

**X00A00  
Public Debt**

***Operating Budget Data***

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(\$ in Thousands)

	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 02-04</u> <u>Change</u>	<u>FY 05</u>	<u>FY 04-05</u> <u>Change</u>
Operations	\$612,792	\$909,931	\$536,819	-\$75,974	\$567,860	\$31,041
Grants	0	0	0	0	0	0
<b>Adjusted Grand Total</b>	<b>\$612,792</b>	<b>\$909,931</b>	<b>\$536,819</b>	<b>-\$75,974</b>	<b>\$567,860</b>	<b>\$31,041</b>
 General Funds	 103,455	 92,684	 0	 -103,455	 0	 0
Special Funds	408,815	727,385	536,819	128,004	567,860	31,041
Reimbursable Funds	100,523	89,862	0	-100,523	0	0
<b>Adjusted Grand Total</b>	<b>\$612,792</b>	<b>\$909,931</b>	<b>\$536,819</b>	<b>-\$75,974</b>	<b>\$567,860</b>	<b>\$31,041</b>
 <b>Annual % Change</b>		<b>48.5%</b>	<b>-41.0%</b>		<b>5.8%</b>	

- Debt service costs are projected to increase \$31 million in fiscal 2005, for an expenditure totaling \$567.9 million.
- The fiscal 2005 allowance assumes no general funds.

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

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## *Analysis in Brief*

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### Major Trends

***Fiscal 2003 Expenditures Were Unusually High Due to Bond Refunding:*** Fiscal 2003 actual expenditures include \$410.9 million in revenues generated through bond refunding.

***Debt Service Costs Are Projected to Increase by \$31 Million:*** In recent years the General Assembly has authorized more debt, primarily to move PAYGO capital funded projects into the bond program.

***The Fiscal 2005 Allowance Assumes No General Funds:*** As in fiscal 2004, debt service will primarily be funded through property taxes.

### Issues

***General Obligation Bond Authorizations Are Increased by \$100 Million:*** The administration's capital budget assumes an additional \$100 million in general obligation bond authorizations. The issue examines the cost of this additional debt. **The Treasurer and the Department of Budget and Management should brief the committees on expanding debt authorizations.**

***How to Pay for Debt Service: Property Taxes or General Funds?*** Currently State property taxes support debt service. In the long term, property tax revenues do not keep up with debt service cost increases. This will require the State to either increase property tax rates or provide a general fund subsidy. The issue examines various long-term debt service revenue options. **It is recommended that the General Assembly adopt a provision in the budget reconciliation legislation to ensure stable property taxes through fiscal 2006.**

***Spending Affordability and Capital Debt Affordability Committees Recommend Against Using Bond Sale Premiums to Support Capital Projects:*** Legislation enacted in 2003 allows the State to use bond sale premium proceeds to support an expansion of the capital program. The issue examines the trade-offs between using the bond sale premiums to support debt service and using the bond sale premiums to support an expanded capital program. **It is recommended that language be adopted that requires that bond sale premium proceeds may only support debt service and may not be appropriated for other purposes.**

***How Long Can Maryland Continue to Expand Private Activity Projects in the Capital Budget and Continue to Issue Tax-exempt Bonds?*** Currently, Maryland only issues tax-exempt bonds. To be tax-exempt, private activity cannot exceed 5% of the bond sale or \$15 million. The administration's

*X00A00 – Public Debt*

six-year *Capital Improvement Program* shifts private activity program funding into the bond program. The issue examines potential costs associated with issuing taxable debt. **The committees should be briefed on the effects of these policies on debt service requirements.**

***Variable Rate Bonds Can Reduce Debt Service Payments, but They also Introduce Additional Risk into the Portfolio:*** Legislation enacted in 2003 allows the State to sell variable rate debt. The issue analyzes the potential cost savings and risks associated with variable rate bonds. **The State Treasurer should brief the committees on the State’s policies concerning the issuance of variable rate bonds.**

***Rating Agency Considers GARVEE Bonds When Calculating State Debt Limits:*** The funding plan for the InterCounty Connector proposes the issuance of Grant Anticipating Revenue Vehicles (GARVEE) bonds. The issue examines the effect of this proposal on State debt limits. **It is recommended that the law be amended to clarify that the GARVEE bonds be examined by the Capital Debt Affordability Committee.**

**Recommended Actions**

	<u>Funds</u>
1. Reduce general obligation bond debt service to recognize the cancellation of the February 2004 bond sale.	\$ 7,500,000
<b>Total Reductions</b>	<b>\$ 7,500,000</b>

**Updates**

***State Recognizes Bond Sale Premiums When Forecasting Revenues and Debt Service:*** Prior to the fiscal 2005 allowance, the State did not estimate bond sale premiums in spite of generating over \$197 million in revenues since January 2000. The current allowance is estimating bond sale premiums. The update examines this policy change.

*X00A00 – Public Debt*

## X00A00 Public Debt

### *Operating Budget Analysis*

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#### **Program Description**

There are two programs in the Public Debt:

- debt service, which funds principal and interest payments on general obligation (GO) bonds. GO bond debt service payments are supported by the Annuity Bond Fund (ABF). Funds are generated from property tax revenues, general funds, and repayments from certain State agencies, subdivisions, and private organizations. All property taxes generated by the State are deposited in the ABF to support debt service. The fund can also receive reimbursable funds first appropriated as general funds in the Maryland State Department of Education (MSDE) budget to pay debt service on public school construction loans; and
- related expenses on State bonds, which includes arbitrage penalty payments and special funds resulting from refunded bonds. The funds generated by refunding bonds are used to purchase government securities that provide the debt service payment to the bondholders. For purposes of setting debt limits, refunded bonds are not included in State debt calculations.

#### **Governor's Proposed Budget**

The fiscal 2005 allowance totals \$567.9 million. **Exhibit 1** shows debt service payments increased 5.8%, or \$31 million when compared to the fiscal 2004 payments. The increase is attributable to higher GO bond authorizations in recent years. Net authorizations increased from \$460 million in the 2000 session to \$505 million in the 2001 session, \$720 million in the 2002 session, and \$740 million in the 2003 session. Due to delays between the authorization and issuance of bonds, as well as the policy to begin retiring debt in the third year after bonds are sold, increased authorizations only slowly result in increased debt service. *Issue 1* demonstrates how recent changes in proposed authorizations affect debt service.

The allowance does not project any arbitrage penalties or bond refunding. Chapter 66, Acts of 2003 altered the accounting method for bond sale proceeds from a project to a cash flow basis. This gives the Comptroller more flexibility when expending bond proceeds for the capital program. The flexibility is expected to reduce future arbitrage penalties paid by the State. No bond refunding is expected in fiscal 2005.

