Effect of Long-Term Debt on the Financial Condition of the State

Department of Legislative Services
Office of Policy Analysis
Annapolis, Maryland

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November 2004

The Honorable Edward J. Kasemeyer, Senate Chairman
Spending Affordability Committee

The Honorable Michael R. Gordon, House Chairman
Spending Affordability Committee

Dear Chairman Kasemeyer and Chairman Gordon:

The Department of Legislative Services' annual report on the *Effect of Long-Term Debt on the Financial Condition of the State* is presented. This report essentially follows the format of previous reports and includes a review of the recommendations of the Capital Debt Affordability Committee, an independent affordability analysis, and a market analysis.

The creation of the Capital Debt Affordability Committee complements the efforts of the Spending Affordability Committee in management of the State's bonded indebtedness. The Capital Debt Affordability Committee, created by an Act of the 1978 General Assembly, is required to submit a recommended level of debt authorization to the Governor and the General Assembly by September 10 of each year. The existence of the committee within the Executive Branch means that consideration of debt affordability will occur at the time of formulation of the State's capital program, as well as the time of approval of the program by the legislature.

The statistical analysis and data used in developing the recommendations were prepared by Patrick Frank with assistance by Henriot St. Gerard, Rachel Hise, David Juppe, Monica Kearns, Matthew Klein, Lucinda Lessley, Amanda Mock, Stacy Porter, and Theresa Tuszynski.

Respectfully submitted,

Warren G. Deschenaux
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WGD/rma

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Chapter 1. Recommendations of the Department of Legislative Services

New General Obligation Bond Authorization

The Capital Debt Affordability Committee (CDAC) recommended a limit of $670 million for new authorizations of general obligation (GO) bonds during the 2005 legislative session. The recommendation is consistent with the authorization level projected in last year's report. The recommendation includes $5 million previously authorized for tobacco buyout financing.

In accordance with Section 8-113 of the State Finance and Procurement Article, the Governor notified the General Assembly on the level of State debt that is advisable. The Governor accepted the recommendation of CDAC and provided the following preliminary allocation of the $670 million debt authorization as shown in **Exhibit 1.1**.

Exhibit 1.1
Governor's Proposed GO Bond Capital Program

	Go Debt
State-owned Facilities	$317,100,000
Grant and Loan Programs	255,300,000
Public School Construction	97,600,000
Total	**670,000,000**

Source: Department of Budget and Management

The Department of Legislative Services' (DLS) forecast of personal income and levels of outstanding debt indicates that Maryland's five-year GO debt authorization plan will be affordable according to the debt affordability criteria and that additional capacity remains. However, the forecast also reveals a significant increase in the amount of annual debt service. That growth in the debt service obligation will necessitate an increase in the amount of general funds or property tax revenues allocated towards debt service. **DLS agrees that the committee's provisional debt limit for the 2005 session of $670 million in new GO authorizations meets the affordability criteria and preserves capacity for the future.**

The Task Force to Study Public School Facilities concluded that many of Maryland's public schools do not meet all minimum required standards as of July 2003. To bring all schools up to these standards, it is estimated to require an additional $1.2 billion, if funded by GO bond authorizations, this would result in $1.8 billion debt service payments through fiscal 2032.

Additional annual debt service costs would break at $130 million. **Given the cost of the proposal and the existing current gap between general fund revenues and expenditures, it is recommended that in any effort to fund the initiative, priority should be given to shifting funding from other purposes and by identifying new revenues for the Annuity Bond Fund.**

A recent paper suggests that GO bond open auctions may result in lower interest costs than closed auctions. **It is recommended that CDAC review the feasibility of implementing open auctions in Maryland.**

Authorization of Transportation Debt

The Maryland Department of Transportation competes with other State capital projects within debt affordability limits. Transportation debt capacity is limited by the constraints on debt outstanding, debt service coverage, the cash flow needs for projects in the capital program, and overall State debt affordability limits. **It is recommended that the General Assembly continue to set an annual limit on the level of State transportation debt to keep debt outstanding within the 3.2 percent of personal income debt affordability criterion, and debt service within the 8.0 percent of revenues debt affordability criterion. DLS also concurs with CDAC's recommendation that $400 million in Grant Anticipation Revenue Vehicles (GARVEE) could be prudently issued in fiscal 2006.**

Higher Education Debt

For fiscal 2006, the University System of Maryland (USM) intends to issue up to $50 million in auxiliary debt and $25 million in academic debt. This level of issuance will result in a debt service ratio below the 5.5 percent of current unrestricted funds and mandatory transfers recommended by the system's financial advisers. This level of issuance also allows total available funds to exceed 50 percent of debt outstanding. Morgan State University advises that it plans to issue some debt, but the amounts to be issued have not been determined. St. Mary's College and Baltimore City Community College do not plan on issuing any debt in fiscal 2006. **DLS agrees that the committee's recommended debt limit for the 2004 session of $25 million in new academic revenue bonds is affordable for USM.**

Non-tax Supported Debt

State agencies and independent authorities have over $12 billion in non-tax supported debt outstanding. This debt, which has grown over 50 percent in five years, is not directly supported with general funds or other State revenues and is not considered to be State debt. In recent years, DLS and the Department of Budget and Management (DBM) have reported on this debt. **It is recommended that DBM continue to report on non-tax supported debt. It is also recommended that these efforts be expanded to include quality-of-debt indicators.**

Qualified Zone Academy Bonds

In 2001, the State issued $18 million in Qualified Zone Academy Bonds (QZABs). DLS estimates that the net present value of the savings is almost $9.4 million. The federal government has recently authorized more QZABs. **Insofar as these issuances generate substantial savings, it is recommended that the State continue to issue QZABs when they are authorized by the federal government.**

Bidding the Maryland Energy Administration's Energy Performance Contracts

State law provides a program for self-financing energy improvements. In September 2004, the State bid a new financing contract. While the process yielded the lowest bidder, concerns were raised that the weighting in the invitation for bids was suboptimal. **It is recommended that the bid process for financing energy improvement projects be reevaluated every three years, prior to each new bid.**

Federal Limits on Tax-exempt Bonds

The federal government places limits on the amount of tax-exempt bonds State and local governments can issue. **It is recommended that the Department of Business and Economic Development report annually on the level of tax-exempt issuances.**

Chapter 2. Recommendations of the Capital Debt Affordability Committee

New General Obligation (GO) Debt Authorization

- GO bonds are backed by the full faith and credit of the State and they support the State's capital program. GO bonds are discussed in Chapter 3.

- The committee recommended a $670 million new GO debt authorization limit for the 2005 session. This figure is $15 million more than the last session's authorization. It includes $5 million for tobacco buyout financing.

- **Exhibit 2.1** shows that the long range plan adopted by the committee provides for $15 million in annual increases through the 2008 session. The committee proposes to reduce the 2009 authorization as recommended in the committee's 2003 report. In its 2003 report, the committee recommended that authorizations be increased $100 million in each session from 2004 to 2008, to realize an additional $500 million in authorizations. At the time, it was agreed that the authorizations be reduced again in 2009 to levels consistent with previously proposed levels.

Exhibit 2.1
Capital Debt Affordability Committee's
Recommended Levels of General Obligation Bond Authorizations
($ in Millions)

Session	Proposed GO Bond Authorizations	Change from Previous Authorization
2005	$670	$15
2006	685	15
2007	700	15
2008	715	15
2009	630	-85
2010	645	15

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations for Fiscal 2006*, September 2004

Public School Construction

The Maryland General Assembly has also asked that the Capital Debt Affordability Committee (CDAC) examine the effects associated with increasing GO bond authorizations for public school construction by $1.2 billion over eight years, which would result in $2 billion in total authorizations. CDAC recommended that, prior to authorizing additional GO debt, the State fully explore alternate funding mechanisms, new revenue streams, and shifting other capital projects. This issue is discussed in Chapter 8.

Grant Anticipation Revenue Vehicles

The Maryland Department of Transportation (MDOT) has proposed issuing Grant Anticipation Revenue Vehicles (GARVEEs). Chapter 430, Acts of 2004, required that the committee review GARVEE debt issued by MDOT. The law also limits GARVEE debt service to 13 percent the State's average annual federal authorization level. The CDAC "estimates that $400 million may be prudently issued in fiscal year 2006." GARVEEs are discussed in Chapter 3.

Higher Education Academic Debt to Be Authorized

CDAC recommends limiting new debt authorization for academic facilities to $25 million for the next fiscal year. CDAC notes that the proposed capital financing programs for the four systems "...result in a debt burden level well below the 10 percent 'highly leveraged' threshold established by Standard & Poor's..." (CDAC 2004, page 44). The $25 million recommended academic revenue bond limit is equal to the amount authorized in the 2004 legislative session. The entire $25 million is intended for projects on University System of Maryland campuses. Academic bond issuances are discussed in Chapter 7.

Chapter 3. State Tax-Supported Debt

Maryland issues six types of tax-supported debt:

- general obligation (GO) bonds backed by the full faith and credit of the State;
- revenue bonds and notes issued by the Department of Transportation backed by operating revenues and pledged taxes of the department;
- capital leases, annual payments of which are subject to appropriation by the General Assembly;
- revenue bonds issued by the Maryland Stadium Authority (MSA), secured by a lease which is supported by State revenues;
- bay restoration bonds issued by the Maryland Department of the Environment's (MSDE) Water Quality Financing Administration; and
- revenue or bond anticipation notes which may be issued by the Treasurer and which must be repaid within 180 days of issuance.

General Obligation Bonds

GO bonds are authorized and issued to pay for the construction, renovation or equipping of facilities for State, local government, and private sector entities. Grants and loans are made to local governments and private sector entities when a State need or interest has been identified. Projects funded with general obligation bonds include public and private colleges and universities, public schools and community colleges, prisons and detention centers, hospitals, and low-income housing projects.

Capital Budget Requests for Fiscal 2006 to 2010

Agency requests for fiscal 2005 total $873.8 million, over $103.8 million more than the amount available under the recommended GO bond debt limit of $670 million. Capital requests for the next five years total nearly $4.8 billion, while the projected debt limit for the same period totals about $3.4 billion. In addition, legislation enacted in 2004 proposes that the State issue an additional $1.2 billion for public school construction (see issue in Chapter 8). This includes $5.0 million for the Tobacco Transition Program in each of fiscal 2005 through 2009. Chapter 103, Acts of 2002, which created the program, excludes up to $5 million of the program's GO debt from the Capital Debt Affordability Committee (CDAC) calculation. **Exhibit 3.1** provides a listing of GO bond capital requests over the next five years. This listing reflects agency requests and will differ from the list that will appear in the Governor's fiscal 2006 *5-Year Capital Improvement Plan.*

Exhibit 3.1
GO Bond Requests: Fiscal 2006 – 2010
($ in Millions)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total	Category Totals
State Facilities							$496.7
Board of Public Works	$101.2	$66.5	$55.6	$129.6	$125.7	$478.8	
Military	0.0	2.1	2.9	1.0	2.5	8.5	
Dept. Disabilities/Veterans Affairs	2.2	2.2	1.9	1.6	1.6	9.5	
Health and Social Services							544.1
Health and Mental Hygiene	15.1	25.1	86.1	163.7	90.9	381.0	
University of MD Medical System	15.0	5.0	10.0	12.5	10.0	52.5	
Senior Citizen Activity Center	2.6	1.2	1.2	1.2	1.2	7.4	
Juvenile Justice	6.8	9.6	28.8	8.0	25.0	78.2	
Private Hospital Grant Program	5.0	5.0	5.0	5.0	5.0	25.0	
Environment							324.1
Natural Resources	20.0	13.0	13.0	13.0	13.5	72.5	
Agriculture*	6.5	7.0	7.3	7.5	8.0	36.3	
Environment	38.0	38.4	37.4	38.2	37.7	189.6	
MD Environmental Service	3.1	5.9	5.2	5.4	6.1	25.8	
Education							619.8
Education	0.0	0.7	50.5	0.0	0.0	51.2	
MD School for the Deaf	1.1	21.9	5.9	1.1	0.0	30.0	
Public School Construction**	107.8	107.6	107.8	107.6	107.8	538.6	
Higher Education							1,477.4
University System of MD***	171.4	126.7	123.7	134.4	272.8	828.9	
Baltimore City Comm. College	1.0	25.7	6.9	0.3	0.00	33.8	
St. Mary's College	5.6	3.7	14.8	2.1	2.4	28.7	
Morgan State University	41.2	16.4	39.7	31.9	27.7	156.9	
Community Colleges	64.0	70.5	123.4	72.2	52.8	382.9	
Southern MD Higher Educ. Center	0.0	0.8	9.1	0.8	0.0	10.7	
Private Facilities Grant Program	11.5	6.0	6.0	6.0	6.0	35.5	
Public Safety							745.0
Public Safety	102.5	57.9	137.6	148.1	181.5	627.6	
State Police	12.7	13.3	7.1	10.1	0.6	43.9	
Local Jails	29.0	9.3	15.5	7.3	12.5	73.5	
Housing and Economic Development							279.7
Economic Development	20.0	20.0	25.0	25.0	25.0	115.0	
Housing and Comm. Development	27.2	30.0	30.9	25.9	25.4	139.4	
Canal Place	1.2	2.1	0.0	0.0	0.0	3.3	
Historic St. Mary's City	0.0	1.0	10.7	5.0	5.3	22.0	
Legislative Initiatives	15.0	15.0	15.0	15.0	15.0	75.0	90.4
Miscellaneous	36.0	53.0	33.0	26.5	25.5	174.0	74.2
Subtotal Request	$867.8	$767.7	$1,022.0	$1,010.9	$1,087.5	$4,735.9	$4,735.9
Tobacco Transition Program	5.0	5.0	5.0	5.0	0.0	20.0	20.0
Total Request	$873.8	$772.7	1,027.0	1,015.9	$1,087.5	$4,755.0	$4,755.9
Debt Affordability Limits	**$670.0**	**$685.0**	**$700.0**	**$715.0**	**$630.0**	**$3,400.0**	

*Department of Agriculture request shown above does not include Tobacco Transition Program.

**The Interagency Committee on School Construction received requests in excess of $390 million for fiscal 2006, and the amount included in the request to the Department of Budget and Management only reflects what is planned in the *Capital Improvement Plan.*

***The USM request excludes academic and auxiliary debt discussed in Chapter 7.

Note: Numbers may not sum to total due to rounding.

Source: Department of Budget and Management

Bond Issuance Stream

GO bonds authorized in a given year are not issued in total the following year. In fact, the Treasurer reports that just over half of the general obligation bonds authorized in a year are typically issued within the next two fiscal years. Specifically, CDAC assumes bonds authorized in a given year will be fully issued over five years (31 percent, 25 percent, 20 percent, 15 percent, and 9 percent). This delay in issuance results in a substantial lag between the time general obligation debt is authorized and when it has a significant impact in debt outstanding levels.

The bond issuance stream influences debt outstanding and debt service calculations on which the affordability calculations are based. **Appendix 1**, shows how the proposed authorizations for fiscal 2005 through 2015 would be issued. The appendix also reflects the higher issuance stream anticipated from the addition of the previously authorized PAYGO projects into the bond program as well as the increase in the capital program adopted by the General Assembly in the 2004 legislative session. **Exhibit 3.2** compares this year's issuance stream to last year's to reveal higher issuance levels through fiscal 2013.

Exhibit 3.2
Proposed Issuance Stream
($ in Millions)

Fiscal Year	Last Year's Report	Current Year's Report
2005	$625	$650
2006	600	650
2007	600	650
2008	625	675
2009	700	700
2010	725	700
2011	750	725
2012	750	725
2013	760	735
Total	**$6,135**	**$6,210**

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*, September 2004

The table in Appendix 1 also indicates the expected issuances of current authorizations. At the beginning of fiscal 2005, over $1.9 billion in debt was authorized by the General Assembly but not issued. The CDAC report assumes that $442 million of this debt will be issued in fiscal 2006.

Bond Refunding

In recent years, low interest rates provided the State with the opportunity to refund bonds. The bonds were financed by issuing new debt, at lower interest rates. The new debt was placed in an escrow account, from which debt service payments for the previously issued debt are made. This increases gross GO bond debt outstanding, but net debt remains constant. The following issuances refunded bonds:

- The March 2002 bond sale included $109.9 million in principal with $117.2 million placed into escrow (includes a $7.5 million premium) to refund the prior bonds. Over the term of the bonds, this will result in debt service savings of $10.8 million.

- The July 2002 bond sale included $290.8 million in principal with $315.3 million placed into escrow (includes $24.7 million premium) to refund the prior bonds. The gross savings on this refunding will be $17.5 million.

- The February 2003 bond sale refunded $86.1 million in principal with $95.8 million placed into escrow (includes $9.6 million premium) to refund the bonds. The gross savings on this refunding will be $6.4 million.

- The October 2004 bond sale refunded $574.7 million in principal with $631.1 million placed in escrow. The gross savings are $23.1 million.

The annual savings from these four recent refunded bonds result in a reduction in the operating budget's appropriation for GO bond debt service. Savings per fiscal year is included in **Exhibit 3.3**.

Exhibit 3.3
Fiscal Year Savings as a Result of Refunding Bonds

Fiscal Year	March 2002	July 2002	February 2003	October 2004	Total
2002	$2,292,073	$0	$0	$0	$2,292,073
2003	2,243,556	9,150,256	428,313	0	11,822,125
2004	2,360,353	1,320,167	660,122	0	4,340,642
2005	692,017	5,251,467	50,105	8,451,236	14,444,825
2006	1,619,999	1,359,265	958,068	1,546,151	5,483,483
2007	1,477,265	212,993	1,329,125	5,054,691	8,074,074
2008	80,225	186,515	1,472,373	5,331,179	7,070,292
2009	80,225	10,342	1,474,575	785,041	2,350,183
2010	112	3,930	0	796,244	800,286
2011	0	0	0	796,357	796,357
2012	0	0	0	181,888	181,888
2013	0	0	0	151,650	151,650
2014	0	0	0	13,544	13,544
2015	0	0	0	12,488	12,488
2016	0	0	0	13,962	13,962
Total	**$10,845,825**	**$17,494,935**	**$6,372,681**	**$23,134,431**	**$57,847,872**

Source: State Treasurer's Office

The State Treasurer's Office, with advice from its financial advisor, determines whether refinancing general obligation debt is advantageous. Should interest rates fall to a point where it is determined that there would be sufficient savings to warrant a refunding, such action would be presented to the Board of Public Works for its approval.

