previously authorized for the Southern Maryland Regional Strategy-Action Plan for Agriculture. Within these levels, and with prudent timing of authorization and issuances, the Committee believes that substantial progress can be made in meeting the current projected needs in school construction, transportation, Chesapeake Bay restoration, and the State's other critical infrastructure needs.

The analysis indicates that the Committee's projection of general obligation bond authorizations is currently affordable. The personal income criterion approaches the 3.2% benchmark in 2011 and 2012, but improves thereafter. The debt service criterion increases annually, but remains well below the 8.0% benchmark through 2017.

The risks of exceeding the affordability criteria are limited. The Committee reviewed its interest rate, revenue, personal income, issuance and authorization assumptions. The Committee believes that all of these variables have been estimated conservatively and consequently, these variables do not pose a serious threat of significantly exceeding the State's affordability criteria.

As more fully discussed in Section III, Part B (Capital Improvement and School Construction Needs), the Committee reviewed the documented need for increased school construction and renovation, the need to meet the goal set forth in the Public School Facilities Act of 2004, and the challenge of meeting these goals with the escalation in building costs. It is not clear that this need can be fully met under present constraints without severely impacting other pressing state capital needs (i.e., prisons, hospitals, etc.) But significant progress can be made.

**The Committee recommends that of the \$935 million authorized to support the 2009 capital program, at least \$300 million should be allocated for public school construction for fiscal year 2009, exceeding by \$50 million the annual funding goal set by the 2004 Public School Facilities Act in those years.**

**Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee recommends a limit of \$33 million for new academic facilities bonds for the University System of Maryland for fiscal year 2009.**

The Committee reviewed the suitability of the affordability criteria and the demand on capital programs as directed by the Senate Budget and Taxation Committee and the House Committee on Appropriations. The Committee's findings are in Section VII of this report.

## **I. INTRODUCTION**

### **A. Membership**

The members are the State Treasurer (Chair), the Comptroller, the Secretaries of Budget and Management and Transportation, one public member appointed by the Governor, and as non-voting members, the Chairs of the Capital Budget Subcommittees of the Senate Budget and Taxation Committee and the House Appropriations Committee.

### **B. Duties**

The Committee is required to review the size and condition of State debt on a continuing basis and to submit to the Governor, by September 10 of each year, an estimate of the total amount of new State debt that prudently may be authorized for the next fiscal year. Although the Committee's estimates are advisory only, the Governor is required to give due consideration to the Committee's findings in determining the total authorizations of new State debt and in preparing a preliminary allocation for the next fiscal year. The Committee is required to consider:

- The amount of State tax-supported debt (see Appendix A for the Committee's definition of tax-supported debt) that will be outstanding and authorized but unissued during the next fiscal year;
- The capital program and the capital improvement and school construction needs during the next five fiscal years;
- Projected debt service requirements for the next ten years;
- Criteria used by recognized bond rating agencies to judge the quality of State bond issues;
- Other factors relevant to the ability of the State to meet its projected debt service requirements for the next five years or relevant to the marketability of State bonds; and
- The effect of new authorizations on each of the factors enumerated above.

The Committee also reviews on a continuing basis the size and condition of any debt of the University System of Maryland, Morgan State University, St. Mary's College of Maryland and Baltimore City Community College; takes any debt issued for academic facilities into account as part of the Committee's affordability analysis with respect to the estimate of new authorizations of general obligation debt; and, finally, submits to the Governor and the General Assembly a recommendation of the amount of new bonds for academic facilities that prudently may be authorized in the aggregate for the next fiscal year by these institutions of higher education.



The Committee reviews school construction needs as identified in the report issued by the 2004 Task Force to Study Public School Facilities. When recommending the State's annual debt limit, the Committee is required to make a recommendation regarding an allocation of funding for school construction and a multiyear funding recommendation that will provide annual funding stability.

The General Assembly requested the 2007 Capital Debt Affordability Committee to review affordability criteria, the effect of diminished capacity on the capital program, the demand for large and multi-year capital projects, the availability of resources to support capital project debt service, and the advantages and disadvantages of adopting a capital biennial budget.

A history of the Committee's membership, duties, debt affordability criteria, definition of tax-supported debt, and authorization increases can be found in Appendix A.

**C. 2006 Recommendations and Subsequent Events**

The following lists the recommendations of the Capital Debt Affordability Committee to the 2007 General Assembly for the fiscal year 2008 capital program and the subsequent events related to those recommendations.

***2006 Recommendations of the Capital Debt Affordability Committee***

- *New authorizations of general obligation debt should be limited to \$810 million, including \$3 million for the Southern Maryland Regional Strategy-Action Plan for Agriculture Loan of 2006.*
- *New authorizations for academic facilities at the University System of Maryland should be limited to an aggregate of \$30 million.*

***2007 Authorizations***

- The net general obligation debt authorized for fiscal year 2008 (effective June 1, 2007) totaled \$810 million:

(in millions)	
\$826.8	New general obligation debt authorized by the 2007 General Assembly
3.0	Authorized for Southern Maryland Regional Strategy-Action Plan for Agriculture Loan of 2007
( 19.8)	Reductions in previously authorized debt
\$810.0	

- The 2007 General Assembly authorized the University System of Maryland to issue \$30.0 million in new academic facility bonds - \$15.0 million to finance various capital projects and \$15.0 million to finance capital facility renewal projects.

## **II. TAX-SUPPORTED DEBT - TRENDS AND OUTLOOK**

The State of Maryland has issued five types of tax-supported debt in recent years:

- general obligation debt, which pledges the full faith and credit of the State;
- bonds, notes and other obligations issued by the Department of Transportation and backed by the operating revenues and pledged taxes of the Department;
- bonds for transportation projects supported by anticipated federal revenue (GARVEE bonds)
- lease and Conditional Purchase Financings
- revenue bonds issued by the Maryland Stadium Authority secured by leases with the State

In addition, in fiscal year 2008, the Maryland Water Quality Financing Administration is expected to issue bonds for the purpose of Chesapeake Bay restoration which will be secured by the revenue from a Statewide fee. These bonds will also be considered tax-supported debt.

Although the State has the authority to make short-term borrowings in anticipation of taxes and other receipts up to a maximum of \$100 million, the State has not issued short-term tax anticipation notes or made any other similar short-term borrowings for cash flow purposes.

### **A. General Obligation (G.O.) Bonds**

#### ***Purpose***

General obligation bonds, which are limited to a maximum maturity of 15 years, are authorized and issued to provide funds for:

- general construction and capital improvements to State-owned facilities, including institutions of higher education;
- grants to local educational authorities for construction and capital improvements to public schools; and
- financial assistance in the form of loans or grants to local governments and the private sector for individual capital projects such as water quality improvements, jails and detention facilities, community colleges, economic development, community health facilities, historic preservation, private higher education, and other community projects.

#### ***Security***

The State has pledged its full faith and credit as security for its G.O. bonds.

#### ***Current Status:***

***Debt Outstanding as of June 30, 2007***

\$ 5,142,154,000

***Amount Authorized but Unissued at June 30, 2007***

\$ 1,911,587,495

### ***Ratings***

Fitch Ratings, Moody's Investor's Service and Standard and Poor's all rate Maryland's General Obligation bonds AAA. Maryland has continuously had this rating dating back to S&P's rating in 1961.

### **Trends in Outstanding General Obligation Debt**

#### ***Authorizations and Issuances***

**Graph 1** depicts the growth between 1975 and 2007 in the State's total general obligation debt. Since 1991, the level of new authorizations and issuances has increased significantly, resulting in an increased level of outstanding general obligation debt. However this increase has generally been accompanied by a growth in personal income and State revenue, so that the debt ratios have remained below affordability criteria. **Appendix C-1** includes data on the authorizations, issuances and debt service of general obligation bonds since 1973. **Appendix C-2** details the authorizations, issuances and debt service for bonds that have been issued for school construction also since 1973. Using the data from **Appendices C-1 and C-2**, **Appendix C-2a** compares the total authorized for school construction with the total authorized for general obligation bonds.

#### ***Annuity Bond Fund (ABF)***

Debt service for General Obligation Bonds is paid from the Annuity Bond Fund (ABF). The State constitution requires the collection of an annual tax to pay debt service and State statute requires that, after considering the balance in the ABF and other revenue sources, the Board of Public Works set an annual property tax rate sufficient to pay debt service in the following fiscal year.

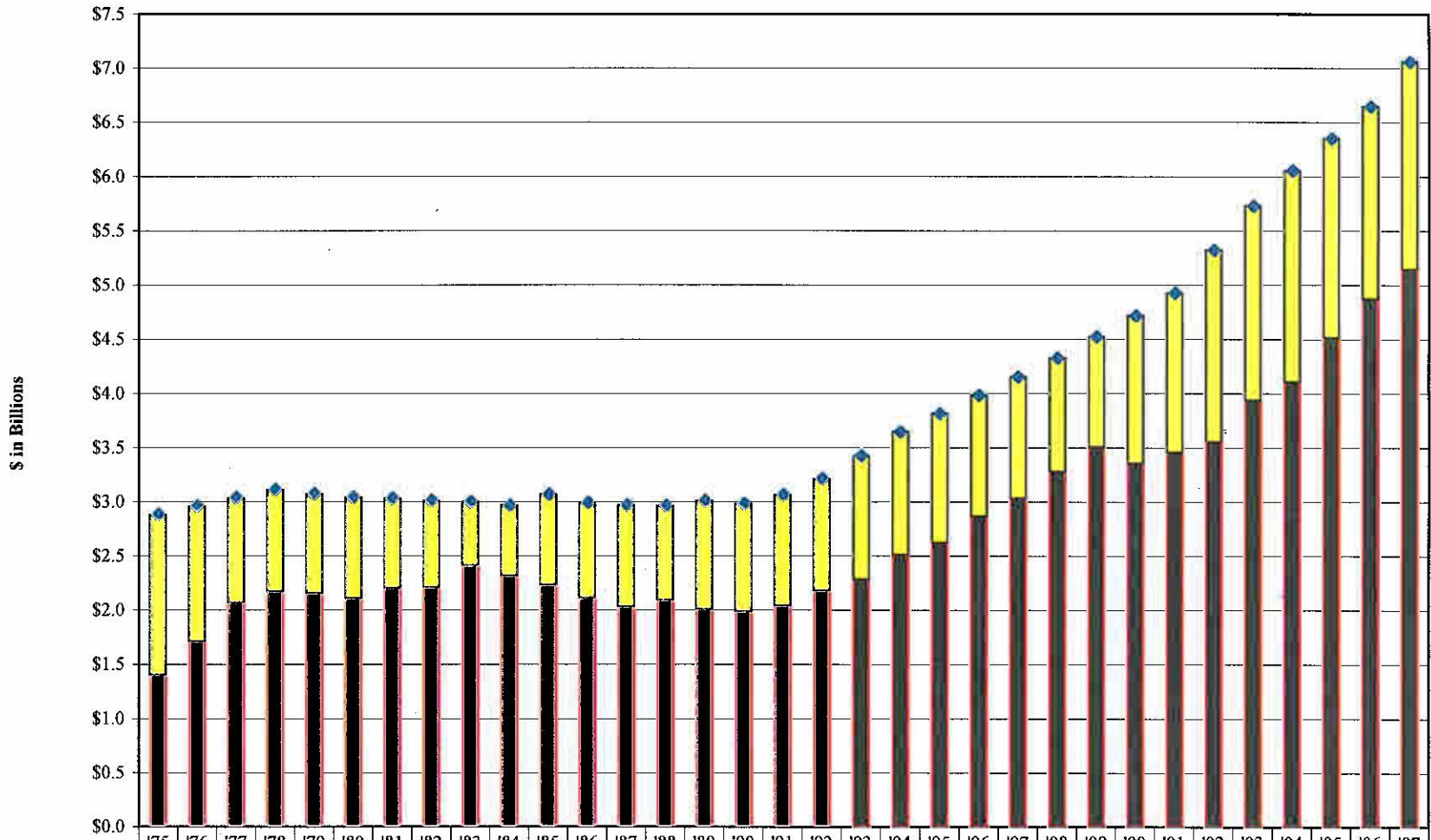
**Graphs 2.1 and 2.2** depict the sources and uses, respectively, for the ABF for the actual years 1996 through 2006 and the projections for fiscal years 2007 – 2012. As depicted in **Graph 2.1**, the payment of general obligation debt service (i.e., principal and interest) relies primarily on the State property tax. **Graph 2.1** also illustrates the reliance on general funds to support general obligation debt service in the years depicted in this graph. Prior to fiscal year 2003, the State used general funds, appropriated either to the Annuity Bond Fund or to the Aid to Education program of the State Department of Education, to provide a substantial portion of the general obligation debt service. A general fund appropriation to the Annuity Bond Fund is again required to meet debt service in 2008 and if the fiscal year 2008 tax rate remains constant or is decreased in fiscal years 2009 through 2012, additional general fund appropriations will also be necessary.

In the five year period between 2002 and 2007, the growth in debt service (**Graph 2.2**) reflects the increase in debt outstanding (**Graph 1**) since this period has seen the lowest interest rates since 1988 as demonstrated in (**Graph 3**).

***True Interest Costs***

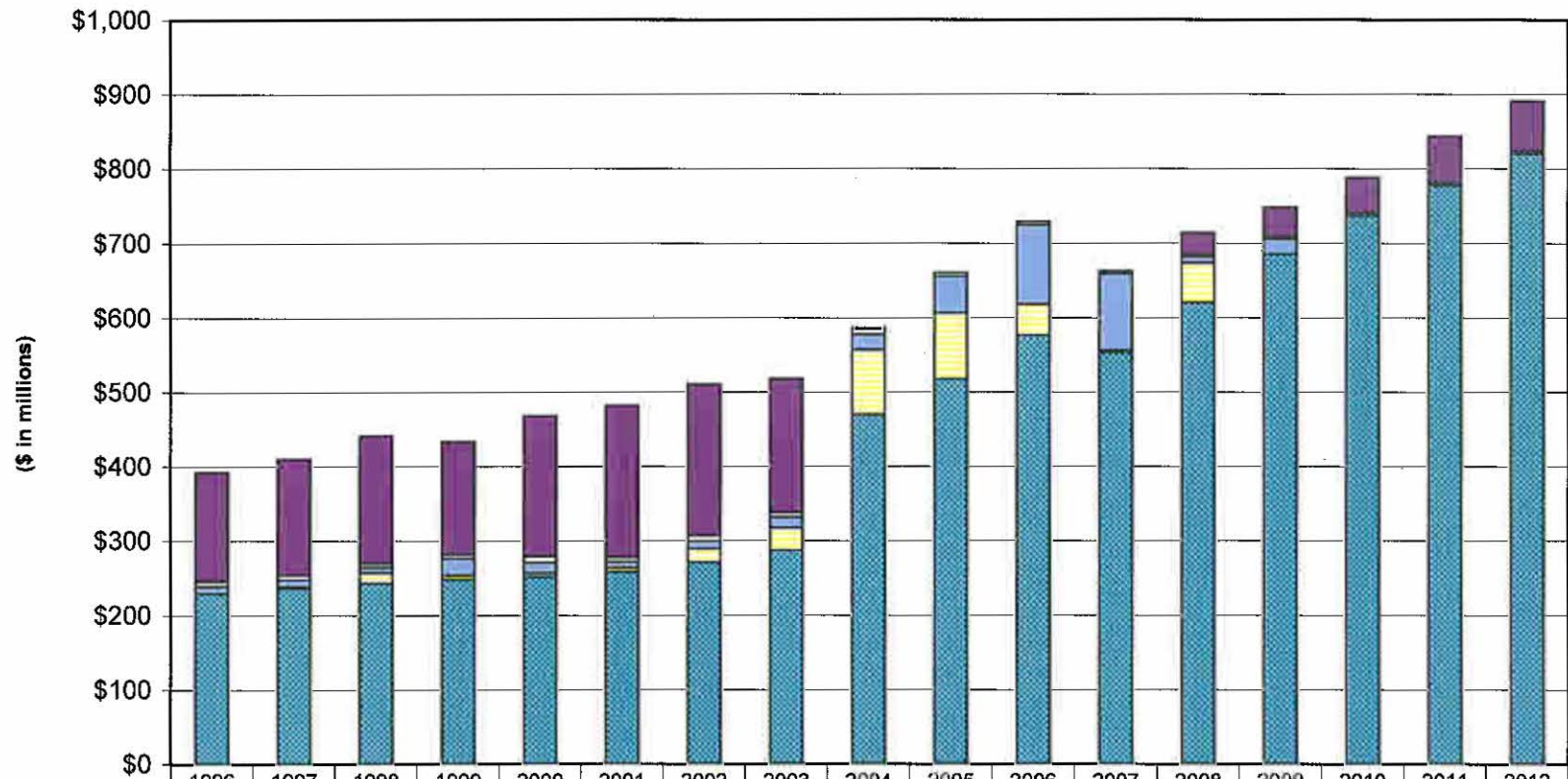
***Graph 3*** depicts the true interest costs (TIC) on tax-exempt and taxable State general obligation debt beginning in 1988 through the sale of the 2007 General Obligation Bonds Second Series that the State sold on August 1, 2007. During the time period analyzed in this chart, the TICs on tax-exempt general obligation debt ranged from a low of 3.098% in the 2004 First Series Refunding to a high of 6.996% in the 1990 Fourth Series. The tax-exempt TIC for the most recent issuance of General Obligation bonds on August 1, 2007 was 4.145%. The TICs on the three taxable issues issued in 2005 and 2006 ranged from 3.86% to 4.98%.

**Graph 1  
General Obligation Debt Authorized and Outstanding at June 30**



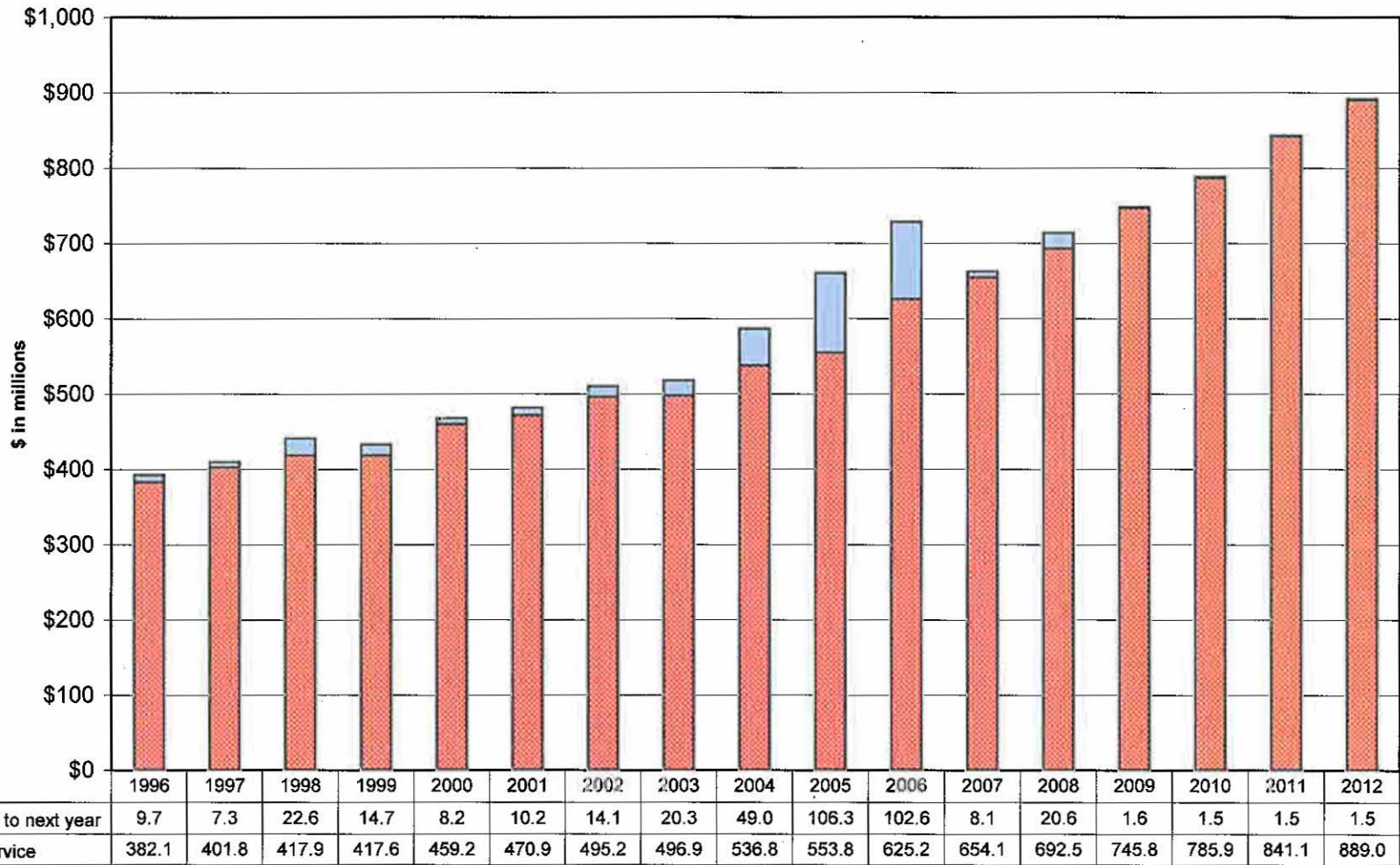
	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Authorized but Unissued	1.4	1.2	0.9	0.9	0.9	0.9	0.8	0.8	0.5	0.6	0.8	0.8	0.9	0.8	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.3	1.4	1.7	1.7	1.9	1.8	1.7	1.9
Total Outstanding	1.40	1.71	2.06	2.17	2.15	2.10	2.20	2.20	2.41	2.31	2.23	2.11	2.03	2.09	2.00	1.98	2.03	2.17	2.27	2.50	2.61	2.86	3.02	3.27	3.50	3.34	3.45	3.54	3.93	4.1	4.51	4.86	5.14
Total Authorized	2.88	2.95	3.03	3.10	3.06	3.03	3.02	3.00	2.99	2.96	3.06	2.98	2.96	2.96	3.00	2.98	3.06	3.21	3.41	3.64	3.81	3.98	4.15	4.32	4.52	4.71	4.92	5.31	5.72	6.04	6.34	6.64	7.05

**Graph 2.1  
Annuity Bond Fund Sources  
1996-2006 Actual, 2007-2012 Projections**



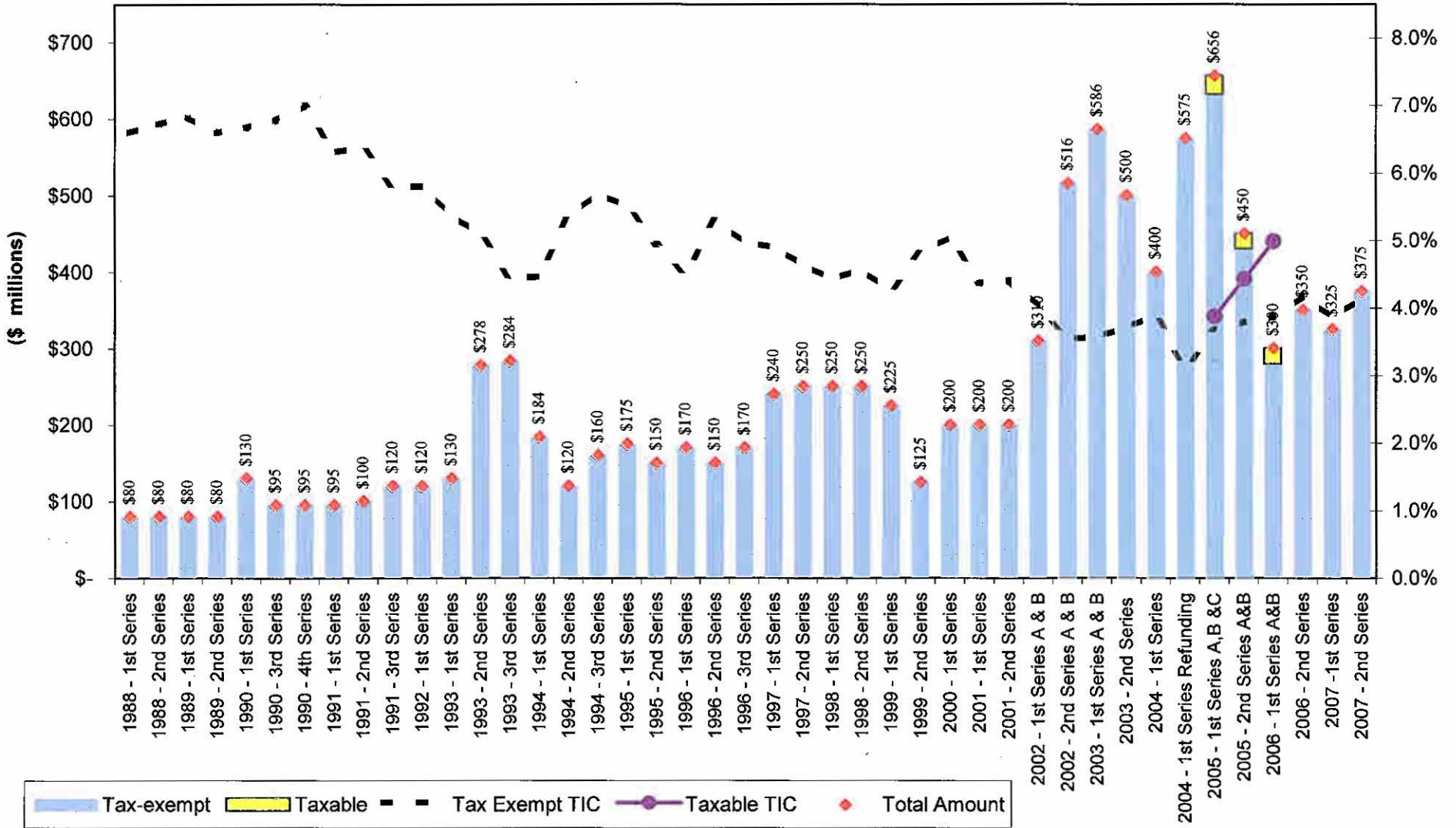
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
General Fund	147.0	155.9	172.0	151.8	189.3	204.3	203.6	180.4	-	-	-	-	29.3	40.0	48.0	62.5	67.8
Miscellaneous Receipts	7.0	6.1	4.8	5.2	7.9	6.0	7.2	6.2	9.2	5.5	4.6	4.4	3.1	2.9	2.4	2.3	2.2
Transfer from prior year	9.4	9.7	7.3	22.6	14.7	8.2	10.2	14.1	20.3	49.0	106.3	102.6	8.1	20.6	1.6	1.5	1.5
Bond Premium-net of disc.	-	1.7	14.2	5.8	4.7	5.4	18.4	30.5	88.0	89.0	41.8	3.1	53.2	-	-	-	-
Property Tax Receipts	228.3	235.6	242.2	246.9	250.8	257.1	270.0	286.0	468.4	516.5	575.1	552.1	619.4	683.9	735.4	776.3	819.0

**Graph 2.2  
Annuity Bond Fund Uses  
1996-2006 Actual, 2007-2012 Projections**



**Graph 3**  
**Issuance Amounts and TICS of General Obligation Bonds**

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TIC - True Interest Cost



## **B. Transportation Debt**

### **Consolidated Transportation Bonds.**

#### ***Purpose***

Consolidated Transportation Bonds, like State general obligation bonds are 15-year obligations, issued by the Department of Transportation for highway and other transportation projects.

