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

Department of Legislative Services
Office of Policy Analysis
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November 2003

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 Jessica Jordan, Lucinda Lessley, Matthew Klein, and Theresa Tuszynski.

Respectfully submitted,

Warren G. Deschenaux
Director

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Chapter 1. Recommendations of the Department of Legislative Services

New Debt Authorization

The Capital Debt Affordability Committee (CDAC) provisionally recommended a limit of $650 million for new authorizations of general obligation bonds during the 2004 legislative session. The recommendation is $95 million more than was proposed for fiscal 2005 in last year's report. In the September 2002 report, CDAC proposed a $555 million general obligation (GO) authorization in fiscal 2005. At the CDAC hearings, the administration proposed the increase to accommodate prior spending commitments and the Governor's priorities. The recommendation excludes a planned $5 million for tobacco buyout financing, as required by Chapter 103, Acts of 2002.

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 the CDAC and provided the following preliminary allocation of the $650 million debt authorization:

	GO Debt
State-owned Facilities	$290,000,000
Grant & Loan Programs	97,600,000
Public School Construction	262,400,000
Total	**$650,000,000**

The Department of Legislative Services' (DLS) forecast of personal income and levels of outstanding debt indicates that Maryland's five-year general obligation 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 proportion of general funds or property tax revenues allocated towards debt service. This results in either an increase in property tax rates or less general funds available for other State needs.

The Department of Legislative Services agrees that the committee's provisional debt limit for the 2004 session of $650 million in new general obligation authorizations meets the affordability criteria and preserves capacity for the future. However, it is also noteworthy that, the increased debt service associated with the higher recommended level may impact the State's ability to meet other high priority services after the payment of debt service obligations.

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.**

Higher Education Debt

For fiscal 2005, the University System of Maryland intends to issue up to $18 million in auxiliary debt and $33 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. Morgan State University, St. Mary's College, and Baltimore City Community College do not plan on issuing any debt in fiscal 2005. **The Department of Legislative Services agrees that the committee's recommended debt limit for the 2004 session of $33.1 million in new academic revenue bonds is affordable for the University System of Maryland.**

DLS is concerned that S&P has recently downgraded USM credit outlook from stable to negative. This could lead to higher interest rates and debt service costs if USM academic and auxiliary revenue bonds credit ratings' are downgraded. DLS is concerned that the ratio of unrestricted net assets to debt outstanding has declined to 53 percent at the end of fiscal 2003. This brings the ration close to the 50 percent threshold. DLS is also concerned that CDAC does not use this ratio to monitor debt outstanding. **To improve the CDAC review of USM debt, it is recommended that, in addition to evaluating debt service, CDAC also evaluate USM debt outstanding. It is suggested that CDAC use the criteria currently used by USM: maintaining a ratio of unrestricted net assets to debt outstanding of at least 50 percent.**

Non-Tax Supported Debt

State agencies and independent authorities have over $10 billion in debt outstanding. This debt, which has grown over 50 percent in five years, is not directly supported with general funds or transportation revenues and is not considered to be State debt. **DLS notes that this was the first year the CDAC examined non-tax supported debt in the course of its work, and recommends that the process be formalized and made more rigorous in the future.**

Bond Sale Premiums

The State has received $197 million in bond sale premiums from fiscal 2001 to 2004. DLS projects that bond sales in fiscal 2004 and 2005 will continue to generate premiums. Currently, the State does not project bond sale premiums when preparing the Annuity Bond Fund and debt service expenditure forecast. **It is recommended that the State begin to estimate bond sale premiums when preparing the debt service and Annuity Bond Fund forecast**.

Legislation enacted in 2003 allows the State to use bond sale premiums to support the capital program. In fiscal 2004, revenues generated from bond sale premiums support debt service. This reduces pressure to fund debt service through property taxes and general funds. **It is recommended that the Spending Affordability Committee limit the use of bond sale premiums so that they might be used to support future debt service, or to reduce general obligation bond issuances with a stable property tax rate.**

Chapter 2. Recommendations of the Capital Debt Affordability Committee

New General Obligation Debt Authorization

- The new general obligation debt authorization at the 2004 session is provisionally set to $650 million. This figure is $90 million less than the prior year's level and excludes $5 million in funding for the tobacco buyout. However, the 2003 session amount was an anomaly. It included $200 million in additional funds to recognize legislative action taken in the Budget Reconciliation and Finance Act of 2002 and to provide greater flexibility in funding the planned pay-as-you-go (PAYGO) capital construction program for fiscal 2004 in light of the national recession.

- Last year's recommended funding level for the 2004 session was $555 million. Compared to the recommended level of funding, the September 2003 CDAC report proposes a net increase of $100 million, $95 million in additional general obligation bonds and excluding the $5 million in funding for the tobacco buyout. Chapter 103, Acts of 2002 which created the tobacco buyout program states that the debt is not part of the CDAC debt limit.

- The long-range plan adopted by the CDAC depicts its intention to add $95 million annually to the September 2002 recommended debt limit. As in previous years, the committee continues to recommend that authorizations be increased $15 million each year. The following table presents the new long-range plan.

Fiscal	**Debt Limit ($ in Millions)**
2005	$650
2006	$665
2007	$680
2008	$695
2009	$710

Higher Education Academic Debt to Be Authorized

Limit new debt authorization for academic facilities to $33.1 million for the next fiscal year. The CDAC notes 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 2003, pg. 39). The $33.1 million recommended academic revenue bond limit is less than the $40 million recommended for fiscal 2004. The entire $33.1 million is intended for projects on University System of Maryland campuses.

Chapter 3. 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 (i.e., transportation, the Maryland Stadium Authority, Bond Anticipation Notes, and capital leases), the recommended fiscal 2005 debt limit of $650 million applies only to general obligation (GO) debt. The limit excludes $5 million in GO bonds for the tobacco buyout program. 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 $40 million for academic facilities is in addition to the limit on general obligation debt and is not considered as tax-supported debt nor is it subject to the 3.2 percent affordability standard.

The projections of the 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 the fiscal period 2004 through 2009, debt outstanding will reach a maximum of 2.94 percent. The committee's projections provide for a $15 million per year increase, after the addition of $95 million annually from fiscal 2005 to 2009. By the end of fiscal 2009, debt outstanding is expected to exceed $6.8 billion. Similarly, the projections indicate that 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 6.44 percent and tax-supported debt service will increase from approximately $694 million in fiscal 2003 to about $935 million in fiscal 2009.

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 general obligation 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. Current personnel income growth rate projections, which are 3.56 percent in fiscal 2004 and 4.33 percent in fiscal 2005, are lower than projected last year. The rates used by CDAC are also lower than the rates currently projected by DLS.

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 general obligation 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 2005 to 2009 ($95 million per year for a total increase of $475 million over last year's report). The higher issuance reflects the committee's concern that funds are insufficient to support spending pressures (such as prior commitments and the administration's priorities).

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 general obligation capital plan.

Chapter 4. State Tax-Supported Debt

Maryland issues five types of tax-supported debt:

- general obligation 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 and secured by a lease with the State; and
- tax or bond anticipation notes (TANs/BANs) which may be issued by the Treasurer and which must be repaid within 180 days of issuance.

General Obligation Bonds

General obligation (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 2004 to 2009

Agency requests for fiscal 2005 total $878.5 million, over $228.5 million more than the amount available under the recommended general obligation bond debt limit of $650 million. Capital requests for the next five years total nearly $4.6 billion, while the projected debt limit for the same period totals about $3.4 billion. 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 CDAC calculation. These figures demonstrate that the number of capital projects proposed far exceeds the ability of the State to appropriate bond funds to provide for capital needs. **Exhibit 4.1** provides a listing of general obligation 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 2005 *5-Year Capital Improvement Plan* (CIP).

Exhibit 4.1
GO Bond Requests: Fiscal 2005 through 2009
($ in Millions)

	Fiscal Year						Category
	2005	2006	2007	2008	2009	Total	Totals
State Facilities							$454.2
Board of Public Works	$70.0	$102.6	$69.3	$125.1	$82.4	$449.4	
Military	0.0	0.0	0.0	4.1	0.7	4.8	
Health and Social Services							669.0
Health and Mental Hygiene	33.6	21.0	152.3	115.5	103.1	425.5	
University of MD Medical System	10.0	20.0	20.0	25.0	25.0	100.0	
Senior Citizen Activity Center	2.0	1.5	1.5	1.5	1.5	8.0	
Juvenile Justice	9.0	57.9	11.4	26.0	6.2	110.5	
Private Hospital Grant Program	3.5	6.5	5.0	5.0	5.0	25.0	
Environment							416.9
Natural Resources	43.3	40.7	27.0	27.4	28.5	166.9	
Agriculture*	15.6	6.5	7.0	0.0	0.0	29.1	
Environment	36.0	32.2	35.3	35.2	38.3	177.0	
MD Environmental Service	3.3	3.8	3.8	4.0	4.0	18.9	
Education							579.6
Education	0.0	26.5	0.0	16.0	0.0	42.5	
MD School for the Deaf	1.1	5.8	21.3	2.0	0.0	30.2	
MD Public Broadcasting	0.5	0.0	0.7	0.4	17.3	18.9	
Public School Construction	97.6	97.6	97.6	97.6	97.6	488.0	
Higher Education							1,329.1
University System of MD**	174.9	72.4	164.6	129.4	154.2	695.5	
Baltimore City Comm. College	15.2	24.5	6.3	0.2	0.00	46.2	
St. Mary's College	28.2	3.4	14.4	0.8	15.4	62.2	
Morgan State University	21.1	35.1	45.4	61.8	28.8	192.2	
Community Colleges	61.8	47.1	104.9	61.6	39.0	314.4	
Southern MD Higher Educ. Center	0.0	0.0	0.8	9.8	0.0	10.6	
Private Facilities Grant Program	8.0	8.0	8.0	8.0	8.0	40.0	
Public Safety							797.4
Public Safety	93.4	124.5	125.5	151.4	171.9	666.7	
State Police	10.7	12.9	0.5	0.0	0.0	24.1	
Local Jails	22.6	26.8	15.7	4.2	5.3	74.6	
Housing and Economic Development							227.1
Economic Development	18.8	24.5	20.0	20.0	20.0	103.3	
Housing and Comm. Development	39.7	13.7	13.1	11.7	11.7	89.9	
Canal Place	0.0	1.5	0.0	0.0	0.0	1.5	
Historic St. Mary's City	5.7	1.7	3.1	13.1	8.8	32.4	
Legislative Initiatives	30.4	15.0	15.0	15.0	15.0	90.4	90.4
Miscellaneous	17.5	16.5	15.5	13.9	10.8	74.2	74.2
Subtotal Request	$873.5	$850.2	$1,005.0	$985.7	$898.5	$4,588.9	$4,588.9
Tobacco Transition Program	5.0	5.0	5.0	5.0	5.0	25.0	25.0
Total Request	$878.5	$855.2	1,010.0	990.7	$903.5	$4,613.9	$4,613.9
Debt Affordability Limits	$650.0	$665.0	$680.0	$695.0	$710.0	$3,400.0	

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

**In addition to the GO bond request, USM has requested academic revenue bond funding for fiscal 2005 – 2009 of $66.6 million, $25.9 million, $37.2 million, $25.0 million and $15.0 million, respectively.