New General Obligation Bond Authorizations

CDAC recommended a limit of $670 million for new authorizations of GO bonds during the 2005 legislative session. The recommendation is $15 million more than was authorized in the 2004 legislative session. The recommendation is consistent with the level of authorizations previously planned by the CDAC in its September 2003 report. The recommendation includes a planned $5 million for tobacco buyout financing, as required by Chapter 103, Acts of 2002.

Exhibit 3.4 shows that out-year projections increase $15 million annually through the 2008 session. The committee proposes to reduce the 2009 authorization. In its 2003 report, the committee recommended that authorizations be increased $100 million in each session from 2004 to 2008, to realize an additional $500 million in authorizations. The justification for the additional authorizations is to keep a more stable capital program. The concern was that surplus general funds that had previously supported the paygo capital program were no longer available, resulting in a decline in capital to maintain the capital program, it was agreed to increase authorizations. At the time, it was also agreed that the authorizations be reduced again in 2009 to previously proposed levels.

Exhibit 3.4
Proposed GO Bond Authorizations
($ in Millions)

Session	Proposed GO Bond Authorizations	Change from Previous Authorization
2005	$670	$15
2006	685	15
2007	700	15
2008	715	15
2009	630	-85
2010	645	15

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*, September 2004

Taxable Debt

The GO bonds that Maryland issues are tax-exempt bonds. Purchasers of Maryland bonds do not have to pay federal income taxes on the interest earned from these bonds. Federal laws and regulations limit the kinds of activities proceeds from tax-exempt bonds can support. One such requirements limits private activities or private use of the bond proceeds to 5 percent of the bond sales proceeds or $10 million per bond sale. Examples of programs that support private activities or uses include the Rental Housing and Home Ownership Programs of the Department of Housing and Community Development, Camden Station – Babe Ruth Museum of the Stadium Authority, Hazardous Substance Cleanup Program of the Department of the Environment, and One Maryland Fund of the Department of Business and Economic Development.

Because the holders of tax-exempt bonds do not pay federal taxes on interest earnings, the interest rates of tax exempt bonds tend to be less than taxable bonds. This reduces the State's borrowing costs and debt service payments. To avoid issuing taxable bonds and keep debt service costs low, general fund PAYGO appropriations have supported these programs. The fiscal crisis has reduced general fund appropriations for private activity and private use programs. The continued structural deficit makes in unlikely that the State will be able to increase general fund appropriations for these programs. In the September 2003 report, the CDAC notes that "the State is exploring the use of taxable bonds to provide funding for these types of projects." The Treasurer's Office advises that it is still looking into issuing taxable debt and that it is unclear how much taxable debt may need to be issued to maintain private activity and private use programs.

While taxable debt is likely to result in some additional costs, it is unlikely that this cost will be substantial. This is attributable to the relatively low levels of capital debt issued. Taxable debt proceeds are likely to be much less than tax-exempt proceeds. Additional interest costs associated with taxable debt are projected to be less than 2 percent greater than tax-exempt rates. Recent analysis suggests that issuing $10 million in taxable debt will result in an additional $2 million in debt service costs over the life of the issuance. In the first year this would require an additional $192,000 in debt service. The analysis also suggested that 19 times out of 20, additional costs will range between $1.1 million and $3 million.

Transportation Debt

The Maryland Department of Transportation (MDOT) issues 15-year, tax-supported consolidated transportation bonds. Bond proceeds are usually earmarked for highway construction. Revenues from taxes and fees and other funding sources accrue to the Transportation Trust Fund (TTF) to pay debt service and operating budget requirements and to support the capital program. Debt service on consolidated transportation bonds is payable solely from TTF.

In addition to issuing consolidated transportation bonds, MDOT also issues debt known as nontraditional debt. The term nontraditional debt refers to a variety of debt instruments that are utilized by MDOT but that are not consolidated transportation bonds. Nontraditional debt currently includes debt sold on MDOT's behalf by the Maryland Transportation Authority as well as Certificates of Participation issued on behalf of the Maryland Aviation Administration and the Maryland Transit Administration by MDOT. Since 1992, MDOT has released 10 separate issuances of nontraditional debt; seven of these issuances remain outstanding. As of June 30, 2005, these seven issuances are expected to have a total outstanding aggregate principal of $751,160,000. Of the seven outstanding issuances of nontraditional debt, only one issuance is tax-supported; thus, this is the only issuance that falls under the purview of CDAC.

Statute does not impose any limit on the total amount of nontraditional debt that MDOT may issue. However, the General Assembly adopted budget language in the fiscal 2005 budget that imposes a ceiling of $769,160,000 on the total amount of nontraditional debt (including both non-tax-supported and tax-supported nontraditional debt) that may be outstanding as of June 30, 2005. MDOT may increase the aggregate outstanding unpaid and principal balance of nontraditional debt above this ceiling during the fiscal year if it notifies the budget committees explaining the reason the additional issuance is needed.

The department previously issued county transportation bonds that were considered both State and county debt and counted toward State debt affordability limits. Chapter 539, Acts of 1993 altered this policy by authorizing the department to continue to issue bonds on behalf of the local jurisdictions but excluding the local debt from counting toward State debt affordability limits. Currently, this debt counts only toward the debt outstanding of the counties that issue it. Debt service on these bonds was and will continue to be paid from the local share of transportation revenues. In November 1993, MDOT refunded nine series of previously issued county transportation debt. There is one remaining series of county transportation debt that was not refunded and that will therefore continue to count against State debt affordability limits until it is retired in November 2006.

Consolidated Transportation Bonds

The issuance of transportation debt is limited by two criteria: an outstanding debt limit and a coverage test. Section 3-202(b) of the Transportation Article establishes the maximum aggregate and unpaid principal balance of consolidated transportation bonds that may be outstanding at any one time. During the 2004 session, the maximum outstanding debt limit was increased to $2 billion (from $1.5 billion) concomitant with the adoption of provisions that increased vehicle registration fees. Section 3-202(c) of the Transportation Article further requires the General Assembly to establish each year in the State budget the maximum unpaid principal balance in bonds that may be outstanding at the end of the forthcoming year. The fiscal 2005 budget bill set the maximum ceiling for June 30, 2005, at $1,472 million, with an allowance to increase the debt outstanding by another $15 million provided such an increase is justified to the budget committees prior to the publication of a preliminary official statement.

The bond revenue coverage test, which is established in the department's bond resolutions, mandates that net revenues and pledged taxes must each equal at least twice (2.0) the maximum future debt service. The department has adopted an administrative policy establishing a minimum coverage of 2.5. Based on MDOT's projected bond sales, the Department of Legislative Services (DLS) estimates that as of June 30, 2005, it will have a maximum outstanding debt of $1,345 million with coverage estimated at the administrative minimum of 3.3 times maximum debt service under the net revenue test, and 7.1 times using the pledged tax test.

Beginning with fiscal 1989, MDOT has issued consolidated transportation bonds in twelve of sixteen years. During these years, four issuances have been made to refinance previous bond sales, including most recently in fiscal 2004, when a total of $75,900,000 was refinanced. **Exhibit 3.5** shows that the department issued significant levels of new debt in 2003 and 2004. Between fiscal 1989 and 1992, MDOT issued $790 million in new debt, while $315 million in debt was issued between fiscal 1993 and 2001. In contrast, $815 million in debt was issued between fiscal 2002 and 2004. The department last issued new debt in May 2004 (fiscal 2004) when bonds totaling $320 million were sold.

Exhibit 3.5

Consolidated Transportation Bond Issuance*

($ in Millions)

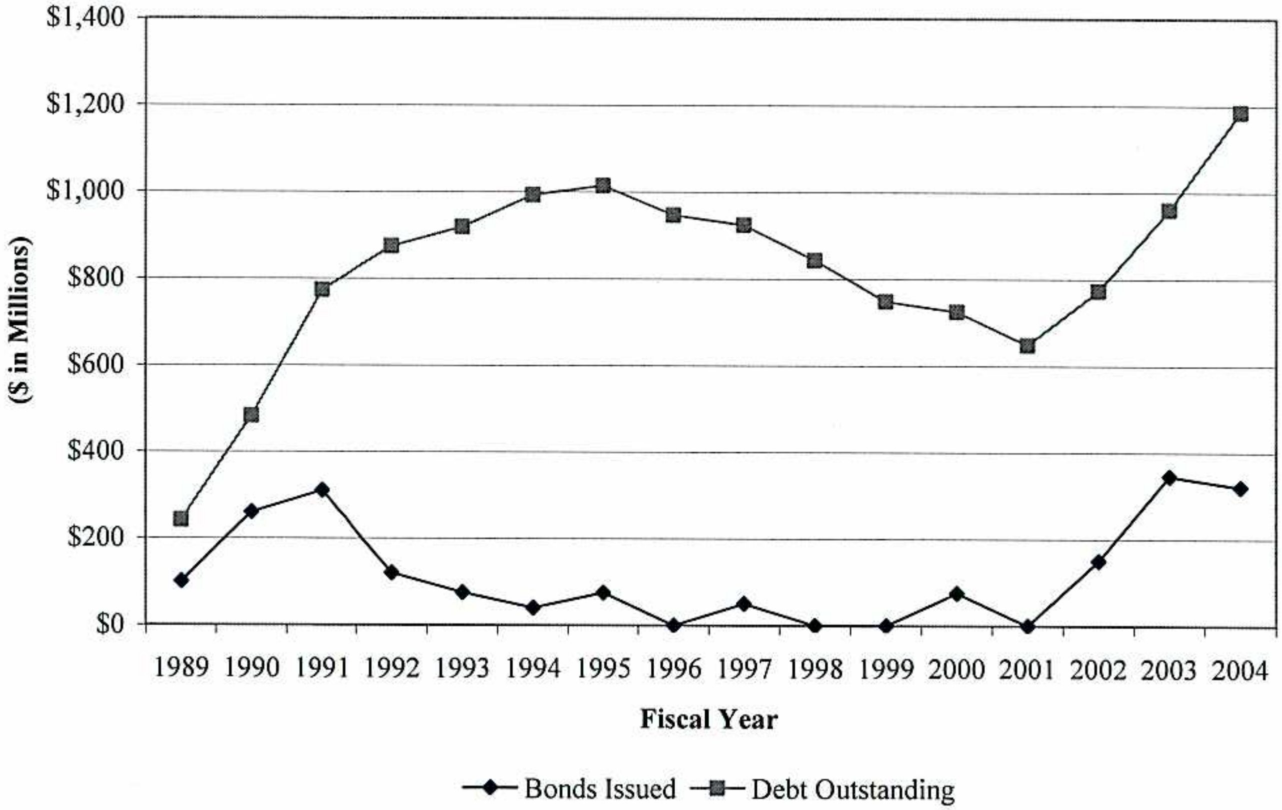
Fiscal Year	Bonds Issued
1989	$100
1990	260
1991	310
1992	120
1993	75
1994	40
1995	75
1996	0
1997	50
1998	0
1999	0
2000	75
2001	0
2002	150
2003	345
2004	320
Total	**$1,920**

*Exclusive of refinancing.

Source: Maryland Department of Transportation

The department's net debt outstanding was $961 million in fiscal 2003. As a result of the fiscal 2004 bond sales, total debt outstanding has risen to $1,186 million. **Exhibit 3.6** illustrates annual bond sales and changes in debt outstanding from fiscal 1989 to 2004.

Exhibit 3.6
MDOT Bonds Issued and Net Debt Outstanding
Sixteen-year Summary – Fiscal 1989 – 2004
($ in Millions)



Source: Maryland Department of Transportation

Capital Leases

In late June 2002 (fiscal 2002), MDOT entered into a $36 million transaction with the Maryland Economic Development Corporation (MEDCO) to obtain proceeds to finance the construction and acquisition of the new MDOT headquarters building. This Certificates of Participation (COPs) issuance – which is among the nontraditional debt issuances subject to the overall limit on nontraditional debt established in budget language – is repaid using funds from the TTF (which is a tax-supported fund). This issuance is therefore considered in CDAC's calculations of debt affordability.

Future Debt Issuance

In September 2004, the CDAC issued a report that included a proposed bond issuance stream for transportation debt through fiscal 2010. More recent figures on anticipated debt issuance have become available subsequent to the release of the CDAC report. The proposed level of debt to be issued for fiscal 2005 through 2010 totals $1.105 billion under DLS' estimate; **Exhibit 3.7** shows projected debt issuance for each year.

Exhibit 3.7
Consolidated Transportation Bond – Projected Issuances
June 2004 Forecast for 2004 – 2010

Fiscal Year	Amount
2005	$275
2006	260
2007	85
2008	110
2009	190
2010	185
Total	**$1,105**

Source: *Maryland Department of Transportation, Draft Transportation Trust Fund Forecast*

Debt Service

Prior to fiscal 1990, the department maintained a debt service reserve whereby two years of principal and interest payments were set aside in a reserve account upon the issuance of bonds; this debt service was then used for the repayment of those bonds. The reserve account requirement was eliminated by Chapter 255, Acts of 1989 for bonds sold after June 1, 1989. The department currently budgets annual debt service payments in the year that principal and interest are due. The refinancing of prior year debt retired all but two of the bond series issued prior to 1989 that had sinking fund reserve requirements. Final sinking fund deposits for the 1986 and 1988 series bonds were made in fiscal 1996 and were reflected in the level of net outstanding debt in fiscal 1997.

The fiscal 2005 debt service payment is expected to be $160 million (an increase of nearly19 percent above the fiscal 2004 debt service payment). Due to an increase in the amount of debt issued starting in fiscal 2002 after a period of limited issuances, debt service payments are projected to remain between $140 million to $165 million before reaching a high of $183 million in fiscal 2010. **Exhibit 3.8** shows estimated debt service for the period fiscal 2005 through 2010.

Exhibit 3.8
Projected Transportation Debt Service
($ in Millions)

Fiscal Year	Projected Debt Service
2005	$160
2006	160
2007	141
2008	150
2009	165
2010	183

Source: Maryland Department of Transportation, Draft Transportation Trust Fund Forecast

County Transportation Bonds

Prior to 1993, MDOT issued debt on behalf of the counties and Baltimore City for local projects. These bonds received AA ratings – which were generally more favorable than the rates received on most county bond issues. County transportation bonds were considered debt of both the counties and the State.

Chapter 539 of the Acts of 1993 authorized MDOT to issue bonds for the local jurisdictions that no longer count against State debt affordability limits but instead count only toward the debt outstanding of the counties. MDOT continues to be responsible for all aspects of administering and issuing debt for the counties. The department charges the counties an administrative fee for servicing the bond issues. Debt service on the bonds was and will continue to be paid from the local share of transportation revenues.

In November 1993, MDOT refunded nine series of previously issued county debt. There are two remaining series of county debt issues that were not refunded and, therefore, will continue to count against State debt affordability limits until the issues are retired. As of June 30, 2004, the remaining net principal balance on the fourteenth series bonds totaled approximately $2.4 million. These issues will be retired in November 2006.

Grant Anticipation Revenue Vehicles

Grant Anticipation Revenue Vehicles (GARVEE) are bonds that are issued by states and public authorities that are backed by future federal-aid highway and transit appropriations. While the source of funds used to repay GARVEE issuances originates with the federal government, the federal government's agreement to the use of its funds in this manner does not constitute any obligation on the part of the federal government to make these funds available. If for any reason federal appropriations are not made as anticipated, the obligation to repay GARVEEs falls entirely to the state agency or authority that issued them.

Sections 3-601 to 3-607 of the Transportation Article authorize MDOT to issue GARVEE bonds. MDOT advises that, through the Maryland Transportation Authority, it is developing plans to construct an InterCounty Connector in Montgomery and Prince George's counties and that the preliminary financing proposal includes issuance of GARVEEs.

Chapter 430, Acts of 2004 amended Section 8-112 of the State Finance and Procurement Article to require that CDAC include GARVEE issuances in its debt affordability review. While the act does not require that the State include GARVEEs in the CDAC calculation of State debt, the General Assembly expressed concerns about the level of GARVEE debt outstanding. To limit the use of GARVEEs, the legislation also required that annual GARVEE debt service be limited to 13 percent of the State's annual average federal fund authorization level and that the maturity not exceed 15 years.

In September 2004, MDOT advised that the current plan was to issue $400 million GARVEEs in fiscal 2006. CDAC reviewed this proposal and determined that it was consistent with the statutes.

Conclusions and Recommendations on Transportation Debt

MDOT competes with other State capital projects within debt affordability limits. Transportation debt capacity is limited by the constraints on debt outstanding, debt service coverage, the cash flow needs for projects in the capital program, and overall State debt affordability limits. **It is recommended that the General Assembly continue to set an annual limit on the level of State transportation debt to keep debt outstanding within the 3.2 percent of personal income debt affordability criterion and debt service within the 8.0 percent of revenues debt affordability criterion. Also, with respect to GARVEE issuances, DLS concurs with the CDAC recommendation that $400 million could be prudently issued in fiscal 2006.**

Capital Leases Supported by State Revenues

Beginning in 1987, the State's capital program began utilizing lease/leaseback financing for capital projects. These leases are used to acquire both real property and equipment.