**Exhibit 1**  
**Annuity Bond Fund Revenues**  
(\$ in Thousands)

	<b>FY 2003</b> <b><u>Actual</u></b>	<b>FY 2004</b> <b><u>Work. Approp.</u></b>	<b>FY 2005</b> <b><u>Allowance</u></b>
<b>Special Fund Income</b>			
Beginning Balance	\$14,141	\$20,295	\$44,374
Property Tax Receipts	285,955	471,746	512,865
Refunds Related to Pipelines	0	-3,267	0
Interest and Penalties on Property Taxes	1,270	1,200	1,200
Local Loan Repayments	3,005	2,762	2,419
Miscellaneous Receipts	1,939	200	200
Accrued Interest on Bonds Sold	0	278	0
Prior Year's Discount	-23	0	0
Bond Premium	30,516	87,979	96,011
Transfer to Reserve	-20,295	-44,374	-89,210
<b>Subtotal Special Funds</b>	<b>\$316,507</b>	<b>\$536,819</b>	<b>\$567,860</b>
<b>General Fund Support</b>			
Appropriated in Annuity Bond Fund	90,500	0	0
Budgeted in MD State Department of Education	89,862	0	0
<b>Subtotal General Funds</b>	<b>\$180,362</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Funds for Debt Service</b>	<b>\$496,870</b>	<b>\$536,819</b>	<b>\$567,860</b>
<b>Penalty Expenditures and Refunded Bond Proceeds</b>			
General Funds – Penalty and Arbitrage	2,184	0	0
Special Funds – Refunded Bond Proceeds	410,878	0	0
<b>Total Funds for Penalties and Refunding</b>	<b>\$413,062</b>	<b>\$0</b>	<b>\$0</b>
<b>Public Debt Total Expenditures</b>			
General Funds	182,546	0	0
Special Funds	727,385	536,819	567,860
<b>Total Funds</b>	<b>\$909,931</b>	<b>\$536,819</b>	<b>\$567,860</b>

Source: State Budget Books

***X00A00 – Public Debt***

As in fiscal 2004, the fiscal 2005 allowance assumes that debt service will be supported by property taxes and no general funds are proposed. Based on current projections, property tax receipts are sufficient at the current rate (\$.0132 per \$100 of assessable base) to support debt service without any general fund subsidy. *Issue 2* addresses long-term, debt service funding issues.

## *Issues*

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### **1. General Obligation Bond Authorizations Are Increased by \$100 Million**

The administration's budget increases the GO bond authorizations by \$100 million, when compared to the amount previously recommended for the 2004 legislative session. This recommendation is consistent with the recommendation of the Capital Debt Affordability Committee (CDAC) which recommended that the GO debt limit be increased to \$655 million for the 2004 session. This represents \$650 million in GO debt within the affordability limit, and \$5 million in bonds supporting the tobacco buyout program. Chapter 103, Acts of 2001 excludes the tobacco buyout bonds from the State limit. In its September 2002 report, the committee indicated that after two years of authorization in excess of \$700 million, future authorizations would revert to their former levels. This would have meant a \$555 million authorization for the 2004 session.

The recommendation to increase the authorization limit was first raised at the CDAC meetings. Concerns were expressed that the level of debt proposed by CDAC in 2002 was insufficient to meet the State's needs. It was noted that spending pressures, such as prior commitments and the administration's priorities, exceed the resources available for the capital program. To meet these needs, the committee recommended increasing the amount of GO debt authorized by \$95 million and excluding \$5 million for tobacco buyout bonds. This results in a total increase of \$100 million annually from fiscal 2005 to 2009.

**Exhibit 2** compares the levels and ratios reported for debt outstanding and debt service for both the 2002 and 2003 *Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations*. In both cases, the State is well within the debt limits. As with the CDAC analysis, the debt outstanding and debt service includes GO bonds, transportation bonds, Stadium Authority Debt, and capital leases.

**Exhibit 3** shows that increasing the authorization results in additional GO bond debt service payments beginning in fiscal 2006.

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

**The State Treasurer and the Department of Budget and Management (DBM) should brief the committees on why an additional \$100 million in bonds is included in the capital budget. The department should also discuss if the current debt levels recommended by the CDAC is insufficient, appropriate, or excessive. The department should also address if it will be able to manage the capital budget in the out-years without increasing debt authorizations.**

**Exhibit 2**  
**Capital Debt Affordability Committee**  
**Comparison of 2002 and 2003 Recommendations**  
(\$ in Millions)

<u>Fiscal Year</u>	<b>2002 Debt Levels Analyzed under Current Financial Conditions</b>					<b>2003 Recommendation</b>				
	<u>New GO Auth.</u>	<u>Debt Out-standing</u>	<u>Debt/ P. I.</u>	<u>Debt Service</u>	<u>Debt Serv./ Tax Rev.</u>	<u>New GO Auth.</u>	<u>Debt Out-standing</u>	<u>Debt/ P. I.</u>	<u>Debt Serv.</u>	<u>Debt Serv./ Tax Rev.</u>
2005	\$555	\$6,525	2.90%	\$820	6.45%	\$655	\$6,556	2.92%	\$820	6.45%
2006	570	6,716	2.84%	834	6.23%	670	6,803	2.88%	836	6.25%
2007	585	6,848	2.75%	848	6.07%	685	7,011	2.81%	854	6.11%
2008	600	6,961	2.65%	877	6.00%	700	7,213	2.74%	888	6.07%
2009	615	7,081	2.55%	920	6.02%	715	7,428	2.68%	940	6.15%

Note: Debt Outstanding is end-of-year debt.

**Exhibit 3**  
**General Obligation Bond Debt Service Requirements**  
**2002 Recommendation Compared to 2003 Recommendation**  
(\$ in Millions)

<u>Fiscal Year</u>	<u>CDAC 2002 Recom. Debt Service</u>	<u>CDAC 2003 Recom. Debt Service</u>	<u>Annual Additional Debt Service</u>	<u>Cummulative Increase</u>
2005	\$560.0	\$560.0	\$0.0	\$0.0
2006	610.3	612.4	2.2	2.2
2007	634.6	640.0	5.4	7.6
2008	659.7	671.1	11.4	19.0
2009	693.2	713.0	19.8	38.7
2010	715.1	743.9	28.8	67.6
2011	742.9	780.4	37.5	105.1
2012	764.1	809.1	45.1	150.2
2013	795.7	845.3	49.5	199.7
2014	821.9	874.3	52.4	252.1

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

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

Until fiscal 2003, property taxes remained constant at \$0.084 per \$100 of assessable base. At this level, property taxes supported approximately 55 to 60% of debt service costs. Any bond sale premiums generated increased the fund balance. In subsequent years these accumulated fund balances were reduced by appropriating the funds for debt service payments, which reduced the general fund requirement. Since property taxes, bond sale premiums, and other revenues were insufficient to pay the entire debt service amount, general funds were appropriated to support the remaining debt service costs. **Exhibit 4** shows that general funds supporting debt service ranged from \$152 million to \$204 million from fiscal 1999 to 2003.