#### ***Limitations to Debt Outstanding***

The gross outstanding aggregate principal amount of Consolidated Transportation Bonds is limited by statute to \$2.0 billion. The General Assembly may set a lower limit each year, and for fiscal year 2008 the limit is \$1.497 billion. In addition, the Department has covenanted with the holders of outstanding Consolidated Transportation Bonds not to issue additional bonds unless: (1) the excess of Transportation Trust Fund revenues over Department of Transportation operational expenses in the preceding fiscal year is equal to at least twice the maximum amount of debt service for any future fiscal year, including debt service on the additional bonds to be issued; and (2) total proceeds from taxes pledged to debt service for the past fiscal year equal at least twice such maximum debt service.

#### ***Security***

Debt service on Consolidated Transportation Bonds is payable from the Department's shares of the motor vehicle fuel tax, the motor vehicle titling tax, all mandatory motor vehicle registration fees, sales tax on rental vehicles, and a portion of the corporate income tax, plus all Departmental operating revenues and receipts. The holders of such bonds are not entitled to look to other sources for payment.

#### ***Current Status:***

##### ***Debt Outstanding as of June 30, 2007***

\$1,111,050,000

##### ***Ratings***

S&P, AAA

Moody's, AA2

Fitch, AA

### **Transportation Debt Outstanding**

The following chart summarizes the activity in Consolidated Transportation Bonds from 2002 to 2007 and the projected activity through 2013.

<b>Summary of Debt Activity MDOT Consolidated Transportation Bonds</b>							
<i>(\$ in millions)</i>							
<b>Fiscal Year</b>	<b>Debt Outstanding at Beginning of Year</b>	<b>New Issues</b>	<b>Refunding Issues</b>	<b>Defeased or Refunded</b>	<b>Redeemed</b>	<b>Debt Outstanding at End of Year</b>	<b>Required Debt Service</b>
2002	\$648	\$150			\$84	\$714	\$113
2003	\$714	\$345	\$262	\$266	\$94	\$961	\$129
2004	\$961	\$320	\$75	\$77	\$93	\$1,186	\$135
2005	\$1,186				\$116	\$1,070	\$154
2006	\$1,070	\$100			\$92	\$1,078	\$141
2007	\$1,078	\$100			\$67	\$1,111	\$115
2008E	\$1,111	\$435			\$69	\$1,477	\$123
2009E	\$1,477	\$300			\$76	\$1,701	\$153
2010E	\$1,701	\$200			\$78	\$1,823	\$163
2011E	\$1,823	\$140			\$87	\$1,876	\$178
2012E	\$1,876	\$220			\$105	\$1,991	\$201
2013E	\$1,991	\$115			\$122	\$1,984	\$220

E=Estimate and preliminary.

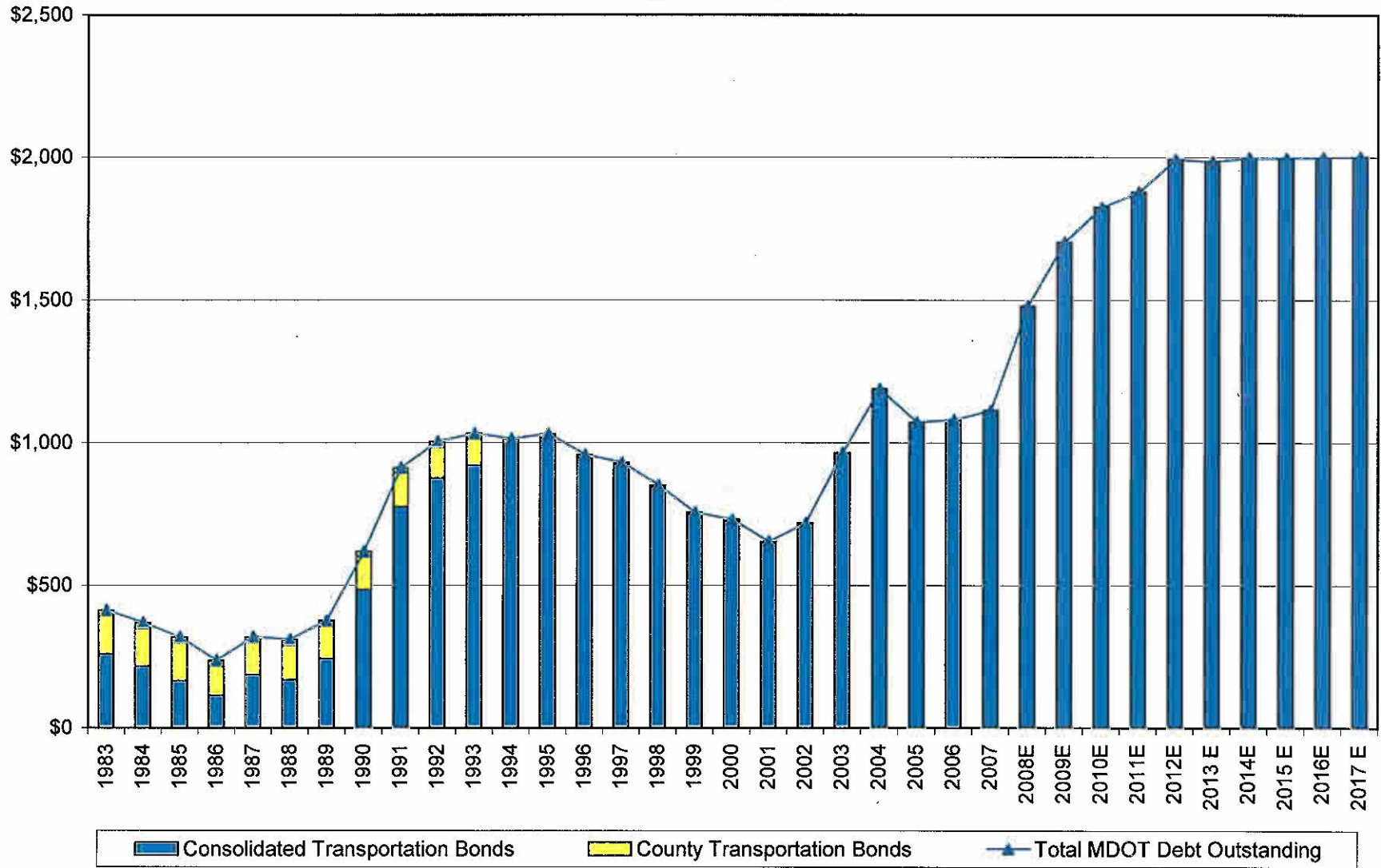
**Graph 4** depicts outstanding Consolidated and County Transportation Bonds <sup>1</sup> (after being reduced by any amounts in sinking funds) for fiscal years 1983 through 2007, as well as the Department's current projections for fiscal years 2008 through 2017.

Prior to 1989, Departmental revenues were sufficient to meet the demands of the capital program so that only a modest level of debt was issued. This situation reflected, among other factors, the impact of several gas tax increases and of permanent allocations to the Transportation Trust Fund of a portion of corporate income tax receipts and the balance of the titling tax. From 1989 until 1995, even with a 1992 increase of the motor fuel tax, increased use of bond financing was necessary to fund several major projects in the capital program. From 1996 until 2002, only a limited amount of new debt was necessary as revenues were sufficient to fund the capital program. However, since 2002, with Department revenues flat, increased use of bond financing has been necessary to fund the capital program.

<sup>1</sup> Prior to 1993, the Department also issued County Transportation Bonds (CBs) on behalf of the counties and Baltimore City for local transportation projects. The State recovered the tax-supported debt service on these bonds from the counties through deductions from amounts otherwise due them from their local share of State-collected highway user revenues, such as the corporate income tax, titling tax, motor fuel taxes, and vehicle registration fees. As of June 30, 2007 all CBs were paid in full. In 1993, legislation was enacted that provides for a non-State tax supported County Transportation Revenue Bond (CTRB) program; subsequent issuances under this program do not constitute State tax-supported debt and are not subject to the affordability calculations.

**Graph 4**  
**Transportation Debt Outstanding - Actual 1983-2006: Estimated 2007-2017**  
 (\$ in millions)

18



## **Grant Anticipation Revenue Vehicles “GARVEE” Bonds**

### ***Purpose***

Grant Anticipation Revenue Vehicle (“GARVEE”) Bonds will be used as one of several sources of a funding plan for the Intercounty Connector (“ICC”) project, in addition to Maryland Transportation Authority funds, Transportation Trust Fund, General Funds, and other sources. Use of GARVEEs on the ICC is intended to allow the project to be implemented sooner than otherwise would be possible and with less reliance on the State’s available funds in the short term.

### ***Limitations***

The Statute limits the total amount that can be issued for GARVEEs at \$750 million, with a maximum maturity of 12 years. Under State law, the proceeds can only be used for the ICC. Legislation enacted by the 2005 General Assembly specified that GARVEE bonds should be considered tax-supported debt in the Capital Debt Affordability analysis.

### ***Security***

GARVEEs are bonds for which debt service is paid using federal transportation funds received by the State. The annual debt service for these bonds will use approximately 15% of the current average annual federal highway funding received by Maryland. In addition, there is a subordinate pledge of certain Maryland State Transportation Trust Fund (TTF) tax sources.

### ***Current Status:***

#### ***Debt Outstanding as of June 30, 2007***

\$325,000,000

#### ***Ratings***

In May 2007, Standard & Poor’s rated these bonds AAA, Moody’s Investor’s Service and Fitch Ratings rated them AA.

### ***Issuances***

In May 2007, the Maryland Transportation Authority sold \$325 million of GARVEE bonds. The remaining authorization of \$425 million is scheduled for issuance in Fiscal Year 2009. The timing and amounts of these individual issuances may be modified, as the funding plan is refined.

### **C. Lease and Conditional Purchase Financings**

The State has financed assets using leases; specifically capital leases, energy leases and conditional purchase financings using Certificates of Participation (“COPS”).

#### **Capital Leases**

##### ***Purpose***

The State's capital funding program has included the use of capital lease financings in which the State builds an equity interest in the leased property over time and gains title to such property at the end of the leasing period. Capital leases are used for the acquisition of both real property and equipment.

Such capital leases are considered debt of the State by financial analysts, rating agencies and under generally accepted accounting principles (GAAP). According to GAAP, leases that are in essence a vehicle for financing assets must be "capitalized" - i.e., reflected on the balance sheet as both an asset and debt.

##### ***Security***

Payments from the State are subject to appropriation. The State has represented to the lessors that it will do all things lawfully within its power to obtain, maintain, and pursue funds to make the Lease Payments. In the event of non-appropriation, the State will surrender the secured property to the lessor.

The additional State liability and debt service resulting from capital leases is not large in relation to the State's general obligation debt outstanding and debt service at this time. Only those capital leases which are tax supported are incorporated in the affordability analysis; revenue-backed leases, while capitalized, are not.

##### ***Ratings***

Leases are not rated.

##### ***Lease Terms***

Under current practice, capital leases for equipment, primarily computers and telecommunications equipment, are generally for periods of five years or less. Real property capital leases are longer term (in the range of 20 to 30 years) and have been used to acquire a wide variety of facilities, including courts, office buildings and, most recently, a new parking garage in Annapolis. In all leases, the term of the lease does not exceed the economic life of the property.

##### ***Projections of Future Lease Activity***

Historical analysis indicates that in years of economic downturns the reliance on capital leasing has been higher than in other years. The State Treasurer's Office (STO) periodically surveys state agencies about their plans to finance equipment using capital leases. As a result of a

survey done in the Spring of 2007, the STO is projecting the financing of \$100 million of equipment from January 2008 through June 2011. In addition, the State is currently exploring using COPS or leases to finance helicopters in undetermined amounts over a period of years.

### **Energy Leases**

In another instance of the use of the capital lease structure, the State began using lease-purchase agreements to provide financing for energy conservation projects at State facilities in March 1994. Lease payments are made from the agencies' annual utility appropriations using savings achieved through the implementation of energy performance contracts. The State Treasurer's Office has discussed future energy lease activity with the Department of General Services (DGS) and because of renewed interest in this program, the STO currently projects approximately \$20 million of new energy leases per year. The term of the energy leases cannot exceed 15 years.

### **Conditional Purchase Financings**

#### ***Purpose***

State Agencies have also made significant use of Certificates of Participation (COPs), another form of conditional purchase debt financing.

Some COPs are not considered to be tax supported, such as: the Department of Transportation's COPs to provide financing for capital improvements at BWI; the expansion of parking at the Maryland Rail Commuter (MARC) BWI rail station; and the construction of a warehouse at the Maryland Port Administration's South Locust Point Terminal. MEDCO has also issued lease revenue bonds to finance the expansion and renovation of Piers A and B and the terminal building at BWI. Revenues from these projects are pledged to the payment of principal and interest on the certificates. Therefore, these are not considered tax supported and are not included in the capital lease component in *Tables 1* and *Tables 2a* and *2b* of this report.

#### ***Limitations to Non-Traditional Transportation Debt***

The 2006 General Assembly established a limit of \$762.2 million at June 30, 2007, for total aggregate outstanding and unpaid principal balance of nontraditional debt issued by the Department of Transportation. Non-traditional debt is defined as any debt instrument that is not a Consolidated Transportation Bond or a GARVEE bond. This includes Certificates of Participation and other forms of transportation capital leases both tax and non-tax supported. As of June 30, 2007, the Department had non-traditional debt outstanding in the total principal amount of \$750.4 million.

The following table summarizes the current tax-supported leases and tax-supported Conditional Purchase Financings as of June 30, 2007.

<b><i>Tax-Supported Lease and Conditional Purchase Financings Outstanding as of June 30, 2007</i></b>		
<b>State Agency</b>	<b>Facilities Financed</b>	<b>Principal Amount Outstanding as of June 30, 2007</b>
State Treasurer's Office	Capital Equipment Leases Various communications, computers and other equipment	\$109,737,220
State Treasurer's Office	Energy Performance Projects	34,144,898
Department of Transportation	Headquarters Office Building	30,415,000
	MAA Shuttle Buses - BWI	12,900,000
Department of General Services	Multi-service office buildings: St. Mary's County	3,730,000
	Calvert County	1,867,641
	District Courts: Towson	2,065,000
	Hyattsville	2,820,000
	Hilton Street Facility	2,150,000
	Prince George's County Justice Center	22,519,889
Maryland Environmental Service	Water and Wastewater Facility at Eastern Correctional Institution	2,415,000
Maryland Transportation Authority	State office parking facility	23,175,000
<b>Total Tax Supported Leases and COPS</b>		<b>\$247,939,648</b>

**D. Maryland Stadium Authority**

***Purpose***

The Maryland Stadium Authority was created in 1986 as an instrumentality of the State responsible for financing and directing the acquisition and construction of professional sports facilities in Maryland. Since then, the Authority's responsibility has been extended to include convention centers in Baltimore City, Ocean City and in Montgomery County, and the Hippodrome Performing Arts Center in Baltimore, Maryland. A history of the Stadium Authority's financing is in Appendix B.

***Security***

Lease rental payments subject to annual appropriation by the State are pledged to pay debt service on the bonds. Revenues from certain select lottery games are transferred to the Stadium Authority for operations and to cover the State's capital leases payments to the Stadium Authority.

***Ratings***

S&P Long Term, AA+  
Short Term, A-1+

***Current Debt at June 30, 2007***

	<b><i>Debt Outstanding as of June 30, 2007</i></b>	<b><i>FY 2007 Debt Service</i></b>	<b><i>Revenue Sources for FY 2007 Debt Service</i></b>
Oriole Park at Camden Yards	\$119,780,000	\$14,235,432	Lottery
Baltimore City Convention Center	31,600,000	4,883,214	General Fund
Ocean City Convention Center	10,600,000	1,483,094	General Fund
Ravens Stadium	74,140,000	6,964,173	Lottery
Montgomery County Conference Center	20,690,000	1,754,800	General Fund
Hippodrome Performing Arts Center	17,720,000	1,782,373	General Fund and \$2 ticket charge
Camden Station Renovation	8,560,000	622,313	Lottery
<b>Totals</b>	<b>\$283,090,000</b>	<b>\$31,725,399</b>	

***2007 Issuances***

The 2007 issuances were \$31.6 million used to refund the 1995 Baltimore City Convention Center bonds and \$73.5 million used to refund the 1996 Football Stadium Bonds in accordance with a forward interest rate swap agreements executed in 1998.

***Projections of Future Issuances***

As of 6/30/2007, the Authority expects to finance \$10 million in improvements to Oriole Park at Camden Yards in fiscal year 2008.



**E. Bay Restoration Bonds**

***Purpose***

Proceeds of these bonds will fund grants to waste water treatment plants (WWTP) for upgrades to remove nutrients thereby reducing nitrogen loading to the Chesapeake Bay and its tributaries.

***Security***

Legislation enacted by the 2004 General Assembly (Chapter 428, Laws of Maryland 2004) established a Bay restoration fee which will be deposited in the Bay Restoration Fund and administered by the Water Quality Financing Administration of the Maryland Department of the Environment. Fee revenue from WWTP users will support the debt service on these bonds.

***Projections of Future Issuances***

The timing and amount of bonds issued will depend on the fee revenue attained and the need for funding as upgrades of WWTP proceed. For purposes of the CDAC calculations, it is assumed that the bonds will be limited to 15-year maturities with a total issuance of \$545 million. The estimated issuance stream (in millions) is \$50, \$70, \$170, \$225 and \$30 in fiscal years 2008-2012, respectively.

### **III. CAPITAL PROGRAMS**

#### **A. State of Maryland Capital Program**

##### **Capital Program Structure**

The State's annual capital program includes projects funded from general obligation bonds, general tax revenues, dedicated tax or fee revenues, federal grants, and auxiliary revenue bonds issued by State agencies.

The general obligation bond-financed portion of the capital program consists of an annual Maryland Consolidated Capital Bond Loan (MCCBL). The MCCBL is a consolidation of projects authorized as general construction projects, various Administration-sponsored capital programs for capital grants for non-State owned projects and, in recent years, separate individual legislative initiatives.

General obligation bond funds are often supplemented with State general fund capital appropriations (PAYGO) authorized in the annual operating budget. The amount of funds available to fund capital projects with operating funds varies from year to year. For example, FY 2002 general fund PAYGO appropriations totaled \$643.9 million, the FY 2006 general fund PAYGO appropriation totaled \$2.5 million, and the FY 2008 general fund PAYGO appropriation totaled \$27.5 million.

The operating budget also traditionally includes PAYGO capital programs funded with (i) a broad range of dedicated taxes, loan repayments, and federal grants such as the State's Drinking Water Revolving Loan Program and the Water Quality Revolving Loan Program, (ii) individual dedicated revenue sources such as the property transfer tax which supports the State's land preservation programs, and (iii) specific federal grants which provide funds for armory construction projects, veteran cemetery expansion projects, and housing programs.

##### **State-Owned Facilities**

Requests for improvements to State-owned facilities are expected to reach over \$3.6 billion (in today's dollars) during the next five years. Higher Education, prisons, State offices, and health facilities comprise the bulk of these requests.

##### **Capital Grants and Loans**

State capital grants and loans are allocated to local governments and non-profit organizations. These grants and loans are primarily used to improve existing, and construct new public schools and community college buildings. Grants and loans are also used to restore the Chesapeake Bay, improve and expand access to quality health care, and revitalize existing communities.

Authorizations for capital grants and loans have increased in recent years to accommodate the need to improve the State's public elementary and secondary schools. Future requests for funding are expected to remain high for public schools, community colleges, and environmental programs. The need for funding environmental programs reflects the State's efforts to restore the Chesapeake Bay.

The Executive Director of the Maryland Association of Community Colleges, Mr. H. Clay Whitlow, made a presentation to the CDAC on the Community College portion of the Capital Program. The presentation discussed projected enrollment increases, the effect of these increases on the demand for community college facilities and, therefore, anticipated capital funding requests. Capital requests for community colleges are expected to total \$666.2 million over the next five years.

Anticipated requests for non-State owned Administration-sponsored programs to be funded with general obligation bonds are expected to reach almost \$5.5 billion over the next five years.

#### **Legislative Initiatives**

Funding requests are also submitted each year by members of the General Assembly to provide financial support for local programs or projects of statewide interest. These bond requests include capital grants to local governments and private non-profit sponsors to support construction of local public and private facilities. These requests are estimated to total \$621 million over the next five years. This is based on the past five-year average of \$124.2 million per year. For the past two years, the requests have been closer to \$135 million per year.

**Summary of Capital Program: FY 2009 - 2013**

The total capital requests are estimated at over \$9.7 billion for the next five years. By contrast, the Department of Budget and Management anticipates recommending a five-year capital improvement program of approximately \$ 4.5 billion in general obligation bonds (based on the authorization levels recommended by the,2006 CDAC report). The total capital program will depend on the amount of general funds and other non-general obligation bond sources available for capital funding.

**FY 2009 – FY 2013  
Requests versus Anticipated Funding  
(\$ in millions)**

	<b>Total Current and Anticipated Requests</b>	<b>Anticipated Bond Funded Capital Program*</b>	<b>Difference Between Current and Anticipated Requests and Anticipated Funding</b>
State-Owned Facilities	\$3,618.4	\$1,933.5	\$1,684.9
Administration Capital Programs	5,489.9	2,446.5	3,043.4
Legislative Initiatives	621.0	75.0	546.0
Totals	\$9,729.3	\$4,455.0	\$5,274.3

\* The FY 2009 – FY 2013 anticipated funding totals almost \$4.5 billion. Of this amount \$3.5 billion was projected in the 2006 Capital Debt Affordability Committee Report for FY 2009 – FY 2012. An additional \$950 million is anticipated in FY 2013. This amount is based on a 3% increase over the amount anticipated for FY 2012. This assumption is based on the incremental annual increase from the 2006 CDAC report.

**B. Capital Improvement and School Construction Needs During the Next 5 Fiscal Years, as Projected by the Interagency Committee on School Construction**

The General Assembly passed the Public School Facilities Act of 2004 (Chapters 306 and 307, Laws of Maryland, 2004) which, among other provisions, declared the intent that the State pursue a goal of fully funding by fiscal year 2013 the school facility needs identified by the 2003 School Facility Assessment Survey. Achieving this goal would require a commitment by the State to provide approximately \$2 billion for school construction projects over 8 years (Fiscal Year 2006 to Fiscal Year 2013) or approximately \$250 million per year.

The Public School Facilities Act, in uncodified Section 11, directs the Capital Debt Affordability Committee to review the additional school construction funding needs identified in the Task Force report and make a specific recommendation regarding additional funding for school construction when recommending the State's annual debt limit.

In 2003, at the request of the Task Force to Study Public School Facilities, the Maryland State Department of Education conducted a survey to determine the extent to which public school facilities Statewide meet current federal, State, and local facility standards and can support required programs and expected enrollment. The results, reported in November 2003, indicated that more than one-third of public schools were deficient in at least one facility standard and that the cost of the necessary improvements was \$3.85 billion in 2003 dollars. The Public School Construction Program (PSCP) determined in February 2005 that this figure would be approximately \$4.32 billion (or a 12% increase) in 2005 dollars, due to increases in the cost of steel, cement, other material components, and labor. The PSCP estimated that costs increased by approximately 12% annually in fiscal 2007 and 2008. Increases in school construction costs appear to have stabilized recently, with costs estimated to hold steady in fiscal 2009. For discussion purposes, this Report refers to the documented \$3.85 billion, but the Committee acknowledges and draws the reader's attention to the impacts of inflation. The Task Force recommended that the State assume \$2 billion of this cost, with the remainder the responsibility of local government.

The advantages and drawbacks to authorizing additional debt have been noted in the Committee's reports in both 2004 and 2005. The advantage is that it's simple, traditional and less costly than most alternatives due to the State's AAA bond rating. The drawback is that it would virtually eliminate increases in other components of State tax-supported debt, either planned or unplanned, and, by absorbing unused capacity, would increase the risk that the affordability criteria would be exceeded if, for example, growth in personal income was less than projected.

