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 2002

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November 2002

The Honorable Norman H. Conway, House Chairman
Spending Affordability Committee

The Honorable Barbara A. Hoffman, Senate Chairman
Spending Affordability Committee

Dear Chairman Hoffman and Chairman Conway:

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 Terri Bacote-Charles with assistance by Matthew Klein, Kathleen Gardiner, Christine A. Romans, and Theresa Tuszynski.

Respectfully submitted,

Warren G. Deschenaux
Director

WGD/jab

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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 debt limit for fiscal 2004 of $740 million in new general obligation debt authorization. The committee intends to make its final recommendation after the official December revenues estimates. The provisional debt limit is set with an increase of $220 million over the recommended debt limit for fiscal 2003. That increase includes $15 million for annual growth in the capital program, $5 million in funding for the tobacco buyout, and another $200 million to recognize the temporary anomaly created by legislative action taken in the Budget Reconciliation and Finance Act of 2002 (BRFA) and the national recession. The national recession is expected to reduce the State's general operating funds available for the capital program in fiscal 2004. The committee cited the favorable debt ratios in its discussions on increasing this year's recommendation and noted that future limits will be set close to the previously assumed levels.

The BRFA reverted $414 million in previously authorized PAYGO appropriations that were intended to be replaced primarily with general obligation bond funding. The capital bill passed by the General Assembly included an additional $200 million for that purpose. During the 2002 session, $353 million was authorized as replacement funding. Sixty million remains for PAYGO replacement in fiscal 2004 capital program and $73.5 million originally planned for fiscal 2003 was deferred to fiscal 2004.

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 $740 million debt authorization:

	G.O. Debt
State-owned Facilities	$340,000,000
Grant & Loan Programs	261,000,000
Public School Construction*	139,000,000
Total	**$740,000,000**

*The Governor also proposed $9 million in Qualified Zone Academy Bonds (QZABs) and $2.4 million in PAYGO for school construction for a total of $150 million in fiscal 2004.

The Department of Legislative Services' 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 allocated towards debt service. As more general funds are required to meet the debt service, less general funds are made available for other competing State needs.

The Department of Legislative Services agrees that the committee's provisional debt limit for the 2003 session of $740 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 2004, the University System of Maryland intends to issue up to $59.3 million in auxiliary debt and up to $32.4 million in academic debt. This level of issuance will result in a debt service ratio below the 5.5 percent recommended by the system's financial advisers. Additionally, Morgan State University for fiscal 2004 may issue new bonds for academic facilities. **The Department of Legislative Services agrees that the committee's recommended debt limit for the 2003 session of $40 million in new academic revenue bonds is affordable for the University System of Maryland and Morgan State University.**

Chapter 2. Recommendations of the Capital Debt Affordability Committee

New General Obligation Debt Authorization

- The new general obligation debt authorization at the 2003 session is provisionally set to \$740 million. This figure is \$205 million more than the prior year's anticipated level and includes \$5 million in funding for the tobacco buyout. The remaining \$200 million is in recognition of the legislative action taken in the Budget Reconciliation and Finance Act of 2002 and to provide greater flexibility in funding the planned PAYGO capital construction program for fiscal 2004 in light of the national recession. The committee cited the favorable debt ratios as the basis for increasing the recommended amount to be authorized and plans to issue its final recommendation following a review of the December revenue estimates.

- The long-range plan adopted by the CDAC depicts its intention to remove the \$200 million added to the fiscal 2004 recommended debt limit as a temporary anomaly, and return to an annual increase of \$15 million per year. That represents increases ranging from 2.70 percent in fiscal 2005 down to 2.56 percent in fiscal 2008. The following table presents the new long-range plan:

Fiscal	Debt Limit ($ in Millions)
2004	$740
2005	$555
2006	$570
2007	$585
2008	$600

Higher Education Academic Debt to Be Authorized

Limit new debt authorization for academic facilities to \$40 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 2002, pg. 38). The \$40 million recommended academic revenue bond limit is unchanged from that recommended for fiscal 2003. Of the $40 million recommended, $32.4 million is intended for projects on University System of Maryland campuses. Allocation of the remaining amount has not been determined.

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. (These criteria were reassessed in 1984 and 1988 and found to be valid measures consistent with good management of debt over time.) 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 2004 debt limit of $740 million applies only to general obligation debt. In 1989 the committee further broadened its review to include higher education academic revenue bonds. Although by law the committee must review the size and condition of this revenue debt, the recommended debt limit of up to $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 Capital Debt Affordability Committee 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 2003 through 2008, debt outstanding will reach a maximum of 2.72 percent. The committee's projections provide for a $15 million per year increase, after the removal of the additional $200 million included in fiscal 2004, in the debt limit to $615 million in fiscal 2008 and tax-supported debt outstanding totaling over $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 6.32 percent and tax-supported debt service will increase from approximately $700 million in fiscal 2003 to about $891 million in fiscal 2008.

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. The committee acknowledges, in an extensive discussion, that the current economic climate creates greater uncertainty in estimates for personal income growth. The committee, therefore, lowered its projected levels of personal income by adjusting the base year (2002) and assumed a slower growth rate in personal income for both fiscal 2003 and 2004. With an adjusted base and a slower assumed rate of growth, the committee's projected ratio of debt outstanding to personal income has risen but remains well with the affordability criteria.

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 in both fiscal 2003 and 2004 ($525 million more than anticipated in last year's report). The assumed higher issuance is due mainly to the transfer of previously authorized PAYGO capital projects into bond funding which are "ready to go" and will need the cash immediately. The higher issuance also reflects the committee's intent to possibly substitute bond funding for the fiscal 2003 or 2004 planned PAYGO capital program. Since higher issuance result in more bonds being sold, the ratio of debt outstanding to personal income will rise.

Beyond fiscal 2004, 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 sluggish economy 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, 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 (G.O.) 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 2008

Agency requests for fiscal 2004 total $888.5 million, over $148.5 million more than the amount available under the recommended general obligation bond debt limit of $740 million. The agency requests include, where applicable, those amounts deferred from fiscal 2003 to 2004. Capital requests for the next five years total nearly $4.2 billion, while the projected debt limit for the same period totals about $3.1 billion. 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.