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**Exhibit 4**  
**Annuity Bond Fund Activity**  
**Fiscal 1999 – 2003**  
**(\$ in Millions)**

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

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

Source: Department of Budget and Management, September 2003

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The State did not appropriate general funds for ABF in the fiscal 2004 budget. Consequently, the Board of Public Works (BPW), which sets the property tax rate, increased the property tax rate to \$0.132 per \$100 of assessable base. With these actions, the State moved from maintaining a constant property tax rate and funding any remaining debt service with general funds, to funding the entire debt service payment with property taxes (as well as some smaller revenue sources). With respect to the fiscal 2005 budget, the administration did not include general funds in the Public Debt allowance, thus continuing the policy of relying on property taxes to support debt service. In the long-term, property tax revenues do not keep up with debt service requirements. This is attributable to the increased authorizations in recent years. By fiscal 2007, the State will have to either:

- increase the property tax rate to fund additional debt service costs; or
- appropriate general funds to maintain stable property tax rates.

### **Reliance on Property Taxes to Support Debt Service Costs**

By excluding general fund appropriations from the ABF in fiscal 2005, the administration continued a policy first adopted in fiscal 2004. Since property taxes do not generate sufficient

*X00A00 – Public Debt*

revenues to support increasing debt service costs, the State may choose to periodically increase property tax rates to fund debt service. If this policy is adopted, BPW is faced with two approaches:

- minimize annual property tax rates by adjusting the rates each year; or
- minimize the number of changes to property tax rates over a period of years.

If BPW were to minimize the property level taxes, the rates would need to be adjusted each year. **Exhibit 5** shows that BPW could lower property taxes to \$0.111 per \$100 of assessable base in fiscal 2005 but would need to increase the rate to \$0.145 per \$100 of assessable base in fiscal 2006. In the short term, recent bond sale premiums provide some additional revenues and keep property tax rates somewhat lower. However, interest rates are expected to rise in the out-years, reducing the spread between market rates and coupon rates resulting in smaller bond sale premiums. In the long run, revenues do not keep up with expenditures without increases in the property tax rate.

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**Exhibit 5**  
**Revenues Supporting GO Bond Debt Service**  
**Variable Property Tax Rates and No General Fund Support**  
**Fiscal 2004 – 2009**  
**(\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Property Tax Receipts	\$472	\$432	\$608	\$637	\$668	\$711
Bond Premium from Prior Years	76	96	0	0	0	0
Other Revenues <sup>(1)</sup>	21	37	7	6	7	7
<b>Total Special Fund Revenues Available</b>	<b>\$570</b>	<b>\$564</b>	<b>\$615</b>	<b>\$644</b>	<b>\$675</b>	<b>\$718</b>
ABF Fund Balance Transferred to Next Year	33	4	3	4	4	5
<b>Subtotal Special Fund Appropriation</b>	<b>\$537</b>	<b>\$560</b>	<b>\$612</b>	<b>\$640</b>	<b>\$671</b>	<b>\$713</b>
General Fund Appropriations	0	0	0	0	0	0
<b>Total Appropriations<sup>(2)</sup></b>	<b>\$537</b>	<b>\$560</b>	<b>\$612</b>	<b>\$640</b>	<b>\$671</b>	<b>\$713</b>
<b>Property Tax Rate per \$100 of Assessable Base</b>	<b>\$0.1320</b>	<b>\$0.1110</b>	<b>\$0.1450</b>	<b>\$0.1420</b>	<b>\$0.1410</b>	<b>\$0.1440</b>

Notes: <sup>(1)</sup> Other revenues include fund balance transfer from the previous year.

<sup>(2)</sup> Assumes cancellation of February 2004 GO bond sale.

Source of Property Tax Assessable Base: Department of Assessment and Taxation, December 2003

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*X00A00 – Public Debt*

The State could also attempt to keep property tax rates constant over a period of years. **Exhibit 6** shows that the State could maintain property tax rates at the current level, \$0.132 per \$100 of assessable base, through fiscal 2006. It is possible to delay property tax rate increases because the high levels of bond sale premiums are projected to increase the fund balance. The premiums are projected to be fully used by fiscal 2006, thus property taxes would no longer be sufficient to support the growth in debt service, and the rates would need to be increased to \$0.141 per \$100 of assessable base if no general funds are appropriated. By the end of fiscal 2009, the ABF would have a \$13 million fund balance.

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**Exhibit 6**  
**Revenues Supporting GO Bond Debt Service**  
**Minimize Tax Rate Changes and General Fund Appropriations**  
**Fiscal 2004 – 2009**  
**(\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Property Tax Receipts	\$472	\$513	\$554	\$633	\$668	\$696
Bond Premium from Prior Years	76	96	0	0	0	0
Other Revenues <sup>(1)</sup>	21	37	88	34	30	30
<b>Total Special Fund Revenues Available</b>	<b>\$570</b>	<b>\$645</b>	<b>\$642</b>	<b>\$666</b>	<b>\$698</b>	<b>\$726</b>
ABF Fund Balance Transferred to Next Year	33	85	31	27	27	13
<b>Subtotal Special Fund Appropriation</b>	<b>\$537</b>	<b>\$560</b>	<b>\$612</b>	<b>\$640</b>	<b>\$671</b>	<b>\$713</b>
General Fund Appropriations	0	0	0	0	0	0
<b>Total Appropriations<sup>(2)</sup></b>	<b>\$537</b>	<b>\$560</b>	<b>\$612</b>	<b>\$640</b>	<b>\$671</b>	<b>\$713</b>
<b>Property Tax Rate per \$100 of Assessable Base</b>	<b>\$0.1320</b>	<b>\$0.1320</b>	<b>\$0.1320</b>	<b>\$0.1410</b>	<b>\$0.1410</b>	<b>\$0.1410</b>

Notes: <sup>(1)</sup> Other revenues include fund balance transfer from the previous year.

<sup>(2)</sup> Assumes cancellation of February 2004 GO bond sale.

Source of Property Tax Assessable Base: Department of Assessment and Taxation, December 2003

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**Appropriate General Funds and Stabilize Property Tax Rates**

The State could also adopt the policy of keeping property tax rates stable at \$0.132 per \$100 of assessable base indefinitely. Since debt service costs are increasing faster than property values, this would require general funds to subsidize any shortfall in the ABF. This is the approach assumed

*X00A00 – Public Debt*

by the administration in its out-year forecast. **Exhibit 7** shows that property taxes can support debt service through fiscal 2006. In fiscal 2007, \$15 million in general funds would need to be appropriated for debt service. This increases to \$58 million in fiscal 2009.

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**Exhibit 7**  
**Stable Property Tax Rates Remaining at \$0.132 per \$100 of Assessable Base and**  
**General Funds Supporting GO Bond Debt Service**  
**Fiscal 2004 – 2009**  
**(\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Property Tax Receipts	\$472	\$513	\$554	\$593	\$626	\$652
Bond Premium from Prior Years	76	96	0	0	0	0
Other Revenues <sup>(1)</sup>	21	37	88	34	5	5
<b>Total Special Fund Revenues Available</b>	<b>\$570</b>	<b>\$645</b>	<b>\$635</b>	<b>\$623</b>	<b>\$631</b>	<b>\$657</b>
ABF Fund Balance Transferred to Next Year	33	85	31	2	2	2
<b>Subtotal Special Fund Appropriation</b>	<b>\$537</b>	<b>\$568</b>	<b>\$612</b>	<b>\$624</b>	<b>\$629</b>	<b>\$655</b>
General Fund Appropriations	0	0	0	15	42	58
<b>Total Appropriations<sup>(2)</sup></b>	<b>\$537</b>	<b>\$568</b>	<b>\$612</b>	<b>\$640</b>	<b>\$671</b>	<b>\$713</b>

Notes: <sup>(1)</sup> Other revenues include fund balance transfer from the previous year.

