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

Department of Legislative Services Office of Policy Analysis

Annapolis, Maryland

November 2000

#### For further information concerning this document contact:

Library and Information Services
Office of Policy Analysis
Department of Legislative Services
90 State Circle
Annapolis, Maryland 21401

Baltimore area (410) 946-5400 ● Washington area (301) 970-5400 Other Areas 1-800-492-7122, Extension 5400 TDD (410) 946-5401 ● (301) 970-5401 Maryland Relay Service: 1-800-735-2258

E-mail: libr@mlis.state.md.us

The Department of Legislative Services does not discriminate on the basis of race, color, national origin, sex, religion, or disability in the admission or access to its programs or activities. Sherry M. Little has been designated to coordinate compliance with the non-discrimination requirements contained in Section 35.107 of the Department of Justice regulations. Requests for assistance should be directed to Ms. Little at the telephone numbers shown above.

#### November 2000

The Honorable Barbara A. Hoffman, Co-Chairman Spending Affordability Committee

The Honorable Nancy K. Kopp, Co-Chairman Spending Affordability Committee

Dear Senator Hoffman and Delegate Kopp:

The Department of Legislative Services's annual report on the "Effect on 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 Steve McCulloch with assistance by Matthew Klein, Patrick Frank, Terri Bacote-Charles, and Theresa Tuszynski. The manuscript was prepared by Jo Ann Bryan.

Respectfully submitted,

Warren G. Deschenaux Director

WGD/jab

## **Contents**

Letter of Tra	ansmittal	iii
Chapter 1.	Recommendation of the Department of Legislative Services	
	New Debt Authorization	1
	Authorization of Transportation Debt	2
	Higher Education Debt	2
Chapter 2.	Recommendations fot the Capital Debt Affordability Committee	
	New General Obligation Debt Authorization	3
	Higher Education Academic Debt to be Authorized	3
Chapter 3.	Review of the Analysis of the Capital Debt Affordability Committee	
	Risk Analysis	5
Chapter 4.	State Tax Supported Debt	
	General Obligation Bonds	9
	Capital Budget Requests for Fiscal 2002 to 2006	9
	Bond Issuance Stream	11
	Bond Refunding	12
	New General Obligation Bond Authorizations	13
	Transportation Debt	13
	Consolidated Transportation Bonds	14
	Capital Leases	16
	Future Debt Issuance	17

	Debt Service	17
	Future Direction of the State Transporation Capital Program	18
	County Transportation Bonds	18
	Conclusions and Recommendations on Transportation Debt	19
	Capital Leases	19
	Maryland Stadium Authority	22
	Hippodrome Performing Arts Center	23
	Bond Anticipation Notes (BANS)	25
Chapter 5.	Economic Factors and Affordability Analysis	
	Personal Income	27
	Revenue Projections	28
	Affordability Analysis	29
Chapter 6.	Non-Tax Supported Debt	
	Revenue Bonds	33
	Debt Issuance	33
	Private Activity Bonds	34
	Debt Outstanding	35
	Debt Service on Academic Revenue Bonds	37
Chapter 7.	Issues	
	Rethinking Debt Policy in Times of Budgetary Surplus	39
	Impact of Higher Construction Costs on the State Program and Public School Construction and the Ability to the State to Fund Its Fiscal 2002 Capital Commitments	41

## Chapter 8. Market Analysis

	Delphis Scale	43
	Bond Buyer Index	45
Appendix 1	Proposed General Obligation Authorizations and Estimated Issances	49
Appendix 2	Debt Outstanding as of June 30th	50
Appendix 3	CDAC Corrected State Supported Debt Outstanding Components and Relationship to Personal Income	51
Appendix 4	CDAC Corrected State Supported Debt Service Components and Relationship to Revenues	52

# Chapter 1. Recommendations of the Department of Legislative Services

#### **New Debt Authorization**

The Capital Debt Affordability Committee's (CDAC) recommended debt limit of \$475 million in new general obligation debt authorization is an increase of \$15 million over the recommended debt limit for fiscal 2001. This increase of 3.3 percent is generally consistent with the long range plan adopted by the committee in 1992 to increase the general obligation debt limit by 3 percent each year based on 1 percent growth and 2 percent inflation. For the second year in a row a motion was made to recommend that the general obligation limit not be increased from the prior year. As happened last year, this motion was defeated in a 3 - 2 vote with the Treasurer and the Comptroller voting against increasing the debt limit.

In accordance with Section 8-113 of the State Finance and Procurement Article, the Governor notified the General Assembly by letter dated November 6, 2000, on the level of State debt that is advisable. The Governor accepted the recommendation of the Capital Debt Affordability Committee and provided the following preliminary allocation of the \$475 million debt authorization:

	G.O. Debt
State-Owned Facilities	\$206,000,000
Grant & Loan Programs	178,000,000
Public School Construction*	91,000,000
Total	\$475,000,000

<sup>\*</sup>The Governor also proposed \$165 million in PAYGO capital for school construction for a total of \$250 million in fiscal 2001.

Forecasts of personal income and levels of outstanding debt indicate that Maryland's five-year general obligation debt authorization plan will be affordable according to the debt affordability criteria.

## **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**

In fiscal 2002 the University System of Maryland intends to issue \$25 million in academic debt and \$65 million in auxiliary debt. Based on these projections, debt service is expected to equal 4.21 percent of unrestricted current fund expenditures and mandatory transfers. The system's financial advisers have recommended an upper limit of 5.5 percent. The Department of Legislative Services agrees the committee's recommended debt limit for the 2001 session of \$25 million in academic revenue bonds is affordable under the university system's 5.5 percent guideline.

# Chapter 2. Recommendations of the Capital Debt Affordability Committee

### **New General Obligation Debt Authorization**

- Limit new general obligation debt authorization at the 2001 session to \$475 million. This figure is \$15 million more than the prior year's recommendation.
- The long range plan adopted by the Capital Debt Affordability Committee (CDAC) includes annual increases in recommended debt levels of \$15 million per year representing increases ranging from 3.3 percent in fiscal 2002 down to 2.9 percent in fiscal 2006. The average annual growth rate over the entire five-year period is 3.02 percent. The planned increases are based on providing approximately 2 percent to cover inflation and 1 percent real growth in the capital plan. The following table presents the new long range plan:

<u>Fis</u>	<u>cal</u>	Debt Limit (\$ in Millions)
20	02	\$475
20	03	490
20	04	505
20	05	520
20	06	535

## **Higher Education Academic Debt to Be Authorized**

Limit new debt authorization for academic facilities to \$25 million for the next fiscal year. The Capital Debt Affordability Committee 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 2000, pg. 37). The entire amount is planned for academic facilities at University System of Maryland campuses. The \$25 million recommended academic revenue bond limit is the same level authorized for fiscal 2001.

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

## 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.

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 2002 debt limit of \$475 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 \$25 million recommended debt limit 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. The committee's projections indicate that debt outstanding will reach a maximum of 2.52 percent during the fiscal 2001-2005 period.

## **Risk Analysis**

As in prior years, 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.