Exhibit 4.1
G.O. Bond Requests: FY 2004 - 2008
($ in Millions)

	Fiscal Year						Category
	2004	**2005**	**2006**	**2007**	**2008**	**Total**	**Totals**
State Facilities							$545.7
Board of Public Works	$77.8	$117.0	$74.0	$71.1	$182.8	$522.7	
Military	0.0	3.5	3.2	11.9	4.4	23.0	
Health and Social Services							442.0
Health and Mental Hygiene	13.8	29.8	80.0	60.2	106.1	289.9	
University of MD Medical System	15.0	10.0	10.0	0.0	0.0	35.0	
Senior Citizen Activity Center	2.5	1.5	1.5	1.5	1.5	8.5	
Juvenile Justice	8.0	33.7	29.5	7.4	5.0	83.6	
Private Hospital Grant Program	5.0	5.0	5.0	5.0	5.0	25.0	
Environment							434.4
Natural Resources	58.0	61.0	66.0	36.0	36.0	257.0	
Agriculture	3.8	5.0	5.0	5.0	5.0	23.8	
Environment	21.3	24.6	25.4	30.4	30.4	132.1	
MD Environmental Service	4.6	4.1	3.8	4.5	4.5	21.5	
Education							607.0
Education	0.0	29.1	15.3	0.8	0.0	45.2	
MD School for the Deaf	0.0	0.8	5.2	20.5	1.1	27.6	
MD Public Broadcasting	2.0	0.0	0.0	0.7	0.5	3.2	
Public School Construction	147.6	90.6	97.6	97.6	97.6	531.0	
Higher Education							1,418.4
University System of MD*	149.4	161.6	88.2	117.1	192.0	708.3	
Baltimore City Comm. College	18.6	0.4	14.9	5.5	0.2	39.6	
St. Mary's College	22.9	14.2	0.8	27.3	4.6	69.8	
Morgan State University	66.6	52.9	39.0	42.4	56.2	257.1	
Community Colleges	48.6	69.5	61.4	83.1	29.6	292.2	
Southern MD Higher Educ. Center	0.0	0.7	9.5	0.0	0.0	10.2	
Private Facilities Grant Program	9.2	8.0	8.0	8.0	8.0	41.2	
Public Safety							391.7
Public Safety	68.9	56.2	55.2	56.1	49.6	286.0	
State Police	26.9	14.4	4.9	6.9	0.4	53.5	
Local Jails	26.3	13.7	7.2	1.6	3.4	52.2	
Housing and Economic Development							87.4
Economic Development	0.0	0.0	0.0	0.0	0.0	0.0	
Housing and Comm. Development	12.7	12.0	14.8	11.7	11.7	62.9	
Canal Place	0.0	0.0	1.4	0.0	0.0	1.4	
Historic St. Mary's City Commission	6.1	2.3	1.7	11.9	1.1	23.1	
Legislative Initiatives	30.0	15.0	15.0	15.0	15.0	90.0	90.0
Miscellaneous	42.9	29.0	27.5	25.9	15.9	141.2	141.2
Total Request	$888.5	$865.6	$771.0	$765.1	$867.6	$4,157.8	$4,157.8
Debt Affordability Limits	$740.0	$555.0	$570.0	$585.0	$600.0	$3,050.0	

* In addition to the G.O. bond request, USM has requested academic revenue bond funding for fiscal 2004 –2008 of $28 million, $54 million, $47 million, $53 million and $28 million respectively.

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

This listing reflects agency requests and will differ from the list that will appear in the Governor's fiscal 2004 *5-Year Capital Improvement Plan* (CIP).

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 table also reflects the higher issuance stream anticipated from the addition of the previously authorized PAYGO projects into the bond program. As shown below, a comparison of this year's issuance stream to last year's reveals higher issuance levels for fiscal 2003, 2004 and 2005.

Proposed Issuance Stream

	($ in Millions)	
	Last Year's Report	**Current Year's Report**
FY 2003	$400	$700
FY 2004	425	650
FY 2005	450	525
FY 2006	550	550
FY 2007	600	575
FY 2008	650	600
FY 2009	700	625
FY 2010	760	675
FY 2011	840	725
Total	**$5,375**	**$5,625**

The 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).

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. In fiscal 2003 this has risen to nearly $1.8 billion. The CDAC report assumes that $421 million and $168 million of this debt will be issued in fiscal 2004 and 2005, respectively.

Bond Refunding

The two most recent bond sales of March and July 2002, included the refinancing of prior bonds. The March 2002 bond sale included $109.9 million in refunding 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 refunding principal with $315.3 million placed into escrow (includes $24.7 million premium) to refund the prior bonds. The gross savings on this refinancing will be $17.5 million.

Likewise, the bond sales of May and October 1993 and February 1994, included the refinancing of prior bonds. The May 1993 bond sale included $147.7 million in refunding principal that was placed into escrow to refund $130.5 million in prior bonds. Over the term of the bonds this will result in debt service savings of $5.55 million. Similarly, the October 1993 bond sale included $143.1 million in refunding principal that was placed into escrow to refund $123.4 million in prior bonds. The gross saving on this refinancing will be $8.8 million. Finally, the February 1994 bond sale included $64.2 million in refunding principal to refund $56.7 million in prior bonds. The debt service savings will be $3.6 million.

The annual savings from the five 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 4.2**.

Exhibit 4.2
Fiscal Year Savings as a Result of Refinancing

Fiscal Year	May 1993	October 1993	February 1994	March 2002	July 2002	Total
1993	$40,024	$0	0	$0	$0	$40,024
1994	917,879	2,669,723	783,295	0	0	4,370,897
1995	910,776	492,895	310,473	0	0	1,714,144
1996	333,201	472,095	312,665	0	0	1,117,961
1997	332,226	470,765	310,828	0	0	1,113,819
1998	334,401	470,635	310,215	0	0	1,115,251
1999	335,289	471,278	312,380	0	0	1,118,947
2000	334,551	468,230	310,145	0	0	1,112,926
2001	334,817	470,965	308,260	0	0	1,114,042
2002	333,826	467,865	311,667	2,292,073	0	3,405,431
2003	332,193	467,660	312,837	2,243,556	9,150,256	12,506,502
2004	333,840	470,640	0	2,360,353	1,320,167	4,485,000
2005	333,748	467,448	0	692,017	5,251,467	6,744,680
2006	333,460	468,463	0	1,619,999	1,359,265	3,781,187
2007	0	471,213	0	1,477,265	212,993	2,161,471
2008	0	0	0	80,225	186,515	266,740
2009	0	0	0	80,225	10,342	90,567
2010	0	0	0	112	3,930	4,042
Total	**$5,540,231**	**$8,799,875**	**$3,582,765**	**$10,845,825**	**$17,494,935**	**$46,263,631**

Source: State Treasurer's Office

The State Treasurer's Office, with advice from bond counsel, 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 $740 million for new authorizations of general obligation bonds during the 2003 legislative session. The committee cited favorable debt ratios as the basis for increasing the recommended amount to be authorized. The figure is $220 million more than the prior year's recommendation. The increase includes $15 million for annual growth in the capital program, $5 million in funding for the tobacco buyout, and another $200 million to recognize the temporary anomaly created by legislative action taken in 2002 and the national recession. The recession is anticipated to lower the level of general operating funds available for the State's capital program in fiscal 2004.