<sup>(2)</sup> Assumes cancellation of February 2004 GO bond sale.

Source of Property Tax Assessable Base: Department of Assessment and Taxation, December 2003

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**It Is Recommended that Budget Reconciliation Legislation Include a Provision to**  
**Ensure Stable Property Tax Rates**

It is recommended that the State maintain a constant property tax rate of \$0.132 per \$100 of assessable base through fiscal 2006. To assure that there are sufficient revenues available to avoid a property tax increase or general fund subsidy in fiscal 2006, it is recommended that budget reconciliation legislation include a provision that the ABF hold \$62 million in reserve in fiscal 2005 so that the funds can be used in fiscal 2006. This reserve is sufficient so that property taxes can support the entire fiscal 2005 and 2006 debt service cost without raising property tax rates.

### **3. Spending Affordability and Capital Debt Affordability Committees Recommend Against Using Bond Sale Premiums to Support Capital Projects**

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

CDAC recommended against using the bond sale premium to expand the capital program. Instead the committee recommended that bond sale premiums stabilize property taxes or fund pay-as-you-go (PAYGO) appropriations in the place of GO debt, thus reducing the amount of debt that is authorized. The Spending Affordability Committee (SAC) concurred with the CDAC's recommendations. Specifically, SAC recommended that the "first priority for any bond sale premium revenues should be stabilizing the property tax rate and minimizing general fund spending on debt service in fiscal 2005 or future years."

Concerns related to having bond sale premiums support an expanded capital program include:

- **Use of bond sale premiums for the capital program increases the need for property tax or general fund revenues.** If the bond sale premiums support the capital program, the ABF's resources are reduced. This requires either higher property tax rates or additional general fund subsidies. With respect to property taxes, \$44 million in bond sale premiums translates to approximately \$0.01 per \$100 in assessable base. With respect to general funds, every dollar of bond sale premiums supporting the capital program increases the general fund subsidy by a dollar.
- **Bond sale premiums are likely to decline in the out-years.** Supporting the capital program with bond sale premiums does not provide the program with a permanent funding source. If the premiums supporting capital projects are overcommitted, the projects will need to be funded with operating funds or debt.

**It is recommended that the General Assembly concur with the CDAC and SAC recommendations that bond sale premiums be used to support debt service payments and to stabilize the property tax rates.**

#### **4. How Long Can Maryland Continue to Expand Private Activity Projects in the Capital Budget and Continue to Issue Tax-exempt Bonds?**

The GO bonds that Maryland issues are tax-exempt bonds. Purchasers of Maryland bonds do not have to pay federal income taxes on the interest earned from these bonds. Because the holders of tax-exempt bonds do not pay federal taxes on interest earnings, the interest rates of tax-exempt bonds tend to be less than taxable bonds. This reduces the State's debt service expenditures.

Federal laws and regulations limit the kinds of activities that proceeds from tax-exempt bonds can support. One such requirement limits private purposes of the bond proceeds to the lesser of 5% of the bond sale's proceeds or \$15 million per bond sale. For a project to be subject to this limitation, there must be both a private use and a private payment. Private use is the use of the tax-exempt financed facility by any entity other than a State or local government agency, such as renting a section of a building to a private company to operate a cafeteria. Private payment is payment for the privately-used portion of the facility above the costs of maintaining and operating that part of the facility. This occurs if the cost paid by the private entity is sufficient to pay debt service on the facility.

This requirement limits private activity to an estimated \$30 million in fiscal 2005 (based on two bond sales planned). If these requirements are violated, the bondholders would have to pay federal income taxes on the bond interest. The State covenants with these bondholders to regulate the use of the proceeds of the bonds and take such actions to maintain the bonds' federal tax-exempt status. If the State were to violate this covenant, the State would almost surely be legally liable.

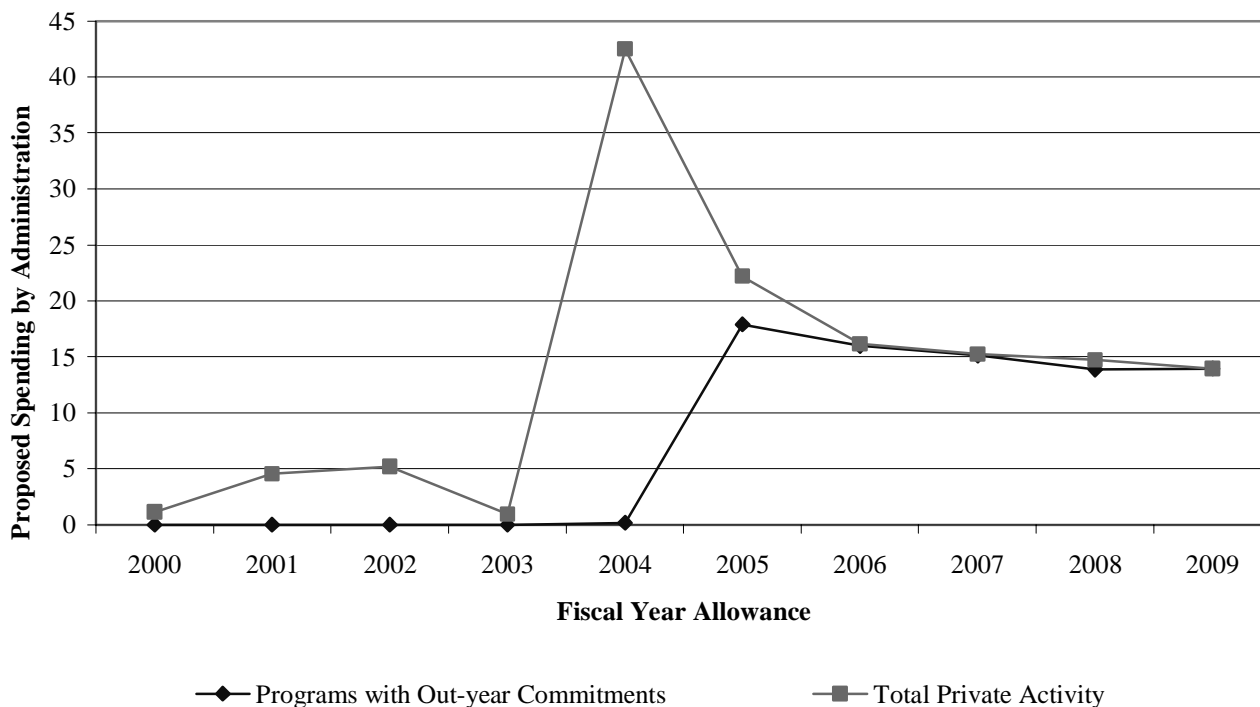
#### **Administration Proposes Permanently Adding Private Activity Programs in GO Bond Program**

Each year the administration proposes its GO bond funded capital program. The administration provides an estimate of private activity projects or programs funded in the capital program. Private activity usually represents a fairly small amount of the programs. The projects subject to private activity also usually require about one to three years to complete. Programs with private activities were typically funded in the operating budget, as opposed to the capital GO program.