Changes in after-the-fact measurement of personal income, as compared to estimates in growth in personal income, are obviously beyond the committee's control. Using a conservative approach in projecting growth in personal income has resulted in subsequent revisions generally indicating additional debt capacity.

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. 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 committee assumes a six-year time period for total issuance of a bond authorization. Any systematic factors that change the rate with which bonds are sold, would affect the ratio of debt outstanding to personal income. To reflect actual issuance rates experienced in recent years, the committee in it's fiscal 1998 report revised upward from 25 to 31 percent the assumed percentage of general obligation bonds issued within the first year of authorization. The current report continues the assumption that 31 percent of bonds authorized in a given year will be issued in the following year.

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 of personal income to be the greatest risk factor with potential changes to the issuance plans of other components of State tax supported debt posing a lesser risk. The committee believes these risks to have a low probability of causing a breach of the affordability criteria limits.

## **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.
- 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 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 2002 to 2006

Agency requests for fiscal 2002 total \$754.1 million, nearly \$280 million more than the amount available under the debt affordability limit. Capital requests for the next five years total over \$3.7 billion, while the projected debt limit for the same period totals \$2.5 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 GO Bond Requests: FY 2002 - 2006 (\$ in Millions)

			Fiscal Y	Year			Category
	2002	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<b>Total</b>	<b>Totals</b>
State Facilities							\$383.4
<b>Board of Public Works</b>	\$47.5	\$44.4	\$109.3	\$93.9	\$76.0	\$371.1	
Military	0.4	3.1	6.6	1.4	0.5	12.0	
Veterans	0.3	0.0	0.0	0.0	0.0	0.3	
Health & Social Services							304.6
Health & Mental Hygiene	19.2	33.1	44.6	19.8	77.1	193.8	
U. of Maryland Medical System	12.0	13.0	10.0	10.0	10.0	55.0	
Senior Citizen Activity Ctr.	2.0	1.0	1.0	1.0	1.0	6.0	
Juvenile Justice	2.2	3.2	21.0	18.6	4.8	49.8	
Environment							275.7
Natural Resources	33.5	33.0	33.0	33.0	33.0	165.5	
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	
Environment	22.3	28.1	19.8	14.0	7.8	92.0	
Md. Environmental Service	3.3	3.4	4.3	3.7	3.5	18.2	
Education							1,333.8
Education	1.6	13.3	12.0	0.0	0.0	26.9	
Md. School for the Deaf	0.0	0.6	3.5	14.1	1.1	19.3	
Md. Public Broadcasting	7.6	0.0	0.7	0.0	0.0	8.3	
Public School. Construction <sup>1</sup>	301.7	299.9	248.9	216.5	212.3	1,279.3	
Higher Education							837.4
University System Of Md. <sup>2</sup>	97.9	73.4	31.7	68.8	108.8	380.6	
Baltimore City Comm. College	1.4	15.4	1.8	13.2	4.3	36.1	
St. Mary's College	1.7	0.9	17.7	3.8	1.9	26.0	
Morgan State University	11.4	33.8	56.1	24.0	25.8	151.1	
Community Colleges	51.1	56.5	45.7	49.3	35.6	238.2	
S. Maryland Higher Ed. Center	0.4	0.0	0.0	0.4	4.6	5.4	
Public Safety							266.7
Public Safety	51.8	53.3	26.4	48.6	47.6	227.7	
State Police	5.2	21.9	7.3	4.3	0.3	39.0	
Housing & Economic Development							55.4
Economic Development	0.0	0.0	0.0	0.0	0.0	0.0	
Housing & Comm. Devel.	11.7	10.3	11.2	11.1	11.1	55.4	
Legislative Initiatives	12.5	12.5	12.5	12.5	12.5	62.5	62.5
Miscellaneous	55.4	56.5	29.0	16.7	14.1	171.7	171.7
Total Request	\$754.1	\$810.6	\$754.1	\$678.7	\$693.7	\$3,691.2	\$3,691.2
<b>Debt Affordability Limits</b>	\$475.0	\$490.0	\$505.0	\$520.0	\$535.0	\$2,525.0	

<sup>&</sup>lt;sup>1</sup> Represents LEA requests to the Interagency Committee on School Construction, May 2000.

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 2002 *5-Year Capital Improvement Plan* (CIP).

<sup>&</sup>lt;sup>2</sup> In addition to the GO bond request, USM has requested academic revenue bond funding of \$25 million per year and general fund PAYGO of \$173.4 million, \$48.0 million, \$12.6 million and \$11.0 million in fiscal years 2002 - 2006 respectively.

#### **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 2001 through 2010 would be issued. For the six years prior to its 1996 report, the Capital Debt Affordability Committee (CDAC) assumed 100 percent issuance of authorized bonds over a six-year period (25 percent, 25 percent, 20 percent, 20 percent, 5 percent and 5 percent). In its 1996 report, however, the CDAC assumed bonds authorized in a given year would be fully issued in just five years (31 percent, 25 percent, 20 percent, 15 percent and 9 percent). This change was made in response to an increase in the rate of issuances experienced from 1994 to 1996. This increase in the rate of issuances means that new authorizations will impact Maryland's level of outstanding debt, and Maryland's debt affordability capacity, more quickly than in the past. The current report continues the new five year issuance assumption.

The table in Appendix 1 also indicates the expected issuances of current authorizations. There is, and has been since 1989, over \$1 billion in authorized but unissued debt. The CDAC report assumes that \$282 million and \$139 million of this debt will be issued in fiscal 2002 and 2003, respectively.

In the past the committee offset the amount of general obligation bonds authorized by \$10 million, assuming that this amount would represent a potential lease conversion project for which general obligation bonds had been authorized. This practice had the effect of placing \$10 million into the issuance stream immediately rather than spreading it over the six-year period. Beginning with the 1991 report, the committee assumed there would be no offset in the amount of general obligation bonds issued. Therefore, it placed the full authorization into the six-year issuance stream and showed the amount of capital leases anticipated in a separate column outside of the general obligation debt column. In addition, the committee now anticipates capital leases for equipment as well as energy conservation projects. These changes were made to recognize that these capital leases were not replacing general obligation authorizations but were being done in addition to the authorizations.