Beginning in fiscal 1994, the State instituted a program involving equipment leases for energy conservation projects at State facilities. For real property, the transaction generally involves an agreement in which the State leases property to a developer who in turn builds or renovates a facility and leases it back to the State. At the end of the lease period, ownership of the facility is transferred to the State. Equipment leases are generally for shorter periods of time, from three to five years. For energy conservation projects, agencies make lease payments using the savings that result from implementation of the conservation projects. Section 8-401 to 8-407 of the State Finance and Procurement Article regulates leases. The law requires that capital leases be approved by the Board of Public Works (BPW) and that the Legislative Policy Committee (LPC) has 45 days to review and comment on any capital lease prior to submission to BPW.

All three types of leases (equipment, energy conservation, and property) have advantages. Often, equipment leases involve high technology equipment, such as data processing equipment or telecommunications equipment. Equipment leases offer the State more flexibility than purchases since leases can be for less than the entire economic life of the equipment. Equipment leases are especially attractive in an environment where technology is changing very rapidly. Leases can also be written with a cancellation clause that would allow the State to cancel the lease if the equipment were no longer needed. Currently, the Treasurer's lease-purchase program consolidates the State's equipment leases in order to lower the cost by reducing the interest rate on the lease. The rate the Treasurer receives for the State's equipment leases financed on a consolidated basis is less than the rates individual agencies would receive if they financed the equipment leases themselves.

Using the savings realized in utility cost reductions to pay off energy conservation project leases allows projects to proceed that otherwise might not be of high enough priority to be funded given all of the other competing capital needs statewide. Under the program, utility costs will decrease and as the leases are paid off the savings from these projects will accrue to the State.

The primary advantages of property leases when compared to general obligation bonds are that they allow the State to act more quickly if an unanticipated opportunity presents itself. Because of the extensive planning and legislative approval process involved in the State's construction program, it often takes years to finance a project. Lease agreements are approved by BPW after they have been reviewed by the budget committees. Since BPW and the budget committees meet throughout the year, leases can be approved much more quickly than general obligation bonds, which must be approved by the entire General Assembly during a legislative session. Therefore, property leases give the State the flexibility to take advantage of economical projects, which are unplanned and unexpected.

Until recently, several of the large capital lease/leaseback projects undertaken had been initiated through the University System of Maryland. These projects use student fees (auxiliary funds) to secure the debt, rather than general obligation bonds; therefore, the debt is not counted as tax-supported debt by the CDAC. In June 2002, MDOT entered into a lease/revenue bond financing agreement with the MEDCO for the construction of their new headquarters building. MDOT will make lease payments to MEDCO who has pledged those payments for debt service on the bonds. This financial arrangement allows MDOT to secure debt without having it apply against the transportation debt limit. This MDOT capital lease is classified as State debt since State revenues support the lease. In October 2004, MDOT issued $15.6 million in COPs. The COPs finance the purchase of 50 forty-foot diesel buses. The Transportation Trust Fund will support the COPs' debt service payments and the COPs will mature in 2016. Insofar as the revenues supporting the COPs are State revenues, this issuance is a tax-supported capital lease and is included in the CDAC calculations.

The original method of accounting for lease purchases of real property within the debt affordability context has changed since the mid 1980s. As originally envisioned, $10 million a year in lease purchases was included in the debt affordability calculations to recognize the possibility of a "good deal" arising when the legislature was not in session. The CDAC assumed that the lease purchases would replace projects approved under the general obligation debt limit. Therefore, of the general obligation bonds authorized for issuance in any given year, $10 million would remain unissued (replaced by lease agreements) and would be subject to cancellation. Beginning with its 1991 report, the committee's assumption has been that there will be $10 million in real property capital leases in addition to the general obligation bonds authorized each year. However, the committee's current estimates do not project any issuance of capital leases for acquiring real property.

It should be noted that while capital lease programs are considered part of State-supported debt, they are not included under the general obligation debt limit and, therefore, increase the State's capital program to the extent that projects are approved by BPW. CDAC has projected $55 million annually for capital leases for equipment and energy projects. Insofar as this suggests a conservative forecasting approach, the DLS forecast reflects the new CDAC capital leasing assumptions without change. **Exhibit 3.9** shows tax-supported capital lease debt outstanding as of June 30, 2004.

Exhibit 3.9
Tax-supported Capital Lease Debt Outstanding
As of June 30, 2004
($ in Thousands)

Maryland Economic Development Corp. – MDOT Headquarters	$34,655
St. Mary's Multi-Service Center	5,185
Towson District Court	3,835
Hyattsville Multi-Service Center	5,195
Hilton Street Facility	1,470
Calvert County Multi-Purpose Center	3,345
Prince George's County Justice Center	2,949
Baltimore City Community College Modular Surge Space Building	575
Eastern Correctional Institution Water & Wastewater Facilities	4,350
Energy Performance Leases	38,577
Equipment Leases	91,740
Total	**$191,876**

Source: Treasurer's Office, Department of Budget and Management, and Maryland Department of Transportation

Maryland Stadium Authority

MSA was created in 1986 (Chapter 283, Acts of 1986) to construct and operate stadium sites for professional baseball and football in the Baltimore metropolitan area. Legislation authorized MSA to issue tax-exempt revenue bonds for property acquisition and construction costs related to the construction of two stadiums at Baltimore's Camden Yards. The authority may also participate in the development of practice fields, team offices, parking lots, garages, and other related properties. In subsequent years, MSA's role was expanded to include managing and issuing debt in the form of revenue bonds for the renovation and expansion of convention centers in Baltimore and Ocean City, the construction of a conference center in Montgomery County, the renovation of the Hippodrome Performing Arts Center, and the renovation of Camden Station. **Exhibit 3.10** lists the debt authorized, the amount of debt outstanding, and the amount of annual debt service required for the projects for which MSA has been authorized to issue revenue bonds.

Exhibit 3.10
Maryland Stadium Authority
Revenue Debt Authorizations, Debt Outstanding, and Debt Service
($ in Millions)

Project	Authorized	Outstanding as of October 1, 2004	Debt Service Fiscal 2005
Baseball and football stadiums	$235.0	$216.5	$21.3
Baltimore City Convention Center	55.0	39.7	4.9
Ocean City Convention Center	17.3	13.2	1.5
Montgomery County Conference Center	23.2	23.2	1.8
Hippodrome Performing Arts Center	20.3	19.7	1.8
Camden Station	8.7	8.7	0.2
Total	**$359.5**	**$321.0**	**$31.5**

Source: Department of Legislative Services

Camden Yards Sports Complex

Provisions of the Financial Institutions Article limit the amount of bonds the authority may issue at the Camden Yards Sports Complex and the allocation of outstanding tax supported debt. The authority may only exceed the limit with approval of BPW and notification to LPC. During the construction of the baseball and football stadiums, the Stadium Authority remained within the statutory limit of $235 million in outstanding debt; however, BPW has on several occasions reallocated the specific statutory project limits to meet the cash-flow needs of the construction efforts. Debt service is supported by lottery revenues. The last such reallocation took place after MSA sold $10.25 million of Sports Facilities Taxable Lease Revenue Refunding Bonds in July 2002. These bonds were sold to refund the principal of bond anticipation notes that were issued to satisfy an arbitration panel's ruling that MSA deposit $10.0 million in a special fund from which improvements to Orioles Park at Camden Yards are funded.

Baltimore and Ocean City Convention Centers

The authority issued $55 million in revenue bonds for the Baltimore City Convention Center (BCCC) project as authorized by legislation in 1993. Baltimore City issued $50 million in city bonds, and the State contributed another $58 million in general obligation bond funding towards the cost of construction for the project, which was completed in 1997. The fiscal 2005 debt service costs for the authority's revenue bonds is $4.9 million and subject to State appropriation. The State is also statutorily required to contribute two-thirds towards BCCC's annual operating deficit through fiscal 2008 and $200,000 annually to a capital improvement fund.

The authority issued $17.3 million in revenue bonds for the Ocean City Convention Center (OCCC) project, authorized in 1995, which was matched by a contribution from the town of Ocean City. The fiscal 2005 debt service costs for the authority's revenue bonds is $1.5 million and subject to State appropriation. The State is also statutorily required to contribute one-half towards OCCC's annual operating deficit through fiscal 2008 and $50,000 annually to a capital improvement fund.

Montgomery County Conference Center

On July 7, 2003, the authority issued $23.2 million in tax-supported bonds to support the construction of the Montgomery County Conference Center. Of this amount, $20.3 million constitutes the State's contribution to the construction costs. The remaining bond proceeds fund a capitalized interest account established as part of the financing plan to fund interest-only debt service payments beginning on June 15, 2003, and through June 15, 2004. Debt service payments thereafter and continuing through June 15, 2024, are paid from funds subject to appropriation by the State. The fiscal 2005 debt service costs for the authority's revenue bonds are $1.8 million. The project is currently projected to cost $36.5 million excluding the cost of capitalized interest, issuance, and underwriting costs. Montgomery County is contributing $13.7 million for construction and another $2.5 million for project related enhancements.

Hippodrome Performing Arts Center

On July 10, 2002, the authority issued $20.25 million in taxable revenue bonds for the renovation of the Hippodrome Performing Arts Center. The total cost of the Hippodrome project was $63 million excluding capitalized interest expense. Funding for the project was provided by the State, MSA revenue bonds, Baltimore City, Baltimore County, private contributions, the performing arts center's operator, historic tax credits, and interest earnings. The project was completed in February 2004.

Debt service payments averaging $1.8 million annually for the 20-year term of the bond are derived from the State's general fund subject to appropriation. More specifically, the Hippodrome will be leased to the State and subsequently leased back to MSA. The rent paid under the lease by the State is equivalent to the debt service on the revenue bonds and is derived from the State's general fund. The debt service is partially offset by a $2 per ticket surcharge for events at the Hippodrome. The legislation authorizing the project requires the theatre operator to collect a $2 ticket surcharge on each ticket sold for events held at the Hippodrome. These revenues, estimated at $690,000 for calendar 2004 and increasing to approximately $825,000 by fiscal 2008, will fund a portion of the annual debt service requirement.

Camden Station

The Stadium Authority's enabling legislation codified under § 13-708.1 of the Financial Institutions Article provides that the authority may develop any portion of Camden Yards for the purpose of generating incidental revenues for the benefit of the authority subject to approval of BPW and LPC. The authority received LPC approval in January 2003 and BPW approval in December 2003.

In February 2004 the Authority issued $8.7 million in 20-year taxable revenue bonds for the renovation of the Camden Station. Of that amount, $8.0 million is to pay for capital construction associated with the development of the project. The remaining bond proceeds will be used to pay capitalized interest, costs of issuance, and bond insurance. The capital interest period covers bi-annual debt service payments though June 15, 2006. The fiscal 2005 debt service costs for the authority's revenue bonds are $213,706 and subject to State appropriation. The project is expected to be completed by March 2005.

As shown in **Exhibit 3.11**, the authority is projecting positive cash flow in each of the years under consideration. The Babe Ruth Museum will rent approximately 22,551 square feet located in the basement and on the first floor and an undetermined tenant will rent approximately 17,254 square feet on the second and third floor. The projection assumes a fully leased building and a 3 percent escalation of revenues and expenses annually.

Exhibit 3.11
Ten-year Camden Station Revenue and Expense Projections

Square Footage Rental Rates	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Babe Ruth Museum	$15.60	$16.07	$15.55	$17.05	$17.56
Babe Ruth Museum	21.60	22.25	22.92	23.60	24.31
Commercial Offices	24.00	24.72	25.46	26.23	27.01
Revenues					
Parking Revenue	$45,000	46,350	47,741	49,173	50,648
Babe Ruth Museum	422,272	434,940	447,988	461,428	475,270
Commercial Offices	414,096	426,519	439,314	452,494	466,069
Total Revenue	**$881,368**	**$907,809**	**$935,043**	**$963,094**	**$991,987**
Expenses					
Operating Expenses	224,513	231,248	238,185	245,331	252,691
Debt Service	504,800	672,250	696,000	717,470	736,660
Total Expenses	**-$729,313**	**-$903,498**	**-$934,185**	**-$962,801**	**-$989,351**
Yearly Cash Flow	**$152,055**	**$4,311**	**$857**	**$293**	**$2,636**
Fund Balance	**$152.055**	**$156,366**	**$157,223**	**$157,516**	**$160,152**

Source: Maryland Stadium Authority Camden Station Comprehensive Plan of Financing

Local Project Assistance

Uncodified language in Chapter 138, Acts of 1998 (1998 capital budget bill) authorizes the authority to assist State agencies and local governments in managing construction projects upon notification of the budget committees and with the provision that funding be provided entirely by the agency or local government requesting assistance unless funding is specifically provided in the budget for the project. The projects for which the authority is currently authorized to provide assistance but is not authorized to issue revenue bonds are:

- Charles County – Minor League Baseball Stadium
- Baltimore City – Feasibility Study for a new arena in downtown Baltimore

Bay Restoration Bonds

The Bay Restoration Fund was created in 2004 (Chapter 428, Acts of 2004) to provide grants for Enhanced Nutrient Removal (ENR) pollution reduction upgrades at the State's 66 major wastewater treatment plants (WWTPs). The fund will be administered by the MDE Water Quality Financing Administration (WQFA). The fund will be financed by a bay restoration fee on users of wastewater facilities, septic systems, and sewage holding tanks. The fees on WWTP users will take effect January 1, 2005, and will be collected through water and sewer bills. The fees on septic system and sewage holding tank owners will take effect October 1, 2005, and will be collected by local governments.

The fund will have several revenue sources and will expend funds for both operating and capital program purposes. To expedite the implementation of the program, MDE intends to issue bonds backed in full or in part by revenue generated under this program. Since the bay restoration fee will be applied broadly across the State, bay restoration bonds constitute a new component of State tax supported debt. Therefore, the fund will consist of revenue generated from the fees, net proceeds of bonds issued by WQFA, interest or other investment income, and any additional money from any other sources. While ENR grants will be the fund's primary expenditure, funds will also be dedicated to debt service, fee collection/administrative costs, sewer infrastructure grants, septic grants/loans, and the Department of Agriculture's cover crop program.

The timing and amount of bonds issued will depend on the actual fee revenue attained, annual funding needs, and the bond maturities and interest rates. Preliminarily, special fund revenues to the fund from bond proceeds (net of issuance costs, which are estimated at 1.5 percent of bond issuance) are anticipated to total an estimated $49.25 million in fiscal 2008, $128.05 million in fiscal 2009, and $167.45 million in fiscal 2010, totaling $502.35 million over the four-year period. These estimates, which are based on the sale of $510 million in bonds from fiscal 2008 through 2011, reflect the anticipated cost to upgrade only the major WWTPs to achieve ENR. It is unclear at this point to what extent MDE will need to issue bonds in future years to support upgrades to the smaller WWTPs.

Based on a preliminary priority list and the estimated capital cost of ENR upgrades, **Exhibit 3.12** provides a brief summary of the anticipated schedule for the issuance of revenue bonds and debt service.

Exhibit 3.12
Bay Restoration Fund: Bond Issuance and Debt Service
($ in Millions)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total
Revenue Bonds Issued	$50	$130	$170	$160	$0	$510
Debt Service	5	18	35	51	51	160

Source: The Capital Debt Affordability Committee Report

Chapter 4. Review of the Analysis of the Capital Debt Affordability Committee

The Capital Debt Affordability Committee (CDAC) continues to employ two affordability criteria established in 1979 after analysis of available data including information from rating agencies. The affordability criteria are:

- total State tax-supported outstanding debt should not exceed 3.2 percent of Maryland personal income; and

- total State tax-supported debt service payments should not exceed 8 percent of State tax revenues.

With the application of these debt management criteria, the State intends to manage resources to meet high-priority services after the payment of debt service obligations and to preserve capacity to issue new debt in the future.

While the committee expanded its focus in 1987 to include all types of State tax-supported debt (such as transportation, the Maryland Stadium Authority, Bond Anticipation Notes, and capital leases), the recommended fiscal 2006 debt limit of $670 million applies only to general obligation (GO) debt. The limit includes $5 million in GO bonds for the tobacco buyout program. The committee also notes in the report that bay restoration bonds, to be issued beginning in fiscal 2008, are also tax-supported debt. In 1989 the committee further broadened its review to include higher education academic revenue bonds. Although by law the committee must review the size and condition of this revenue debt, the recommended debt limit of up to $25 million for academic facilities is in addition to the limit on GO debt and is not considered as tax-supported debt nor is it subject to the 3.2 percent affordability standard.

The projections of CDAC indicate that total State tax-supported debt outstanding will remain within the 3.2 percent of Maryland personal income limit for the five-year forecast period. For fiscal 2005 through 2010, debt outstanding will reach a maximum of 2.89 percent. The committee's projections provide for a $15 million per year increase, except in fiscal 2010 when authorizations are reduced to bring authorizations back to those previously recommended prior to 2003. By the end of fiscal 2010, total State-supported debt outstanding is expected to be almost $8.2 billion. Similarly, the projections indicate that the total State tax-supported debt service will not exceed the 8 percent limit of State tax revenues. For the same fiscal period, debt service will reach a maximum of 6.48 percent and tax-supported debt service will increase from approximately $754 million in fiscal 2004 to over $1 billion in fiscal 2010.

Risk Analysis

The committee performed a risk analysis to evaluate the potential for exceeding the affordability criteria under a proposed five-year general obligation bond authorization plan. The four basic risk factors that the committee considered were:

- changes in personal income;
- changes in the definition of tax-supported debt;
- changes within the GO bond program; and
- changes in the bond issuance plans for other components, including new components of tax-supported debt.

As in prior years, the committee noted that changes in after-the-fact measurement of personal income, as compared to estimates in growth in personal income, are beyond its control. In previous years, changes in personnel income resulted in significant changes in capital program affordability. In this report, the committee acknowledges risks but believes that even if personnel income growth slows substantially, the program is still well within affordability limits. The Department of Legislative Services' current personnel income growth rate projections, which are 5.72 percent in 2005 and 5.85 percent in 2006, are somewhat higher than projected by CDAC in September 2004. This reflects the improved economic outlook that newer economic data suggests. However, debt is still affordable even if the personal income data is not updated and CDAC's lower income rates are used.

