

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

#### FOR FISCAL YEAR 2013

## SUBMITTED TO THE GOVERNOR AND GENERAL ASSEMBLY OF MARYLAND

September 2011

#### September 21, 2011

The Honorable Martin J. O'Malley Governor of Maryland State House Annapolis, Maryland 21401

The Honorable Thomas V. M. Miller, Jr. President of the Senate Maryland General Assembly State House Annapolis, Maryland 21401

The Honorable Michael E. Busch Speaker of the House Maryland General Assembly State House Annapolis, Maryland 21401

#### 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 required to submit an estimate of the amount of new academic facilities bonds that prudently may be authorized.

At this time, the Committee recommends a \$925 million limit for new general obligation authorizations by the 2012 General Assembly to support the 2013 capital program. The Committee's projections for future authorizations assume level authorizations through 2016 of between \$925 million and \$955 million. In 2017 the projected authorization is \$1,200 million and it increases by approximately 3% through 2021. With these authorization levels, the debt affordability ratios remain within the CDAC benchmarks of 4% debt outstanding to personal income and 8% debt service to revenues.

The motion to adopt this level specifically recognized that authorization levels proposed in the Governor's 2013 capital budget could be adjusted to reflect up-to-date economic and fiscal information and the Board of Revenue Estimate's December revenue estimates. Accordingly, the Capital Debt Affordability Committee may review its authorization in December 2011 and make any necessary modifications to its recommendation.

The Committee evaluated the State's debt affordability process and, pursuant to legislative direction, made recommendations to improve that process which is in Section VII of the 2011 CDAC Report. The Report will also include a recommendation to the General Assembly of the amount of non-GO tax supported debt in fiscal year 2013.

As required by Chapter 396 of the 2011 Laws of Maryland, CDAC evaluated the capacity of the University System of Maryland (USM) to increase the amount of Academic Revenue Bonds (ARBs) by \$5 million. USM has reported that the total debt planned for 2013 will not change; only the allocation between academic and auxiliary bonds will change. CDAC concluded that the overall level of debt is prudent over time and accepted the breakdown (between academic and auxiliary) as proposed by the system. Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee therefore, recommends a limit of \$32 million for new academic facilities bonds for the University System of Maryland for fiscal year 2013, an increase of \$5 million from last year's recommendation of \$27 million.

We are pleased to present to you the Committee's Annual Report, with the recommendations relating to the fiscal 2013 capital program.

Nancy K. Kopp

State Treasurer

Chair

David Romans, Deputy Secretary

Budget and Management, on behalf of

T. Eloise Foster, Secretary

Department of Budget and Management

Peter Franchot

State Comptroller

Beverley Swaim-Staley, Secretary

alf of Department of Transportation

Public Member

#### TABLE OF CONTENTS

			Pag					
	EXE	ECUTIVE SUMMARY	6					
I.	INT	RODUCTION						
	Α.	Membership of the Committee	9					
	В.	Duties of the Committee	9					
	C.	2010 Recommendations and Subsequent Events	10					
	•	2010 Recommendations and Subsequent Events	10					
II.	TAX-SUPPORTED DEBT - TRENDS AND OUTLOOK							
	<b>A.</b>	General Obligation Bonds	11					
	В.	Transportation Debt	18					
	C.	Grant Anticipation Revenue Vehicles "GARVEE" Bonds	21					
	D.	Lease and Conditional Purchase Financings	22					
	<b>E.</b>	Maryland Stadium Authority	28					
	F.	Bay Restoration Fund Revenue Bonds	29					
III.	CAF	PITAL PROGRAMS						
	<b>A.</b>	State of Maryland Capital Program	31					
	В.	Capital Improvement and School Construction Needs						
IV.		BOND RATING AGENCY REPORTS						
	<b>A.</b>	Negative Outlook Assigned to General Obligation Bonds	35					
	В.	Excerpts from Rating Agency Reports Issued in Conjunction with the Sale						
		Of General Obligation Bonds State and Local Facilities Loan of 2011,						
		Second Series	35					
	C.	Moody's 2011 State Debt Medians	36					
V.	AFF	ORDABILITY ANALYSIS						
	<b>A.</b>	The Concept of Affordability	38					
	В.	Affordability Criteria	38					
	C.	2011 Affordability Recommendation	38					
	D.	Comparison of Recommendation and Criteria	39					
	Е.	Comparison of Recommendation and Capital Program	48					
	F.	Affordability Risk Analysis	48					
VI.	шс	HER EDUCATION DEBT						
V 1.	A.	Background	56					
	В.	CDAC Duties	56					
	Б. С.	Size and Condition of Debt of the University System of	50					
	C.	· · · · · · · · · · · · · · · · · · ·						
		Maryland, Morgan State University, St. Mary's College of	57					
	D	Maryland, and Baltimore City Community College	57					
	D.	Incorporating Higher Education Academic Debt into the	50					
	T	Affordability Analysis	59					
	<b>E.</b>	University System of Maryland Debt Management Policy	60					
	F.	2011 Recommended Authorization for Higher Education Academic Debt and	L					
		Evaluation of the Capacity of the University System of Maryland (USM) to	<b>C</b> 1					
		Increase Academic Revenue Bonds (ARBs) by \$5 million	61					

#### TABLE OF CONTENTS (CONTINUED)

			Page
VII.		LUATION OF THE DEBT AFFORDABILITY PROCESS AND	
		OMMENDATIONS TO THE GENERAL ASSEMBLY	
	<b>A.</b>	Background	
	В.	Request to Evaluate the State's Debt Affordability Process	
	C.	CDAC's Recommendations	
	D.	Recommendation for Non GO Tax-supported Debt for Fiscal Year 2013	66
APPI	ENDIC	ES	
	A.	History of the Capital Debt Affordability Committee	67
	В.	History of Maryland Stadium Authority Financings	72
SCHI	EDULE	CS CS	
	<b>A-1</b>	Maryland Personal Income and Population	
		Historical Data and Projections	76
	<b>A-2</b>	Maryland State Revenue	
		Historical Data and Projections	77
	<b>B-1</b>	Proposed General Obligation Authorizations and	
		Estimated Issuances	78
	<b>B-2</b>	Projected General Obligation Debt - Authorized	
		But Unissued	79
	<b>B-3</b>	Projected General Obligation Debt Outstanding	
	<b>B-4</b>	Projected General Obligation Debt Service	
	C-1	Historical Data - General Obligation Debt	
	<b>C-2</b>	Historical Data - Affordability Ratios	
	<b>C-3</b>	Historical Data - Consolidated Transportation	
		Bonds	84

#### **EXECUTIVE SUMMARY**

The Capital Dept Affordability Committee ("CDAC" or "the Committee"), established under Section 8-104 *et seq*. of the State Finance and Procurement Article (SF&P), 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, St. Mary's College of Maryland and Baltimore City Community College;

To develop its recommendations, the Committee met on August 12, September 13 and September 21, 2011. At its first meeting, the Committee reviewed actions by the 2011 Legislature and the size, condition and projected issuances of tax-supported debt. The Committee conducted a similar annual review of the debt of higher education institutions at the September 13 meeting. Also at the September 13 meeting, the Committee reviewed the State of Maryland Capital Program and school construction needs.

The State's AAA ratings were also discussed at the Committee's meetings. On July 13, 2011 and in early September 2011, Moody's Investors Service, Standard & Poor's ("S&P") and Fitch Ratings all affirmed the State's AAA rating. Moody's, however, placed the general obligation bonds of Maryland (and four other states) on negative outlook after the August 2, 2011 assignment of a negative outlook to the U.S. government. S&P has also expressed concern about the effect of federal budget reductions on Maryland. In its September 7 rating report S&P stated, "Downside risk for the rating includes our view of the potential for significant reductions in federal funding that currently flows to the state. Standard & Poor's will continue to monitor the federal consolidation efforts stemming from the Budget Control Act and, once these are identified, will evaluate their effect on Maryland's finances and the state's response to these revenue reductions." As of the date of this report, there have been no further rating actions.

At the September 21 meeting, the Committee unanimously recommended a \$925.0 million limit for new general obligation authorizations by the 2012 General Assembly to support the 2013 capital program. The Committee's projections for future authorizations assume generally level authorizations through 2016 of between \$925.0 million and \$955.0 million. In 2017 the projected authorization is \$1,200.0 million and it increases by approximately 3% through 2021.

With these authorization levels, the debt affordability ratios remain within the CDAC benchmarks of 4% debt outstanding to personal income and 8% debt service to revenues. The affordability analysis presented at the September 21 meeting indicates that the Committee's projection of General Obligation Bond authorizations is currently affordable. The personal income criterion peaks at 3.47% in fiscal year 2013 and is at 2.92% in fiscal year 2021. The debt service criterion increases annually to 7.72% in fiscal year 2017 but declines to 7.05% in fiscal year 2021.

The Committee reviewed its assumptions on interest rates, revenues, personal income, debt issuance and bond authorizations and the Committee believes that these variables have been estimated conservatively. The personal income and revenue estimates reflect the most recent projections by the Bureau of Revenue Estimates in September 2011. Because the affordability ratio for debt service to revenues is near the benchmark of 8.0%, any appreciable variation in revenue assumptions could significantly impact the amount of future authorizations and issuances. The motion to recommend \$925.0 million specifically recognized that authorization levels proposed in the Governor's 2013 capital budget could be adjusted to reflect up-to-date economic and fiscal information and the Board of Revenue Estimate's December revenue estimates. Accordingly, the Capital Debt Affordability Committee may review its authorization in December 2011 and make any necessary modifications to its recommendation.

As required by Chapter 396 of the 2011 Laws of Maryland, CDAC evaluated the capacity of the University System of Maryland (USM) to increase the amount of Academic Revenue Bonds (ARBs) by \$5.0 million. USM has reported that the total debt planned for 2013 will not change; only the allocation between academic and auxiliary bonds will change. CDAC concluded that the overall level of debt is prudent over time and accepted the breakdown between academic and auxiliary as proposed by the system. Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee therefore, recommends a limit of \$32.0 million for new academic facilities bonds for the University System of Maryland for fiscal year 2013, an increase of \$5.0 million from last year's recommendation of \$27.0 million. The Committee did not receive any requests for new issuances for Morgan State University, St. Mary's College of Maryland and Baltimore City Community College and therefore made no recommendations for these institutions.

There were also miscellaneous reviews conducted by CDAC in 2011 which included an evaluation of the debt affordability process, the impact of Public Private Partnerships and the inclusion of energy leases in the debt affordability analysis. A summary of these reviews follows.

The legislative budget committees requested CDAC to evaluate the State's debt affordability process and make recommendations for consideration by the General Assembly in the 2012 session. This evaluation and recommendations are in Section VII in the CDAC report.

Chapter 641 of the Laws of 2010, codified at SF&P §10A-102(d), requires the Committee to analyze and report on the aggregate impact of Public-Private Partnership agreements on the total amount of new State debt that prudently may be authorized for the next fiscal year. There were no Public-Private Partnerships presented to CDAC during this reporting period. In 2010 the Committee concluded that the proposed State Center Public-Private Partnership would have no impact on the total amount of new State debt that may be authorized because the lease approved by the Board of Public Works on July 28, 2010 met the criteria for operating leases. However, on the advice of the State's external auditor in 2010, the final determination of the classification of the occupancy leases at State Center should be done at the time the State actually occupies the space. A review of Public Private Partnerships ("P-3s") is included in the Section II. D in the Report.

In accordance with SF&P §8-104(c), leases are considered tax-supported debt when the lease or unit of State government is "supported directly or indirectly by State tax revenues". However, SF&P §8-104 was amended in the 2011 Session by Chapter 163 of the 2011 Laws of

Maryland. Effective June 1, 2011, tax supported debt does not include capital leases used to finance energy performance contracts if, as determined by the CDAC, energy savings that are guaranteed by the contractor:

- (i) equal or exceed the capital lease payments on an annual basis; and
- (ii) are monitored in accordance with reporting requirements adopted by the CDAC. Section II. D in the Report describes the guidelines adopted by CDAC to determine if a capital lease should be considered in the affordability analysis and summarizes the leases that are and are not included in the affordability analysis.

The 2011 Capital Debt Affordability Report and the 2011 meeting materials are available on the State Treasurer's website at <a href="http://www.treasurer.state.md.us/debtmanagement/cdac-reports.aspx">http://www.treasurer.state.md.us/debtmanagement/cdac-reports.aspx</a>

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

#### I. INTRODUCTION

#### A. Membership

The members of the Capital Debt Affordability Committee ("CDAC" or "Committee") 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. <u>Duties</u>

The Committee is required to review the size and condition of State debt on a continuing basis and to submit to the Governor and to the General Assembly by October 1 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 <sup>2</sup> that will be:
  - Outstanding, and
  - Authorized but unissued during the next fiscal year;
- The capital program prepared by the Department of Budget and Management and the capital improvement and school construction needs during the next five fiscal years, as projected by the Interagency Committee on School Construction;
- Projected debt service requirements for the next ten years;
- Criteria used by recognized bond rating agencies to judge the quality of State bond issues;
- The aggregate impact of public-private partnership agreements on the total amount of new State debt that prudently may be authorized for the next fiscal year <sup>3</sup>;
- 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.

<sup>&</sup>lt;sup>1</sup> Chapter 695, Laws of Maryland 2010 changed the date from September 10 to October 1 of each year to allow the Committee to consider updated projections from the Board of Revenue Estimates made in September of each year. <sup>2</sup> See Appendix A for the Committee's definition of tax-supported debt.

<sup>&</sup>lt;sup>3</sup> Chapter 641 of the Laws of 2010 requires the State Treasurer to analyze the impact of each public-private partnership agreement proposed by a unit of State government on the State's Capital Debt Affordability limits and submit that analysis to the Budget Committees within 30 days of receiving a copy of the proposed agreement from a unit of State government. Chapter 641 also requires the Committee to analyze the aggregate impact of public-private partnership agreements on the Committee's recommended authorization for the next fiscal year.

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.

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. <u>2010 Recommendations and Subsequent Events</u>

The recommendations of the Committee to the Governor and the General Assembly for the fiscal year 2012 capital program and the subsequent events related to those recommendations are summarized below.

#### 2010 Recommendations of the Capital Debt Affordability Committee

The Committee made a conditional recommendation of \$925.0 million in new debt for fiscal year 2012 in its 2010 report. In its letter dated September 22, 2010 to the Governor, President of the Senate and the Speaker of the House, the Committee noted that the motion to recommend \$925.0 million specifically recognized that authorization levels proposed in the Governor's 2012 capital budget could be adjusted to reflect up-to-date economic and fiscal information and the Board of Revenue Estimate's December revenue estimates. In December 2010, the Capital Debt Affordability Committee concluded that there had been no significant revenue changes and did not modify its recommendation of \$925.0 million in new debt for fiscal year 2012.

Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee recommended a limit of \$27.0 million for new academic facilities for the University System of Maryland for fiscal year 2012.

#### 2011 Authorizations

• The net general obligation debt authorized for the fiscal year 2012 capital program (effective June 1, 2011) totaled \$925.0 million:

(in millions)	
\$ 949.1	New general obligation debt authorized
	by the 2011 General Assembly
(24.1)	Reductions in previously authorized debt
\$ <u>925.0</u>	-

- The 2011 General Assembly authorized the University System of Maryland to issue \$27.0 million in new academic facility bonds \$10.0 million to finance specific capital projects and \$17.0 million to finance capital facility renewal projects.
- The 2010 General Assembly also increased the total amount of debt authorized for the University System from \$1,200.0 million to \$1,400.0 million.

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

The State of Maryland has issued six 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 highway aid ("GARVEE Bonds") and issued by the Maryland Transportation Authority;
- Lease and Conditional Purchase Financings;
- Revenue bonds issued by the Maryland Stadium Authority secured by leases with the State;
- Bonds for the purpose of Chesapeake Bay restoration secured by the revenue from a Statewide fee and issued by the Maryland Water Quality Financing Administration

Although the State has the authority to make short-term borrowings in anticipation of taxes and other receipts up to a maximum of \$100.0 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 State-owned capital improvements, including institutions of higher education, and the construction of locally owned public schools;
- Fund local government improvements, including grants and loans for water quality improvement projects and correctional facilities; and
- Provide funds for repayable loans or outright grants to private, nonprofit, cultural, or educational institutions.

#### Security

The State has pledged its full faith and credit as security for its General Obligation Bonds.

#### Current Status:

**Debt Outstanding as of June 30, 2011** \$ 6,982,845,967

**Amount Authorized but Unissued at June 30, 2011** \$ 2,357,041,130\*

\*Includes the \$15,902,000 authorization for Qualified Zone Academy Bonds (QZABs) in the 2011 legislative session which was unissued as of June 30, 2011.

#### Ratings

Fitch Ratings, Moody's Investors Service and Standard and Poor's have rated Maryland's General Obligation Bonds AAA since S&P's first rating in 1961, Moody's in 1973 and Fitch's in 1993.

On July 12, 2011, just prior to the issuance of the State's General Obligation Bonds 2011 Second Series A, B, C and D, Moody's Investors Service, Standard & Poor's and Fitch Ratings affirmed the Aaa/AAA/AAA ratings, respectively, with a stable outlook. On July 19, 2011, however, Moody's announced that in connection with their review and possible downgrade of the Aaa 'bond rating of the United States, they also placed Maryland and four other Aaa states identified as indirectly linked to the U.S. government on review for a possible downgrade. Following the confirmation of the U.S. Aaa sovereign rating, Moody's confirmed the Aaa ratings of Maryland and the four other states on August 4, 2011. At the same time, they stated: "In conjunction with assignment of a negative outlook (to) the U.S. government, the outlooks for indirectly linked U.S. public finance issuers (including Maryland) have been revised to negative... (and) ...their outlooks will be reviewed on a case by case basis in the coming weeks." The complete August 4, 2011, press release is currently available at: <a href="http://www.moodys.com/research/Correction-to-Text-Aug-4-2011-Moodys-confirms-Aaa-ratings?lang=en&cy=global&docid=PR 224016">http://www.moodys.com/research/Correction-to-Text-Aug-4-2011-Moodys-confirms-Aaa-ratings?lang=en&cy=global&docid=PR 224016</a>

The Rating Agencies assigned the AAA rating to the 2011 Second Series E Tax-Exempt Refunding Bonds sold on September 13, 2011 and affirmed the State's AAA ratings on all its general obligation bonds. Moody's rating continued to have a negative outlook. Standard and Poor's also noted in their report that "Downside risk for the rating includes our view of the potential for significant reductions in federal funding that currently flows to the state. Standard & Poor's will continue to monitor the federal consolidation efforts stemming from the Budget Control Act and, once these are identified, will evaluate their effect on Maryland's finances and the state's response to these revenue reductions."

## Use of Variable Rate Debt, Bond Insurance, Interest Rate Exchange Agreements and Guaranteed Investment Contracts

The State is authorized to issue variable interest rate bonds in an amount that does not exceed 15% of the outstanding general obligation indebtedness. The State has not issued any variable rate debt as of June 30, 2011 and has not executed any interest rate exchange agreements. Because the State is a "natural" AAA credit, there has been no need for bond insurance. To invest the sinking funds paid on certain Qualified Zone Academy Bonds ("QZABs"), the State has entered into master repurchase agreements.

#### Trends in Outstanding General Obligation Debt

#### **Authorizations and Issuances**

*Graph 1* depicts the growth between 1980 and 2011 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. *Appendix C-1* includes data on the authorizations, issuances and debt service of General Obligation Bonds since 1973.

#### Annuity Bond Fund

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 1998 – 2010 and the projections for fiscal years 2011 – 2016. 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 and general funds. Prior to fiscal year 2004, the State used general funds, appropriated either to the ABF 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 ABF was required to meet debt service in 2008 and, if the tax rate remains constant in fiscal year 2013, additional general fund appropriations may be necessary beginning in fiscal year 2013.