#### **Bond Refunding**

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 three 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	<u>October 1993</u>	February 1994	<b>Total</b>
1993	\$40,024	\$0	\$0	\$42,024
1994	917,879	2,669,723	783,295	4,370,987
1995	910,776	492,895	310,473	1,714,144
1996	333,201	472,095	312,665	1,117,961
1997	332,226	470,765	310,828	1,113,819
1998	334,401	470,635	310,215	1,115,251
1999	335,289	471,278	312,380	1,118,947
2000	334,551	468,230	310,145	1,112,926
2001	334,817	470,965	308,260	1,114,042
2002	333,826	467,865	311,667	1,113,358
2003	332,193	467,660	312,837	1,112,690
2004	333,840	470,640	0	804,480
2005	333,748	467,448	0	801,196
2006	333,460	468,463	0	801,923
2007	0	471,213	0	471,213
Total	\$ 5,540,231	\$ 8,799,875	\$ 3,582,765	\$17,922,871

Source: State Treasurer's Office

Interest rates have risen since 1993 making additional refundings unlikely in the near future. However, should interest rates fall again 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**

The CDAC recommends that new authorizations of general obligation bonds during the 2001 legislative session be limited to \$475 million. This recommendation is consistent with the six-year plan included in CDAC's 1999 report and represents a \$15 million increase over the amount authorized by the General Assembly in the 1999 session. CDAC's six-year forecast of general obligation bond authorization levels continues the \$15 million annual increase that has been projected for the past few years. The projected increases remain slightly in excess of the 3 percent increase target comprised of a 2 percent increase each year to account for inflation and 1 percent increase representing real growth in the State's general obligation capital program. The authorizations and percent increases projected by the committee are as follows:

<u>Session</u>	General Obligation Bond Authorizations (\$ in Millions)	Increase
2001	475	3.3%
2002	490	3.2%
2003	505	3.1%
2004	520	3.0%
2005	535	2.9%
2006	550	2.8%

Source: Report of the Capital Debt Affordability Committee, September 2000

## **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 fund 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.

### **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 an annual debt ceiling is to be set annually in the budget bill. The fiscal 2001 budget bill set the maximum ceiling for June 30, 2001, at \$823 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, the Department of Legislative Services (DLS) estimates that as of June 30, 2001, it will have a maximum outstanding debt of \$713 million with coverage estimated at 4.9 times maximum debt service under the net revenue test, and 7.3 times using the pledged tax test.

Since fiscal 1989, the department has issued consolidated transportation bonds in nine of the twelve years. This includes two issuances to refinance previous bond sales. In 1993, \$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, \$315 million in debt was issued between fiscal 1993 - 2000. The department last issued new debt in December 1999 (fiscal 2000), when \$75 million in bonds were sold.

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

Fiscal Year	<b>Amount</b>
1989	\$100
1990	260
1991	310
1992	120
1993	75
1994	40
1995	75
1997	50
2000	<u>75</u>
Total	\$1,105

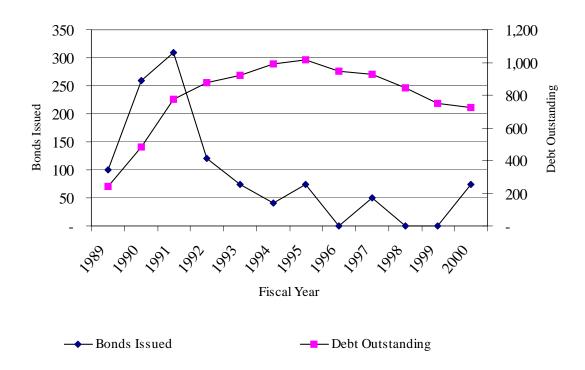
<sup>\*</sup> Exclusive of refinancing

Source: Maryland Department of Transportation

Prepared by: Department of Legislative Services, November 2000

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 \$725 million by the end of fiscal 2000 **Exhibit 4.4** illustrates annual bond sales and changes in debt outstanding.

Exhibit 4.4
MDOT Bonds Issued and Net Debt Outstanding
Twelve-Year Summary -- FY 1989 - 2000
(\$ in Millions)



S o urce: Maryland Department of Transportation

Prepared by: Department of Legislative Services, November 2000

## **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. Capital leases are considered tax supported debt and the Capital Debt Affordability Committee's analysis includes this financing.

#### **Future Debt Issuance**

In September 2000, the Capital Debt Affordability Committee issued its report that included a proposed bond issuance stream for transportation debt through fiscal 2006. The proposed level of debt to be issued for fiscal 2001 through 2006 totaled \$1,045 million as outlined in **Exhibit 4.5**. Debt outstanding would peak at \$1,200 million, the maximum allowed by law, in fiscal 2005.

Since the report was issued, DLS has reviewed the fiscal 2000 Transportation Trust Fund (TTF) closeout, and the Bureau of Revenue Estimates has revised its TTF revenue forecasts. The new revenue projections increase the amount available for the capital program by \$577 million over the level contained in the 2001 draft CTP. 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 <u>Debt Issuance</u>
2001	\$65
2002	230
2003	240
2004	215
2005	200
2006	95
Total	\$1,045

Source: Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations, September 2000

Prepared by: Department of Legislative Services, November 2000

#### **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 1990's, annual debt service requirements have risen 217 percent since fiscal 1989, from \$35 million to \$111 million in fiscal 2000. Based on the CDAC report, annual debt service will continue to increase, with annual payments peeking at \$178 million in fiscal 2005.

### **Future Direction of the State Transportation Capital Program**

Declines in capital spending occur over time because the largest source of transportation revenues (motor fuel taxes) does not grow as quickly as expenditures. The department budgets for debt service, operating budget requirements, and capital system preservation needs first, followed by spending for new or ongoing capital projects. Thus as expenditure needs grow, progressively lower levels of funding remain for capital spending.

In the short term, Maryland has benefitted from strong revenue growth (especially titling tax receipts) and increased federal aid. MDOT estimates that the reauthorization of federal transportation funds for highways and mass transit through the federal Transportation Equity Act for the 21st Century (TEA-21) will provide the capital program with approximately an additional \$130 million annually. During the 2000 legislative session, the administration proposed providing \$360 million in general funds from fiscal 2001 to 2005 to support Woodrow Wilson Bridge replacement and construction of the Addison Road to Largo Town Center Metrorail extension. These initiatives allowed the administration to add \$3.5 billion to the 1999 and 2000 Consolidated Transportation Programs (CTP) in new and expanded projects. In the draft CTP released in September 2000, MDOT was able to add another \$1.1 billion in new and expanded projects. DLS projects that additional revenues should allow MDOT to add another \$577 million in new and expanded projects to the CTP in January 2001.

## **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, 2000, the remaining net principal balance on the 1986 Refunding and 14th Series bonds totaled approximately \$5.1 million. These issues will be retired in fiscal 2007.

#### **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 \$25 million in equipment leases 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.

Several large lease/leaseback projects undertaken in the past have been initiated at institutions of higher education. These projects, all part of the University System of Maryland, use student fees to secure the debt. These are projects financed through auxiliary funds rather then general obligation bonds and are not included as tax supported debt by the Capital Debt Affordability Committee.

The original method of accounting for lease purchases of real property within the debt affordability context has changed since the mid 1980's. 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 Capital Debt Affordability Committee 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, and the committee's estimates have projected the issuance of the full general obligation bond authorization each year.

In 1987 the Joint Budget and Audit Committee opposed a separate limit for capital leases that removed certain projects from the competition for funding under the general obligation bond limit. As previously noted, the original reason for establishing a separate \$10 million for capital leases was to handle unanticipated lease/lease back projects. The present use of lease/leaseback creates a system diametrically opposed to the committees 1987 recommendations.

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 Capital Debt Affordability Committee generally includes \$10 million annually for real property leases, \$15 million annually for equipment, and \$10 million annually for energy projects.