According to the committee, internal changes in the definition of what constitutes State tax-supported debt resulting from reviews of individual transactions would tend to be minor. However, changes in definition by the bond rating agencies or the Governmental Accounting Standards Board could have a major impact on measured affordability. The committee is unaware of any potential external changes and believes that any external changes would provide ample lead time to allow adjustments to the five-year plan.

Changes within the GO bond program were thought most likely to consist of two types. First, changes might occur to the types or costs of certain capital projects within the program. Among the factors that can cause changes in the program is the availability of PAYGO funding. However, since the committee recommends a specific dollar amount and not the use of the funds, this type of change would not affect affordability so long as the total dollar amount is not exceeded. Second, changes might occur in the rate at which authorized bonds are issued. The current report assumes a higher level of issuance from fiscal 2006 to 2010, when compared to last year's report. This year, it is projected that $3,325 million will be issued, as compared to $3,250 million planned to be issued last year.

Beyond fiscal 2005, the committee assumes a continuation of the pattern that 31 percent of bonds authorized in a given year will be issued in the following year. That assumption reflects a 1998 study of actual experience. Any systematic factors that change the rate with which bonds are sold, would affect the ratio of debt outstanding to personal income.

Changes in issuance plans for the transportation program, capital leases, the Stadium Authority or any unknown component that would be considered State tax-supported debt have the potential to affect affordability. The committee identified several factors that might result in changes in issuance plans such as external factors that accelerate or delay a project, the expansion of existing programs or the starting of new ones that have not been accounted for in the analysis, and unknown changes in bond programs that would be considered State tax-supported debt. These types of changes could have a positive or negative impact on the affordability of the five-year capital program.

The committee's risk analysis considers changes in the growth rate of personal income to be the greatest risk factor for breaching the affordability criteria limit. That is primarily a result of the uneven economic recovery and the chance that growth in personal income may not achieve the rates assumed. In contrast, the committee believes the other components of risk, including potential changes in the bond issuance plans of other components of State tax-supported debt, pose little pressure on the projections of capacity. However, the committee did mention that risk could result from actions taken to alter the program of authorizations within the GO capital plan.

Chapter 5. Economic Factors and Affordability Analysis

Economic factors have a strong influence on whether a particular level of debt is affordable under the criteria adopted by the State. Maryland personal income levels and revenues are factors that influence debt affordability calculations. Changes in these factors can substantially limit or expand the amount of debt that is perceived to be affordable.

Personal Income

The Department of Legislative Services (DLS) estimates of personal income differ from those of the Capital Debt Affordability Committee (CDAC). **Exhibit 5.1** shows that DLS is estimating higher personal income than CDAC beginning in calendar 2005. DLS' higher personal income projections are attributable to improved economic performance suggested by recent economic data.

Exhibit 5.1
Maryland Personnel Income – Historical Data and Projections
Comparison of DLS and CDAC Projections
($ in Millions)

Calendar Year	DLS Personal Income	Percent Change	CDAC Personal Income	Percent Change	Difference
2003	$205,652	3.9%	$205,652	3.9%	$0
2004	217,778	5.9%	215,426	4.8%	2,352
2005	230,240	5.7%	225,090	4.5%	5,150
2006	243,720	5.9%	235,370	4.6%	8,350
2007	257,089	5.5%	246,873	4.9%	10,216
2008	271,012	5.4%	258,470	4.7%	12,542
2009	285,709	5.4%	270,130	4.5%	15,579
2010	301,297	5.5%	281,908	4.4%	19,389

Source: Department of Legislative Services: 2003 Bureau of Economic Analysis, U.S. Department of Commerce
2004 – 2010 Department of Legislative Services
Capital Debt Affordability Committee: *Capital Debt Affordability Committee Report*, September 2004

Changes in personal income can have a large impact on the affordability of the State's debt level. Improvements in personal income levels have the effect of improving the affordability picture. In contrast, lower personal income results in higher ratios of debt outstanding for any given level of debt. Levels of outstanding debt that were projected to be affordable in past years may suddenly be close to or over the limit if poor economic conditions result in sizable downward revisions.

Revenue Projections

Exhibit 5.2 presents revenue projections to fiscal 2010. DLS' revenue projections exceed those of CDAC through fiscal 2010. DLS' revenue projections are higher because of improved economic performance suggested by recent economic data. Revenue levels are factored into the debt service criterion. Higher revenues result in lower ratios of debt service to revenues and increase debt service capacity.

Exhibit 5.2
Revenue History and Projections
($ in Millions)

Fiscal Year	General Fund	Property Taxes	Use of Premium	Trans.	Stadium-Related	Bay Rest. Fund	Total DLS Revenues	CDAC Revenues	DLS less CDAC
2004	$10,255	$472	$88	$1,884	$24	$0	$12,723	$12,462	$261
2005	10,918	511	90	2,126	25	0	13,669	13,293	376
2006	11,338	552	7	2,100	25	0	14,021	13,620	401
2007	11,867	601	0	2,078	25	0	14,571	14,063	508
2008	12,487	631	0	2,068	25	0	15,211	14,521	690
2009	13,174	665	0	2,104	25	5	15,972	15,059	914
2010	13,860	700	0	2,144	25	17	16,746	15,624	1,122

Rest. = Restoration

Source of Estimate: Department of Legislative Services
Property Tax: *Capital Debt Affordability Committee Report*, September 2004
Use of Premium: *Capital Debt Affordability Committee Report*, September 2004
Transportation: Department of Legislative Services
Stadium: Maryland Stadium Authority
Capital Debt Affordability Committee Revenues: *Capital Debt Affordability Committee Report*, September 2004

Affordability Analysis

Exhibits 5.3 and **5.4** incorporate the general obligation debt (GO) limit recommended by the CDAC, the DLS estimated debt levels for transportation, capital leases, and the Maryland Stadium Authority, along with the personal income and revenues estimated by DLS to determine compliance with the established guidelines for debt affordability.

Exhibit 5.3 shows that, for the forecast period, debt outstanding as a percent of personal income increases to 2.73 percent through fiscal 2006 then declines to 2.65 percent in fiscal 2008. The decrease is attributable to the improved economic outlook for personal income and limited increases in new GO bond issuances. The issuance forecast does not assume any significant new capital program expansions through fiscal 2008. In fiscal 2009 issuing new bay restoration bonds results in increasing the ratio again. This increase is tempered by the $85 million reduction in GO bond authorizations as proposed by CDAC in its September 2003 report (see **Chapter 4** for details).

Exhibit 5.4 shows that the debt service as a percent of revenues trend is similar to debt outstanding as percent of personal income. Debt service as a percent of revenues is 6.01 percent at the end of fiscal 2010. The ratio peaks in fiscal 2006 at 6.02 percent.

Exhibit 5.3
State Tax-supported Debt Outstanding
Components and Relationship to Personal Income

Fiscal Year	General Obligation (a)(b)	Department of Transportation Consolidated (c)	Department of Transportation County	Department of Transportation Total	Capital Leases	Stadium Authority	Bay Restoration Bonds	Total Tax-supported Debt
State Tax-supported Debt Outstanding ($ in Thousands)								
2000	$3,348,872	$724,770	$4,460	$729,230	$183,497	$293,520	$0	$4,555,119
2001	3,450,900	648,050	3,830	651,880	207,661	285,975	0	4,596,416
2002	3,544,178	714,150	3,155	717,305	225,495	277,995	0	4,764,973
2003	3,932,493	961,245	2,440	963,685	235,376	323,240	0	5,454,794
2004	4,102,278	1,185,650	1,675	1,187,325	191,876	320,955	0	5,802,434
2005	4,413,546	1,345,000	865	1,345,865	190,641	309,195	0	6,259,247
2006	4,677,521	1,513,000	0	1,513,000	160,487	296,280	0	6,647,288
2007	4,925,966	1,531,000	0	1,531,000	140,481	282,340	0	6,879,787
2008	5,181,937	1,567,000	0	1,567,000	121,960	267,145	50,000	7,188,042
2009	5,434,126	1,672,000	0	1,672,000	105,679	252,205	177,683	7,641,693
2010	5,666,894	1,760,000	0	1,760,000	92,718	236,010	339,225	8,094,847
State Tax-supported Debt Outstanding as a Percent of Personal Income (Affordability Criteria = 3.2%)								
2000	1.84	0.40	0.00	0.40	0.10	0.16	0.00	2.50
2001	1.81	0.34	0.00	0.34	0.11	0.15	0.00	2.41
2002	1.79	0.36	0.00	0.36	0.11	0.14	0.00	2.41
2003	1.91	0.47	0.00	0.47	0.11	0.16	0.00	2.65
2004	1.88	0.54	0.00	0.55	0.09	0.15	0.00	2.66
2005	1.92	0.58	0.00	0.58	0.08	0.13	0.00	2.72
2006	1.92	0.62	0.00	0.62	0.07	0.12	0.00	2.73
2007	1.92	0.60	0.00	0.60	0.05	0.11	0.00	2.68
2008	1.91	0.58	0.00	0.58	0.05	0.10	0.02	2.65
2009	1.90	0.59	0.00	0.59	0.04	0.09	0.06	2.67
2010	1.88	0.58	0.00	0.58	0.03	0.08	0.11	2.69

(a) Reflects presumed new authorizations as follows:

General Assembly Session	2005	2006	2007	2008	2009	2010
For Fiscal Year	2006	2007	2008	2009	2010	2011
($ in Millions)	$670	$685	$700	$715	$630	$645

(b) Assumes debt service on minibonds is paid at maturity and no minibond put options are exercised.

(c) Does not include the following:

(1) The Transportation Authority investment of $11.9 million for the development of Berth 4 at the Seagirt Marina Terminal. The Maryland Department of Transportation (MDOT) is repaying this amount in annual payments of $567,280 including interest over a 33-year period.

(2) Financing the construction of the Masonville Auto Terminal during fiscal 1999 and 2000 in the amount of $20 million to be repaid in annual payments of $1 million including interest over a 20-year period.

(d) Assumptions: (millions)

	2005	2006	2007	2008	2009	2010
GO Issuances	650	650	650	675	700	700
MDOT Issuances	275	260	85	110	190	185
Stadium Authority Issuances	9	0	0	0	0	0
Capital Leases – Equipment and EPC	98	55	55	55	55	55
Bay Restoration Bond Issuances	0	0	0	50	130	170
Personal Income (Billions)	230.2	243.7	257.1	271.0	285.7	301.3

Source: Department of Legislative Services

Exhibit 5.4
State Tax-supported Debt Service
Components and Relationship to Revenues

Fiscal Year	General Obligation (a)(b)	Department of Transportation: Consolidated (c)(d)	Department of Transportation: County	Department of Transportation: Total	Capital Leases	Stadium Authority (e)	Bay Restoration Bonds	Total Tax-supported Debt Service
				State Tax-supported Debt Service ($ in Thousands)				
2000	$459,358	$135,233			$11,102	$27,622	$0	$633,315
2001	470,949	109,674			18,290	27,383	0	626,296
2002	495,217	113,178			30,019	27,035	0	665,449
2003	496,870	128,694			42,660	27,333	0	695,557
2004	536,819	134,910			51,438	30,395	0	753,562
2005	553,783	160,000			52,853	30,267	0	796,903
2006	612,528	160,000			38,882	31,115	0	842,525
2007	638,061	141,000			27,958	31,103	0	838,122
2008	671,232	150,000			25,786	31,243	0	878,261
2009	720,529	165,000			22,745	30,660	4,817	943,751
2010	755,226	183,000			18,665	30,697	17,342	1,004,930
				State Tax-supported Debt Service as a Percent of Revenues (Affordability Criteria = 8.0%)				
2000	4.15	1.22			0.10	0.25	0.00	5.73
2001	4.02	0.94			0.16	0.23	0.00	5.35
2002	4.31	0.99			0.26	0.24	0.00	5.80
2003	4.40	1.14			0.38	0.24	0.00	6.15
2004	4.22	1.06			0.40	0.24	0.00	5.92
2005	4.05	1.17			0.39	0.22	0.00	5.83
2006	4.37	1.14			0.28	0.22	0.00	6.01
2007	4.38	0.97			0.19	0.21	0.00	5.75
2008	4.41	0.99			0.17	0.21	0.00	5.77
2009	4.51	1.03			0.14	0.19	0.03	5.91
2010	4.51	1.09			0.11	0.18	0.10	6.00

(a) Reflects presumed new authorizations as follows:	2005	2006	2007	2008	2009	2010
($ in Millions)	$670	$685	$700	$715	$630	$645

(b) Forecast assumes debt service on minibonds is paid at maturity and no put options are exercised.

(c) Does not include debt service on county transportation bonds. Repayments from counties equal or exceed debt service requirements.

(d) Does not include the following:

(1) The authority investment of $11.9 million for the development of Berth 4 at the Seagirt Marina Terminal. MDOT is repaying this amount in annual payments of $567,280 including interest over a 33-year period.

(2) Financing the construction of the Masonville Auto Terminal during fiscal 1999 and 2000 in the amount of $20 million to be repaid in annual payments of $1.7 million including interest over a 20-year period.

(e) Transfers from the Stadium Facilities Fund to the Stadium Authority are assumed to be just sufficient, when coupled with the authority's own-source revenues, to meet debt service requirements.

Source: Department of Legislative Services

Exhibit 5.5 shows that debt outstanding ratios based on DLS personal income estimates are slightly lower than those estimated by the CDAC throughout the forecast period. As previously noted, the differences are attributable to recent economic data.

Exhibit 5.5
Comparison of Debt to Personal Income Ratios

Fiscal Year	DLS	CDAC
2005	2.72%	2.81%
2006	2.73%	2.84%
2007	2.68%	2.82%
2008	2.65%	2.81%
2009	2.67%	2.85%
2010	2.69%	2.89%

Source: Department of Legislative Services, *Capital Debt Affordability Committee Report,* September 2004

Similarly, **Exhibit 5.6** shows that debt service ratios based on the DLS baseline forecast of general fund revenues are different than those estimated by CDAC due to revenue projections.

Exhibit 5.6
Comparison of Debt Service to Revenue Ratios

Fiscal Year	DLS	CDAC
2005	5.83%	6.18%
2006	6.01%	6.22%
2007	5.75%	6.02%
2008	5.77%	6.12%
2009	5.91%	6.30%
2010	6.00%	6.48%

Source: Department of Legislative Services; *Capital Debt Affordability Committee Report*, September 2003

For both affordability criteria, the forecasts for personal income and general funds provide capacity under the projected annual debt limits.

Chapter 6. Market Analysis

This section deals with the market for Maryland's securities, and in particular, how Maryland's general obligation (GO) bonds compared to the Delphis Scale.

Because of the tremendous size of the State and municipal bond market, there are independent companies that gather information about the yield on State and municipal bonds. One such independent company, the Delphis Hanover Corporation, prepares an index that measures the average yield on State and municipal bonds based on daily market activity (Delphis Scale). The Department of Legislative Services has reviewed Maryland's bond yields on the day of sale or day prior to sale from 1991 to the latest sale in 2004 in relation to the Delphis Scale to help assess how well the State is performing compared to average yield. (The Treasurer's Office maintains a subscription to the Delphis Hanover Scale and uses this in reviewing Maryland's bond sales.) Maryland's bond yields were compared to the 10-year bond index[1] for AAA and AA+ bonds.

The Treasurer's Office advises that the yield on Maryland bonds in the past may have been higher than the yield on AAA and AA+ bonds because of the different institutional setting surrounding the sale of Maryland's bonds and the bonds measured in the Delphis Scale. Maryland's bond sales are "wholesale" transactions to a syndicate of bond brokers, while the Delphis Scale measures transactions on the secondary market. Because Maryland deals with a syndicate at the wholesale level, the bonds are sold at a higher yield. The Delphis Scale, however, only measures the transactions in the secondary market, after the bond brokers have already placed the bonds on the market. Because these market transactions tend to have lower yields than the wholesale transactions, the Delphis Scale tends to have a lower yield. Although the Delphis Scale is not directly comparable with Maryland's bonds, the relationship may be important. A significant change in relationship could raise questions and signal a need for closer review.

A review of **Exhibit 6.1** indicates some variation between the yield on Maryland bonds and the Delphis AAA and AA scale. Since the October 1994 sale, the yield on Maryland's bond sales returned to being even with or slightly above the Delphis AAA scale with the exception of the July 2002 and February 2003 sales. That change in the yield reflects the current volatility in the investment market and its daily fluctuations on the bond market.

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[1]The 10-year index is used because Maryland's bonds are serial bonds that repay the principal over a number of years, whereas, the Delphis Scale measures the yield on term bonds that pay back all their principal in a single payment at the end of the bond life. To adjust the Maryland bonds to the Delphis Scale, it is necessary to determine the average maturity of the Maryland bonds and then compare the average maturity of the Maryland bonds to the corresponding maturity of the Delphis Scale. The average maturity of Maryland bonds is 10 years, thus, the 10-year bond index is used.