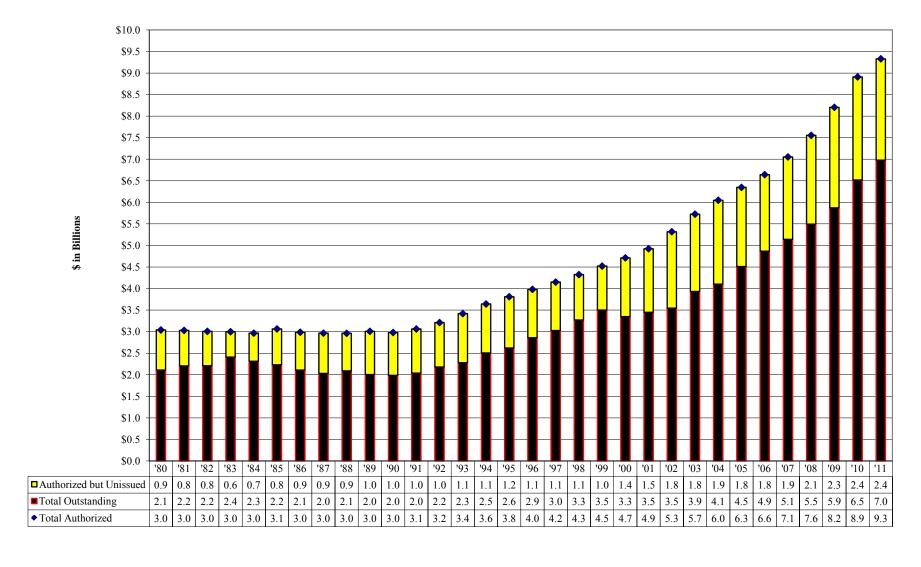
The period between 2003 and 2011 has had the lowest interest rates since 1988 as demonstrated in (*Graph 3*); *consequently*, the increase in debt service (*Graph 2.2*) is primarily due to the increase in debt outstanding (*Graph 1*).

#### True Interest Costs

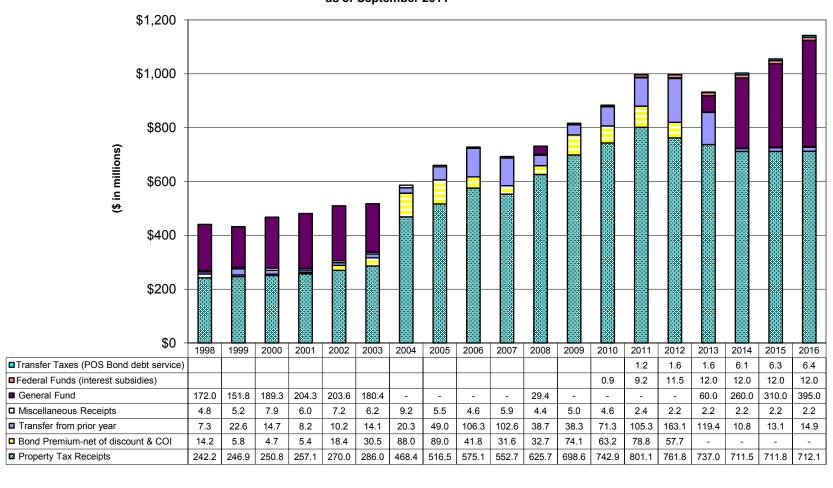
*Graph 3* depicts the true interest costs ("TIC") on tax-exempt and taxable State general obligation debt (excluding refunding bonds and QZABs) from 1988 through the State's recent issuance on August 5, 2011. During this time period, the TICs on general obligation debt ranged from a low of 2.082% in the 2010 Second Series A, Series B and Series C to a high of 6.996% in the 1990 Fourth Series. The TICs for the taxable Build America Bonds, Qualified School Construction Bonds and Qualified Energy Conservation Bonds were adjusted for the federal interest subsidy.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

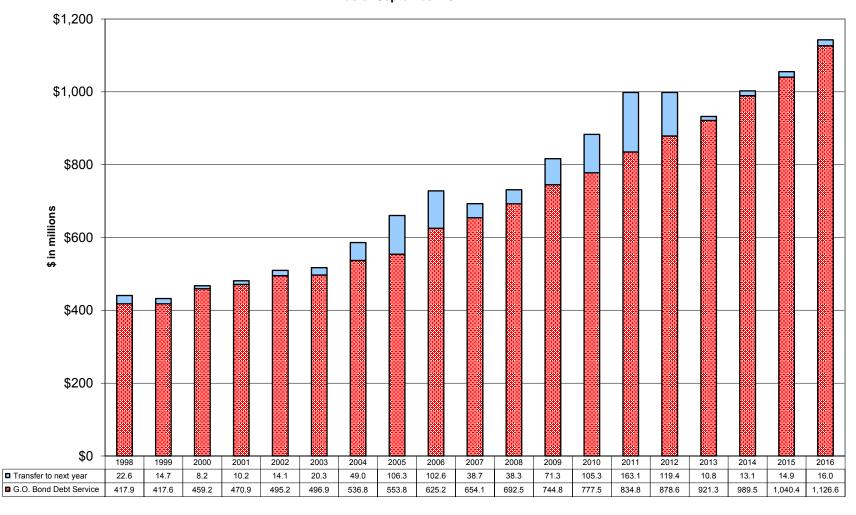
**Graph 1 History of General Obligation Debt Outstanding and Unissued Authorizations** 



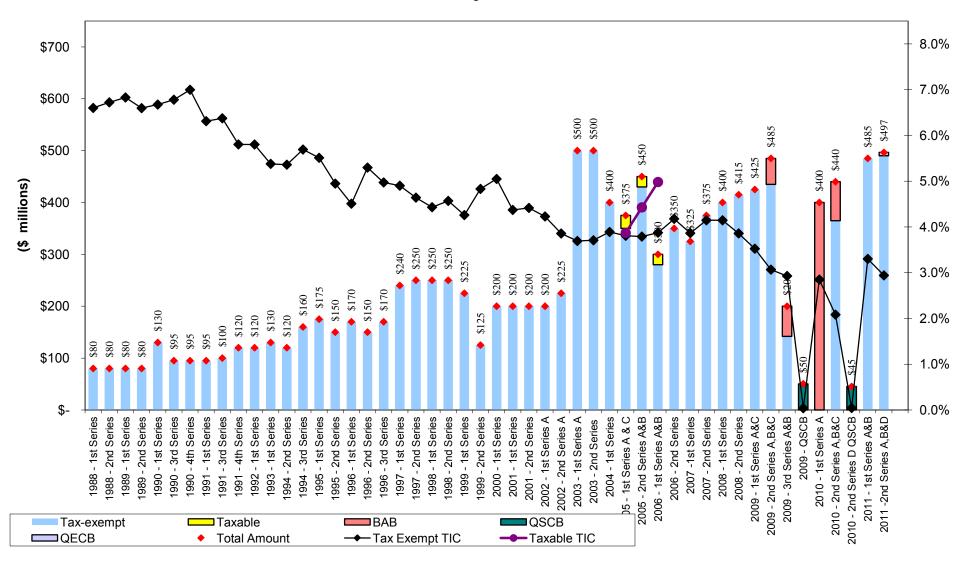
Graph 2.1
Annuity Bond Fund Sources
1998 - 2010 Actual,
2011- 2016 Projections, subject to change
as of September 2011



Graph 2.2
Annuity Bond Fund Uses
1998 - 2010 Actual,
2011- 2016 Projections, subject to change
as of September 2011



Graph 3
New Money Issuance Amounts and True Interest Costs of General Obligation Bonds
Excludes QZABs



#### **B.** Transportation Debt

#### **Consolidated Transportation Bonds**

#### **Purpose**

Consolidated Transportation Bonds ("CTB"), like State General Obligation Bonds are 15-year obligations, issued by the Maryland Department of Transportation ("MDOT") for highway and other transportation projects.

#### Limitations to Debt Outstanding

The gross outstanding aggregate principal amount of CTBs is limited by statute to \$2.6 billion. The General Assembly may set a lower limit each year, and for fiscal year 2012 the limit is \$1.889 billion. In addition, MDOT has covenanted with the holders of outstanding CTBs not to issue additional bonds unless: (1) the excess of Transportation Trust Fund revenues over MDOT 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 or, conversely, total debt service cannot exceed 50% of total proceeds from taxes pledged using the debt service divided by revenues convention.

#### Security

Debt service on CTBs is payable from MDOT's shares of the motor vehicle fuel tax, the motor vehicle titling tax, sales tax on rental vehicles, and a portion of the corporate income tax. The 2011 Budget Reconciliation and Financing Act (House Bill 72/Chapter 397) made the following changes to MDOT's pledged revenues: 1) effective July 1, 2011 MDOT will no longer receive a distribution of the State's general sales and use tax revenues, and 2) effective July 1, 2012 MDOT will receive a reduced distribution of the State's corporate income tax revenues. The bill also made provision for these revenues to remain available, if needed, to pay debt service on CTBs issued prior to July 1, 2011 while they remain outstanding and unpaid. In addition, other receipts of MDOT (including motor vehicle licensing and registration fees and operating revenue of MDOT) are available to meet debt service if these tax proceeds should become insufficient. The holders of CTBs are not entitled to look to other sources for payment including the federal highway capital grants that are pledged to GARVEE Bonds.

#### **Current Status:**

Debt Outstanding as of June 30, 2011 \$1,561,840,000 Ratings S&P, AAA Moody's, Aal Fitch, AA+

## Use of Variable Rate Debt, Bond Insurance, Interest Rate Exchange Agreements and Guaranteed Investment Contracts

MDOT does not have variable rate debt or bond insurance on CTBs nor does MDOT use interest rate exchange agreements or guaranteed investment contracts.

#### Transportation Debt Outstanding

The following chart summarizes the activity in CTBs from 2005 to 2011 and the projected activity through 2017.

	Summary of Debt Activity MDOT Consolidated Transportation Bonds							
	(\$ in millions)							
Fiscal Year	Debt Outstanding at Beginning of Year	New Issues	Refunding Issues	Defeased or Refunded	Redeemed	Debt Outstanding at End of Year	Required Debt Service	
2005	\$1,186	\$0			\$116	\$1,070	\$154	
2006	\$1,070	\$100			\$92	\$1,078	\$141	
2007	\$1,078	\$100			\$67	\$1,111	\$118	
2008	\$1,111	\$227			\$69	\$1,269	\$121	
2009	\$1,269	\$390			\$76	\$1,583	\$142	
2010	\$1,583	\$140			\$78	\$1,645	\$151	
2011	\$1,645	\$0			\$83	\$1,562	\$159	
2012E	\$1,562	\$300			\$103	\$1,759	\$182	
2013E	\$1,759	\$240			\$109	\$1,890	\$197	
2014E	\$1,890	\$240			\$131	\$1,999	\$226	
2015E	\$1,999	\$185			\$153	\$2,031	\$254	
2016E	\$2,031	\$210			\$165	\$2,076	\$269	
2017E	\$2,076	\$300			\$197	\$2,179	\$307	

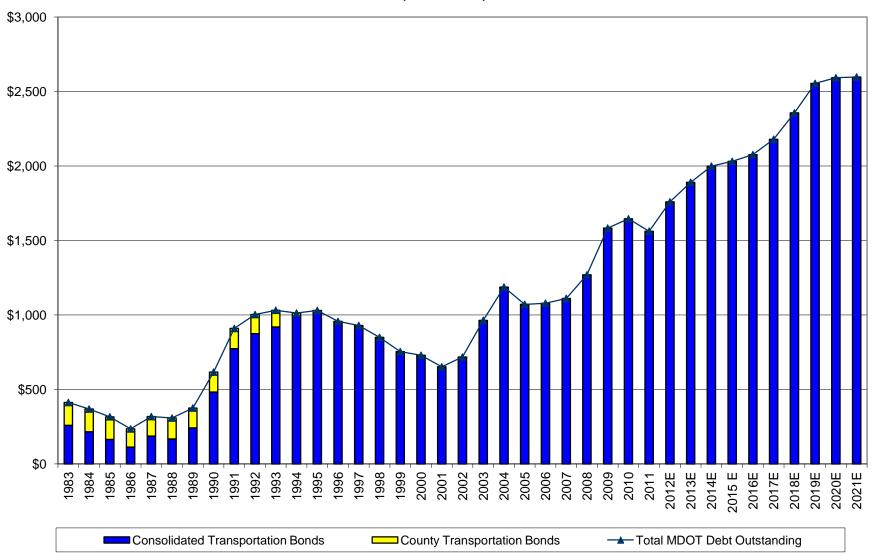
E=Estimate and preliminary.

Graph 4 depicts outstanding CTBs and County Transportation Bonds <sup>1</sup> (after being reduced by any amounts in sinking funds) for fiscal years 1983 through 2011, as well as MDOT's current projections for fiscal years 2012 through 2021. Prior to 1989, MDOT 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. From 2002 through 2004, with MDOT revenues flat, increased use of bond financing was necessary to fund the capital program. From 2005 through 2007 revenues increased and a limited amount of debt was necessary to fund the capital program. Since 2008, with revenues affected by the slowing economy, MDOT has had to increase reliance on debt to support capital projects. In fiscal year 2011, revenues were slightly higher than target levels at the same time capital funds were not expended as quickly as anticipated, therefore the issuance of debt was delayed.

-

<sup>&</sup>lt;sup>1</sup> Prior to 1993, MDOT 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 sales and use tax on rental vehicles. 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 1983-2011: Estimated 2012-2021
(\$ in millions)



#### C. Grant Anticipation Revenue Vehicles ("GARVEE") Bonds

#### **Purpose**

Grant Anticipation Revenue Vehicles ("GARVEE") Bonds are being used as part of the funding plan for the Intercounty Connector ("ICC") project, in addition to Maryland Transportation Authority funds, revenue bonds and a federal loan under the Transportation Infrastructure Finance and Innovation Act ("TIFIA") Program, Maryland Transportation Trust Funds, State General Funds, State General Obligation Bonds, and other sources. Use of GARVEEs on the ICC was 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 authorizing statutes limit the total amount that can be issued for GARVEEs to \$750.0 million, with a maximum maturity of 12 years. 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 a portion of federal transportation funds received by the State. In addition, there is a subordinate pledge of certain State Transportation Trust Fund ("TTF") tax sources. There are also debt service reserve funds.

#### Current Status:

*GARVEE bonds issued:* \$750,000,000

**Debt Outstanding as of June 30, 2011:** \$596,915,000

Ratings: Standard & Poor's AAA

Moody's Investor's Service Aa1

Fitch Ratings AA

Annual Debt Service Payments: Approximately \$87.5 million per year for fiscal years 2012-2019 and \$51.4 million for fiscal year 2020

Final Maturity: March 1, 2020

Pledged Revenue: \$440.4 million per year in federal aid

#### Issuances

In May 2007, the Maryland Transportation Authority sold \$325.0 million of GARVEE bonds at a true interest cost of 3.99%. In December 2008, the Authority sold the remaining \$425.0 million of GARVEE bonds at a true interest cost of 4.31%. No further GARVEE bond sales are planned. Future refunding opportunities are not likely to occur.

## Use of Variable Rate Debt, Bond Insurance, Derivatives and Guaranteed Investment Contracts

The GARVEE bonds are fixed rate bonds, and were issued without bond insurance due to the TTF back up pledge and the availability of debt service reserve funds. The Authority has not used derivatives or guaranteed investment contracts.

#### D. 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"). The additional State liability and debt service resulting from capital leases are not large in relation to the State's general obligation debt outstanding and debt service but it is a growing component of tax-supported debt due primarily to the financing of Video Lottery Terminals ("VLTs") in Ocean Downs and Perryville and the projected financing of the Department of Health and Mental Hygiene's ("DHMH's") public health lab and the projected financing of VLTs at Arundel Mills. The following lease activity for equipment and energy performance contracts does not include leases for the Maryland Stadium Authority ("MSA") which are reported as MSA debt.

#### 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.

State Agencies have also made significant use of COPs, another form of conditional lease purchase debt financing. In 2011, the State issued \$40.9 million of COPs to finance VLTs at Ocean Downs and Perryville.

Some COPs are supported by facility revenues and therefore are <u>not</u> considered to be tax supported and are not included in the capital lease component in Table 1 and Tables 2a and 2b of this report. Examples of such projects include: MDOT's financing for capital improvements at Baltimore/Washington International Thurgood Marshall Airport ("BWI"); the expansion of parking at the Maryland Rail Commuter BWI rail station; and the construction of a warehouse at the Maryland Port Administration's South Locust Point Terminal.

#### Security

Lease payments by 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.

#### Ratings

Equipment and energy leases are not rated. However, COPs may have ratings. The 2011 COPs that were issued in January 2011 to finance VLTs were rated Aa1, AA+ and AA+ by Moody's, Standard & Poor's and Fitch Ratings, respectively.

#### 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 a new parking garage in Annapolis. In all leases, the term of the lease does not exceed the economic life of the property.

In another instance of the use of the capital lease structure, the State began using leasepurchase 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 term of the energy leases cannot exceed 15 years.

#### Limitations to Nontraditional Transportation Debt

The 2010 General Assembly established a limit of \$628.3 million at June 30, 2011 for total aggregate outstanding and unpaid principal balance of nontraditional debt issued by MDOT. Nontraditional debt is defined as any debt instrument that is not a CTB or a GARVEE Bond. This includes COPs and other forms of transportation capital leases both tax and non-tax supported. The limit of \$628.3 million was increased to \$663.3 million by MDOT, after appropriate notification to and concurrence of the General Assembly's budget committees, solely for the purpose of the proposed State Center garage financing through the Maryland Economic Development Corporation ("MEDCO"). As of June 30, 2011, MDOT had nontraditional debt outstanding in the total principal amount of \$628.3 million.

Tax-Supported Debt and the Inclusion of Energy Leases in the Affordability Analysis
In accordance with SF&P §8-104(c), leases are considered tax-supported debt when the
lease or unit of State government is "supported directly or indirectly by State tax revenues".
However, SF&P §8-104 was amended in the 2011 Session by Chapter 163 of the 2011 Laws of
Maryland. Effective June 1, 2011, tax supported debt does not include capital leases used to
finance energy performance contracts if, as determined by the CDAC, energy savings that are
guaranteed by the contractor:

- (i) equal or exceed the capital lease payments on an annual basis; and
- (ii) are monitored in accordance with reporting requirements adopted by the CDAC.

The Committee has examined the energy leases financed by the State Treasurer's Office ("STO") and adopted the following guidelines.

- 1. All energy leases that do not have any guarantees should be included as tax supported debt in CDAC's affordability analysis.
- 2. Prior to the recommendation of the total amount of new State debt that prudently may be authorized for the next fiscal year, CDAC should monitor and review the following:

*If construction of the energy improvement is complete:* 

- The Guarantee must be current and not expired
- If the amount of the Guarantee is greater than or equal to the annual debt service on the lease, the lease will not be included as tax supported debt in CDAC's affordability analysis.

*If the energy project is in construction:* 

• If the proposed amount of the surety bond that will be posted is greater than or equal to the future annual debt service on the lease, the lease will not be included as tax supported debt in CDAC's affordability analysis.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

Consequently, the following leases are  $\underline{not}$  included as tax-supported debt in the affordability analysis.

Energy lease project	Debt Service for FY 2011	Annual Surety Bond Amount
UMS – Baltimore Campus (UMBC)	\$543,600	\$592,164
DGS – District Court & Multi –		
Service Centers	388,320	396,252
Maryland School for the Deaf	291,257	291,257
DHMH – Springfield Hospital	637,912	637,912
DPSCS – Hagerstown Prison	488,395	832,158
DHMH- Deer's Head Hospital	255,946	255,946
Spring Grove Hospital	1,896,641	2,392,341
Spring Grove Hospital (Modification)	149,055	*
Department of Agriculture	194,960	243,185
DGS - Multi-Service Centers	794,357	1,818,967
University of Baltimore	649,125	701,240
UMCP	1,882,220	1,882,220
UMCES (Horn Point Lab)	159,338	214,407
State Police	241,629	584,840
Workforce Technology	169,101	204,181
DPSCS – Jessup	In construction, No DS in FY 2011	Proposed** 1,944,776
Maryland Aviation Administration	In construction, No DS in FY2011	Proposed** 2,061,302
State Highway Administration	In construction, No DS in FY 2011	Proposed** 2,234,503
Maryland Transit Administration	In construction, No DS in FY 2011	Proposed** \$646,589

<sup>\*</sup> The surety bond amount is included with the original Spring Grove project surety bond amount.

" "

<sup>\*\*</sup> The surety bonds will be effective after construction is complete and the proposed amounts are greater than the projected annual debt service.