**Exhibit 4.6** shows tax supported capital lease debt outstanding as of June 30, 2000.

# Exhibit 4.6 Tax Supported Capital Lease Debt Outstanding As of June 30, 2000

(\$ in Thousands)
\$55,318
6,810
5,835
7,830
2,268
5,409
3,651
48,348
\$135,469

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 select a site for, construct, and operate stadiums for baseball and football. Legislation authorized the MSA to issue debt to a maximum of \$235 million outstanding for these purposes. In subsequent years, MSA's role was expanded to include managing and issuing debt for the renovation and expansion of the Baltimore City and Ocean City convention centers, construction of a conference center in Montgomery County, construction of a golf course and conference center in St. Mary's County, and renovation and expansion of the Hippodrome Theatre in Baltimore City for use as a performing arts center (see below for a discussion of the Hippodrome project). In addition, the MSA has been given authority to manage several construction projects for State agencies and local governments for which it has no authority to issue debt. These projects include constructing a new arena at the University of Maryland College Park, renovating and expanding the seating at Towson University's Minnegan Stadium, constructing a new student center for the University of Maryland, Baltimore County, and assisting in the construction of a minor league baseball stadium and youth baseball academy in Harford County.

MSA is also managing several feasibility studies for local governments. **Exhibit 4.7** lists the projects for which MSA was authorized to issue debt. The MSA had \$292.5 million in debt outstanding as of June 30, 2000.

## Exhibit 4.7 Projects Authorized for MSA Debt

<b>Project</b>	(\$ in Millions)
Baseball and football stadiums	\$235.0
Baltimore City Convention Center	55.0
Ocean City Convention Center	17.3
Montgomery County Conference Center	23.2
Hippodrome Performing Arts Center (Discussed below)	12.0

## **Hippodrome Performing Arts Center**

The Hippodrome is seen as the cornerstone of the Baltimore City West Side revitalization effort. The Maryland Stadium Authority 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 Performing Arts Center. The new Hippodrome is planned to be a state-of-the-art theatrical facility large enough to accommodate larger broadway touring shows. The facility will be have a seating capacity of approximately 2,200.

The current estimated cost of the Hippodrome project is \$56 million excluding capitalized interest expenses. Funding for the project is expected to be provided by the State, Baltimore City, the performing arts center's operator, Stadium Authority revenue bonds, historic preservation tax credits, and private contributions. Plans are currently underway to have the Hippodrome and two surrounding buildings declared as national landmarks. This will entitle the owner of the properties to claim federal and State credits for historic preservation. Construction on the theatre and surrounding buildings is expected to begin in the early part of 2001, with the opening of the theatre scheduled for sometime in the spring of 2003. **Exhibit 4.8** shows breakdown of the sources and uses of funding for the Hippodrome project.

**Exhibit 4.8 Hippodrome Performing Arts Center Financing Plan** 

Sources	(\$ in Millions)
State General Fund PAYGO (fiscal 1999 - 2001)	\$16.5
Maryland Stadium Authority Revenue Bonds	10.0
City of Baltimore	6.0
Private Contributions	7.5
Theatre Operator	8.0
Historic Tax Credits	8.0
Total	\$56.0
<u>Uses</u>	
Hard Construction Costs	\$44.5
Architectural and Engineering Design	5.0
Legal - Accounting	0.3
Property Acquisition	2.0
Furniture, Fixtures and Equipment	4.2
Total	\$56.0

The 2000 General Assembly enacted HB 1301 (Chapter 185, Acts of 2000) authorizing the Maryland Stadium Authority to issue up to \$12 million in revenue bonds for the construction of the Hippodrome. Provided it secures the agreements as required in the bill, the Maryland Stadium Authority anticipates issuing approximately \$11.6 million in bonds for construction costs and capitalized interest in the spring of 2001. Under this scenario an interest only payment of \$462,000 will be made in fiscal 2002. Beginning in fiscal 2003 the average annual debt service will be approximately \$1.2

million for the term of the bonds. The Hippodrome will be leased to the State and subsequently leased back to the Maryland Stadium Authority. 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.

### **Bond Anticipation Notes (BANS)**

In response to the savings and loan crisis in May 1985, the General Assembly authorized \$100 million in general obligation bonds. The State utilized the authorization as security for the issuance of Bond Anticipation Notes (BANS). The final BANS redemption occurred in fiscal 1990, and during the 1990 session the \$100 million general obligation bond authorization was canceled.

Early in the land acquisition phase of the new baseball stadium, the Maryland Stadium Authority issued \$18 million in Bond Anticipation Notes. These were retired with funds from the first bond sale.

There are no plans to issue additional BANS at this time nor is there debt outstanding on BANS.

## 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 growth than is CDAC throughout the forecast period. DLS's fiscal 1999 amount is lower than that of the CDAC reflecting a downward revision made by the U.S. Department of Commerce's Bureau of Economic Analysis after the CDAC report was issued. **Exhibit 5.1** compares DLS personal income estimate with those of CDAC.

Exhibit 5.1

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

	DLS		CDAC		
Calendar	Personal		Personal		
<u>Year</u>	<b>Income</b>	% Change	<b>Income</b>	% Change	DLS - CDAC
1998	156,759		156,759		0
1999	166,062	5.9%	166,350	6.1%	(288)
2000	176,360	6.2%	175,264	5.4%	1,096
2001	186,973	6.0%	185,571	5.9%	1,402
2002	197,569	5.7%	196,178	5.7%	1,391
2003	208,660	5.6%	206,776	5.4%	1,884
2004	220,295	5.6%	217,070	5.0%	3,225
2005	232,345	5.5%	227,489	4.8%	4,856
2006	244,912	5.4%	238,218	4.7%	6,694

Source: DLS 1998 - 1999 Bureau of Economic Analysis, U.S. Department of Commerce

2000 - 2006 Department of Legislative Services

CDAC CDAC report, September 2000

Changes in personal income can have a large impact on the affordability of the State's debt level. 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. Improvements in personal income levels have the opposite effect and improve the affordability picture.

### **Revenue Projections**

**Exhibit 5.2** presents revenue projections to fiscal 2006. The Department of Legislative Services revenue projections are slightly higher than those of the CDAC. Revenue levels are factored into the debt service criteria. 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 Maryland State Revenue Projections (\$ in Millions)

Fiscal <u>Year</u>	General <u>Fund</u>	Property <u>Taxes</u>	<u>Transp.</u>	Stadium <u>Related</u>	Total DLS Revenues	CDAC Revenues	DLS - CDAC
1999	\$8,524.4	\$246.5	\$1,462.0	\$25.7	\$10,258.6	\$10,258.6	\$0
2000	9,220.1	250.5	1,569.0	27.1	11,066.7	10,906.6	160.1
2001	9,603.9	254.5	1,546.0	27.1	11,431.5	11,199.8	231.7
2002	9,883.0	260.5	1,562.0	27.1	11,732.6	11,558.9	173.7
2003	10,337.2	267.9	1,616.0	27.1	12,248.2	11,987.4	260.8
2004	10,913.1	274.6	1,679.0	27.2	12,893.9	12,537.9	356.0
2005	11,491.3	281.5	1,728.0	27.2	13,528.0	13,126.3	401.7
2006	12,090.3	288.5	1,770.0	27.2	14,176.0	13,748.5	427.5

General Fund: Per DLS October report to the Spending Affordability Committee

Property Tax: 1999 - 2000: State Treasurer's Office

2001 - 2002: Department of Budget and Management 2003 - 2006: Department of Legislative Services

Transportation: 1999: Department of Transportation

2000 - 2005: Department of Legislative Services

Stadium: Maryland Stadium Authority
CDAC: CDAC Report, September 2000

### **Affordability Analysis**

**Exhibits 5.3 and 5.4** incorporate the debt limits recommended by the CDAC along with the personal income and revenues estimated by the Department of Legislative Services 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 2.50 percent in fiscal 2001 to 2.53 percent in fiscal 2002 then declines to 2.46 percent by fiscal 2005.