Exhibit 6.1
Interest Rates on Maryland GO Bonds
Compared with the Delphis Hanover 10-year Scale

Date of Sale	Rate on MD Bonds	Delphis Hanover AAA	MD Rate as % of AAA Rate	Delphis Hanover AA+	MD Rate as % of AA+ Rate
03/13/91	6.31	6.15	102.6%	6.25	101.0%
07/10/91	6.37	6.20	102.7%	6.30	101.1%
10/09/91	5.80	5.70	101.8%	5.80	100.0%
05/13/92	5.80	5.75	100.9%	5.85	99.1%
01/13/93	5.38	5.40	99.6%	5.50	97.8%
05/19/93	5.10	5.10	100.0%	5.20	98.1%
10/06/93	4.45	4.45	100.0%	4.55	97.8%
02/16/94	4.48	4.50	99.6%	4.60	97.4%
05/18/94	5.36	5.35	100.2%	5.45	98.3%
10/05/94	5.69	5.50	103.5%	5.60	101.6%
03/08/95	5.51	5.35	103.0%	5.45	101.1%
10/11/95	4.95	4.80	103.0%	4.90	100.9%
02/14/96	4.51	4.35	103.6%	4.45	101.3%
06/05/96	5.30	5.10	103.9%	5.20	101.9%
10/09/96	4.97	4.90	101.5%	5.00	99.4%
02/26/97	4.90	4.70	104.3%	4.80	102.1%
07/30/97	4.64	4.50	103.1%	4.55	102.0%
02/18/98	4.43	4.25	104.2%	4.30	103.0%
07/08/98	4.57	4.40	103.8%	4.45	102.6%
02/24/99	4.26	4.10	103.9%	4.20	101.4%
07/14/99	4.83	4.80	100.6%	4.85	99.6%
07/19/00	5.05	4.85	104.1%	4.92	102.6%
02/21/01	4.37	4.28	102.1%	4.34	100.7%
07/11/01	4.41	4.39	100.5%	4.46	99.0%
03/06/02	4.23	4.17	101.4%	4.32	97.9%
07/31/02	3.86	3.89	99.2%	4.02	96.0%
02/19/03	3.69	3.77	97.9%	3.86	95.6%
07/16/03	3.71	3.56	104.2%	3.64	101.9%
07/21/04	3.89	3.89	100.0%	3.97	97.9%

Note: Maryland rate expressed as True Interest Cost (TIC).

Source: Department of Legislative Services; Delphis Hanover

Chapter 7. Non-tax-supported Debt

In addition to the six types of tax-supported debt that Maryland issues, there are various forms of non-tax-supported debt that are issued by State agencies and non-state public purpose entities. While this debt is not backed by the full faith and credit of the State and is not included within the tax-supported debt criteria, a default in payment of debt service on this debt could negatively impact other Maryland debt. The first part of the chapter addresses these non-tax-supported issuances. The second part of the chapter reviews university debt, which the Capital Debt Affordability Committee (CDAC) is required to review.

There are 18 State agencies and authorities authorized to issue non-tax-supported debt. Eight of these entities have never issued any debt and one entity has previously issued debt but currently has no outstanding debt. The remaining 10 entities have a combined total of just over $12 billion in aggregate outstanding principal. **Exhibit 7.1** lists all State entities currently authorized to issue non-tax-supported debt and the purposes for which each entity issues debt.

Exhibit 7.1

Overview of State Agencies and Authorities Authorized to Issue Non-tax-supported Debt

Entity	Authorized Purpose(s) of Debt Issuances
Bainbridge Development Corporation	Finance projects that support economic activity on the property of the closed Bainbridge Naval Training Center (Cecil County)
Baltimore City Community College	Finance construction of auxiliary facilities
Canal Place Preservation and Development Authority	Finance the management and promotion of the Canal Place Heritage Area (Allegany County)
Historic St. Mary's Commission	Fund its corporate purposes, including the preservation and utilization of Historic St. Mary's City (St. Mary's County)
Maryland Agricultural and Resource-based Industry Development Corporation	Finance projects that will support agricultural industries, markets, and production in the State
Maryland Department of Housing and Community Development – Community Development Association	Finance the making or purchasing of mortgages or loans, or of securities backed by mortgages or loans, as well as the costs of development projects
Maryland Department of Transportation – Non-traditional Debt	Finance transportation facilities projects that have dedicated revenue sources

Entity	Authorized Purpose(s) of Debt Issuances
Maryland Economic Development Corporation	Serve as a conduit for the issuance by clients of debt that will support economic development in the State
Maryland Environmental Service	Finance the acquisition, construction, and improvement of water supply systems and waste management facilities
Maryland Food Center Authority	Finance the costs of developments or projects that support the wholesale food industry
Maryland Health and Higher Educational Facilities Authority	Serve as a conduit for the issuance by clients of debt that finances the construction of educational facilities or hospitals
Maryland Heritage Areas Authority	Provide financial assistance to certified and recognized heritage areas
Maryland Industrial Development Financing Authority	Serve as a conduit for the issuance by clients of debt that finances capital acquisition and improvement projects promoting economic development, business retention, and new industry development
Maryland Transportation Authority	Finance the cost of revenue generating transportation facilities projects
Maryland Water Quality Financing Administration	Serve as a conduit for the issuance by local governments of debt that finances the construction or acquisition of wastewater facilities
Morgan State University	Finance the cost of academic and auxiliary facilities
PenMar Development Corporation	Finance projects that will support economic activity on the site of the closed Fort Ritchie (Washington County).
St. Mary's College	Finance the cost of academic and auxiliary facilities
University System of Maryland	Finance the cost of academic and auxiliary facilities

Source: Department of Legislative Services

What Is Non-tax-supported Debt?

Tax-supported debt is bonds and capital leases whose debt service appropriations are supported by statewide revenue sources. Statewide revenue sources include general funds, state property tax receipts, bay restoration fee revenues, and Transportation Trust Fund revenues.

Non-tax-supported debt generally takes the form of either a project/program revenue debt or conduit debt, as discussed below:

- **Revenue Bonds:** Revenue bonds are bonds issued to raise funds for a specific project or program. The debt service on these bonds is generally repaid using revenues generated through the operation of the project or program for which the bonds were sold. For example, the Maryland Transportation Authority (MdTA) issues project revenue bonds to finance the cost of constructing revenue generating transportation facilities, and MdTA then repays the bonds using the revenues generated through the tolls charged to drivers for the use of the facilities.

- **Conduit Debt:** Conduit debt is debt that agencies or authorities issue on behalf of clients. Clients could include local governments, nonprofit organizations, or private companies. When an agency or authority serves as a conduit issuer, the bonds it issues may not be obligations of the issuing entity. Should the client for whom the bonds are issued be unable to meet debt service obligations on their bonds, the issuing entity is not necessarily obligated to make the debt payments. In such circumstances, the issuing agency may take the client's property into receivership or exercise other contractual provisions to meet the debt service. Agencies and authorities in the State that serve primarily as conduit issuers include the Maryland Economic Development Corporation (MEDCO), the Maryland Health and Higher Educational Facilities Authority (MHHEFA), and the Maryland Industrial Development Financing Authority.

Purposes of Non-tax-supported Debt Issuances

In some cases, agencies and authorities in the State issue non-tax-supported debt to fulfill their own corporate purposes. For example, the Canal Place Preservation and Development Authority (CPPDA) is responsible for preserving, developing, and maintaining the Canal Place Heritage Area in Allegany county. CPPDA is authorized to issue debt to fund projects at the Canal Place site or for any purposes related to the management and promotion of the Canal Place site. Examples of other agencies and authorities that are authorized to issue debt primarily to fund their own corporate purposes include the Bainbridge Development Corporation, Historic St. Mary's Commission, the PenMar Development Corporation, and all four higher education systems.

Oversight of the Issuance of Non-tax-supported Debt

Non-statutory Limits on Non-tax-supported Debt

Limiting the amount of non-tax-supported debt has been a concern of both the Maryland General Assembly and CDAC. During the 1989 legislative session, the General Assembly passed Senate Bill 337 in an effort to establish some control over the revenue bonds issued by agencies and authorities of the State. This legislation was vetoed by the Governor, who then issued Executive Order 01.01.1989.13, which established a procedure whereby the Governor set a revenue bond debt ceiling each year and allocated the debt allowance among the State agencies covered by the order. During the 1997 interim, a workgroup reviewed the provisions of the 1989 executive order. The workgroup recommended that the order be revised to apply to only four entities (thus removing the higher education institutions and the Department of Housing and Community Development's Community Development Administration from the debt ceiling imposed by the order). The workgroup also recommended that notification of issuances should be made only for issuances of $25 million or more. The Governor instituted the recommendations of the workgroup by issuing Executive Order 01.01.1998.07. The agencies and authorities currently subject to the revenue bond ceiling established under this executive order include MdTA, the Maryland Environmental Service, the Maryland Food Center Authority, and the Maryland Water Quality Financing Administration.

Statutory Limits on Non-tax-supported Debt

There are no statutory provisions that establish blanket limits on the issuance of non-tax-supported debt. Instead, statutory limits may be imposed on an entity's total debt outstanding and bond maturity, and statue may specify what (if any) approvals the entity must obtain prior to issuing debt. **Exhibit 7.2** provides information on the total debt outstanding (if any) of each of the 19 agencies and authorities authorized to issue non-tax-supported debt as well as on the statutory limits imposed on each entity's issuance of debt (if a box is blank, it does not apply to the agency in question).

Exhibit 7.2
Oversight of Issuances of Non-tax-supported Debt by Maryland State Agencies and Authorities

Entity	Debt Outstanding	Debt Limit	Maturity Limit	Approval(s) Needed to Issue Bonds
Bainbridge Development Corporation				
Baltimore City Community College		$15 million (may only issue auxiliary facility bonds)	33 years (auxiliary facilities)	
Canal Place Preservation and Development Authority				Agency must notify the Board of Public Works (BPW) of intent to issue debt
Historic St. Mary's Commission		$3 million	30 years	BPW
Maryland Agricultural and Resource-based Industry Development Corporation			40 years	
Maryland Department of Housing and Community Development – Community Development Association	$2,571,910,000		50 years	
Maryland Department of Transportation – Non-traditional Debt	$728,070,000	Annual limit established in budget		Varies depending on conduit issuer utilized and structure of debt
MEDCO	$1,604,136,937		40 years	
Maryland Environmental Service	$30,495,081		40 years	
Maryland Food Center Authority		$25 million	40 years	BPW
MHHEFA	$5,196,896,000		50 years	
Maryland Heritage Areas Authority		$15 million		BPW
Maryland Industrial Development Financing Authority	$514,356,135		30 years	MIDFA must notify BPW of intent to issue debt

Entity	Debt Outstanding	Debt Limit	Maturity Limit	Approval(s) Needed to Issue Bonds
MdTA	$274,440,561 MdTA-recourse debt ($488.9 million conduit issuances)		40 years	
Maryland Water Quality Financing Administration	$98,581,579			BPW; Secretary of Maryland Department of the Environment
Morgan State University	$67,088,000	$77 million	21 years (academic facility bonds) 33 years (auxiliary facility bonds)	Academic facility bonds: General Assembly
PenMar Development Corporation				
St. Mary's College	$40,125,000	$45 million	21 years (academic facility bonds) 33 years (auxiliary facility bonds)	Academic facility bonds: General Assembly
University System of Maryland	$880,000,000 in bonds ($95,000,000 in other types of debt)	$1,025 million	21 years (academic facility bonds) 33 years (auxiliary facility bonds)	Academic facility bonds: General Assembly
Total Debt Outstanding	**$12,006,099,293**			

Source: Department of Legislative Services

Growth in Debt Burden

Two of the largest conduit debt issuing agencies – MEDCO and MHHEFA – account for nearly 57 percent (just over $6.8 billion) of the total amount of non-tax-supported debt currently outstanding. MHHEFA alone accounts for approximately 43 percent of the total amount of non-tax-supported debt outstanding. Between the end of fiscal 2003 and the beginning of fiscal 2005, MHHEFA's total debt outstanding has increased by nearly 13 percent; while MEDCO's total debt outstanding has increased by just over 8 percent. MHHEFA and MEDCO have also experienced payment defaults and/or have had to exercise contractual obligations to prevent defaults on the part of clients. Bonds issued by MEDCO for the Rocky Gap facility in Western Maryland are currently in payment default. MHHEFA has also recently experienced a ratings downgrade on a bond issuance. Specifically, Fitch Ratings downgraded $22.8 million of revenue bonds issued by MHHEFA in 1993 on behalf of the Montgomery General Hospital from BBB+ to BBB.

The largest debt issuances among debt issued by agencies for their own corporate purposes are observed among the University System of Maryland (USM), the Maryland Department of Transportation (MDOT), and MdTA. Together, these three entities have nearly $1.9 billion in total non-tax-supported debt outstanding (approximately 16 percent of the total amount of non-tax-supported debt outstanding). The debt issuances of USM are discussed elsewhere in this report. The non-tax-supported debt issued by MDOT includes debt sold by MdTA and by MEDCO as well as Certificates of Participation issued on behalf of the Maryland Aviation Administration and the Maryland Transit Administration by MDOT. MDOT's total non-traditional (MDOT refers to its non-tax-supported debt as non-traditional debt) debt outstanding has increased by more than 400 percent between the end of fiscal 2002 and the end of fiscal 2004. MdTA's total non-tax-supported debt outstanding (not including conduit issuances) has increased by 41 percent from the close of fiscal 2003 to the first quarter of fiscal 2005, and MdTA anticipates undertaking a significant capital program in the coming years that will require large debt issuances.

In all cases, the non-tax-supported bonds issued by the agencies and authorities profiled in this section of the report are not debts of the State of Maryland and are never backed by the full faith and credit of the State. Should the project or program for which these bonds are issued fail to generate the revenue necessary to repay these bonds, the State is under no legal obligation to pay the debt service on these bonds. While several of the agencies that issue tax-exempt bonds have experienced defaults – including payment defaults – on different bond issuances without significant adverse consequences, it is always possible that a default – particularly a large default – could negatively impact other Maryland debt. Thus, CDAC noted in its 1998 report that:

> … the default of such debt can have a dramatic impact upon the general credit worthiness of a state even when no appearance of a moral obligation exists. In 1983, the Washington Public Power Supply System defaulted on $2.25 billion in tax-exempt bonds issued to build two nuclear power generating plants. This default had a negative impact upon bond market conditions for issuers throughout the Pacific Northwest. (p. 31)

Agencies and authorities that can issue non-tax supported debt have been given substantial autonomy. This autonomy makes it difficult to obtain data about this debt. In response to the lack of information about this debt, the Department of Budget and Management (DBM) now prepares an annual report entitled *Debt Issued by Maryland State Agencies*. During the 2004 interim, the Department of Legislative Services prepared a report entitled *Overview of Debt Issued by Maryland State Agencies and Authorities*, which attempts to catalogue all debt (including State and non-State debt) issued by State entities and to profile the statutory provisions that govern each entity's debt issuances. **It is recommended that the administration continue to annually report on the issuances made by agencies and authorities that are authorized to issue non-tax supported debt.**

Another concern is the quality of the debt issued by (or through) agencies and authorities created by the State. This debt supports Maryland businesses, governments, and non-profit institutions. The objective is to provide an organization access to capital markets so that the organization can better serve its mission. This debt is issued to increase an organization's capacity to achieve its mission without creating a debt burden that hinders the organization. It may be useful for the State to monitor the quality of the debt that is issued by agencies and authorities. Ideally, the State would collect data that can be used to evaluate the quality of the debt and the State would maintain the data centrally. Given the limited resources available to State agencies, it may be best to develop some key indicators that can be reported by agencies that issue the debt. An example of a quality-of-debt indicator would be an issuance's credit rating (as rated by Fitch, Moody's, Standard and Poor's). For example, Standard and Poor's rates an issuance CCC (and below) if the debtor:

> "is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation."

This rating means that Standard and Poor's analysis concludes that, while an issuance may not be in default, a change in the environment could result in the organization defaulting on the debt. An indicator that identifies issuances with a rating of CCC or lower could be reported. Such an indicator could be a used to help evaluate how well agencies and authorities are managing their mission to provide access to capital markets without creating undue financial stress for the organization.

It is recommended that, in addition to reporting on agency and authority debt, DBM also collect data that evaluates the quality of the debt that is issued. This could include data on the number of issuances that are in default or the number of issuances that are no longer investment grade. These quality-of-debt indicators should be included in DBM's annual agency debt report.

Debt Service on Academic and Auxiliary Revenue Bonds

USM, Morgan State University (MSU), and St. Mary's College of Maryland (SMCM) have authority to issue bonds for academic and auxiliary facilities under Chapter 93, Acts of 1989. Baltimore City Community College (BCCC) gained authority to issue bonds only for auxiliary facilities under Chapter 208, Acts of 1992.

Academic facilities are primarily used for instruction of students. Construction of academic facilities must be expressly approved by an act of the General Assembly that determines both the project and bond issue amount. Auxiliary facilities, such as residential dormitories, produce income from fees charged for their use and require approval from the USM

Board of Regents. Debt service on academic and auxiliary debt may be paid from academic and auxiliary fees, respectively, a State appropriation expressly authorized for that purpose, or revenues from contracts, gifts, or grants.

The USM debt limit is $1.025 billion, the MSU limit is $77 million, the SMCM limit is $45 million, and the BCCC limit is $15 million. CDAC does not consider higher education debt as a component of State tax-supported debt, since higher education debt can be paid by academic and auxiliary revenues raised independent of State appropriations.

University System of Maryland's Debt Rating Downgrade and Response

In May 2004, Standard & Poor's Rating Services, one of three credit rating agencies that rates USM, lowered the rating on USM debt from AA+ to AA. The Standard & Poor's analysis said that the downgrade resulted from USM's increased debt, particularly since 2000, and its projected debt needs to accommodate enrollment through at least 2008. Furthermore, USM's liquidity levels are somewhat modest to be included in the AA+ rating category (only five institutions in the U.S. are in this category).

In response to the rating downgrade, USM intends to improve the ratio of its fund balance to debt. USM plans to use 1 percent of its unrestricted funds to increase fund balance each year through fiscal 2008. Furthermore, USM will reduce the amount of new debt issued per year from $90 million to $60 to $65 million. This total includes academic and auxiliary debt.

Exhibit 7.3 shows that over the next five years, the largest amount of debt outstanding is expected to occur in fiscal 2009 ($999.9 million), while the largest single-year increase in total debt outstanding is expected to occur in fiscal 2006 ($22.7 million). USM has a policy to limit debt service to 5.5 percent of unrestricted expenditures plus mandatory transfers. As shown in Exhibit 6.3, USM expects to remain under this limit through fiscal 2010.