In the recently released *Capital Improvement Program (CIP)*, DBM projected that total private activity projects would be \$22.2 million in fiscal 2005. This provides the State with \$7.8 million in private activity capacity. Technically, private activity is within the limits imposed by federal requirements.

However, a closer examination of total spending on private activity financed with bonds reveals a shift in policy. In the capital budget, most of the private activity represents long-term commitments. **Exhibit 8** shows that the fiscal 2005 budget includes \$17.9 million (out of \$22.2 million) in GO bonds for private activities that are long-term commitments (resulting in expenditures throughout the entire six-year capital improvement program). In previous years, there were almost no long-term commitments made to support private activity programs with GO bonds. Previously, most private

**Exhibit 8**  
**Projected GO Bond Funded Private Activity as Proposed by Administration**  
**Total Activity vs. Six-year Commitments**  
**Fiscal 2000 – 2009**  
**(\$ in Millions)**



Note: The fiscal 2004 allowance included a substantial increase in one-time support for private activity projects and programs with GO bonds. At the time, only the Biological Sciences Research Building at the University of Maryland, College Park required any commitment in fiscal 2006 to 2008.

Source: Department of Budget and Management, *Maryland Capital Budget*, Fiscal 2000 to 2005

activity supported short-term projects such as the Science Research Facility with Greenhouse at Morgan State University, the new Arena at the University of Maryland, College Park, and the African American Museum.

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**Exhibit 9** shows that the long-term commitments extend through the entire six-year CIP and total \$76.7 million. Over the six-year period, these commitments average \$15 million per year, with the largest funding in the early years of the program. The plan assumes increased special fund support for community legacy, rental housing, and homeownership programs in the out-years as GO bond support wanes.

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**Exhibit 9**  
**Projected Private Activity Issuances**  
**Long-term Debt Commitments**  
**Fiscal 2005 – 2009**  
**(\$ in Thousands)**

<b>Dept.</b>	<b>Program</b>	<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	<b><u>FY 2008</u></b>	<b><u>FY 2009</u></b>	<b><u>Total</u></b>
MDE	Hazardous Substance Cleanup Program	\$1,500	\$1,700	\$1,700	\$1,700	\$1,700	\$8,300
DHCD	MD Historical Trust Revolving Loan Fund	250	350	350	350	350	1,650
DHCD	Community Housing Programs	5,000	4,500	4,000	3,500	3,500	20,500
DHCD	Rental Housing Programs	7,409	6,000	5,700	5,600	5,650	30,359
DHCD	Homeownership Programs	2,989	1,950	1,850	1,200	1,250	9,239
BPW	Public Safety Communications System	750	1,500	1,500	1,500	1,500	6,750
<b>Total</b>		<b>\$17,898</b>	<b>\$16,000</b>	<b>\$15,100</b>	<b>\$13,850</b>	<b>\$13,950</b>	<b>\$76,798</b>

Source: Department of Budget and Management, *Maryland Capital Budget Fiscal Year 2005*, January 2004

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This new policy raises a concern about managing private activity projects and programs within federal requirements. Under previous policies, there were fewer planned projects and six-year commitments were exceptional. This provided the State with a large cushion within which to manage debt. The State was able to manage private activity even if the scope of projects changed or assets were sold. Adding projects with six-year commitments complicates the State's ability to manage private activity projects and programs in the entire program period, and increases the chance that the State could exceed the federal limits. It also reduces the State's ability to fund new private activity projects which may be proposed over the next few years.

### **The Cost of Taxable Debt**

To avoid issuing taxable bonds and keep debt service costs low, general fund PAYGO appropriations historically supported private activity programs. Due to operating budget constraints, the administration is no longer funding private activity programs with general fund PAYGO. Instead, these activities are fully supported by the GO bond program. This may require the State to issue taxable debt to support capital budget projects.

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Over the six-year forecast period, the administration proposes an average of \$15 million in private activity programs in the GO bond program. To illustrate possible cost differences between taxable and tax-exempt issuances, the cost of a \$15 million taxable bond issuance is compared to a \$15 million tax-exempt bond issuance. Based on data provided by the Treasurer's Office's financial advisor, the cost of taxable debt averages 192 basis points greater than tax-exempt debt. **Exhibit 10** shows that this results in an additional \$3 million in interest costs if the debt were issued in the spring of 2005.

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**Exhibit 10**  
**Comparison of Debt Service Costs of \$15 Million Taxable and**  
**Tax-exempt Bond Sales**  
**Fiscal 2006 – 2020**  
**(\$ in Thousands)**

<u>Fiscal Year</u>	<u>Taxable Bond</u> <u>Debt Service</u>	<u>Tax-exempt Bond</u> <u>Debt Service</u>	<u>Variance</u>	<u>NPV of</u> <u>Variance</u>
2006	\$1,038	\$750	\$288	\$274
2007	1,038	750	288	261
2008	1,788	1,595	193	167
2009	1,786	1,598	188	155
2010	1,786	1,598	187	147
2011	1,787	1,597	190	142
2012	1,788	1,598	191	136
2013	1,785	1,596	189	128
2014	1,788	1,597	191	123
2015	1,786	1,595	190	117
2016	1,788	1,596	192	112
2017	1,784	1,598	186	104
2018	1,785	1,598	187	99
2019	1,789	1,599	190	96
2020	1,786	1,596	190	91
<b>Total</b>	<b>\$25,301</b>	<b>\$22,259</b>	<b>\$3,042</b>	<b>\$2,152</b>

Notes: (1) Assumes 5% coupon (interest) rate for tax-exempt bonds, which is consistent with last bond sales and current coupon rate estimate.

(2) Assumes 6.92% coupon (interest) rate for taxable bonds, see *Effect of Long Term Debt on the Financial Condition of the State*, November 2003, pages 56 to 57 for basis of coupon (interest) rate.

NPV = Net Present Value

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**The State Treasurer and DBM should brief the committees on:**

- **any policies limiting the use of the GO bond program to support projects or programs with private activities;**
- **the safeguards that are in place to ensure that private activity is within federal limits so that the bonds maintain their tax-exempt status;**
- **the effect of the long-term (six-year) commitment to fund private activity programs with GO bonds on the State’s ability to manage tax-exempt GO debt within federal limits; and**
- **the likelihood that taxable bonds will be issued in the six-year program period and the cost to the State of issuing taxable debt.**

## **5. Variable Rate Bonds Can Lower Debt Service Payments, but They also Introduce Additional Risk into the Portfolio**

Chapter 325, Acts of 2003 authorizes the State Treasurer to issue variable rate bonds. The law limits variable rate debt to 15% of the State’s outstanding GO bonds. More than 25 states have issued variable rate debt, including AAA rated states South Carolina, Utah, and Virginia. There are different variable rate bond arrangements that can be entered into, such as Variable Rate Demand Bonds (VRDB) and Commercial Paper. The various instruments share key similarities. To keep the discussion focused on key differences between fixed and variable debt, only VRDBs will be analyzed and compared to fixed rate debt.