Exhibit 5.4 shows that debt service as a percent of revenues increases with some variations year-to-year from 5.71 percent in fiscal 2001 to 6.08 percent in fiscal 2005. 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 <u>Year</u>	General Obligation (a)(b)	Department Consolidated (d)	of Transpor <u>County</u>	tation (c) <u>Total</u>	Capital <u>Leases</u>	Stadium <u>Authority</u>	
		State Tax St	unnorted De	ht Outstandi	ng (\$ in Thous	sands)	
		State Tax B	apported De	ot Outstand	ing (ψ in Thou.	ourus)	
1997	3,025,394	923,885	5,637	929,522	98,351	309,740	4,363,007
1998	3,270,525	844,015	5,605	849,620	90,301	305,460	4,515,906
1999	3,500,238	749,130	5,050	754,180	134,453	299,895	4,688,766
2000	3,348,872	724,770	4,460	729,230	135,469	292,515	4,506,086
2001	3,450,881	713,050	3,830	716,880	192,600	319,890	4,680,251
2002	3,557,561	909,000	3,155	912,155	214,445	311,620	4,995,781
2003	3,640,310	1,050,000	2,440	1,052,440	213,908	302,855	5,209,513
2004	3,849,363	1,142,000	1,675	1,143,675	208,474	292,977	5,494,489
2005	4,032,060	1,199,000	865	1,199,865	198,614	282,503	5,713,041
2006	4,214,122	1,199,000	0	1,199,000	NA	271,376	NA
	C4a4	a Tay Sunnauta	d Dobt Outa	tandina aa a l	Domoont of Dov	annal Imaam	•
	Stat	e Tax Supporte		_		Sonai Incom	e
		(AII	ordability ci	riteria standa	ra = 3.2%		
1997	2.04%	0.62%	0.00%	0.63%	0.07%	0.21%	2.94%
1998	2.09%	0.54%	0.00%	0.54%	0.06%	0.19%	2.88%
1999	2.11%	0.45%	0.00%	0.45%	0.08%	0.18%	2.82%
2000	1.90%	0.41%	0.00%	0.41%	0.08%	0.17%	2.56%
2001	1.85%	0.38%	0.00%	0.38%	0.10%	0.17%	2.50%
2002	1.80%	0.46%	0.00%	0.46%	0.11%	0.16%	2.53%
2003	1.74%	0.50%	0.00%	0.50%	0.10%	0.15%	2.50%
2004	1.75%	0.52%	0.00%	0.52%	0.09%	0.13%	2.49%
2005	1.74%	0.52%	0.00%	0.52%	0.09%	0.12%	2.46%
2006	1.72%	0.49%	0.00%	0.49%	NA	0.11%	NA
(a)	Reflects presum	ed new authorizati	ions as follows	ı <b>.</b>			
(u)		embly Session:	200		2003	2004	2005 2006
	For Fiscal Y	•	200		2004		2006 2007
	(millions)	cui.	\$47		\$505		\$535 \$550
<i>a</i> >	(1111110113)	,	ψ-1/	υ του	Ψυσυ	. Ψ <i>52</i> 0 .	φ555

- (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. DOT 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)	2001	2002	2003	2004	2005	2006
	G.O. issues	\$400	\$429	\$410	\$540	\$535	\$550
	DOT issues	65	280	235	195	175	95
	Stadium Authority issues	35	0	0	0	0	0
	Capital Leases - Equip. & EPC	25	25	25	25	25	25
	Real Property	43	10	10	10	10	10
	Personal Income (billions)	187.0	197.6	208.7	220.3	232.3	244.9

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

Fiscal	Fiscal General Department of Transportation				Capital	Stadium	Total Tax
Year	Obligation	Consolidated	County	Total	Leases	Authority	Supported Debt Service
	(a)	(b)	(c)			(d)	<u>Debt Bel vice</u>
		State Tax Su	ipported Deb	t Service (\$ i	n thousands	)	
1997	401,548	135,693		135,693	36,316	22,029	595,586
1998	417,322	142,796		142,796	25,220	24,573	609,911
1999	417,505	132,910		132,910	23,992	25,669	600,076
2000	459,393	135,233		135,233	25,089	27,142	646,857
2001	470,718	111,462		111,462	43,337	27,125	652,642
2002	497,989	124,000		124,000	51,460	29,395	702,844
2003	510,663	145,000		145,000	53,227	29,378	738,268
2004	522,221	160,000		160,000	54,045	29,943	766,209
2005	556,422	178,000		178,000	58,307	29,924	822,653
2006	583,921	156,000		156,000	NA	29,919	NA
		State Tax Suppo	rtad Daht Sar	wice oc o Per	cent of Reve	aniioc	
			dability criter			enues	
1997	5.11%	10.49%			0.46%	100.00%	6.50%
1998	5.03%	10.70%			0.30%	100.00%	6.32%
1999	4.76%	9.09%			0.27%	100.00%	5.85%
2000	4.85%	8.62%			0.26%	100.00%	5.85%
2001	4.77%	7.21%			0.44%	100.00%	5.71%
2002	4.91%	7.94%			0.51%	100.00%	5.99%
2003	4.82%	8.97%			0.50%	100.00%	6.03%
2004	4.67%	9.53%			0.48%	100.00%	5.94%
2005	4.73%	10.30%			0.50%	100.00%	6.08%
2006	4.72%	8.81%			NA	100.00%	NA

<sup>(</sup>a) Forecast assumes debt service on minibonds is paid at maturity and no minibond put options are exercised.

<sup>(</sup>b) Does not include the following:

<sup>(1)</sup> 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 2000 for the DOT to repay the MdTA's \$20 million financing of the Masonville Auto Terminal; (4) \$12 million transfer per year in fiscal 2002 - 2003 from MDOT to the MdTA to repay a \$24 million transfer in fiscal 1999.

<sup>(</sup>c) Repayments from counties equal or exceed debt service requirements.

<sup>(</sup>d) 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 Legislative Services' personal income estimates are slightly lower than or equal to those estimated by the CDAC throughout the forecast period, except for fiscal 2002. The lower ratios result primarily from Legislative Services' higher estimates of personal income. The higher DLS ratio in fiscal 2002 results from higher transportation debt outstanding than assumed by the CDAC. **Exhibit 5.5** compares the two sets of debt outstanding ratios.