Another alternative is to absorb some or all of the additional funds needed for school construction within the existing capital budget. This would, by necessity, entail postponing or eliminating other projects. Finally, a third alternative is identification of a new revenue stream, such as video lottery terminals, a portion of which could be dedicated to school construction.

Given the magnitude of the additional funding needed for school construction, the Committee in 2004 recommended fully exploring these alternative funding mechanisms, new revenue streams, or shifting other capital projects before considering \$2 billion in general obligation bond authorizations.

Public school construction received \$401.8 million in fiscal 2008, the highest amount for the program since its creation in 1971. Fiscal 2008 marks the third year in a row that the Governor and General Assembly met the \$250 million annual funding goal set in the 2004 Public School Facilities Act, and the second consecutive year in which the goal was exceeded. The

Governor and the General Assembly have utilized several of the alternatives recommended by the Committee to increase State school construction funding, using a combination of general obligation debt which involved both reducing and delaying funds for some other State capital projects; using unspent school construction funds from prior years available in the contingency fund; and PAYGO. In fiscal 2008, \$13.6 million was allocated from the contingency fund and \$2.4 million in special fund PAYGO from the Stadium Authority; the remaining \$385.8 million for school construction was supported by G.O. bonds. Although the Committee's 2005 report noted that relying solely on capital debt is neither sufficient nor necessary, the Committee's 2006 out-year authorization estimates, including a 3% increase per year and no drop in authorizations in 2009, as had been projected in the past, provides significant additional debt capacity. In fiscal 2008, nearly half of the \$810 G.O. debt authorization was allocated to public school construction. This level of G.O. support for public school construction depends on the Committee's proposed authorization levels. In this report, the Committee has recommended \$935 in authorizations for fiscal year 2009, *of which at least \$300 million should be allocated for school construction.*

The fiscal 2008 CIP projects \$250 million annually in G.O. bonds for public school construction in fiscal 2009 through 2012, which would achieve the State's nominal funding goal. It is important to recognize, however, that escalation in building costs since 2004 has significantly raised the actual cost of the basic goal of the Public School Facilities Act: to bring all public schools up to minimum standards by 2013.

#### **IV. BOND RATING AGENCY REPORTS**

In the affirmation of the State's AAA General rating in July 2007, just prior to the issuance of the General Obligation Bonds 2007 Second Series, the rating agencies reported on the status of Maryland's financial condition and economy. Implicit in their analysis are the criteria that the rating agencies consider in evaluating a state's credit.

Included below are salient points from each of the rating agency reports. The State Treasurer's Office sent the complete reports to the Committee members.

##### **A. Standard and Poor's**

In their report dated July 30, 2007, S&P noted:

- the diverse, broad-based economy, which has historically outperformed the national economy
- High wealth and income levels
- Historically strong financial management and performance

Standard & Poor's "expects the state to identify a solution beyond the use of onetime revenues to balance operations in the coming fiscal year. In addition, the incremental growth of annual estimated OPEB contributions and increased unfunded pension liabilities will need to be addressed as a separate matter and in conjunction with the projected general fund budget gap for the coming fiscal year".

##### **B. Moody's Investors Service**

Moody's noted the \$1.4 Billion budget gap in fiscal 2009 in the report dated July 26, 2007 and stated, "The specifics of the state's full response to the fiscal 2009 deficit are not defined yet, and will not likely be finalized before the end of the upcoming legislative session. Maryland has a good history of managing its finances through periods of fiscal stress, including years when annual budget deficits reached 19% of General Fund revenues. Moody's expects that, like other Aaa-rated states, and in keeping with Maryland's historically conservative financial management and aggressive approach to dealing with budget shortfalls, the state will soon develop a clear-cut response to stabilize its finances, bringing them back into structural balance."

##### **C. Fitch Ratings**

Fitch's report was issued on July 31, 2007. The report noted the 15 year maturity limit, strong, centralized debt oversight and the state's debt affordability measures as key credit strengths. "State affordability criteria include maintaining tax-supported debt at or below 3.2% of personal income and that debt service consume no more than 8% of state revenues. Growing capital needs may pressure these debt limits going forward, driven in particular by population and job growth related to military base realignment, education, and transportation."

## V. AFFORDABILITY ANALYSIS

The objective of an affordability analysis is to draw a proper balance between two basic interests: the State's capital needs and the State's ability, as measured by self-imposed affordability criteria, to repay the debt issued to finance those capital needs.

### A. The Concept of Affordability

The ultimate test of debt affordability is the willingness and ability of the State to pay the debt service when due. Apart from revenue sources which are dedicated by law, the allocation of future resources between debt repayment and other program needs is a matter of judgment. A careful and comprehensive determination of affordability should take into consideration the demand for capital projects, the relationship between debt authorization and debt issuance, available and potential funding mechanisms, overall budgetary priorities, and revenues.

The Committee believes that the crux of the concept of affordability is not merely whether or not the State can pay the debt service; rather affordability implies the ability to manage debt over time to achieve certain goals. Maryland has a long tradition of effectively managing its finances and debt. The challenge of debt management is to provide sufficient funds to meet growing capital needs within the framework of the State's debt capacity, thereby maintaining the AAA credit rating.

### B. Affordability Criteria

The current affordability criteria are: State tax-supported debt outstanding should be no more than 3.2% of State personal income; and debt service on that debt should require no more than 8% of revenues.

### C. 2007 Affordability Recommendation

**The Committee recommends a \$935 million limit for new general obligation debt authorizations enacted by the 2008 General Assembly for the fiscal 2009 capital program and an assumption of an annual increase of 3% for the following years.** The \$935 million represents a 15% increase over the \$810 million authorization for the fiscal year 2008 capital program. The \$935 million also includes \$3 million previously authorized for the Southern Maryland Regional Strategy-Action Plan for Agriculture.

Current personal income and revenue estimates both support the recommended authorizations while maintaining basic affordability criteria. Schedules of Personal Income and Revenues are in *Appendix A-1 and Appendix A-2* respectively. These schedules report historical data from 1995 through 2006 and projections for 2007 through 2017.



As indicated by **Table 3**, Tax-Supported Debt Outstanding and Debt Service Stress Test, if the projections for debt outstanding and debt service are held constant, declines in personal income and revenues can still be absorbed and affordability ratios maintained. Similarly, there is still some very limited capacity for increases in debt outstanding and debt service if the personal income and revenue projections are held constant and the affordability ratios are not changed.

The Committee's recommendation is expected to result in a pattern of debt issuances, debt outstanding, and debt service payments that are within the affordability standards and criteria. The State has met and continues to meet the accepted affordability standards. Recognizing the need to sufficiently invest in Maryland's infrastructure and communities, the Committee's current goal is recommend authorizations that maximize the current affordability standard in the criteria of debt outstanding to personal income. In 2011 and 2012, this ratio approaches the 3.2% benchmark but improves thereafter as the GARVEE bonds and Bay Bonds mature.

The virtue of the annual CDAC process is the ability, if needed, to adjust authorizations in future years should forecasts of personal income and revenues decline or if projections for debt service rise because of increases in interest rates. **Appendix B-4** highlights the effect of the maturity limit of 15 years on the State's General Obligation bonds and the resulting rapid amortization of current outstanding debt which provides additional financial flexibility. Any reductions in future annual authorizations would rapidly improve the debt affordability ratios.

#### **D. Comparison of Recommendation and Criteria**

To analyze the relationship of the Committee's recommendation for general obligation debt to the affordability criteria, each component of tax-supported debt and debt service has been examined.

##### ***Debt Outstanding***

The rapid rise in total tax-supported debt in **Table 1** reflects the inclusion of Bay Bonds beginning in fiscal year 2008, GARVEE Bonds beginning in fiscal year 2007, the increased authorizations and issuances of general obligation bonds, and the increasing issuance of Transportation bonds in the period 2002 to 2017. Total general obligation debt rises steadily from \$5.142 billion as of June 30, 2007 to \$9.218 billion as of June 30, 2017. Department of Transportation debt is projected to rise from \$1.111 billion to \$2.000 billion during this same period. Stadium Authority debt will decline from \$283.090 million to \$108.700 million assuming there are no future additional MSA financings beyond the \$10 million in Fiscal Year 2008 for Oriole Park improvements.

### ***Debt Outstanding as a Percent of Personal Income***

This criterion of debt outstanding to personal income reflects the State's reliance on revenues (sales tax and income tax) that are primarily based on consumption and income. The debt outstanding is as of the end of a fiscal year and the personal income is as of the end of the calendar year. For example, the debt outstanding is as of 6/30/2007 and the personal income is as of 12/31/2007.

The ratio of State tax-supported debt outstanding to personal income (***Table 1***) rises from 2.72% in fiscal year 2007 to 3.15% in fiscal years 2011 and 2012 and 2.94% in fiscal year 2017. Due to the rapid amortization of state debt in 15 years and the amortization of GARVEE bonds in 12 years, the ratio approaches the 3.2% benchmark but then begins to decline. At all times, the ratio remains below the affordability criterion of 3.2%.

### ***Debt Service***

Projected general obligation debt service (***Appendix B-4***) assumes that future interest rates are consistent with current forecasts and also assumes that annual increases in future authorizations are limited to 3%.

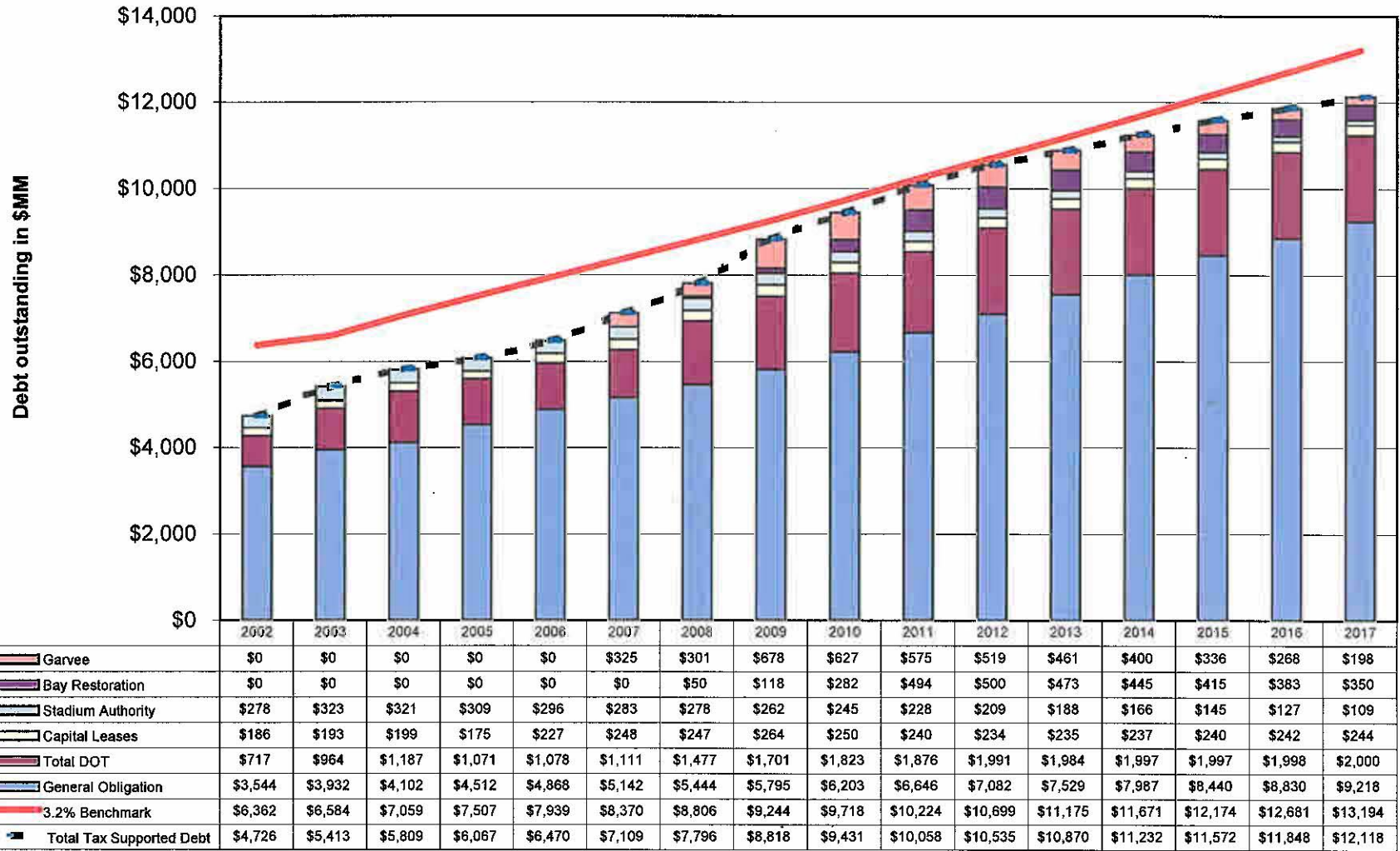
### ***Debt Service as a Percent of Revenues***

Compared to the prior criterion, debt service as a percent of revenues is a better measure for State financial management purposes, i.e., the legislature has control of both variables – revenues and debt service through the authorization of debt.

The ratio of annual debt service to revenues (***Table 2a***) increases from 5.42% in fiscal year 2007 to 6.66% in fiscal year 2012 and 7.17% in fiscal year 2017. As in the past, the ratio remains below the affordability criterion of 8.0% but nevertheless is increasing each year.

## Tax Supported Debt Outstanding to Personal Income

(see also Table 1)



as of September 2007

**STATE TAX SUPPORTED DEBT OUTSTANDING  
COMPONENTS AND RELATIONSHIP TO PERSONAL INCOME**  
(\$ in thousands)

**TABLE 1**

Fiscal Year	Department of Transportation (b)					Stadium Authority	Bay Restoration Bonds	Garvee Bonds	Total Tax Supported Debt	Fiscal Year
	General Obligation Bonds	Consolidated Transportation Bonds	County Transportation Bonds	Total DOT	Capital Leases					
	(a)				(c) (d)					
2002	\$3,544,178	\$714,150	\$3,155	\$717,305	\$186,238	\$277,995			\$4,725,716	2002
2003	\$3,932,493	\$961,245	\$2,440	\$963,685	\$193,136	\$323,240			\$5,412,554	2003
2004	\$4,102,278	\$1,185,650	\$1,675	\$1,187,325	\$198,585	\$320,955			\$5,809,143	2004
2005	\$4,511,826	\$1,069,945	\$865	\$1,070,810	\$175,062	\$309,195			\$6,066,893	2005
2006	\$4,868,471	\$1,078,475	\$0	\$1,078,475	\$226,897	\$296,280			\$6,470,123	2006
2007	\$5,142,154	\$1,111,000	\$0	\$1,111,000	\$247,940	\$283,090		\$325,000	\$7,109,184	2007
2008	\$5,443,830	\$1,477,000	\$0	\$1,477,000	\$246,803	\$278,070	\$50,000	\$300,655	\$7,796,358	2008
2009	\$5,794,668	\$1,701,000	\$0	\$1,701,000	\$264,272	\$262,275	\$117,769	\$677,660	\$8,817,644	2009
2010	\$6,202,941	\$1,823,000	\$0	\$1,823,000	\$250,241	\$245,465	\$282,291	\$627,350	\$9,431,288	2010
2011	\$6,646,096	\$1,876,000	\$0	\$1,876,000	\$240,128	\$227,575	\$493,926	\$574,540	\$10,058,265	2011
2012	\$7,082,435	\$1,991,000	\$0	\$1,991,000	\$234,447	\$208,505	\$499,784	\$519,100	\$10,535,270	2012
2013	\$7,529,094	\$1,984,000	\$0	\$1,984,000	\$234,892	\$188,170	\$472,976	\$460,910	\$10,870,042	2013
2014	\$7,986,923	\$1,997,000	\$0	\$1,997,000	\$237,085	\$166,490	\$444,694	\$399,820	\$11,232,012	2014
2015	\$8,439,813	\$1,997,000	\$0	\$1,997,000	\$240,248	\$144,735	\$414,856	\$335,700	\$11,572,353	2015
2016	\$8,829,838	\$1,998,000	\$0	\$1,998,000	\$242,003	\$126,585	\$383,378	\$268,395	\$11,848,198	2016
2017	\$9,217,561	\$2,000,000	\$0	\$2,000,000	\$244,005	\$108,700	\$350,167	\$197,735	\$12,118,168	2017

**State Tax Supported Debt Outstanding as a Percent of Personal Income**  
(Affordability criteria standard = 3.2% )

2002	1.78%	0.36%	0.00%	0.36%	0.09%	0.14%			<b>2.38%</b>	2002
2003	1.91%	0.47%	0.00%	0.47%	0.09%	0.16%			<b>2.63%</b>	2003
2004	1.86%	0.54%	0.00%	0.54%	0.09%	0.15%			<b>2.63%</b>	2004
2005	1.92%	0.46%	0.00%	0.46%	0.07%	0.13%			<b>2.59%</b>	2005
2006	1.96%	0.43%	0.00%	0.43%	0.09%	0.12%			<b>2.61%</b>	2006
2007	1.97%	0.42%	0.00%	0.42%	0.09%	0.11%		0.12%	<b>2.72%</b>	2007
2008	1.98%	0.54%	0.00%	0.54%	0.09%	0.10%	0.02%	0.11%	<b>2.83%</b>	2008
2009	2.01%	0.59%	0.00%	0.59%	0.09%	0.09%	0.04%	0.23%	<b>3.05%</b>	2009
2010	2.04%	0.60%	0.00%	0.60%	0.08%	0.08%	0.09%	0.21%	<b>3.11%</b>	2010
2011	2.08%	0.59%	0.00%	0.59%	0.08%	0.07%	0.15%	0.18%	<b>3.16%</b>	2011
2012	2.12%	0.60%	0.00%	0.60%	0.07%	0.06%	0.15%	0.16%	<b>3.15%</b>	2012
2013	2.16%	0.57%	0.00%	0.57%	0.07%	0.05%	0.14%	0.13%	<b>3.11%</b>	2013
2014	2.19%	0.55%	0.00%	0.55%	0.07%	0.05%	0.12%	0.11%	<b>3.08%</b>	2014
2015	2.22%	0.52%	0.00%	0.52%	0.06%	0.04%	0.11%	0.09%	<b>3.04%</b>	2015
2016	2.23%	0.50%	0.00%	0.50%	0.06%	0.03%	0.10%	0.07%	<b>2.99%</b>	2016
2017	2.24%	0.49%	0.00%	0.49%	0.06%	0.03%	0.08%	0.05%	<b>2.94%</b>	2017

(a) Reflects presumed new authorizations as follows:

General Assembly Session:	2007	2008	2009	2010	2011
For Fiscal Year:	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
(millions)	\$810	\$995	\$960	\$990	\$1,020
Qualified Zone Academy Bonds (QZAB's)	\$4.9	\$5.6	\$6.6		

(b) Net of sinking funds or debt service reserve funds.

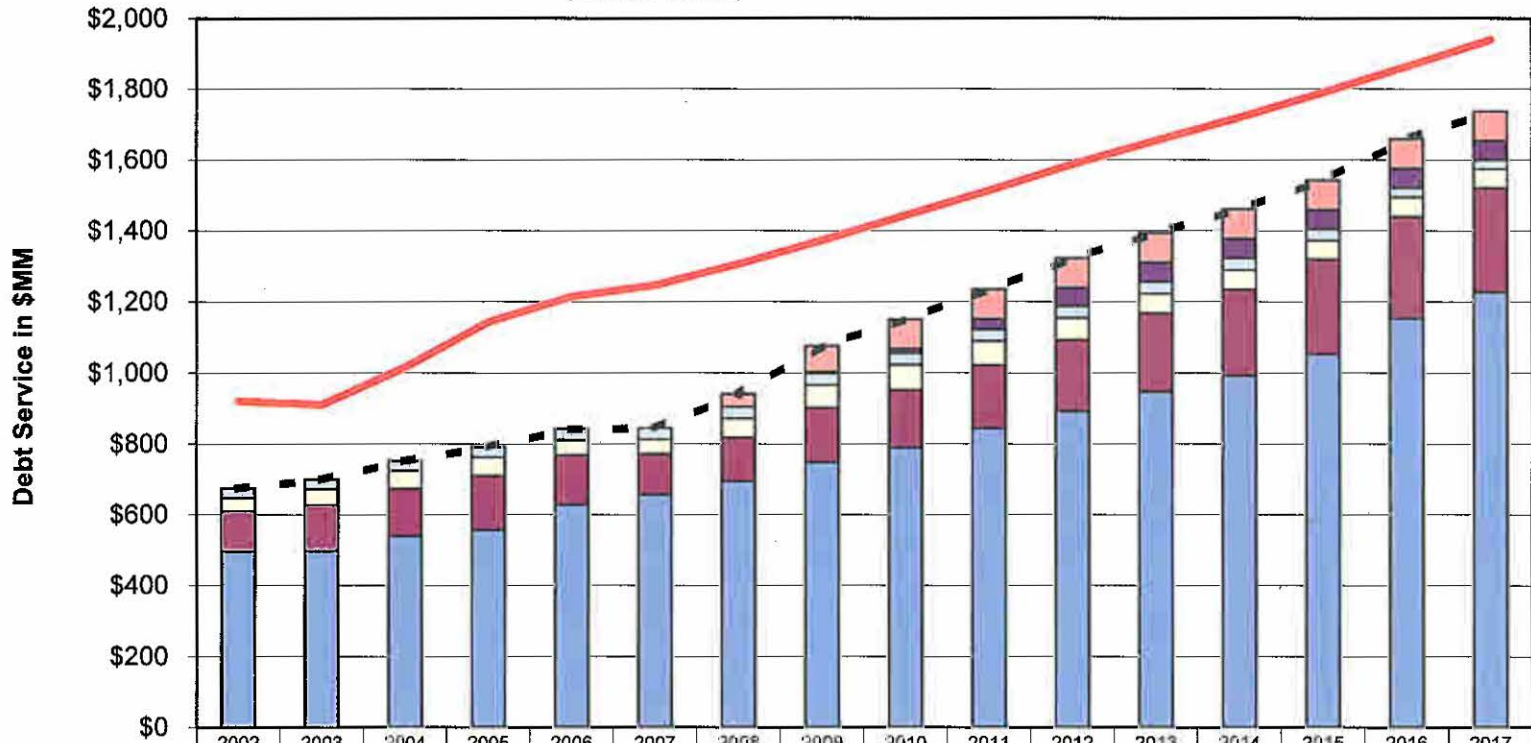
(c) Includes financings for multi-agency office buildings in St. Mary's and Calvert Counties, district court facilities in Baltimore and Prince George's Counties, headquarters building for MDOT, shuttle buses at BWI, water and wastewater facility at ECI, and the state office parking facility.