During the 2002 session, the General Assembly passed the Budget Reconciliation and Finance Act. Although the act reverted $457 million in previously authorized PAYGO appropriations, only $414 million required a substitution of general obligation bond funding. The General Assembly authorized $354 million in replacement funding and adopted intent language to complete the remaining PAYGO replacements in fiscal 2004 and to fund the projects deferred from fiscal 2003.

Transportation Debt

The Maryland Department of Transportation (MDOT) issues 15-year consolidated transportation bonds which are tax supported debt. Bond proceeds are usually earmarked for highway construction. Revenues from taxes and fees and other funding sources accrue to the Transportation Trust Tund (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 trust fund.

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, without having the local debt apply to State debt affordability limits. Currently this debt counts only toward the debt outstanding of the counties.

In addition the department has increasingly used debt other than consolidated transportation bonds to support capital spending. Non-traditional debt used by the department has included certificates of participation (COPs), Maryland Transportation Authority revenue bonds supported by specific user fees such as parking revenues, and Maryland Economic Development Corporation (MEDCO) revenue bonds. A portion of this debt is not tax-supported and therefore, is not under the purview of the Capital Debt Affordability Committee. COPs and MEDCO bonds are considered capital leases and will be discussed later in this section.

Since 1992 the department, in eight separate issuances, has issued $684 million in non-traditional debt to support in large part the expansion of Baltimore-Washington International Airport or the purchase of administrative facilities for the department. The majority of this debt, $450 million, was issued in fiscal 2002. With the exception of the annual limit placed on the issuance of COPs in the budget bill, there are no statutory limits on the issuance or usage of non-traditional debt. As of June 30, 2002, non-traditional debt outstanding totaled $574 million.

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 2003 budget bill set the maximum ceiling for June 30, 2003, at $1,075 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 currently projected bond sales, DLS estimates that as of June 30, 2003, it will have a maximum outstanding debt of $915 million with coverage estimated at 4.4 times maximum debt service under the net revenue test, and 6.9 times using the pledged tax test.

Since fiscal 1989, the department has issued consolidated transportation bonds in nine of thirteen years. This includes two issuances to refinance previous bond sales. In 1994, $504 million in bonds was issued to refinance prior year debt, and $93.6 million was refinanced in 1998. **Exhibit 4.3** shows that the department issued significant levels of new debt in the early 1990s. Between fiscal 1989 and 1992, MDOT issued $790 million in new debt. In contrast, $465 million in debt was issued between fiscal 1993 and 2002. The department last issued new debt in February 2002 (fiscal 2002), when bonds totaling $150 million were sold.

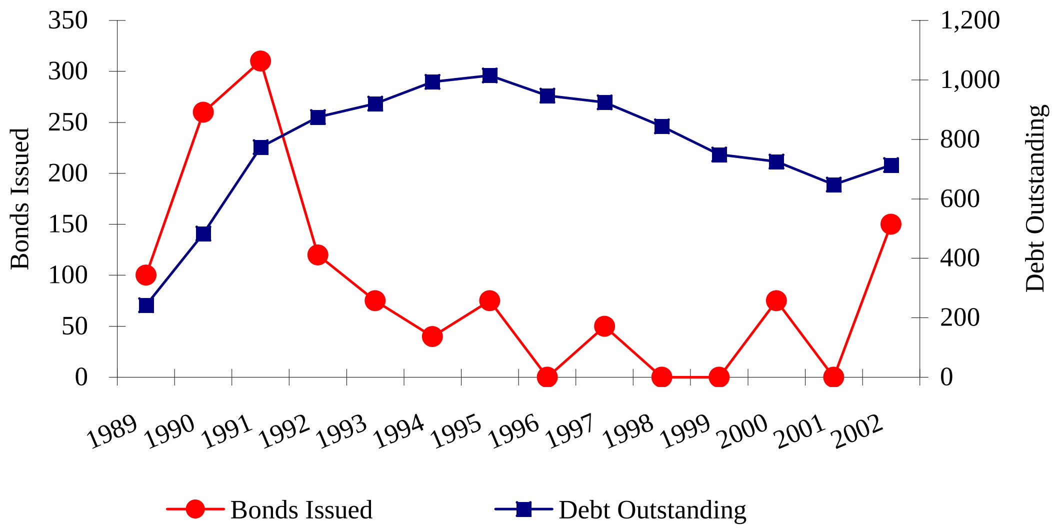
Exhibit 4.3
Consolidated Transportation Bond Issuance*
($ in Millions)

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
Total	**$1,255**

* Exclusive of refinancing
Source: Maryland Department of Transportation

As a result of the additional bonds issued, the department's net debt outstanding grew from $168 million in fiscal 1988 to $1,015 million in fiscal 1995. Recently, lower debt issuance coupled with the retirement of debt resulted in debt outstanding dropping to $648 million by the end of fiscal 2001. However, debt outstanding is rising as a result of the fiscal 2002 sale and the additional sales planned for fiscal 2003 and 2004. **Exhibit 4.4** illustrates annual bond sales and changes in debt outstanding.

Exhibit 4.4
MDOT Bonds Issued and Net Debt Outstanding
Fourteen-Year Summary – FY 1989 – 2002
($ 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 will 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 2002, the CDAC issued its report that included a proposed bond issuance stream for transportation debt through fiscal 2008. The proposed level of debt to be issued for fiscal 2003 through 2007 totals $1.3 billion as outlined in **Exhibit 4.5**.

Since the report was issued, DLS has reviewed the fiscal 2002 Transportation Trust Fund closeout, and the Bureau of Revenue Estimates has revised its TTF revenue forecasts, both reflecting slight 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.

Exhibit 4.5
CDAC Projected New Debt Issuance
($ in Millions)

Fiscal Year	CDAC Projected Debt Issuance
2003	$325
2004	285
2005	170
2006	175
2007	125
2008	190
Total	**$1,270**

Source: *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*, September 2002

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 risen 223 percent since fiscal 1989, from $35 million to $113 million in fiscal 2002. However, 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 will increase to $154 million. Based on the CDAC report, annual debt service payments will peak at $173 million in fiscal 2005. **Exhibit 4.6** shows estimated debt service for the period fiscal 2003 through 2008.

Exhibit 4.6
Projected Transportation Debt Service
($ in Millions)

Fiscal Year	Projected Debt Service
2003	$135
2004	153
2005	178
2006	160
2007	144
2008	146
Total	**$916**

Source: Maryland Department of Transportation

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, that were generally more favorable than the rates received on most county bond issues. County transportation bonds were considered debt of both the counties and the State.