The following leases are included as tax-supported debt in the affordability analysis on Tables 1 and 2 because the energy savings were not guaranteed in an amount that was equal to or greater than annual debt service.

Energy lease project	Lease Outstanding on 6/30/11	Debt Service for FY 2011
DGS - State Office Complex	\$4,212,260	\$908,233
DHMH -Rosewood Center	1,812,820	383,326
DHMH -Rosewood Center	801,736	156,934
St. Mary's College of Maryland	1,555,258	205,295
Veterans Affairs	618,168	56,638
Total	<u>\$9,000,242</u>	<u>\$1,710,426</u>

#### Projections of Future Lease Activity

The STO periodically surveys State agencies about their plans to finance equipment and energy performance contracts using capital leases. The following assumptions were used in the affordability analysis.

<u>Equipment Leases</u>: As a result of the survey done in the spring of 2011 and recent lease activity, the STO is projecting the financing of \$10.0 million of equipment in each future fiscal year 2012 through 2021.

<u>VLT Leases</u>: VLTs for Ocean Downs and Perryville were financed in January 2011 and are included as tax-supported leases in the affordability analysis. Arundel Mills is scheduled to open in June 2012 and this financing is also included in the affordability analysis as tax-supported debt. The assumptions for Arundel Mills are as follows: 4,750 VLTs of which 81% are to be financed at a cost of approximately \$22,000 per machine for a total financing of approximately \$85.0 million. The lease term is five years and the first payment of principal and interest will occur in FY 2013. These assumptions were developed based on the experience at Ocean Downs and Perryville and the actual amount financed at Arundel Mills could change.

Using similar assumptions for the potential Baltimore City and Rocky Gap VLT facilities, it is estimated that equipment leases totaling \$66.9 million for Baltimore City and \$26.8 million for Rocky Gap may be necessary. However, due to the uncertainty of the timing of these financings, no projections for VLT financing at these two facilities were made in the 2011 CDAC analysis.

Energy Leases: The Department of General Services ("DGS") has indicated that \$88.0 million in energy leases will be financed in fiscal years 2012 and 2013. DGS has advised the CDAC that all of the projected energy lease financings will have surety bond guarantees that equal or exceed the debt service payments throughout the term of the lease; therefore, these leases are not included in the CDAC Affordability Analysis.

<u>DHMH Lab</u>: The Board of Public Works approved the capital lease for the public health lab on August 10, 2011. MEDCO expects to issue bonds to finance the project in the Fall of 2011 and the affordability analysis includes MEDCO's most recent projections. The amount financed is \$179.0 million with a term of 20 years.

<u>State Center Garage</u>: MEDCO is also expected to finance this garage at State Center in the amount of \$32.5 million. The affordability analysis assumes a closing in June 2014 and 15 years of debt service beginning in fiscal year 2015.

Leases Not Included in the 2011 CDAC Affordability Analysis: In 2011, the State began leasing the Charles County Courthouse which the General Accounting Division has determined is an operating lease. Consequently, the lease for the Charles County Courthouse is not included in the CDAC analysis as a tax-supported lease. At this time, the proposed 15 year lease of office space in New Carrollton beginning in 2013 for the Department of Housing and Community Development is also treated as an operating lease and not included in the affordability analysis.

<u>Changes to Lease Accounting</u>: Under current Generally Accepted Accounting Principles ("GAAP"), if a lease meets one or more of the following four criteria it is classified as a capital lease:

- The lease transfers ownership of the property to the lessee (user) by the end of the lease term.
- The lease allows the lessee (user) to purchase the property at a bargain price at fixed points in the term of the lease and for fixed amounts.
- The term of the lease is 75% or more of the estimated useful economic life of the property.
- The present value of the lease payments is 90% or more of the fair value of the property.

The Financial Accounting Standards Board ("FASB") has a current project that proposes to establish a common leasing standard and to change lease accounting so that all lease obligations and the related right-to-use are reported on private sector balance sheets. The Government Accounting Standards Board ("GASB") has added a similar lease accounting project to their research agenda for the period April to August 2011.

CDAC has been briefed about the possibility of proposed accounting changes. Since there have been no definitive changes to accounting standards to date, CDAC continues to consider only capital leases in its affordability analysis.

The following table summarizes the current tax-supported leases and tax-supported Conditional Purchase Financings as of June 30, 2011.

Tax-Supported Lease and Conditional Purchase Financings Outstanding as of June 30, 2011					
State Agency (Lessee)	Facilities Financed	Principal Amount Outstanding as of June 30, 2011			
State Treasurer's Office	Capital Equipment Leases Various communications, computers and other equipment for various State agencies	\$41,172,697			
State Treasurer's Office	Energy Performance Projects (State Office Complex, DHMH Rosewood, St. Mary's College, Veterans Affairs)	9,000,242			
Department of	Headquarters Office Building	24,360,000			
Transportation	MAA Shuttle Buses - BWI	7,700,000			
Department of General	Multi-service office buildings: St. Mary's County	1,385,000			
Services Services	Hilton Street Facility	1,455,000			
	Prince George's County Justice Center	19,908,324			
Maryland Transportation Authority	State office parking facility in Annapolis	20,670,000			
Maryland State Lottery Ocean Downs and Perryville VLTs		40,900,000			
Total Tax Supported Leas	<u>\$166,551,263</u>				

#### Public-Private Partnerships -"P-3s"

Chapter 641 of the Laws of 2010, codified at SF&P §10A-102(d), requires the CDAC to analyze and report on the aggregate impact of Public-Private Partnership agreements on the total amount of new State debt that prudently may be authorized for the next fiscal year. The focus of this analysis is on tax-supported State leases and, particularly, a determination of the leases as capital or operating.

There were no Public-Private Partnerships presented to CDAC during this reporting period. In 2010 the Committee concluded that the proposed State Center Public-Private Partnership would have no impact on the total amount of new State debt that may be authorized because, in the opinion of the State's external auditor, the lease approved by the Board of Public Works on July 28, 2010 met the criteria for operating leases. However, the auditor advised that the final determination of the classification of the occupancy leases at State Center should be done at the time the State actually occupies the space. Currently, therefore, there are no P-3s that impact the authorization of tax-supported debt.

#### E. Maryland Stadium Authority ("MSA")

#### Purpose

The MSA 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 MSA's responsibility has been extended to include convention centers in Baltimore City, Ocean City and a conference center in Montgomery County, and the Hippodrome Theater in Baltimore, Maryland. A history of MSA's financings is in Appendix B.

#### Security

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

#### Ratings

Long-Term Ratings are: S&P, AA+; Moody's, Aa2; Fitch, AA Short-Term Ratings are: S&P, A1+; Moody's, VMIG1; Fitch, F1+

### Use of Variable Rate Debt, Bond Insurance, Interest Rate Exchange Agreements and Guaranteed Investment Contracts

MSA has issued variable rate debt that has been swapped to fixed rate. The counterparties on the swaps are AIG-FP and Barclay's.

#### Current Debt at June 30, 2011

	Debt Outstanding	FY 2011 Debt	Revenue Sources for FY 2011 Debt
	as of June 30, 2011	Service	Service
Oriole Park at Camden Yards			Lottery and operating
(Bonds and Equipment Lease)	\$94,952,581	\$14,861,383	revenues
Oriole Park at Camden Yards			Guaranteed Utility
(Energy Lease) (a)	\$5,856,823	\$358,216	Savings
Baltimore City Convention Center	17,585,000	5,063,869	General Fund
Ocean City Convention Center	6,630,000	1,478,794	General Fund
Ravens Stadium			
(Bonds and Equipment Lease)	\$67,425,717	6,782,669	Lottery
Designs Cho direct			Communica d Hitilita
Ravens Stadium	\$2.205.762	121 (1)	Guaranteed Utility
(Energy Lease) (a)	\$2,395,763	131,616	Savings
Montgomery County Conference	17,000,000	1.750.462	C 1F 1
Center	17,000,000	1,759,463	General Fund
			General Fund and \$2
Hippodrome Theater	14,575,000	1,801,088	ticket charge
Camden Station Renovation	<u>7,575,000</u>	<u>716,550</u>	Lottery
Totals	\$233,995,884	\$32,953,648	

<sup>(</sup>a) Energy Leases are debt of the MSA, but are not included as part of tax-supported debt on Tables 1 and 2 because guaranteed utility savings exceeds the annual debt service.

#### 2011 Issuances/ Projections of Future Issuances

In fiscal year 2011, the MSA issued Series 2011 Ocean City Convention Center Refunding Bonds in the amount of \$6.6 million to take advantage of low interest rates. The

proceeds from these bonds were used to refund \$6.5 million of Series 1995 bonds, with the balance for closing costs. Final maturity is December 15, 2015.

MSA issued the Maryland Stadium Authority Sports Facilities Taxable Revenue Bond (Camden Yards Sports Complex Projects), Series 2011 totaling \$11.1 million in August 2011. Approximately \$10.0 million of the proceeds will be used for renovations to the Warehouse and Oriole Park at Camden Yards, \$1.0 million to fund a debt service reserve account and \$0.1 million for closing costs. This series will mature on December 15, 2022. Lottery revenues were pledged for these bonds; therefore they are not tax-supported debt and are not included in the CDAC affordability analysis.

MSA anticipates issuing another \$11.1 million in revenue bonds in FY 2013 to be used for various renovations at Oriole Park at Camden Yards. This series is expected to mature on December 15, 2022. Lottery revenues will also be pledged as the source of revenue for this bond. Consequently, these bonds will not be tax-supported debt and are not included in the CDAC affordability analysis.

MSA expects to issue about \$104.0 million of Maryland Stadium Authority Lease Revenue Refunding Bonds, Series A and B, a combination of taxable and tax-exempt, with the proceeds being used to terminate the Interest Rate Swap Agreement entered into between MSA and AIG Financial in 1993. The proceeds will refund \$11.0 million of Series 1998A and \$70.7 million of Series 1999; pay a \$20.5 million termination fee due to AIG Financial and approximately \$1.8 million of issuance costs. Closing of this transaction is expected in late 2011 or early 2012. These bonds are tax-supported debt.

#### F. <u>Bay Restoration Fund Revenue Bonds (Bay Restoration Bonds)</u>

#### **Purpose**

Proceeds of Bay Restoration Bonds will fund grants to waste water treatment plants ("WWTP") for upgrades to remove nutrients thereby reducing nitrogen loads in the Chesapeake Bay and its tributaries.

#### Security

Legislation enacted by the 2004 General Assembly 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 Bay Restoration Bonds.

#### Current Status:

Debt Outstanding as of June 30, 2011 \$41,560,000 Ratings Moody's: Aa2 - Series 2008

## Use of variable rate debt, bond insurance, derivatives and Guaranteed Investment Contracts (GIC)

The indenture permits the issuance of variable rate debt although none has been issued to

date. The structure for the Series 2008 issue was fixed rate only, with no debt service reserve that may have required guaranteed investment contracts and no bond insurance.

#### Projections of Future Issuances

The timing and amount of Bay Restoration 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 \$530.0 million. Future estimated issuance is projected (in millions) at \$50.0, \$170.0, \$160.0 and \$100.0 in fiscal years 2012-2015, respectively.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

#### III. CAPITAL PROGRAMS

#### A. <u>State of Maryland Capital Program</u>

#### 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 is authorized by an annual Maryland Consolidated Capital Bond Loan ("MCCBL"). The MCCBL is a consolidation of general construction projects and various Administration-sponsored capital programs, capital grants for non-State-owned projects, and separate individual legislative initiatives.

General Obligation Bond funds are occasionally 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, fiscal year 2006 general fund PAYGO appropriation totaled \$2.5 million, the fiscal year 2010 general fund PAYGO appropriation totaled \$60.0 thousand, and the fiscal year 2012 general fund PAYGO appropriation totaled \$47.5 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 exceed \$3.4 billion over the next five years. Higher Education, juvenile services facilities, correctional facilities, and information technology improvements comprise the bulk of these requests.

#### State 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.

Requests for State capital grant and loan programs to be funded with General Obligation Bonds are expected to exceed \$5.4 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 \$305.0 million over the next five years based on the past five-year average of \$61.0 million per year.

#### Summary of Capital Program: FY 2013 – 2017

The total capital requests are estimated at \$9.16 billion for the next five years. By contrast, the Department of Budget and Management anticipates recommending a five-year capital improvement program of approximately \$4.69 billion in General Obligation Bonds (based on the authorization levels recommended by the Committee in September, 2010). The total capital program will depend on the amount of general funds and other non-General Obligation Bond sources available for capital funding.

FY 2013 – FY 2017 Requests versus Anticipated Funding (\$ in millions)

	Total Current and Anticipated Requests	Anticipated Bond Funded Capital Program	Difference Between Current and Anticipated Requests and Anticipated Funding
State-Owned Facilities State Capital Grants and	\$3,429.3	\$2,101.6	\$1,327.7
Loans	5,423.5	2,508.4	2,915.1
Legislative Initiatives	305.0	75.0	230.0
Totals	\$9,157.8	\$4,685.0	\$4,472.8

#### **B.** Capital Improvement and School Construction Needs

Fiscal year 2012 marks the seventh consecutive year that the Governor and General Assembly have met or exceeded the \$250.0 million annual funding goal set in the 2004 Public School Facilities Act. Since fiscal year 2006, the State has invested a total of \$2.167 billion in public school construction, surpassing the overall State goal of providing \$2.0 billion within eight years. 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 \$2.0 billion for school construction projects over eight years (fiscal year 2006 to fiscal year 2013) or approximately \$250.0 million per year.

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 years 2007 and 2008. However, school construction costs have since stabilized with costs projected to increase slightly in fiscal year 2013 after declining from record high levels. PSCP monitors actual costs based on final contracts throughout the year and may make adjustments to the State reimbursement rate if warranted by market conditions. For discussion purposes, this Report refers to the documented \$3.85 billion, but the Committee acknowledges the impacts of inflation. The Task Force recommended that the State assume \$2.0 billion of this cost with the remainder the responsibility of local government under the State-local cost share formula for school construction.

In fiscal year 2012 public school construction received \$264.1 million from general obligation bonds (\$240.3 million) and previously-authorized contingency funds (\$23.7 million). In addition, Chapter 572 of 2011 allocated \$47.5 million in supplementary appropriations for public school construction projects. The Governor and the General Assembly have met the State funding goal for school construction primarily by both reducing and delaying funds for some other State capital projects and using unspent school construction funds from prior years available in the contingency fund. The amount of available contingency funds has increased significantly in the past several years reflecting economic conditions as more projects have come in well-under budget and local governments have reduced project scopes or cancelled projects due to lack of local matching funds. In fiscal 2012, as in previous years, about one-quarter of the total general obligation debt authorization was allocated to public school construction.

The fiscal year 2012 Capital Improvement Program proposes to continue the \$250.0 million annual funding commitment for public school construction beyond fiscal year 2013. Allocating \$250.0 million for school construction in fiscal year 2013 will bring total State funding to \$2.417 billion for fiscal years 2006 through 2013, exceeding the \$2.0 billion overall funding goal by 20 percent. 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 fiscal year 2013. And while funding requests from local jurisdictions have declined by 9.0% annually in the last five years, school construction needs continue to exceed the anticipated level of State funding. Fiscal year 2013 requests are expected to total approximately \$560.0 million and out-year requests in the range of \$550.0 million to \$650.0 million annually through 2017.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

#### IV. BOND RATING AGENCY REPORTS

#### A. <u>Negative Outlook Assigned to General Obligation Bonds</u>

On July 13, 2011 and in early September 2011, Moody's Investors Service, Standard & Poor's (S&P) and Fitch Ratings all affirmed the State's AAA rating. (See below for excerpts from the July ratings reports). Moody's, however, placed the general obligation bonds of Maryland (and four other states) on negative outlook after the August 2, 2011 assignment of a negative outlook to the U.S. government debt. S&P has also expressed concern about the effect of federal budget reductions on Maryland. In its September 7 rating report S&P stated, "Downside risk for the rating includes our view of the potential for significant reductions in federal funding that currently flows to the state. Standard & Poor's will continue to monitor the federal consolidation efforts stemming from the Budget Control Act and, once these are identified, will evaluate their effect on Maryland's finances and the state's response to these revenue reductions." As of the date of this CDAC report, there have been no further rating actions.

## B. Excerpts from Rating Agency Reports Issued in Conjunction with the Sale of General Obligation Bonds State and Local Facilities Loan of 2011, Second Series

Generally, there is consensus among the rating agencies in evaluating the State's credit strengths and weaknesses. The following summarizes the most recent reports.

Fitch Ratings, in assigning the AAA rating and stable outlook, noted:

- Debt oversight is strong and centralized, and the debt burden is moderate. The state has policies to maintain debt affordability, and the constitution requires GO and transportation bonds to amortize within 15 years.
- Pension funding levels have deteriorated, although the state is undertaking extensive pension and other post-employment benefit (OPEB) reforms.
- The state has a diverse, wealthy economy, benefiting from its proximity to the nation's capital.
- Financial operations are conservative, and the state maintains a rainy day fund to manage revenue cyclicality. The state took repeated action during the course of the recession to address projected budget gaps, including raising tax revenues, cutting spending, and using rainy day and other balances.

Credit challenges that were cited by Moody's include:

- Continuing budget pressure
- Low retirement system funded levels
- Above average debt burden (S&P and Fitch consider the debt burden moderate.)
- Reliance on federal jobs in era of retrenchment

Current ratings reports are available on the Treasurer's website at <a href="https://www.treasurer.state.md.us">www.treasurer.state.md.us</a>

#### C. Moody's 2011 State Debt Medians

Moody's issued a report in May 2011 titled <u>2011 State Debt Medians Report</u> which was reviewed by the Committee.

#### Purpose of the Report

Every year, Moody's releases an analysis of state debt medians to evaluate debt burden - one of many factors that Moody's uses to determine state credit quality. The 2011 Debt Medians Report shows net state tax-supported debt as of calendar year-end 2010 compared to personal income as of 2009. Two measures of state debt burden – debt per capita and debt as a percentage of personal income – are commonly used by analysts to compare one state to another. This report also includes a new metric, debt as a percentage of State GDP. Tables 1 and 2 in the Moody's 2011 State Debt Medians Report show these measures for the states and are included in the following page.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

er Capit	ta:		Rating
Cr Capi	Connecticut	\$5,236	Aa2
	Massachusetts	\$4,711	Aa1
	Hawaii	\$4,236	Aa2
	New Jersey	\$3,940	Aa3
	New York	\$3,149	Aa2
)	Delaware	\$2,676	Aaa
,	Washington	\$2,626	Aa1
	California	\$2,542	A1
	Illinois	\$2,383	A1
0	Rhode Island	\$2,191	Aa2
1	Oregon	\$2,006	Aa1
2	Kentucky	\$1,961	Aa2*
3	New Mexico	\$1,827	Aaa
4 _	Wisconsin	\$1,795	Aa2
5	Maryland	\$1,681	Aaa
6	Mississippi	\$1,534	Aa2
7	Louisiana	\$1,308	Aa2
8	Alaska	\$1,257	Aaa
	Kansas	\$1,239	Aa1*
9	Utah	\$1,222	Aaa
1	West Virginia	\$1,221	Aa1
2	Minnesota	\$1,159	Aa1
3	Florida	\$1,150	Aa1
4)	Georgia	\$1,103	Aaa
5	Pennsylvania	\$1,075	Aa1
6)	Virginia	\$1,058	Aaa
7	Ohio	\$1,007	Aa1
28	Arizona	\$910	Aa3*
9	South Carolina	\$887	Aaa
10	Nevada	\$878	Aa2
1	Maine	\$865	Aa2
2	Alabama	\$856	Aa1
3	New Hampshire	\$812	Aa1
4)	North Carolina	\$782	Aaa
(5)	Missouri	\$775	Aaa
36	Michigan	\$762	Aa2
37	Vermont	\$747	Aaa
38	Oklahoma	\$634	Aa2
39	Texas	\$612	Aaa
10	Colorado	\$524	Aa1*
1	Idaho	\$519	Aa1*
12	Indiana	\$471	Aaa*
13	Montana	\$371	Aa1
14	Arkansas	\$361	Aa1
15	Tennessee	\$345	Aaa
16	South Dakota	\$328	NGO**
17	North Dakota	\$315	Aa1*
18)	lowa	\$270	Aaa*
19	Wyoming	\$71	NGO**
50	Nebraska	\$13	NGO**
	MEAN:	\$1,408	
	MEDIAN:	\$1,066	211
	Puerto Rico	\$10,474	A3***

*	Issuer Rati	ng (No 0	G.O.	Debt
•	Issuer Rati	ng (No (	J.O.	Debt

<sup>\*\*</sup> No General Obligation Debt

JUNE 3, 2011

As a % of	2009 Personal Income	
1	Hawaii	10.1%
2	Massachusetts	9.5%
3	Connecticut	9.5%
4	New Jersey	7.9%
<u>5)</u>	Delaware	6.8%
6	New York	6.8%
7	Washington	6.2%
8	Kentucky	6.1%
9	California	6.0%
10	Illinois	5.7%
11	Oregon	5.6%
12	New Mexico	5.6%
13	Rhode Island	5.3%
14	Mississippi	5.1%
15	Wisconsin	4.8%
16)	Utah	3.9%
17	West Virginia	3.8%
18	Maryland	3.5%
19	Louisiana	3.5%
60)	Georgia	3.3%
21	Kansas	3.2%
22	Florida	3.0%
23	Alaska	3.09
24	Ohio	2.89
25	Minnesota	2.89
26	Arizona	2.8%
27	South Carolina	2.79
28	Pennsylvania	2.79
29	Alabama	2.69
30)	Virginia	2.49
31	Maine	2.49
32	Nevada	2.39
<u>33</u>	North Carolina	2.39
$\hookrightarrow$	Michigan	2.29
35)	Missouri	2.29
36	Vermont	1.9%
37	New Hampshire	1.9%
38	Oklahoma	1.89
39	Idaho	1.69
40	Texas	1.69
41	Indiana	1.49
	Colorado	130

Colorado

Arkansas

Montana

lowa Wyoming

Nebraska

MEAN:

MEDIAN:

Puerto Rico

Tennessee

South Dakota

North Dakota

\_42

43

44

45

46

<u>48</u> 49

50

# o Eight States are rated AAA by all 3 rating agencies

1.3%

1.1%

1.1%

1.0%

0.9%

0.8%

0.1%

3.5% 2.8%

71.0%\*\*

<sup>\*\*\*</sup> This figure is not included in any totals, means, or median calculations but is provided for comparison

<sup>\*\*</sup> This figure is based on 2009 Personal Income. It is not included in any totals, means, or median calculations but is provided for comparison purposes only.