Note: Numbers may not sum to total due to rounding.
Source: Department of Budget and Management

Bond Issuance Stream

General obligation 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. 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 is the key table upon which much of the affordability calculations are based. This table, included as **Appendix 1**, shows how the proposed authorizations for fiscal 2003 through 2012 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 CDAC in its September report. **Exhibit 4.2** compares this year's issuance stream to last year's to reveal higher issuance levels through fiscal 2011. 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).

Exhibit 4.2

Proposed Issuance Stream
($ in Millions)

Fiscal Year	Last Year's Report	Current Year's Report
2004	$650	$700
2005	525	625
2006	550	600
2007	575	600
2008	600	625
2009	625	700
2010	675	725
2011	725	750
2012	795	750
Total	**$5,720**	**$6,075**

The table in Appendix 1 also indicates the expected issuances of current authorizations. Since 1989 there has been over $1 billion in authorized but unissued debt. At the beginning of fiscal 2004, this has risen to nearly $1.8 billion. The CDAC report assumes that $422 million of this debt will be issued in fiscal 2005.

Bond Refunding

Three of the last four bond sales (March 2002, July 2002, and February 2003) included the refunding of prior 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. Similarly, 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 annual savings from these three recent refundings each fiscal year will result in a reduction in the general fund appropriation required in the operating budget under the Annuity Bond Fund to pay debt services on general obligation bonds. Savings per fiscal year is included in **Exhibit 4.3**.

Exhibit 4.3
Fiscal Year Savings as a Result of Refinancing

Fiscal Year	March 2002	July 2002	February 2003	Total
2002	$2,292,073	$0	$0	$2,294,075
2003	2,243,556	9,150,256	428,313	11,824,128
2004	2,360,353	1,320,167	660,122	4,342,645
2005	692,017	5,251,467	50,105	5,995,594
2006	1,619,999	1,359,265	958,068	3,939,338
2007	1,477,265	212,993	1,329,125	3,021,390
2008	80,225	186,515	1,472,373	1,741,121
2009	80,225	10,342	1,474,575	1,567,151
2010	112	3,930	0	6,052
Total	**$10,845,825**	**$17,494,935**	**$6,372,679**	**$34,713,439**

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 provisionally recommended a limit of $650 million for new authorizations of general obligation bonds during the 2004 legislative session. The recommendation is $95 million more than was proposed for fiscal 2005 in last year's report. In the September 2002 report, CDAC proposed a $555 million GO authorization in fiscal 2005. At the CDAC hearings, the administration proposed the increase to accommodate prior spending commitments and the Governor's priorities. The recommendation excludes a planned $5 million for tobacco buyout financing, as required by Chapter 103, Acts of 2002.

Chapter 204, Acts of 2003 (Fiscal 2004 Capital Budget) authorized $30.4 million in GO bonds that become effective in fiscal 2005. To abide by the CDAC recommendation, the administration will need to accommodate these $30.4 million in authorization within the $650 million limit. The authorization includes:

- $12.7 million in Community Based Regional Initiatives Loan of 2004. These projects were initially proposed by the House of Delegates for the fiscal 2003 budget and were reintroduced in the 2003 legislative session;

- $12.7 million for the Legislative Community Initiatives Loan of 2004 for projects selected by the Maryland Senate; and

- $5 million for the Legislative Community Initiatives Loan of 2004 for projects agreed upon by both houses.

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 the TTF.

The department previously issued county transportation bonds that were considered both State and county debt and counted toward State debt affordability limits. Chapter 539 of the 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.

Since 1992, the department has also issued nine separate issuances totaling nearly $908 million in non-traditional debt to support in large part the expansion of Baltimore-Washington International Airport (BWI) and the purchase of administrative facilities for the department. As of June 30, 2003, non-traditional debt outstanding totaled $699 million. Of this amount, only $36 million in Maryland Economic Development Corporation (MEDCO) bonds issued to finance construction of the new MDOT headquarters is tax supported. As the rest of this debt is not tax-supported, it does not fall under the purview of the Capital Debt Affordability Committee.

Consolidated Transportation Bonds

The issuance of transportation debt is limited by two criteria: an outstanding debt limit and a coverage test. The outstanding debt limit is set by statute. During the 1992 session, the outstanding debt limit was increased from $950 million to $1,200 million with the proviso that a debt ceiling is to be set annually in the budget bill. During the 2002 session, the maximum outstanding debt limit was increased to $1,500 million. The fiscal 2004 budget bill set the maximum ceiling for June 30, 2004, at $1,253 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, 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, DLS estimates that as of June 30, 2004, it will have a maximum outstanding debt of $1,252 million with coverage estimated at the administrative minimum of 2.6 times maximum debt service under the net revenue test, and 6.2 times using the pledged tax test.

Beginning with fiscal 1989, the department has issued consolidated transportation bonds in eleven of fifteen years. During these years, three issuances have been made to refinance previous bond sales, including most recently in fiscal 2003, when a total of $262,405,000 was refinanced. **Exhibit 4.4** shows that the department issued significant levels of new debt in 2003. 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, $495 million in debt was issued in fiscal 2002 and 2003 alone. The department last issued new debt in June 2003 (fiscal 2003) when bonds totaling $195 million were sold.

Exhibit 4.4
Consolidated Transportation Bond Issuance*
($ in Millions)

Fiscal Year	Amount
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
Total	**$1,600**

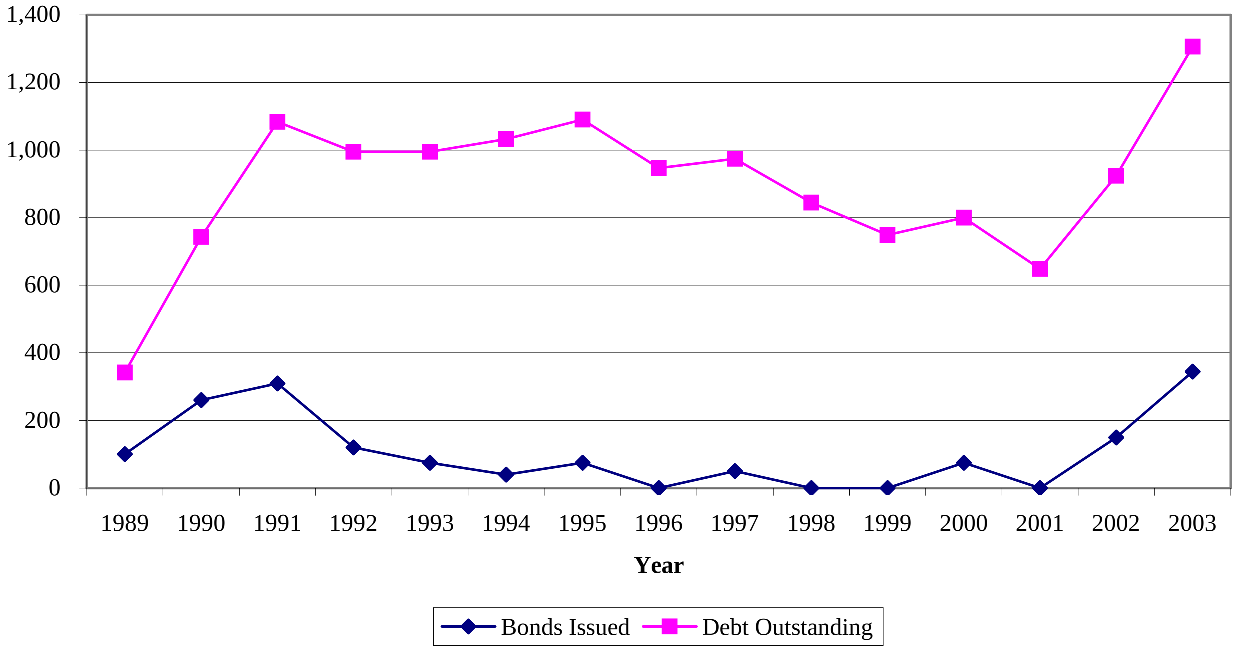
*Exclusive of refinancing.

Source: Maryland Department of Transportation

The department's net debt outstanding was $961 million in fiscal 2003. However, debt outstanding is rising as a result of the fiscal 2002 and 2003 sales and is expected to continue to rise due to the additional sales planned for fiscal 2004 and 2005. **Exhibit 4.5** illustrates annual bond sales and changes in debt outstanding from fiscal 1989 to 2003.

Exhibit 4.5

MDOT Bonds Issued and Net Debt Outstanding
Fourteen-Year Summary – Fiscal 1989 through 2003
($ in Millions)



Source: Maryland Department of Transportation

Capital Leases

In September 2000 (fiscal 2001), MDOT entered into a $33 million transaction involving a conditional purchase agreement through the issuance of Certificates of Participation (COPs). Proceeds support adding two levels to the existing five-level parking garage and constructing a new seven-level parking structure at the Baltimore/Washington International Airport MARC rail station. Garage parking revenues will be used to retire the COPs.

In addition in late June 2002 (fiscal 2002), MDOT entered into a $36 million transaction with the Maryland Economic Development Corporation (MEDCO). The proceeds finance the construction and acquisition of a new MDOT headquarters building. Capital leases are considered tax-supported debt, and the CDAC's analysis includes this financing.

Future Debt Issuance

In September 2003, the CDAC issued a report that included a proposed bond issuance stream for transportation debt through fiscal 2009. 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 2004 through 2009 totals $1.055 billion under the Department of Legislative Services' estimate; **Exhibit 4.6** shows projected debt issuance for each year.

Exhibit 4.6

CDAC Projected New Debt Issuance
($ in Millions)

Fiscal Year	CDAC Projected Debt Issuance
2004	$385
2005	175
2006	165
2007	125
2008	115
2009	90
Total	**$1,055**

Source: *Department of Legislative Services, Draft Transportation Trust Fund Forecast*

Since the report was issued, DLS has reviewed the fiscal 2003 Transportation Trust Fund closeout, and the Bureau of Revenue Estimates has revised its TTF revenue forecasts, both reflecting moderate increases in available transportation revenues. Consequently, MDOT will be able to maintain its planned debt issuance level and increase the capital program or maintain the size of its capital program and reduce debt issuance.

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. This 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.