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

In November 1993, MDOT refunded nine series of previously issued county debt. There are two remaining series of county debt issues that were not refunded and therefore, will continue to count against State debt affordability limits until the issues are retired. As of June 30, 2002, the remaining net principal balance on the 14th Series bonds totaled approximately $3.2 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.

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, 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 Maryland Economic Development Corporation (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.

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.

During the 1993 interim in discussions on the Hyattsville District Court, the authority of the General Assembly to review capital leases was questioned. The Department of Fiscal Services requested the Attorney General's Office to review the procedure by which the budget committees have 45 days to review and comment on proposed capital leases. Advice of counsel indicated that there was no clear requirement for such review process. As a result, the Joint Budget and Audit Committee sponsored legislation during the 1994 session to codify procedures regarding capital leases. This legislation (HB 1282/SB 564) was enacted as Chapter 654 of the Acts of 1994 providing for review of leases by the Legislative Policy Committee.

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. The CDAC has projected $50 million annually for capital leases for equipment and energy projects. This is higher than past assumptions that generally included $10 million annually for real property leases, $15 million annually for equipment, and $10 million annually for energy projects. The additional debt is anticipated due to the economic downturn and a need for greater reliance on financing mechanisms. The DLS forecast reflects the new CDAC capital leasing assumptions without change.

Exhibit 4.7 shows tax-supported capital lease debt outstanding as of June 30, 2002.

Exhibit 4.7
Tax-Supported Capital Lease Debt Outstanding
As of June 30, 2002 ($ in Thousands)

Maryland Economic Development Corp. – MDOT Headquarters	$36,000
Maryland Department of Transportation	84,340
St. Mary's Multi-Service Center	6,040
Towson District Court	4,880
Hyattsville Multi-Service Center	6,580
Hilton Street	1,840
Calvert County Multi-Purpose Center	4,295
Prince George's County Justice Center	3,156
BCCC Surge Building	1,276
ECI Water & Wastewater Facilities	5,285
Equipment Leases	92,040
Total	**$245,732**

Source: Office of the Comptroller

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, and the renovation of the Hippodrome Performing Arts Center. **Exhibit 4.8** 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 4.8
Maryland Stadium Authority
Revenue Debt Authorizations, Debt Outstanding, and Debt Service
($ in Millions)

Project	Authorized	Outstanding as of September 1, 2002	Debt Service Fiscal 2003
Baseball and football stadiums	$235.0	$228.9	$20.9
Baltimore City Convention Center	55.0	44.6	4.9
Ocean City Convention Center	17.3	14.7	1.5
Montgomery County Conference Center	23.3	0.0	0
Hippodrome Performing Arts Center	17.4	17.4	1.1
Total	**$348.0**	**$303.6**	**$28.4**

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 on 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 the 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 Convention Center project as authorized by legislation in 1993. Baltimore City also issued $50 million in city bonds as its share of the construction project. The State also contributed $58 million in general obligation bond funding for this project, which was completed in 1997. The Authority issued $17.3 million in revenue bonds for the Ocean City Convention Center project, authorized in 1995, which was matched by a contribution from the town of Ocean City.

Montgomery County Conference Center

The Authority was authorized in 1996 to issue $17.3 million in support of the construction of the Montgomery County Conference Center. Due to the delay in the construction schedule caused by challenges to zoning and other disagreements at the county level, the project is expected to cost an additional $6.0 million. Legislation enacted during 2000 session increased the bond authority to $20.3 million to account for the MSA's contribution toward the additional construction costs. Montgomery County and a private developer will provide the remaining financing for the conference center project. The legal issues concerning the project's zoning have yet to be fully resolved and as a result the sale of the bonds has not taken place.

Hippodrome Performing Arts Center

On July 10, 2002, the Authority issued $20.25 million in 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 debt service begins in fiscal 2003 at approximately $1.1 million and will average $1.8 million per year for the remaining 20-year term of the bond. The Hippodrome will be leased to the State and subsequently leased back to MSA. The rent paid under the lease will be equivalent to the debt service on the revenue bonds and will be derived from the State's general fund. The debt service will be partially offset by a $2 per ticket surcharge for events at the Hippodrome.

The Hippodrome is seen as the cornerstone of the Baltimore City West Side revitalization effort. MSA is working in conjunction with the Baltimore Development Corporation, West Side Renaissance, Inc., and the Baltimore Center for the Performing Arts in developing the Hippodrome. According to the May 17, 2002, Comprehensive Plan of Financing, required under Section13-701 of the Financial Institutions Article to be submitted to the General Assembly at least 30 days in advance of the MSA's sale of tax supported debt of the State, the current estimated cost of the Hippodrome project is $60 million excluding capitalized interest expenses. Funding for the project is expected to be provided by the State, Baltimore City, Baltimore County, MSA revenue bonds, historic preservation tax credits, private contributions, and the performing arts center's operator. **Exhibit 4.9** shows a breakdown of the sources of funding for the Hippodrome project.

Exhibit 4.9

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

Local Project Assistance

Uncodified language in the 1998 capital budget bill also 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 4.10** lists the projects for which the authority is providing assistance but is not authorized to issue revenue bonds.

Exhibit 4.10
State Agency and Local Government Projects
Receiving Maryland Stadium Authority Assistance

University of Maryland, College Park – Comcast Center (basketball arena)
Towson University – Minnegan Stadium (football stadium)
University of Maryland, Baltimore County – New Student Center
City of Aberdeen – Ripken Baseball Stadium and Youth Baseball Academy
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). DLS is predicting higher personal income than is CDAC throughout the forecast period due to an assumed greater rate of annual growth. **Exhibit 5.1** compares the DLS personal income estimate with that of CDAC.