## 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 the Committee's 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 Committee has self-imposed affordability criteria which are: State tax-supported debt outstanding should be no more than 4.0% of State personal income; and debt service on State tax-supported debt should require no more than 8.0% of revenues.

### C. 2011 Affordability Recommendation

At its meeting on September 21, the Committee recommended a \$925.0 million limit for new general obligation authorizations by the 2012 General Assembly to support the 2013 capital program. The Committee's projections for future authorizations assume generally level authorizations through the 2016 Legislative Session of between \$925.0 million and \$955.0 million. In the 2017 Session, the projected authorization is \$1,200.0 million and it increases by approximately 3% annually through 2021. With these authorization levels, the debt affordability ratios remain within the CDAC benchmarks of 4.0% debt outstanding to personal income and 8.0% debt service to revenues.

The motion to adopt this level specifically recognized that authorization levels proposed in the Governor's 2013 capital budget could be adjusted to reflect up-to-date economic and fiscal information and the Board of Revenue Estimate's December revenue estimates. Accordingly, the Committee may review its assumptions in December 2011 and make any necessary modifications to its recommendation.

Current estimates for personal income and revenues were updated in September 2011 after the September update from the Board of Revenue Estimates and both support the recommended authorization while adhering to the affordability criteria. Schedules of Personal Income and Revenues are in *Appendix A-1 and Appendix A-2*, respectively. These schedules

report historical data from 2001 through 2010 and projections for 2011 through 2021.

The Committee reviewed its assumptions for interest rates, revenues, personal income, authorizations, and issuances at its September 21 meeting. The Committee believes that revenues, personal income and interest rates have been estimated conservatively. As indicated in *Appendix A-2*, the decline in total revenues in fiscal years 2009 and 2010 put pressure on the debt service to revenues benchmark and, as a result, CDAC's recommended authorization declined from \$1,140.0 million in 2009 to \$925.0 million in 2010 and 2011.

In its review of the affordability assumptions, the Committee noted that certain financings were not included in the analysis. Specifically, these include any financing for the video lottery terminals at future slots facilities at Rocky Gap and in Baltimore City. Because the affordability ratio for debt service to revenues is near the 8.0% benchmark, any variation to the assumptions for revenues, interest rates, and projected activity in tax-supported debt issuance would impact directly the amount of future tax-supported authorizations and issuances.

As indicated by *Table 3*, Tax-Supported Debt Outstanding and Debt Service Stress Test, if the projections for debt service are held constant, very limited declines in revenues can still be absorbed and affordability ratios maintained. Similarly, there is limited capacity for increases in debt service if the revenue projections are held constant and the affordability criteria is 8.0%. Based on the estimates and assumptions in September 2011, the Committee's recommendation is expected to result in a pattern of debt issuances and debt service payments that remain within this 8.0% affordability benchmark.

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. However, these reductions to authorizations can be significant. For example, primarily as a result of declining revenues, the projected legislative authorizations of general obligation bonds in the five year period of 2012 - 2016 declined from \$5.6 billion in the 2008 CDAC Report to \$4.7 billion in the 2011 CDAC Report. See the history of projected authorizations on page 54. *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. Debt service on current outstanding debt declines appreciably after about 5 years.

### 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 GARVEE Bonds beginning in fiscal year 2007, Bay Restoration Bonds beginning in fiscal year 2008, the increased authorizations and issuances of General Obligation Bonds, and the increased authorization of Transportation Bonds from \$2.0 billion to \$2.6 billion as a result of the 2007 1<sup>st</sup> Special Session. Total general obligation debt outstanding rises steadily from \$6.983 billion as of June 30, 2011 to \$9.914 billion as of June 30, 2021. Department of Transportation debt is projected to rise from \$1.562 billion to \$2.597 billion during this same period. Maryland

Stadium Authority debt will decline from \$225.7 million to \$36.8 million assuming no future new money financings.

# 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 June 30, 2011 and the personal income is projected as of December 31, 2011.

The ratio of State tax-supported debt outstanding to personal income (*Table 1*) rises from 3.22% in fiscal year 2011, peaks at 3.47% in fiscal year 2013 and is at 2.92% in fiscal year 2021. Due to the rapid amortization of most tax-supported debt in 15 years and the even faster amortization of GARVEE Bonds in 12 years, the ratio declines .55% from 2013 to 2021. At all times, the ratio remains below the affordability criterion of 4.0%.

#### Debt Service

Projected general obligation debt service (*Appendix B-4*) assumes that future interest rates are consistent with current forecasts and also assumes authorizations are \$925.0 million for the 2012 session/2013 capital program. Projected authorizations for the 2013 Session/2014 Capital Program through the 2021 Session/2022 Capital Program are in *Appendix B-1*.

# Debt Service as a Percent of Revenues

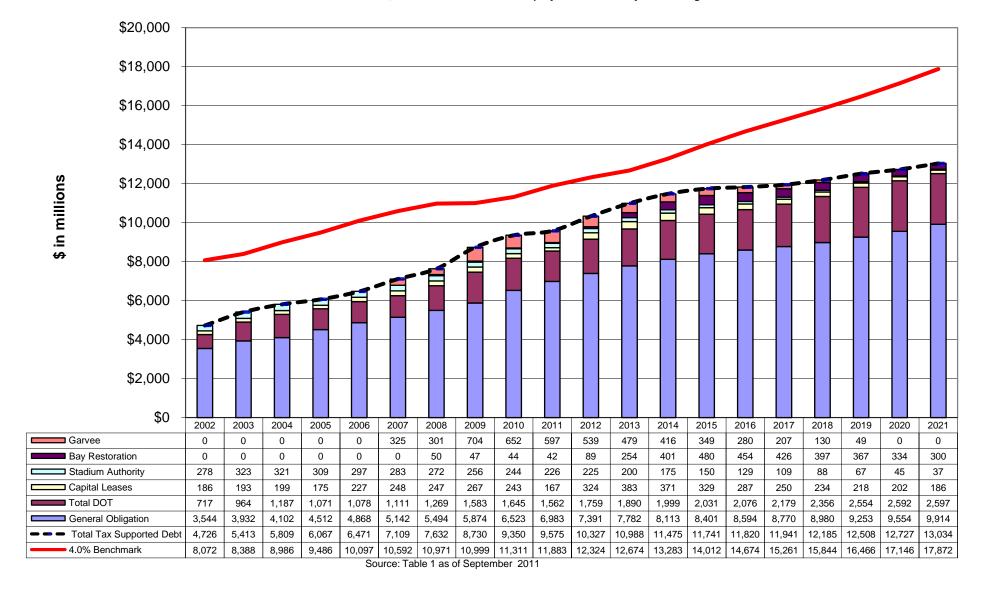
Compared to the prior criterion, debt service as a percent of revenues is a better measure for State financial management purposes, i.e., the legislature has control of both variables – revenues through the enactment of taxes and fees and debt service through the authorization of debt. It also reflects the State's ability to repay its debt.

The ratio of annual debt service to revenues (*Table 2a*) increases from 6.59% in fiscal year 2011 to a peak of 7.72% in fiscal year 2017. It then declines to 7.05% in 2021. This decline reflects the maximum 5 year amortization for VLT equipment leases and the final payment of GARVEE debt service in fiscal year 2020.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

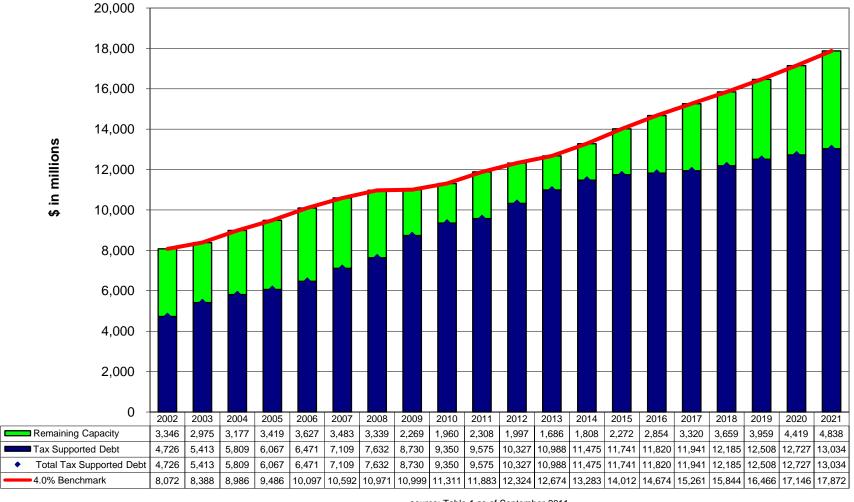
# Tax Supported Debt Outstanding to Personal Income as of September 2011

Fiscal Years 2002-2011 are final; Fiscal Years 2012-2021 are projections and subject to change



# Available Debt Capacity Using the 4.0% Criterion as of September 2011

Fiscal Years 2002-2011 are final; Fiscal Years 2012-2021 are projections and subject to change



source: Table 1 as of September 2011

#### STATE TAX SUPPORTED DEBT OUTSTANDING COMPONENTS AND RELATIONSHIP TO PERSONAL INCOME

(\$ in thousands) Sep-11

Fiscal Years 2002-2011 are final; Fiscal Years 2012-2021 are projections and subject to change

Department of Transportation

Fiscal Year	General Obligation Bonds	Consolidated Transportation Bonds	County Transportation Bonds (b)	Total DOT	Capital Leases	Stadium Authority	Bay Restoration Bonds	Garvee Bonds	Total Tax Supported Debt Outstanding	Fiscal Year
	(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
2004 2005	\$4,102,278 \$4,511,826	\$1,185,650 \$1,069,945	\$1,675 \$865	\$1,187,325 \$1,070,810	\$198,585 \$175,062	\$320,955 \$309,195			\$5,809,143 \$6,066,893	2004
2006	\$4,868,471	\$1,009,945 \$1,078,475	\$805 \$0	\$1,070,810	\$226,898	\$296,820			\$6,006,893 \$6,470,664	2005
2007	\$5,142,154	\$1,076,475	\$0 \$0	\$1,076,475	\$247,939	\$283,090		\$325,000	\$7,109,233	2007
2007	\$5,142,154 \$5,493,830	\$1,111,050	\$0 \$0	\$1,111,050	\$247,939 \$247,427	\$271,570	\$50,000	\$300,655	\$7,109,233	2007
2009	\$5,493,630 \$5,873,643	\$1,582,605	\$0 \$0	\$1,582,605	\$266,757	\$256,013	\$46,825	\$704,365	\$8,730,208	2009
2010	\$6,523,222	\$1,645,010	\$0	\$1,645,010	\$242,636	\$243,557	\$44,185	\$651,795	\$9,350,406	2010
2011	\$6,982,846	\$1,561,840	\$0	\$1,561,840	\$166,551	\$225,743	\$41,560	\$596,915	\$9,575,456	2011
2012	\$7,391,377	\$1,759,000	\$0	\$1,759,000	\$323,932	\$224,701	\$88,820	\$539,355	\$10,327,185	2012
2013	\$7,782,077	\$1,890,000	\$0	\$1,890,000	\$382,822	\$200,205	\$253,764	\$479,035	\$10,987,904	2013
2014	\$8,113,098	\$1,999,000	\$0	\$1,999,000	\$371,096	\$174,873	\$400,884	\$415,775	\$11,474,725	2014
2015	\$8,400,846	\$2,031,000	\$0	\$2,031,000	\$329,325	\$149,982	\$480,183	\$349,440	\$11,740,776	2015
2016	\$8,594,201	\$2,076,000	\$0	\$2,076,000	\$286,511	\$129,226	\$453,919	\$279,780	\$11,819,638	2016
2017	\$8,770,016	\$2,179,000	\$0	\$2,179,000	\$249,503	\$109,203	\$426,277	\$206,590	\$11,940,589	2017
2018	\$8,980,101	\$2,356,000	\$0	\$2,356,000	\$233,770	\$88,431	\$397,172	\$129,680	\$12,185,155	2018
2019	\$9,252,892	\$2,554,000	\$0	\$2,554,000	\$218,189	\$67,282	\$366,525	\$48,865	\$12,507,753	2019
2020	\$9,553,801	\$2,592,000	\$0	\$2,592,000	\$202,234	\$45,225	\$334,134	\$0	\$12,727,394	2020
2021	\$9,913,965	\$2,597,000	\$0	\$2,597,000	\$186,088	\$36,840	\$299,987	\$0	\$13,033,879	2021
		\$	State Tax Suppo		standing as a Perce		ome			
				(Affordability	criteria standard = 4	4.0% )				
2002	1.76%	0.35%	0.00%	0.36%	0.09%	0.14%			2.34%	2002
2003	1.88%	0.46%	0.00%	0.46%	0.09%	0.15%			2.58%	2002
2004	1.83%	0.53%	0.00%	0.53%	0.09%	0.14%			2.59%	2004
2005	1.90%	0.45%	0.00%	0.45%	0.07%	0.13%			2.56%	2005
2006	1.93%	0.43%	0.00%	0.43%	0.09%	0.12%			2.56%	2006
2007	1.94%	0.42%	0.00%	0.42%	0.09%	0.12%		0.12%	2.68%	2007
2008	2.00%	0.46%	0.00%	0.46%	0.09%	0.10%	0.02%	0.11%	2.78%	2007
2009	2.14%	0.58%	0.00%	0.58%	0.10%	0.09%	0.02%	0.26%	3.17%	2009
2010	2.31%	0.58%	0.00%	0.58%	0.09%	0.09%	0.02%	0.23%	3.31%	2010
2011	2.35%	0.53%	0.00%	0.53%	0.06%	0.08%	0.01%	0.20%	3.22%	2011
2012	2.40%	0.57%	0.00%	0.57%	0.11%	0.07%	0.03%	0.18%	3.35%	2012
2013	2.46%	0.60%	0.00%	0.60%	0.12%	0.06%	0.08%	0.15%	3.47%	2013
2014	2.44%	0.60%	0.00%	0.60%	0.11%	0.05%	0.12%	0.13%	3.46%	2014
2015	2.40%	0.58%	0.00%	0.58%	0.09%	0.04%	0.14%	0.10%	3.35%	2015
2016	2.34%	0.57%	0.00%	0.57%	0.08%	0.04%	0.12%	0.08%	3.22%	2016
2017	2.30%	0.57%	0.00%	0.57%	0.07%	0.03%	0.11%	0.05%	3.13%	2017
2018	2.27%	0.59%	0.00%	0.59%	0.06%	0.02%	0.10%	0.03%	3.08%	2018
2019	2.25%	0.62%	0.00%	0.62%	0.05%	0.02%	0.09%	0.01%	3.04%	2019
2020	2.23%	0.60%	0.00%	0.60%	0.05%	0.01%	0.08%	0.00%	2.97%	2020
2021	2.22%	0.58%	0.00%	0.58%	0.04%	0.01%	0.07%	0.00%	2.92%	2021
	esumed authorizations as follows:	0.0070	0.0070	0.0070	0.0470	0.0170	0.01 /0	0.0070	2.02/0	2021
	eral Assembly Session:		2011	2012	2013	2014	2015			
	al Year/Capital Budget:		2012	2013	2014	2015	2016			
	nillions)		\$925	\$925	\$925	\$935	\$945			

<sup>(</sup>in millions)
(b) Net of sinking funds or debt service reserve funds.

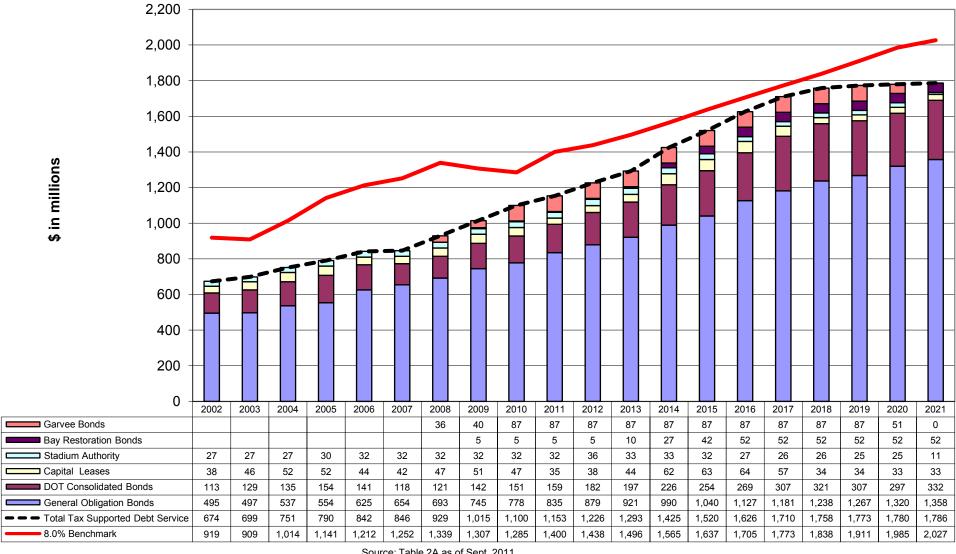
Issuance Assumptions: (\$ in millions)	2012	2013	2014	2015	2016
G.O. issues	\$960.0	\$955.0	\$945.0	\$935.0	\$930.0
DOT issues	\$300.0	\$240.0	\$240.0	\$185.0	\$210.0
Stadium Authority issues	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
New Capital Leases - Equip. & EPC	\$10.0	\$10.0	\$10.0	\$10.0	\$10.0
New Capital leases - DHMH Lab	\$179.0	\$0.0	\$0.0	\$0.0	\$0.0
New Capital Leases - State Center Garage	\$0.0	\$0.0	\$32.5	\$0.0	\$0.0
New Capital leases - VLTs	\$0.0	\$85.0	\$0.0	\$0.0	\$0.0
Garvee Bond Issues	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Bay Bonds Issues	\$50.0	\$170.0	\$160.0	\$100.0	\$0.0
Personal Income (billions) (Appendix A-1)	\$308.1	\$316.8	\$332.1	\$350.3	\$366.8

<sup>(</sup>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 waste water facility at ECI, DHMH public health lab and State Center Garage.