Maryland’s fixed rate bonds are 15-year agreements between the State and bondholders. The interest rate and maturity is set when the bonds are issued. The State guarantees specific debt services payments on specific days through the 15-year life of the bonds. Interest costs for fixed rate debt is in part a function of the 15-year life of the bonds. Because of the long-term nature of the bond, bond holders demand that the bonds provide a long-term interest rate, which is usually higher than the short-term rates.

Variable rate bonds do not have fixed interest rates throughout the life of the bond. Instead, VRDBs are issued with long nominal maturities that are constantly resold to lenders paying short-term interest rates. Unlike fixed rate bonds, VRDBs do not have an underwriter; instead a remarketing agent manages bond sales. Variable rate bonds are also not sold competitively which is impractical because the bonds are constantly remarketed. Traditionally, a Request for Proposal (RFP) is issued for the remarketing agent instead of issuing a Preliminary Official Statement.

Most VRDBs also have a liquidity provider. If the remarketing agent cannot find another buyer for the debt, a liquidity provider is responsible for paying principal and interest for the bonds. Liquidity providers are usually banks with credit ratings of at least AA. Liquidity providers would also be competitively bid with an RFP.

## **Advantages of Fixed and Variable Rate Debt**

Both fixed and variable rate bonds have advantages and disadvantages. The advantages of fixed rate debt include:

- **No upward interest rate risk.** Since the rates are determined when the bonds are issued, increases in interest rates during the life of the bonds do not affect debt service payments. However, this can also be a disadvantage if interest rates decline.
- **Budget certainty.** Debt service payments can be calculated through the life of the bonds when the bonds are issued. VRDBs have constantly changing interest rates which requires the issuer to estimate debt service payments in the out-years.
- **Current market conditions.** Currently, low interest rates allow the State to lock into relatively low interest rates until the bonds mature. Most economists expect that interest rates are more likely to rise than fall. If interest rates rise the State is still locked into the lower interest rates.

There are also advantages to variable rate debt such as:

- **Short-term rates are usually lower than long-term rates.** Currently, short-term interest rates are 1.43% (after fees are included) compared to 3.59% for long-term interest rates, which results in lower debt service payments for VRDBs if short-term rates do not increase substantially.
- **Short-term rates often track revenues better than long-term rates.** Historically, interest rates tended to decline during recessions if the rate of inflation is low. Current Federal Reserve policy is to stimulate the economy with interest rates while maintaining price stability. In response to the recent economic slowdown, the Federal Reserve has reduced short-term interest rates. The Federal Reserve is expected to raise interest rates if there is sustained economic growth. If inflation is minimized, these policies imply that interest rates (and VRDB costs) will tend to drop during economic downturns. This is not the case with fixed rate instruments, which remain constant and do not reflect economic conditions.

## **Assessment of Costs and Risks Associated with Variable Rate Bonds**

Last year's law change provides the State with an opportunity to issue variable rate debt. Insofar as short-term interest rates tend to be lower than long-term rates, variable rate debt tends to provide debt service savings.

**Exhibit 11** shows that under current market conditions, issuing \$45 million of variable rate debt yields a savings of \$1.6 million (\$1.4 million in net present value) compared to the projected cost of issuing fixed rate debt. A \$45 million issuance is compared since it represents 15% of the bond sale projected in July 2004. Fixed rate debt service is 3.59% based on the current rate for AAA bonds.

**Exhibit 11**  
**Comparison of Fixed Rate Bond and Variable Rate Bonds Debt Service Costs**  
**Assuming a \$45 Million Bond Issuance**  
**(\$ in Thousands)**

<b>Fiscal Year</b>	<b>Fixed Rate Debt Service</b>	<b>Variable Rate Debt Service</b>	<b>Variance</b>	<b>NPV of Variance</b>
2005	\$1,616	\$959	\$657	\$634
2006	1,616	1,242	374	348
2007	4,391	4,175	216	194
2008	4,391	4,366	25	22
2009	4,393	4,349	43	36
2010	4,391	4,343	47	38
2011	4,395	4,352	43	34
2012	4,395	4,356	39	29
2013	4,391	4,356	35	25
2014	4,393	4,363	30	21
2015	4,390	4,365	26	17
2016	4,393	4,372	21	14
2017	4,391	4,375	16	10
2018	4,394	4,384	11	7
2019	4,397	4,392	6	3
<b>Total</b>	<b>\$60,336</b>	<b>\$58,747</b>	<b>\$1,589</b>	<b>\$1,434</b>

## Assumptions:

- (1) Fixed interest rate is 3.59% based on 1/6/04 Delphins-Hanover Scale AAA rating.
- (2) Variable interest rate is 1.43% based on Bond Market Association Index 52 week average on January 21, 2004, and costs for remarketing agent and liquidity provider.
- (3) Proxy for changes in market conditions is Economy.Com 10-year Treasury Bill forecast January 18, 2004.
- (4) Variable interest rate is also adjusted 70 basis points to account for the large spread between fixed and variable interest rates.

NPV = Net Present Value

VRDBs interest rates begin at 2.13%, based on current rates and costs for a remarketing agent and liquidity provider, and increase consistent with forecasted market conditions. The True Interest Cost of the variable rate bonds is 3.18%.

However, variable rate bonds also introduce risk into the State's bond portfolio. Over the life of the bonds, the volatile nature of short-term rates can result in increased debt service costs if market conditions change. VRDBs' primary advantage is that short-term interest rates tend to be lower than long-term interest rates. Their disadvantage is that interest rates are volatile and sharp increases in

## *X00A00 – Public Debt*

interest rates result in increased debt service. An example (albeit extreme) of volatile short-term interest rates occurred in 1980 and 1981. The federal funds rate, which is the interest rate at which a depository institution lends immediately available funds to another depository institution overnight, increased from under 9% at the end of July 1980 to over 20% in January 1981. Over the same period, rates on 10-year Treasury Bills increased from 10.20 to 12.36%.

Risks can be viewed in two ways: the short-term risks associated with market fluctuations and long-term risks associated with a general rise in interest rates. Within a given year, short-term interest rate fluctuates about 47 basis points, or 0.47%. If this trend continues over the life of the variable bonds, there is an 80% probability that variable bonds will reduce interest rate costs.

Long-term risks are more difficult to quantify. To quantify the interest rate conditions in the long-term, the model estimating the cost of variable debt assumes that market conditions will push interest rates up 150 basis points. A major concern with this assumption is that inflation has a substantial effect on interest rates and that inflation rates are difficult to forecast. For example, most of the increase in short-term rates in the early 1980s was attributable to inflation. The model's interest rate forecast assumes a moderate level of inflation over the 15 years the bonds are issued. This is based on the consensus among many forecasters that inflation will not increase substantially. If this assumption is incorrect, interest rates could vary substantially and debt service costs for variable rate bonds could be quite higher.