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

Calendar Year	DLS Personal Income	% Change	CDAC Personal Income	% Change	DLS - CDAC
2001	$189,142		$187,862		$1,280
2002	195,278	3.2%	194,625	3.6%	653
2003	204,224	4.6%	203,967	4.8%	257
2004	214,963	5.3%	214,165	5.0%	798
2005	226,661	5.4%	225,516	5.3%	1,145
2006	239,061	5.5%	236,792	5.0%	2,269
2007	252,183	5.5%	248,632	5.0%	3,551
2008	265,942	5.5%	261,063	5.0%	4,879

Source: DLS: 2001 Bureau of Economic Analysis, U.S. Department of Commerce
2002 - 2008 Department of Legislative Services
CDAC: CDAC report, September 2002

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 2008. DLS's revenue projections are slightly lower than those of the CDAC. 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

	General Fund	Property Taxes	Transp.	Stadium Related	Total DLS Revenues	CDAC Revenues	DLS - CDAC
2001	$9,802.0	$257.1	$1,615.0	$25.8	$11,699.9	11,701.9	$-2.0
2002	9,504.0	269.9	1,704.0	23.0	11,500.9	11,489.7	11.2
2003	9,432.0	281.7	1,679.0	23.7	11,416.4	11,802.9	-386.5
2004	10,029.0	294.2	1,680.0	24.0	12,027.2	12,348.5	-321.3
2005	10,480.0	307.9	1,716.0	24.0	12,527.9	12,834.3	-306.4
2006	11,057.0	315.6	1,751.0	24.0	13,147.6	13,348.5	-200.9
2007	11,643.0	323.5	1,799.0	24.0	13,789.5	13,870.0	-80.5
2008	12,265.0	331.6	1,830.0	24.0	14,450.6	14,451.1	-.5

General Fund:	Per DLS November report to the Spending Affordability Committee
Property Tax:	2001 – 2004: Department of Budget and Management 2005 – 2008: Department of Legislative Services
Transportation:	2001: Department of Transportation 2002 - 2008: Department of Legislative Services
Stadium:	CDAC Report, September 2002
CDAC:	CDAC Report, September 2002

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 2.66 percent in fiscal 2003 to 2.82 percent in fiscal 2005 then declines to 2.61 percent by fiscal 2008.

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 6.20 percent in fiscal 2003 to 6.75 percent in fiscal 2005 then declines to 6.47 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

Fiscal Year	General Obligation (a)(b)	Department of Transportation (c) Consolidated (d)	County	Total	Capital Leases	Stadium Authority	Total Tax Supported Debt
		State Tax-Supported Debt Outstanding ($ in Thousands)					
1999	$3,500,238	$749,130	$5,050	$754,180	$149,224	$300,660	$4,704,302
2000	3,348,872	724,770	4,460	729,230	148,357	293,520	4,519,979
2001	3,450,900	648,050	3,830	651,880	197,701	285,975	4,586,456
2002	3,544,178	714,000	3,155	717,155	245,732	277,995	4,785,060
2003	3,916,595	915,000	2,440	917,440	306,672	300,055	5,440,762
2004	4,235,492	1,193,000	1,675	1,194,675	305,068	312,225	6,047,460
2005	4,411,829	1,384,000	865	1,384,865	299,272	301,280	6,397,246
2006	4,577,723	1,465,000	0	1,465,000	293,872	288,187	6,624,782
2007	4,745,681	1,463,000	0	1,463,000	281,535	274,190	6,764,406
2008	4,926,222	1,500,000	0	1,500,000	260,807	259,186	6,946,215
		State Tax-Supported Debt Outstanding as a Percent of Personal Income (Affordability Criteria Standard = 3.2%)					
1999	2.09	0.45	0.00	0.45	0.09	0.18	2.81
2000	1.86	0.40	0.00	0.40	0.08	0.16	2.51
2001	1.82	0.34	0.00	0.34	0.10	0.15	2.42
2002	1.81	0.37	0.00	0.37	0.13	0.14	2.45
2003	1.92	0.45	0.00	0.45	0.15	0.15	2.66
2004	1.97	0.55	0.00	0.56	0.14	0.15	2.81
2005	1.95	0.61	0.00	0.61	0.13	0.13	2.82
2006	1.91	0.61	0.00	0.61	0.12	0.12	2.77
2007	1.88	0.58	0.00	0.58	0.11	0.11	2.68
2008	1.85	0.56	0.00	0.56	0.10	0.10	2.61

(a) Reflects presumed new authorizations as follows:

General Assembly Session:	2003	2004	2005	2006	2007	2008
For Fiscal Year:	2004	2005	2006	2007	2008	2009
(millions)	$740	$555	$570	$585	$600	$615

(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)Transfers of $25, $40, and $10 million from the Transportation Authority to the Department of Transportation in fiscal 1991 - 1993. MDOT re-transferred $25 million per year in fiscal 1995-1997; (2) The authority investment of $11.9 million for the development of Berth 4 at the Seagirt Marina Terminal. The department is repaying this amount in annual payments of $567,280 including interest over a 33-year period; (3) Financing the construction of the Masonville Terminal during fiscal 1999 - 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: (millions)	2003	2004	2005	2006	2007	2008
G.O. issues	$700	$650	$525	$550	$575	$600
MDOT issues	295	380	305	170	65	110
Stadium Authority issues	54	0	0	0	0	0
Capital Leases - Equip. & EPC	96	50	50	50	50	50
Real Property	0	0	0	0	0	0
Personal Income (billions)	204.2	215.0	226.7	239.1	252.2	265.9

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

Fiscal Year	General Obligation (a)	Department of Transportation Consolidated (b)	County (c)	Total	Capital Leases	Stadium Authority (d)	Total Tax Supported
State Tax-Supported Debt Service ($ in Thousands)							
1999	$417,629	$132,910			$23,670	$24,450	$598,659
2000	459,358	135,233			27,865	21,211	643,667
2001	470,949	109,674			32,973	27,133	640,729
2002	495,217	113,000			40,708	27,112	676,037
2003	497,298	135,000			46,789	28,357	707,444
2004	527,093	153,000			65,171	31,109	776,373
2005	567,972	178,000			69,784	30,170	845,926
2006	613,331	160,000			69,624	31,108	874,063
2007	648,084	144,000			76,715	31,114	899,913
2008	672,479	146,000			84,798	31,303	934,580
State Tax-Supported Debt Service as a Percent of Revenues (Affordability Criteria Standard = 8%)							
1999	4.76	9.09			0.27	99.80	5.84
2000	4.85	8.62			0.29	100.05	5.82
2001	4.68	6.79			0.33	105.17	5.48
2002	5.07	6.63			0.42	117.88	5.88
2003	5.12	8.04			0.48	119.65	6.20
2004	5.11	9.11			0.63	129.62	6.46
2005	5.26	10.37			0.65	125.71	6.75
2006	5.39	9.14			0.61	129.62	6.65
2007	5.42	8.00			0.64	129.64	6.53
2008	5.34	7.98			0.67	130.43	6.47

(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) Transfers of $25 million per year in fiscal 1995 - 1997 from the Department of Transportation (MDOT) to the Maryland Transportation Authority (MdTA) to repay the MdTA for the transfer of $25, $40, and $10 million in fiscal 1991 - 1993; (2) 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; (3) 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.

(d) Although not shown, transfers from the Stadium Facilities Fund to the Stadium Authority are assumed to be just sufficient, when coupled with the Authority's own-source revenues, to meet debt service requirements.