(d) Leases include equipment, video lottery terminals and energy leases that do not have guaranteed energy savings = or > debt service.

# **Tax Supported Debt Service to Revenues** as of SEPTEMBER 2011

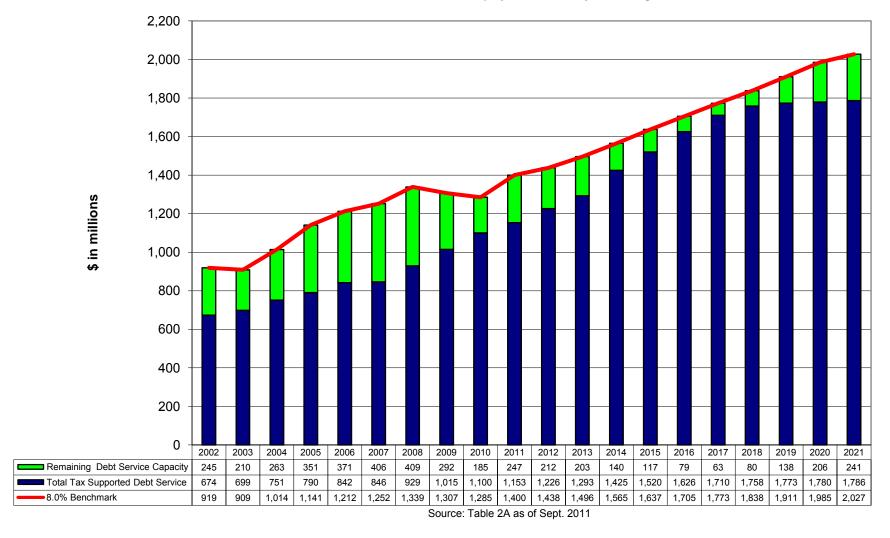
Fiscal Years 2002-2011 are final; Fiscal Years 2012-2021 are projections and subject to change



Source: Table 2A as of Sept. 2011

# Available Debt Service Capacity Using the 8.0% Criterion as of SEPTEMBER 2011

Fiscal Years 2002-2011 are final; Fiscal Years 2012-2021 are projections and subject to change



# STATE TAX SUPPORTED DEBT SERVICE STATE TAX SUPPORTED DEBT SERVICE AS A PERCENT OF REVENUES (Affordability criteria standard = 8%)

(\$ in thousands)

as of September 2011

Fiscal Years 2002-2011 are final; Fiscal years 2012-2021 are projections and subject to change

Fiscal	General Obligation	DOT Consolidated		Stadium	Bay Restoration		Total Tax Supported	Total	Total Tax Supported Debt Service as a % of	Fiscal
Year	Bonds	Bonds	Capital Leases	Authority	Bonds	Garvee Bonds	Debt Service	Revenues	Revenues	Year
	(a)	(b)	(c) (d)					(Appendix A-2)		
2002	\$495,217	\$113,178	\$37,979	\$27,383			\$673,757	\$11,489,682	5.86%	2002
2003	\$496,870	\$128,694	\$46,152	\$27,035			\$698,751	\$11,357,434	6.15%	2003
2004	\$536,819	\$134,910	\$52,117	\$27,333			\$751,179	\$12,676,056	5.93%	2004
2005	\$553,783	\$153,655	\$52,239	\$30,480			\$790,157	\$14,265,771	5.54%	2005
2006	\$625,208	\$141,172	\$43,532	\$31,713			\$841,625	\$15,155,236	5.55%	2006
2007	\$654,055	\$118,424	\$41,636	\$31,725			\$845,840	\$15,651,623	5.40%	2007
2008	\$692,539	\$121,390	\$47,357	\$32,108		\$36,091	\$929,484	\$16,735,213	5.55%	2008
2009	\$744,799	\$142,355	\$50,783	\$31,935	\$4,655	\$40,364	\$1,014,892	\$16,333,158	6.21%	2009
2010	\$777,523	\$150,954	\$47,460	\$32,054	\$4,710	\$87,458	\$1,100,158	\$16,061,611	6.85%	2010
2011	\$834,833	\$158,662	\$35,252	\$32,464	\$4,616	\$87,455	\$1,153,282	\$17,500,654	6.59%	2011
2012	\$878,568	\$182,000	\$38,125	\$35,553	\$4,614	\$87,457	\$1,226,317	\$17,974,309	6.82%	2012
2013	\$921,302	\$197,000	\$43,850	\$33,369	\$9,598	\$87,451	\$1,292,572	\$18,699,184	6.91%	2013
2014	\$989,543	\$226,000	\$61,872	\$33,395	\$26,531	\$87,458	\$1,424,799	\$19,560,606	7.28%	2014
2015	\$1,040,389	\$254,000	\$63,450	\$32,112	\$42,473	\$87,454	\$1,519,877	\$20,462,877	7.43%	2015
2016	\$1,126,565	\$269,000	\$63,578	\$27,093	\$52,434	\$87,450	\$1,626,120	\$21,317,401	7.63%	2016
2017	\$1,181,088	\$307,000	\$56,546	\$25,693	\$52,405	\$87,452	\$1,710,183	\$22,161,174	7.72%	2017
2018	\$1,237,610	\$321,000	\$34,173	\$25,714	\$52,364	\$87,457	\$1,758,317	\$22,977,222	7.65%	2018
2019	\$1,267,477	\$307,000	\$33,577	\$25,289	\$52,322	\$87,452	\$1,773,116	\$23,883,516	7.42%	2019
2020	\$1,320,028	\$297,000	\$33,492	\$25,317	\$52,434	\$51,365	\$1,779,635	\$24,816,925	7.17%	2020
2021	\$1,357,838	\$332,000	\$33,193	\$10,952	\$52,435	\$0	\$1,786,418	\$25,339,514	7.05%	2021

#### Assumptions: See Table 1

- (a) Includes payments for 2001, 2004, 2006, 2007, 2008, 2009, 2010 and 2011 Qualified Zone Academy Bonds (QZAB's).
- (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 waster water facility at ECI, DHMH public health lab and State Center Garage.
- (d) Debt service on leases include equipment, video lottery terminals and energy leases that do not have guaranteed energy savings = or > than debt service.

#### TABLE 2B

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

		DOT			Bay	
Fiscal	General Obligation	Consolidated		Stadium	Restoration	
Year	Bonds	Bonds	Capital Leases	Authority	Bonds	Garvee Bonds
2002	5.05%	6.81%	0.40%	100.56%		
2003	5.11%	8.03%	0.49%	123.17%		
2004	4.98%	7.16%	0.51%	122.93%		
2005	4.55%	7.37%	0.45%	140.40%		
2006	4.80%	6.65%	0.35%	147.99%		
2007	4.83%	5.64%	0.32%	149.65%		
2008	4.87%	6.04%	0.35%	149.34%		8.18%
2009	5.45%	6.65%	0.39%	159.68%	8.73%	9.15%
2010	5.80%	7.07%	0.38%	160.27%	8.59%	19.82%
2011	5.71%	7.03%	0.26%	137.26%	8.34%	16.19%
2012	5.78%	8.07%	0.27%	130.22%	8.25%	19.86%
2013	5.88%	7.84%	0.30%	134.83%	16.99%	19.86%
2014	6.05%	8.41%	0.41%	134.88%	46.51%	19.86%
2015	6.06%	9.16%	0.40%	136.73%	73.72%	19.86%
2016	6.28%	9.46%	0.39%	115.29%	90.11%	19.86%
2017	6.30%	10.67%	0.33%	109.33%	89.17%	19.86%
2018	6.32%	11.14%	0.19%	109.39%	88.21%	19.86%
2019	6.21%	10.44%	0.18%	109.61%	87.27%	19.86%
2020	6.20%	9.94%	0.17%	109.67%	86.59%	11.66%
2021	6.11%	10.91%	0.16%	125.92%	85.73%	n/a

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."

# **Tax Supported Debt Outstanding and Debt Service Stress Test**

(\$ in thousands)
Projections as of September 2011 and subject to change

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

Fiscal Year	Debt Outstanding	Personal Income	Current Ratios	Fiscal Year	Maximum Ratio	Minimum Personal Income	Difference	Additional Affordable Debt Outstanding
2012	\$10,327,185	\$308,095,000	3.35%	2012	4.00%	\$258,179,630	\$49,915,370	\$1,996,615
2013	\$10,987,904	\$316,842,000	3.47%	2013	4.00%	\$274,697,589	\$42,144,411	\$1,685,776
2014	\$11,474,725	\$332,074,000	3.46%	2014	4.00%	\$286,868,136	\$45,205,864	\$1,808,235
2015	\$11,740,776	\$350,310,000	3.35%	2015	4.00%	\$293,519,411	\$56,790,589	\$2,271,624
2016	\$11,819,638	\$366,845,000	3.22%	2016	4.00%	\$295,490,945	\$71,354,055	\$2,854,162
2017	\$11,940,589	\$381,518,000	3.13%	2017	4.00%	\$298,514,723	\$83,003,277	\$3,320,131
2018	\$12,185,155	\$396,092,000	3.08%	2018	4.00%	\$304,628,874	\$91,463,126	\$3,658,525
2019	\$12,507,753	\$411,659,000	3.04%	2019	4.00%	\$312,693,827	\$98,965,173	\$3,958,607
2020	\$12,727,394	\$428,660,000	2.97%	2020	4.00%	\$318,184,843	\$110,475,157	\$4,419,006
2021	\$13,033,879	\$446,793,000	2.92%	2021	4.00%	\$325,846,984	\$120,946,016	\$4,837,841

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

(b) Additional Fiscal Fiscal Maximum Current Minimum Affordable Debt Year Ratio Year **Debt Service** Revenues Ratios Revenues Difference Service 2012 \$1,226,317 \$17,974,309 6.82% 2012 8.00% \$15,328,963 \$2,645,346 \$211,628 2013 \$1,292,572 \$18,699,184 6.91% 2013 8.00% \$16,157,144 \$2,542,040 \$203,363 2014 \$1,750,615 \$140,049 \$1,424,799 \$19,560,606 7.28% 2014 8.00% \$17,809,991 2015 \$1,519,877 \$20,462,877 2015 \$18,998,468 \$1,464,409 \$117,153 8.00% 7.43% 2016 \$1,626,120 \$21,317,401 2016 \$20,326,494 \$990.906 \$79.273 7.63% 8.00% 2017 \$1,710,183 \$22,161,174 2017 8.00% \$21,377,290 \$783,884 \$62,711 7.72% 2018 \$1,758,317 \$22,977,222 7.65% 2018 8.00% \$21,978,965 \$998.258 \$79.861 2019 \$1,773,116 \$23,883,516 7.42% 2019 8.00% \$22,163,952 \$1,719,563 \$137,565 2020 \$1,779,635 \$22,245,439 \$2,571,486 \$205,719 \$24,816,925 2020 7.17% 8.00% \$240,743 2021 \$1,786,418 \$25,339,514 2021 \$22,330,223 \$3,009,291 7.05% 8.00%

This table demonstrates the minimum levels to which personal income and revenues could fall without violating the 4.0% and 8.0% criteria on projected debt and debt service levels.

Source: Tables 1 and 2a Appendices A-1 and A-2

<sup>(</sup>a) Holding debt outstanding constant, personal income could decline by indicated amounts and affordability ratios would not exceed the 4.0% maximum.

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

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

# E. Comparison of Recommendation and Capital Program

The Committee's recommendation of \$925.0 million in general obligation authorizations provides a commitment for the fiscal year 2013 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.

# 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 has 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 2011 recommended authorization and the projected future authorizations as described above in paragraph C.

- 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.

There is a higher level of economic uncertainty in late 2011 that increases the risks to CDAC's projections compared to most other years. The economic recovery is prolonged and potential future federal reductions in employment and procurement could negatively impact Maryland more than most states.

### 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 future personal income. The risk is noteworthy as the nation and the State struggle to recover from the worst recession in post-war history. Over the next ten years population growth is expected to slow and the population will age; both are indicators for slower job growth. However, the risk has been somewhat mitigated in the short term by the influx of high-wage personnel at Fort Meade and

Aberdeen Proving Grounds as a result of Base Realignment and Closure (BRAC).

*Table 3* demonstrates that at current projections for debt outstanding through 2021, personal income could decline by no more than \$42.1 billion in 2013 without the affordability ratio exceeding the 4.0% maximum. A decline of \$41.5 billion is 13.3% of the projected personal income in 2013 of \$316.8 billion. Consequently, the possibility of exceeding the 4.0% threshold seems remote. For most years, the personal income growth rate used to develop projections in *Appendix A-1* for 2011 through 2021 are below the 10-year average for 2001 through 2010, which was 4.40%. The exceptions are in 2011, 2014, 2015 and 2016 when the growth rates are 5.06%, 4.81%, 5.49% and 4.72%, respectively.

# Changes in and Sources of Revenues

Sources of Revenues

Appendix A-2 details the total revenues and its components from fiscal year 2001 to fiscal year 2021. Total revenues are comprised of general fund revenues, property taxes, bond premiums, and US Treasury subsidies for taxable Build America Bonds, Qualified School Construction Bonds, Qualified Energy Conservation Bonds and the 2010 Qualified Zone Academy Bonds. Also included in total revenues are Educational Trust Fund revenues (Video Lottery Terminals); Transportation Trust Fund revenues; revenues attributed to GARVEE Bonds, Bay Restoration Bonds, and Stadium Authority Bonds; and transfer taxes as a result of the 2009 authorization for Program Open Space. 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 in September 2011. Growth in General Funds ranged from -4.8% in fiscal year 2009 to 7.5% in fiscal year 2011. Beginning in 2018, 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 2012-2016. In 2012, 2013 and 2014, property tax revenues are expected to decline with no growth forecast in 2015 and 2016. After consultation with DAT, the Department of Budget and Management and the State Treasurer's Office, the growth in property taxes was projected at a conservative 2.5% for fiscal years 2017 through 2021. Bond premiums and Annuity Bond Fund miscellaneous receipts are also included as revenues. Because bond premiums can be volatile, they are only projected through the current calendar year and miscellaneous receipts are relatively insignificant. The US Treasury subsidy is also a source of revenue for the 35% interest subsidy for the taxable Build America Bonds, the 100% subsidy for the 2010 taxable Qualified School Construction Bonds and 2011 taxable Qualified Zone Academy Bonds, and the 70% subsidy for the Qualified Energy Conservation Bonds.

The referendum authorizing Video Lottery Terminals ("VLTs") passed in November 2008. The source of the revenue projections for the Educational Trust Funds (VLT revenues) on *Appendix A-2* through 2016 was from the Department of Budget and Management. From 2017 through 2021, growth in the Education Trust Fund is projected at 2%.

The Committee began to recognize transfer taxes as a revenue source after the issuance of general obligation bonds for Program Open Space ("POS") in July 2010. Chapter 419 Acts of 2009 authorized \$70.0 million in bond funds for the Department of Natural Resource's ("DNR") POS land acquisition program and the use of property transfer tax revenue to pay principal and

interest on the POS bonds prior to any other distribution.

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 Theater and revenues from Camden Yards. The lottery revenues are net of the debt service on the 2010 and 2011 Maryland Stadium Authority's Sports Facilities Revenue Bonds.

# Changes in Revenues

At the September 13 meeting, CDAC reviewed a sensitivity analysis that assumed that there was a "double dip" recession. To develop this analysis, the assumptions were as follows:

- The general fund revenue projection received from BRE in August 2011 was the base line.
- \$300.0 million was added to the FY 2011 figure to reflect actual revenues.
- There was a 0.9% decline from FY 2011 to FY 2012, which accounts for roughly \$300 million of new revenue from the BRFA.
- The growth rate was cut in half, to 2.1% for FY 2013.
- The growth rates in the August forecast continued beginning in FY 2014.

As a result of the projected decline in revenues in the assumed "double dip" recession, the 2017 debt service to revenues ratio increased approximately .4% and exceeded 8%. To retain the affordability ratio at no more than 8% in all years, issuances of tax-supported debt would have to decline almost \$1 billion in the period between fiscal years 2012 and 2018 in the recession scenario described above.

The Committee used the September 2011 Board of Revenue Estimates' projected revenues on *Appendix A-2* in the affordability analysis. While there would be a significant revision in authorizations and issuance if there was another recession and all other variables were constant, the Board of Revenue Estimates (BRE) produces the State's official forecast of revenues and CDAC continues to use those estimates in its affordability analysis. Because of the current uncertain economic climate, the CDAC may re-examine the affordability ratios again in December after the next BRE general fund revenue projections.

#### Interest Rate Risk

Debt service is calculated for future General Obligation Bonds assuming coupon interest rates of 5.0%.

The State Treasurer's Office and the State's financial advisor reviewed historical indices for municipal debt including the Municipal Market Data (MMD) for 15 year, AAA general obligation bonds. This index had daily rates from 1993 through September 2011. For this time period, the average rate was 4.57% and the median was 4.58%. The general obligation bonds have a 15 year term but an average life of around 10 years. The State's financial advisor has commented that the actual rate is closer to the average life rather than the final maturity and so the estimate of 5% is conservative. Based on this review and after consideration for expected future inflation trends in rates, 5.0% was the assumed rate for all future issues.

For leases, the analysis estimates tax-exempt rates at 2.5% and 3.0% for the 3 and 5 year capital equipment leases respectively. The most recent actual rates on capital equipment leases were 1.45% for a three year lease and 1.65% for a five year lease. Because of economic

conditions and investors' preference for Treasuries, the rates since the fall of 2008 have been extraordinarily low but are expected to rise when financial conditions improve.

The interest rate used by Maryland Water Quality Financing Administration for the Bay Restoration Bonds was 5.5% for issuances in fiscal year 2012 and beyond. Maryland Department of Transportation used 4.9% for the 2012 sale; 5.4% for 2012 - 2015; 5.5% for 2016 and 2017; and 5.3% thereafter.

There is a risk to the federal tax-exemption for all municipal bonds in some recent proposals to reduce the federal deficit. If the State and other municipal issuers have to issue taxable debt or if tax-exempt debt is less attractive to taxpayers with high tax rates, interest rates and debt service will increase. At this time, it is very unclear if any of these proposals would be adopted.

### Changes in the Definition of Tax-Supported Debt

Changes in the definition of tax-supported debt dictated by an outside authoritative group could have a major impact on the affordability ratios.

The Financial Accounting Standards Board ("FASB") has a current project that proposes to establish a common leasing standard and to change lease accounting so that all lease obligations and the related right-to-use are reported on private sector balance sheets. Consequently, all leases would be considered debt. The State's financial statements conform to Governmental Accounting Standards Board ("GASB") which has added a similar lease accounting project to their research agenda for the period April to August 2011.

These proposed changes could have significant impact in the amount of tax – supported debt. The State's 2010 Comprehensive Annual Financial Report ("CAFR") indicates that the State's governmental funds pay for office space that are accounted for as operating leases. These rent expenditures for the year ended June 30, 2010 were approximately \$65.8 million. Because they are classified as operating leases, they are not currently included in the debt affordability ratios.

Since there have been no definitive changes to accounting standards to date, CDAC continues to consider only capital leases in its affordability analysis. CDAC will continue to monitor this accounting issue at future meetings and may review the affordability benchmarks if the accounting standards change.

# 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. In 2010 and 2011, the Committee recognized significant new debt that had not been accounted for in prior years: \$125.9 million for video lottery terminals, \$70.0 million for Program Open Space, \$32.5 million for the State Center Garage and \$179.0 million for the DHMH public health lab.

The assumptions regarding non-general obligation components of tax-supported debt and debt service are as described in Section II. The Department of Transportation's debt is expected to rise consistently over the next several years, especially because their authorization limit was raised from \$2.0 billion to \$2.6 billion in the 2007 1<sup>st</sup> Special Session. There are no plans for further GARVEE bond issuances. The projections for future equipment capital lease financings are based on surveys of State agencies.

The issuance of Bay Restoration Bonds began in fiscal year 2008 and is limited to the availability of Bay Restoration (wastewater) Fund revenues. The Director of the Water Quality Financing Administration advised the Committee that no further Bay Restoration Bonds beyond the existing plan of \$530 million will be issued unless fee revenues increase. The Director informed the Committee that current Bay Restoration Fund revenues are not sufficient to complete enhanced nutrient removal capital improvement projects that are currently estimated to cost \$1.4 billion.