(d) includes equipment and energy leases

Assumptions: (\$ in millions)	2008	2009	2010	2011	2012
G.O. issues (Includes Tobacco buyout)	\$725.0	\$810.0	\$885.0	\$955.0	\$970.0
DOT issues	\$435.0	\$300.0	\$200.0	\$140.0	\$220.0
Stadium Authority issues	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0
New Capital Leases - Equip. & EPC	\$42.0	\$70.0	\$45.0	\$45.0	\$45.0
Garvee Bond Sales		\$425.0			
Bay Bonds Issued	\$60.0	\$70.0	\$170.0	\$225.0	\$30.0
Personal Income (billions) (Appendix A-1)	\$275.2	\$288.2	\$303.7	\$319.5	\$334.3

## Tax Supported Debt Service to Revenues

(see also Table 2)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Garvee Bonds							\$36	\$73	\$84	\$84	\$84	\$84	\$84	\$84	\$84	\$84
Bay Restoration Bonds								\$5	\$12	\$29	\$51	\$54	\$54	\$54	\$54	\$54
Stadium Authority	\$27	\$27	\$27	\$30	\$32	\$32	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$32	\$27	\$25
Capital Leases	\$38	\$46	\$52	\$52	\$44	\$42	\$54	\$64	\$71	\$68	\$62	\$56	\$56	\$54	\$55	\$53
DOT Consolidated Bonds	\$113	\$129	\$135	\$154	\$141	\$115	\$123	\$153	\$163	\$178	\$201	\$220	\$242	\$266	\$286	\$294
General Obligation Bonds	\$495	\$497	\$537	\$554	\$625	\$654	\$693	\$746	\$766	\$841	\$889	\$945	\$989	\$1,050	\$1,151	\$1,224
8.0% Benchmark	\$919	\$908	\$1,013	\$1,141	\$1,212	\$1,243	\$1,303	\$1,370	\$1,441	\$1,511	\$1,586	\$1,652	\$1,717	\$1,788	\$1,860	\$1,937
Total Tax Supported Debt Service	\$674	\$699	\$751	\$790	\$842	\$842	\$938	\$1,074	\$1,149	\$1,233	\$1,320	\$1,391	\$1,459	\$1,540	\$1,657	\$1,735

as of September 2007

TABLE 2A

**STATE TAX SUPPORTED DEBT SERVICE**  
**STATE TAX SUPPORTED DEBT SERVICE AS A PERCENT OF REVENUES**  
(Affordability criteria standard = 8% )  
(\$ in thousands)

Fiscal Year	General Obligation Bonds	DOT Consolidated Bonds		Stadium Authority	Bay Restoration Bonds		Total Tax Supported Debt Service	Total Revenues	Total Tax Supported Debt Service as a % of Revenues	Fiscal Year
		(a)	(b)		Capital Leases	Garvee Bonds				
2002	\$495,217	\$113,178	\$37,979	\$27,383			\$673,757	\$11,482,630	5.87%	2002
2003	\$496,870	\$128,694	\$46,152	\$27,035			\$698,751	\$11,351,220	6.16%	2003
2004	\$536,819	\$134,910	\$52,117	\$27,333			\$751,179	\$12,666,867	5.93%	2004
2005	\$553,783	\$153,655	\$52,239	\$30,480			\$790,157	\$14,260,280	5.54%	2005
2006	\$625,208	\$141,172	\$43,532	\$31,713			\$841,625	\$15,150,640	5.56%	2006
2007	\$654,055	\$115,000	\$41,636	\$31,725			\$842,416	\$15,539,237	5.42%	2007
2008	\$692,539	\$123,000	\$53,759	\$32,705		\$36,091	\$938,093	\$16,290,257	5.76%	2008
2009	\$745,847	\$153,000	\$64,284	\$32,569	\$4,981	\$73,421	\$1,074,103	\$17,124,773	6.27%	2009
2010	\$785,871	\$163,000	\$71,321	\$32,836	\$11,955	\$84,041	\$1,148,824	\$18,006,519	6.38%	2010
2011	\$841,099	\$178,000	\$67,803	\$32,720	\$28,891	\$84,038	\$1,232,553	\$18,893,251	6.52%	2011
2012	\$889,040	\$201,000	\$61,964	\$32,890	\$51,307	\$84,037	\$1,320,238	\$19,819,411	6.66%	2012
2013	\$944,655	\$220,000	\$55,601	\$32,892	\$54,296	\$84,040	\$1,391,485	\$20,648,352	6.74%	2013
2014	\$989,382	\$242,000	\$55,986	\$32,973	\$54,296	\$84,039	\$1,458,676	\$21,462,089	6.80%	2014
2015	\$1,050,421	\$266,000	\$53,693	\$31,741	\$54,296	\$84,046	\$1,540,197	\$22,344,132	6.89%	2015
2016	\$1,150,766	\$286,000	\$54,914	\$26,775	\$54,296	\$84,042	\$1,656,793	\$23,256,040	7.12%	2016
2017	\$1,224,275	\$294,000	\$53,230	\$25,437	\$54,296	\$84,036	\$1,735,273	\$24,210,471	7.17%	2017

## Assumptions: See Table 1

- (a) Payments for 2001, 2004, 2006 and projected 2007, 2008 and 2009 Qualified Zone Academy Bonds (QZAB's) have been included for fiscal years 2003 through 2025.  
(b) Does not include debt service on county transportation bonds. Highway user revenues from counties exceed debt service requirements.  
(c) Includes debt service on financings for multi-agency office buildings in St. Mary's and Calvert Counties, district court facilities in Baltimore and Prince George's Counties, headquarters building for MDOT, shuttle buses at BWI, water and wastewater facility at ECI, and the state office parking facility.  
(d) Includes debt service on equipment and energy leases

TABLE 2B

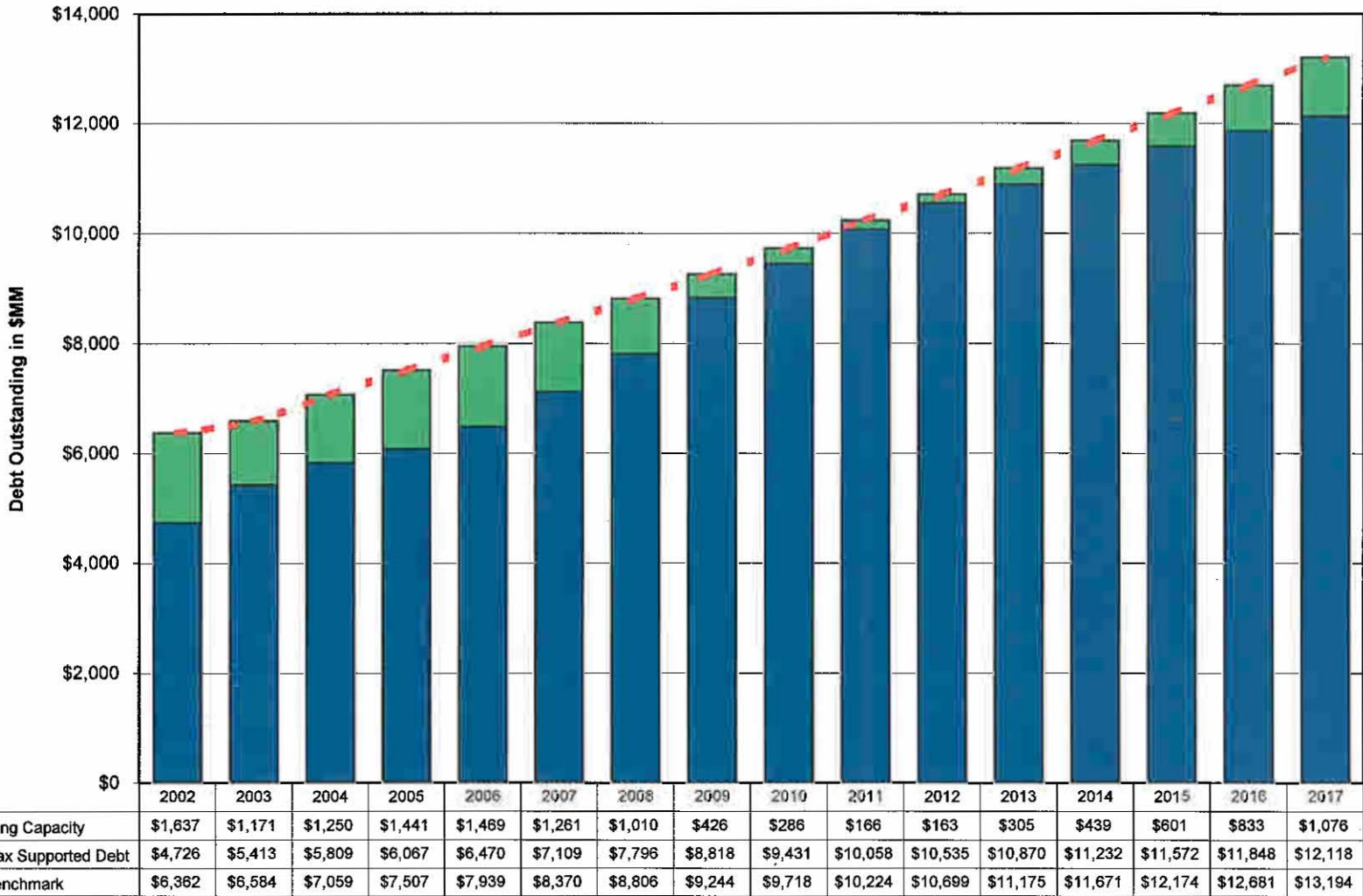
## STATE TAX SUPPORTED DEBT SERVICE AS A PERCENT OF DEDICATED REVENUES

Fiscal Year	General Obligation Bonds	DOT Consolidated Bonds		Stadium Authority	Bay Restoration Bonds	
		Capital Leases	Garvee Bonds			
2002	5.06%	6.81%	0.40%	100.56%		
2003	5.11%	8.03%	0.49%	123.17%		
2004	4.99%	7.16%	0.51%	122.93%		
2005	4.56%	7.37%	0.45%	140.40%		
2006	4.81%	6.65%	0.35%	147.99%		
2007	4.87%	5.48%	0.32%	145.53%		
2008	4.91%	5.80%	0.40%	146.66%		100.00%
2009	5.03%	7.00%	0.45%	146.05%	100.00%	100.00%
2010	5.38%	7.23%	0.48%	146.35%	100.00%	100.00%
2011	5.13%	7.58%	0.43%	146.73%	100.00%	100.00%
2012	5.15%	8.34%	0.38%	147.49%	100.00%	100.00%
2013	5.24%	8.89%	0.32%	147.50%	100.00%	100.00%
2014	5.26%	9.70%	0.31%	147.86%	100.00%	100.00%
2015	5.35%	10.43%	0.29%	149.02%	100.00%	100.00%
2016	5.61%	11.02%	0.28%	125.71%	100.00%	100.00%
2017	5.72%	11.11%	0.26%	119.42%	100.00%	100.00%

Note: Unlike Table 2A, Table 2B ratios are serviced by separate and specific revenue sources and have different denominators; therefore, ratios cannot be added across to provide a sum of combined ratio totals. Refer to "Appendix A-2, Revenue Projections."

### Available Debt Capacity Using the 3.2% Criterion

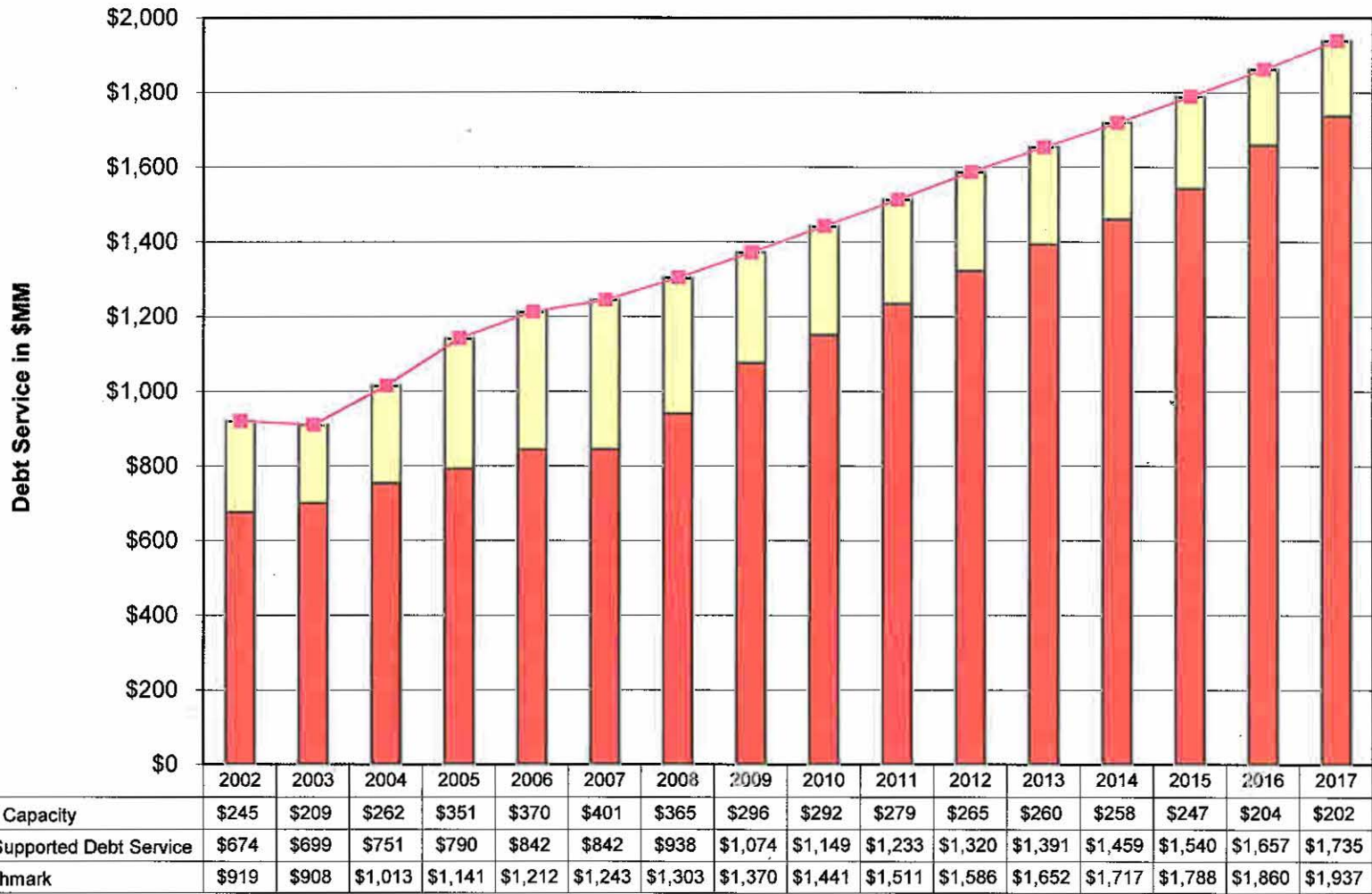
(see Table 3)



\* as of September 2007

### Available Debt Capacity Using the 8.0% Criterion

(See Table 3)



as of September 2007



Table 3

## Tax Supported Debt Outstanding and Debt Service Stress Test

(\$ in thousands)

### State Tax Supported Debt Outstanding as a Percent of Personal Income Under "Stress" Scenarios

Fiscal Year	Debt Outstanding	Personal Income	Current Ratios	(a)			(c)	
				Fiscal Year	Maximum Ratio	Minimum Personal Income	Difference	Additional Affordable Debt Outstanding
2008	\$7,796,358	\$275,188,810	2.83%	2008	3.20%	\$243,636,190	\$31,552,620	\$1,009,684
2009	\$8,817,644	\$288,866,000	3.05%	2009	3.20%	\$275,551,370	\$13,314,630	\$426,068
2010	\$9,431,288	\$303,677,160	3.11%	2010	3.20%	\$294,727,757	\$8,949,403	\$286,381
2011	\$10,058,265	\$319,504,560	3.15%	2011	3.20%	\$314,320,790	\$5,183,770	\$165,881
2012	\$10,535,270	\$334,330,560	3.15%	2012	3.20%	\$329,227,202	\$5,103,358	\$163,307
2013	\$10,870,042	\$349,204,750	3.11%	2013	3.20%	\$339,688,823	\$9,515,927	\$304,510
2014	\$11,232,012	\$364,722,910	3.08%	2014	3.20%	\$351,000,377	\$13,722,533	\$439,121
2015	\$11,572,353	\$380,431,700	3.04%	2015	3.20%	\$361,636,016	\$18,795,684	\$601,462
2016	\$11,848,198	\$396,290,600	2.99%	2016	3.20%	\$370,256,176	\$26,034,424	\$833,102
2017	\$12,118,168	\$412,305,400	2.94%	2017	3.20%	\$378,692,749	\$33,612,651	\$1,075,605

### State Tax Supported Debt Service as a Percent of Revenues Under "Stress" Scenarios

Fiscal Year	Debt Service	Revenues	Current Ratios	(b)			(c)	
				Fiscal Year	Maximum Ratio	Minimum Revenues	Difference	Additional Affordable Debt Service
2008	\$938,093	\$16,290,257	5.76%	2008	8.00%	\$11,726,160	\$4,564,097	\$365,128
2009	\$1,074,103	\$17,124,773	6.27%	2009	8.00%	\$13,426,281	\$3,698,492	\$295,879
2010	\$1,148,824	\$18,006,519	6.38%	2010	8.00%	\$14,360,298	\$3,646,221	\$291,698
2011	\$1,232,553	\$18,893,251	6.52%	2011	8.00%	\$15,406,907	\$3,486,345	\$278,908
2012	\$1,320,238	\$19,819,411	6.66%	2012	8.00%	\$16,502,976	\$3,316,435	\$265,315
2013	\$1,391,485	\$20,648,352	6.74%	2013	8.00%	\$17,393,561	\$3,254,792	\$260,383
2014	\$1,458,676	\$21,462,089	6.80%	2014	8.00%	\$18,233,446	\$3,228,643	\$258,291
2015	\$1,540,197	\$22,344,132	6.89%	2015	8.00%	\$19,252,464	\$3,091,668	\$247,333
2016	\$1,656,793	\$23,256,040	7.12%	2016	8.00%	\$20,709,914	\$2,546,127	\$203,690
2017	\$1,735,273	\$24,210,471	7.17%	2017	8.00%	\$21,690,917	\$2,519,555	\$201,564

This table demonstrates the minimum levels to which personal income and revenues could fall without violating the 3.2% and 8.0% criteria on projected debt and debt service levels.

(a) Holding debt outstanding constant, personal income could decline by indicated amounts and affordability ratios would not exceed the 3.2% maximum.

(b) Holding debt service constant, revenues could decline by indicated amounts and affordability ratios would not exceed the 8.0% maximum.

(c) Holding personal income and revenues constant, these figures indicate additional debt outstanding and debt service affordable without exceeding current maximum affordability ratios.

**E. Comparison of Recommendation and Capital Program**

The Committee's recommendation of \$935 million in general obligation authorizations provides a commitment for the FY 2009 Capital Improvement Program. However, the program and the recommendations fall short of total funding needs and the Committee recognizes that allocation decisions will have to be made by the Governor and General Assembly. The Committee's projections of tax-supported debt fully incorporates the most current capital program proposed by the Department of Transportation, the major non-general obligation debt issuer.

The current recommendation of \$935 million for fiscal year 2009 and an annual rate of increase of 3% should provide for at least \$300 million in GO bond funds for public school construction in fiscal year 2009, exceeding in nominal dollars the annual funding goal set by the law in 2004. The Committee recognized the documented need for increased school construction and renovation, the need to increase funding over time to meet the goal set forth in the Public School Facilities Act of 2004, and the challenge of meeting these goals with the escalation in building costs.

**F. Affordability Risk Analysis**

**Background**

Since 1989, the Committee has included in its Reports an *affordability risk analysis*: the analysis of the risk that a particular five-year general obligation bond authorization plan, if followed over time, might lead to a violation of the Committee's affordability criteria, even though the plan was deemed affordable at the time it was proposed. Beginning in its 2007 review, the Committee examined this risk over a ten year horizon.

**Components of Risk**

The Committee identified and reviewed the following risks in making a judgment about the ultimate affordability of its 2007 recommended authorization and the projected 3% increase in future authorizations:

- Changes in personal income
- Changes in and sources of revenues
- Interest rate risk
- Changes in the definition of tax-supported debt
- Changes in the bond issuance plans of non-general obligation issuers of tax-supported debt
- Changes within the general obligation bond program

### **Changes in Personal Income**

In the past, there have been significant adjustments to the estimates of personal income. These changes result from: (1) after-the-fact measurement changes by federal statisticians; and (2) revised projections by the State's Bureau of Revenue Estimates, which are used by the Committee. The former risk is clearly beyond the Committee's control. Although the federal estimates of personal income for a year may change by material amounts in the first two years after the close of the year, subsequent adjustments generally have been small.

Clearly, there is always a risk of reductions in projected levels of personal income. Maryland's economic growth over the next ten years will be affected by slower population growth, and the aging of the population, potentially slowing job growth. Although the risk of a downward revision in personal income sufficient to breach the affordability criterion of 3.2% is possible, it is not likely and may be deemed small if the Committee maintains its tradition of conservative long-term projections. In fact, the growth rate used to develop projections in *Appendix A-1* for 2008 through 2017 are all below the 10-year average for 1997 through 2006, which was 5.90%.

### **Changes in and Sources of Revenues**

*Appendix A-2* details the total revenues and its components from FY 1997 to FY 2017. Total revenues are comprised of general fund revenues, property taxes, bond premiums, Transportation Trust Fund revenues plus revenues attributed to GARVEE bonds, Bay Restoration Bonds and Stadium Authority Bonds. These projections do not take into account any possible changes in future tax rates or structures.

General Funds were projected by the Bureau of Revenue Estimates. Growth in General Funds ranged from 3.8% and 4.4% in FY 2007 and 2008 to the low 5% range from 2009 through 2012. Beginning in 2013, growth was assumed at 4.5%; (2.5% real growth and 2.0% inflation). Estimates were obtained for property tax revenue from the Department of Assessments and Taxation (DAT) for fiscal years 2008-2012. For fiscal years 2013 through 2017, after consultation with DAT, DBM and STO, the growth in property taxes was projected at a conservative 2.5%. Because bond premiums can be volatile and relatively minor, they are only projected through the current fiscal year.

Transportation Revenues in *Appendix A-2* represent the Transportation Trust Fund revenues. Lottery revenues that are transferred to the Stadium Authority are the source of Stadium revenues plus a ticket charge at the Hippodrome. The revenues for GARVEE bonds and Bay Bonds are included to the extent that they cover debt service. The source of GARVEE revenues are federal revenues dedicated to debt service; revenues dedicated to capital transportation projects are not included.

### **Interest Rate Risk**

Debt service is calculated for general obligation bonds assuming interest rates of 5% for the February 2008 sale. For the remaining issues through 2017, the rate is projected at 5.5%. These rates are within the State's experience in the last 12 years; the State's Financial Advisor has concurred with these estimates. The recent TIC for the 2007 Second Series that was sold on 8/1/2007 was 4.14% and there were 5% coupons for all maturities. See *Graph 3* for the history of TICS from 1988 to the present.

For leases, the analysis estimates rates at 4.5% for the shorter term capital equipment leases and 5.5% for the longer term energy leases. Current rates on capital equipment leases are 3.71% and 3.68% for a three year and five year lease respectively. The rate for energy leases for June 2007 is 4.07% for a 15 year lease.

The interest rate used by Maryland Water Quality Financing Administration for the Bay Restoration Bonds was 5.5%. Maryland Department of Transportation used 4.6% and 4.9% for the 2008 and 2009 sales respectively and 5.0% for all sales after 2010.

### **Changes in the Definition of Tax-Supported debt**

As demonstrated in Chart 1, the Committee's classification of GARVEE bonds and Bay Bonds as tax-supported debt has absorbed capacity that could have been available for GO and Transportation Bonds. Changes in the definition of tax-supported debt dictated by an outside authoritative group are unlikely but there would be a major impact if, for example, the bond rating agencies were to include State housing agency debt as tax-supported debt or if the Governmental Accounting Standards Board require long-term operating leases to be included on the State's balance sheet. Although changes in standards used by outside authoritative groups might have a major impact on measured affordability, such changes are likely to be implemented with ample lead time and would either only affect the "out-years" of the program or provide the Committee with time to adjust its program.

### **Changes in the Bond Issuance Plans of Other Components of State Tax Supported Debt**

Changes in the bond issuance plans for other issuers of tax-supported debt can take the form of expansion of existing programs, as was the case with the expanded Consolidated Transportation debt issuance associated with the 1992 gas tax increase, or a totally new program, such as the financings by the Maryland Stadium Authority or the Bay Restoration Bond program. Even if the Committee recognizes a potential new program, the exact timing of legal enactment and the amount of new debt are less certain, and so they are not included in these assumptions.

The assumptions regarding non-general obligation components of tax-supported debt and debt service are as described in Part II. The Department of Transportation's debt is expected to rise consistently over the next several years. The issuance of GARVEE bonds, supported by increased federal revenue, is projected at the statutory limit. The Stadium Authority is projecting the issuance of \$10 million in Fiscal Year 2008 and the issuance of Bay Restoration Bonds is

also anticipated beginning in fiscal year 2008. The projections for future equipment and energy lease purchase financings are based on surveys of state agencies. The Maryland Agricultural and Resource-Based Industry Development Corporation (“MARBIDCO”), a recently created instrumentality of the State possessing revenue bond issuance authority, is not expected to issue any tax-supported debt at this time. The status of this issuer’s program should be reviewed annually by the Committee.

**Changes within the General Obligation Bond Program**

Changes within the general obligation bond program may arise because of changes in: (1) the types and costs of facilities and other projects financed by general obligation bonds; or (2) changes in the speed at which authorized bonds are issued.

Changes in the types and costs of facilities do not necessarily affect total authorizations but may lead to a re-allocation of resources. The Committee's recommendations are made in terms of a total dollar amount of bonds, not in specific capital projects. Changes in construction costs, the availability of PAYGO funding, the need for unanticipated new projects, changes in federal tax laws, and a host of other variables influence both the need for general obligation bonds and the share of the total allocation allotted to each use. Such changes affect which assets can be acquired within a specific dollar amount of the program. These changes by themselves, however, affect neither the dollar amount of the Committee's assumed authorizations nor the ratio of debt outstanding compared to personal income. Therefore, without Committee or General Assembly action to alter the total dollars to be authorized in the plan, there is no affordability risk resulting from such changes within the general obligation plan.

Changes in the timing of issuance of authorized bonds, however, may affect the affordability criteria. Bonds authorized at a General Assembly session are not immediately issued. In fact, only half of the bonds authorized each year are typically issued within the ensuing two fiscal years and the remaining issuances occur over the next three years. The bonds are sold over an extended period of time as the projects are developed and cash is required to pay property owners, consultants, contractors, equipment manufacturers, etc. Consequently, the impact of a change in any year's debt authorizations translates slowly into issuances and affects the outstanding level of debt with a substantial lag. *Appendix B-1*, Proposed General Obligation Authorizations and Estimated Issuances converts the recommended levels of new general obligation bond authorizations into a projected level of annual issuances; it is assumed that all authorized debt will be issued. In addition to projecting issuances at prescribed levels, the State Treasurer’s Office monitors the disbursement pace of bond proceeds and adjusts issuance amounts as necessary.

While some projects currently authorized will be abandoned or completed for less than authorized, it is assumed that such unnecessary authorization will be de-authorized and re-appropriated into other approved projects. Although some authorizations may ultimately be cancelled rather than re-appropriated, the amount of such cancellations are expected to be immaterial to the analysis.

Any systematic change that would accelerate or retard the speed with which bonds are issued would increase or decrease the amount of debt outstanding and debt service and consequently affect both of the affordability ratios. Bond sales in fiscal year 2008 are currently estimated to total \$725 million although a year ago the 2006 CDAC Report projected that \$700 million in bonds would be sold in fiscal year 2008. The acceleration of the issuances of general obligation bonds in 2008 is due to an increased pace of expenditures from bond proceeds.

The Committee reviewed the issuance projections for the 2007 Report in light of the pattern of recent authorizations and issuances. The following chart compares projections to actual issuances. Timing can explain some of the differences between projections and issuances in a specific fiscal year. For instance, instead of two issues in fiscal year 2004, there was only one and, consequently, there were additional bonds issued to catch up in fiscal year 2005. However, the most important reason for accelerated issuances is the increase in authorizations which is depicted in the next chart.