The debt outstanding ratios based on DLS personal income estimates are slightly higher than those estimated by the CDAC throughout the forecast period. The higher ratios result 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
2003	2.66%	2.61%
2004	2.81%	2.72%
2005	2.82%	2.69%
2006	2.77%	2.66%
2007	2.68%	2.63%
2008	2.61%	2.61%

Source: Department of Legislative Services
CDAC Report, September 2002

Similarly, the debt service ratios based on the DLS baseline forecast of general fund revenues are higher than those estimated by CDAC due to an assumed more severe recession 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
2003	6.20%	5.93%
2004	6.46%	6.15%
2005	6.75%	6.32%
2006	6.65%	6.27%
2007	6.53%	6.15%
2008	6.47%	6.16%

Source: Department of Legislative Services
CDAC Report, September 2002

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 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.

Growth in Debt Burden

Growth in 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.

Since fiscal 1990, non-tax supported debt issued by State agencies and independent authorities has more than doubled from $3.9 billion to $9.5 billion in fiscal 2002. That rate of growth far exceeds the comparative rate of $2 billion to $3.5 billion (same period) for general obligation debt and has occurred under the reporting auspices required by the 1998 Executive Order. Moreover, the period of greatest growth in non-tax supported debt has occurred between fiscal 1998 and 2002. **Exhibit 6.1** illustrates that growth for debt outstanding increased 41% from $6.7 billion to nearly $9.5 billion. 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.

Given the rapid growth in non-tax supported outstanding debt and the resulting impact of an increased risk of market saturation of Maryland-related bonds and increased pressure placed on the pledged revenues (defaults have occurred) to maintain adequate coverage ratios for debt service, it is time to initiate an annual review process that can establish a measure of control similar to that found with tax-supported debt. **The Capital Debt Affordability Committee's current responsibility to annually review and recommend appropriate levels of tax-supported debt should be expanded to include monitoring the level of non-tax supported debt and a due diligence review of the financial condition of issuers of that debt as well.**

Exhibit 6.1
Agency Issued Debt
($ in Millions)

Agency	FY 1998	FY 2002	Difference	% Increase
MD Environmental Service	$31.0	$36.5	$5.5	17.7
MD Food Center Authority	7.0	0.0		--
MD Transportation Authority	374.9	668.8	293.8	78.4
MD Water Quality Financing Admin.	151.3	1,156.9	(35.4)	--
MD Dept. of Housing & Comm. Dev. Admin.	2,453.2	2,797.4	344.2	14.0
MD Energy Financing Admin.	306.2	0	(306.2)	--
MD Industrial Dev. Financing Authority	326.4	547.4	221.0	67.7
Dept. of Trans. Certificates of Participation	0	65.2	65.2	--
MD Economic Development Corp.	227.7	967.6	739.9	325.0
MD Health and Higher Education Fac. Auth.	2,821.0	4,265.4	1,444.5	51.2
Total	**$6,698.8**	**$9,464.4**	**$2,765.5**	**41.3**

*Legislation effective January 2002 abolished the Maryland Energy Financing Administration. The outstanding debt is now reflected under Maryland Industrial Development Financing Authority.

Debt Outstanding

Exhibit 6.2 summarizes the increase in debt outstanding for various categories between fiscal 1993 and 2002. A table containing debt outstanding by year for the individual agencies included in the summary is included as **Appendix 2**.

Between fiscal 1993 and 2002 general obligation bond and State capital lease debt outstanding has increased by 58.6 percent. Over the same period, agency debt subject to the Governor's issuance cap has increased nearly $347 million, an increase of 73.0 percent. Most of the increase is attributable to the recent issuance activity by the Maryland Transportation Authority. 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 $1.3 billion, an increase of 47.3 percent. Similarly, public purpose/private debt increased by $2.2 billion.

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.

Exhibit 6.2
Debt Outstanding as of June 30
($ in Millions)

	1993	2002	% Change
Agency debt subject to issuance cap	$474.7	$821.2	73.0
Agency debt not subject to issuance cap*	2,860.7	4,213.8	47.3
General obligation & State lease debt	2,390.1	3,789.9	58.6
Transportation debt	919.9	714.2	(22.4)
Public purpose/private debt	2,064.9	4,265.4	106.6

*Excluding Maryland Industrial Financing Authority debt for which debt outstanding numbers prior to 1997 are unavailable.

Source: CDAC Report 2002 and Department of Budget and Management

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.

Debt Service on Academic 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 fees 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 Auxiliary and Academic Facilities Bonding Authority that lists the specific academic projects that require authorization. This legislation may also increase the 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. In fiscal 2003, total debt service will be approximately 3.9 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 level in the next five years. The highest percentage forecast is 4.9 percent in fiscal 2008.

The latest debt capacity study also recommended that USM maintain a ratio of unrestricted revenues to direct debt of 50 percent and noted that rating agencies are placing more importance on building liquidity in the form of unrestricted fund balances and quasi endowment. According to the study, "USM shows some weakness when compared to rating agency medians and its peers primarily in the area of unrestricted fund balances….USM will be vulnerable to a downgrade [in bond rating] if the unrestricted fund balances do not grow relative to the planned increases in debt."

The Capital Debt Affordability Committee's September 2002 report shows that USM intends to issue $100 million in new debt during fiscal 2003, the same level intended in fiscal 2002. However, an update from USM indicates it intends to issue $89.7 million in new debt in fiscal 2003, down from the $100 million issued in fiscal 2002. For fiscal 2004 – 2008, issuances range from $83 million up to almost $101 million. Auxiliary debt will make up to 41 to 65 percent of total issuances.

If these amounts are issued, the total USM debt outstanding will be over the $975 million authorized debt limit in fiscal 2004 and will reach $1.13 billion by fiscal 2008. Consequently, USM plans to seek an increase in the debt limit during the 2003 legislative session. The amount sought will reflect the new recommended level and will be informed by the results of the debt capacity study. **Exhibit 6.3** provides a summary of the University System of Maryland academic debt profile from fiscal 1990 to 2003.

Exhibit 6.3
Summary of Academic Debt for the University System of Maryland
($ in Millions)

Fiscal Year	Issued	Authorized	Redeemed	Outstanding	Debt Service	Authorized But Unissued
1990	$58.7	$50.4	$0.0	$50.4	$1.6	$8.2
1991	45.8	42.7	1.4	91.8	4.2	11.3
1992	42.7	24.9	2.3	114.5	6.7	29.0
1993	40.0	51.9	4.2	162.2	10.9	17.1
1994	24.5	12.9	4.6	170.4	15.0	28.7
1995	41.7	23.8	6.5	187.7	16.1	46.6
1996	40.0	25.9	5.4	208.1	17.0	60.7
1997	40.0	27.7	6.4	229.4	19.0	73.0
1998	28.5	38.1	7.5	260.0	20.6	63.5
1999	31.5	49.6	10.5	299.2	23.1	45.4
2000	25.0	26.6	12.2	313.6	27.1	43.7
2001	25.0	28.1	12.3	329.4	29.3	40.6
2002	25.0	22.5	34.9	317.0	30.2	43.1
2003	35.9	35.0	24.5	327.5	32.0	44.0

Source: The University System of Maryland

Chapter 7. Issues

This section discusses issues related to Maryland debt and debt management.