As a result of the large issuances of debt during the early 1990s, annual debt service requirements have shown an average annual increase of nearly 10 percent (increasing from $35 million to $130 million) from fiscal 1989 to 2003. Due to an increase in the amount of debt issued starting in fiscal 2002 after a period of limited issuances, debt service payments in fiscal 2004 are projected to increase again to $141 million (an 8.5 percent increase over the fiscal 2003 payment). Based on the current MDOT forecast, debt service payments will reach a high of $176 million in fiscal year 2005; they will subsequently decline to $141 million in fiscal 2007 before increasing again to $157 million in fiscal 2009. **Exhibit 4.7** shows estimated debt service for the period fiscal 2004 through 2009.

Exhibit 4.7

Projected Transportation Debt Service
($ in Millions)

Fiscal Year	**Projected Debt Service**
2004	$141
2005	178
2006	155
2007	141
2008	144
2009	157
Total	**$916**

Source: *Department of Legislative Services, 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 October 31, 2003, the remaining net principal balance on the 14th Series bonds totaled approximately $3.155 million. These issues will be retired in November 2006.

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.**

Capital Leases

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 the 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 the Board of Public Works after they have been reviewed by the budget committees. Since the Board of Public Works 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.

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 the Board of Public Works. CDAC has projected $75 million annually for capital leases for equipment and energy projects. Traditionally, the State assumed $35 million annually. This was increased to $50 million last year. The additional debt is anticipated due to the economic downturn and a need for greater reliance on financing mechanisms. Insofar as this suggests a conservative forecasting approach, the DLS forecast reflects the new CDAC capital leasing assumptions without change. **Exhibit 4.8** shows tax-supported capital lease debt outstanding as of June 30, 2003.

Exhibit 4.8

Tax-Supported Capital Lease Debt Outstanding
As of June 30, 2003
($ in Thousands)

Maryland Economic Development Corp. – MDOT Headquarters	$36,000
Maryland Department of Transportation	57,670
St. Mary's Multi-Service Center	5,835
Towson District Court	4,370
Hyattsville Multi-Service Center	5,905
Hilton Street Facility	2,790
Calvert County Multi-Purpose Center	4,295
Prince George's County Justice Center	3,156
Baltimore City Community College Modular Surge Space Building	934
Eastern Correctional Institution Water & Wastewater Facilities	5,285
Equipment Leases	90,819
Total	**$217,059**

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

Maryland Stadium Authority

The Maryland Stadium Authority (MSA) was created in 1986 (Chapter 283 of the 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 4.9** lists the debt authorized, the amount of debt outstanding, and the amount of annual debt service required for the projects for which the MSA has been authorized to issue revenue bonds.

Exhibit 4.9

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

Project	Authorized	Outstanding as of September 1, 2003	Debt Service Fiscal 2004
Baseball and football stadiums	$235.0	$216.5	$22.3
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	0.9
Hippodrome Performing Arts Center	20.3	19.7	1.1
Camden Station	8.7	0.0	1.8
Total	**$359.5**	**$312.3**	**$32.5**

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 the Board of Public Works and notification to the Legislative Policy Committee. During the construction of the baseball and football stadiums, the Stadium Authority remained within the statutory limit of $235 million in outstanding debt; however, the Board of Public Works has on several occasions reallocated the specific statutory project limits to meet the cash-flow needs of the construction efforts. The last such reallocation took place after the 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 2004 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 the 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 2004 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 the 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 December 15, 2004. Debt service payments thereafter and continuing through June 15, 2024, will be paid from funds subject to appropriation by the State. The project is currently projected to cost $34.0 million excluding the cost of capitalized interest, issuance, and underwriting costs. Montgomery County is contributing $13.7 million for construction and another $2.25 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. Of that amount, $17.4 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 December 15, 2003. Thereafter, debt service payments averaging $1.8 million annually for the remaining 20-year term of the bonds will be 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 fiscal 2004 and increasing to approximately $825,000 by fiscal 2008, will fund a portion of the annual debt service requirement.

The estimated cost of the Hippodrome project is $60 million excluding capitalized interest expenses. Funding for the project is provided by the State, Baltimore City, Baltimore County, Stadium Authority revenue bonds, historic preservation tax credits, private contributions, and the performing arts center's operator. **Exhibit 4.10** shows a breakdown of the sources of funding for the Hippodrome project.

Exhibit 4.10

Hippodrome Performing Arts Center Funding Sources

Sources	**$ in Millions**
State General Fund PAYGO	$16.5
Maryland Stadium Authority Revenue Bonds	17.4
City of Baltimore	6.0
Private Contributions	6.9
Theatre Operator Contribution	8.0
Historic Tax Credits	5.2
Total	**$60.0**

Source: Maryland Stadium Authority: Hippodrome Project – Financing Plan for the Maryland Stadium Authority Series 2002 Taxable Bonds – May 17, 2002

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 the Board of Public Works (BPW) and Legislative Policy Committee (LPC). During the January 14, 2003 meeting of the LPC, the Authority provided the committee with a proposal to renovate Camden Station to accommodate the Babe Ruth Museum and an undetermined commercial tenant.

To finance the project, the authority proposed the use of $8.73 million in 20-year taxable lease revenue bonds. The financing includes capitalization of the first two years of debt service during the construction phase of the project. According the Authority's financing plan for the project, the annual debt service on the 20-year bonds is estimated to be $765,000 and annual operating costs are projected at $300,000. When fully leased, revenues are projected at approximately $935,000 and increasing at 3 percent per annum. Based on these projections the project is expected to achieve positive cash flow within six years of completion. The Authority anticipates a two-year construction schedule that would likely begin in the winter of 2003 immediately following the issuance of the bonds. The BPW formally approved the bond issuance at its October 15, 2003, meeting.

The Authority's cost estimate for the renovation project, excluding capitalized interest and the bond issuance costs, is approximately $8.5 million. **Exhibit 4.11** provides a breakdown of the project costs

Exhibit 4.11

Cost Estimate for Renovation of Camden Station

Interior core and shell	$ 6,294,920
Historical restoration	382,667
Commercial office fit-out	480,000
Escalation at 6%	429,455
Architectural and Engineering fee at 8%	682,833
Maryland Stadium Authority fee	150,000
Reimbursables	50,000
Total	**$ 8,469,875**

Source: Maryland Stadium Authority

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 proviso that funding be provided entirely by the agency or local government requesting assistance unless funding is specifically provided in the budget for the project. **Exhibit 4.12** lists the projects for which the authority is currently authorized to provide assistance but is not authorized to issue revenue bonds.

Exhibit 4.12

State Agency and Local Government Projects
Receiving Maryland Stadium Authority Assistance

Charles County - Minor League Baseball Stadium
Special Olympics of Maryland & Anne Arundel County – Headquarters and Training Facility
Maryland Economic Development Corporation – Leonardtown Golf Course

Source: Department of Legislative Services

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 make up one half of the affordability calculations. Changes in these factors can have a profound effect.

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 predicting higher personal income than CDAC beginning in fiscal 2005. In fiscal 2003 and 2004, DLS is projecting slower growth. While DLS is projecting a mild recovery in 2003 and 2004, it appears as though the recovery began later than previously projected, which leads to slower growth in the short-term.

Exhibit 5.1

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

Calendar Year	DLS Personal Income	% Change	CDAC Personal Income	% Change	Difference
2002	$197,156	3.8%	$200,595	5.8%	($3,439)
2003	204,987	4.0%	207,389	3.4%	(2,402)
2004	214,214	4.5%	214,780	3.6%	(566)
2005	224,697	4.9%	224,087	4.3%	610
2006	236,406	5.2%	233,659	4.3%	2,747
2007	249,272	5.4%	243,312	4.1%	5,960
2008	262,861	5.5%	253,207	4.1%	9,654
2009	277,169	5.4%	263,324	4.0%	13,845

Source: DLS: 2002 Bureau of Economic Analysis, U.S. Department of Commerce
2003 - 2009 Department of Legislative Services
CDAC: CDAC report, September 2003

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 2009. DLS's revenue projections are lower than those of the CDAC in fiscal 2005 and 2006. Revenue levels are factored into the debt service criterion. Higher revenues result in lower ratios of debt service to revenues. Conversely, when revenue growth is slow, higher debt service to revenue ratios occur.

Exhibit 5.2

Revenue History and Projections
($ in Millions)

Fiscal Year	General Fund	Property Taxes	Use of Premium	Trans.	Stadium Related	Total DLS Revenues	CDAC Revenues	DLS less CDAC
2003	$9,410	$283	$31	$1,752	$24	$11,499	$11,350	$149
2004	10,018	466	88	1,814	24	12,410	12,324	86
2005	10,316	473	54	1,846	25	12,714	12,785	(71)
2006	10,898	616	0	1,846	25	13,384	13,413	(29)
2007	11,444	654	0	1,850	25	13,973	13,899	74
2008	12,034	686	0	1,875	25	14,620	14,438	182
2009	12,633	727	0	1,905	25	15,290	15,055	235

General Fund:	DLS October report to the Spending Affordability Committee
Property Tax:	CDAC Report, September 2003
Use of Premium:	Department of Budget and Management
Transportation:	Department of Legislative Services
Stadium:	Maryland Stadium Authority
CDAC:	CDAC Report, September 2003

Affordability Analysis

Exhibits 5.3 and 5.4 incorporate the general obligation debt limit recommended by the CDAC, the DLS estimated debt levels for transportation, capital leases, and the 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 from 2.62 percent in fiscal 2003 to 2.93 percent in fiscal 2004 then declines to 2.67 percent by fiscal 2009.

Exhibit 5.4 shows that 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 increases from 6.05 percent in fiscal 2003 to 6.45 percent in fiscal 2005 then declines to 6.07 percent by fiscal 2008. These ratios, as in past forecasts, are well below the 8 percent affordability criteria.