<b>Comparison of Actual Issuances* to CDAC Projections</b> <i>(\$ in millions)</i>					
<b>Projected Issuances in CDAC Reports</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY2006</b>	<b>FY2007</b>	<b>FY2008</b>
2000	\$450	\$500	\$550	\$600	\$650
2001	\$425	\$450	\$550	\$600	\$650
2002	\$650	\$525	\$550	\$575	\$600
2003	\$700	\$625	\$600	\$600	\$625
2004	xxxx	\$650	\$650	\$650	\$675
2005	xxxx	xxxx	\$750	\$675	\$700
2006	xxxx	xxxx	xxxx	\$675	\$700
2007	xxxx	xxxx	xxxx	xxxx	\$725
<b>Actual Issuances</b>	\$500	\$775	\$750	\$675	\$725 (as of September 2007)

\* Issuances are for new money only, amounts do not include refundings.

Projected General Assembly Authorizations in Fiscal Years (\$ in millions)										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Projected Authorizations in CDAC Reports</b>										
<b>2007</b>							x	\$935	\$960	\$990
<b>2006</b>	x	x	x	x	x	x	\$810	\$835	\$860	\$890
<b>2005</b>	x	x	x	x	x	\$690	\$710	\$730	\$745	\$770
<b>2004</b>	x	x	x	x	\$670	\$685	\$700	\$715	\$630	\$645
<b>2003</b>	x	x	x	\$650	\$665	\$680	\$695	\$710	\$630	\$645
<b>2002</b>	x	x	\$740	\$555	\$570	\$585	\$600	\$615	\$625	\$640
<b>2001</b>	x	\$520	\$535	\$550	\$565	\$580	\$595	\$610	\$625	\$640
<b>2000</b>	\$475	\$490	\$505	\$520	\$535	\$550	\$565	\$580	\$595	\$610

Gray indicates those years where the increase in authorization from the prior year was approximately \$100 million or more.

#### **Fiscal Years 2009 - 2017 Risks**

In considering the affordability risk associated with the 2009-2017 projected authorizations in this year's report, the major risks appear to be:

- uncertainty regarding the rate of growth in personal income when economic growth is moderating,
- acceleration in the issuance of general obligation bonds,
- authorizations of general obligation bonds greater than the 2007 recommendation,
- potential authorization of tax-supported debt to finance projects that are presently unknown to the Committee,
- interest rate risk, especially noting the significant rate uncertainties at the present (mid-2007) time.

There do not appear to be any federal regulatory changes that might lead to an acceleration of general obligation debt issuances. Regulatory actions are from time to time announced or proposed and litigation is threatened or commenced which, if implemented or concluded in a particular manner, could adversely affect the market value of the Bonds. An example of such litigation is the case of *Davis v. Kentucky Department of Revenue*, 97 S.W.3d 557 (2006), now before the U.S. Supreme Court, challenging Kentucky's taxation of bonds issued by other states and their political subdivisions differently than it taxes bonds issued by Kentucky and its political subdivisions. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the Bonds or the market value thereof would be impacted thereby. Therefore, and recognizing that many bond market participants think it unlikely that the ruling would be unfavorable to Kentucky, we have not considered this to be a risk to our interest rate

assumptions. The effect of any federal budget actions are unclear and not apparent in the near term. Indeed, the on-going process of military base adjustments is expected to bring a significant number of high level jobs and net positive revenue to Maryland. Finally, there is no evidence that the rating agencies or the Governmental Accounting Standards Board are contemplating changes in standards that would expand the definition of tax-supported debt.

A substantial acceleration of the issuances of general obligation bonds is unlikely. Current planned issuance levels are expected to be sufficient to provide adequate capital cash levels. The changes in the issuance plans of other components of tax-supported debt also appear to pose limited risk at this time. The assumed issuances by the Department of Transportation are consistent with current statutory limits, revenue forecasts and debt service coverage criteria. GARVEE bonds and Bay Restoration Bonds are included as a component of State tax-supported debt and are incorporated into the analysis.

### **Conclusion.**

The analysis suggests that the Committee's projection of general obligation bond authorizations is currently affordable and, due to conservative assumptions, the risks of exceeding the affordability criteria are limited. However, there is a small margin between the projected ratio of debt outstanding to personal income 3.15% in 2011 and 2012 and the benchmark of 3.2%. As portrayed in Chart 1 and Table 1, this ratio declines as the Bay Bonds and GARVEE bonds mature.

None of the potential risks – limited growth of personal income, accelerated sales of G.O. bonds, increased authorizations of either G.O. bonds or other components, or interest rate risk – pose a serious threat of breaching the affordability criteria. Projections used by the Committee for personal income growth are below the average actual income growth for the last ten years. The need for accelerated sales of G.O. bonds appears remote. Finally, authorizations of tax-supported debt components (either G.O. or other) are wholly within the State's control. The Committee believes that the \$935 million authorization recommendation in the first year of the current ten year program and 3% annual increases for the next nine years is prudent and within current projections of capacity. Within these levels, relying upon prudent timing of authorization and issuances, and including the use of available PAYGO general funds, the Committee believes that many of the current projected needs in school construction, transportation, higher education and other essential areas can be met; but the Committee also acknowledges that the recommendation falls far short of total funding requests.



## **VI. HIGHER EDUCATION DEBT**

### **A. Background**

Chapter 93, Laws of Maryland, 1989, now codified in Title 19 of The Education Article (the "Statute"), altered the revenue bonding framework and authority of the University System of Maryland (USM), Morgan State University, and St. Mary's College of Maryland and also assigned certain duties relevant to those alterations to the Capital Debt Affordability Committee. Chapter 673, Laws of Maryland, 1994, required the Capital Debt Affordability Committee to also review the size and condition of any debt of the Baltimore City Community College.

The Statute provided a framework for the issuance of higher education debt. Specifically, the Statute distinguished between auxiliary facilities (which generate fees or income arising from the use of the facility) and academic facilities (which are primarily instructional but can include any facilities not defined as auxiliary). The statute also authorized institutions to issue bonds to finance either auxiliary or academic facilities (maximum terms of 33 and 20 years, respectively) with the stipulation that any academic facilities so financed must first be expressly approved by an act of the General Assembly as to both project and amount.

Furthermore, the Statute specified fund sources that could be pledged as security as well as those that could be used for debt service payments. Specifically available to be pledged as security are auxiliary fees (fees and rents arising from the use of the auxiliary facility) and academic fees (tuition and student fees). The systems specifically cannot pledge: (1) a State appropriation; (2) contracts, grants, or gifts; or (3) any other source not expressly authorized by the General Assembly. Debt service on bonds is payable solely from auxiliary fees, academic fees, a State appropriation expressly authorized for that purpose, or revenues from contracts, gifts, or grants, as appropriate.

### **B. CDAC Duties**

In addition to defining higher education bond authority and authorizing certain projects, the Statute directs the Capital Debt Affordability Committee to:

1. "...review on a continuing basis the size and condition of any debt of the University System of Maryland, Morgan State University, St. Mary's College of Maryland, and Baltimore City Community College;"
2. "In preparing an estimate with respect to the authorization of any new State debt" [i.e., general obligation debt] to "take into account as part of the affordability analysis any debt for academic facilities to be issued by a System;" and
3. "...submit to the Governor and the General Assembly the Committee's estimate of the amount of new bonds for academic facilities that prudently may be authorized in the aggregate for the next fiscal year by the University System of Maryland, Morgan State University, and St. Mary's College of Maryland."

Charge #1 was met during the meetings of CDAC when representatives from all four institutions presented debt information to the Committee. A summary of the data presented is in Section C below. Charges #2 and #3 are discussed in Sections D, E and F below.

**C. Size and Condition of any Debt of the University System of Maryland, Morgan State University, St. Mary's College of Maryland, and Baltimore City Community College**

***University System of Maryland***

Since 1989, the General Assembly has authorized bonds totaling \$611.2 million for various academic facilities for the University System of Maryland. Of this amount, \$30.0 million was authorized by the 2007 General Assembly (Chapter 489, Laws of Maryland, 2007).

In fiscal 2007, the total issuance for academic and auxiliary facilities was \$83 million. The University System estimates its debt outstanding (Bonds, Certificates of Participation, Capital Leases and Loans) at \$956,725,000 at June 30, 2007.

Fitch Ratings and S&P have rated the bonds AA and Moody's rated them Aa2. All ratings have a stable outlook. Credit strengths include strong student demand, sound financial operations and a large, diverse revenue base. Credit challenges noted by the rating agencies include potential increases in capital spending to meet enrollment growth, limited liquidity, and possible decreases in State support. According to a 2007 Moody's report, the median rating for public universities is A2, with the average climbing to Aa3 when weighted by the amount of rated debt.

The following are the projected issuances for the University System of Maryland through 2013.

<b>University System of Maryland</b>			
<b>Projected Bond Issuances</b>			
	<b>Auxiliary</b>	<b>Academic</b>	<b>Total</b>
<b>FY</b>	<b>(\$ in thousands)</b>		
2008	\$65,000	\$30,000	\$95,000,000
2009	\$67,000	\$33,000	\$100,000,000
2010	\$73,000	\$27,000	\$100,000,000
2011	\$73,000	\$27,000	\$100,000,000
2012	\$73,000	\$27,000	\$100,000,000
2013	\$73,000	\$27,000	\$100,000,000

### ***St. Mary's College of Maryland***

Debt outstanding at June 30, 2007 includes: Revenue Bonds totaling \$41.44 million, a \$4.0 million Bond Anticipation Note and a \$2.8 million capitalized lease related to an energy performance contract. Moody's has rated the bonds A2 with a stable outlook. Currently, there are no projections for future bond issuances.

### ***Morgan State University***

Morgan State University is rated A1 by Moody's Investors Service and A+ by Standard and Poor's. The University was placed on credit watch by Moody's due to a downturn in freshman enrollment in the fall of 2005. However, there has been a resurgence in enrollment and Moody's has indicated that the University has a sound market position. A formal review by Moody's is scheduled in a few months.

Of the authorized issue limit of \$88 million, \$66 million of debt is outstanding as of June 30, 2007. The University does not have immediate plans for the issuance of additional debt.

### ***Baltimore City Community College***

BCCC has no bonds outstanding and has no plans to issue bonds in fiscal year 2008. In any case, BCCC would not be included in the Committee's estimate of the amount of new bonds for academic facilities that prudently may be authorized for the next fiscal year, because BCCC does not have the authority to issue bonds for academic facilities but only for auxiliary facilities.

BCCC is currently exploring the feasibility and desirability of various projects that might be funded by the issuance of auxiliary bonds or through capital leases during the next several fiscal years. In fiscal year 2002, BCCC entered into a \$1.2 million, 5-year capital lease for a computer network upgrade through the State's master equipment lease purchase financing program.

**D. Incorporating Higher Education Academic Debt into the Affordability Analysis**

The language in the statute expanding the Committee's charge states: "In preparing an estimate with respect to the authorization of any new State debt [i.e., general obligation debt], the Committee shall take into account as part of the affordability analysis any debt for academic facilities to be issued by a system." This language, however, is not explicit regarding the meaning of "take into account."

The statute does not direct, nor has the Committee elected to include higher education debt as a component of State tax-supported debt for purposes of the capacity criteria or affordability analysis. Consequently, the Committee's recommendations relating to new authorizations of general obligation debt and higher education academic debt are made independently for the following reasons:

1. The rating agencies do not consider debt issued by institutions of higher education as State tax-supported debt. The debt of the systems, either currently outstanding or related to future issuances, is not included by the rating agencies in determining the rating of the State's general obligation bonds.
2. Both the statutory structure of higher education debt and the current budgetary policies related to higher education debt underscore the separation of higher education debt and tax-supported debt. The Statute provides that higher education debt may not be secured by a pledge of the issuer's general fund appropriation. The Statute further provides that no general funds may be used to pay debt service unless specifically authorized in the budget.
3. The revenue sources that secure the bonds are under the direct control of the systems and not directly subject to the approval of either the Governor or the General Assembly.

The Committee believes that its analysis, discussions, and deliberations of higher education debt levels, capacity, and needs address the legislative intent to take into account higher education academic debt.

**E. University System of Maryland Debt Capacity Study**

In 1994, USM requested their financial advisor, Public Financial Management, Inc. (PFM), to prepare an analysis of USM's debt capacity. PFM used 1993 data to compare USM to a group of 26 peer public universities that were rated either AA-, AA, or AA+ by Standard and Poor's Ratings Group. (Standard and Poor's rating of USM debt was AA+). PFM's analysis showed that USM favorably compares in seven out of ten criteria and recommended that debt service not exceed 5.5% of unrestricted current fund expenditures and mandatory transfers (UCF+MT). The remaining three criteria identified as areas to monitor in the future were: (1)

endowment (low in comparison to peers); (2) debt to endowment (comparatively high); and (3) unrestricted monies as a percent of debt (comparatively low).

On March 25, 1995, the Board of Regents of the University System of Maryland approved a debt capacity policy which required that debt service not exceed 5.5% of current UCF+MT, unless the debt to endowment ratio decreased or the ratio of unrestricted available funds to total debt increased. The policy also required that the Capital Improvement Plan must be consistent with the debt capacity policy and provided criteria to determine which projects should be financed.

USM's financial advisor, Public Financial Management, is working with the Chancellor's Office to develop a new debt capacity policy as a result of the rating agency concerns regarding liquidity and, also, financial reporting changes mandated by Government Accounting Standards Board Statement No. 35 – *Basic Financial Statements and Management Discussion and Analysis for Public Colleges and Universities*.

The USM has routinely monitored the relationship between expendable resources and debt and is committed to maintaining expendable resources that are not less than 50% of outstanding debt. Expendable resources include unrestricted net assets of the USM and its affiliated foundation with adjustments for certain long term liabilities. As recommended by the Spending Affordability Committee, this Committee will include a review of the University System's ratio of expendable resources to debt outstanding. The following table includes actual data for fiscal years 2003 through 2006 and projections for fiscal years 2007 through 2008:

University System of Maryland			
Ratio of Expendable Resources to Debt Outstanding			
(\$ in thousands)			
FY	Expendable Resources	Debt Outstanding	Ratio of Expendable Resources to Debt Outstanding
2003	\$514,726	\$960,000	53.62%
2004	\$646,927	\$998,073	64.82%
2005	\$743,000	\$1,000,000	74.30%
2006	\$758,000	\$935,000	81.07%
2007 Projected	\$788,619	\$955,648	82.52%
2008 Projected	\$718,519	\$984,485	72.98%

Source: University System of Maryland

**F. 2007 Recommended Authorization for Higher Education Academic Debt**

The Committee's charge is to submit an "estimate of the amount of new bonds for academic facilities that prudently may be authorized in the aggregate for the next fiscal year by the University System of Maryland, Morgan State University, and St. Mary's College of Maryland." This charge, therefore, requires the Committee to distinguish between burdens imposed by academic debt and those imposed by auxiliary debt in arriving at a recommendation for academic debt alone. From a credit analyst's point of view, however, the aggregate level of a system's debt is critical, while the type of debt (academic versus auxiliary) has no relevance to the credit analysis.

One approach to determining a prudent amount of new academic debt to be authorized is to start with the aggregate level of debt that each system anticipates issuing. If it is estimated that the level of debt is prudent over time, then it is reasonable for the Committee to accept the aggregate total and also to accept the breakdown (between academic and auxiliary) proposed by a system.

The guidelines initially adopted by the Committee to judge debt manageability are those contained in the rating methodology used by one of the major rating agencies. Standard and Poor's uses five factors to rate a public institution's debt (over a time frame of several years): (1) the rating of the State; (2) the State's general financial support for higher education as a whole; (3) the State's financial support for the particular institution; (4) the institution's demand and financial factors; and (5) the security pledge. The first, second, and fifth factors are the same for all four systems. All systems benefit from the State's AAA rating; all are part of public higher education in Maryland; and all can offer the same types of security.

The third factor is only relevant to Morgan State University, St. Mary's College of Maryland and Baltimore City Community College, since the University System of Maryland receives approximately 89% of the State general funds appropriated to the four systems. The fourth factor, the institution's demand and financial factors, encompasses a host of data dealing with the student body, financial performance, and components of debt.

*Table 4* displays information on the debt of each of the four higher education systems, compliance with statutory limitations and evaluates financial performance.

1. Legislation limits the aggregate principal amount of revenue bonds outstanding and the present value of capital lease payments, less the amount of any reserves established therefore, for both academic and auxiliary facilities. The current statutory limits are \$1,050.0 million for the University System of Maryland, \$88.0 million for Morgan State University, \$60.0 million for St. Mary's College of Maryland, and \$15.0 million for Baltimore City Community College. All four higher education systems are within the statutory limits as of June 30, 2007.

2. A key measurement of financial performance frequently used by credit analysts is debt burden; that is, debt service as a percent of the sum of unrestricted current fund expenditures plus mandatory transfers. If that ratio exceeds 10%, the institution is considered highly leveraged. Comparisons of public institutions in one state to those in another state may not be meaningful, since the level of state support varies so widely. The ratios range from below 2% to over 10% and do not necessarily correlate to ratings, since many other factors are taken into account in evaluating credit worthiness.

For purposes of this analysis and for the CDAC recommendation, the relevant measure is debt burden. As can be seen from the final column in **Table 4**, each of the system's debt issuance plans would result in a debt burden level well below the 10% "highly leveraged" threshold established by Standard & Poor's. The USM, moreover, is within its 5.5% debt capacity limit.

Considering that each of the system's debt issuance plans would result in a debt burden level well below the 10% "highly leveraged" threshold established by Standard & Poor's and within the 5.5% debt capacity limit, there appears to be no need for the Committee's recommendation to differ from the systems' plans at this time. Therefore, the Committee recommends a limit of \$33 million of new bonds for USM academic facilities to be authorized in the aggregate for the next fiscal year. Morgan State University and St. Mary's College of Maryland do not propose to issue bonds for academic facilities in fiscal year 2009.

The Committee's recommendation to the Governor and the General Assembly to authorize \$33 million for new academic facilities bonds for the University System of Maryland for fiscal year 2009 is in accordance with the 2007 MCCBL, Chapter 488, Laws of Maryland, 2007, which states under "University System of Maryland":

Provided that it is the intent of the General Assembly that \$5,000,000 of University System of Maryland Academic Revenue Bonds be provided for the University of Maryland, College Park School of Journalism in fiscal 2009 and that the Capital Debt Affordability Committee authorize \$30,000,000 in Academic Revenue Bonds in fiscal 2009 to accommodate this deferral. The deferral of these funds to fiscal 2009 shall not be construed as delaying construction of the building.

Further provided that it is the intent of the General Assembly that remaining design funds for the University of Maryland, Baltimore Pharmacy Hall Addition and Renovation project be provided in fiscal 2009.

Further provided that it is the intent of the General Assembly that funds for the construction of the New Fine and Performing Arts Building at Bowie State University be authorized in fiscal 2010.

TABLE 4

**HIGHER EDUCATION DEBT**  
**Total Auxiliary and Academic**  
**(\$ in thousands)**

Fiscal Year	Projected Issuances		Projected Debt Outstanding as of June 30	Projected Debt Service for fiscal year	Unrestricted Current Fund Expenditures plus Mandatory Transfers	Ratio of Debt Service to UCF Expenditures plus Mandatory Transfers
	Auxiliary	Academic				
<b>University Systems Of Maryland</b>						
2008	\$65,000	\$30,000	\$984,485	\$109,736	\$2,925,666	3.75%
2009	\$67,000	\$33,000	\$1,011,999	\$119,100	\$2,984,179	3.99%
2010	\$73,000	\$27,000	\$1,042,615	\$117,136	\$3,043,863	3.85%
2011	\$73,000	\$27,000	\$1,071,215	\$122,074	\$3,104,740	3.93%
2012	\$73,000	\$27,000	\$1,099,883	\$124,675	\$3,166,835	3.94%
2013	\$73,000	\$27,000	\$1,131,330	\$124,712	\$3,230,171	3.86%
<b>Morgan State University</b>						
2008			\$63,141	\$6,160	\$145,458	4.23%
2009			\$61,324	\$6,267	\$152,004	4.12%
2010	\$20,000		\$79,213	\$7,672	\$158,844	4.83%
2011			\$75,756	\$7,701	\$165,992	4.64%
2012			\$72,113	\$7,712	\$173,462	4.45%
2013			\$68,280	\$7,709	\$181,268	4.25%
<b>St. Mary's College of Maryland</b>						
2008			\$44,015	\$2,961	\$57,926	5.11%
2009			\$42,965	\$2,953	\$60,243	4.90%
2010			\$41,625	\$2,953	\$62,653	4.71%
2011			\$40,240	\$2,947	\$65,159	4.52%
2012			\$38,795	\$2,905	\$67,765	4.29%
2013			\$33,290	\$2,792	\$70,476	3.96%
<b>Baltimore City Community College</b>						
2008			\$432	\$108 (a)	\$62,922	0.17%
2009			\$324	\$108 (a)	\$63,914	0.17%
2010			\$216	\$108 (a)	\$69,161	0.16%
2011			\$108	\$108 (a)	\$72,879	0.15%
2012			\$0	\$0	\$77,144	0.00%
2013			\$0	\$0	\$81,702	0.00%

Standard & Poor's criteria is, if a ratio is greater than 10%, the institution is considered highly leveraged. USM has a debt capacity limit of 5.5%

(a) Includes lease payment of \$108 for modular unit financed through the Treasurers Office.



## **VII. REVIEW OF AFFORDABILITY CRITERIA, EFFECT OF DIMINISHED RESOURCES ON THE CAPITAL PROGRAM AND THE CAPITAL BUDGET**

### **A. Request of the General Assembly**

The Senate Budget and Taxation Committee and the House Committee on Appropriations requested the 2007 Capital Debt Affordability Committee to review affordability criteria and the capital program and budgeting as described below.

*Chapter 43 of 1978 created the Capital Debt Affordability Committee (CDAC) to advise the Governor and General Assembly on State debt policy. At the time, the committee developed affordability guidelines based on the State's debt policy goals. Initially, the goal was to reduce overall State debt levels, which were about twice as high as they currently are. When State debt levels declined to the proposed levels, the State's policy goal no longer was to reduce the level of debt and the criteria were modified. Currently the State faces diminished capacity, high capital demand, large and multiple-year projects, and a structural deficit. The committees request the CDAC reevaluate the affordability criteria to make them more compatible with the current fiscal condition and needs and report its findings in its annual report due September 10, 2007. The CDAC's review of the criteria shall include, but is not limited to:*

- (1) the effect of diminished capacity on the capital program;*
- (2) the demand for large and multi-year capital projects;*
- (3) the availability of resources to support capital project debt service; and*
- (4) advantages and disadvantages of adopting a capital biennial budget.*

### **B. Committee's Review**

In response to the request from the General Assembly, the Committee met on July 25, 2007 to review presentations by the Department of Budget and Management and the State Treasurer's Office. The following summarizes the discussions and presentations.

#### ***History and Background of the Affordability Criteria***

##### **a) History of Criteria**

Between 1979 and 1986 the Capital Debt Affordability Committee considered and evaluated three criteria before recommending general obligation bond authorizations. The criteria were:

- 1) Debt Outstanding should not exceed 3.2% of personal income;
- 2) Debt Service should not exceed 8% of revenues; and
- 3) "New authorizations should be kept in the range of redemptions over the near term." This criterion was also known as the "get out of debt" criterion and it was the controlling criterion during these years. Because new authorizations matched

redemptions or principal payments, the total debt outstanding was essentially frozen while revenues and personal income grew over these years. The third criterion satisfied the goal of the Committee to reduce what was considered to be a high debt level.

In 1987, the CDAC determined that the third criterion was no longer appropriate<sup>2</sup> and also acknowledged that the remaining two criteria were originally established for General Obligation Bonds. “These criteria (3.2% and 8%) were adopted by the Committee solely for the analysis of general obligation debt.”<sup>3</sup> However, the Committee’s analysis had expanded to encompass all tax-supported debt and included not only General Obligation Bonds, but also Transportation Bonds, capital leases and Stadium Authority Bonds. (This was codified by Chapter 241, Laws of Maryland, 1989) Nevertheless, the Committee decided to continue to use the original criteria of 3.2% and 8% while recognizing that ultimately they would need to develop techniques to insure that major components of tax-supported debt are in appropriate balance. In the 1987 report the Committee stated, “At the present time, the Committee is not prepared to recommend a set of principles for allocating the comprehensive affordability limit.”<sup>4</sup>

Discussion continued in 1988 regarding the continued use of the original criteria. After a survey of market participants, the Committee decided that the criteria need not be changed despite the inclusion of other tax supported debt because the continuity of the criteria was important, particularly since Maryland’s debt levels exceeded the national median.<sup>5</sup>

Most importantly, the 1987-1988 CDAC apparently chose not to address any changes in the criteria because, after years of limiting the amount of new debt by implementing the third criteria, both ratios remained well within the guidelines - even after expanding the analysis from G.O. Bonds to tax-supported debt. The actual ratios for 1960, 1965, 1970 and 1975 through 2007 for both criteria follow.