Affordability and the Growth in Debt Service

Although the most widely used measure of debt management and affordability is the ratio of debt outstanding as a percent of personal income, the true measure of performance lies in a State's ability to manage its debt service payments while also maintaining adequate resources for other State services and purposes. During times of fiscal crisis, prudent management practices (balancing limited State resources) are often tested.

The State maintains significant debt capacity, as defined by the two debt affordability criteria. Hence, the issuance of debt above the previously assumed amounts, projected by the Capital Debt Affordability Committee, is readily considered affordable. However, increased issuance of debt is accompanied by higher debt service payments than previously expected. Those higher payments carry an underlying assumption that income will increase to offset the repayment requirement and maintain a balance between debt service and other competing State needs.

General obligation debt service, the single largest component of tax-supported debt, is estimated to grow 26.5 percent from nearly $532 million in fiscal 2004 to about $673 million in fiscal 2008. The projected average annual rate of growth is 6 percent. That compares with a projected average annual growth rate of 5.2 percent for general funds and 3 percent for property tax receipts -- the two revenue sources used to meet the debt service. Moreover, the projections suggest that a greater proportion of general funds will be needed to meet the debt service requirements. As more general funds are required to meet the non-discretionary expense of debt service, that leaves less general funds available for other competing purposes.

The State cannot control the national economy but it is well within a State's power to control its appetite for debt. Moreover, most states are currently operating within a strained credit environment where declines in bond ratings are possible.

Chapter 8. Market Analysis

This section deals with the market for Maryland's securities, and in particular, how Maryland's general obligation bonds compared to various national scales.

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 1990 to the latest sale in 1998 in relation to the Delphis Scale in order 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 believes 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 is important. A significant change in relationship would raise a question and signal a need for closer review.

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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. In order 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.

A review of **Exhibit 8.1** indicates some variation between the yield on Maryland bonds and the Delphis AAA and AA scale. During 1991 to mid 1992, the average yield for the sale of Maryland bonds was slightly above the ten-year bond on the Delphis AAA scale. During 1993 and early 1994, the yield on Maryland bond sales was at or slightly below the Delphis AAA 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.

Exhibit 8.1
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%
Average	**4.98**	**4.88**	**102.0%**	**4.97**	**100.2%**

*Maryland rate expressed as True Interest Cost (TIC).
Source: Department of Legislative Services and Delphis Hanover

Bond Buyer Index

The Bond Buyer prepares on a weekly basis four indices of the yields of general obligation bonds. Of these four indices, the Department of Legislative Services uses the Bond Buyer Index of 20 general obligation bonds, and the Bond Buyer Index of 11 general obligation bonds to determine how well Maryland's general obligation bonds are performing. The Bond Buyer Index 20 is an index of 20 bonds with 20-year maturities and an average quality of A1. The Bond Buyer Index 11 is a subset of the Bond Buyer Index 20, that measures 11 bonds, with 20-year maturities with an average quality of AA.

Maryland's bonds have consistently outperformed the Bond Buyer Index 20 and Index 11. The average yield of the Bond Buyer Index 20 and Index 11 since 1986 are 6.27 percent and 6.16 percent, respectively, while Maryland has an average yield of 5.49 percent. (See **Exhibit 8.2**).

The spread between Maryland's general obligation bonds and the Bond Buyer Index 20 and Index 11 is to be expected. Maryland's superior performance can be explained by the fact that the indices measure bonds with 20-year maturities, while Maryland's longest maturity is 15 years and the average maturity of a Maryland bond is about 10 years. The second reason that Maryland's general obligation bonds perform comparatively better is because the Bond Buyer Index 20 has an average rating of A1 and the Bond Buyer Index 11 has an average rating of AA, while Maryland's bonds are rated AAA. While confirming the superior quality of Maryland's AAA bonds, this information only provides a measure of the spread between Maryland's bonds and those of other states.

Although it is not clear why the spread narrowed between 1988 and 1991, the narrowing of the spreads did coincide with two changes in Maryland's bidding procedures that were instituted in December 1987. The first major change in bidding procedures was the introduction of a call feature that would clearly lead to an increase in the yield on Maryland's general obligation bonds. While the call feature has particular value to the State at a time of high interest rates, and has resulted in the State's ability to refinance certain bonds, it would appear to have little value when the interest rates are at low levels.

The second major change in bidding procedures was the allowance of bond discounts in the bids which should serve to decrease the yield on Maryland bonds. If these changes in bond procedures are the reasons for the narrowing of the spread between Maryland's yields and the Bond Buyer Index, then it appears that the ability of syndicates to include discounts in bids is not sufficient to offset the additional yield that investors demand for the call provisions.

Exhibit 8.2
Interest Rates on Maryland Bonds*
Compared with the Bond Buyer Indexes for the Thursday Following Sale