Exhibit 5.3
State Tax-Supported Debt Outstanding
Components and Relationship to Personal Income
($ in Thousands)

Fiscal Year	General Obligation (a)(b)	Department of Transportation (c) Consolidated (d)	County	Total	Capital Leases	Stadium Authority	Tax-Supported Debt	Fiscal Year
		State Tax-Supported Debt Outstanding ($ in Thousands)						
1999	3,500,238	749,130	5,050	754,180	73,735	305,460	4,633,613	1999
2000	3,348,872	724,770	4,460	729,230	184,939	300,660	4,563,701	2000
2001	3,450,900	648,050	3,830	651,880	198,723	293,520	4,595,023	2001
2002	3,544,178	714,150	3,155	717,305	212,703	285,975	4,760,161	2002
2003	3,932,493	961,245	2,440	963,685	180,702	288,245	5,365,125	2003
2004(e)	4,302,278	1,252,250	1,675	1,253,925	217,059	508,083	6,281,345	2004
2005	4,577,953	1,311,000	865	1,311,865	186,771	477,783	6,554,372	2005
2006	4,789,128	1,385,000	0	1,385,000	177,414	446,636	6,798,178	2006
2007	4,971,932	1,441,000	0	1,441,000	174,899	415,502	7,003,333	2007
2008	5,161,488	1,482,000	0	1,482,000	172,635	384,232	7,200,355	2008
2009	5,399,716	1,487,000	0	1,487,000	170,231	353,552	7,410,499	2009
		State Tax Supported Debt Outstanding as a Percent of Personal Income (Affordability Criteria = 3.2%)						
1999	2.09	0.45	0.00	0.45	0.04	0.18	2.77	1999
2000	1.85	0.40	0.00	0.40	0.10	0.17	2.53	2000
2001	1.82	0.34	0.00	0.34	0.10	0.15	2.42	2001
2002	1.77	0.36	0.00	0.36	0.11	0.14	2.37	2002
2003	1.92	0.47	0.00	0.47	0.09	0.14	2.62	2003
2004	2.01	0.58	0.00	0.59	0.10	0.24	2.93	2004
2005	2.04	0.58	0.00	0.58	0.08	0.21	2.92	2005
2006	2.03	0.59	0.00	0.59	0.08	0.19	2.88	2006
2007	1.99	0.58	0.00	0.58	0.07	0.17	2.81	2007
2008	1.96	0.56	0.00	0.56	0.07	0.15	2.74	2008
2009	1.95	0.54	0.00	0.54	0.06	0.13	2.67	2009

(a) Reflects presumed new authorizations as follows:

General Assembly Session	2004	2005	2006	2007	2008	2009
For Fiscal Year	2005	2006	2007	2008	2009	2010
($ in Millions)	$650	$665	$680	$695	$710	$630

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

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

(d) 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. 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 through the Transportation Authority during fiscal 1999 and 2000 in the amount of $20 million to be repaid in annual payments of $1,674,000 including interest over a 20 year period.

(e) Assumptions: ($ in Millions)	2004	2005	2006	2007	2008	2009
GO issues	700	623	597	596	620	695
MDOT issues	385	175	165	125	115	90
Stadium Authority issues	9	0	0	0	0	0
Capital Leases - Equipment & EPC	96	75	75	75	75	75
Real Property	0	0	0	0	0	0
Personal Income ($ in Billions)	214.2	224.7	236.4	249.3	262.9	277.2

Exhibit 5.4

State Tax-Supported Debt Service
Components and Relationship to Revenues
($ in Thousands)

Fiscal Year	General Obligation (a)	Department of Transportation Consolidated (b)	Department of Transportation County (c)	Capital Leases	Stadium Authority	Tax-Supported Debt Service	Fiscal Year
		State Tax Supported Debt Service ($ in Thousands)					
1999	417,900	132,910		10,452	24,573	585,835	1999
2000	417,629	135,233		17,819	24,450	595,131	2000
2001	459,358	109,674		25,138	21,211	615,381	2001
2002	470,949	113,178		34,037	25,782	643,946	2002
2003	496,870	128,694		43,833	25,762	695,159	2003
2004	536,819	141,000		51,961	30,443	760,223	2004
2005	567,485	176,000		46,120	30,300	819,905	2005
2006	617,845	155,000		31,767	31,147	835,759	2006
2007	657,145	141,000		24,062	31,134	853.341	2007
2008	688,068	144,000		24,070	31,270	887,408	2008
2009	726,943	157,000		24,449	30,680	939,072	2009
		State Tax Supported Debt Service as a Percent of Revenues (Affordability criteria = 8.0%)					
1999	4.77	9.09		0.12	100.00	5.71	1999
2000	4.41	8.62		0.19	99.80	5.38	2000
2001	4.56	6.79		0.25	83.51	5.26	2001
2002	4.81	6.81		0.35	99.93	5.61	2002
2003	5.11	7.35		0.45	109.63	6.05	2003
2004	5.08	7.77		0.49	126.32	6.13	2004
2005	5.23	9.53		0.43	122.67	6.45	2005
2006	5.37	8.40		0.28	126.10	6.24	2006
2007	5.43	7.62		0.20	126.05	6.11	2007
2008	5.41	7.68		0.19	126.60	6.07	2008
2009	5.44	8.24		0.18	124.21	6.14	2009

(a) Forecast assumes debt service on minibonds is paid at maturity and no minibond put options are exercised.
(b) Does not include the following:
(1) Annual payments of $567,280 beginning in fiscal 1999 from MDOT to the MdTA to repay the Authority's $11.9 million investment for the development of Berth 4 Seagirt Marine Terminal; and (2) Annual payments of $1,674,000 beginning in fiscal 2001 for MDOT to repay the MdTA's $20 million financing of the Masonville Auto Terminal.
(c) Repayments from counties equal or exceed debt service requirements.

The debt outstanding ratios based on DLS personal income estimates are slightly higher than those estimated by the CDAC throughout the forecast period. Differences from DLS estimates of greater debt issuance assumptions for MDOT and Stadium Authority and the inclusion of the MDOT certificates of participation as tax supported debt. **Exhibit 5.5** compares the two sets of debt outstanding ratios.

Exhibit 5.5

Comparison of Debt to Personal Income Ratios

Fiscal Year	DLS	CDAC
2004	2.93%	2.90%
2005	2.92%	2.94%
2006	2.88%	2.92%
2007	2.81%	2.85%
2008	2.74%	2.78%
2009	2.67%	2.78%

Source: Department of Legislative Services
CDAC Report, September 2003

Similarly, the debt service ratios based on the DLS baseline forecast of general fund revenues are different than those estimated by CDAC due to revenue projections and greater debt issuance assumptions. **Exhibit 5.6** compares the two sets of debt service ratios.

Exhibit 5.6

Comparison of Debt Service to Revenue Ratios

Fiscal Year	DLS	CDAC
2004	6.13%	6.17%
2005	6.45%	6.44%
2006	6.24%	6.30%
2007	6.11%	6.16%
2008	6.07%	6.15%
2009	6.14%	6.21%

Source: Department of Legislative Services
CDAC Report, September 2003

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

Chapter 6. Non-Tax Supported Debt

In addition to the five 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.

Revenue and Private Activity Bonds

Debt service on revenue bonds is generally derived from the revenue generated from facilities built with the bond proceeds. The Department of Housing and Community Development's Community Development Administration (CDA) makes housing loans with revenue bond proceeds and the mortgage payments help pay debt service. Likewise, the Maryland Transportation Authority (MdTA) constructs toll facilities with bond proceeds and the tolls collected pay off the bonds. Other State agencies issue bonds for various purposes. This agency debt is funded through private activity bonds. The Community Development Administration, the Maryland Industrial Development Financing Authority, and the Maryland Energy Finance Authority issue private activity bonds to fund projects. These bonds are subject to the unified volume cap set in federal tax law.

Debt Outstanding

Containing the amount of non-tax-supported agency debt has been a consistent concern of both the General Assembly and the Capital Debt Affordability Committee. During the 1989 session, the General Assembly passed SB 337 in an attempt to establish a measure of control over agency debt. This legislation was vetoed by the Governor who addressed the issue through the issue of Executive Order 01.01.1989.13 that established a procedure whereby the Governor set a revenue bond debt ceiling each year and allocated the debt allowance among the State agencies. The Department of Budget and Management (DBM) was tasked with administering the process and was required to submit a report annually on the amount of agency debt outstanding. During the 1997 interim, a workgroup comprised of DBM staff and staff from agencies that issue revenues bonds, met to review the provisions of the 1989 executive order and make recommendations for improvement. The workgroup recommended removing higher education institutions from the process because their levels of debt are already limited by statute. Additionally, the CDA Infrastructure Program was recommended for removal from the process because debt of that program is issued on behalf of local governments and is not a debt of the State. Finally, the workgroup recommended changes in reporting dates and notification requirements. It was decided that prior notification of issuances need be made only for issuances of $25 million or more. On February 10, 1998, the Governor instituted the recommendations of the workgroup by signing Executive Order 01.01.1998.07 superceding the 1989 process.

Exhibit 6.1 summarizes the increase in debt outstanding for various categories between fiscal 1993 and 2003. A table containing debt outstanding by year for the individual agencies included in the summary is included as **Appendix 2**.

Between fiscal 1993 and 2003, GO bond and State capital lease debt outstanding has increased by 74 percent. Over the same period, agency debt subject to the Governor's issuance cap has increased $242 million, an increase of 51 percent. Most of the increase is attributable to the recent issuance activity by the MdTA. Agency debt that is not subject to the Governor's cap (excluding debt of the Maryland Industrial Financing Authority for which debt outstanding figures for years prior to 1997 is unavailable) has grown by over $1.6 billion, an increase of 55 percent. Similarly, authorities/corporations without caps debt increased by $2.6 billion, a 124 percent increase.

Exhibit 6.1
Debt Outstanding as of June 30
($ in Millions)

	1993	2003	% Change
Agency debt subject to issuance cap	$475	$717	51%
Agency debt not subject to issuance cap	2,861	4,114	44%
General obligation & State lease debt	2,390	4,150	74%
Transportation debt	960	961	0%
Authorities and Corporations without caps	2,065	6,103	196%
Total	**$8,751**	**$16,045**	**83%**

Source: CDAC Report 2002 and Department of Budget and Management

Growth in Debt Burden

In recent years, State agencies' debt burden has increased substantially. Since 1990, non-tax supported debt outstanding grew from $3.9 to $10.1 billion, an increase of over 160 percent. The period of greatest growth in non-tax supported debt occurred between fiscal 1998 and 2003 − **Exhibit 6.2** shows debt outstanding increased over 50 percent from $6.7 billion to almost $10.1 billion. This growth in debt exceeds growth in personal income, the measure that the State uses to evaluate the affordability of tax-supported debt. From 1998 to 2003, personnel income increased 35 percent.

Most of the growth is attributable to the increased issuance activity for the Maryland Health and Higher Education Facilities Authority and the Maryland Economic Development Corporation (MEDCO). Also, during this period, both MEDCO and the Maryland Energy Financing Administration ($156 million) have reported instances of defaults, where the issued debt will not be paid off as assumed. Recently, transportation has also played an increasing role in the growth of debt outstanding. In fiscal 2003, $224 million in MEDCO revenue bonds were issued to support the development of Baltimore/Washington International Airport (BWI). By June 30, 2003, non-taxable debt supporting BWI totaled $663 million.