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<sup>2</sup> 1987 CDAC Report, page 33

<sup>3</sup> 1987 CDAC Report, page 31

<sup>4</sup> 1987 CDAC Report, pages 33 and 34

<sup>5</sup> 1988 CDAC Report, page 19

## History of Affordability Ratios

	Debt as a % of Personal Income		Debt Service as a % of Revenues	
	GO Debt Only	Tax-Supported includes GO, DOT, Cap Leases & Stadium Auth. (4)	GO Debt Service as a % of State Revenues (1) (2)	Tax-Supported includes GO, DOT, Cap Leases & Stadium Auth. (4)
1960	3.11%		5.23%	
1965	3.12%		5.10%	
1970	3.34%		3.35%	
1975	5.26%		9.78%	
1976	5.87%		10.17%	
1977	6.53%		10.55%	
1978	6.11%		10.60%	
1979	5.41%		10.55%	
1980	4.76%		10.46%	
1981	4.48%		10.63%	
1982	4.24%		10.60%	
1983	4.43%		10.32%	
(3) 1984		4.15%		10.16%
(3) 1985		3.63%		9.61%
(3) 1986		3.12%		8.80%
1987		2.87%		7.77%
1988		2.71%		6.99%
1989		2.51%		6.78%
1990		2.64%		6.85%
1991		2.90%		6.74%
1992		3.01%		6.25%
1993		2.97%		6.13%
1994		3.00%		5.50%
1995		3.04%		6.09%
1996		3.01%		6.46%
1997		2.93%		6.45%
1998		2.85%		6.45%
1999		2.78%		5.84%
2000		2.50%		5.73%
2001		2.36%		5.45%
2002		2.38%		5.87%
2003		2.63%		6.16%
2004		2.63%		5.93%
2005		2.59%		5.54%
2006		2.61%		5.56%
(4) 2007		2.72%		5.42%

(1) Gross GO debt service plus debt service on assumed local school debt minus debt service on loans repayable by local governments, State agencies and others.

(2) Revenues include general fund revenues plus property tax revenues.

(3) Various components of tax-supported debt begin in the 1988 report which recalculates the ratios beginning in 1984

(4) GARVEE Bonds are first issued in 2007 and consequently are considered tax-supported debt beginning in 2007

**b) Why are these criteria used? Are there other criteria that could be used?**

The rating agencies frequently reference the first criterion, debt outstanding as a percent of personal income, in their rating reports. This ratio is used because personal income is an independent, consistent measure and readily available through the Bureau of Economic Analysis. In fact, Moody's issues an annual report ranking the states using this criterion. Fitch Ratings notes that, "The burden of state debt is best measured by relating net tax-supported (or resource supported) debt to personal income as state revenue systems are based on consumption and income, unlike those of local government that depend primarily on real estate values translated into property tax revenues."<sup>6</sup>

However, most states prefer the second criterion because debt service as a percent of revenues is a better measure for and indicator of State financial management, i.e., the State has control of both variables – revenues and debt service through the authorization of debt.

Other ratios are also sometimes used by rating agencies and other issuers. Debt per capita is one such benchmark but it does not calculate the ability of the issuer to repay the debt and, consequently, is not as relevant as the first criterion, debt as a percent of personal income, particularly for a wealthy state such as Maryland. Another guideline is debt as a percentage of the taxable value of real property. However, this ratio is generally more relevant for local governments whose predominate source of revenue is property taxes.

**c) Effect of including bonds other than G.O. Bonds in Tax-Supported Debt**

Since 1987, tax-supported debt has included General Obligation Bonds, Consolidated Transportation Bonds, Capital Leases, and Maryland Stadium Authority Bonds. The 1987 CDAC Report included all these components into tax supported debt because "the rating agencies and investment community make a more comprehensive measure of Maryland's debt ..."<sup>7</sup>

However, GARVEE Bonds (first issued in 2007) and Bay Restoration Bonds (first issuance projected in 2008) are now also identified as tax-supported debt. In 2004, the Committee, after consulting with counsel, included Bay Restoration Bonds as a component of tax supported debt because the restoration fee is applied broadly across the State. The General Assembly expanded the scope of tax-supported debt in Chapters 471, 472, Laws of Maryland, 2005 by explicitly recognizing debt as tax-supported when secured by a pledge of future federal aid from any source.

The inclusion of all these components does not impact the debt service to revenues criterion because the total debt service is offset by Transportation Trust Fund revenues, a portion of the lottery revenues for the stadium bonds and, to the extent of the debt service for Bay

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<sup>6</sup> Fitch Ratings, December 5, 2006

<sup>7</sup> 1987 CDAC Report, page 31

Restoration Bonds and GARVEE Bonds, the revenues from the Bay Restoration Fund and federal transportation revenues, respectively.

However, when comparing debt outstanding to personal income, even though not all tax-supported debt is supported by general fund revenue, there are no similar adjustments to personal income. This criterion is projected to approach the 3.2% benchmark, especially as GARVEE bonds and Bay Bonds are issued. This situation has led some to say that this criterion has become the controlling criterion in the Committee's analysis of debt affordability.

#### **d) Other States' Criteria**

In January 2007, the State Treasurer's Office conducted an initial survey of other states' debt managers to determine what affordability criteria they used. A summary of the approximately 15 responses was distributed to the Committee at the July 25, 2007 meeting.

Three themes emerged from the inquiry:

- a. States differ widely in what is financed by their tax-supported debt. For example, some states finance public school construction and in other states, this is done by local school districts. So a comparison of ratios among the states can be misleading. In a comparison among states, the overall debt burden on the citizens as reflected in the personal income criteria may be identical but the allocation between local and state tax supported debt may differ significantly.
- b. Some states are trying to decide what components should be included as tax supported debt. For instance, Georgia (another AAA state), reported that they have two different limits, with and without GARVEE debt, because of the divergence in the treatment of GARVEE bonds by the rating agencies.
- c. Most states focus on the Debt Service to Revenues criterion. While they may measure debt to personal income and debt per capita, the driver of debt affordability is the debt service to revenues calculation.

#### **e) Rating Agency Guidance**

On July 31, 2007, Fitch Ratings released a report prior to the State's issuance of \$375 million of General Obligation bonds. The report noted the 15 year maturity limit, strong, centralized debt oversight and the state's debt affordability measures as key credit strengths. "State affordability criteria include maintaining tax-supported debt at or below 3.2% of personal income and that debt service consume no more than 8% of state revenues. Growing capital needs may pressure these debt limits going forward, driven in particular by population and job growth related to military base realignment, education, and transportation."

Standard & Poor's has indicated that a debt affordability model is one of the top ten management characteristics of highly rated credits. They consider how the model is established and used by the government and the track record in adhering to the affordability parameters

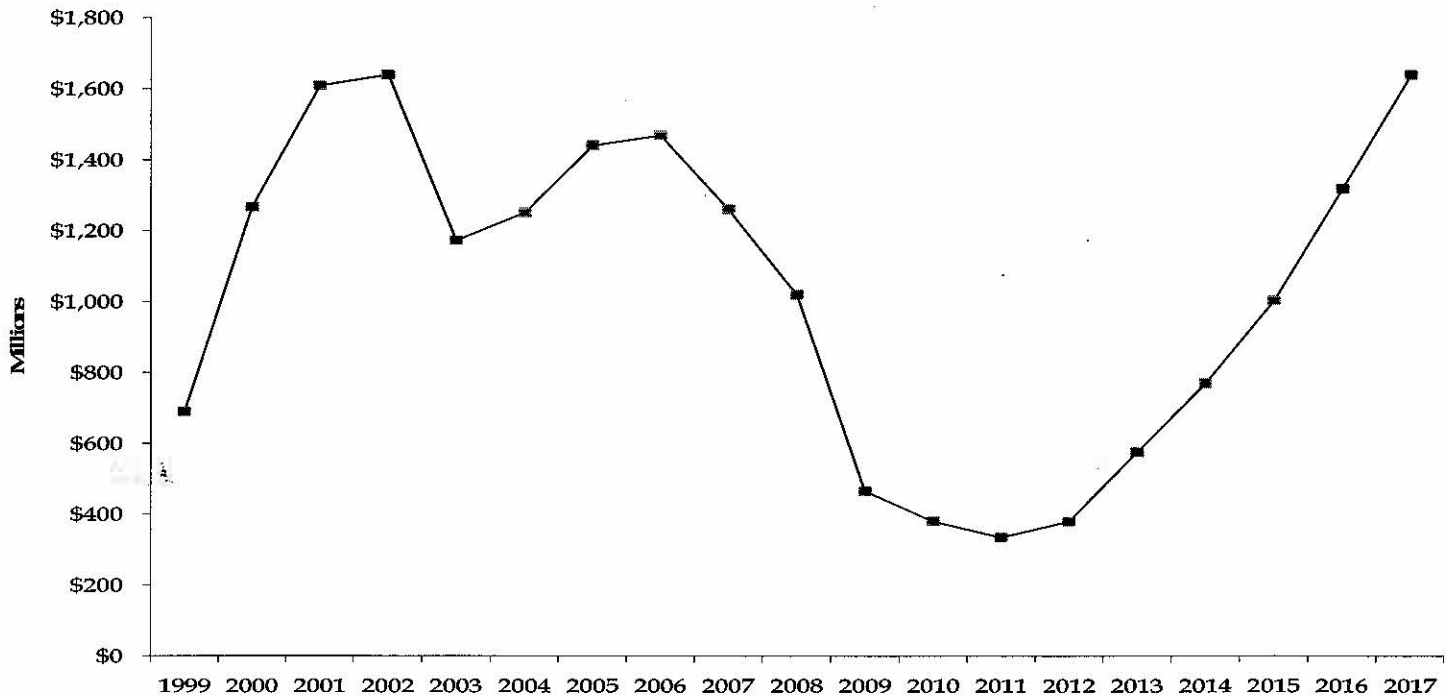
established in the model.<sup>8</sup>

Moody's releases annual reports ranking the states on this measure. The 2007 report stated that Maryland's percentage of tax supported debt outstanding as a percentage of personal income was 2.8%. The mean was 3.2%, the median was 2.4%.<sup>9</sup> However, the primary analyst at Moody's has commented that in their ratings analysis, they focus not so much on the annual ratios but on the 10 year growth in net tax-supported debt as a percent of personal income.

### *Effect of Diminished Capacity on the Capital Program*

Because of the increased authorizations in recent years and the subsequent constraint of the 3.2% criterion, the projected unauthorized debt capacity has been declining and is not expected to increase until after the projected GARVEE Bonds and Bay Restoration Bonds are issued and start to amortize. Fortunately, the GARVEE bonds will amortize in 12 years and the Bay Restoration Bonds in 15 years, thus restoring capacity over that time period assuming that there are no future issues of Bay Restoration Bonds or GARVEE bonds other than what is already projected by the Committee.

The following chart illustrates the declining debt capacity based on the 2006 CDAC recommendations.

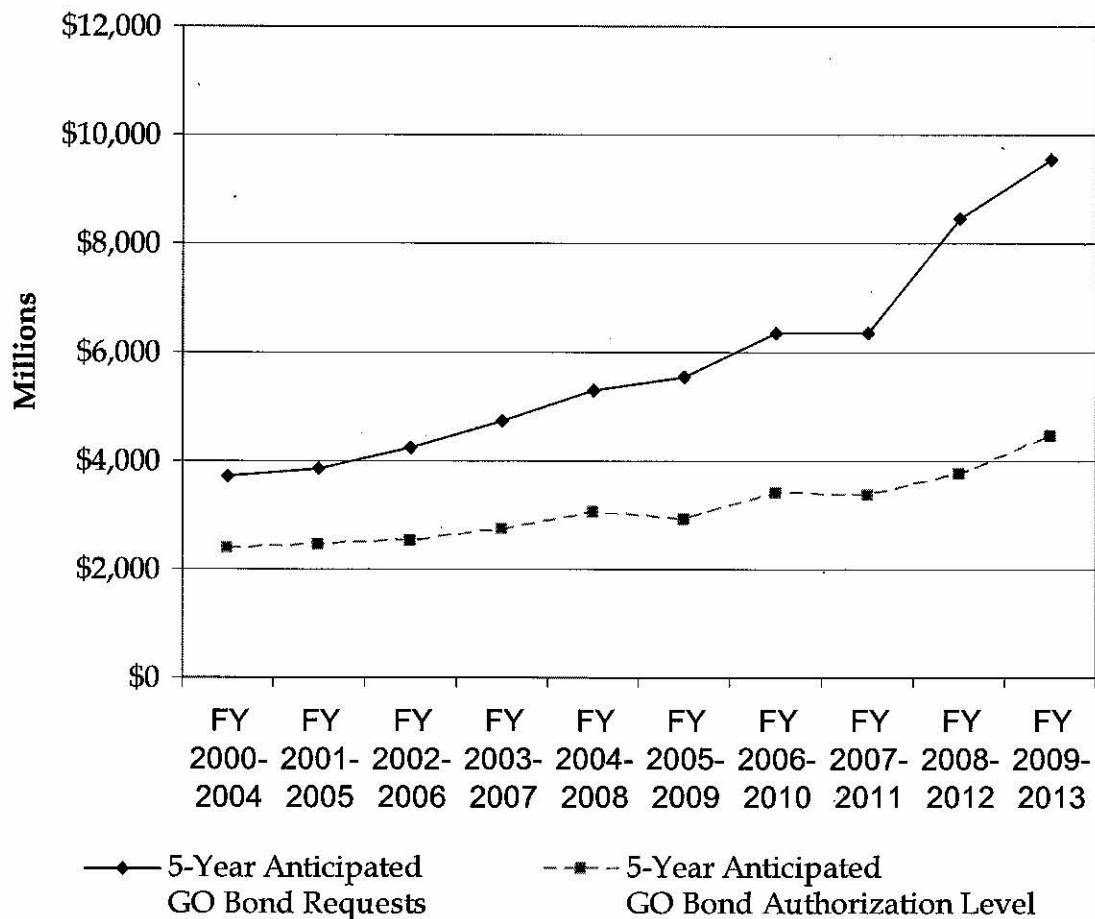


<sup>8</sup> Top 10 Management Characteristics of Highly Rated Credits in U.S. Public Finance, January 11, 2006

<sup>9</sup> 2007 State Debt Medians, April 2007

While unauthorized debt capacity is declining, the demand for capital projects has increased. For example, requests for school construction funding have increased from \$1.9 billion in 2005 to \$4.1 billion in 2007. Similarly, funding requests for higher education facilities have increased from \$1.6 billion in 2005 to \$2.3 billion in 2007. As a result of these two factors, Maryland is able to finance a smaller portion of the demand for capital projects.

The following chart illustrates the increasing gap between anticipated five year bond requests and anticipated authorizations.



***Demand for Large and Multi-year Capital Projects***

The Department of Budget and Management analyzed the demand for large and multi-year capital projects for FY 1996 – FY 2008 and for FY 2009 – FY 2013 adjusted for inflation.

<b>FY 1996 – FY 2008*</b>			
<u>Project Value</u>	<u>Number</u>	<u>% of total</u>	<u>Total Estimated Cost</u>
\$25 M – \$49 M	30	50%	\$1,083 M
\$50 M - \$74 M	19	32	1,159 M
\$75 M - \$99 M	3	5	270 M
\$100 M +	8	13	1,316 M
<b>Total</b>	<b>60</b>	<b>100%</b>	<b>\$3,828 M</b>

\* adjusted for inflation

<b>FY 2009 – FY 2013</b>			
<u>Project Value</u>	<u>Number</u>	<u>% of total</u>	<u>Total Estimated Cost</u>
\$25 M – \$49 M	25	46%	\$874 M
\$50 M - \$74 M	17	30	1,037 M
\$75 M - \$99 M	8	15	700 M
\$100 M +	5	9	743 M
<b>Total</b>	<b>55</b>	<b>100%</b>	<b>\$3,354 M</b>

The proportion of requested projects greater than \$75 million has increased from 18% in FY 1996 – 2008 compared to 24% in FY 2009 – 2013. This shift to more costly projects in the past few years is due to both the size of projects and the increased cost of labor and materials.

***Availability of Resources to Support Capital Project Debt Service***

Funds to support debt service on General Obligation Bonds are budgeted within the Annuity Bond Fund (ABF). The primary revenue source for the ABF is the State property tax which currently is set at \$.112 per \$100 of assessed value for real property.

In Fiscal 2008, the general fund appropriation to the ABF is \$29.3 million. Assuming the 2007 CDAC recommended authorizations and current property tax rates, the General Fund support for debt service is estimated to increase to \$40.0 million, \$48.0 million, \$62.5 million, and \$67.8 million in fiscal years 2009 through 2012 respectively. A one cent increase in the tax rate would increase revenues by \$61 million in 2009 and \$73 million in 2012 thereby eliminating the need for general fund appropriations during this time period. Conversely, a reduction in the property tax would increase the need for even greater transfers from the general fund.



The State continues to explore alternative sources which may be used to support capital debt service including the identification of new revenue streams, such as video lottery terminals, a portion of which could be dedicated to specific purposes such as school construction. Other states have securitized revenue streams or entered private-public partnerships to generate additional funds. Throughout the year, Maryland will continue to follow the progress of these transactions and meet periodically with investment bankers to review the financing structures and risks, prior to making any further recommendations.

### ***Advantages and Disadvantages of Adopting a Capital Biennial Budget***

Of the 50 states, 21 have biennial capital budget cycles and 14 of them combine annual legislative sessions with biennial capital budgets. Many of the states with biennial budget cycles enact annual budgets for each year of the biennium or update the biennial budget annually.

The advantages of a biennial capital budget are that it may improve long-term planning by allowing more time for project and master plan review and budget preparation costs could be reduced. However, there are disadvantages. Project cost estimates are less reliable and require annual supplemental appropriations. Finally, the biennial budget does not address emergent issues.

Both budgeting systems appear to work and there is no empirical evidence available to support one method of budgeting over another. Hence, a decision about which type of budget cycle a state should use depends largely on the circumstances and needs of a particular state. The Committee found no reason to recommend a change to a biennial budget system in Maryland.

### **C. Committee's Recommendation on the Reevaluation of the Affordability Criteria**

The Committee recognizes that the first criterion (debt outstanding should not exceed 3.2% of personal income) limits the authorization of debt more than the second criterion (debt service should not exceed 8% of revenues) and the first criterion is less appropriate for non-general fund supported debt such as the Bay Restoration Bonds and the GARVEE Bonds. Even though current projections show that the rapid amortization of the bonds restores some debt capacity under current authorization assumptions, the amount that could be authorized using the 3.2% criterion is less than what could be authorized using the 8% criterion. This gap between the amounts that can be authorized according to each criterion will widen even further if revenues increase.

The Committee noted that these criteria were originally set for general obligation bonds only and were not revised when the analysis was expanded to include other tax-supported debt. As the history of actual ratios demonstrates on page 58, the Committee did not have to address adjustments to the ratios because the ratios fell well within the prescribed ranges and because the inclusion of GARVEE bonds and Bay Restoration Bonds has been fairly recent.

As demonstrated throughout the meetings, the funding of capital programs is increasingly

lagging the demand. Authorizations could have been increased this year by up to approximately \$125 million annually over the 2006 CDAC recommendations and still remained within both criteria, all other factors being equal.

The Committee is recommending the continued study and reevaluation of the criteria. The Committee would consider, in greater detail, the impact of:

- Adjusting the 3.2% limit for personal income to debt outstanding criterion as a determinant for authorizations. Options may include increasing the limit, establishing separate criteria for all tax supported debt and tax supported debt excluding GARVEE Bonds and/or Bay Restoration Bonds or retaining the present limit and knowingly breaching it temporarily.
- A review of the revenue and personal income variables incorporated in the ratios, including an analysis of the various inputs, estimation methodology, and the impact of any changes that may affect those variables.

The Committee recommends that the Treasurer consult with the rating agencies and the State's financial advisor before any changes are made to the criteria. The rating agencies respect Maryland's long-standing process of evaluating debt affordability and the continuity of the existing criteria, which have been in place for almost thirty years. The State should determine if a change in criteria would jeopardize the AAA rating. It is also critical to understand the potential effects of other long-term liabilities (e.g., OPEB or state pension liabilities) in the rating agency consideration of debt. Finally, the Committee should consider the impact of changing the distribution of the remaining available capacity among the various issuers of tax-supported debt.

## **Appendix A**

### **History of the Capital Debt Affordability Committee**

#### ***Duties***

The creation of the Capital Debt Affordability Committee was an outgrowth of two events: the dramatic increase in outstanding debt during the mid-1970's due to the creation of the State's school construction program and the release in June 1974 of the Department of Legislative Services' two year study on the State's debt picture, titled "An Analysis and Evaluation of the State of Maryland's Long-Term Debt: 1958 - 1988." In response to this study and the rising level of State debt, the 1978 General Assembly enacted the current State Finance and Procurement Article, Section 8-104, *et seq.*, which created the Committee and Capital Debt Affordability process.

The 1989 General Assembly further expanded the Committee's charge as part of legislation relating to higher education debt (Chapter 93, Laws of Maryland, 1989). The statute requires the Committee to review on a continuing basis the size and condition of any debt of the University System of Maryland, Morgan State University, and St. Mary's College of Maryland; take any debt issued for academic facilities into account as part of the Committee's affordability analysis with respect to the estimate of new authorizations of general obligation debt; and, finally, to submit to the Governor and the General Assembly an estimate of the amount of new bonds for academic facilities that prudently may be authorized in the aggregate for the next fiscal year by the University System of Maryland, Morgan State University, and St. Mary's College of Maryland. The 1994 General Assembly added Baltimore City Community College to the list of higher education institutions that the Committee reviews.

The 2004 General Assembly added to the duties of the Committee in Public School Facilities Act of 2004 (Chapters 306, 307, Laws of Maryland, 2004, uncodified Section 11), in which it directed the Committee to annually "review the additional school construction funding needs as identified in the 2004 Task Force to Study Public School Facilities report and ... make a specific recommendation regarding additional funding for school construction when recommending the State's annual debt limit." The statute also directs that the Committee "include a multiyear funding recommendation that will provide stability in the annual funding for school construction."

#### ***Membership***

The 2005 Session of the General Assembly expanded the membership of the Committee with the addition of the Chair of the Capital Budget Subcommittee of the Senate Budget and Taxation Committee and the Chair of the Capital Budget Subcommittee of the House Committee on Appropriations as non-voting *ex officio* members. Chapter 445, Laws of Maryland, 2005.

#### ***Definition of Tax-supported debt***

In addition to the duties previously noted, the Committee has generally reviewed other types of public debt issued by State or State-created authorities or agencies. In keeping with a narrow interpretation of its statutory charge, the Committee's efforts through 1986 focused

mainly on bringing the State's general obligation debt in line with certain parameters. In 1987, however, the Committee began to adopt a more comprehensive view of State debt that included all tax-supported debt in addition to general obligation debt.

This broader view was adopted in recognition of the fact that the rating agencies and investment community take a more comprehensive view of a state's debt when analyzing that state's obligations. Discussions with rating analysts over several years indicated that analysts were interested in all tax-supported debt. Summaries of rating agency reports indicated that the measure of debt used was "net tax-supported debt" - the sum of general obligation debt, consolidated and county transportation debt (net of sinking funds), capital lease commitments, and tax or bond anticipation notes.

The more comprehensive view of debt also recognized that other forms of long-term commitments were becoming more common. Capital leases, particularly lease purchase obligations, were more visible, if not more widely used. The bonds issued by the Maryland Stadium Authority for the Baltimore stadium are supported by lease arrangements; the State had consolidated a significant amount of equipment lease obligations; and the Motor Vehicle Administration was using the capital lease method for expanding or relocating its service center network. Although these leases do not represent debt in the constitutional sense, any default on these leases would be viewed by the market as similar to a default on State bonds. This broader view was ultimately codified and included in the Committee's statutory charge by Chapter 241, Laws of Maryland, 1989.

The Committee considered in 2004 the question of whether Bay Restoration Bonds constitute a new component of State tax-supported debt for purposes of debt affordability calculations. The Bay restoration fee is applied broadly across the State and is not directly tied to the use of a specific WWTP. There is a consensus among counsel that the maturity of the bonds must be limited to 15 years, the maximum for "State debt." As a result, the Committee concluded that the Bay Restoration Bonds are State tax-supported debt.

Most recently, the 2005 General Assembly expanded the scope of what the Committee considers in Chapters 471, 472, Laws of Maryland, 2005, by explicitly recognizing debt issued by the Maryland Department of Transportation (MDOT) under Title 4, Subtitle 6 of the Transportation Article, or by the Maryland Transportation Authority (MdTA) under Title 4, Subtitle 3 of that Article, when "secured by a pledge of future federal aid from any source" (e.g., GARVEE bonds) as "tax-supported debt." Thus, this type of debt must be taken into account both in the annual authorization recommendation and in consideration of the amount of tax-supported debt outstanding.

It is useful to note that the bond rating agencies are not uniform in their treatment of the federal-revenue backed debt when assessing the State's situation. Two of the agencies do include GARVEEs as tax-supported debt outstanding; the remaining agency considers it a "gray area" and would not include them as long as the bonds are "stand alone," that is, not backed by the State's full faith and credit. All three agencies also noted that to the extent the State includes

GARVEEs as tax supported, it would be appropriate to include the supporting federal revenue stream that backs the bonds when considering the debt service affordability criterion of 8% of State revenues. Further, one of the two bond rating agencies that include GARVEEs as tax-supported debt stated that they did so for their own analytic purposes, but would accept and understand if a State did otherwise for affordability determination purposes.

### ***History of Debt Affordability Criteria***

Based upon an analysis of available material and consultation with a number of financial experts, the following affordability criteria were developed by the Committee in 1979:

- Outstanding debt should be no more than 3.2% of State personal income;
- Adjusted debt service should be no more than 8% of State revenues; and
- New authorizations should be kept in the range of redemptions of existing debt over the near term.

These criteria were adopted by the Committee solely for the analysis of general obligation debt.

Criteria 1 and 2 represented traditional measures and criterion 3 reflected a discretionary policy position that the State should "get out of debt." The Committee at that time declared that, given the high debt level of the mid-late 1970's, the first two criteria were goals to be achieved over time, and the final criterion became controlling over the short term.