**Exhibit 5.5 Comparison of Debt to Personal Income Ratios** 

Fiscal Year	<u>DLS</u>	$\underline{\mathbf{CDAC}}^1$
2001	2.50%	2.52%
2002	2.53%	2.52%
2003	2.50%	2.50%
2004	2.49%	2.52%
2005	2.46%	2.51%

<sup>1</sup>The CDAC report issued September 2000 contained a number of error in the data which affected the validity of the debt affordability ratios. The ratios presented here were calculated by DLS using the CDAC assumptions but correcting the errors. The corrected versions of the CDAC report tables 1 and 2 are included in this report as Appendices 3 and 4.

Source: Department of Legislative Services

# 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 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.

#### **Debt Issuance**

Growth in the amount of non-tax supported agency debt has been a 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 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** shows the allocations and

issues for fiscal 1999 and 2000 and the issuance levels for 2001.

#### Exhibit 6.1 State Agency Debt Allocations and Issuances (\$ in Thousands)

	FY 1999	)	FY 2	FY 2001	
Agencies Subject to	Issuance Le	evels	Issuance	Approved Levels	
Allocation Cap	<b>Approved</b>	<u>Issued</u>	<b>Approved</b>	<u>Issued</u>	
MD Envirn. Service	8,000	7,543	10,000	*	15,000
MD Food Ctr. Auth.	10,000		15,000		15,000
MD Trans. Auth.	30,000				
Water Qual. Fin. Ad.	50,000				
Total	\$98,000	\$7,543	\$25,000	<b>\$0</b>	\$30,000

<sup>\*</sup>Original approved level was \$6 million; amended to \$10 million.

Source: Department of Budget and Management. *Debt Issued by Maryland Sate Agencies and Independent Authorities: Fiscal Year 2000*, November 2000.

### **Private Activity Bonds**

Agency debt not subject to the Executive Order 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. Originally imposed by the Tax Reform Act of 1986, the unified volume cap set a ceiling on annual tax-exempt private activity bond volume for each state equal to the greater of \$50 per capita or \$150 million. The Omnibus Appropriation Act of 1998 increased the cap to the greater of \$75 per capita or \$225 million. The increase is to be phased in from federal fiscal 2003 to 2007. Congress enacted legislation in 1999 that would have started the phase-in of the cap increase in federal fiscal 2000, however the bill was vetoed by the President. The only tax-exempt private activity bonds not subject to the cap are those issued for nonprofit organizations, for government owned airports, docks, wharves, solid waste facilities, and for other public properties.

The unified volume cap legislation also imposed a 50/50 split of the volume cap between State issuing authorities and local issuing authorities that is subject to change

should the Governor or legislature propose an alternative allocation. Unused capacity under the unified volume cap that is not used during the year in which it is received may be carried forward for a period of three years.

### **Debt Outstanding**

**Exhibit 6.2** summarizes the increase in debt outstanding for various categories between fiscal 1991 and 2000. A table containing debt outstanding by year for the individual agencies included in the summary is included as **Appendix 2**.

Between fiscal 1991 and 2000 general obligation bond and State capital lease debt outstanding has increased by 65.0 percent. Over the same period, agency debt subject to the Governor's issuance cap has increased by \$114.4 million, an increase of 30.8 percent. 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 \$1.4 billion, an increase of 57.0 percent.

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 30th
(\$ in Millions)

	<u>1991</u>	<u>2000</u>	% Change
Agency debt subject to issuance cap	\$371.8	\$486.2	30.8
Agency debt not subject to issuance cap*	2,420.7	3,801.1	57.0
General obligation & State lease debt	2,111.7	3,484.3	65.0
Transportation debt	842.0	724.8	(13.9)
Public purpose/private debt	1,660.9	3,555.0	114.0

<sup>\*</sup>Excluding Maryland Industrial Financing Authority debt for which debt outstanding numbers prior to 1997 are unavailable.

Source: CDAC Report 2000 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 in 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 singlefamily 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 \$850 million, the Morgan State University limit is \$65 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 fiscal 2002, total debt service will be approximately 4.2 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 4.37 percent in fiscal 2004. The debt service recommendation was based on 10 criteria, of which the system rated favorably in seven. Three areas that warrant monitoring were endowment, debt to endowment, and unrestricted funds as a percentage of debt. Should the system resolve the concerns raised by the consultant's study, it could then consider increasing its debt service payment ceiling. Since 1993, the debt to endowment ratio and the unrestricted fund to debt service ratio have gotten worse which will prevent consideration of raising the debt service payment ratio in the near term.

Based on information contained in the Capital Debt Affordability Committee's September 2000 report, USM intends to continue to issue approximately \$90 million annually in new debt during fiscal 2002 through 2006. Specifically in fiscal 2002, they intend to issue \$25 million in academic debt and \$65 million in auxiliary debt. If these amounts are issued, the total USM debt outstanding will be approximately \$773 million which is well within the \$850 million authorized debt limit. **Exhibit 6.3** provides a summary of the University System of Maryland academic debt profile from fiscal 1990 to fiscal 2001.

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

Fiscal Year	<u>Authorized</u>	<u>Issued</u>	Cancelled	Authorized but Unissued	Debt Service
1990	\$52	\$52	\$0	\$0	\$4.61
1991	42	42	0	0	3.83
1992	40	25	5	10	2.08
1993	40	49	0	1	4.42
1994	25	12	13	1	1.08
1995	42	21	0	22	1.77
1996	40	25	0	37	2.17
1997	40	35	0	42	2.97
1998	29	37	0	34	2.90
1999	32	NA	NA	66	NA
2000	25	49	0	42	4.70
2001	25	54	0	13	5.10

Source: The University System of Maryland

# Chapter 7. Issues

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

### Reality Check in Out Year PAYGO Budgeting

The fiscal 2002 *Capital Improvement Program* (CIP) projects over \$1.1 billion in general fund PAYGO spending for the fiscal 2003 - 2006 period. While this level of funding seem reasonable just a year ago, given current economic forecasts it is doubtful that anything close to this level will be attained.

For ongoing programs funded with general fund PAYGO, such as those dealing with housing, economic development, and the environment, a reduction in funding level is relatively easy to accommodate - activity level simply drops accordingly. Problems arise, however, when dealing with discrete projects planned for general fund PAYGO funding. If general funds are not available those projects must be delayed or funded from an alternative source such as general obligation bonds. Delaying specific projects is problematic because expectations of the supporters have been raised by the project being included in the CIP. Moving projects to bond funding is difficult because the bond program is fully subscribed in each year of the CIP, moving projects into the bond program requires moving an equal amount of funding out in order to remain within the bond authorization limit.

The problems involved with having projects or programs in the out years of the CIP that are not ultimately supportable by the general funds due to a reduction in the amount of general funds available for use as PAYGO can be lessened to a great extent by adopting policies which limit the use of out year general fund PAYGO to only those uses for which tax exempt debt financing is not allowable (e.g. economic development, housing, and environmental programs.) Most discrete projects are eligible for tax exempt bond funding and would no longer be slated for general fund PAYGO in the out years of the CIP. This would not prevent the Governor from funding projects in the budget year with general fund PAYGO should the fund balance permit. Adoption of this policy could be accomplished through amending the section of the State Finance and Procurement Article of the Code of Maryland that provides the requirements on development of the CIP. Amending the statute in this manner would also codify the policy adopted by the Spending Affordability Committee in its 2000 report that when discrete projects are funded with general fund PAYGO the appopriation include full funding for all phases of the project (i.e. planning, constructing and equipping.) Since no out year general fund PAYGO for discrete projects could be included in the CIP, the budget year general fund PAYGO appropriation would either need to include funding

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

40

of all phases or the alternative funding would need to be identified for the out year phases.