# 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 affordability ratios. 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 has adjusted 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 reappropriated 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. The Committee reviewed the issuance projections for the 2011 Report in light of the pattern of recent authorizations and issuances. The following chart compares projected issuances in CDAC Reports from 2003 to 2011 to actual issuances. Timing can explain some of the differences between projections and issuances in a specific fiscal year, especially since the 2009 and 2010 MCCBL authorized significant amounts for the Intercounty Connector ("ICC") which had construction well underway and used bond proceeds shortly after the authorization.

	Projected I	ssuances in CD	AC Reports (\$ i	n millions)	
CDAC Reports	FY2008	FY2009	FY 2010	FY 2011	FY 2012
2003	\$625	\$700	\$725	\$750	\$750
2004	\$675	\$700	\$700	\$725	\$725
2005	\$700	\$725	\$725	\$750	\$775
2006	\$700	\$760	\$810	\$860	\$900
2007	\$725	\$810	\$885	\$955	\$970
2008	XXXX	\$810	\$910	\$970	\$1,000
2009	XXXX	XXXX	\$960	\$970	\$975
2010	XXXX	XXXX	XXXX	\$970	\$960
2011	XXXX	XXXX	XXXX	XXXX	\$960
Actual Issuances	\$775.0	\$840.0	\$1,135.3	\$970.2	\$960.4 projected as of September 2011

<sup>\*</sup> Issuances are for new money only, amounts do not include refundings or QZABs.

However, the most important reason for accelerated issuances is the increase in authorizations greater than the typical projection for 3% growth. The history of projected authorizations is depicted in the following chart. Gray indicates those years where the increase in the authorization from the prior year was approximately \$100 million or more.

The chart also illustrates the decline in projected authorizations in fiscal years 2011 through 2013. This is attributable to the decline in revenues associated with the Great Recession. Authorizations and issuances (and therefore debt service) had to decline to remain within CDAC's self-imposed debt service to revenues ratio of 8%.

	Projecto	ed Gene	ral Ass	embly A	uthoriz	zations ii	n Fiscal `	Years:		
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CDAC Reports										
2011	X	X	X	X	X	X	X	X	\$925	\$925
2010	X	X	X	X	X	X	X	\$925	\$925	\$925
2009	X	X	X	X	X	X	\$1,140 <sup>-1</sup>	\$1,020	\$1,050	\$1,080
2008	X	X	X	X	X	\$1,110	\$990	\$1,020	\$1,050	\$1,080
2007	X	X	X	X	\$935	\$960	\$990	\$1,020	\$1,050	\$1,080
2006	X	X	X	\$810	\$835	\$860	\$890	\$920	\$950	\$980
2005	X	X	\$690	\$710	\$730	\$745	\$770	\$795	\$820	\$845
2004	X	\$670	\$685	\$700	\$715	\$630	\$645	\$660	\$675	\$690
2003	\$650	\$665	\$680	\$695	\$710	\$630	\$645	\$660	\$675	\$690

#### Fiscal Years 2013 - 2021 Risks

In considering the affordability risk associated with the 2013-2021 projected authorizations in this year's report, the major risks appear to be:

- Uncertainty regarding the rate of growth in personal income and revenues when financial markets are volatile and the economy struggles to recover from some of the worst economic conditions since the 1930s:
- Potential authorization of tax-supported debt to finance projects that are presently unknown to the Committee;
- Acceleration in the issuance of General Obligation Bonds;
- Interest rate risk. While rates continue to be quite low, many expect interest rates to rise when the economy recovers. There has also been increasing discussion of the elimination or limitation of tax-exempt bonds.

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. 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, we have not considered this to be a risk to our interest rate assumptions. The effect of any federal budget action is unclear and not apparent in the near term, although there are economists who predict that the federal deficit will eventually result in higher interest rates and federal budget reductions could negatively impact Maryland revenues.

There was an acceleration of issuance in calendar year 2010 to provide sufficient proceeds for projects like the ICC which had construction underway, to take advantage of historically low interest rates and to keep the cash flow of bond proceeds positive and minimize liquidity pressures on the State's cash accounts. Future substantial acceleration of the issuances of General Obligation Bonds appears unlikely at this time. The current amount of authorizations that are unissued appears reasonable and the amount of bond issuances appears sufficient to avoid large "red balances."

<sup>1</sup> In September 2009, the Committee made a conditional recommendation of \$990 million for general obligation bond authorizations by the 2010 General Assembly. In December, the Committee revised the recommendation to \$1,140 million.

The changes in the issuance plans of other components of tax-supported debt also appear to pose limited risk at this time. As more fully described in Section VII, the Committee has recommended that the Administration coordinate the issuance plans for all issuers of tax-supported debt and the Committee has recommended an aggregate total of \$505 million in new issuances in fiscal year 2013. The assumed issuances by the Department of Transportation are consistent with current statutory limits, revenue forecasts and debt service coverage criteria.

#### Conclusion

The Committee believes that its \$925.0 million recommendation for the 2012 legislative session/2013 capital program is prudent and within current projections of capacity. The Committee's projections for future authorizations assume generally level authorizations by the Legislature through 2016 of between \$925.0 million and \$955.0 million. In the 2017 Session, the projected authorization is \$1,200.0 million and it increases by approximately 3% through 2021. With these authorization levels, the debt affordability ratios remain within the CDAC benchmarks of 4.0% debt outstanding to personal income and 8.0% debt service to revenues. At these levels, and relying upon prudent timing of authorization and issuances, 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.

The Committee reviewed its interest rate, revenue, personal income, issuance and authorization assumptions and believes that all of these variables have been estimated conservatively. Nevertheless, the volatile financial conditions in the last few years have resulted in revisions to revenue estimates and personal income. Because the affordability ratio for debt service to revenues is near the 8.0% benchmark, any variation to the assumptions for revenues, interest rates, and projected activity in tax-supported debt issuance would impact directly the amount of future tax-supported authorizations and issuances.

The motion to recommend \$925.0 million in authorizations to the 2012 General Assembly recognized that the Governor's 2013 capital budget could be adjusted to reflect up-to-date economic and fiscal information and the Board of Revenue Estimate's December revenue estimates. Accordingly, the Capital Debt Affordability Committee may review its authorization in December 2011 and make any necessary modifications to its recommendation.

\*VJ G'TGO CIP F GT'QH'RCI G'IP VGP VKQP CNN| 'NGHV'DNCP M+

# VI. <u>HIGHER EDUCATION DEBT</u>

#### A. Background

Title 19 of The Education Article (the "Statute"), establishes the revenue bonding framework and authority of the University System of Maryland ("USM"), Morgan State University, St. Mary's College of Maryland and Baltimore City Community College. The Committee is assigned certain duties relevant to higher education debt, as described below.

The Statute provides a framework for the issuance of higher education debt. Specifically, the Statute distinguishes 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 authorizes 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 specifies fund sources that can be pledged as security as well as those that can 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. <u>CDAC Duties</u>

The Committee is directed 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, St. Mary's College of Maryland, and the Baltimore City Community College."

Charge #1 was met during the September 13, 2011 CDAC meeting 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.

Chapter 396 of the 2011 Laws of Maryland, also charged CDAC to evaluate the capacity of the University System of Maryland (USM) to increase the amount of Academic Revenue Bonds (ARBs) by \$5.0 million. This evaluation and conclusion are in Section F below.

# C. <u>Size and Condition of Debt of the University System of Maryland, Morgan State University, St. Mary's College of Maryland, and Baltimore City Community College</u>

# University System of Maryland

#### **Bond Activity**

Since 1989, the General Assembly has authorized bonds totaling \$725.2 million for various academic facilities for USM. Of this amount, \$27.0 million was authorized by the 2011 General Assembly for academic facilities (Chapter 357, Laws of Maryland, 2011).

In fiscal year 2011, the total issuance for new debt for academic and auxiliary facilities was \$115.0 million. USM reports its bond debt outstanding at \$1,072,745,709 at June 30, 2011. Of this outstanding amount, USM has \$50.0 million of variable rate bonds outstanding with a three year interest reset. The University System has not used interest rate exchange agreements or guaranteed investment contracts. Projected issuances through fiscal year 2017 for USM are shown in *Table 4*.

The bonds are rated as follows: Fitch Ratings, AA+ (upgraded from AA in December 2010); S&P, AA+; and Moody's, Aa1. 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 and State budget pressure. According to a 2009 Moody's report, the median rating for the 220 public universities they rate is A1, with the average climbing to Aa2 when weighted by the amount of debt outstanding.

#### Other Debt and Capital Lease Activity

There are \$45,897,955 of Other Debt and Capital Lease Obligations outstanding as of June 30, 2011: \$35,212,964 has been financed through the State Treasurer's Office primarily for energy performance contracts and \$10,684,991 has been financed directly by USM to lease a facility and finance certain equipment acquisitions. *Section II D*, *Lease and Conditional Purchase Financings*, in this 2011 CDAC Report lists the energy

leases, including those for the University System, that are not included in the CDAC affordability analysis because the annual guaranteed savings equals or exceeds the annual debt service on the leases.

# St. Mary's College of Maryland

# **Bond Activity**

Debt outstanding as of June 30, 2011 includes: \$39.45 million in revenue bonds and a bond anticipation note. Moody's has rated the bonds A1 with a stable outlook. Currently, there are no projections for future bond issuances. No refinance opportunities currently exist, the next call date is September 2013.

St. Mary's College of Maryland does not have any interest rate exchange agreements, variable rate bonds or guaranteed investment contracts. Except for the bond anticipation note, substantially all of the bonds are insured by AMBAC.

# Lease Activity

There is a capital lease through the State Treasurer's Office with a remaining balance of \$1.56 million related to an energy performance contract. *Section II D*, *Lease and Conditional Purchase Financings*, in this 2011 CDAC Report lists the energy lease for St. Mary's College that is included in the CDAC affordability analysis because the annual guaranteed savings does not equal or exceeds the annual debt service on the lease.

#### Morgan State University

#### **Bond Activity**

Morgan State University bonds are rated A+ by Standard and Poor's, and rated A1 with a negative outlook by Moody's Investors Service. Moody's has not changed the negative outlook originally assigned in November, 2005 primarily due to concerns about Morgan State University's low levels of financial resources for the rated category. Moody's also indicated that debt and operating coverage ratios are thin and a significant increase in liquidity is needed to improve the rating. Standard and Poor's completed their routine review in April 2009 and affirmed the A+ rating with a stable outlook.

\$55.8 million of revenue bonds are outstanding as of June 30, 2011. Morgan State University does not have immediate plans for the issuance of additional bonds.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

Morgan State University does not have any interest rate exchange agreements, variable rate bonds or guaranteed investment contracts nor are any of their bonds insured.

#### Lease Activity

Morgan State University utilizes the State Treasurer's Office Capital Equipment Lease-Purchase Program for financing facilities and technology equipment. As of June 30, 2011, \$3.8 million of capital leases are outstanding. Over the next ten years, the University estimates that it will utilize the Capital Equipment Lease-Purchase Program for additional projects.

# Baltimore City Community College ("BCCC")

# **Bond Activity**

In 2009 the General Assembly increased the total amount of debt authorized for BCCC from \$15.0 million to \$65.0 million and expanded the authorization to include academic as well as auxiliary facilities.

BCCC has no bonds outstanding and has no plans to issue bonds in fiscal years 2012 or 2013. BCCC anticipates beginning the bond rating process in FY 2013 for potential issuance in late FY 2014.

BCCC is currently exploring the feasibility and desirability of various projects that might be funded by the issuance of academic and/or auxiliary bonds or capital leases. Potential projects include:

- Parking Garage
- Equipment leasing in support of a new Enterprise Resource Planning initiative
- Facilities needs not funded in CIP

#### Lease Activity

BCCC has \$1.0 million in capital leases outstanding as of June 30, 2011.

# D. <u>Incorporating Higher Education Academic Debt into the Affordability</u> Analysis

The statutory language of 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. <u>University System of Maryland Debt Management Policy</u>

Working with Public Financial Management, USM's financial advisor, the Chancellor's Office developed a new policy on debt management as a result of rating agency concerns regarding liquidity, financial reporting changes mandated by Government Accounting Standards Board Statement 35 – Basic Financial Statements and Management Discussion and Analysis for Public Colleges and Universities, and the complexities of "off-balance sheet" financing.

In February, 2008 the Board of Regents approved a policy on debt management that remains unchanged in 2011. The policy provides:

- Criteria to protect the bond ratings;
- Interest rate management strategies;
- Definitions of all types of debt and its impact on debt capacity; and
- A process to assess a project's impact on debt capacity.

As a result of this policy, USM is committed to maintaining:

- 1. Debt service that does not exceed 4.5% of operating revenues plus State Appropriations
  - The debt service burden is presented in Table 4 and USM debt complies with this policy.
- 2. Available resources that are not less than 55% of direct debt
  - Available resources include net assets of USM and its affiliated foundations with adjustments for certain long term liabilities. An

analysis of the ratio of available resources to debt outstanding follows. The table includes actual data for fiscal years 2007 through 2010 and projections for fiscal years 2011 through 2012:

	Unive	ersity System of Marylar	nd
	Ratio of Availa	ble Resources to Debt C	Outstanding
		(\$ in thousands)	
FY	Available Resources	Debt Outstanding	Ratio of Available Resources to Debt Outstanding
2007	\$992,147	\$954,846	103.91%
2008	\$1,141,812	\$969,923	117.72%
2009	\$1,130,100	\$1,028,524	109.88%
2010	\$1,188,162	\$1,082,866	109.72%
2011 Projected	\$1,200,000	\$1,118,644	107.27%
2012 Projected	\$1,000,000	\$1,152,152	86.79%

Source: University System of Maryland

# F. 2011 Recommended Authorization for Higher Education Academic Debt and Evaluation of the Capacity of the University System of Maryland (USM) to Increase Academic Revenue Bonds (ARBs) by \$5 million

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, St. Mary's College of Maryland and the Baltimore City Community College." 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 as proposed by the 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.

S&P's third factor looks at the trends in State appropriations 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 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 \$1,400.0 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 \$65.0 million for Baltimore City Community College. All four higher education systems are within the statutory limits as of June 30, 2011.
- 2. A key measurement of financial performance frequently used by credit analysts is debt burden; that is, debt service as a percent of operating revenues plus State appropriations. USM's ratio does not exceed 4.5%, which is the limit established in the USM debt policy.

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*, USM's debt issuance plan would result in a debt burden level well below the 4.5% maximum mandated by USM's debt management policy.

As required by Chapter 396 of the 2011 Laws of Maryland, CDAC evaluated the capacity of the University System of Maryland (USM) to increase Academic Revenue Bonds (ARBs) by \$5.0 million. This additional authorization of ARBs will support campus-wide infrastructure improvements at the University of Maryland, College Park and would be used to match State general obligation bond infrastructure improvement projects. *Table 4* shows that the total USM debt planned for 2012 and 2013 is \$115.0 million; only the allocation between academic and auxiliary bonds has changed.

CDAC has concluded that the overall level of debt is prudent over time and accepts the breakdown between academic and auxiliary as proposed by the System. Based on its review of the condition of State debt in light of the debt affordability guidelines, the Committee recommends a limit of \$32.0 million for new academic facilities bonds for the University System of Maryland for fiscal year 2013, an increase of \$5.0 million from last year's recommendation of \$27.0 million.

Morgan State University, St. Mary's College of Maryland, and Baltimore City Community College do not propose to issue bonds for academic facilities in fiscal year 2013.
(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

# HIGHER EDUCATION DEBT Total Auxiliary and Academic Bonds and Leases (\$ in thousands)

	Projected Issuances		Outstanding Debt		Debt Service				
•			Bonds	Leases	Bonds	Leases			
Fiscal Year	Auxiliary	Academic	Projected Debt Outstanding as of June 30	Projected Debt Outstanding as of June 30	Projected Debt Service for Fiscal Year	Projected Debt Service for Fiscal Year	Total Debt Service	Operating Revenues Plus State Appropriations	Ratio of Debt Service to Operating Revenues Plus State Appropriations
University	Systems Of N	laryland							
2012	\$88,000	\$27,000	\$1,057,934	\$94,218	\$119,257	\$11,421	\$130,678	\$3,864,130	3.38%
2013	\$83,000	\$32,000	\$1,103,228	\$86,944	\$117,733	\$11,262	\$128,995	\$3,941,413	3.27%
2014	\$83,000	\$32,000	\$1,145,436	\$80,576	\$124,795	\$10,135	\$134,930	\$4,020,241	3.36%
2015	\$83,000	\$32,000	\$1,185,910	\$76,236	\$130,075	\$7,936	\$138,011	\$4,100,646	3.37%
2016	\$83,000	\$32,000	\$1,214,457	\$72,376	\$145,198	\$7,322	\$152,520	\$4,182,659	3.65%
2017	\$83,000	\$32,000	\$1,241,844	\$69,031	\$149,022	\$6,679	\$155,701	\$4,266,312	3.65%
Morgan S	tate University	,							
2012	_		\$55,800	\$3,756	\$6,116	\$1,918	\$8,034	\$170,049	4.72%
2013			\$52,605	\$5,852	\$6,127	\$1,302	\$7,429	\$174,691	4.25%
2014			\$49,240	\$4,253	\$6,124	\$2,161	\$8,285	\$179,580	4.61%
2015			\$45,690	\$2,855	\$6,125	\$1,891	\$8,016	\$184,730	4.34%
2016			\$41,965	\$5,057	\$6,115	\$1,518	\$7,633	\$191,155	3.99%
2017			\$38,035	\$6,711	\$6,124	\$2,154	\$8,278	\$197,370	4.19%
			\$33,905	\$5,057	\$6,114	\$2,837	\$8,951	\$203,891	4.39%
St. Mary's	College of Ma	ryland							
2012			\$36,160	\$1,407	\$3,208	\$205	\$3,413	\$69,409	4.92%
2013			\$34,710	\$1,253	\$3,138	\$205	\$3,343	\$72,185	4.63%
2014			\$33,205	\$1,093	\$3,137	\$205	\$3,342	\$75,073	4.45%
2015			\$31,645	\$927	\$3,137	\$205	\$3,342	\$78,076	4.28%
2016			\$30,020	\$756	\$3,133	\$205	\$3,338	\$81,199	4.11%
2017			\$28,320	\$577	\$3,135	\$205	\$3,340	\$84,447	3.96%
Baltimore	City Commun	ity College							
2012				\$1,018		\$99	\$99	\$66,111	0.15%
2013				\$985		\$99	\$99	\$69,417	0.14%
2014				\$949		\$99	\$99	\$72,888	0.14%
2015				\$911		\$99	\$99	\$76,532	0.13%
2016				\$870		\$99	\$99	\$80,359	0.12%
2017				\$827		\$99	\$99	\$84,377	0.12%

The University System's criteria is debt service may not exceed 4.5% of operating revenues plus State Appropriations.

# VII. EVALUATION OF THE DEBT AFFORDABILITY PROCESS AND RECOMMENDATIONS TO THE GENERAL ASSEMBLY

### A. Background

Tax-supported debt has increased in the last decade as the State expanded investments in its capital infrastructure through various financing mechanisms including General Obligation and Consolidated Transportation bonds as well as newer forms of tax-supported debt such as Grant Anticipation Revenue Vehicles Bonds ("GARVEEs") and Bay Restoration Bonds. Most recently in 2011, the State issued Certificates of Participation ("COPs") to finance Video Lottery Terminals and the Board of Public Works approved the capital lease for the public health lab in the Department of Health and Mental Hygiene. These new bonds, COPs and capital leases are all included in CDAC's affordability analysis.

Whether set by statute or through agreements with bondholders, there are specific debt outstanding limitations for Consolidated Transportation Bonds, GARVEEs and Bay Restoration Fund Revenue Bonds that are noted in Section II of the CDAC Report. While each component of tax-supported debt may be within its prescribed limits, tax-supported debt, in aggregate, is projected to approach the debt service to revenues benchmark of 8% within the next 10 years.