Exhibit 6.2
Agency Debt Outstanding[1]
($ in Millions)

Agency	FY 1998	FY 2003	Difference	% Increase
Environmental Service	$31.0	$33.7	$2.7	8.6%
Food Center Authority	7.0	0	(7.0)	-100.0%
Transportation Authority	374.9	575.6	200.7	53.5%
Water Quality Financing Admin.	151.3	107.8	(43.5)	-28.8%
Dept. of Housing & Comm. Dev. Admin.	2,453.2	2,672.8	219.6	9.0%
Industrial Dev. Financing Authority [2]	632.6	533.3	(99.3)	-15.7%
Dept. of Trans. Certificates of Participation	17.7	57.7	40.0	226.0%
Economic Development Corp.	227.7	1,483.9	1,256.2	551.7%
Health and Higher Education Facility Auth.	2,821.0	4,619.5	1,798.5	63.8%
Total	**$6,698.8**	**$10,084.3**	**$3,385.5**	**50.5%**

[1] Excludes higher education institution debt discussed later in this chapter.
[2] Legislation effective January 2002 abolished the Maryland Energy Financing Administration. The outstanding debt is now reflected under Maryland Industrial Development Financing Authority.

Although agency debt is not considered an obligation of the State, the Capital Debt Affordability Committee noted in its 1988 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)

Additionally, increased revenue debt is felt by the citizens of Maryland in the form of higher fees and tuition at State colleges and universities, and as higher utility and other service fees.

In November 1994, the Legislative Auditor issued a report on State-created entities that issue revenue bonds. The report stated that there were no indications of problems regarding either debt service coverage ratios or bond ratings, but that periodic review of this debt was advisable.

In December 1996, Moody's Investor Services placed under review for possible downgrade Multiple-Family Housing Revenue Bonds issued by the Maryland Community Development Administration under its 1982 parity indenture. Moody's also indicated its intent to expedite its review of CDA's single-family housing bonds. Moody's concerns were prompted by its review of audited statements of the Maryland Housing Fund (MHF) which insures a portion of the loans financed with proceeds of CDA housing revenue bonds. Moody's questioned the adequacy of the MHF insurance reserves given increased expenses related to provision for possible insurance and loan losses. The Department of Housing and Community Development moved swiftly to address Moody's concerns. The department restructured the single-family housing program so that the bonds will no longer rely on the MHF. A new multi-family bond indenture that does not rely on the MHF had already been created in November 1996. These actions along with other changes in the management of the MHF and bond programs led Moody's to reaffirm the AA ratings for both the multi-family and single-family housing bonds. This experience highlights the importance of continual review of agency debt activities.

In November 2002, DBM submitted a report cataloging agency debt entitled *Debt Issued by Maryland State Agencies and Independent Authorities, Fiscal 2002*. This annual report is an appropriate first step the State should take when evaluating agency debt. However, CDAC has not developed any criteria for evaluating the risks to the State of this ever-increasing, agency debt. **DLS notes that this was the first year the CDAC examined non-tax supported debt in the course of its work, and recommends that the process be formalized and made more rigorous in the future.**

Debt Service on Academic and Auxiliary Revenue Bonds

Chapter 93 of the Acts of 1989 gave Morgan State University, St. Mary's College, and The University System of Maryland (USM) the authority to issue bonds for academic and auxiliary facilities. Chapter 208 of the Acts of 1992 granted Baltimore City Community College the authority to issue bonds for auxiliary facilities only. Academic facilities are primarily used for instruction of students. Auxiliary facilities are those that produce income from fees charged for the use of the facility. A residential dormitory is an example of an auxiliary facility. Debt service on auxiliary and academic debt may be paid from auxiliary and academic fees, a State appropriation expressly authorized for that purpose, or revenues from contracts, gifts, or grants.

The statute specifies that academic facilities must be expressly approved by an act of the General Assembly that determines both the project and bond issue amount. Each year the University System of Maryland introduces legislation entitled Academic Facilities Bonding Authority that lists the specific academic projects that require authorization. This legislation may also increase the University System of Maryland (USM) total debt limit when warranted. The USM debt limit is $975 million, the Morgan State University limit is $77 million, the St. Mary's College limit is $45 million, and the Baltimore City Community College limit is $15 million.

In 1995 the USM Board of Regents adopted a debt capacity policy recommended by consultants that limits the percentage of unrestricted funds and mandatory transfers used for debt service to 5.5 percent. In 2001, a new debt capacity study was conducted that reaffirmed the maximum annual debt service to 5.5 percent of unrestricted current fund expenditures and mandatory transfers. Including debt issued in fiscal 2004, total debt service will be approximately $98 million, or 4.4 percent of that total. The percentage of unrestricted funds used for debt service is below the recommended limit, and the forecast does not indicate that the system will reach the recommended limit in the next five years. Fiscal 2004 represents the highest percentage forecast through fiscal 2009. The policy is currently factored favorably into rating agency assessment of the system's debt, however, the system will begin reconsideration of this policy over winter 2003-2004.

For fiscal 2005 through 2009, the USM is projecting academic and auxiliary debt issuances of $51-71 million, the highest in fiscal 2006. Auxiliary debt will make up approximately 48 percent of total issuances. **Exhibit 6.3** provides a summary of the University System of Maryland academic and auxiliary debt profile from fiscal 2000 to 2004.

Exhibit 6.3

Summary of Academic and Auxiliary Debt for the University System of Maryland ($ in Millions)

Fiscal Year	Type of Debt	Outstanding	Debt Service	Debt Service to Unrestricted Funds and Mandatory Transfers [1]
2000	Academic	$314.7	$27.1	3.54%
	Auxiliary	393.4	28.5	
2001	Academic	305.0	29.3	3.39%
	Auxiliary	464.3	32.0	
2002	Academic	387.2	30.2	3.53%
	Auxiliary	540.3	39.8	
2003	Academic	319.3	30.9	3.74%
	Auxiliary	591.5	45.3	
2004	Academic	342.8	35.3	4.19%
	Auxiliary	634.0	55.1	
2005	Academic	354.9	38.7	4.39%
	Auxiliary	619.2	59.8	
2006	Academic	387.9	41.7	4.35%
	Auxiliary	596.8	59.9	
2007	Academic	390.7	43.9	4.32%
	Auxiliary	579.1	61.3	
2008	Academic	409.1	46.6	4.27%
	Auxiliary	551.0	61.7	
2009	Academic	400.2	48.0	4.22%
	Auxiliary	538.5	63.3	

[1] Includes debt service for both academic and auxiliary debt. The USM Board of Regents has adopted a policy that this ratio should be less than 5.5.

Source: University System of Maryland, October 2003

St. Mary's College exceeded the 5.5 percent debt ratio in fiscal 2002 in order to build more residential buildings to house their increasing enrollment. General fund reductions in fiscal 2003 and 2004 lowered the total against which debt service is measured. Currently St. Mary's College has a 6 percent ratio of debt to unrestricted expenditures and mandatory transfers. The debt ratio is expected to reach its high at 6.43 percent in fiscal 2005 and decline to 5.5 percent by fiscal 2009. The extra residence hall is currently full, and since the debt for the building will be paid out of auxiliary revenues, exceeding the ratio is not expected to hurt the College's credit rating.

Chapter 7. Market Analysis

This section deals with the market for Maryland's securities, and in particular, how Maryland's general obligation 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 2003 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 ten-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 7.1** 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 slightly above the Delphis AAA scale with the exception of the July 2002 sale. 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 ten-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 ten years, thus, the ten-year bond index is used.

Exhibit 7.1

Interest Rates on Maryland Bonds Compared with the Delphis Hanover Ten-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%

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

Source: Department of Legislative Services and Delphis Hanover

Chapter 8. Issues

This section discusses issues related to Maryland debt and debt management. The issues are:

- the Capital Debt Affordability Committee's (CDAC) recommended increasing bond sale authorizations by $475 million over five years. The issue examines the effect of the recommendation on debt affordability and out-year debt service costs;

- the State has received substantial bond sale premiums in recent years. **It is recommended that the State begin to estimate bond sale premiums when preparing the debt service and Annuity Bond Fund (ABF) forecast**;

- the fiscal 2004 budget does not include any general funds for debt service. Instead, property taxes support the entire debt service. The issue analyzes the tradeoffs between using general funds and property taxes for debt service;

- legislation enacted in 2003 allows the State to use bond sale premiums to support the capital program. The issue examines the implications of the use of bond sale premiums for capital projects. **It is recommended that the Spending Affordability Committee limit the use of bond sale premiums to support debt service or reduce general obligation (GO) bond issuances**;

- CDAC has indicated that the State may issue taxable bonds to support the capital program. The issue examines the costs associated with issuing taxable bonds; and

- DLS is concerned that CDAC does not adequately examine higher education debt. **It is recommended that, in addition to evaluating debt service, CDAC also evaluate higher education debt outstanding.**

Capital Debt Affordability Committee Debt Recommendation to Increase Debt Authorization

The CDAC has recommended that the GO debt limit be increased to $650 million for the 2004 session. In its September 2002 report, the committee indicated that after two years of authorization in excess of $700 million, future authorizations would revert to their former levels. This would have meant a $555 million authorization for the 2004 session. The committee also recommended a limit of $33.1 million for academic revenue bonds at the University of Maryland.

The CDAC is a statutory body consisting of the Treasurer, the Comptroller, the Secretary of Budget and Management, the Secretary of Transportation, and a public member appointed by the Governor. Section 8 of the State Finance and Procurement Article requires that the committee review State debt and recommend to the General Assembly and Governor the amount of debt that prudently may be authorized in the upcoming legislative session. The committee's recommendation is not legally binding, but as a matter of custom, the Governor has abided by the limit in the past.

The committee uses two fiscal benchmarks in setting the debt limit. The first is that the aggregate amount of tax-supported debt (which includes transportation and stadium issues as well as capital leases) should not exceed 3.2 percent of personal income. The second is that the tax-supported debt service should not exceed 8 percent of tax revenues. These ratios are examined over a six-year planning period

At CDAC meetings concerns were expressed that the level of debt proposed by CDAC last year was insufficient to meet the State's needs. It was noted that spending pressures, such as prior commitments and the administration's priorities, exceed the resources available for the capital program. To meet these needs, the committee recommended to increase the amount of GO debt authorized by $95 million annually from fiscal 2005 to 2009. Actual debt levels may be $5 million greater than the limit because bonds in that amount were authorized in the 2001 session to fund the tobacco buy-out program. The buy-out funding legislation stipulated that that amount be in addition to the debt affordability limit.

Exhibit 8.1 compares the levels and ratios reported for debt outstanding and debt service for both the 2002 and 2003 *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*. In both cases, the State is well within the debt limits. **Exhibit 8.2** shows that increasing the authorization results in additional debt service payments beginning in fiscal 2006.

Exhibit 8.1
Comparison of 2002 and 2003 Recommendations
($ in Millions)

	2002 Debt Levels Analyzed Under Current Financial Conditions					2003 Recommendation				
Fiscal Year	New GO Auth.	Debt Out-standing	Debt/ P. I.	Debt Service	Debt Serv/ Tax Rev	New GO Auth.	Debt Out-standing	Debt/ P. I.	Debt Service	Debt Serv/ Tax Rev
2005	555	6,561	2.93%	822	6.43%	650	6,590	2.94%	822	6.43%
2006	570	6,744	2.89%	838	6.25%	665	6,827	2.92%	840	6.26%
2007	585	6,776	2.78%	845	6.08%	680	6,931	2.85%	850	6.12%
2008	600	6,796	2.68%	875	6.06%	695	7,035	2.78%	886	6.13%
2009	615	6,972	2.65%	917	6.09%	710	7,302	2.77%	936	6.22%

Note: Debt Outstanding is end of year debt.