# 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<sup>1</sup> 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.

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

The ten-year index is used is 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.

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.

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 <u>AAA</u>	MD Rate as % of <u>AAA Rate</u>	Delphis Hanover <u>AA+</u>	MD Rate as % of <u>AA+ Rate</u>
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%
7/19/00	5.05	4.85	104.1%	4.92	102.6%
Average	5.32	5.01	102.3%	5.10	100.5%

<sup>\*</sup>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.

For the past 14 years (Maryland didn't sell debt during 1985), 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 1982 are 6.40 percent and 6.29 percent, respectively, while Maryland has an average yield of 5.65 percent. (See **Exhibit 8.2**).

The spread between Maryland's general obligation bonds and the Bond Buyer Index 20 and Index 11 it 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

<u>Date</u>	Rate on MD Bonds	Index of 20 G.O.  Bonds	MD Rate as % of 20 Bond	Index of 11 G.O. <u>Bonds</u>	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%
Average	5.65	6.40	88.1%	6.29	89.6%

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

The Treasurer's Office believes that the narrowing of the spreads is primarily a function of a change in the yield curve. 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	Proposed	2001	2002	2002			ces During					Total
<u>Session</u>	<u>Authorizations</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Issued</u>
2001	475	0	147	119	95	71	43	0	0	0	0	475
2002	490		0	152	123	98	74	44	0	0	0	490
2003	505			0	157	126	101	76	45	0	0	505
2004	520				0	161	130	104	78	47	0	520
2005	535					0	166	134	107	80	48	535
2006	550						0	171	138	110	83	501
2007	565							0	175	141	113	429
2008	580								0	180	145	325
2009	595									0	184	184
2010	610										0	0
Total		0	147	271	374	457	513	528	543	558	573	3,964
Current												
Authorizations (	b) 1363	400	282	139	166	78	37	26	0	0	0	
<b>Total Issuances</b>		400	429	410	540	535	550	554	543	558	573	5,092
Sales Fi	rst	200	200	210	270							
	econd	200	229	200	270							
Te	otal	400	429	410	540							
Notes:												
(a) Percentage i	ssuance assumptions	by fiscal	vears:									
	year following year	•	•	1st	2nd	3rd	4th	5th				
	Percent of origin			31%	25%	20%	15%	9%				

<sup>(</sup>b) Net of \$1 million - the remaining bonds authorized by the Outdoor Recreation Loan of 1969 that are unissued as of June 30, 2000. This amount will be canceled.

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 2002, September 2000.

# Debt Outstanding as of June 30th (\$ in Millions)

	<u>FY 91</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<b>FY 00</b>	FY 91-00	
Agency Debt Subject to Ceiling and	Allocatio	n Caps										
MD Envir. Service	19.0	18.4	27.2	27.2	29.9	34.8	33.7	31.0	34.0	29.4	54.6%	
MD Wholesale Food Ctr. Auth.	11.2	11.0	11.0	7.3	7.2	7.2	7.1	7.0	6.9	6.8	-39.2%	
MD Trans Authority	272.8	272.8	302.5	302.5	465.2	408.4	391.9	374.9	344.5	318.7	16.8%	
MD Water Qual. Finan. Adm.	68.8	107.9	134.0	133.2	163.2	163.4	157.8	151.3	138.1	131.3	90.9%	
Revenue Cap Total	371.8	410.1	474.7	470.2	665.5	613.8	590.6	537.3	523.4	486.2	30.8%	
% Change/Prior Year	23.5%	10.3%	15.7%	-0.9%	41.5%	-7.8%	-3.8%	-9.0%	-2.6%	-7.1%		
Agency Debt Not Subject to Ceiling and Allocation Caps												
Balt. City Comm. College												
Comm. Devel. Admin. (a)	1,988.5	2,334.9	2,275.6	2,457.4	2,446.5	2,340.8	2,238.3	2,321.1	2,473.5	2,627.0	32.1%	
Local Govt. Infra. (CDA)	28.5	41.0	39.7	42.3	48.5	55.0	62.5	66.1	81.1	85.5	200.0%	
MD Energy Finance Admin.	14.1	49.8	48.0	44.6	202.6	300.9	307.4	306.2	301.1	388.4	2654.3%	
MIDFA							352.3	330.4	312.3	296.0		
Morgan State University	30.4	26.7	27.0	28.0	28.9	29.4	29.9	27.9	27.5	27.1	-10.8%	
St. Mary's College	4.2	4.0	8.9	8.7	8.5	8.1	7.8	17.5	17.3	16.9	302.9%	
Univ. of Maryland System	355.0	412.1	461.5	473.8	518.3	505.9	534.5	611.0	670.0	656.1	84.8%	
Non-Cap Total	2,420.7	2,868.5	2,860.7	3,054.9	3,253.3	3,240.1	3,532.9	3,680.3	3,882.8	4,097.1	69.3%	
% Change/Prior Year	11.6%	18.5%	-0.3%	6.8%	6.5%	-0.4%	9.0%	4.2%	5.5%	5.5%		
Capital Leases and General Obligat	tion Debt											
Capital Leases - BPW	73.3	100.5	110.7	140.8	125.2	115.8	98.4	90.3	134.5	135.5	84.9%	
General Obligation Debt	2,038.4	2,178.2	2,279.4	2,504.0	2,619.1	2,859.9	3,025.4	3,270.5	3,500.2	3,348.9	64.3%	
Total Leases + GO	2,111.7	2,278.7	2,390.1	2,644.8	2,744.3	2,975.7	3,123.8	3,360.8	3,634.7	3,484.3	65.0%	
% Change/Prior Year	4.0%	7.9%	4.9%	10.7%	3.8%	8.4%	5.0%	7.6%	8.1%	-4.1%		
Non-state Debt (Not Subject to Ceil	ing and A	llocation (	Caps)									
Higher Ed. Suppl. Ln. Ath. (b)	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Hlth/Higher Ed. Fcl. Ath.	1,655.6	1,863.8	2,064.9	2,254.2	2,256.6	2,348.4	2,489.7	2,821.0	3,236.6	3,555.0	114.7%	
<b>Total Non-State</b>	1,660.9	1,863.8	2,064.9	2,254.2	2,256.6	2,348.4	2,489.7	2,821.0	3,236.6	3,555.0	114.0%	
% Change/Prior Year	22.3%	12.2%	10.8%	9.2%	0.1%	4.1%	6.0%	13.3%	14.7%	9.8%		

(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 - 2000: Dept. of Budget & Management, St. Mary's College, Morgan State University, University System of Maryland, Capital Debt Affordability Committee Report, Sept. 2000