Exhibit 7.3
University System of Maryland Debt Service as Related to Unrestricted Funds
Fiscal 2001 – 2010
($ in Millions)

Fiscal Year	Debt Outstanding (Academic and Auxiliary)	Auxiliary Debt Service	Academic Debt Service	Unrestricted Expenditures Plus Mandatory Transfers	Ratio of Debt Service to Unrestricted Expenditures Plus Mandatory Transfers
2001	$757,457	$38,055	$31,432	$1,881,595	3.7%
2002	796,665	46,330	32,277	2,116,275	3.7%
2003	855,142	51,877	31,802	2,153,227	3.9%
2004	960,885	56,248	33,216	2,234,731	4.0%
2005 Estimated	956,228	59,095	37,129	2,324,120	4.1%
2006 Estimated	978,950	63,360	39,251	2,417,085	4.2%
2007 Estimated	992,525	66,490	41,197	2,513,768	4.3%
2008 Estimated	999,260	71,133	40,657	2,614,319	4.3%
2009 Estimated	999,905	73,212	42,665	2,718,892	4.3%
2010 Estimated	994,420	73,671	41,656	2,827,648	4.1%

Source: University System of Maryland

Another debt measure involves the ratio of total available funds to debt outstanding. Total available funds consist of unrestricted net assets plus accrued leave funds and foundation fund balances. In terms of debt management, USM controls unrestricted net assets but does not really control the level of leave funds and foundation funds. Nevertheless, credit rating agencies look to see whether the ratio of total available funds to debt outstanding is greater than 50 percent. As shown in **Exhibit 7.4**, USM has exceeded this level. USM has set a higher goal of 65 percent, which it expects to achieve in fiscal 2007.

Exhibit 7.4
University System of Maryland Debt Service as Related to Unrestricted Funds
Fiscal 2001 – 2010
($ in Millions)

Fiscal Year	Debt Outstanding (Academic and Auxiliary)	Unrestricted Net Assets	Ratio of Unrestricted Net Assets to Debt Outstanding	Total Available Funds	Ratio of Total Available Funds to Debt Outstanding
2001	$757,457	$322,447	42.6%	$523,590	69.1%
2002	796,665	302,659	38.0%	504,470	63.3%
2003	855,142	317,089	37.1%	519,089	60.7%
2004	960,885	400,000	41.6%	602,000	62.7%
2005 Estimated	956,228	410,000	42.9%	612,000	64.0%
2006 Estimated	978,950	430,000	43.9%	632,000	64.6%
2007 Estimated	992,525	450,000	45.3%	652,000	65.7%
2008 Estimated	999,260	470,000	47.0%	672,000	67.2%
2009 Estimated	999,905	470,000	47.0%	672,000	67.2%
2010 Estimated	994,420	470,000	47.3%	672,000	67.6%

Source: University System of Maryland

Morgan State University

MSU has $4 million in outstanding academic debt in fiscal 2005. Academic debt is expected to decrease to $3.1 million by fiscal 2010.

Auxiliary debt totals $63 million in fiscal 2005 and is expected to be $71.7 million in fiscal 2006. The fiscal 2006 increase is not tied to any particular projects at this point, MSU says, but several projects are being studied for feasibility. By 2010, auxiliary debt is projected to decline to $64 million.

Except for fiscal 2006, MSU's debt service is expected to be below 5 percent of unrestricted expenditures plus mandatory transfers. The fiscal 2006 ratio is projected at 5.06 percent.

St. Mary's College of Maryland

SMCM does not have any outstanding academic debt. Auxiliary debt totals $39.2 million for fiscal 2005 and is expected to steadily decrease to $34.2 million by fiscal 2010.

Since fiscal 2004, SMCM has exceeded a 5.5 percent ratio of debt service to unrestricted expenditures plus mandatory transfers so it could build a residential building to house increasing enrollment. Although the ratio is above the ideal level, current projections indicate that it will perform better than was projected last year. The ratio is 5.8 percent for fiscal 2005; last year it was expected to be 6.43 percent.

Fiscal 2005 is expected to be the peak of the increase, and the ratio is projected to decline to 5.0 percent by 2010. SMCM reports that the extra residence hall is full, and since the debt for the building will be paid out of auxiliary revenues, exceeding the ratio is not expected to hurt SMCM's credit rating.

Chapter 8. Issues and Recommendations

This section discusses issues related to Maryland debt and debt management. These issues address major policy concerns or major funding recommendations made by legislators or commissions. Specific issues are:

- Currently general obligation (GO) debt service is supported by property taxes and the revenues generated from bond sale premiums. Interest rates are expected to rise, thus eliminating the bond sale premium. It is projected that property tax revenues will be insufficient to support debt service in fiscal 2008.

- The Task Force to Study Public School Facilities concluded that many of Maryland's public schools do not meet all minimum required standards as of July 2003. To bring all schools up to these standards, it is estimated to require an additional $1.2 billion, if funded by GO bond authorizations, this would result in $1.8 billion debt service payments through fiscal 2032. Additional annual debt service costs would break at $130 million. **Given the cost of the proposal and the existing current gap between general fund revenues and expenditures, it is recommended that in any effort to fund the initiative, priority should be given to shifting funding from other purposes and by identifying new revenues for the Annuity Bond Fund.**

- In 2001 the State issued $18 million in Qualified Zone Academy Bonds (QZABs). The Department of Legislative Services (DLS) estimates that the net present value of the savings is almost $9.4 million. The federal government has recently authorized more QZABs. **Insofar as these issuances generate substantial savings, it is recommended that the State continue to issue QZABs.**

- State law provides a program for self-financing energy improvements. In September 2004 the State bid a new financing contract. While the process yielded the lowest bidder, concerns were raised that the weighting in the invitation for bid was suboptimal. **It is recommended that the bid process for financing energy improvement projects be reevaluated every three years, prior to each new bid.**

- A recent paper suggests that GO bond open auctions may result in lower interest costs that closed auctions. **It is recommended that CDAC review the feasibility of implementing open auctions in Maryland.**

- The federal government places limits on the amount of tax-exempt bonds states and local governments can issue. **It is recommended that the Department of Business and Economic Development (DBED) report annually on the level of tax-exempt issuances.**

Property Tax Revenues Are Insufficient to Support Debt Service Payments

GO bond debt service costs are supported by the Annuity Bond Fund (ABF). The fund's largest revenue sources include State property tax revenues and proceeds from bond sale premiums. Other revenue sources include interest generated by fund balances and loan repayments for local bonds. When ABF has not generated sufficient revenues to support all of debt service, general funds have subsidized debt service.

Until fiscal 2003, State property taxes remained unchanged at $0.084 per $100 of assessable base. At this level, State property taxes supported approximately 55 to 60 percent of debt service costs. The State did not appropriate general funds for ABF in the fiscal 2004 budget. To eliminate the revenue shortfall, the Board of Public Works (BPW) increased the State property tax rate to $0.132 per $100 of assessable base. With these actions, the State moved from maintaining a constant property tax rate and funding any remaining debt service with general funds to funding the entire debt service payment with property taxes (as well as some smaller revenue sources). As in fiscal 2004, the fiscal 2005 budget does not include any general funds.

In the short term, keeping State property tax rates at $0.132 per $100 of assessable base provides sufficient revenues to fund debt service. The tax rates are sufficient because of the high fund balances that bond sale premiums[1] have generated. Since 2000, GO bond sales have generated $248 million in bond sale premiums, which have been deposited into ABF to support debt service payments. Bond sale premiums allowed the State to keep its property tax rate lower than it otherwise might have been. Most economic forecasts expect interest rates to rise over the next few years, which will eliminate the premium and require the State to either raise property tax rates or appropriate general funds for debt service.

Exhibit 8.1 shows that revenues supporting debt service are insufficient to fully fund debt service beginning in fiscal 2008. Projected State property tax receipts are less than projected debt service expenditures in all years between fiscal 2005 and 2010. For example, State property taxes are projected to generate $514 million in fiscal 2005 while debt service expenditures total $554 million. By fiscal 2010, State property taxes generate $719 million and debt service expenditures will increase to $755 million. From fiscal 2005 to 2008, bond sale premiums from prior years and other revenues (which include fund balance carried over from previous years) provide sufficient available revenues so support debt service. Once these balances are exhausted and the State relies solely on property taxes, additional revenues will need to be generated. If the State continues to rely on property taxes, it is projected that State property taxes would need to be increased to $0.146 per $100 of assessable base to cover debt service costs through fiscal 2010.

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[1]Bond sales generate a premium when the market interest rate, as measured by the true interest cost, is less than the coupon interest rate that the bond pays to bondholders. Under these conditions, the bonds sell at a premium and the State receives the additional proceeds at the time of the bond sale. By law the proceeds from the premiums are deposited into ABF and used to pay debt service.

Exhibit 8.1
Revenues Supporting Debt Service
Property Tax Revenues Constant at $0.132 per $100 of Assessable Base
($ in Millions)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Property Tax Receipts	$514	$568	$607	$654	$687	$719
Bond Sale Premiums	19	0	0	0	0	0
Other Revenues	4	3	3	3	3	3
ABF Fund Balance Transferred from Prior Year	130	113	72	44	29	0
Total Special Fund Revenues Available	**$667**	**$684**	**$682**	**$701**	**$719**	**$722**
ABF Fund Balance Transferred to Next Year	113	72	44	29	0	0
Subtotal Special Fund Appropriation	**$554**	**$612**	**$638**	**$671**	**$719**	**$722**
Projected Debt Service Expenditures	**$554**	**$612**	**$638**	**$671**	**$721**	**$755**
Annual Special Fund Revenue Shortfall	**$0**	**$0**	**$0**	**$0**	**$1**	**$33**
State Property Tax Rate per $100 of Assessable Base	0.132	0.132	0.132	0.132	0.132	0.132
Property Tax Rate Increase Required to Support Debt Service	0.000	0.000	0.000	0.000	0.000	0.007

Note: Other revenues include fund balance transfer from the previous year.
Source of Property Taxes and Bond Premiums for Prior Years is the Department of Budget and Management.

Cost of Authorizing Additional Public School Construction Debt Is Substantial

Chapter 307, Acts of 2004 also referred to as the Public School Facilities Act of 2004, established a State goal to fully fund school construction projects by fiscal 2013 to meet all minimum required standards as of July 2003. The Act was a response to the November 2003 survey results of the Task Force to Study Public School Facilities. The task force concluded that many Maryland public schools were deficient in some capacity and that the cost to bring schools up to standard would be $3.85 billion. Through the Public School Facilities Act, the State would provide $2 billion of the $3.85 billion over the next eight fiscal years, with the remaining balance funded by local governments. The State has currently committed to $800 million ($100 million annually) in the Department of Budget and Management's (DBM) *Capital Improvement Program* (CIP), leaving a $1.2 billion shortfall. Increasing the authorization by $150 million annually for eight years would allow the State to meet the goal.

CDAC was required, by Chapters 306 and 307, to review the school construction needs and make a funding recommendation annually. In 2005 the committee recommended to the General Assembly that the State continue to authorize $100 million in public school construction and also analyzed the effect of authorizing an additional $1.2 billion for public school construction. The committee concluded that authorizing this additional debt would not exceed debt capacity as currently defined, yet the committee warned that such a task would limit the State's ability to issue debt for other programs along with a caution that changes in personal income could breach affordability measures. The committee concluded that:

> *"[g]iven the magnitude of the proposed additional funding for school construction, however, the committee recommends fully exploring alternative funding mechanisms, new revenue streams, or shifting other capital projects before considering an additional $1.2 billion in general obligation bond authorizations."*

Meeting the Task Force's Goals Solely with GO Bonds Increases the Shortfall in Revenues Supporting Debt Service

To fund an additional $2 billion in school construction, the task force proposed that the State authorize an additional $150 million along with the $100 million already committed by the State in the next eight fiscal years. **Exhibit 8.2** shows that this is projected to cost over $1.8 billion. Based on data from recent public school construction authorizations, authorized funds would not be spent immediately. Instead, the program would need to be phased in over a number of years. Based on recent data from the Interagency Committee on School Construction (IAC), DLS estimates that about half the authorized funds would be issued in the first year. If authorizations are increased in the 2005 session, the first debt service payment is projected to be $3.8 million in fiscal 2007. As the program progresses, debt service costs increase to over $100 million annually in 10 years, peaking at over $130 million annually in 2018.

Exhibit 8.2
Public School Construction Program
Projected Costs Associated with Authorizing an Additional $1.2 Billion in GO Debt
($ in Millions)

Fiscal Year	Debt Authorized	Debt Issued	Debt Service	Debt Outstanding
2006	$150.0	$75.0	$0.0	$75.0
2007	150.0	120.0	3.8	195.0
2008	150.0	135.0	10.1	330.0
2009	150.0	142.5	21.7	468.3
2010	150.0	150.0	36.2	607.2
2011	150.0	150.0	51.8	738.1
2012	150.0	150.0	67.9	860.2
2013	150.0	150.0	84.3	972.7
2014	0.0	75.0	100.8	999.9
2015	0.0	30.0	113.1	971.3
2016	0.0	15.0	123.0	916.4
2017	0.0	7.5	127.9	846.0
2018	0.0	0.0	130.0	762.3
2019	0.0	0.0	130.8	673.2
2020	0.0	0.0	131.2	578.9
2021	0.0	0.0	131.2	479.5
2022	0.0	0.0	123.2	382.6
2023	0.0	0.0	110.2	293.4
2024	0.0	0.0	95.4	214.2
2025	0.0	0.0	79.8	146.1
2026	0.0	0.0	63.3	90.8
2027	0.0	0.0	46.9	48.9
2028	0.0	0.0	30.4	21.2
2029	0.0	0.0	14.0	8.4
2030	0.0	0.0	5.8	3.1
2031	0.0	0.0	2.5	0.8
2032	0.0	0.0	0.8	0.0
Total	**$1,200.0**	**$1,200.0**	**$1,836.0**	

Source: Department of Legislative Services

Authorizing additional debt for public school construction would add to the projected shortfall between revenues and GO bond debt service. **Exhibit 8.3** shows that by fiscal 2010, the public school authorization adds $36.2 million to the special fund shortfall. The shortfall could be addressed through general fund appropriations or increases in the State property tax rate.

Exhibit 8.3
Effect of Authorizing Additional GO Bonds for Public School Construction Projected Additional General Fund Appropriations
($ in Millions)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Annual Special Fund Revenue Shortfall	0.0	0.0	0.0	1.1	33.4
$150 Million Annual Auth. - Additional Shortfall	0.0	0.0	0.0	35.6	36.2
Total Shortfall	**0.0**	**0.0**	**0.0**	**36.7**	**69.6**

Source: Department of Legislative Services

Exhibit 8.4 shows that reliance solely on the State property tax to fund the additional authorizations would require increasing the State property tax rate to $0.145 per $100 of assessable base by fiscal 2010.

Exhibit 8.4
Effect of Authorizing Additional GO Bonds for Public School Construction Projected Property Tax Rate Increases
($ in Millions)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Current Tax Rate per $100 of Assessable Base	0.132	0.132	0.132	0.132	0.132
State Property Tax Rate Increase Required due to Currently Projected Shortfall	0.000	0.000	0.000	0.000	0.007
Rate Increase Attributable to Public School Capital	0.000	0.000	0.000	0.008	0.006
Tax Rate Required to Fund Debt Service with Public School Enhancement	0.132	0.132	0.132	0.140	0.145

Source: Department of Legislative Services

Additional Debt Meets Current CDAC Affordability Criteria

Based on current projections and affordability standards, issuing additional GO debt to support the public school construction program is affordable. As discussed earlier in the report, the controlling criterion is debt outstanding to personal income. **Exhibit 8.5** shows that debt outstanding remains under 3.2 percent of personal income. The State still has over $1 billion in unused debt capacity over the next five years. This unused capacity declines in fiscal 2009 and is likely to continue declining as the proposed expansion is phased in over the next decade.

Exhibit 8.5
Effect of Authorizing Additional GO Bonds for Public School Construction
Debt Outstanding to Personal Income Ratio Remains Under 3.2%

Fiscal Year	Current Proposal	With Additional Public School Debt[1]	Difference	Remaining Capacity ($ in Millions)
2006	2.73	2.75	0.02	1,105
2007	2.68	2.73	0.05	1,212
2008	2.65	2.74	0.09	1,231
2009	2.67	2.81	0.13	1,113
2010	2.69	2.86	0.17	1,014

[1]DLS calculation of affordability.

Source: Department of Legislative Services

Similarly, **Exhibit 8.6** shows that debt service remains under 8 percent of revenues, consistent with CDAC debt service criterion.

Exhibit 8.6
Effect of Authorizing Additional GO Bonds for Public School Construction
Debt Service to Revenues Remains Under 8%

Fiscal Year	Current Proposal[1]	With Additional Public School Debt
2006	6.01	6.01
2007	5.75	5.78
2008	5.77	5.82
2009	5.91	6.02
2010	6.00	6.18

[1] DLS calculation of affordability.

Source: Department of Legislative Services

CDAC Does Not Recommend Authorizing Additional Debt

CDAC expressed concerns about the magnitude of this proposed expansion and instead of recommending that the GO bond program be expanded, the committee recommended that the State first examine:

- ***Alternative Financing Sources:*** Chapters 306 and 307, Acts of 2004 authorize the use of alternative financing methods, such as leasing arrangements with contractors, and allows all counties to issue bonds for public school construction. The IAC advises that the regulations pertaining to these new laws are being promulgated and should be implemented by the end of fiscal 2005. The IAC is also monitoring these financing methods to determine which can be applied more broadly across the State.

- ***New Revenues:*** Possible revenue sources include enacting legislation allowing video lottery terminals and increasing State property tax rates, or dedicating current revenues.