Exhibit 8.2

General Obligation Bond Debt Service Requirements
2002 Recommendation Compared to 2003 Recommendation
($ in Millions)

Fiscal Year	2002 Recom. Debt Service	2003 Recom. Debt Service	Annual Additional Debt Service	Cumulative Increase
2005	567.5	567.5	0.0	0.0
2006	615.8	617.8	2.1	2.1
2007	652.0	657.1	5.1	7.2
2008	677.2	688.1	10.9	18.1
2009	708.1	726.9	18.8	36.9
2010	731.1	758.5	27.4	64.3
2011	758.9	794.3	35.4	99.7
2012	780.0	822.6	42.6	142.3
2013	811.7	858.8	47.1	189.4
2014	837.9	887.7	49.8	239.2

The modest initial increase in debt service is attributable to the issuance stream and the State's policy of paying only interest in the first two years after issuing GO debt. Due to the planning requirements associated with capital budget projects, CDAC assumes that not all debt is issued the year it is authorized. For example, CDAC assumes that 31 percent is issued in the first year and 25 percent in the second year. If the additional debt service supports projects with shorter planning periods, debt will be issued sooner and increased debt service payments will be more substantial in the early years.

State Should Recognize Bond Premiums When Forecasting Revenues and Debt Service

GO bond debt service is supported by the Annuity Bond Fund (ABF) and general funds. ABF's revenue sources include property tax revenues, interest generated by fund balances, loan repayments for local bonds, and miscellaneous revenues generated from bond sales such as bond sale premiums. The purpose of the bond fund is to support debt service. If ABF revenues are insufficient to support the entire GO bond debt service, general funds are also appropriated.

Traditionally, more than 95 percent of revenues are generated from either property taxes (distributed through the ABF) or general fund appropriations. In recent years, bond sale premiums have been a substantial revenue source for the ABF. From fiscal 2001 through 2004, the State generated over $197 million in bond sale premiums. This is almost 10 percent of debt service expenditures over the same period.

In spite of the large amount of revenues generated through bond sale premiums, the State does not estimate any premiums for future bond sales. This can result in the State substantially understating revenues supporting GO bond debt service as well as overstating the need for general funds or property tax revenues to support debt service. This issue proposes that:

- bond sale premiums are a function of the amount of bonds that are sold, the interest rate on the bonds, and the prevailing market interest rate on the date of the sale;

- as such, bond sale premiums can be estimated;

- since the amount of bonds sold as well are interest rates can fluctuate, bond premium projections should be conservative; and

- the State should begin to estimate likely bond premiums when preparing operating budget forecasts.

Bond Sale Premiums Have Increased as Interest Rates Have Fallen

When bonds are sold they have a par value (cost of the bond as shown in the Official Statement) and a coupon rate (interest rate of the bond listed in the Official Statement). When the bonds are bid, the Treasurer's Office determines the value of the bonds sold and when the bonds mature. The market determines the coupon rate and the sale price of the bonds. In the current low-interest rate climate, the coupon rate has been substantially higher than the market interest rate, as measured by the True Interest Cost (TIC). If the TIC is less than a bond's coupon rate, the market tends to bid up the price of the bonds to a level that his higher than par value. The difference between the par value and the sale price of the bonds is a premium. Conversely, when the TIC is above the coupon rate, the bonds cannot sell at par value and sell for less. This difference is referred to as a discount.

Maryland has received a premium for every bond sale since 1997. Having a premium ensures that there are sufficient funds available for the capital projects being financed. Usually, the coupon rate and market rate are close and the resulting premium is limited. However, in recent years the premium has been quite large. **Exhibit 8.3** shows that since January 1, 2000, the State has sold over $2 billion in new GO bonds generating in excess of $197 million in bond premiums.

Exhibit 8.3

Bond Premiums – Fiscal 2001 to 2004
($ in Millions)

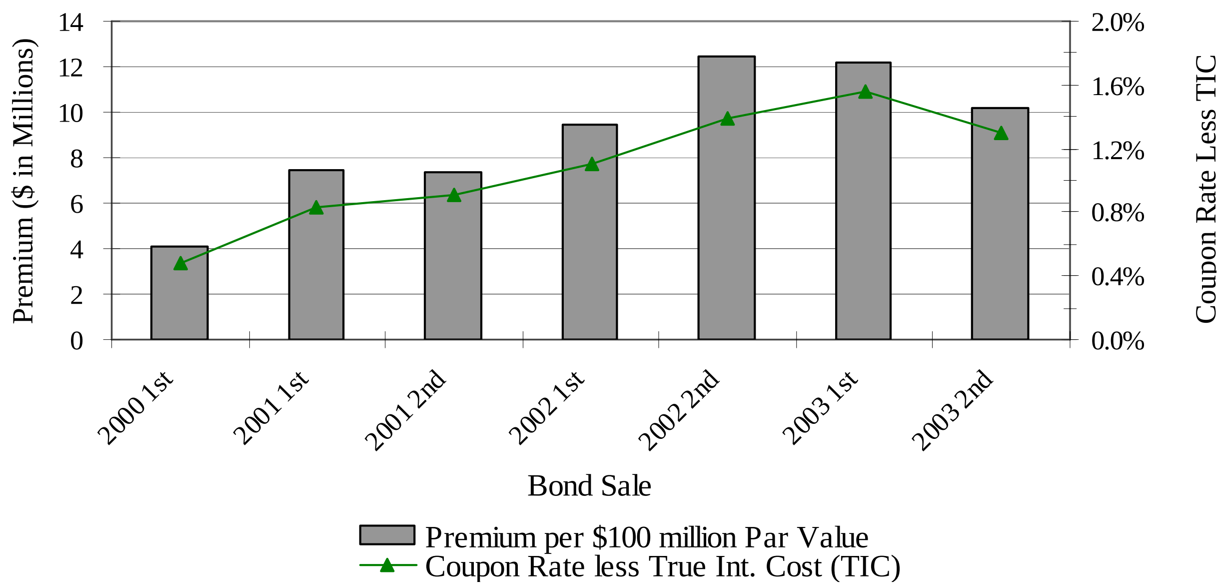
Fiscal Year	Issuance	Average Coupon Rate	True Interest Cost (TIC)	Par Value of Bonds Sold	Premium
2001	2000 1st	5.53%	5.05%	$200	$8
2001	2001 1st	5.20%	4.37%	200	15
2002	2001 2nd	5.32%	4.41%	200	15
2002	2002 1st	5.34%	4.23%	200	19
2003	2002 2nd	5.25%	3.86%	225	28
2003	2003 1st	5.25%	3.69%	500	61
2004	2003 2nd	5.00%	3.71%	500	51
Total				**$2,025**	**$197**

Source: Department of Budget and Management, September 2003

The increases in premiums are attributable to the difference between the bonds' coupon rates and TIC. The coupon rates have declined less than market interest rates (as measured by the TIC) in recent years. **Exhibit 8.4** shows that the difference between the coupon rates and the TIC increased from about 48 basis points (coupon rate of 5.53 percent compared to a TIC of 5.05 percent) in 2001 to 156 basis points (coupon rate of 5.25 percent compared to a TIC of 3.69 percent) in early 2003. Over the same period, bond sale premiums increased from $4 million sale to $12 million per $100 million of bonds sold.

Exhibit 8.4

Differences between GO Bond's Coupon Rates and True Interest Cost Effect Premiums



Source: Department of Budget and Management, September 2003

Bond Sale Premiums Are Projected to Generate Additional Revenues

Currently, the State does not estimate any bond premiums for projected GO bond sales. The Department of Budget and Management's Annuity Bond Fund estimate assumes only general fund and/or property tax proceeds, as well as approximately $3 million in miscellaneous fees such as interest and local bond loan repayments. The estimate does not assume any premiums even though substantial premiums have been received in recent years. Due to the relationship between market interest rates, coupon rates, and bond premiums, a financial model can be developed that can estimate bond premiums. However, the volatile nature of interest rates suggests that including premium projections is not without risks.

Exhibit 8.5 shows that the Department of Legislative Services (DLS) estimates that the remaining bond sales in fiscal 2004 and 2005 should generate $28.5 million in bond sales premiums. DLS' model assumes that the State will sell a total of $825 million in GO bonds at a coupon rate of 5.00 percent. It is also assumed that interest rates will fluctuate between 4.25 and 4.75 percent. As mentioned earlier, a rise in interest tends to reduce the premium. The February 2005 premium is projected to be almost half as much as the February 2004 premium even though an additional $125 million in bonds are sold in 2005. This is due to a 50 basis point increase in interest rates (from 4.25 to 4.75 percent). Conversely, increasing the coupon rate would increase the premium generated from bond sales. If the coupon rate is increased to 5.25 percent for the next three bond sales, the estimated premium is $44.3 million. However, raising the coupon rate is not without costs since higher coupon rates mean higher debt services for the 15 years it takes the bonds to mature. Raising the coupon rate 25 basis points, to 5.25 percent, results in over $29 million in increased debt service costs.

Exhibit 8.5

Projected Bond Sale Premiums
($ in Millions)

Fiscal Year	Bond Sale	Par Value of Bonds[1]	Coupon Rate[2]	TIC[1]	Premium
2004	February-04	200.0	5.00%	4.25%	11.4
2005	July-04	300.0	5.00%	4.50%	11.2
2005	February-05	325.0	5.00%	4.75%	5.9
	Total	**825.0**			**28.5**

[1] Based on bond sales and interest rates in the *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*, September 2003.
[2] Coupon rate on July 2003 GO bond sale is assumed.

In the out-years, DLS projects that bond sale premiums will be $4 to $5 million annually. The reduction in bond sale premiums is attributable to increased interest rates, which CDAC projects will increase to 5 percent in fiscal 2006. This eliminates the large spread between market rates and coupon rates that is the source of the bond sale premiums. As in the late 1990s it is still likely that there will be premiums, albeit much smaller premiums.

A concern with estimating premiums is that a sudden sharp increase in interest rates could substantially reduce premiums. If rates rise to 5 percent before the next bond sale, the State’s premium would be substantially reduced. A second concern is that bond sales amounts can vary from what was projected by CDAC. When issuing bonds, the Treasurer’s Office attempts sell sufficient amounts of bonds to fund all capital projects that will need funding until the next bond sale. Ideally, the State should avoid issuing too many bonds since this could result in a large fund balance in the account and excessive interest payments in the out-years. If project cash flows are different than was projected, bond issuances should be changed. For example, in its 2002 report, CDAC projected that bond sales would total $800 million in calendar 2003. Instead bond sales were $1,000 million, which is $200 million more than projected. If the next three bond sales are less than projected and interest rates are consistent with the CDAC estimates, the premium is likely to decline. For example, reducing the next three bond sales by a total of $200 million, DLS estimates that bond sale premiums would be $9.6 million less than projected.