Date	Rate on MD Bonds	Index of 20 G.O. Bonds	MD Rate as % of 20 Bond	Index of 11 G.O. Bonds	MD Rate as % of 11 Bond
02/19/86	6.50	7.44	87.4%	7.34	88.6%
06/25/86	6.68	7.59	88.0%	7.43	89.9%
06/17/87	6.44	7.63	84.4%	7.49	86.0%
12/09/87	6.91	8.10	85.3%	7.94	87.0%
04/27/88	6.60	7.77	84.9%	7.63	86.5%
10/05/88	6.72	7.53	89.2%	7.42	90.6%
02/08/89	6.83	7.38	92.5%	7.28	93.8%
06/28/89	6.59	7.02	93.9%	6.93	95.1%
02/07/90	6.67	7.20	92.6%	7.06	94.5%
06/27/90	6.78	7.27	93.3%	7.13	95.1%
09/26/90	7.00	7.53	93.0%	7.36	95.1%
03/13/91	6.31	7.13	88.5%	6.97	90.5%
07/10/91	6.37	7.07	90.1%	6.92	92.1%
10/09/91	5.80	6.66	87.1%	6.52	89.0%
05/13/92	5.80	6.54	88.7%	6.41	90.5%
01/13/93	5.38	6.17	87.2%	6.08	88.4%
05/19/93	5.10	5.77	88.4%	5.68	89.8%
10/06/93	4.45	5.30	83.9%	5.21	85.4%
02/16/94	4.48	5.42	82.7%	5.33	84.1%
05/18/94	5.36	6.14	87.3%	6.04	88.7%
10/05/94	5.69	6.50	87.5%	6.41	88.8%
03/08/95	5.51	6.18	89.2%	6.00	91.8%
10/11/95	4.95	5.82	85.0%	5.74	86.2%
02/14/96	4.51	5.33	84.6%	5.23	86.2%
06/05/96	5.30	5.94	89.2%	5.84	90.7%
10/09/96	4.97	5.73	86.8%	5.63	88.3%
02/26/97	4.90	5.65	86.8%	5.55	88.3%
07/30/97	4.64	5.23	88.7%	5.15	90.1%
02/18/98	4.43	5.07	87.4%	5.00	88.6%
07/08/98	4.57	5.12	89.2%	5.06	90.3%
02/24/99	4.26	5.08	83.8%	5.02	84.8%
07/14/99	4.83	5.36	90.1%	5.29	91.3%
07/19/00	5.05	5.60	90.2%	5.55	91.0%
02/21/01	4.37	5.21	83.9%	5.16	84.7%
07/11/01	4.41	5.22	84.6%	5.17	85.4%
03/06/02	4.23	5.19	81.5%	5.14	82.3%
07/31/02	3.86	5.00	77.2%	4.95	78.0%
Average	**5.49**	**6.27**	**87.6%**	**6.16**	**89.1%**

*Beginning Dec. 1987, interest rates are reported in True Interest Cost (TIC) rather than Net Interest Cost (NIC).

The widening of the spreads during Maryland's last two bond sales are indicative of the current investment market conditions that are rewarding the highest quality bonds with cash premiums and lower up-front rates. Since Maryland's bonds tend to be shorter term than the Bond Buyer Index bonds, changes in the relationship between interest rates of bonds with different maturities would impact the spread between the Maryland yield and the Bond Buyer Index.

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

General Assembly Session	Proposed Authorizations	--------------------Estimated Issuances During Fiscal Year*-------------------- 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total Issued
2003	$740	$0	$229	$185	$148	$111	$67	$0	$0	$0	$0	$740
2004	555		0	172	139	111	83	50	0	0	0	555
2005	570			0	177	143	114	86	51	0	0	570
2006	585				0	181	146	117	88	53	0	585
2007	600					0	186	150	120	90	54	600
2008	615						0	191	154	123	92	560
2009	625							0	194	156	125	475
2010	640								0	198	160	358
2011	655									0	203	203
2012	670										0	0
Total		**0**	**229**	**357**	**463**	**546**	**596**	**593**	**607**	**620**	**634**	**4,646**
Current Authorizations	1,774	700	421	168	87	29	4	32	68	105	161	1,774
Total Issuances		**$700**	**$650**	**$525**	**$550**	**$575**	**$600**	**$625**	**$675**	**$725**	**$795**	**$6,420**
Sales	First	225	400	300	280							
	Second	475	250	225	270							
	Total	**700**	**650**	**525**	**550**							

*Percentage issuance assumptions by fiscal years:

Fiscal year following year of authorization:	1st	2nd	3rd	4th	5th
Percent of original authorization	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 2004*, September 2002.

Debt Outstanding as of June 30
($ in Millions)

	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY02	FY 93-02
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	34.3%
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	--
MD Trans Authority	302.5	302.5	465.2	408.4	391.9	374.9	344.5	318.7	300.6	668.8	121.1%
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	-13.5%
Revenue Cap Total	**$474.7**	**$470.2**	**$665.5**	**$613.8**	**$590.6**	**$564.3**	**$523.4**	**$486.2**	**$465.9**	**$821.2**	73.0%
% Change/Prior Year	15.7%	-0.9%	41.5%	-7.8%	-3.8%	-4.5%	-7.2%	-7.1%	-4.2%	76.2%	
Agency Debt Not Subject to Ceiling and Allocation Caps											
Balt. City Comm. College	--	--	--	--	--	--	--	--			--
Comm. Devel. Admin. (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	18.9%
Local Govt. Infra. (CDA)	39.7	42.3	48.5	55.0	62.5	66.1	81.1	85.5	87.7	91.7	131.0%
MD Energy Finance Admin.	48.0	44.6	202.6	300.9	307.4	306.2	301.1	388.4	379.8	0	--
MIDFA					352.3	326.4	312.3	296.0	277.6	547.4	--
Morgan State University	27.0	28.0	28.9	29.4	29.9	27.9	27.5	27.1	26.8	33.4	23.7%
St. Mary's College	8.9	8.7	8.5	8.1	7.8	17.5	17.3	16.9	27.8	27.5	209.0%
Univ. of Maryland System	461.5	473.8	518.3	505.9	534.5	611.0	670.0	656.1	802.7	808.0	75.1%
Non-Cap Total	**$2,860.7**	**$3,054.9**	**$3,253.3**	**$3,240.1**	**$3,532.9**	**$3,680.3**	**$3,882.8**	**$4,097.1**	**$4,294.5**	**$4,213.8**	47.3%
% Change/Prior Year	-0.3%	6.8%	6.5%	-0.4%	9.0%	4.2%	5.5%	5.5%	4.8%	-1.9%	
Capital Leases and General Obligation Debt											
Capital Leases - BPW	$110.7	$140.8	$125.2	$115.8	$98.4	$90.3	$149.2	$148.4	$197.7	$245.7	122.0%
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	55.5%
Total Leases + G.O.	**$2,390.1**	**$2,644.8**	**$2,744.3**	**$2,975.7**	**$3,123.8**	**$3,360.8**	**$3,649.4**	**$3,497.3**	**$3,648.6**	**$3,789.9**	58.6%
% Change/Prior Year	4.9%	10.7%	3.8%	8.4%	5.0%	7.6%	8.6%	-4.2%	4.3%	3.9%	
Non-State Debt (Not Subject to Ceiling and Allocation Caps)											
Higher Ed. Suppl. Ln. Ath. (b)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	--
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	106.6%
Total Non-State	**$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**	106.6%
% Change/Prior Year	10.8%	9.2%	0.1%	4.1%	6.0%	13.3%	14.7%	9.8%	3.0%	16.5%	

(a) Does not include Local Govt. Infrastructure.

(b) Loans were sold to 1st National Bank of Maryland in FY 1992.

Source:

1991 - 1997: Department of Budget & Management

1998 - 2002: Dept. of Budget & Management, St. Mary's College, Morgan State University, University System of Maryland, Capital Debt Affordability Committee Report, Sept. 2002