- ***Shifting Funds From Other Projects:*** As noted in Chapter 4, the current capital requests exceed available funding. Each year DBM prepares a CIP, which identifies capital projects to be funded. The CIP funding levels are generally consistent with CDAC's proposed authorizations. The program is slightly less ($6.5 million to $11 million depending on the year) than that CDAC's proposed authorizations to provide funds for legislative initiatives. To provide additional funding for public school construction would require the State to delay or eliminate other projects in CIP. Possible capital program reductions include stopping construction projects that are underway, delaying construction projects not yet begun, reducing grant projects, and reducing legislative initiatives. DLS will examine the implications of reducing the current capital program to fund more public school construction when the Governor's capital budget is submitted at the beginning of the 2005 legislative session.

DLS' Concerns about Expanding the GO Program

While the debt is affordable based on CDAC criteria, DLS has the following concerns about expanding GO bond authorizations:

- ***Current Revenues Are Insufficient to Fund Debt Service in the Out Years, Expanding the Capital Program Exacerbates the Revenue Shortfall:*** Current property tax rates are insufficient to fully fund debt service. An unusually high ABF fund balance is providing the additional funds necessary. It is projected that the fund balance will be depleted by fiscal 2008 and the State will either need to raise State property tax rates or appropriate general funds. DLS estimates that the State property tax will need to be raised by $0.014 per $100 of assessable base to support current debt service in fiscal 2010. Implementing this proposed GO debt expansion requires the State to increase its property taxes by $0.022 per $100 of assessable base.

- ***Issuing Additional Debt Limits Capacity for Non-GO Bond Financed Projects:*** The proposed increase in school construction debt absorbs one-third of projected debt capacity in fiscal 2010. The GO bond program is part of the State's debt program. Other components include transportation, bay restoration bonds, stadium authority bonds, and capital leases. Issuing GO debt limits how much the other programs can issue.

- ***Local ability to fund and manage the proposed expansion:*** The proposed expansion requires that local jurisdictions provide $1.85 billion to support funding. This may be more than some jurisdictions are willing or able to fund.

- ***Short term ability of the market to absorb the additional work:*** The capacity to build and renovate schools is limited. This proposed expansion represents a major commitment. At times it may be difficult for the construction market to meet all the new demand. This could result in higher costs and, if the work is too rushed or inferior contractors enter the market, lower quality work.

Conclusion

Implementing the proposed $1.2 billion program to expand the public school construction capital program is affordable by CDAC standards. While CDAC criteria effectively limit the State's aggregate debt, the criteria do not examine debt service in the context of the State's current fiscal condition. DLS is concerned about the fiscal impact of authorizing an additional $1.2 billion in GO bonds, adding $1.8 billion in debt service costs. The State is not projected to generate sufficient revenues to support currently estimated levels of debt service. Implementing this proposed program without a source of revenues to pay for the additional costs widens the gap between GO bond debt service costs and revenues.

Given the cost of the proposal and the existing current gap between general fund revenues and expenditures, it is recommended that in any effort to fund the initiative, priority should be given to shifting funding from other purposes and by identifying new revenues for the Annuity Bond Fund.

Qualified Zone Academy Bonds

QZAB's were created under the Tax Reform Act of 1997 as a new type of debt instrument to finance specific education projects. Specifically, the program was created to provide an additional means for states to fund school repair projects while lessening the burden of issuing additional debt. The following briefly describes the process of issuing QZABs.

- Qualified schools are identified by the State along with a project proposal.[2]

- Schools must locate qualified contributors to provide a 10 percent matching grant towards the project.[3]

- QZABs are purchased by financial institutions, insurance companies, or lending institutions. Once a QZAB allocation has been approved by the local government, the State must find one of the aforementioned institutions to purchase a QZAB.

- QZAB is issued to the qualified purchaser and funds are distributed for the project.

The State does not pay interest on QZABs. Instead, bondholders (the qualified purchaser) receive a federal income tax credit for each year the bond is held. The State is not required to make payments on the principal until the bonds are redeemed. For example, under its agreement with Bank of America, the State, through the Treasurer's Office, makes annual payments of $888,000 into a sinking fund invested into a guaranteed rate of interest. Since the funds are invested in interest bearing accounts, the repayment of the principal by the State comes out to be less than the par value of QZABs.

Exhibit 8.8 demonstrates the cost savings of issuing QZABs as opposed to GO bonds under the current QZAB issue of $18.098 million. Under an issuance of GO bonds, the State's total obligation is $26.9 million as compared to $12.4 million under the QZAB issuance for a savings of $14.4 million. Whereas the State under the issuance of a regular GO bond would have to pay both interest and principal to the bondholder, in the case of a QZABs, the State's only liability is on the principal of the bond.

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[2] To qualify for QZABs, schools must be located in an enterprise zone or have 35 percent of the school's students qualify for free and reduced priced meals. Maryland also gives priority to projects on schools built prior to 1960 that have not been renovated since construction. Schools are approved for QZABs by the Board of Public Works and the proceeds are distributed by the Public School Construction Program.

[3] Partners must contribute at least 10 percent of the net present value of the amount of money borrowed. Contributions could include; cash, equipment, technical assistance, services to students, or other services approved by the local school board. In addition to the contribution, partners must assist the school in planning and implementing QZAB funded programs.

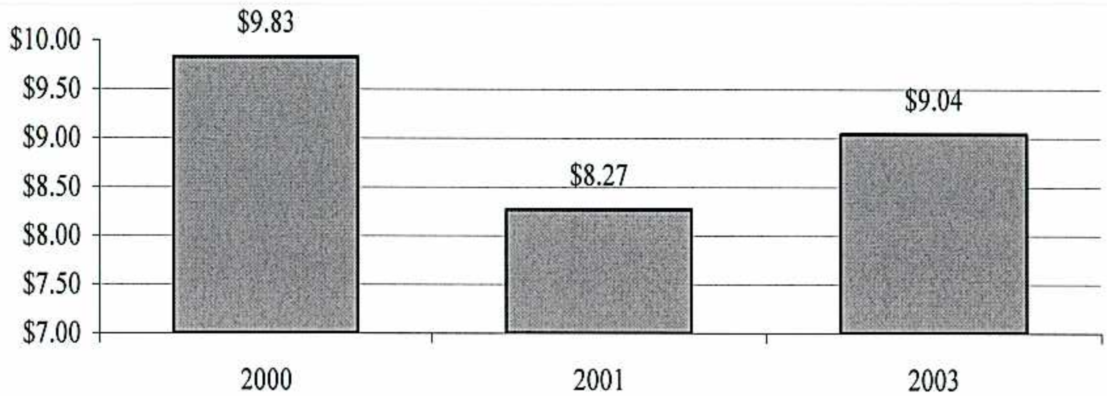
Exhibit 8.8
GO Bond and QZAB Debt Service Cost Comparison
Series 2001 – $18.1 Million Issuance
($ in Thousands)

Fiscal Year	GO Debt Service	QZAB Sinking Fund	QZAB Savings	Net Present Value of Savings
2003	$905	$888	$17	$16
2004	905	888	17	15
2005	1,925	888	1,037	896
2006	1,929	888	1,041	856
2007	1,925	888	1,037	813
2008	1,929	888	1,041	777
2009	1,925	888	1,037	737
2010	1,928	888	1,040	704
2011	1,927	888	1,039	670
2012	1,929	888	1,041	639
2013	1,927	888	1,039	607
2014	1,926	888	1,038	578
2015	1,927	888	1,039	551
2016	1,929	888	1,041	526
2017	1,919	0	1,919	923
Total	**$26,855**	**$12,432**	**$14,423**	**$9,308**

Source: State Treasurer's Office; Department of Legislative Services

Exhibit 8.9 shows that the State has made three QZAB authorizations. The first two authorizations were combined into a single issuance in 2001 (this is the issuance previously examined). The third authorization was issued in November 2004. Sinking fund payments total $6.9 million over 15 years. The issuance yields a $4.6 million savings (net present value savings totaling $4.6 million) compared to GO bonds.

Exhibit 8.9
Qualified Zone Academy Bonds' Authorizations
($ in Millions)



Source: Office of the State Treasurer, October 2004

The federal government has extended the QZAB program. The Treasurer's Office advises that the State could enact a fourth authorization of approximately $4.3 million in the 2006 session. **Given QZAB's cost benefits to the State, it is recommended that the State continue to authorize and issue QZABs when authorized by the federal government.**

Energy Performance Contracts Bid Process Should be Revaluated Every Three Years

The Maryland Energy Administration's (MEA) Energy Performance Contracting program was implemented to provide self-financing energy improvement projects. To fund the program, a financing contract is bid every three years. This contract is a capital lease and is included in CDAC's State tax-supported debt affordability calculations. The last contract expired on June 30, 2004. BPW approved a new contract providing up to $30 million in financing in September 2004. This issue examines the process by which the financing bid is evaluated.

Maryland's Energy Performance Contracts

Chapter 477, Acts of 1993 codified the State's Energy Performance Contracts. The State entered into its first agreement in March 1994. Annual capital outlays ranged from $0.8 million in fiscal 1995 to $15 million in fiscal 1996. There were no projects financed in fiscal 1997, 1998, and

2000. These capital improvements are coordinated by MEA. Financing these improvements is supported by the Treasurer's Office. Each project essentially involves two parties:

- an energy savings contractor that makes improvements; and
- a financing entity that finances the improvements.

An Energy Performance Contract is an agreement between the State and a contractor to make energy-efficient capital improvements. This contractor performs an energy audit to determine if retrofitting new capital equipment can provide energy savings. If the audit projects savings, the contractor agrees to design and install improved capital equipment. This is financed through savings generated by the improvements. The contractor guarantees the savings. If the savings do not materialize, the contractor is required to reimburse the State for any savings that are not achieved. To protect the State, contractors are required to purchase insurance, purchase a surety bond, or obtain an irrevocable letter of credit. MEA advises that there have been instances in which the savings were not realized and the State received payment from the contractor. To date, no contractor filed a claim against an insurance policy or surety bond.

The type of energy saving upgrades typically made include replacing or retrofitting boilers, furnaces, air conditioning units, windows, and lighting fixtures. In most cases, the useful life of the equipment exceeds the term of the financing, which may not exceed 15 years. In cases where the useful life may not exceed the term of the financing, such as software improvements or light fixtures, the contractor is required to make the necessary improvements to extend the life of the capital equipment. MEA advises that most projects are quite large and almost always exceed $500,000 each in total capital improvements. The Treasurer's Office notes that most of the recent projects have also been financed over 13 or 14 years.

Analysis of the Bids

In September 2004 BPW reviewed bids for a new Energy Performance Contract Master Lease-Purchase Financing contract, which provides a financing mechanism for energy improvement contracts. The Treasurer's Office evaluated each bid to determine if the financing entity was likely to be able to service the contract. For the qualified financing entities, the bids were evaluated solely on price, which is the interest rate offered in the bid. The Treasurer's Office received four qualifying bids. **Exhibit 8.10** shows that the Treasurer's Office rated Bank of America's bid, which had a weighted average interest rate of 3.758 percent, to be the lowest bidder. This weighted average represents the Treasurer's recommendation to BPW.

Exhibit 8.10
Energy Performance Contact Master Lease-Purchase Financing Bids

Year	Carlyle Financial Services	First Municipal	Sun Trust	Minority Alliance Capital	Bank of America
3	3.2603%	0.0204%	2.8956%	3.4155%	2.5185%
4	3.4293%	0.4047%	3.0795%	3.5190%	2.6910%
5	3.6329%	1.7098%	3.2320%	3.6570%	2.8980%
6	3.7260%	0.9208%	3.3769%	3.7605%	3.0705%
7	3.8606%	1.1433%	3.4955%	3.8985%	3.2085%
8	3.9917%	3.0757%	3.6087%	4.0020%	3.3465%
9	4.0917%	3.2881%	3.7046%	4.1055%	3.4845%
10	4.2263%	3.8446%	3.8461%	4.2090%	3.5880%
11	4.2815%	3.9559%	3.9458%	4.3125%	3.6915%
12	4.3332%	4.0571%	4.0248%	4.4505%	3.7605%
13	4.5540%	5.3015%	4.0941%	4.4850%	3.8640%
14	4.6092%	5.3925%	4.2052%	4.6230%	3.9330%
15	4.6679%	5.4836%	4.2759%	4.7610%	4.0365%
Weighted Average	**4.3765%**	**4.3559%**	**4.0150%**	**4.4201%**	**3.7580%**

Source: Maryland State Treasurer's Office, August 2004

The process by which bids are evaluated is noted in the Invitation for Bid (IFB) submitted by the Treasurer's Office. IFB requires that a weighted average be developed to evaluate the bids. The following weights were used to evaluate the bids:

- projects maturing in less than 10 years represented 2.3 percent of the weighted average;

- projects maturing in 10 to 12 years represented 66.7 percent of the weighted average, as required by IFB; and

- projects maturing in 13 to 15 years represented 31 percent of the weighted average.

Assigning a higher weight to the later projects is consistent with recent experience and it appears as though the Treasurer's recommendation to award the bid to Bank of America was appropriate. However, DLS is concerned that the projects maturing in 10 to 12 years figure too prominently in the calculation. Recent data suggests that the most common maturities are greater than 12 years. For example, four projects were awarded in fiscal 2003 and 2004. These included two 13-year projects totaling $7.3 million and two 14-year projects totaling $6.5 million. There were no bids awarded for projects financed in less than 13 years. While the weighting system is consistent with IFB and results in the bid with the lowest interest rates being the lowest rated bid, DLS is concerned that bids maturing in 10 to 12 years are assigned too much weight. Prior to the next IFB in 2007, the Treasurer's Office should examine project awards and revise IFB so that the weighting system most accurately reflects actual project financing maturities.

Recommendation to Revaluate the Weighting Prior to Issuing a New IFB

The purpose of IFB is to provide a self-financing mechanism for energy efficient projects. The relevant factor used to evaluate the bids is the interest rate offered by the bidders. The evaluation process is complicated by the fact that project financing maturities vary from project to project. Since the maturities tend to be almost 15 years, the bid process should more favorably factor interest rates for projects with longer maturities. This is done by developing a weighted average to evaluate what reflects the likely maturities of the projects being financed. Recent experience suggests that most projects are financed for at least 13 years. In an IFB submitted by the Treasurer's Office, projects maturing in 10 to 12 years receive the highest weighting. Since these are not the most likely maturities, it appears as though the maturities ranging from 10 to 12 years are assigned too much weight. Depending on the bids received, this could result in a high bidder being awarded the bid. **To avoid awarding a contract to a high bidder, it is recommended that the weighting criteria be reviewed prior to every issuance of an IFB and that it be adjusted to reflect actual projects financed.**

The State Should Review Bond Sale Bid Process to Determine if Open Auctions Yield Savings

Currently, State GO bonds are sold in closed auctions. The State advertises a bond sale, which includes the day and time that all the bids are due. All the bids are opened at the same time and the bidder with the lowest true interest cost (TIC) is awarded the bond sale.

In her paper "Municipal Bonds, Auctions, and Borrowing Costs: Using Open Auctions in a Competitive Bond Sale," Chris Rocco, a Masters of Public Administration degree candidate at the University of Connecticut, examined different methods of issuing bonds to determine the method of sale that resulted in the lowest TIC. Specific emphasis was paid to two companies that offer electronic bond auctions, namely, the Grant Street Group's "MuniAuction" and the Thomson Corporation's "Parity" bid submission system. The major difference between the two products is that MuniAuction offers an open auction system while Parity is exclusively a closed auction system.

The open auction system from MuniAuction permits underwriters to submit bids during a 15 minute period. Once a bid is submitted the underwriter is then notified of their rank in the bidding (e.g., they may be the fourth best bid), and they have the opportunity to resubmit lower bids.

If a bid is submitted at the end of the time period that is lower than the other bids, an additional two minutes is added to the auction to permit the other bidders to respond (thus discouraging last second bidding). When the auction ends the underwriter offering the lowest TIC is awarded the bond issue.

Under the closed bidding system from Parity, underwriters submit a bid and wait to be notified if they are the winner. Ms. Rocco researched nearly 5,000 bond issuances from calendar 2002, of which 2,612 reported a TIC and where 204 used the open auction system from MuniAuction (largely used in Pennsylvania, where the company is based).

The results of this research indicated that nationally, open auction use resulted in average interest rates that were nine basis points lower than bond sales using the closed auction method. When the research was focused exclusively on Pennsylvania (where 90 percent of bond issuances used open auctions) and California (where 10 percent of bond issuances used open auctions), the paper found significant savings of 24 basis points on average. The higher savings appear to be related to the more prevalent use of open auctions in those states.

Based on the forecast of proposed GO bond sales in Maryland, DLS prepared an estimate of the level of savings in debt service which could be attained if an open auction of issuance were used for each bond sale over the next 10 years. **Exhibit 8.11** shows that this could result in savings ranging from $22 million (if an average savings of nine basis points is assumed) to $59 million (if average savings of 24 basis points is assumed).

Exhibit 8.11
Debt Service Open Auctions Estimated Savings
9 to 24 Basis Points
($ in Thousands)

Fiscal Year	Bonds Sold	Debt Service	0.09% Savings	0.24% Savings
2005	$625,000	$567,485	$135	$360
2006	600,000	617,944	698	1,860
2007	600,000	657,418	1,238	3,300
2008	625,000	688,584	1,570	4,184
2009	700,000	727,919	1,951	5,199
2010	756,000	760,436	2,400	6,392
2011	775,000	798,376	2,880	7,672
2012	770,000	828,442	3,349	8,918
2013	800,000	867,382	3,798	10,113
2014	734,000	898,595	4,248	11,312
Total	**$6,985,000**	**$7,412,581**	**$22,266**	**$59,310**

Source: Department of Legislative Services

The research suggests that significant savings could be achieved through the adoption of open bond issuance auctions. **It is recommended that CDAC review the feasibility of implementing an open auction GO bond sale bidding process. This review should include researching available open auctions.**

Review of Limits on Tax-exempt Bonds Should Be Submitted Annually

Low interest rates and a continued weak economy, coupled with three years of increases in the federal private activity bond volume cap on tax-exempt financing, have led Maryland to carry forward a record amount of private-activity bond capacity from 2003 to this year.