Taken together, changes in interest rates and changes in the amount of bonds sold can lead to substantial changes in estimated premiums. In recent years, declining interest rates coupled with increased bond sales have resulted in large bond sale premiums. If the trend were to reverse so that bond sale amounts shrink and interest rates rise, premiums could decline. An aggressive premium estimate under these circumstances could require the State to find other sources to fund debt service payments during the fiscal year.

Cautiously Estimating Bond Premiums Is Recommended

It is recommended that the State estimate bond sale premiums. Based on bond sale data in the September 2003 CDAC report, DLS is projecting $28.5 million in bond sale premium in fiscal 2004 and 2005. In the out-years, bond sales should generate $4 to $5 million in bond sale premiums. DLS' long-term financial forecast reflects these estimates. Due to the volatile nature of financial markets, the forecast is quite conservative. The forecast assumes increasing interest rates, decreasing bond sales, and low coupon rates on the bonds.

How to Pay for Debt Service? Property Taxes or General Funds

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

Until fiscal 2003, property taxes remained unchanged at $0.084 per $100 of assessable base. At this level, property taxes supported approximately 55 to 60 percent of debt service costs. Any bond sale premiums generated increased the fund balance. In subsequent years these accumulated fund balances were reduced by appropriating the funds for debt service payments, which reduced the general fund requirement. Since property taxes, bond sale premiums, and other revenues were insufficient to pay the entire debt service amount, general funds were appropriated to support the remaining debt service costs. **Exhibit 8.6** shows that general funds ranged from $152 to $204 million from fiscal 1999 to 2003.

Exhibit 8.6

Annuity Bond Fund Activity
($ in Millions)

Revenues	**1999**	**2000**	**2001**	**2002**	**2003**
Property Tax Revenues	$246.9	$250.8	$257.1	$270.0	$283.8
General Funds	151.8	189.3	204.3	203.6	180.4
Bond Sale Premium	6.3	5.2	5.5	18.4	30.5
Other Revenues	27.4	22.1	14.1	17.4	22.5
Total Revenues	**$432.4**	**$467.4**	**$481.0**	**$509.4**	**$517.2**
Debt Service Expenditures	**$417.7**	**$459.2**	**$470.9**	**$495.2**	**$496.9**
End of Year Fund Balance	14.7	8.2	10.2	14.1	20.3

Source: Department of Budget and Management, September 2003

The State did not appropriate general funds for ABF in the fiscal 2004 budget. Consequently, the Board of Public Works (BPW) increased the 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). With respect to the fiscal 2005 budget, the State could:

- exclude the use of general funds to support debt service and continue relying primarily on property taxes and bond sale premiums as in fiscal 2004; or

- appropriate general funds into ABF and reduce property tax rates to pre-fiscal 2004 levels.

Rely on Property Taxes to Support Debt Service Costs

Excluding general fund appropriations from the ABF in fiscal 2005 would continue a policy first adopted in fiscal 2004. If this policy is adopted, the BPW is faced with two choices:

- attempt to minimize annual property tax rates by adjusting the rates each year; or

- attempt to minimize the number of changes to property tax rates over a period of years.

If the BPW were to minimize the property taxes, the rates would need to be adjusted each year. **Exhibit 8.7** shows that BPW could lower property taxes to $0.123 per $100 of assessable base in fiscal 2005 but would need to increase the rate to $0.143 per $100 of assessable base in fiscal 2006. In the short term, recent bond sale premiums provide some additional revenues and keep property tax rates somewhat lower. However, interest rates are expected to rise in the out-years, reducing the spread between market rates and coupon rates resulting in smaller bond sale premiums. In the long run, revenues do not keep up with expenditures without increases in the property tax rate.

Exhibit 8.7

Revenues Supporting GO Bond Debt Service
Minimize Property Tax Rates and General Fund Support
($ in Millions)

	2004	2005	2006	2007	2008	2009
Property Tax Receipts	$472	$468	$583	$650	$682	$723
Bond Premium from Prior Years	88	54	0	0	0	0
DLS Premium Estimate for Out-Years	11	17	5	4	4	4
Other Revenues/Prior Year Balance	21	60	35	7	7	7
Total Special Fund (ABF) Revenues Available	**$593**	**$599**	**$622**	**$662**	**$693**	**$734**
ABF Fund Balance Transferred to Next Year	56	32	4	4	4	6
Subtotal Special fund Appropriation	$537	$567	$618	$657	$689	$728
General Fund Appropriations	0	0	0	0	0	0
Total Appropriations for Debt Service	**$537**	**$567**	**$618**	**$657**	**$689**	**$728**
Property Tax Rate per $100 of Assessable Base	0.1320	0.1230	0.1430	0.1490	0.1480	0.1510

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

The State could also attempt to keep property tax rates constant over a period of years. **Exhibit 8.8** shows that the State could maintain property tax rates at the current level, $0.132 per $100 of assessable base, through fiscal 2006. Based on current estimates, fiscal 2006 would have a $6 to $8 million shortfall. It is possible to delay property tax rate increases because the high levels of bond sale premiums that would accrue. As the premiums become smaller in fiscal 2007, property taxes are no longer sufficient to support the growth in debt service, and the rates would need to be increased to $0.15 per $100 of assessable base, if no general funds are appropriated. By the end of fiscal 2009, the ABF would have a $12 million fund balance.

Exhibit 8.8

Revenues Supporting GO Bond Debt Service
Minimize Tax Rate Changes and General Fund Appropriations
($ in Millions)

	2004	**2005**	**2006**	**2007**	**2008**	**2009**
Property Tax Receipts	$472	$502	$539	$654	$691	$718
Bond Premium from Prior Years	88	54	0	0	0	0
DLS Premium Estimate for Out-Years	11	17	5	4	4	4
Other Revenues/Prior Year Balance	21	60	68	5	9	18
Total Special Fund (ABF) Revenues Available	**$593**	**$633**	**$612**	**$663**	**$704**	**$740**
ABF Fund Balance Transferred to Next Year	56	65	2	6	15	12
Subtotal Special fund Appropriation	$537	$567	$610	$657	$689	$728
General Fund Appropriations	0	0	8	0	0	0
Total Appropriations for Debt Service	**$537**	**$567**	**$618**	**$657**	**$689**	**$728**
Property Tax Rate per $100 of Assessable Base	0.1320	0.1320	0.1320	0.1500	0.1500	0.1500

Note: Other revenues includes fund balance transfer from the previous year.

Source of Property Taxes and Bond Premiums for Prior Years is the Department of Budget and Management

Appropriate General Funds and Reduce Property Taxes

The State could also adopt the policies that were in place prior to fiscal 2004. This would result in reducing the property tax rate back to $0.084 per $100 of assessable base and using general funds to subsidize any shortfall in the Annuity Bond Fund. **Exhibit 8.9** shows that reducing the property tax rate requires a $118 million appropriation in fiscal 2005, assuming $28.5 million in additional bond sale premiums in fiscal 2004 and 2005. The general fund requirements are relatively low in fiscal 2005 because of the availability of previous year's bond sale premiums. In fiscal 2006 the general fund appropriation increases to $268 million because the ABF fund balance was drawn down in fiscal 2005.

Exhibit 8.9

Revenues Supporting GO Bond Debt Service
Property Tax Rates Returned to Fiscal 2003 Level of $0.084 per $100 of Assessable Base
($ in Millions)

	2004	2005	2006	2007	2008	2009
Property Tax Receipts	$472	$321	$344	$367	$388	$402
Bond Premium from Prior Years	88	54	0	0	0	0
DLS Premium Estimate for Out-Years	11	17	5	4	4	4
Other Revenues/Prior Year Balance	21	60	5	5	5	5
Total Special Fund (ABF) Revenues Available	**$593**	**$452**	**$353**	**$376**	**$397**	**$412**
ABF Fund Balance Transferred to Next Year	56	2	2	2	2	2
Subtotal Special fund Appropriation	$537	$450	$351	$374	$395	$410
General Fund Appropriations	0	118	266	283	294	318
Total Appropriations for Debt Service	**$537**	**$567**	**$618**	**$657**	**$689**	**$728**
Property Tax Rate per $100 of Assessable Base	0.1320	0.0840	0.0840	0.0840	0.0840	0.0840

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

Bond Sale Premiums Can Support Capital Projects

Chapter 66, Acts of 2003 amended Section 8-125 of the State Finance and Procurement Article to allow the use of the funds derived from a bond sale premium to support the costs of other capital projects. As a result, the State could use bond sale premiums to support capital projects in fiscal 2005. DBM advises that fiscal 2004's projected end of year ABF balance will exceed $44 million. This amounts to $44 million in bond premiums in the account that could support capital projects.

In its report, CDAC recommended against using the bond sale premium to expand the capital program. Instead the committee recommended that bond sale premiums stabilize property taxes or fund pay as you go (PAYGO) appropriations in the place of GO debt, thus reducing the amount of debt that is authorized.

Using the bond sale premiums to stabilize property taxes could minimize the general fund subsidy required to fund debt service. Applying the $44 million available in bond sale premiums for debt service could reduce any increase necessary in property taxes by $0.01 per $100 in assessable base and not require a general fund subsidy.

Using the bond sale premiums to reduce GO bond sales reduces the debt service requirements over the 15-year life of the bonds that would have been issued. However, in the short term, the increases debt service requirements, which places additional pressure on either property taxes or the general fund.

Another concern is that bond sale premiums are projected to decline sharply in fiscal 2006, supporting the capital program with bond sale premiums does not provide the program with a permanent funding source and many programs funded would either need to be discontinued in fiscal 2006 or add to the State's structural deficit.

It is recommended that the Spending Affordability Committee (SAC) concur with the Capital Debt Affordability Committee's recommendation to limit the use of bond sale premiums to either support debt service payments or reduce GO bond issuances. Further, it is recommended that SAC recommend that the first priority for any bond sale premium revenues be to minimize general fund support for debt service through a stable property tax rate. Additional premiums may support capital projects if general obligation bond authorizations are reduced correspondingly. It is recommended that SAC preclude the use of bond sale premiums to expand the capital program.

Taxable Debt Issuances

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. 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 unclear how much taxable debt may need to be issued to maintain private activity and private use programs. If programs' expenditures are limited in the near term, the State may able manage these programs within federal limits. However, the office also notes that the demand for issuing as much as $50 million in taxable debt exists.