In 1987, while retaining the first and second criteria for evaluating the expanded definition of debt and debt service, the Committee concluded that the third criterion was no longer an applicable guideline. The basis for its conclusion was threefold. First, the high ratings of the State's general obligation and transportation bonds indicated that the existing level of debt and the planned increases were acceptable to the rating agencies. Second, pressing legislative and executive commitments required an increase in the level of bonded debt to finance needed transportation and other projects. Third, adherence to the criterion tied yearly authorizations to events of 15 years before, thereby producing highly variable bond authorizations inconsistent with either good debt management or a stable capital program.

In 1988, a detailed survey of credit analysts was undertaken to obtain their views on the Committee's comprehensive approach to reviewing debt and to the criteria the Committee had been using for 10 years. The survey affirmed the Committee's decision to take an expanded view of debt. In addition, criteria 1 and 2 were almost universally approved. This position was reinforced in discussion with investment banks and bond rating agencies as recently as July 2005. Indeed, the rating agencies have repeatedly cited the Capital Debt Affordability process and criteria as major reasons for awarding Maryland AAA status.

### ***History of Authorization Increases and Rate of Increases***

In its 1992 report, while reaffirming its belief in the theories underlying its prior recommendations, the Committee recommended that the six-year program originally recommended in 1988 be reduced, due principally to the severe national and state economic downturn. The 1992 recommendation acknowledged that the persistent recession had depressed the levels of personal income and that the structural changes in Maryland's economy would deter near term resumption of the State's rapid growth in personal income. The 1992 program also recognized that, while there had been no abatement in the population growth and need for services, cost inflation and, therefore, total need had been lower than originally projected in the years between 1988 and 1991. Considering all of these factors, the Committee recommended limiting authorization increases to 3% based at that time on the prevailing inflation rate plus 1%. In earlier years, the recommended out-year increases had varied between 3-5%, usually incorporating some estimate of inflation plus need.

In the years between 1993 and 2002, the State's economy and personal income recovered significantly but, due to the availability of general PAYGO funds, the guideline increase of 3% was generally observed and incorporated in future year projections. As debt authorizations grew at a slower rate than personal income, the level of "unused" debt capacity increased. Since 2002, the inclusion of Bay Bonds and GARVEEs as State tax-supported debt and the increases in the authorizations of general obligation bonds absorb virtually all of previously unused debt capacity.

## **Appendix B**

### **History of Stadium Authority Financings**

#### ***Oriole Park at Camden Yard***

Currently the Authority operates Oriole Park at Camden Yards, which opened in 1992. In connection with the construction of that facility, the Authority issued \$155.0 million in notes and bonds. In October 1993, the Authority entered into an agreement to implement a synthetic fixed rate refinancing of the sports facility bonds using a combination of variable rate refunding obligations and forward interest rate exchange agreements. As provided under the agreements, savings of \$15.5 million was paid to the Authority on April 1, 1996. In accordance with this agreement and in consideration for the prior payment of the savings, the Authority issued its \$17.9 million Sports Facilities Lease Revenue Refunding Bonds in December 1998, to refund its outstanding Sports Facility Lease Revenue Bonds Series 1989C, and issued its \$121.0 million Sports Facilities Lease Revenue Refunding Bonds in December 1999, to refund its Sports Facilities Lease Revenue Bonds Series 1989D.

The Authority's notes and bonds are lease-backed revenue obligations, the payment of which is secured by, among other things, an assignment of revenues received under a lease of Oriole Park at Camden Yards from the Authority to the State. The rental payments due from the State under that lease are subject to annual appropriation by the General Assembly. Revenues to fund the lease payments are generated from a variety of sources, including in each year revenues from sports lotteries, the net operating revenues of the Authority, and \$1.0 million from the City of Baltimore.

In November 2001, the Authority issued \$10.25 million in bond anticipation notes, which were refunded in July 2002 with \$10.25 million in taxable lease-backed revenue bonds. The 2001 bond anticipation notes were used to fund a \$10.0 million deposit to the "Supplemental Improvements Fund" under the Baltimore Orioles Lease in accordance with the order of the panel of Arbitrators in American Arbitration Association Case No. 16Y1150005500.

Net debt service on the Authority's bonds for Oriole Park at Camden Yards was \$14.2 million in 2007.

#### ***Baltimore City Convention Center***

The Authority also constructed an expansion of the Baltimore City Convention Center. The Convention Center expansion cost \$167.0 million and was financed through a combination of funding from Baltimore City revenue bonds (\$50.0 million), Authority revenue bonds (\$55.0 million), State general obligation bonds (\$58.0 million) and other State appropriations. As required, the City sold its revenue bonds before the Authority's sale of lease-backed revenue bonds on August 25, 1994. The State sold \$58.0 million in general obligation bonds designated for the Convention Center in sales from October 1993 to October 1996. The agreement between the City and the Authority provides that: (i) the City and the Authority each make equal annual

contributions to a capital improvements reserve fund; (ii) after completion of construction through fiscal year 2008, the Authority and the City contribute toward operating deficits in the proportion Authority (2/3), City (1/3); and (iii) the City be solely responsible for operating deficits and capital improvements prior to completion of the expansion and after fiscal year 2008.

The State's and Authority's debt service for the Convention Center in fiscal year 2007 was approximately \$5.0 and \$4.8 million respectively. The 2006 contribution to operating deficits and the project's capital improvements fund was approximately \$2.9 million. Through direct and indirect benefits, the project has covered its costs (debt service, operating deficit contributions, deposits to the capital improvements fund, and that portion of the Authority's budget that is allocable to the Convention Center project) since 1999.

In June 1998, the Authority entered into an agreement to implement a synthetic fixed rate refinancing of its revenue bonds for the Baltimore City Convention Center using a combination of variable rate refunding obligations and forward interest rate exchange agreements. As provided under the agreements, a savings of \$587,500 was paid to the Authority on June 10, 1998. The Authority called and reissued the Series 1994 bonds on December 15, 2006. The amount issued as the Baltimore Convention Center Lease Revenue Refunding Bonds, Series 2006 is \$31.6 million which included \$375,000 to be used for closing costs.

### ***Ocean City Convention Center***

The Authority also constructed an expansion of the Convention Center in Ocean City; the expansion cost \$33.2 million and was financed through a matching grant from the State to Ocean City and a combination of funding from Ocean City and the Authority. In October 1995, the Authority issued \$17.3 million in revenue bonds to provide State funding; as required, Ocean City sold \$15.0 million of its special tax and general obligation bonds before the sale by the Authority. Authority debt service in connection with the revenue bonds for the Convention Center in Ocean City was \$1.5 million in fiscal year 2007. The Authority will also continue to pay one-half of any annual operating deficits of the facility through December 15, 2015, after which time Ocean City will be solely responsible for operating deficits.

### ***Ravens Stadium***

The Authority currently operates Ravens Stadium, which opened in 1998. In connection with the construction of that facility, the Authority sold \$87.6 million in lease-backed revenue bonds on May 1, 1996, for Ravens Stadium. The proceeds from the Authority's bonds, along with cash available from State lottery proceeds, investment earnings, contributions from the Ravens and other sources were used to pay project design and construction expenses of approximately \$229.0 million. The bonds are solely secured by an assignment of revenues received under a lease of the project from the Authority to the State. In June 1998, the Authority entered into an agreement to implement a synthetic fixed rate refinancing of the football lease-backed revenue bonds using a combination of variable rate refunding obligations and forward interest rate exchange agreements. As provided under the agreements, savings of \$2.6 million



were paid to the Authority on June 10, 1998. The Authority called and reissued the Series 1996 bonds in March 1, 2007. The amount issued as the Sports Facilities Lease Revenue Refunding Bonds Football Stadium Issue, Series 2007 is \$73.5 million which included \$375,000 to be used for closing costs.

On December 15, 1997, the Authority issued \$4.6 million in Sports Facilities Lease Revenue Bonds, Series 1997. The proceeds from these bonds were used toward the construction of Ravens Stadium. The Authority's combined debt service on the revenue bonds is \$7.0 million annually.

### ***Montgomery County Conference Center***

In January 2003, the Authority issued \$23.2 million in lease-backed revenue bonds in connection with the construction of a conference center in Montgomery County. The conference center is adjacent and physically connected with a Marriott Hotel, which has been privately financed. The center cost \$33.5 million and is financed through a combination of funding from Montgomery County and the Authority. The Authority does not have any operating risk. The 2007 debt service for these bonds was \$1.8 million.

### ***Hippodrome Theater***

In July 2002, the Authority issued \$20.3 million in taxable lease-backed revenue bonds in connection with the renovation and construction of the Hippodrome Theater as part of Baltimore City's West Side Development. The cost of renovating the theater is \$ 63.0 million and is financed by various public and private sources. The Authority does not have any operating risk for the project which was completed in February, 2004. The 2007 debt service for these bonds was \$1.8 million.

### ***Camden Station Renovation***

In February 2004, the Authority issued \$8.7 million in taxable lease-backed revenue bonds in connection with the renovation of the historic Camden Station located at the Camden Yards Complex in Baltimore, Maryland. The cost of the renovation is projected to be \$8.0 million. The Authority has executed lease agreements for the entire building, with the Babe Ruth Museum leasing approximately 22,600 square feet and Geppi's Entertainment Museum leasing the balance of the building. The Babe Ruth Museum opened on May 12, 2005 and the Geppi's Entertainment Museum opened in fall 2006. The 2007 debt service for these bonds was \$.6 million.

## MARYLAND PERSONAL INCOME AND POPULATION

Historical Data through 2006  
Projections 2007-2017

<u>Calendar Year</u>	<u>Personal Income</u> <i>(\$ in millions)</i>	<u>% Change</u>	<u>Population</u> <i>(thousands)</i>	<u>% Change</u>
1997	\$ 147,843	5.58%	5,157	0.88%
1998	\$ 157,784	6.72%	5,204	0.91%
1999	\$ 167,075	5.89%	5,255	0.98%
2000	\$ 181,958	8.91%	5,312	1.08%
2001	\$ 191,657	5.33%	5,380	1.28%
2002	\$ 198,824	3.74%	5,441	1.14%
2003	\$ 205,737	3.48%	5,507	1.20%
2004	\$ 220,603	7.23%	5,553	0.85%
2005	\$ 234,609	6.35%	5,590	0.65%
2006	\$ 248,103	5.75%	5,616	0.47%
2007	\$ 261,575	5.43%	5,658	0.75%
2008	\$ 275,189	5.20%	5,700	0.76%
2009	\$ 288,866	4.97%	5,746	0.80%
2010	\$ 303,677	5.13%	5,797	0.88%
2011	\$ 319,505	5.21%	5,844	0.82%
2012	\$ 334,331	4.64%	5,885	0.69%
2013	\$ 349,205	4.45%	5,923	0.65%
2014	\$ 364,723	4.44%	5,961	0.64%
2015	\$ 380,432	4.31%	5,999	0.63%
2016	\$ 396,291	4.17%	6,036	0.61%
2017	\$ 412,305	4.04%	6,071	0.59%

5.90% Average rate of personal income growth for 10 year period 1997 through 2006

5.82% Median rate of personal income growth for 10 year period 1997 through 2006

Sources: Personal Income  
1997-2006 Bureau of Economic Analysis, U.S. Dept. of Commerce  
2007-2017 Forecast : Economy.com (May 2007 Forecast)

Population  
1997-2006 Census Bureau, U.S. Dept. of Commerce  
2007-2017 Forecast : Economy.com (May 2007 Forecast)

**MARYLAND STATE REVENUE PROJECTIONS**  
(\$ in millions)

Fiscal Year	General Fund Revenue	% Growth of GF	Property Taxes	% Growth of Prop. Taxes	Use of Premium	Total	Transportation Revenues	Stadium Related Revenues	Garvee Bonds	Bay Restoration Fund	Total Revenues	Percent Change of Total Revenues
1997	\$7,617.0		\$235.6		\$1.7	\$7,854.3	\$1,293.8	\$22.0			\$9,170.1	4.93%
1998	\$8,051.0	5.7%	\$242.2		\$14.4	\$8,307.6	\$1,341.5	\$24.6			\$9,673.7	5.49%
1999	\$8,524.0	5.9%	\$246.9		\$6.3	\$8,777.2	\$1,462.6	\$24.5			\$10,264.3	6.11%
2000	\$9,220.0	8.2%	\$260.8		\$5.2	\$9,476.0	\$1,568.4	\$21.2			\$11,065.6	7.81%
2001	\$9,802.0	6.3%	\$257.1		\$5.5	\$10,064.6	\$1,615.0	\$27.6			\$11,707.2	5.80%
2002	\$9,504.0	-3.0%	\$270.0		\$18.4	\$9,792.4	\$1,663.0	\$27.2			\$11,482.6	-1.92%
2003	\$9,409.8	-1.0%	\$286.0		\$30.5	\$9,726.3	\$1,603.0	\$21.9			\$11,351.2	-1.14%
2004	\$10,204.3	8.4%	\$468.4		\$88.0	\$10,760.6	\$1,884.0	\$22.2			\$12,666.9	11.59%
2005	\$11,548.0	13.2%	\$516.5	10.3%	\$89.0	\$12,153.6	\$2,085.0	\$21.7			\$14,260.3	12.58%
2006	\$12,390.3	7.3%	\$575.1	11.3%	\$41.8	\$13,007.2	\$2,122.0	\$21.4			\$15,150.6	6.24%
2007	\$12,865.2	3.8%	\$552.1	-4.0%	\$3.1	\$13,420.4	\$2,097.0	\$21.8			\$15,539.2	2.56%
2008	\$13,437.3	4.4%	\$619.4	12.2%	\$53.2	\$14,109.9	\$2,122.0	\$22.3	\$36.1		\$16,290.3	4.83%
2009	\$14,153.1	5.3%	\$683.9	10.4%	\$0.0	\$14,837.1	\$2,187.0	\$22.3	\$73.4	\$5.0	\$17,124.8	5.12%
2010	\$14,896.8	5.3%	\$735.4	7.5%	\$0.0	\$15,632.2	\$2,256.0	\$22.3	\$84.0	\$12.0	\$18,006.5	5.15%
2011	\$15,633.7	4.9%	\$776.3	5.6%	\$0.0	\$16,410.0	\$2,348.0	\$22.3	\$84.0	\$28.9	\$18,893.3	4.92%
2012	\$16,432.8	5.1%	\$819.0	5.5%	\$0.0	\$17,251.8	\$2,410.0	\$22.3	\$84.0	\$51.3	\$19,819.4	4.90%
2013	\$17,172.2	4.5%	\$839.5	2.5%	\$0.0	\$18,011.7	\$2,476.0	\$22.3	\$84.0	\$54.3	\$20,648.4	4.18%
2014	\$17,945.0	4.5%	\$860.5	2.5%	\$0.0	\$18,805.5	\$2,496.0	\$22.3	\$84.0	\$54.3	\$21,462.1	3.94%
2015	\$18,752.5	4.5%	\$882.0	2.5%	\$0.0	\$19,634.5	\$2,550.0	\$21.3	\$84.0	\$54.3	\$22,344.1	4.11%
2016	\$19,596.4	4.5%	\$904.0	2.5%	\$0.0	\$20,500.4	\$2,596.0	\$21.3	\$84.0	\$54.3	\$23,256.0	4.08%
2017	\$20,478.2	4.5%	\$926.6	2.5%	\$0.0	\$21,404.8	\$2,646.0	\$21.3	\$84.0	\$54.3	\$24,210.5	4.10%

## General Fund:

1998 -2017: Bureau of Revenue Estimates, DBM 2007-2008

## Property Tax and Use of Premium Revenues:

1998 - 2006: State Budget Books

2007 - 2017 : Dept. of Budget and Management, STO, Department of Budget and Taxation

## Transportation Revenues:

1998-2017: Department of Transportation, Office of Finance

## Garvee Bond Revenues:

are assumed to be just sufficient to meet Garvee debt service requirements.

## Stadium Revenues:

represent only lottery revenues transferred to the Stadium Authority plus ticket charges at the Hippodrome.

## Bay Restoration Fund Revenues:

are assumed to be just sufficient to meet Bay Restoration debt service requirements.

**Proposed General Obligation Authorizations and Estimated Issuances  
CDAC 2007 Recommendation**

(\$ in millions)

Legislative Session	Fiscal Year	Proposed Authorizations	Crop Conversions	Total Proposed Authorizations	Rate of Increase	(a)												
						2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 and beyond	Total Issued	
2008	2009	\$932	\$3	\$935	15%		290	234	187	140	84							\$935
2009	2010	\$955	\$5	\$960	3%			298	240	192	144	86						\$960
2010	2011	\$990		\$990	3%				307	248	198	149	89					\$990
2011	2012	\$1,020		\$1,020	3%					316	255	204	153	92				\$1,020
2012	2013	\$1,050		\$1,050	3%						326	263	210	158	95			\$1,050
2013	2014	\$1,080		\$1,080	3%							335	270	216	162	97		\$1,080
2014	2015	\$1,110		\$1,110	3%								344	278	222	266		\$1,110
2015	2016	\$1,140		\$1,140	3%									353	285	502		\$1,140
2016	2017	\$1,170		\$1,170	3%										363	807		\$1,170
2017	2018	\$1,200		\$1,200	3%											1,200		\$1,200
<b>Projected Issuance of New Authorizations</b>				<b>\$10,655</b>		<b>0</b>	<b>290</b>	<b>531</b>	<b>734</b>	<b>896</b>	<b>1,007</b>	<b>1,036</b>	<b>1,066</b>	<b>1,096</b>	<b>1,126</b>	<b>2,872</b>		<b>\$10,655</b>
<b>Current Authorized but Unissued</b>				<b>\$1,912</b>		<b>725</b>	<b>520</b>	<b>354</b>	<b>221</b>	<b>74</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>			<b>\$1,913</b>
<b>Total Projected Issuances</b>				<b>\$12,567</b>		<b>\$725</b>	<b>\$810</b>	<b>\$885</b>	<b>\$955</b>	<b>\$970</b>	<b>\$1,010</b>	<b>\$1,040</b>	<b>\$1,070</b>	<b>\$1,100</b>	<b>\$1,130</b>	<b>\$2,872</b>		<b>\$12,568</b>
<b>Projected Bond Sales</b>		<i>Fiscal Year</i>				<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>			
		1st sale				\$375	\$415	\$455	\$490	\$500	520	535	550	565	580			
		2nd sale				\$350	\$395	\$430	\$465	\$470	490	505	520	535	550			
		Total sales				\$725	\$810	\$885	\$955	\$970	\$1,010	\$1,040	\$1,070	\$1,100	\$1,130			

(a) Assumes that projected authorizations continue to increase at a rate of 3%.

(b) Percentage Issuance assumptions by fiscal years:

Fiscal year following year of authorization:

Percent of original authorization issued

1st	2nd	3rd	4th	5th
31%	25%	20%	15%	9%

## PROJECTED GENERAL OBLIGATION DEBT - AUTHORIZED BUT UNISSUED

Appendix B-2

(\$ in thousands)

Fiscal Year	Authorized but Unissued Debt at Beginning of FY	New Debt Authorizations (net)	Bond Issues	Authorized but Unissued Debt at End of FY
		(a)	(a)	
2008	\$1,911,587	\$935,000	(\$725,000)	\$2,121,587
2009	\$2,121,587	\$960,000	(\$810,000)	\$2,271,587
2010	\$2,271,587	\$990,000	(\$885,000)	\$2,376,587
2011	\$2,376,587	\$1,020,000	(\$955,000)	\$2,441,587
2012	\$2,441,587	\$1,050,000	(\$970,000)	\$2,521,587
2013	\$2,521,587	\$1,080,000	(\$1,010,000)	\$2,591,587
2014	\$2,591,587	\$1,110,000	(\$1,040,000)	\$2,661,587
2015	\$2,661,587	\$1,140,000	(\$1,070,000)	\$2,731,587
2016	\$2,731,587	\$1,170,000	(\$1,100,000)	\$2,801,587
2017	\$2,801,587	\$1,200,000	(\$1,130,000)	\$2,871,587
		<u>\$10,655,000</u>	<u>(\$9,695,000)</u>	

**Summary:**

Authorized but Unissued at 7/1/2008	\$1,911,587
Total Authorizations	\$10,655,000
Total Issuances	<u>(\$9,695,000)</u>
Total Authorized but Unissued at 6/30/2017	<u>\$2,871,587</u>

(a) As projected in Appendix B-1

**PROJECTED GENERAL OBLIGATION DEBT OUTSTANDING**

APPENDIX B - 3

(\$ in thousands)

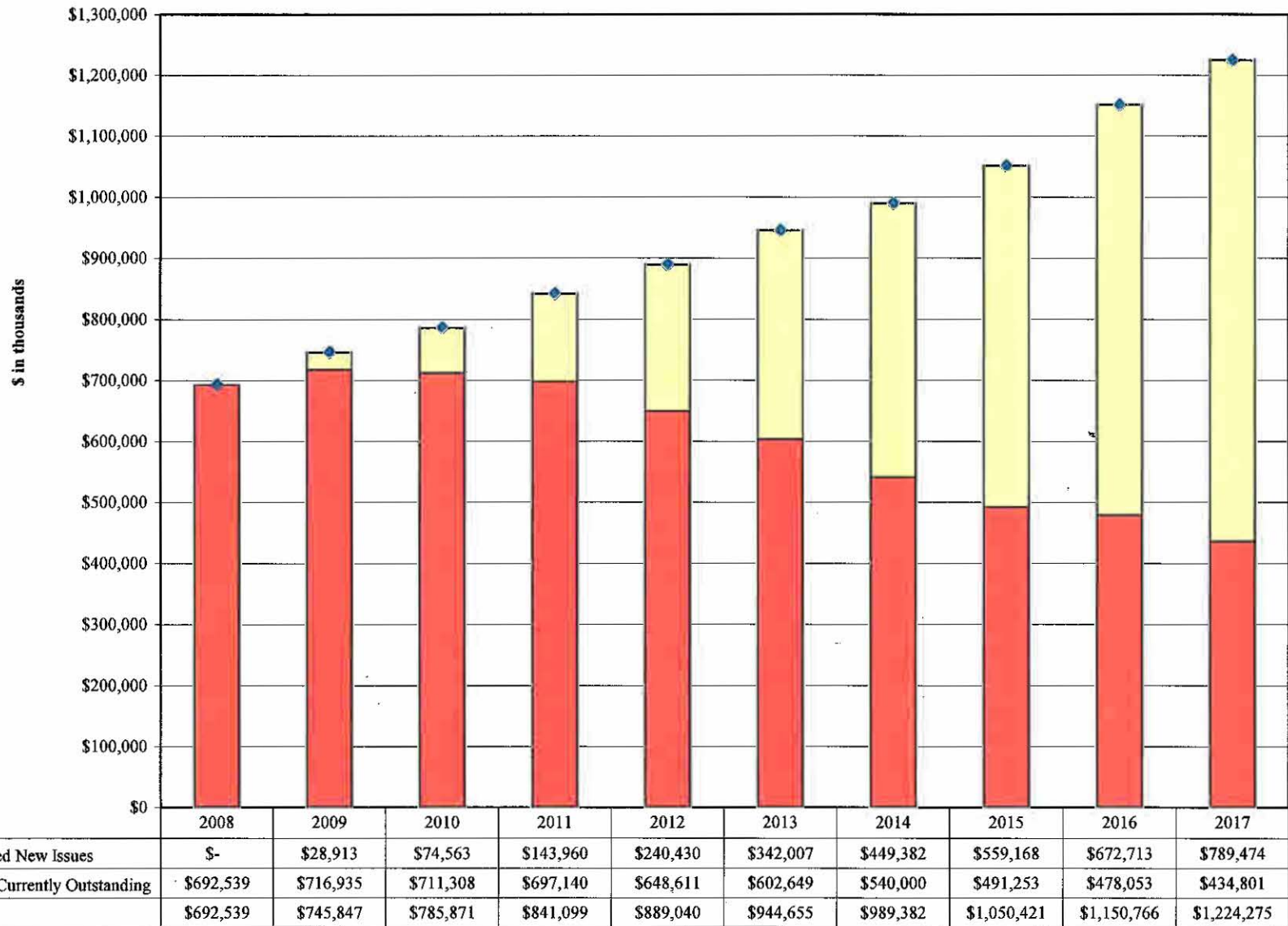
Fiscal Year	Outstanding at Beginning of FY	GO New Issues	Redemptions	QZABS- new issues and Redemptions	Outstanding at End of FY
		(a)			
2008	\$5,142,154	\$725,000	(\$428,310)	\$4,986	\$5,443,830
2009	\$5,443,830	\$810,000	(\$464,725)	\$5,563	\$5,794,668
2010	\$5,794,668	\$885,000	(\$482,290)	\$5,563	\$6,202,941
2011	\$6,202,941	\$955,000	(\$511,845)		\$6,646,096
2012	\$6,646,096	\$970,000	(\$533,662)		\$7,082,435
2013	\$7,082,435	\$1,010,000	(\$563,341)		\$7,529,094
2014	\$7,529,094	\$1,040,000	(\$582,171)		\$7,986,923
2015	\$7,986,923	\$1,070,000	(\$617,110)		\$8,439,813
2016	\$8,439,813	\$1,100,000	(\$691,878)	(\$18,098)	\$8,829,838
2017	\$8,829,838	\$1,130,000	(\$742,276)		\$9,217,561
		<u>\$9,695,000</u>	<u>(\$5,617,607)</u>	<u>(\$1,986)</u>	

**Summary:**

Outstanding at 7/1/2007	\$5,142,154
Total GO issued	\$9,695,000
Total GO Redeemed	(\$5,617,607)
Net QZAB Activity	<u>(\$1,986)</u>
Outstanding at 6/30/2017	<u>\$9,217,561</u>

(a) New issues as projected in Appendix B-1

**Appendix B-4  
Projected General Obligation Debt Service**



Appendix B-4 is the projected debt service corresponding to debt outstanding on Appendix B-3