# Table 1 - CDAC Corrected State Supported Debt Outstanding Components and Relationship to Personal Income

	Total									
Fiscal	General	- Department	of Transpor	rtation - (c)	Capital	Stadium	Tax Supported			
Year	<b>Obligation</b>	Consolidated	County	Total	Leases	Authority	<u>Debt</u>			
	(a)(b)	(d)								
	· / · /	. ,	te Tax Supp	orted Debt Ou	itstanding					
				Thousands)	C					
1996	2,859,935	946,685	10,200	956,885	115,778	307,340	4,239,938			
1997	3,025,394	923,885	5,637	929,522	98,351	309,740	4,363,007			
1998	3,270,525	844,015	5,605	849,620	90,301	305,460	4,515,906			
1999	3,500,238	749,130	5,050	754,180	134,453	299,895	4,688,766			
2000	3,348,872	724,770	4,460	729,230	135,469	292,515	4,506,086			
2001	3,450,881	(e) 713,050	3,830	716,880	192,600	319,890	4,680,251			
2002	3,557,561	859,150	3,155	862,305	214,445	311,620	4,945,931			
2003	3,640,310	1,004,660	2,440	1,007,100	213,908	302,855	5,164,173			
2004	3,849,363	1,116,705	1,675	1,118,380	208,474	292,977	5,469,194			
2005	4,032,060	1,199,865	865	1,200,730	198,614	282,503	5,713,906			
2006	4,214,122	1,201,015	0	1,201,015	NA	271,376	NA			
State Tax Supported Debt Outstanding as a Percent of Personal Income										
			(Affordabil	lity criteria = 1	3.2%					
1996	2.03	0.67	0.01	0.68	0.08	0.22	3.01			
1997	2.04	0.62	0.00	0.63	0.07	0.21	2.94			
1998	2.09	0.54	0.00	0.54	0.06	0.19	2.88			
1999	2.10	0.45	0.00	0.45	0.08	0.18	2.82			
2000	1.91	0.41	0.00	0.42	0.08	0.17	2.57			
2001	1.86	0.38	0.00	0.39	0.10	0.17	2.52			
2002	1.81	0.44	0.00	0.44	0.11	0.16	2.52			
2003	1.76	0.49	0.00	0.49	0.10	0.15	2.50			
2004	1.77	0.51	0.00	0.52	0.10	0.13	2.52			
2005	1.77	0.53	0.00	0.53	0.09	0.12	2.51			
2006	1.77	0.50	0.00	0.50	NA	0.11	NA			
(a) Refle	ects presumed i	new authorizations as	follows:							
	General A	Assembly Session	2001	2002			005 2006			
		For Fiscal Year	2002	2003			006 2007			
		(\$ in Millions)	\$475	\$490	\$505	\$520 \$.	535 \$550			

- (b) Assumes debt service on minibonds is paid at maturity and no minibond put options are excercised.
- (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 Maryland Transportation Authority to the Department of Transportation in fiscal 1991, 1993, and 1993. DOT 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 Auto Terminal during fiscal 1999 and 2000 in the amount of \$20 million to be repaid in annual payments of \$1,674,0000 including interest over a 20-year period.

(e) Issuance Assumptions: (millions)	2001	2002	2003	2004	2005	2006
G.O. issues	400	429	410	540	535	550
DOT issues	65	230	240	215	200	95
Stadium Authority issues	35	0	0	0	0	0
Capital Leases - Equipment & EPC	25	25	25	25	25	25
- Real Property	43	10	10	10	10	10
Personal Income (billions)	185.6	196.2	206.8	217.1	227.5	238.2

### Table 2 - CDAC Corrected State Supported Debt Service Components and Relationship to Revenues

					<b>Total Tax</b>				
General	Department of	f Transportation - (c)	Capital	Stadium	Supported				
<b>Obligation</b>	<b>Consolidated</b>	<b>County</b> Total	<b>Leases</b>	<b>Authority</b>	<b>Debt</b>				
(a)	(b)			(d)					
	Sta	ate Tax Supported Debt	Outstanding						
		(\$ in Thousand	*						
401,548	135,693			22,029	595,586				
,	,			24,573	609,911				
417,505	132,910		23,992	25,669	600,076				
459,393	135,233		25,089	27,142	646,857				
470,718	111,462		43,337	27,125	652,641				
497,989	122,963		51,460	29,395	701,807				
510,663	142,081		53,227	29,378	735,349				
522,221	157,632		54,045	29,943	763,842				
556,422	176,539		58,307	29,924	821,192				
583,921	155,244		NA	29,919	NA				
**									
		(Affordability criteria							
					6.50				
					6.32				
					5.85				
					5.93				
4.88					5.83				
4.98					6.07				
					6.13				
4.77	10.11			100.00	6.09				
4.84	11.04		0.51	100.00	6.25				
4.84	9.44		NA	100.00	NA				
	Obligation (a)  401,548 417,322 417,505 459,393 470,718 497,989 510,663 522,221 556,422 583,921  5.11 5.03 4.76 4.92 4.88 4.98 4.90 4.77 4.84	Obligation         Consolidated           (a)         (b)           401,548         135,693           417,322         142,796           417,505         132,910           459,393         135,233           470,718         111,462           497,989         122,963           510,663         142,081           522,221         157,632           556,422         176,539           583,921         155,244           State Tax Suggested at Tax	Obligation         Consolidated         County         Total           (a)         (b)         State Tax Supported Debt (\$ in Thousand (\$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Obligation (a)         Consolidated (b)         County         Total (d)         Leases (d)         Authority (d)           State Tax Supported Debt Outstanding (\$ in Thousands)           401,548         135,693         36,316         22,029           417,322         142,796         25,220         24,573           417,505         132,910         23,992         25,669           459,393         135,233         25,089         27,142           470,718         111,462         43,337         27,125           497,989         122,963         51,460         29,395           510,663         142,081         53,227         29,378           522,221         157,632         54,045         29,943           556,422         176,539         58,307         29,924           583,921         155,244         NA         29,919           State Tax Supported Debt Service as a Percent of Revenues (Affordability criteria = 8.0%)           5.11         10.49         0.46         100.00           4.76         9.09         0.27         100.00           4.92         8.80         0.27         100.00           4.98         8.06         0.51         100.00 <t< td=""></t<>				

- (a) Forecast assumes debt service on minibonds is paid at maturity and no put options are excercised.
- (b) Does not include the following:
  - (1) Transfers of \$25 million per year in fiscal 1995-1997 from MDOT to MdTA to repay the MdTA for the transfer of \$25, \$40, and \$10 million in fiscal 1991, 1992, and 1993. (2) Annual payments of \$567,280 beginning in fiscal 1999 from MDOT to MdTA to repay MdTA's \$11.9 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 MdTA's \$20 million financing of the Masonville Auto Terminal.
- (c) Does not include debt service on county transportation bonds. Repayments from counties equal or exceed debt service requirements.
- (d) Transfers from the Stadium Facilities Fund to the Stadium Authority are assumed to be just sufficient, when coupled with the Authority's own-source revenue, to meet debt service requirements.