### B. Request to Evaluate the State's Debt Affordability Process

The legislative budget committees have requested that CDAC evaluate the State's debt affordability process and make recommendations for consideration by the General Assembly in the 2012 session. Specifically, in a letter to the members of CDAC dated June 16, 2011, the Chairs of the budget committees have requested consideration of the following:

- CDAC Should Recommend an Aggregate Debt Limit Encompassing All Types of State Debt
- The Administration Should Recommend a Specific Debt Limit for Each Type of State Debt
- Each Year, the Governor Should Include Limits to All Types of State Debt in the Capital Budget Bill
- The Legislature Should Review the Proposed Debt Limits
- A Process That Allows the Limits to be Exceeded Under Clearly Defined Circumstances Should be Developed

# C. <u>CDAC's Recommendations</u>

The CDAC has considered the items set forth by the budget committees and recommends the following process to establish debt limits for each year. For the following discussion "debt limits" is defined as the amount of bonds that are *authorized* annually for general obligation bonds and *issued* annually for all other tax-supported debt.

At the initial CDAC meeting each year, CDAC staff will present a preliminary affordability analysis based on projections of debt issuance, debt outstanding and debt service as submitted by the issuers of tax-supported debt. As CDAC conducts its review, the Administration will also review the preliminary debt affordability analysis and issuers' projections. The Administration will then direct an issuer to make any adjustments that are

determined necessary and finalize an allocation of debt capacity among the tax-supported issuers.

The affordability analysis will then be updated with all necessary changes and distributed to CDAC prior to its final recommendations of an authorization of general obligation bonds and an aggregate tax-supported debt limit for the next legislative session. This process will address the first two items that the budget committees wanted CDAC to consider.

As there are existing processes in place to facilitate legislative review of the authorization and issuance of tax-supported debt, it is recommended that the aggregate debt limit be included in the CDAC report and that the Governor will set forth specific debt limits in a letter to the Legislature. This process facilitates the communication of debt limits with the budget committees for their further action while maintaining the State's ability to manage tax-supported debt.

In the event that unusual circumstances prompt the consideration of exceeding the aggregate debt limit as recommended by CDAC, the committee may meet to determine if changes are necessary and the procedures to effect such a change.

# D. Recommendation for Non GO Tax-supported Debt for Fiscal Year 2013

With respect to all other tax-supported debt (Consolidated Transportation Bonds, Maryland Stadium Authority, Capital Leases, Certificates of Participation to finance Video Lottery Terminals, GARVEE Bonds, and Bay Restoration Fund Revenue Bonds), the Committee also recommends an aggregate total of \$505.0 million in new issues in fiscal year 2013.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

# **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 and the 2009 General Assembly expanded the debt authorization for Baltimore City Community College to academic as well as auxiliary facilities.

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 directed that the Committee "include a multiyear funding recommendation that will provide stability in the annual funding for school construction." The 2009 General Assembly repealed this requirement that the Committee annually review the school construction needs and make a specific recommendation regarding additional funding (Chapter 485, Laws of Maryland 2009).

Chapter 641 of the Laws of 2010 requires the Capital Debt Affordability Committee to analyze and report on the aggregate impact of Public-Private Partnership agreements on the total amount of new State debt that prudently may be authorized for the next fiscal year.

#### **Membership**

Since 1979, the members have been the State Treasurer (Chair), the Comptroller, the Secretaries of Budget and Management and Transportation, and one public member appointed by the Governor. Chapter 445, Laws of Maryland, 2005 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.

# 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 8.0% 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.

In accordance with SF&P §8-104(c), leases are considered tax-supported debt when the lease or unit of State government is "supported directly or indirectly by State tax revenues". However, SF&P §8-104 was amended in the 2011 Session by Chapter 163 of the 2011 Laws of Maryland. Effective June 1, 2011, tax supported debt does not include capital leases used to finance energy performance contracts if, as determined by the committee, energy savings that are guaranteed by the contractor:

- (i) equal or exceed the capital lease payments on an annual basis; and
- (ii) are monitored in accordance with reporting requirements adopted by the committee.

# 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 8.0% 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 in July 2005. Indeed, the rating agencies have repeatedly cited the Capital Debt Affordability process and criteria as major reasons for awarding Maryland AAA status.

The 2007 Capital Debt Affordability Committee Report (Section VII) documented the Committee's review of its affordability criteria, initiated at the request of the General Assembly. The Committee concluded the 2007 Report with a recommendation for the continued study and evaluation of the criteria in 2008. That recommendation was followed and, after thorough analysis by the Committee and staff, and following consultation with the rating agencies and the State's financial advisor, the Committee voted to retain the 8.0% debt service to revenues criterion and to change the debt outstanding to personal income criterion from 3.2% to 4.0%. A complete report of the process undertaken by the Committee to change the criterion is in Section V of the 2008 CDAC Report.

In 2008, as part of the 2007 and 2008 review of variables incorporated in the affordability criteria, the Committee standardized the calculation of revenues for all components of tax-supported debt. Beginning in the 2008 analysis, revenues for GARVEE Bonds and Bay Restoration Bonds are no longer limited to their respective debt service as had been the prior practice. Revenues for GARVEE Bonds and Bay Restoration Bonds include all federal capital highway revenues and bay restoration fees respectively. This adjustment matches the convention that has been used by CDAC for all other tax-supported debt. For instance, debt service on General Obligation Bonds is measured using all available revenues from the general fund, bond premiums and real property taxes and revenues were not restricted solely to debt service on G.O. Bonds.

Actual affordability ratios for 1960 through 2011 are in *Appendix C-2*.

# History of Authorizations

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. Between 2002 and 2008, the inclusion of Bay Restoration Bonds and GARVEEs as State tax-supported debt and the increases in the authorizations of General Obligation Bonds absorbed virtually all of the previously unused debt capacity. The recommendations for General Obligation Bond authorizations in 2006, 2007, 2008 and 2009 were over the amount that would have been recommended had the 3.0% growth rate been maintained. In 2006 and 2007, the \$100 million increases extended to future years. In 2008 and 2009, \$150 million was projected as a one-time increase for each year.

In its September 2010 meeting, CDAC recommended an authorization of \$925.0 million for the 2011 Legislative Session which was \$215.0 million below the December 2009 CDAC recommendation. The 2010 Committee adjusted future authorization levels for the 2012 – 2016 Sessions to remain within the CDAC self-imposed affordability benchmarks. These future levels were essentially unchanged in the 2011 CDAC analyses. The authorization levels that were projected at the September 2010 and 2011 meetings and that are in the 2010 and 2011 CDAC Reports represent one of many authorization options that could be used to achieve adherence to the CDAC affordability criteria.

For a history of recent authorizations and issuances, see Section V of the 2011 CDAC Report, "Changes within the General Obligation Bond Program" for further discussion.

# Appendix B History of Maryland 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 with AIG-FP 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.

In early 2007 the Baltimore Orioles filed for arbitration over the selection and installation of a new video board at Oriole Park at Camden Yards. In September 2007, the Authority and the Baltimore Orioles reached a settlement agreement, agreeing to purchase and install \$9.0 million of new audio and video equipment funded by \$5.5 million from the "Supplemental Improvements Fund" and \$3.5 million from the Authority. The Authority's share is financed under the State's equipment lease-purchase program and amortized over 10 years.

In November 2009, the Maryland Stadium Authority entered into a contract with Pepco Energy Services to provide energy upgrades and enhancements to Oriole Park at Camden Yards and the Warehouse. The energy upgrades and enhancements cost approximately \$6.0 million. The Authority is financing these under the State's energy performance contract lease-purchase agreement over 12 years. This lease is not included in the CDAC affordability analysis because the guaranteed annual savings exceeds the annual debt service.

In fiscal year 2010, the Maryland Stadium Authority issued Series 2010 Sports Facilities Taxable Revenue Bond in the amount of \$10.0 million. The proceeds from this bond were used to renovate the lower and upper levels in the seating bowl at Oriole Park. This bond matures on December 15, 2013. The \$10.0 million Revenue bond is not included in the tax-supported debt in the affordability analysis.

Net debt service for Oriole Park at Camden Yards was \$14.9 million in 2011.

### **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 (½), City (½); and (iii) the City be solely responsible for operating deficits and capital improvements prior to completion of the expansion and after fiscal year 2008. During the 2008 General Assembly Session, a bill was passed that extends the State's obligation of funding ½ of the operating deficit until December 15, 2014.

The Authority's debt service for the Convention Center in fiscal year 2011 was approximately \$5.1 million. The 2011 contribution to operating deficits and the project's capital improvements fund was approximately \$6.1 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 with Ambac 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. In December 2008, the Authority terminated the synthetic fixed rate agreement with Ambac and entered into a new agreement with Barclay's without any fiscal impact to the Authority.

### Ocean City Convention Center

The Authority also constructed an expansion of the Ocean City 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.

In March 2011, the Authority refinanced the outstanding balance of \$6.5 million. A new fixed rate series was issued in the amount of \$6.65 million with \$6.5 million being used to call the Series 1995 Bonds and the balance of \$150,000 was used for transactional costs. The annual

debt service on the Series 2011 Bonds is approximately \$1.4 million annually.

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. The 2011 contribution to operating deficits and the project's capital improvements fund is approximately \$1.6 million. The project has generated direct and indirect benefits to the State that offset 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 Ocean City Convention Center project) since 2007.

### 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 leasebacked revenue bonds with Ambac 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. In December 2008, the Authority terminated the synthetic fixed rate agreement with Ambac and entered into a new agreement with Barclay's without any fiscal impact to the Authority.

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 Series 1997 bonds matured on December 15, 2007.

In November 2009, the Maryland Stadium Authority entered into a contract with Pepco Energy Services to provide energy upgrades and enhancements to M & T Bank Stadium at a cost of approximately \$2.4 million. The Authority is financing the upgrades and enhancements under the State's energy performance contract lease-purchase agreement over 12 years. The outstanding balance as of June 30, 2011 is \$2.4 million. This lease is not included in the CDAC affordability analysis because the guaranteed annual savings exceeds the annual debt service.

The Authority and the Baltimore Ravens agreed to purchase and install \$9.6 million of new audio and video equipment funded by \$5.6 million from the Baltimore Ravens and \$4.0 million from the Authority. The Authority's share was financed under the State's equipment lease-purchase program in April 2010 and amortized over 10 years. The outstanding balance as of June 30, 2011 is \$3.8 million.

The Authority's combined debt service on the revenue bonds is \$6.5 million for fiscal year 2011.

### 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 to 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. Fiscal year 2011 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 was \$63.0 million and was financed by various public and private sources. The Authority did not have any operating risk for the project, which was completed in February, 2004. Fiscal year 2011 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 was \$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. Fiscal year 2011 debt service for these bonds was \$.7 million.

(THE REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

### **APPENDIX A - 1**

#### MARYLAND PERSONAL INCOME AND POPULATION

### Historical Data through 2010 Projections 2011 - 2021

### UPDATED SEPTEMBER 2011, PROJECTIONS CAN AND WILL CHANGE

Personal	% Chango	Population	% Change
	Change		Change
(\$ m mmons)		(inousunus)	
\$ 194,581	5.65%	5,414	1.95%
\$ 201,793	3.71%	5,479	1.20%
\$ 209,701	3.92%	5,534	1.00%
\$ 224,646	7.13%	5,582	0.87%
\$ 237,146	5.56%	5,621	0.70%
\$ 252,431	6.45%	5,650	0.52%
\$ 264,798	4.90%	5,677	0.48%
\$ 274,286	3.58%	5,711	0.60%
\$ 274,980	0.25%	5,760	0.86%
\$ 282,770	2.83%	5,822	1.08%
\$ 297,084	5.06%	5,866	0.76%
\$ 308,095	3.71%	5,900	0.58%
\$ 316,842	2.84%	5,932	0.54%
\$ 332,074	4.81%	5,963	0.52%
\$ 350,310	5.49%	5,993	0.50%
\$ 366,845	4.72%	6,023	0.50%
\$ 381,518	4.00%	6,053	0.50%
\$ 396,092	3.82%	6,082	0.48%
\$ 411,659	3.93%	6,112	0.49%
\$ 428,660	4.13%	6,140	0.46%
\$ 446,793	4.23%	6,170	0.49%
	Income	Sample   Change   Sample   S	Income         Change         Population           (\$ in millions)         (thousands)           \$ 194,581         5.65%         5,414           \$ 201,793         3.71%         5,479           \$ 209,701         3.92%         5,534           \$ 224,646         7.13%         5,582           \$ 237,146         5.56%         5,621           \$ 252,431         6.45%         5,650           \$ 264,798         4.90%         5,677           \$ 274,286         3.58%         5,711           \$ 274,980         0.25%         5,760           \$ 282,770         2.83%         5,822           \$ 297,084         5.06%         5,866           \$ 308,095         3.71%         5,900           \$ 316,842         2.84%         5,932           \$ 332,074         4.81%         5,963           \$ 350,310         5.49%         5,993           \$ 366,845         4.72%         6,023           \$ 381,518         4.00%         6,053           \$ 396,092         3.82%         6,082           \$ 411,659         3.93%         6,112           \$ 428,660         4.13%         6,140

<sup>4.40%</sup> Average rate of personal income growth for 10 year period 2001 through 2010 4.41% Median rate of personal income growth for 10 year period 2001 through 2010

Sources: Personal Income

2001 - 2010 Bureau of Economic Analysis, U.S. Dept. of Commerce

2011 - 2021 BRE

Population

2001 - 2009 Census Bureau, U.S. Dept. of Commerce 2010 - 2021 Forecast: Moody's Analytics July 2011

# MARYLAND STATE REVENUE PROJECTIONS (\$ in millions)

#### UPDATED SEPTEMBER 2011. PROJECTIONS CAN AND WILL CHANGE

Fiscal Year	General Fund Revenue	% Growth of GF	Property Taxes	% Growth of Prop. Taxes	Use of Premium and Misc. ABF Receipts	US Treasury Subsidy - Direct Subsidy Bonds	Educational Trust Fund (VLT revenues)	Transfer Taxes	Total	Transportation Revenues	Stadium Related Revenues	Garvee Bonds	Bay Restoration Fund	Total Revenues	Percent Change of Total Revenues
1999	\$8,524.0	5.9%	\$246.9		\$11.0				\$8,781.9	\$1,462.6	\$24.5			\$10,269.0	6.11%
2000	\$9,220.0	8.2%	\$250.8		\$12.6				\$9,483.4	\$1,568.4	\$21.2			\$11,073.0	7.83%
2001	\$9,802.0	6.3%	\$257.1		\$11.4				\$10,070.5	\$1,615.0	\$27.6			\$11,713.1	5.78%
2002	\$9,504.0	-3.0%	\$270.0		\$25.5				\$9,799.5	\$1,663.0	\$27.2			\$11,489.7	-1.91%
2003	\$9,409.8	-1.0%	\$286.0		\$36.7				\$9,732.5	\$1,603.0	\$21.9			\$11,357.4	-1.15%
2004	\$10,204.3	8.4%	\$468.4		\$97.2				\$10,769.8	\$1,884.0	\$22.2			\$12,676.1	11.61%
2005	\$11,548.0	13.2%	\$516.5	10.3%	\$94.5				\$12,159.1	\$2,085.0	\$21.7			\$14,265.8	12.54%
2006	\$12,390.3	7.3%	\$575.1	11.3%	\$46.4				\$13,011.8	\$2,122.0	\$21.4			\$15,155.2	6.23%
2007	\$12,940.2	4.4%	\$552.7	-3.9%	\$37.6				\$13,530.4	\$2,100.0	\$21.2			\$15,651.6	3.28%
2008	\$13,545.6	4.7%	\$625.7	13.2%	\$37.1				\$14,208.4	\$2,009.0	\$21.5	\$441.3	\$55.0	\$16,735.2	6.92%
2009	\$12,900.5	-4.8%	\$698.6	11.6%	\$79.2				\$13,678.2	\$2,140.3	\$20.0	\$441.3	\$53.3	\$16,333.2	-2.40%
2010	\$12,587.1	-2.4%	\$742.9	6.3%	\$67.8	\$0.9	\$11.0		\$13,409.7	\$2,135.8	\$20.0	\$441.3	\$54.8	\$16,061.6	-1.66%
2011	\$13,537.4	7.5%	\$801.1	7.8%	\$81.2	\$9.2	\$82.8	\$113.8	\$14,625.4	\$2,256.0	\$23.7	\$540.2	\$55.4	\$17,500.7	8.96%
2012	\$14,117.0	4.3%	\$761.8	-4.9%	\$60.0	\$11.5	\$127.5	\$118.9	\$15,196.7	\$2,254.0	\$27.3	\$440.4	\$55.9	\$17,974.3	2.71%
2013	\$14,493.8	2.7%	\$737.0	-3.3%	\$2.2	\$12.0	\$286.6	\$134.0	\$15,665.6	\$2,512.0	\$24.7	\$440.4	\$56.5	\$18,699.2	4.03%
2014	\$14,998.0	3.5%	\$711.5	-3.5%	\$2.2	\$12.0	\$471.3	\$157.4	\$16,352.4	\$2,686.0	\$24.8	\$440.4	\$57.0	\$19,560.6	4.61%
2015	\$15,756.9	5.1%	\$711.8	0.0%	\$2.2	\$12.0	\$512.3	\$174.2	\$17,169.4	\$2,772.0	\$23.5	\$440.4	\$57.6	\$20,462.9	4.61%
2016	\$16,496.9	4.7%	\$712.1	0.0%	\$2.2	\$12.0	\$549.4	\$177.8	\$17,950.3	\$2,845.0	\$23.5	\$440.4	\$58.2	\$21,317.4	4.18%
2017	\$17,274.9	4.7%	\$729.9	2.5%	\$2.2	\$12.0	\$560.4	\$182.2	\$18,761.5	\$2,877.0	\$23.5	\$440.4	\$58.8	\$22,161.2	3.96%
2018	\$18,052.3	4.5%	\$748.1	2.5%	\$2.2	\$12.0	\$571.6	\$186.8	\$19,573.0	\$2,881.0	\$23.5	\$440.4	\$59.4	\$22,977.2	3.68%
2019	\$18,864.7	4.5%	\$766.8	2.5%	\$2.2	\$12.0	\$583.0	\$191.4	\$20,420.1	\$2,940.0	\$23.1	\$440.4	\$60.0	\$23,883.5	3.94%
2020	\$19,713.6	4.5%	\$786.0	2.5%	\$2.2	\$11.2	\$594.7	\$196.2	\$21,303.9	\$2,989.0	\$23.1	\$440.4	\$60.6	\$24,816.9	3.91%
2021	\$20,600.7	4.5%	\$805.6	2.5%	\$2.2	\$10.4	\$606.6	\$201.1	\$22,226.7	\$3,043.0	\$8.7	n/a	\$61.2	\$25,339.5	2.11%

#### General Fund:

1999 - 2021: Bureau of Revenue Estimates after September BRE meeting

Property Tax and Use of Premium Revenues:

1999 - 2010: State Budget Books

2011 - 2021 : Dept. of Budget and Management, STO, Department of Assessments and Taxation

US Treasury Subsidy - Direct federal subsidies for Build America, Qualified School Construction, Qualified Zone Academy, and Qualified Energy Conservation Bonds

Educational Trust Fund (slots revenues)

2011 - 2016 - Dept. of Budget and Management

2017 through 2021, projected at 2% growth

Transfer Taxes

2011 - 2016: Bureau of Revenue Estimates

2017 - 2021: Projected at growth rate of 2.5%

Transportation Revenues:

1999-2021: Department of Transportation, Office of Finance, updated Septmeber 2011

Revenues consist of Taxes and Fees, Operating Revenue, Other Revenue, (including investment revenue) and federal funds for operations; MdTA transfers are deducted.