APPENDIX C-1

**Historical Data - General Obligation Debt**  
(\$ in thousands)

Fiscal Year	Summary of Authorizations				Summary of Debt Activity					Summary of Debt Service				
	Authorized	Cancelled	New Issuances	Authorized but Unissued	New Issuances	Refunding	Redeemed	Refunded	Outstanding at Fiscal Year End	Gross Total	Repayable	Assumed	Net	Adjusted Debt Service
	(a)													
1973	\$463,565	\$9,152	\$193,505	\$1,256,159	\$193,505		\$51,017		\$1,018,664	\$88,836	(\$9,912)	\$45,766	\$35,854	\$124,690
1974	\$412,827	\$16,058	\$162,150	\$1,490,778	\$162,150		\$59,823		\$1,120,991	\$105,394	(\$9,405)	\$45,684	\$36,279	\$141,673
1975	\$375,956	\$35,267	\$353,615	\$1,477,852	\$353,615		\$72,452		\$1,402,154	\$125,787	(\$11,581)	\$44,674	\$33,094	\$158,881
1976	\$180,181	\$20,465	\$391,605	\$1,245,963	\$391,605		\$83,416		\$1,710,343	\$155,462	(\$11,072)	\$44,186	\$33,114	\$188,576
1977	\$169,908	\$653	\$448,200	\$967,018	\$448,200		\$92,633		\$2,065,910	\$184,751	(\$11,963)	\$43,425	\$31,462	\$216,213
1978	\$190,896	\$4,577	\$218,145	\$935,192	\$218,145		\$111,095		\$2,172,960	\$216,797	(\$14,066)	\$42,459	\$28,393	\$245,190
1979	\$155,887	\$61,422	\$115,350	\$914,307	\$115,350		\$134,235		\$2,154,075	\$244,653	(\$14,503)	\$39,599	\$25,096	\$269,749
1980	\$205,510	\$72,819	\$117,310	\$929,688	\$117,310		\$162,255		\$2,109,130	\$269,054	(\$15,052)	\$37,425	\$22,373	\$291,427
1981	\$182,418	\$16,335	\$271,065	\$824,706	\$271,065		\$176,140		\$2,204,055	\$286,003	(\$15,946)	\$35,841	\$19,895	\$305,898
1982	\$184,998	\$22,391	\$188,180	\$799,133	\$188,180		\$184,575		\$2,207,660	\$311,372	(\$16,253)	\$33,947	\$17,694	\$329,066
1983	\$190,250	\$8,851	\$392,230	\$588,301	\$392,230		\$190,000		\$2,409,890	\$330,491	(\$14,062)	\$28,328	\$14,266	\$344,757
1984	\$203,150	\$24,467	\$116,700	\$650,284	\$116,700		\$212,275		\$2,314,315	\$361,279	(\$12,750)	\$27,209	\$14,459	\$375,738
1985	(c) \$331,387	\$11,187	\$138,990	\$831,495	\$138,990		\$222,010		\$2,231,295	\$380,089	(\$11,809)	\$24,146	\$12,337	\$392,426
1986	\$219,034	\$49,892	\$124,585	\$876,052	\$124,585		\$245,805		\$2,110,075	\$396,768	(\$9,204)	\$20,227	\$11,023	\$407,791
1987	\$230,950	\$7,575	\$164,645	\$934,782	\$164,645		\$244,305		\$2,030,415	\$394,568	(\$5,104)	\$16,441	\$11,337	\$405,905
1988	\$254,228	\$13,601	\$304,860	\$870,549	\$304,860		\$244,455		\$2,090,820	\$389,993	(\$4,649)	\$13,635	\$8,986	\$398,979
1989	\$294,997	\$3,545	\$160,000	\$1,002,000	\$160,000		\$245,460		\$2,005,360	\$393,388	(\$4,240)	\$10,293	\$6,053	\$399,441
1990	(c) \$328,219	\$103,063	\$234,227	\$992,930	\$234,227		\$252,681		\$1,986,906	\$395,118	(\$4,260)	\$8,317	\$4,057	\$399,175
1991	\$329,200	\$2,570	\$296,787	\$1,022,773	\$296,787		\$245,256		\$2,038,437	\$388,400	(\$1,349)	\$6,547	\$5,198	\$393,598
1992	\$349,979	\$1,000	\$340,000	\$1,031,752	\$340,000		\$200,238		\$2,178,199	\$345,897	(\$1,353)	\$5,648	\$4,295	\$350,192
1993	\$369,995	\$2,320	\$260,410	\$1,139,018	\$260,410	\$147,740	\$176,479	\$130,475	\$2,279,395	\$322,251	(\$1,358)	\$3,156	\$1,798	\$324,049
1994	\$379,889	\$1,417	\$380,365	\$1,137,125	\$380,365	\$207,390	\$183,106	\$180,040	\$2,504,004	\$323,618	(\$654)	\$2,146	\$1,492	\$325,110
1995	\$389,960	\$1,111	\$335,000	\$1,190,958	\$335,000		\$219,936		\$2,619,069	\$373,485	(\$653)	\$1,357	\$704	\$374,189
1996	\$412,088	\$12,425	\$470,000	\$1,119,919	\$470,000		\$229,134		\$2,859,935	\$382,125	(\$652)	\$1,360	\$708	\$382,833
1997	\$416,133	\$2,114	\$410,000	\$1,124,656	\$410,000		\$244,541		\$3,025,394	\$401,799	(\$647)	\$347	(\$300)	\$401,499
1998	\$442,999	\$15,142	\$500,000	\$1,052,513	\$500,000		\$254,869		\$3,270,525	\$417,900	(\$642)	\$64	(\$578)	\$417,322
1999	\$448,745	\$5,764	\$475,000	\$1,020,898	\$475,000		\$245,297		\$3,500,238	\$417,646	(\$124)	\$0	(\$124)	\$417,522
2000	\$471,786	\$3,659	\$125,000	\$1,363,620	\$125,000		\$276,362		\$3,348,872	\$459,156	\$0	\$0	\$0	\$459,156
2001	\$513,250	\$3,612	\$400,000	\$1,473,258	\$400,000		\$297,966		\$3,450,900	\$470,869	\$0	\$0	\$0	\$470,869
2002	\$731,058	\$12,614	\$418,098	\$1,773,604	\$418,098	\$109,935	\$322,320	\$112,435	\$3,544,178	\$495,217	\$0	\$0	\$0	\$495,217
2003	\$756,513	\$11,634	\$725,000	\$1,793,483	\$725,000	\$376,950	\$326,695	\$386,940	\$3,932,493	\$496,870	\$0	\$0	\$0	\$496,870
2004	\$663,663	\$10,692	\$500,000	\$1,946,454	\$500,000		\$330,215		\$4,102,278	\$536,819	\$0	\$0	\$0	\$536,819
2005	\$679,807	\$6,730	\$784,043	\$1,835,488	\$784,043	\$855,840	\$348,180	\$882,155	\$4,511,826	\$553,783	\$0	\$0	\$0	\$553,783
2006	\$690,000	\$1,004	\$750,000	\$1,774,484	\$750,000		\$393,355		\$4,868,471	\$625,208	\$0	\$0	\$0	\$625,208
2007	\$821,126	\$4,645	\$679,378	\$1,911,587	\$679,378		\$405,695		\$5,142,154	\$654,055	\$0	\$0	\$0	\$654,055

- (a) Authorizations for a fiscal year represent those authorizations effective for that fiscal year; therefore, authorizations for FY 1988 exclude \$15 million for the Salisbury Multi-Service Center which authorization is effective 7/1/88.
- (b) Adjustment to debt service: "repayable" represents debt service on loans the repayment of which is received by the State, from non-State entities, concurrently with, or prior to, debt service payment dates. "Assumed" debt represents payments made by the State for debt service on non-State debt.
- (c) Includes \$100 million authorized in the Special Session of 1985 for the savings and loan crisis; no bonds were issued and the authorization was cancelled in 1990.



**STATE PUBLIC SCHOOL CONSTRUCTION  
AND CAPITAL IMPROVEMENT LOANS**

(\$ in thousands)

APPENDIX C - 2

Fiscal Year	Authorized	Issued	Redeemed	Outstanding	Authorized but Unissued	Debt Service
1973	\$220,000	\$73,000	\$0	\$163,340	\$506,660	\$5,218
1974	\$212,000	\$114,400	\$0	\$277,740	\$604,260	\$9,154
1975	\$160,000	\$186,000	\$5,170	\$458,570	\$578,260	\$20,623
1976	\$50,000	\$162,700	\$9,685	\$611,585	\$465,560	\$34,242
1977	\$69,000	\$230,900	\$16,590	\$825,895	\$303,660	\$52,119
1978	\$57,000	\$121,650	\$27,240	\$920,305	\$239,010	\$70,941
1979	\$62,000	\$70,750	\$37,285	\$953,770	\$230,260	\$85,335
1980	\$45,000	\$48,210	\$52,195	\$949,785	\$227,050	\$99,952
1981	\$45,000	\$111,200	\$61,860	\$999,125	\$160,850	\$111,679
1982	\$32,000	\$65,500	\$69,120	\$995,505	\$127,350	\$124,968
1983	\$22,000	\$86,350	\$75,410	\$1,006,445	\$63,000	\$134,258
1984	\$36,000	\$36,500	\$87,025	\$955,920	\$62,500	\$146,099
1985	\$34,600	\$24,000	\$94,685	\$885,235	\$73,100	\$153,339
1986	\$44,300	\$38,000	\$103,545	\$819,690	\$79,400	\$149,417
1987	\$57,400	\$34,040	\$111,190	\$742,540	\$102,760	\$163,947
1988	\$53,000	\$55,750	\$109,295	\$688,995	\$100,010	\$157,696
1989	\$44,000	\$52,000	\$110,090	\$630,905	\$92,010	\$155,959
1990	\$53,000	\$35,300	\$106,395	\$559,810	\$109,710	\$148,422
1991	\$60,000	\$57,000	\$94,910	\$521,900	\$112,710	\$133,620
1992	\$69,000	\$76,510	\$76,725	\$521,685	\$105,200	\$113,813
1993	\$80,000	\$95,000	\$58,520	\$558,165	\$90,200	\$93,822
1994	\$82,000	\$52,856	\$52,715	\$558,306	\$119,344	\$84,168
1995	\$83,000	\$76,700	\$54,394	\$580,613	\$125,644	\$83,919
1996	\$118,000	\$77,131	\$55,410	\$602,334	\$166,513	\$84,563
1997	\$122,000	\$129,438	\$55,670	\$676,102	\$159,075	\$85,440
1998	\$129,500	\$158,819	\$55,145	\$779,776	\$129,756	\$86,366
1999	\$90,000	\$150,906	\$51,230	\$879,454	\$68,850	\$89,838
2000	\$96,728	\$60,000	\$54,866	\$795,015	\$30,200	\$96,543
2001	\$119,369	\$75,397	\$58,675	\$812,296	\$170,900	\$98,983
2002	\$224,100	\$64,098	\$62,703	\$813,691	\$330,902	\$104,369
2003	\$113,115	\$230,816	\$63,364	\$981,144	\$213,201	\$103,235
2004	\$114,226	\$82,912	\$59,631	\$1,004,425	\$244,515	\$109,066
2005	\$234,400	\$106,965	\$87,401	\$1,023,989	\$371,950	\$143,782
2006	\$284,669	\$210,593	\$99,582	\$1,135,000	\$446,026	\$157,991
2007	\$397,176	\$258,628	\$102,237	\$1,291,391	\$584,574	\$163,189

**Comparison of Total GO Bond Authorizations with Total  
Authorized for School Construction**

*(\$ in thousands)*

Appendix C-2a

	<b>Total Authorizations less Cancellations</b>	<b>Authorized for School Construction</b>	<b>% for School Construction</b>
	(a)	(b)	
1973	\$454,413	\$220,000	48%
1974	\$396,769	\$212,000	53%
1975	\$340,689	\$160,000	47%
1976	\$159,716	\$50,000	31%
1977	\$169,255	\$69,000	41%
1978	\$186,319	\$57,000	31%
1979	\$94,465	\$62,000	66%
1980	\$132,691	\$45,000	34%
1981	\$166,083	\$45,000	27%
1982	\$162,607	\$32,000	20%
1983	\$181,399	\$22,000	12%
1984	\$178,683	\$36,000	20%
1985	\$320,200	\$34,600	11%
1986	\$169,142	\$44,300	26%
1987	\$223,375	\$57,400	26%
1988	\$240,627	\$53,000	22%
1989	\$291,452	\$44,000	15%
1990	\$225,156	\$53,000	24%
1991	\$326,630	\$60,000	18%
1992	\$348,979	\$69,000	20%
1993	\$367,675	\$80,000	22%
1994	\$378,472	\$82,000	22%
1995	\$388,849	\$83,000	21%
1996	\$399,663	\$118,000	30%
1997	\$414,019	\$122,000	29%
1998	\$427,857	\$129,500	30%
1999	\$442,981	\$90,000	20%
2000	\$468,127	\$96,728	21%
2001	\$509,638	\$119,369	23%
2002	\$718,444	\$224,100	31%
2003	\$744,879	\$113,115	15%
2004	\$652,971	\$114,226	17%
2005	\$673,077	\$234,400	35%
2006	\$688,996	\$284,669	41%
2007	\$816,481	\$397,176	49%
<b>Totals</b>	<b>\$12,860,780</b>	<b>\$3,713,583</b>	<b>29%</b>

(a) Refer to Appendix C-1

(b) Refer to Appendix C-2

HISTORICAL DATA - DEPARTMENT OF TRANSPORTATION DEBT

Consolidated Transportation Bonds  
(\$ in thousands)

Fiscal Year	Summary of Debt Activity					Summary of Debt Service (d)					
	Gross Debt Outstanding Beginning of Year	Issued	Defeased	Redeemed	Gross Debt Outstanding End of Year	Sinking Fund(s) Balance (c)	Net Debt Outstanding End of Year	Deposits to Refunding Sinking Fund	Principal Redeemed	Interest	Total
1981	\$ 399,865	\$ 120,000 (a)	-	\$ -	\$ 519,865	-	-	-	-	-	-
1982	\$ 519,865	\$ 60,000	-	\$ 60,000	\$ 519,865	-	-	\$ 20,924	\$ 60,000	\$ 32,884	\$ 113,808
1983	\$ 519,865	\$ 40,000	-	\$ 60,000	\$ 499,865	\$ 240,601	\$ 259,264	\$ 20,924	-	\$ 29,219	\$ 50,143
1984	\$ 499,865	-	-	-	\$ 499,865	\$ 283,617	\$ 216,248	\$ 20,924	-	\$ 29,219	\$ 50,143
1985	\$ 499,865	-	-	-	\$ 499,865	\$ 335,241	\$ 164,624	\$ 20,924	-	\$ 29,219	\$ 50,143
1986	\$ 499,865	-	\$ 354,865 (b)	\$ 3,000	\$ 142,000	\$ 29,299	\$ 112,701	\$ 10,462	\$ 3,000	\$ 19,547	\$ 33,009
1987	\$ 142,000	\$ 100,000	-	\$ 7,000	\$ 235,000	\$ 48,317	\$ 186,683	-	\$ 7,000	\$ 12,919	\$ 19,919
1988	\$ 235,000	-	-	\$ 8,000	\$ 227,000	\$ 58,953	\$ 168,047	-	\$ 8,000	\$ 15,685	\$ 23,685
1989	\$ 227,000	\$ 100,000	-	\$ 17,000	\$ 310,000	\$ 68,162	\$ 241,838	-	\$ 17,000	\$ 18,195	\$ 35,195
1990	\$ 310,000	\$ 280,000	-	\$ 20,000	\$ 550,000	\$ 67,309	\$ 482,691	-	\$ 20,000	\$ 28,842	\$ 48,842
1991	\$ 550,000	\$ 310,000	-	\$ 18,000	\$ 842,000	\$ 68,329	\$ 773,671	-	\$ 18,000	\$ 46,261	\$ 64,261
1992	\$ 842,000	\$ 120,000	-	\$ 21,000	\$ 941,000	\$ 66,230	\$ 874,770	-	\$ 21,000	\$ 59,211	\$ 80,211
1993	\$ 941,000	\$ 75,000	-	\$ 56,200	\$ 959,800	\$ 39,901	\$ 919,899	-	\$ 56,200 (e)	\$ 61,445	\$ 117,645
1994	(f) \$ 959,800	\$ 543,745	\$ 457,800	\$ 25,455	\$ 1,020,290	\$ 27,570	\$ 992,720	-	\$ 25,455	\$ 56,423	\$ 81,878
1995	\$ 1,020,290	\$ 75,000	-	\$ 47,785	\$ 1,047,505	\$ 32,338	\$ 1,015,167	-	\$ 47,785	\$ 52,841	\$ 100,626
1996	\$ 1,047,505	-	-	\$ 69,880	\$ 977,625	\$ 30,940	\$ 946,685	-	\$ 69,880	\$ 51,526	\$ 121,406
1997	\$ 977,625	\$ 50,000	-	\$ 88,245	\$ 939,380	\$ 15,495	\$ 923,885	-	\$ 88,245	\$ 47,448	\$ 135,693
1998	\$ 939,380	\$ 93,645 (g)	\$ 91,200	\$ 97,810	\$ 844,015	-	\$ 844,015	-	\$ 97,810	\$ 44,959	\$ 142,769
1999	\$ 844,015	-	-	\$ 94,885	\$ 749,130	-	\$ 749,013	-	\$ 94,885	\$ 38,025	\$ 132,910
2000	\$ 749,130	\$ 75,000	-	\$ 99,360	\$ 724,770	-	\$ 724,770	-	\$ 99,360	\$ 35,873	\$ 135,233
2001	\$ 724,770	-	-	\$ 76,720	\$ 648,050	-	\$ 648,050	-	\$ 76,720	\$ 32,954	\$ 109,674
2002	\$ 648,050	\$ 150,000	-	\$ 83,900	\$ 714,150	-	\$ 714,150	-	\$ 83,900	\$ 29,278	\$ 113,178
2003	\$ 714,150	\$ 607,405 (h)	\$ 46,500	\$ 313,810	\$ 961,245	-	\$ 961,245	-	\$ 313,810	\$ 34,204	\$ 348,014
2004	\$ 961,245	\$ 395,900 (i)	\$ 77,500	\$ 93,995	\$ 1,185,650	-	\$ 1,185,650	-	\$ 93,995	\$ 40,915	\$ 134,910
2005	\$ 1,185,650	-	-	\$ 115,705	\$ 1,069,945	-	\$ 1,069,945	-	\$ 115,705	\$ 53,950	\$ 169,655
2006	\$ 1,069,945	\$ 100,000	-	\$ 91,470	\$ 1,078,475	-	\$ 1,078,475	-	\$ 91,470	\$ 49,702	\$ 141,172
2007	\$ 1,078,475	\$ 100,000	-	\$ 67,425	\$ 1,111,050	-	\$ 1,111,050	-	\$ 67,425	\$ 50,999	\$ 118,424

(a) Includes \$60 million Consolidated Transportation Bonds plus a one-year Bond Anticipation Note for \$60 million. The one-year BAN was re-issued the following year.

(b) Represents a defeasance of the balance remaining of the series 1978 refunding bonds.

(c) For those bonds issued prior to 7/1/89, sinking fund balances reflect the net effect of: deposits into the fund, one calendar year in advance, of debt service; fund earnings; and payments, from the sinking fund, to bondholders. Bonds issued after 7/1/89 do not require such a sinking fund.

(d) Represents payments to the refunding bond sinking fund plus payments of principal and interest to the bondholders. Amounts may differ from budgetary amounts (budgetary amounts represent payment to sinking funds).

(e) Includes early redemptions of \$30 million.

(f) DOT sold two issues of refunding bonds in FY 94: \$211.985 million to refund \$204.0 million \$291.760 million to refund \$253.8 million

(g) The Department issued \$93.645 million refunding bonds to refund \$91.2 million during fiscal year 1998.

(h) The Department issued \$262.405 million refunding bonds to refund \$265.820 million during fiscal year 2003.

(i) The Department issued \$75.9 million refunding bonds to refund \$77.5 million during fiscal year 2004.

APPENDIX C - 4

HISTORICAL DATA - DEPARTMENT OF TRANSPORTATION DEBT

County Transportation Bonds  
(\$ in thousands)

Summary of Debt Activity

Summary of Debt Service (d)

Fiscal Year	Gross Debt Outstanding				Gross Debt Outstanding End of Year	Sinking Fund Balance (c)	Net Debt Outstanding End of Year	Deposits to			
	Beginning of Year	Issued	Defeased or Refunded	Redeemed				Refunding Sinking Fund	Principal Redeemed	Interest	Total
1983	\$ 225,085	\$ 34,875	-	\$ 2,625	\$ 257,335	\$ 104,373	\$ 152,962	\$ 9,216	\$ 2,625	\$ 15,681	\$ 27,522
1984	\$ 257,335	\$ 22,270	-	\$ 2,985	\$ 276,620	\$ 124,619	\$ 152,001	\$ 8,749	\$ 2,985	\$ 18,061	\$ 29,795
1985	\$ 276,620	\$ 24,210	-	\$ 4,435	\$ 296,395	\$ 144,595	\$ 151,800	\$ 7,214	\$ 4,435	\$ 19,591	\$ 31,240
1986	\$ 296,395	\$ 8,795	-	\$ 5,720	\$ 299,470	\$ 177,185	\$ 122,285	-	\$ 5,720	\$ 12,099	\$ 17,819
1987	\$ 299,470	\$ 40,590	(a) \$ 180,405	(b) \$ 7,090	\$ 152,565	\$ 21,479	\$ 131,086	-	\$ 7,090	\$ 12,336	\$ 19,426
1988	\$ 152,565	\$ 18,255	-	\$ 8,920	\$ 161,900	\$ 21,599	\$ 140,301	-	\$ 8,920	\$ 11,766	\$ 20,686
1989	\$ 161,900	\$ 7,285	-	\$ 9,895	\$ 159,290	\$ 26,024	\$ 133,266	-	\$ 9,895	\$ 11,931	\$ 21,826
1990	\$ 159,290	\$ 9,950	-	\$ 11,535	\$ 157,705	\$ 23,978	\$ 133,727	-	\$ 11,535	\$ 11,695	\$ 23,230
1991	\$ 157,705	\$ 16,550	-	\$ 12,875	\$ 161,380	\$ 25,539	\$ 135,841	-	\$ 12,875	\$ 11,619	\$ 24,494
1992	\$ 161,380	\$ 8,300	-	\$ 14,440	\$ 155,240	\$ 27,314	\$ 127,926	-	\$ 14,440	\$ 11,383	\$ 25,823
1993	\$ 155,240	-	-	\$ 16,405	\$ 138,835	\$ 27,294	\$ 111,541	-	\$ 16,405	\$ 10,454	\$ 26,859
1994	\$ 138,835	-	\$ 94,955	(e) \$ 18,035	\$ 25,845	\$ 5,954	\$ 19,891	-	\$ 18,035	\$ 5,662	\$ 23,697
1995	\$ 25,845	-	-	\$ 4,640	\$ 21,205	\$ 6,007	\$ 15,198	-	\$ 4,640	\$ 1,314	\$ 5,954
1996	\$ 21,205	-	-	\$ 4,950	\$ 16,255	\$ 6,055	\$ 10,200	-	\$ 4,950	\$ 1,057	\$ 6,007
1997	\$ 16,255	-	-	\$ 5,280	\$ 10,975	\$ 5,338	\$ 5,637	-	\$ 5,280	\$ 775	\$ 6,055
1998	\$ 10,975	-	-	\$ 4,845	\$ 6,130	\$ 525	\$ 5,605	-	\$ 4,845	\$ 493	\$ 5,338
1999	\$ 6,130	-	-	\$ 525	\$ 5,605	\$ 555	\$ 5,050	-	\$ 525	\$ 344	\$ 869
2000	\$ 5,605	-	-	\$ 555	\$ 5,050	\$ 590	\$ 4,460	-	\$ 555	\$ 314	\$ 869
2001	\$ 5,050	-	-	\$ 590	\$ 4,460	\$ 630	\$ 3,830	-	\$ 590	\$ 283	\$ 873
2002	\$ 4,460	-	-	\$ 630	\$ 3,830	\$ 675	\$ 3,155	-	\$ 630	\$ 248	\$ 878
2003	\$ 3,830	-	-	\$ 675	\$ 3,155	\$ 715	\$ 2,440	-	\$ 675	\$ 211	\$ 886
2004	\$ 3,155	-	-	\$ 715	\$ 2,440	\$ 765	\$ 1,675	-	\$ 715	\$ 170	\$ 885
2005	\$ 2,440	-	-	\$ 765	\$ 1,675	\$ 810	\$ 865	-	\$ 765	\$ 126	\$ 891
2006	\$ 1,675	-	-	\$ 810	\$ 865	\$ 865	-	-	\$ 810	\$ 78	\$ 888
2007	\$ 865	-	-	\$ 865	-	-	-	-	\$ 865	\$ 27	\$ 892

(a) Represents the Ninth Series issue of \$11.415 million plus a refunding series of \$29.175 million issued to refund \$24.680 million. The \$29.175 million was fully retired on 10/01/97.

(b) Represents the defeasance of a 1978 refunding bond issue in the amount of \$155.725 million, and the refunded \$24.680 million (see (a) above).

(c) Sinking fund balances reflect the net effect of: deposits into the fund, one fiscal year in advance, of debt service; fund earnings; and payments, from the sinking fund, to bondholders.

(d) Represents payments to the refunding bond sinking fund plus payments of principal and interest to bondholders. Amounts may differ from budgetary amounts (budgetary amounts represent payments to sinking funds).

(e) In FY 94 DOT refunded the 3rd and 6th thru 13th Series. The refunding debt is not classified as State tax supported debt.