### **Tools that Minimize Risk**

Variable rate bonds introduce risk into a bond portfolio. The concern is that rising interest rates increase the cost of debt service. Rising debt service costs could strain State resources if the ABF forecast did not take these costs into consideration. The risks can be reduced by:

- **Maintaining a reserve in the ABF to support debt service if interest rates rise.** If 15% of the State's bonds outstanding (e.g., \$720 million out of a projected \$4.8 billion at the end of fiscal 2005) were variable rate bonds, increasing interest rates 1% would increase debt service costs approximately \$8 million. If the State were to issue variable rate bonds, holding reserves in the ABF may be advisable.
- **Including an interest rate cap with the variable bond issuance.** Debt can also be structured so that there is a cap on maximum interest rates. While reducing the exposure to risk, a cap would increase debt service costs of the variable rate bonds.
- **Converting the debt from variable debt to fixed debt.** At the time the bonds are sold, the State could include provisions that the variable debt be converted under specific circumstances such as interest rates reaching a certain level.
- **Selling derivatives as a hedge against increasing interest rates.** Derivatives are financial instruments whose underlying value depend on the performance of another security. Examples of derivatives include options and futures contracts. To hedge against increases in interest rates, the

## *X00A00 – Public Debt*

State could enter into an options contract that provides the State with revenues if interest rates rise above a specific level. The State could enter into these contracts at any time during the life of a bond. This would add to the cost of servicing the debt. Derivatives can be extremely complex instruments that require a fair degree of financial sophistication to manage.

The common dominator that all these options share is that they can reduce risk if applied properly and that they tend to reduce the projected savings associated with variable debt. Ultimately, variable rate bonds are inherently more risky than fixed rate bonds. If the risk associated with variable rate bonds is unacceptable, then issuing fixed rate bonds is the only acceptable option.

### **Conclusion**

Currently, interest rates are at exceptionally low levels. The spread between long-term and short-term interest is fairly high. In the near term, debt service costs can be reduced by issuing variable debt. Also given the market condition over the last ten years, it appears likely that variable rate bond will yield debt service savings. However, past performance does not guarantee future success. Adding variable rate bonds to the State's portfolio certainly introduces risk.

**The State Treasurer should brief the committees on the State's variable interest rate debt policies. This should include a discussion of:**

- **any plans to issue variable interest rate debt;**
- **projected costs and benefits associated with issuing variable rate debt; and**
- **risks associated with variable rate debt, and any tools the State could use to minimize the risk.**

### **6. Rating Agency Considers GARVEE Bonds When Calculating State Debt Limits**

The Maryland Department of Transportation (MDOT), through the Maryland Transportation Authority (MdTA), is developing plans to construct an InterCounty Connector (ICC) in Montgomery and Prince George's counties. MdTA's preliminary financing proposal includes issuance of various revenue bonds, such as Grant Anticipation Revenue Vehicles (GARVEE). They are bonds that are issued by states and public authorities, backed by future federal-aid highway and transit appropriations. While the source of funds used to repay GARVEEs originates with the federal government, the federal government's agreement to the use of its funds in this manner does not constitute any obligation on the part of the U.S. government to make these funds available. If for any reason federal appropriations are not made as anticipated, the obligation to repay the GARVEEs falls entirely to the state agency or authority that issued them. To date, the State has not issued any GARVEE bonds.

### *X00A00 – Public Debt*

GARVEEs are excluded from the CDAC analysis of State debt limits. As part of the review of MdTA's GARVEE proposal, rating agencies were consulted. Fitch Ratings advises that they will take GARVEE bonds into consideration when they assess the State's debt capacity and rate the State's GO bonds. While the funds supporting GARVEE debt service are federal, the rating agency advises that they view these federal funds as a State resource. Using federal funds for debt service creates an obligation against future revenues.

MdTA's conceptual financing plan for the ICC highway calls for the issuance of \$900 million in GARVEEs. If the GARVEEs are issued over a period of four to five years, the bonds are affordable if included in the State's debt limit. CDAC guidelines limit debt outstanding to 3.2% of personal income. Currently this ratio peaks at 2.92% in fiscal 2005. If the State were to begin issuing GARVEEs in fiscal 2006, the ratio would peak at approximately 3.10%.

One key element of CDAC's mission is to protect the State's bond rating. To effectively accomplish its mission, the committee should reflect State debt consistent with rating agencies' policies. Under current policies, the CDAC does not examine GARVEE bonds when evaluating State debt. While Fitch is not recommending that GARVEE bonds be included in the debt outstanding to personal income ratio, they do recommend that CDAC consider the level of GARVEE debt when debt affordability is examined. **To ensure that the CDAC thoroughly and accurately reflects the State debt burden, it is recommended that the CDAC examine GARVEE bonds when reporting on State debt. To effect this change, it is recommended that budget reconciliation legislation amend Section 8-112 of the State Finance and Procurement Article to clarify that GARVEE bonds are to be included in the Capital Debt Affordability Committee's evaluation of State debt.**

## ***Recommended Actions***

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	<b><u>Amount Reduction</u></b>
1. Reduce general obligation bond debt service to recognize the cancellation of the February 2004 bond sale. The allowance includes \$7.5 million in debt service for the February 2004 bond sale. The Treasurer’s Office advises that there will no longer be a \$150 million bond sale in February 2004. The office also notes that capital project spending is less than anticipated so the bond proceeds are not needed.	\$ 7,500,000 SF
<b>Total Special Fund Reductions</b>	<b>\$ 7,500,000</b>

## ***Updates***

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### **1. State Recognizes Bond Sale Premiums When Forecasting Revenues and Debt Service**

GO bond debt service is supported by the ABF. ABF's revenue sources can include general funds, property tax revenues, interest generated by fund balances, loan repayments for local bonds, and miscellaneous revenues generated from bond sales such as bond sale premiums. The purpose of the fund is to support debt service.

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

In previous budgets, the State did not estimate bond sale premiums. This resulted in the State substantially understating revenues supporting GO bond debt service. Recognizing the large amount of revenues generated through bond sale premiums, the administration began estimating bond sale premiums in the fiscal 2005 allowance. Bond sale premiums can be estimated because they are a function of the amount of bonds that are sold, the interest rate on the bonds, and the prevailing market interest rate on the date of the sale.

#### **Bond Sale Premiums Have Increased as Interest Rates Have Fallen**

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

*X00A00 – Public Debt*

Maryland has received a premium for every bond sale since 1997. Having a premium ensures that there are sufficient funds available for the capital projects being financed. Usually, the coupon rate and market rate are close and the resulting premium is limited. However, in recent years the premium has been quite large. **Exhibit 12** shows that since January 1, 2000, the State has sold over \$2 billion in new GO bonds generating in excess of \$197 million in bond premiums.