The Treasurer's Office's financial advisor compared the difference between 10-year taxable bonds and tax-exempt bonds issued between 1999 and 2003. On average, taxable bonds were 192 basis points higher than tax-exempt bonds. **Exhibit 8.10** shows that the interest payments on a $10 million taxable bond issuance are projected to be an average of $2 million more than the interest payments for tax-exempt debt.

Exhibit 8.10

Taxable Debt Costs vs. Tax-Free Debt Costs
Issuing $10 Million in GO Bonds
($ in Thousands)

	Tax-Free Interest Rate	Additional Interest	Total Taxable Interest	Tax-Free Interest Payments	Additional Debt Service	Total Interest Payments
2 Standard Deviations less than the Mean	5.00%	1.06%	6.06%	4.8	1.1	5.9
1 Standard Deviation less than the Mean	5.00%	1.49%	6.49%	4.8	1.6	6.4
Average	5.00%	1.92%	6.92%	4.8	2.0	6.9
1 Standard Deviation more than the Mean	5.00%	2.35%	7.35%	4.8	2.5	7.3
2 Standard Deviations more than the Mean	5.00%	2.78%	7.78%	4.8	3.0	7.8

Assumptions: 5.00 percent coupon rate, consistent with the latest bond sale (July 2003);
Average maturity of 10 years; and
$10 million bond issuance.

Source: Public Resources Advisory Group, October 2003

Because of the many factors affecting the difference between taxable and tax-exempt bonds (such as federal tax code, investors' portfolios, and years to maturity), the difference between taxable and tax-exempt interest rates can fluctuate substantially. Based on the financial advisor's survey, over 95 percent (two standard deviations) of $10 million taxable bond issuances should result in a higher interest payments ranging between $1.1 and $3 million. That is to say that 19 of 20 taxable debt issuances should cost about 11 to 30 cents more on the dollar than tax-fee debt. Similarly, about 68 percent (one standard deviation) of taxable bond sale issuances should cost about 16 to 25 cents more on the dollar.

In conclusion, the State is currently issuing tax-exempt bonds. These issuances can include a limited amount of private activity or private use bonds. The financial condition of the State has resulted in reduced paygo capital appropriations for programs supported by private activity or private use bonds. It is unclear how much need for taxable bonds there is in these programs, so it is difficult to estimate the cost of issuing taxable bonds. However, a recent survey of taxable debt issuance suggests that taxable debt is more expensive than tax-exempt. On average, this will result in paying an additional $2 million in interest costs per $10 million in bonds issued. Should the General Assembly authorize and the Treasurer sell taxable bonds, debt service costs will increase in the out-years.

Modifying Process to Evaluate Higher Education Debt Is Recommended

The Capital Debt Affordability Committee (CDAC) is charged with evaluating debt limits for State supported higher education institutions. The debt affordability process attempts to maximize debt issuance yet constrain debt to ensure that the bonds' credit ratings are not lowered. Low credit ratings can result in higher interest rates, higher debt service, and less funding for State services.

This summer, Standard and Poor's (S&P) lowered the University System of Maryland's (USM) credit outlook to negative (from stable). Credit rating agencies often lower their outlook prior to lowering credit ratings. DLS is concerned that the CDAC process does not adequately examine higher education institution debt. If the debt is not properly evaluated, CDAC could miss some key data, and the USM's credit rating could suffer.

Currently, CDAC's criterion for measuring debt is to compare debt service to unrestricted current fund expenditures and mandatory transfers. CDAC does not have a criterion for evaluating debt outstanding. The concern is that only one measure, debt service, does not adequately evaluate the affordability of higher education debt since it does not evaluate some key data.

USM advises that credit rating agencies evaluate both debt outstanding and debt service when determining a credit rating. Indeed, with State debt (e.g., GO bonds, transportation debt, Stadium Authority debt, and capital leases) CDAC evaluates both debt service and debt outstanding. In 2002, USM prepared a debt capacity study. The study notes that the system's financial advisory, Public Financial Management, Inc., recommends that the system modify its debt policy to evaluate debt outstanding. Specifically, the study notes that USM should "Maintain a ratio of Unrestricted Resources to Direct Debt of 50%."

USM has adopted its financial advisor's recommendation and evaluates debt service by comparing unrestricted net assets to debt outstanding. Debt is deemed affordable if assets are at least 50 percent of debt outstanding. According to USM, this ratio has declined from 65 percent in fiscal 2001 to 51 percent at the end of fiscal 2003. USM did not provide any data for the fiscal 2004 and 2005. Based on data available from CDAC and USM, DLS projects that the ratio will remain above 50 percent through fiscal 2005, as shown in **Exhibit 8.11**. However, these figures are preliminary so they are subject to change. The concern is that they could change substantially enough to fall below the 50 percent threshold, which could jeopardize the bond rating.

Exhibit 8.11

University System of Maryland
Unrestricted Net Assets Compared to Debt Outstanding
($ in Thousands)

Fiscal Year	Unrestricted Net Assets	Debt Outstanding	Assets as a Percent of Debt
2001	523,620	802,685	65.2%
2002	503,811	797,000	63.2%
2003	495,274	964,000	51.4%
2004	498,999*	952,204	52.4%
2005	509,039*	950,007	53.6%

*The estimates for Unrestricted Net Assets prepared by the Department of Legislative Services

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*, September 2003, and University System of Maryland, November 2003

DLS is concerned that S&P has recently downgraded USM credit outlook from stable to negative. This could lead to higher interest rates and debt service costs if USM academic and auxiliary revenue bonds credit ratings' are downgraded. **To improve the CDAC review of USM debt, it is recommended that, in addition to evaluating debt service, CDAC also evaluate USM debt outstanding. It is suggested that CDAC use the criteria currently used by USM: maintaining a ratio of unrestricted net assets to debt outstanding of at least 50 percent.**

Proposed General Obligation Authorizations and Estimated Issuances
($ in Millions)

General Assembly Session	Proposed Authorizations	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
			Estimated Issuances During Fiscal Year (a)								
2004	$650,000	$0	$201,500	$162,500	$130,000	$97,500	$58,500	$0	$0	$0	$0
2005	665,000		0	206,150	166,250	133,000	99,750	59,850			
2006	680,000			0	210,800	170,000	136,000	102,000	61,200		
2007	695,000				0	215,450	173,750	139,000	104,250	62,550	
2008	710,000					0	220,100	177,500	142,000	106,500	63,900
2009	630,000						0	195,300	157,500	126,000	94,500
2010	645,000							0	199,950	161,250	129,000
2011	660,000								0	204,600	165,000
2012	675,000									0	209,250
2013	690,000										0
2014	705,000										
2015	720,000										
2016	735,000										
2017	750,000										
2018	765,000										
2019	780,000										
Total New Authorization		**$0**	**$201,500**	**$368,650**	**$507,050**	**$615,950**	**$688,100**	**$673,650**	**$664,900**	**$660,900**	**$661,650**
Current Authorizations	1,793,377	700,000	421,950	228,550	89,150	4,500	6,900	47,900	82,900	87,900	122,900
Total Issuances (New and Current):		**$700,000**	**$623,450**	**$597,200**	**$596,200**	**$620,450**	**$695,000**	**$721,550**	**$747,800**	**$748,800**	**$784,550**

	2005	2006	2007	2008	2009
(a)Fiscal year following year of authorization	1st	2nd	3rd	4th	5th
Percent of authorization issued	31%	25%	20%	15%	9%

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

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations for Fiscal Year 2005*, September 2003.

Appendix 2

Debt Outstanding
($ in Millions)

	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY02	FY03	FY 92-03
Agency Debt Subject to Ceiling and Allocation Caps												
MD Envir. Service	27.2	27.2	29.9	34.8	33.7	31.0	34.0	29.4	34.4	36.5	33.7	24%
MD Wholesale Food Ctr. Auth.	11.0	7.3	7.2	7.2	7.1	7.0	6.9	6.8	6.7	0.0	0.0	-100%
MD Trans Authority	302.5	302.5	465.2	408.4	391.9	374.9	344.5	318.7	300.6	668.8	575.6	90%
MD Water Qual. Finan. Adm.	134.0	133.2	163.2	163.4	157.8	151.3	138.1	131.3	124.3	115.9	107.8	-20%
Revenue Cap Total	**474.7**	**470.2**	**665.5**	**613.8**	**590.5**	**564.2**	**523.5**	**486.2**	**466.0**	**821.2**	**717.1**	51%
% Change/Prior Year	16%	-1%	42%	-8%	-4%	-4%	-7%	-7%	-4%	76%	-13%	
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)	2,275.6	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	17%
Local Govt. Infra. (CDA)	39.7	42.3	48.5	55.0	62.5	66.1	81.1	85.5	87.7	91.7	105.6	166%
MD Energy Finance Admin.	48.0	44.6	202.6	300.9	307.4	306.2	301.1	388.4	379.8	0.0	0.0	-100%
MIDFA					352.3	326.4	312.3	296.0	277.6	547.4	533.3	51%
Morgan State University	27.0	28.0	28.9	29.4	29.9	27.9	27.5	27.1	26.8	33.4	72.2	167%
St. Mary's College	8.9	8.7	8.5	8.1	7.8	17.5	17.3	16.9	27.8	27.5	40.6	356%
Univ. of Maryland System	461.5	473.8	518.3	505.9	534.5	611.0	670.0	656.1	802.7	808.0	910.8	97%
Non-Cap Total	**2,860.7**	**3,054.8**	**3,253.3**	**3,240.1**	**3,598.9**	**3,415.8**	**3,570.5**	**3,801.0**	**4,016.9**	**3,992.8**	**4,114.3**	44%
% Change/Prior Year	0%	7%	6%	0%	11%	-5%	5%	6%	6%	-1%	3%	
Tax-Supported Debt												
Transportation Debt	959.8	1,020.3	1,047.5	977.6	939.4	844.0	749.1	724.8	648.1	714.2	961.2	0%
Capital Leases - BPW	110.7	140.8	125.2	115.8	98.4	90.3	149.2	148.4	197.7	245.7	217.1	96%
General Obligation Debt	2,279.4	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	73%
Tax Supported Debt Total	**3,349.9**	**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**	53%
% Change/Prior Year	5%	9%	3%	4%	-74%	305%	5%	-4%	2%	5%	13%	
Authorities and Corporations Not Subject to Ceiling and Allocation Caps												
Hlth./Higher Ed. Fcl. Ath.	2,064.9	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	124%
MD Econ. Dev. Corp.	n/a	45.0	61.0	141.0	177.0	227.7	321.1	635.4	855.6	1,077.7	1,483.9	n/a
Auth. And Corp Total	**2,064.9**	**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**	**n/a**
% Change/Prior Year	11%	9%	0%	4%	6%	13%	15%	10%	3%	17%	8%	

(a) Excludes local government infrastructure.

Source: Department of Budget and Management