Garvee Bond Revenues:

2008-2021: Federal highway capital revenues; source MdTA, September 2011

Stadium Revenues:

represents lottery revenues transferred to the Stadium Authority net of debt service on the 2010 & 2011 Sports Facilities Revenue Bonds PLUS Camden Yards revenues and Hippodrome ticket charges Bay Restoration Fund Revenues:

2008-2021 total program revenues; source MDE, MWQFA, updated September 2011

Appendix B-1

# Proposed General Obligation Authorizations and Estimated Issuances CDAC 2011 Recommendation

(\$ in millions)

Legislative Session	Fiscal Year	Proposed Authoriza- tions	Crop Conver- sions	Total Proposed Authorizations	Rate of Increase	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 and beyond	Total Issued
2012	2013	\$925		\$925	0%		287	231	185	139	83						\$925
2013	2014	\$925		\$925	0%			287	231	185	139	83					\$925
2014	2015	\$935		\$935	1%				290	234	187	140	84				\$935
2015	2016	\$945		\$945	1%					293	236	189	142	85			\$945
2016	2017	\$955		\$955	1%						296	239	191	143	86		\$955
2017	2018	\$1,200		\$1,200	26%							372	300	240	180	\$108	\$1,200
2018	2019	\$1,240		\$1,240	3%								384	310	248	\$298	\$1,240
2019	2020	\$1,280		\$1,280	3%									397	320	\$563	\$1,280
2020	2021	\$1,320		\$1,320	3%										409	\$911	\$1,320
2021	2022	\$1,360		\$1,360	3%											\$1,360	\$1,360
Projected Is	ssuance of	New Authoriz	zations	\$11,085		0	287	518	706	850	941	1,023	1,101	1,175	1,243	3,240	\$11,085
Curren	t Authorize	ed but Unissu	ed	\$2,357		960	668	427	229	80	(1)	(3)	(1)	(0)	(0)		\$2,358
Tota	al Projecte	ed Issuances		\$13,442		\$960	\$955	\$945	\$935	\$930	\$940	\$1,020	\$1,100	\$1,175	\$1,243	\$3,240	\$13,443
P	rojected B	ond Sales		Fiscal Year		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	-			1st sale		\$512	\$475	\$475	\$475	\$475	\$485	\$500	\$525	\$565	\$600		
				2nd sale		\$448	\$480	\$470	\$460	\$455	\$455	\$520	\$575	\$610	\$643		
				Total sales		\$960	\$955	\$945	\$935	\$930	\$940	\$1,020	\$1,100	\$1,175	\$1,243		

Percentage Issuance assui Percentage Issuance assumptions by fiscal years:											
Fiscal year following year o Fiscal year following year of authorization:	1st	2nd	3rd	4th	5th						
Percent of original authoriz Percent of original authorization issued	31%	25%	20%	15%	9%						

### PROJECTED GENERAL OBLIGATION DEBT - AUTHORIZED BUT UNISSUED

### **Appendix B-2**

	(\$ in thousands)											
Fiscal Year (a)	Authorized but Unissued Debt at Beginning of FY	New Debt Authorizations (net)	Bond Issues	Authorized but Unissued Debt at End of FY								
		(b)	(b)									
2012	\$2,357,041	\$925,000	(\$960,000)	\$2,322,041								
2013	\$2,322,041	\$925,000	(\$955,000)	\$2,292,041								
2014	\$2,292,041	\$935,000	(\$945,000)	\$2,282,041								
2015	\$2,282,041	\$945,000	(\$935,000)	\$2,292,041								
2016	\$2,292,041	\$955,000	(\$930,000)	\$2,317,041								
2017	\$2,317,041	\$1,200,000	(\$940,000)	\$2,577,041								
2018	\$2,577,041	\$1,240,000	(\$1,020,000)	\$2,797,041								
2019	\$2,797,041	\$1,280,000	(\$1,100,000)	\$2,977,041								
2020	\$2,977,041	\$1,320,000	(\$1,175,000)	\$3,122,041								
2021	\$3,122,041	\$1,360,000	(\$1,243,000)	\$3,239,041								
		\$11,085,000	(\$10,203,000)									
Summary:												
•	Jnissued at 7/1/2011		\$2,357,041									
Total Authorizati			\$11,085,000									
Total Issuances			(\$10,203,000)									
Total Authorized	but Unissued at 6/3	0/2021	\$3,239,041									

<sup>(</sup>a) Debt authorizations are shown in the fiscal year of the legislative session to support the capital program of the following fiscal year.

<sup>(</sup>b) As projected in Appendix B-1

### PROJECTED GENERAL OBLIGATION DEBT OUTSTANDING

APPENDIX B - 3

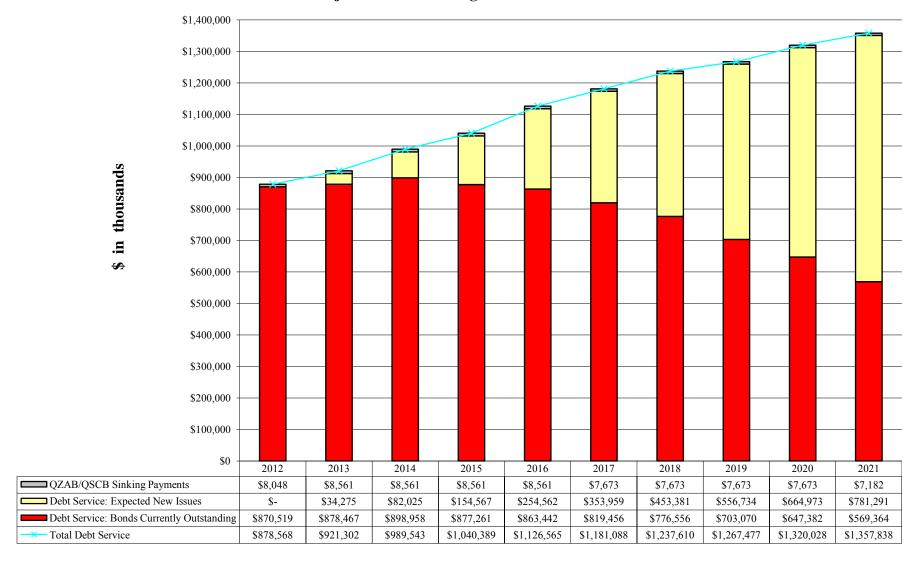
	(\$ in thousands)							
Fiscal Year	Outstanding at Beginning of FY	GO New Issues	Redemptions	Refunding	QZAB Redemptions	Outstanding a End of FY		
	<u> </u>	(a)						
2012	\$6,982,846	\$960,400	(\$542,179)	(\$9,690)		\$7,391,377		
2013	\$7,391,377	\$955,000	(\$564,299)			\$7,782,077		
2014	\$7,782,077	\$945,000	(\$613,979)			\$8,113,098		
2015	\$8,113,098	\$935,000	(\$647,252)			\$8,400,846		
2016	\$8,400,846	\$930,000	(\$718,546)		(\$18,098)	\$8,594,201		
2017	\$8,594,201	\$940,000	(\$764,186)		, ,	\$8,770,016		
2018	\$8,770,016	\$1,020,000	(\$809,914)			\$8,980,101		
2019	\$8,980,101	\$1,100,000	(\$827,209)			\$9,252,892		
2020	\$9,252,892	\$1,175,000	(\$865,048)		(\$9,043)	\$9,553,801		
2021	\$9,553,801	\$1,243,000	(\$882,836)		,	\$9,913,965		
		\$10,203,400	(\$7,235,450)		(\$27,141)			

### Summary:

\$6,982,846
\$10,203,400
(\$9,690)
(\$7,235,450)
(\$27,141)
\$9,913,965

<sup>(</sup>a) New issues as projected in Appendix B-1

Appendix B-4
Projected General Obligation Debt Service



### **Historical Data - General Obligation Debt**

(\$ in thousands)

	Summary of Authorizations						Summ	ary of Debt	Activity			Summar	y of Debt Se	ervice
					<u> </u>					<u>.</u>		Adjustm	ent (b)	
				New	Authorized	New				Outstanding at Fiscal				
Fiscal Year		Authorized	Cancelled	Issuances	but Unissued	Issuances	Refunding	Redeemed	Refunded	Year End	Gross Total	Repayable	Assumed	Net
	_	(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
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
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
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
1977		\$169,908	\$653	\$448,200	\$967,018	\$448,200		\$92,633		\$2,065,910	\$184,751	(\$11,963)	\$43,425	\$31,462
1978		\$190,896	\$4,577	\$218,145	\$935,192	\$218,145		\$111,095		\$2,172,960	\$216,797	(\$14,066)	\$42,459	\$28,393
1979		\$155,887	\$61,422	\$115,350	\$914,307	\$115,350		\$134,235		\$2,154,075	\$244,653	(\$14,503)	\$39,599	\$25,096
1980		\$205,510	\$72,819	\$117,310	\$929,688	\$117,310		\$162,255		\$2,109,130	\$269,054	(\$15,052)	\$37,425	\$22,373
1981		\$182,418	\$16,335	\$271,065	\$824,706	\$271,065		\$176,140		\$2,204,055	\$286,003	(\$15,946)	\$35,841	\$19,895
1982		\$184,998	\$22,391	\$188,180	\$799,133	\$188,180		\$184,575		\$2,207,660	\$311,372	(\$16,253)	\$33,947	\$17,694
1983		\$190,250	\$8,851	\$392,230	\$588,301	\$392,230		\$190,000		\$2,409,890	\$330,491	(\$14,062)	\$28,328	\$14,266
1984		\$203,150	\$24,467	\$116,700	\$650,284	\$116,700		\$212,275		\$2,314,315	\$361,279	(\$12,750)	\$27,209	\$14,459
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
1986		\$219,034	\$49,892	\$124,585	\$876,052	\$124,585		\$245,805		\$2,110,075	\$396,768	(\$9,204)	\$20,227	\$11,023
1987		\$230,950	\$7,575	\$164,645	\$934,782	\$164,645		\$244,305		\$2,030,415	\$394,568	(\$5,104)	\$16,441	\$11,337
1988		\$254,228	\$13,601	\$304,860	\$870,549	\$304,860		\$244,455		\$2,090,820	\$389,993	(\$4,649)	\$13,635	\$8,986
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
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
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
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
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
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
1995		\$389,960	\$1,111	\$335,000	\$1,190,958	\$335,000		\$219,936		\$2,619,069	\$373,485	(\$653)	\$1,357	\$704
1996		\$412,088	\$12,425	\$470,000	\$1,119,919	\$470,000		\$229,134		\$2,859,935	\$382,125	(\$652)	\$1,360	\$708
1997		\$416,133	\$2,114	\$410,000	\$1,124,656	\$410,000		\$244,541		\$3,025,394	\$401,799	(\$647)	\$347	(\$300)
1998		\$442,999	\$15,142	\$500,000	\$1,052,513	\$500,000		\$254,869		\$3,270,525	\$417,900	(\$642)	\$64	(\$578)
1999		\$448,745	\$5,764	\$475,000	\$1,020,898	\$475,000		\$245,297		\$3,500,238	\$417,646	(\$124)	\$0	(\$124)
2000		\$471,786	\$3,659	\$125,000	\$1,363,620	\$125,000		\$276,362		\$3,348,872	\$459,156	\$0	\$0	\$0
2001		\$513,250	\$3,612	\$400,000	\$1,473,258	\$400,000		\$297,966		\$3,450,900	\$470,868	\$0	\$0	\$0
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
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
2004		\$663,663	\$10,692	\$500,000	\$1,946,454	\$500.000	φο, ο,οοο	\$330,215	ψοσο,σ-το	\$4,102,278	\$536,819	\$0	\$0	\$0
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
2006		\$690,000	\$1,004	\$750,000	\$1,774,484	\$750,000	φοσο,σ-το	\$393,355	ψουΣ, 100	\$4,868,471	\$625,208	\$0	\$0	\$0
2007		\$821,126	\$4,645	\$679,378	\$1,911,587	\$679,378		\$405,695		\$5,142,154	\$654,055	\$0 \$0	\$0 \$0	\$0
2008		\$935,000	\$2,749	\$779,986	\$2,063,852	\$779,986		\$428,310		\$5,493,830	\$692,539	\$0 \$0	\$0 \$0	\$0 \$0
	(d)	\$1,112,000	\$1,939	\$845,563	\$2,328,350	\$845,563	\$65,800	\$464,725	\$66,825	\$5,873,643	\$744,799	\$0 \$0	\$0 \$0	\$0 \$0
	(e)	\$1,214,543	\$7,026	\$1,140,883	\$2,394,984	\$1,140,883	\$798,080	\$482,754	\$806,630	\$6,523,222	\$777,523	\$0 \$0	\$0 \$0	\$0 \$0
2010	(0)	Ψ1,217,040	ψ1,020	ψ1,170,000	Ψ2,007,004	ψ1,170,000	Ψ1 30,000	Ψ-102,104	ψοσο,σσο	Ψ0,020,222	Ψ111,020	φυ	ΨΟ	ΨΟ

\$515,094

\$6.982.846

\$834,833

\$0

\$0

\$0

\$974,718

\$2,357,041

\$974,718

\$4,127

2011 (f) \$940,902

<sup>(</sup>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.

<sup>(</sup>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.

<sup>(</sup>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.

<sup>(</sup>d) \$1,110 million for G.O bonds and \$2.0 million for Local Government Infrastructure program

<sup>(</sup>e) \$1,140 million for 2010 MCCBL, \$70 million 2009 Program Open Space and \$4.543 million for QZAB authorization

<sup>(</sup>f) \$925 million for 2011 MCCBL, \$15.902 million for QZAB authorization

### **History of Affordability Ratios**

Appendix C-2

			(1)	(	2)
			% of Personal come	Debt Service as	a % of Revenues
		GO Debt Only	Tax-Supported includes GO, DOT, Cap Leases & Stadium Auth.	GO Debt Service as a % of State Revenues (5) (6)	Tax-Supported includes GO, DOT, Cap Leases & Stadium Auth.
	1960	3.11%		5.23%	
	1965	3.12%		5.10%	
	1903	3.34%		3.35%	
	1975	5.26%		9.78%	
	1976	5.87%		10.17%	
	1970	6.53%		10.17 %	
	1977	6.11%		10.60%	
	1976	5.41%		10.55%	
	1980	4.76%		10.46%	
	1981	4.48%		10.63%	
	1982	4.24%		10.60%	
	1983	4.43%		10.32%	
(7)	1984	4.4070	4.15%	10.0270	10.16%
(7)	1985		3.63%		9.61%
(7)	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		2.34%		5.86%
	2003		2.58%		6.15%
	2004		2.59%		5.93%
	2005		2.56%		5.54%
	2006		2.56%		5.55%
(3)	2007		2.68%		5.40%
(4)	2008		2.78%		5.55%
	2009		3.17%		6.21%
	2010		3.31%		6.85%
	2011		3.22%		6.59%

For more history on affordability criteria, see also Section VII in 2007 CDAC Report and Section V in 2008 CDAC Report.

<sup>(1)</sup> The criterion for debt outstanding to personal income was 3.2% from 1979 through 2007. CDAC changed it to 4.0% in 2008.

<sup>(2)</sup> The criterion for debt service to revenues has been 8.0% since 1979.

<sup>(3)</sup> GARVEE Bonds are first issued in 2007 and consequently are considered tax-supported debt beginning in 2007.

<sup>(4)</sup> Bay Restoration Bonds are first issued in 2008 and consequently are considered tax-supported debt beginning in 2008.

<sup>(5)</sup> 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.

<sup>(6)</sup> Revenues include general fund revenues plus property tax revenues.

<sup>(7)</sup> Various components of tax-supported debt first appear in the 1988 report which recalculated the ratios beginning in 1984.

#### **APPENDIX C - 3**

#### **HISTORICAL DATA - DEPARTMENT OF TRANSPORTATION DEBT**

# Consolidated Transportation Bonds (\$ in thousands)

Summary of Debt Activity

Summar	y of	Debt	Service	(ď	)
--------	------	------	---------	----	---

				u. y ·	51 DODE 710				Cummary or Bost Corvice (u)				
Fiscal Year	Gross Debt Outstanding Beginning of Year	Issued	Defease	d <u>R</u>	edeemed	Gross D Outstand End of Yea	ling Sinking Fund(s)	Net Debt Outstanding End of Year	Deposits to Refunding Sinking Fund	Principal Redeemed	Interest	Total	
1981	\$ 399,865		,000 (a) -	\$	-	\$ 519,							
1982	\$ 519,865		,000	\$	60,000	\$ 519,							
1983	\$ 519,865	\$ 40,	- 000	\$	60,000	\$ 499,		\$ 259,264	\$ 20,924 \$	60,000	\$ 32,884	\$ 113,808	
1984	\$ 499,865		-		-	\$ 499,		\$ 216,248	\$ 20,924	-	\$ 29,219	\$ 50,143	
1985	\$ 499,865		-		-	\$ 499,		\$ 164,624	\$ 20,924	-	\$ 29,219	\$ 50,143	
1986	\$ 499,865		- \$ 354,86	. , .	3,000	\$ 142,		\$ 112,701	\$ 10,462 \$		\$ 19,547	\$ 33,009	
1987	\$ 142,000	\$ 100,	.000 -	\$	7,000	\$ 235,		\$ 186,683	- \$	.,	\$ 12,919	\$ 19,919	
1988	\$ 235,000		-	\$	8,000	\$ 227,		\$ 168,047	- \$	8,000	\$ 15,685	\$ 23,685	
1989	\$ 227,000	\$ 100,		\$	17,000	\$ 310,		\$ 241,838	- \$	,	\$ 18,195	\$ 35,195	
1990	\$ 310,000	\$ 260,		\$	20,000	\$ 550,		\$ 482,691	- \$	20,000	\$ 28,842	\$ 48,842	
1991	\$ 550,000	\$ 310,		\$	18,000	\$ 842,		\$ 773,671	- \$	18,000	\$ 46,261	\$ 64,261	
1992	\$ 842,000	\$ 120,		\$	21,000	\$ 941,		\$ 874,770	- \$	21,000	\$ 59,211	\$ 80,211	
1993	\$ 941,000		- 000	\$	56,200	\$ 959,		\$ 919,899	- \$	56,200 (e)		\$ 117,645	
1994	\$ 959,800	\$ 543,	. , , ,	0 \$	25,455	\$ 1,020,		\$ 992,720	- \$	25,455	\$ 56,423	\$ 81,878	
1995	\$ 1,020,290	\$ 75,	- 000	\$	47,785	\$ 1,047,		\$ 1,015,167	- \$	47,785	\$ 52,841	\$ 100,626	
1996	\$ 1,047,505			\$	69,880	\$ 977,		\$ 946,685	- \$	69,880	\$ 51,526	\$ 121,406	
1997	\$ 977,625		- 000	\$	88,245	\$ 939,		\$ 923,885	- \$	88,245	\$ 47,448	\$ 135,693	
1998	\$ 939,380	\$ 93,	645 (g) \$ 91,20	0 \$	97,810	\$ 844,		\$ 844,015	- \$	97,810	\$ 44,959	\$ 142,769	
1999	\$ 844,015			\$	94,885	\$ 749,		\$ 749,013	- \$	94,885	\$ 38,025	\$ 132,910	
2000	\$ 749,130	\$ 75,	- 000	\$	99,360	\$ 724,		\$ 724,770	- \$	99,360	\$ 35,873	\$ 135,233	
2001	\$ 724,770		-	\$	76,720	\$ 648,		\$ 648,050	- \$	76,720	\$ 32,954	\$ 109,674	
2002	\$ 648,050	\$ 150,		\$	83,900	\$ 714,		\$ 714,150	- \$	,	\$ 29,278	\$ 113,178	
2003	\$ 714,150		405 (h) \$ 46,50	0 \$	313,810	\$ 961,		\$ 961,245	- \$		\$ 34,204	\$ 348,014	
2004	\$ 961,245	\$ 395	,900 (i) \$ 77,50	0 \$	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,		\$	91,470	\$ 1,078,	475 -	\$ 1,078,475	- \$	91,470	\$ 49,702	\$ 141,172	
2007	\$ 1,078,475	\$ 100,		\$	67,425	\$ 1,111,		\$ 1,111,050	- \$	,	\$ 50,999	\$ 118,424	
2008	\$ 1,111,050	\$ 226	755 -	\$	68,990	\$ 1,268,	815 -	\$ 1,268,815	- \$	68,990	\$ 52,400	\$ 121,390	
2009	\$ 1,268,815	\$ 390,		\$	76,210	\$ 1,582,		\$ 1,582,605	- \$	76,210	\$ 66,145	\$ 142,355	
2010	\$ 1,582,605	\$ 140,	- 000	\$	77,595	\$ 1,645,		\$ 1,645,010	- \$	77,595	\$ 73,358	\$ 150,953	
2011	\$ 1,645,010			\$	83,170	\$ 1,561,	840 -	\$ 1,561,840	- \$	83,170	\$ 75,492	\$ 158,662	

- (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.