Qualified private activity bonds are tax-exempt revenue bonds issued by a state or local government, the proceeds of which are used for a defined qualified purpose by an entity other than the government issuing the bonds. For a private activity revenue bond to be tax-exempt, 95 percent or more of the net bond proceed must be used for one of the following qualified purposes:

- exempt facilities including airports, docks and wharves, mass commuting facilities, sewage and solid facilities, qualified residential rental projects, local electric energy or gas facilities, local district heating and cooling facilities, qualified hazardous waste facilities, high-speed intercity rail facilities, environmental enhancements of hydro-electric generating facilities, and qualified public education facilities;

- mortgage revenue bonds, multi-family housing, and mortgage revenue certificates;

- small issue industrial development revenue bonds;

- Student loan bonds, and;

- Redevelopment bonds for facilities located in qualified enterprise and empowerment zones.

If the 95 percent use test is not satisfied, the result is a loss of the tax-exempt qualified status of the bond issue. Hence the bonds become taxable private activity revenue bonds.

In addition to limiting the kinds of activities that can be supported with tax-exempt financing, Congress, in the Tax Reform Act of 1986, imposed an annual statewide volume cap on private-activity bonds. The volume cap was set at the greater of $50 per capita or $150 million per state, effective in 1988. In the late 1990s a number of states began to exhaust their annual volume caps and were forced to postpone or cancel projects, or to issue taxable bonds that are more expensive, because tax-exempt financing could not be secured. Congress addressed this issue and approved an increase over two years that in 2001 raised the limit to $65.50 per capita or $187.5 million per state and in 2002 raised the aggregate cap to $75 per capita or $225 million, whichever is greater. Beginning in 2003, annual adjustments to the volume cap have been tied to the nation's inflation rate.

In addition to receiving an annual allocation, states can carry forward any unused amount permitted under its cap for up to three years. To qualify for the three-year carry forward, a state must designate a specific issuer and specific type of function to be financed. If a designated facility cannot be financed during the subsequent three years due to changes in market conditions, the state cannot reallocate the bond authority to another type of project elsewhere in the state. The bond authority can only be used by the specific issuer and only for the approved use. As a result, states have little flexibility in reallocating scarce tax-exempt bond authority under the volume cap to react to changing market conditions.

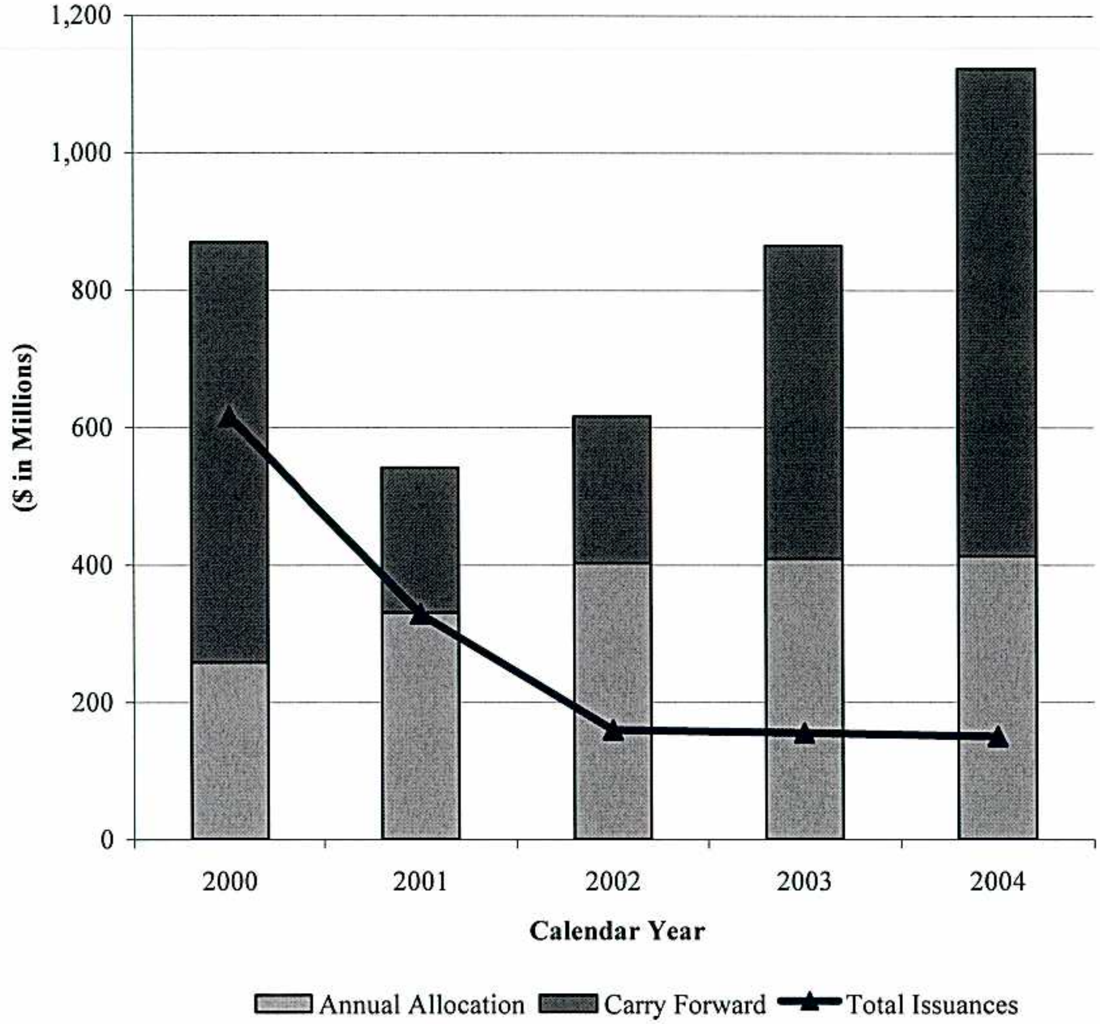
Exhibit 8.12 provides the calendar 2000 through 2004 figures for the amount of available tax-exempt bond authority and the level of annual issuances made under the volume cap limits. The figures indicate that despite the additional allocation authority allowed under the revised volume cap requirements, Maryland carried forward from 2003 to 2004 an unprecedented $710 million of unissued volume cap and when added to the over $410 million of additional allocation authority available for 2004, Maryland has in excess of $1.1 billion of unissued tax-exempt bond authority currently available. The recent downturn in the national and Maryland economies, coupled with changes in the federal allocation guidelines, simultaneously made tax exempt financing less desirable and practical in the highly regulated tax-exempt financing market place and produced dramatic increases in annual allocation levels, and unprecedented levels of available volume cap. This trend is graphed in **Exhibit 8.13**.

Exhibit 8.12
Allocation of Private Activity Bonds
Calendar 2000 – 2003
($ in Millions)

	2000	2001	2002	2003	2004 est.
Fund Sources					
Annual Cap	$258.6	$331.0	$403.1	$409.4	$427.2
Carry Forward from Prior Years	611.2	211.0	213.0	455.6	710.0
Total Capacity Available	**$869.8**	**$542.0**	**$ 616.1**	**$ 865.0**	**$1,137.2**
Issuances					
Mortgage Revenue Bonds	$162.1	$135.6	$0.9	$20.7	$85.0
Multifamily Housing	55.4	130.0	77.9	130.3	68.0
Housing Not Broken Out	89.8	0.0	54.1	0.0	0.0
Industrial Development Bonds	31.5	38.4	15.8	4.0	0.0
Exempt Facilities	110.5	25.0	11.8	0.0	0.0
Student Loans	0.0	0.0	0.0	0.0	0.0
Mortgage Credit Certificates	0.0	0.0	0.0	0.0	0.0
Other	167.0	0.0	0.0	0.0	0.0
Total Issuances	**$616.3**	**$329.0**	**$159.6**	**$155.0**	**$153.0**
Carry Forward	$251.5	$213.0	$455.6	$710.0	$984.2

Source: Bond Market Association

Exhibit 8.13
Allocation of Private Activity Bonds



Source: Bond Market Association

The housing sector for instance, which tends to receive the largest annual allocation, was affected on a national level by record low interest rates according to bond market analysts. Low interest rates almost totally eliminated mortgage revenue bond issuances, which provide low interest loans to first-time homebuyers, in Maryland. Mortgage revenue bond issuances ranged between $162 million and $135 million during 2000 and 2001 but no higher than $21 million during 2002 and 2003.

The volume of industrial development bonds issued fell sharply in 2002 and 2003 in the face of a struggling manufacturing sector and a continuing burdensome statutory cap. According to bond market analysts, manufacturers have clamped down on spending in a sluggish market and when they have financed projects they have turned to taxable bonds due to the current low interest rate environment. However, an increasingly strengthened economy could mean an increase in Industrial Development Bonds (IDB) issuance if manufacturers feel comfortable enough to make capital investments in equipment. As for the burdensome statutory cap, small manufacturers eligible for IDB financing face separate restrictions set by Congress in 1978 that limit to an aggregate $10 million the size of the bond issue and related capital expenditures that can benefit a manufacturing firm in the three years before and after the issue. Recent attempts to soften these restrictions have failed in Congress.

Financial Institutions Article §13-801 through §13-807 governs the allocation of private activity bonds. DBED is the allocating authority responsible for oversight of the rather complicated allocation formula which directs portions of the volume cap to specific issuers, such as the Department of Housing and Community Development's Community Development Administration, as well as local and municipal issuers throughout the State. While the State statutory guidelines require each issuer to provide an annual report of its allocation and issuance activities to DBED, the department is not required to compile this disparate information into a statewide consolidated report to the General Assembly. In addition, the Financial Institutions Article requires State and local issuers to make every effort to use minority business enterprises (MBE) in the construction of projects financed with tax-exempt bond proceeds and to monitor compliance with this requirement. Absent an annual report from DBED covering statewide issuance activities, it is difficult to effectively evaluate whether the State and local issuers are taking full advantage of tax-exempt bond financing available under the federal private-activity volume cap allocation guidelines, or assess compliance with MBE requirements. Furthermore, as the amount of available bond authority increases due to annual inflationary indexing and carry-forward provisions, it is increasingly important to ensure that the State and local issuers are doing everything possible to position the State to use this largess when the economy and the tax exempt marketplace recover from the current downturn.

It is recommended that DBED be required to submit an annual report to DBM that provides summary statistical information concerning the utilization of the State's private activity volume cap. At a minimum the report should include the amount of State volume cap allocated to each bond issuer in the State and the amounts and types of bond issuances made or anticipated to be issued pursuant to the total allocation to the issuer. This information should be included in DBM's *Debt Issued by Maryland State Agencies and Independent Authorities* annual report to BPW and the Maryland General Assembly.

Estimated General Obligation Issuances
($ in Thousands)

General Assembly Session	Proposed Authorizations	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total Issued
					<==== Estimated Issuances During Fiscal Year (a) ====>								
2005	$670,000	$0	$207,700	$167,500	$134,000	$100,500	$60,300						$670,000
2006	685,000		0	212,350	171,250	137,000	102,750	61,650					685,000
2007	700,000			0	217,000	175,000	140,000	105,000	63,000				700,000
2008	715,000				0	221,650	178,750	143,000	107,250	64,350			715,000
2009	630,000					0	195,300	157,500	126,000	94,500	56,700		630,000
2010	645,000						0	199,950	161,250	129,000	96,750	58,050	645,000
2011	660,000							0	204,600	165,000	132,000	99,000	600,600
2012	675,000								0	209,250	168,750	135,000	513,000
2013	690,000									0	213,900	172,500	386,400
2014	705,000										0	218,550	218,550
2015	720,000											0	0
Total New Authorization		**0**	**207,700**	**379,850**	**522,250**	**634,150**	**677,100**	**667,100**	**662,100**	**662,100**	**668,100**	**683,100**	
Current Authorizatio	1,946,468	650,000	442,300	270,150	152,750	65,850	22,900	57,900	62,900	72,900	81,900	66,918	1,946,468
Total Issuances (New and Current):		**650,000**	**650,000**	**650,000**	**675,000**	**700,000**	**700,000**	**725,000**	**725,000**	**735,000**	**750,000**	**750,018**	

Notes:

(a) Percentage issuance assumptions by fiscal year:

1st	2nd	3rd	4th	5th
31.0%	25.0%	20.0%	15.0%	9.0%

(b) It is assumed that authorizations increase $15 million annually.

(c) There is an additional change assumed in the 2009 legislative session. Authorizations are reduced $100 million. In 2003, CDAC recommended to increase authorizations annually $100 million for five years (total increase is $500 million). In 2009, authorizations return to previous levels.

(d) The 2008 legislative session is the last session that includes an additional $5 million for the Tobacco Crop Conversion program. Authorizations are reduced $5 million in 2009 to reflect the end of this program.

Source: Capital Debt Affordability Committee

Debt Outstanding
($ in Millions)

	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY02	FY03	FY04	FY 94-04
Agency Debt Subject to Ceiling and Allocation Caps												
MD Envir. Service	$27.2	$29.9	$34.8	$33.7	$31.0	$34.0	$29.4	$34.4	$36.5	$33.7	$30.5	12%
MD Wholesale Food Ctr. Auth.	7.3	7.2	7.2	7.1	7.0	6.9	6.8	6.7	0.0	0.0	0.0	-100%
MD Trans Authority	302.5	465.2	408.4	391.9	374.9	344.5	318.7	300.6	668.8	575.6	627.2	107%
MD Water Qual. Finan. Adm.	133.2	163.2	163.4	157.8	151.3	138.1	131.3	124.3	115.9	105.6	96.6	-27%
Revenue Cap Total	**$470.2**	**$665.5**	**$613.8**	**$590.5**	**$564.2**	**$523.5**	**$486.2**	**$466.0**	**$821.2**	**$714.9**	**$754.3**	**60%**
% Change/Prior Year	-1%	42%	-8%	-4%	-4%	-7%	-7%	-4%	76%	-13%	6%	
Agency Debt Not Subject to Ceiling and Allocation Caps												
Balt. City Comm. College	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a
DHCD (a)	$2,457.4	$2,446.5	$2,340.8	$2,304.5	$2,387.1	$2,473.5	$2,627.0	$2,692.1	$2,705.8	$2,672.8	$2,415.1	-2%
Local Govt. Infra. (CDA)	42.3	48.5	55.0	62.5	66.1	81.1	85.5	87.7	91.7	105.6	114.6	171%
MD Energy Finance Admin.	44.6	202.6	300.9	307.4	306.2	301.1	388.4	379.8	0.0	0.0	0.0	-100%
MIDFA (b)				386.3	360.4	346.3	330.0	311.6	581.4	568.4	411.1	n/a
MDOT - County Bonds and COPs	n/a	n/a	n/a	n/a	45.5	77.4	68.1	93.3	78.2	65.5	58.4	n/a
Morgan State University	28.0	28.9	29.4	29.9	27.9	27.5	27.1	26.8	33.4	72.2	70.0	150%
St. Mary's College	8.7	8.5	8.1	7.8	17.5	17.3	16.9	27.8	27.5	40.6	40.1	361%
Univ. of Maryland System	473.8	518.3	505.9	534.5	611.0	670.0	656.1	802.7	797.0	960.0	973.0	105%
Non-Cap Total	**$3,054.8**	**$3,253.3**	**$3,240.1**	**$3,632.9**	**$3,821.7**	**$3,994.2**	**$4,199.2**	**$4,421.7**	**$4,315.0**	**$4,485.1**	**$4,082.4**	**34%**
% Change/Prior Year	7%	6%	0%	12%	5%	5%	5%	5%	-2%	4%	-9%	
Tax-Supported Debt												
Transportation Debt	$1,020.3	$1,047.5	$977.6	$939.4	$844.0	$749.1	$724.8	$648.1	$714.2	$961.2	$1,185.7	16%
Capital Leases - BPW	140.8	125.2	115.8	98.4	90.3	149.2	148.4	197.7	245.7	217.1	191.9	36%
General Obligation Debt	2,504.0	2,619.1	2,859.9	3.025.4	3,270.5	3,500.2	3,348.9	3,450.9	3,544.2	3,932.5	4,102.3	64%
Tax Supported Debt Total	**$3,665.1**	**$3,791.8**	**$3,953.3**	**$1,037.8**	**$4,204.8**	**$4,398.5**	**$4,222.1**	**$4,296.7**	**$4,504.1**	**$5,110.8**	**$5,479.8**	**50%**
% Change/Prior Year	9%	3%	4%	-74%	305%	5%	-4%	2%	5%	13%	7%	
Authorities and Corporations Not Subject to Ceiling and Allocation Caps												
Hlth./Higher Ed. Fcl. Ath.	$2,254.2	$2,256.6	$2,348.4	$2,489.7	$2,821.0	$3,236.6	$3,555.0	$3,660.8	$4,265.4	$4,619.5	$5,316.9	136%
MD Econ. Dev. Corp.	45.0	61.0	141.0	177.0	227.7	321.1	635.4	855.6	1,077.7	1,483.9	1,591.9	3438%
Auth. And Corp Total	**$2,299.2**	**$2,317.6**	**$2,489.4**	**$2,666.7**	**$3,048.7**	**$3,557.7**	**$4,190.4**	**$4,516.4**	**$5,343.1**	**$6,103.4**	**$6,908.8**	**200%**
% Change/Prior Year	9%	0%	4%	6%	13%	15%	10%	3%	17%	8%	15%	

(a) Excludes local government infrastructure.

(b) Balances have been restated to reflect the inclusion of MIDFA's Economic Development Revenue Bonds (Holy Cross Health System Corporation) Series 1993.

Source: Department of Budget and Management