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**Exhibit 12**  
**Bond Premiums**  
**Fiscal 2001 – 2004**  
**(\$ in Millions)**

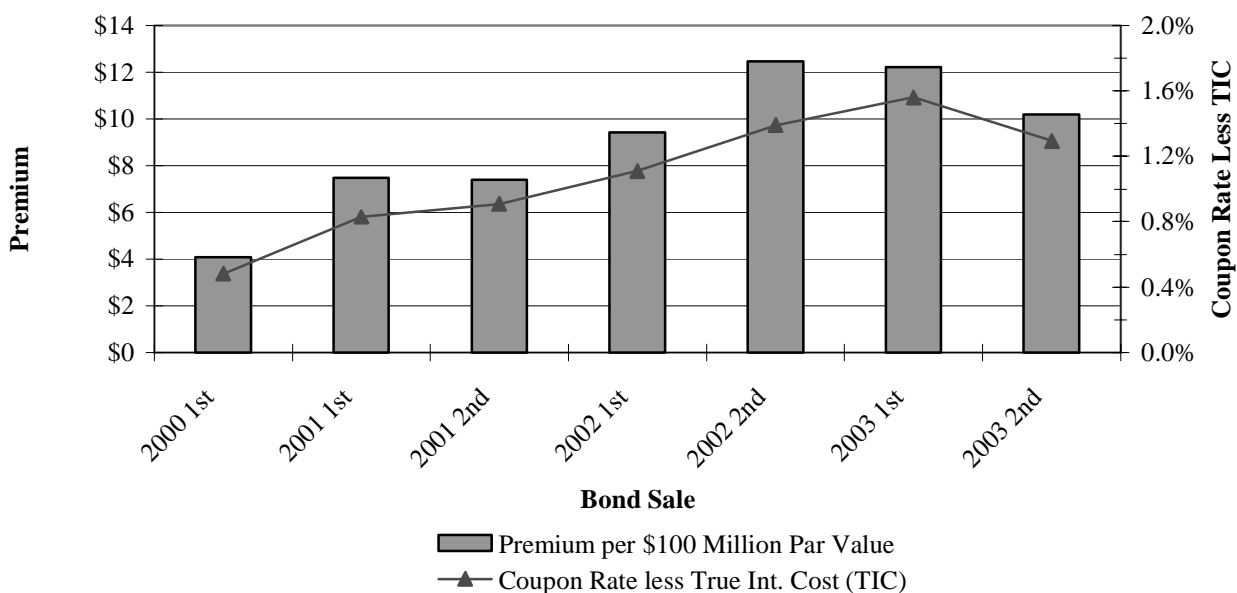
<u>Fiscal Year</u>	<u>Issuance</u>	<u>Average Coupon Rate</u>	<u>True Interest Cost (TIC)</u>	<u>Par Value of Bonds Sold</u>	<u>Premium</u>
2001	2000 1st	5.53%	5.05%	\$200	\$8
2001	2001 1st	5.20%	4.37%	200	15
2002	2001 2nd	5.32%	4.41%	200	15
2002	2002 1st	5.34%	4.23%	200	19
2003	2002 2nd	5.25%	3.86%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

Source: Department of Budget and Management, September 2003

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The increases in premiums are attributable to the difference between the bonds' coupon rates and TIC. The coupon rates have declined less than market interest rates (as measured by the TIC) in recent years. **Exhibit 13** shows that the difference between the coupon rates and the TIC increased from about 48 basis points (coupon rate of 5.53% compared to a TIC of 5.05%) in 2001 to 156 basis points (coupon rate of 5.25% compared to a TIC of 3.69%) in early 2003. Over the same period, bond sale premiums increased from \$4 million to \$12 million per \$100 million of bonds sold.

**Exhibit 13**  
**Difference between GO Bond Sale Coupon Rates and**  
**True Interest Costs Effect Premiums**  
**(\$ in Millions)**



TIC = True Interest Cost

Source: Department of Budget and Management, September 2003

**Bond Sale Premiums Are Projected to Generate Additional Revenues**

**Exhibit 14** shows that the fiscal 2005 allowance’s bond sale premium estimates total \$30.4 million. DBM assumes that the State will sell a total of \$625 million in GO bonds at a coupon rate of 5.00%. It is also assumed that interest rates will fluctuate between 4.25 and 4.50%. As mentioned earlier, a rise in interest tends to reduce the premium. The February 2005 premium is projected to be substantially less than the July 2004 premium even though the amount sold only is reduced by \$25 million. This is due to a projected 25 basis point increase in interest rates (from 4.25 to 4.50%). Conversely, increasing the coupon rate would increase the premium generated from bond sales. If the coupon rate is increased to 5.25% for the next three bond sales, the estimated premium is \$11.9 million. However, raising the coupon rate is not without costs since higher coupon rates mean higher debt services for the 15 years it takes the bonds to mature. Raising the coupon rate 25 basis points, to 5.25%, results in over \$15.5 million in increased debt service costs.

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**Exhibit 14**  
**Projected Bond Sale Premiums**  
**Fiscal 2005**  
**(\$ in Millions)**

<u>Fiscal Year</u>	<u>Bond Sale</u>	<u>Par Value of Bonds</u>	<u>Coupon Rate</u>	<u>TIC</u>	<u>Premium</u>
2005	July-04	\$325.0	5.00%	4.25%	\$18.7
2005	February-05	300.0	5.00%	4.50%	11.4
	<b>Total</b>	<b>\$625.0</b>			<b>\$30.1</b>

TIC = True Interest Cost

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A concern with estimating premiums is that a sudden sharp increase in interest rates could substantially reduce premiums. If rates rise to 5%, the State's premium would be substantially reduced. A second concern is that bond sales amounts can vary from what was previously projected. When issuing bonds, the Treasurer's Office attempts to sell sufficient amounts of bonds to fund all capital projects that will need funding until the next bond sale. Ideally, the State should avoid issuing too many bonds since this could result in a large fund balance in the account and excessive interest payments in the out-years. If project cash flows are different than was projected, bond issuances should be changed. For example, in its 2002 report, CDAC projected that bond sales would total \$800 million in calendar 2003. Instead bond sales were \$1,000 million, which is \$200 million more than projected. If the next three sales are less than projected, the premium is likely to decline. For example, canceling the February 2004 bond sale reduced projected bond sale premiums by \$11.7 million.

After examining the issue, SAC recommended in its December 2003 report that the State estimate bond sale premiums when preparing the budget each year. DBM has complied with the SAC recommendation. In spite of the inherent uncertainty in the forecasting process, it is appropriate to estimate bond sale premiums when the budget is being prepared. Estimating bond sale premiums provides a more complete and realistic assessment of the ABF which supports the Public Debt program.

## ***Current and Prior Year Budgets***

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### **Current and Prior Year Budgets Public Debt (\$ in Thousands)**

	<b><u>General Fund</u></b>	<b><u>Special Fund</u></b>	<b><u>Federal Fund</u></b>	<b><u>Reimb. Fund</u></b>	<b><u>Total</u></b>
<b>Fiscal 2003</b>					
Legislative Appropriation	\$94,020	\$311,357	\$0	\$89,862	\$495,239
Deficiency Appropriation	0	0	0	0	0
Budget Amendments	0	425,766	0	0	425,766
Cost Containment	0	0	0	0	0
Reversions and Cancellations	-1,336	-9,738	0	0	-11,074
<b>Actual Expenditures</b>	<b>\$92,684</b>	<b>\$727,385</b>	<b>\$0</b>	<b>\$89,862</b>	<b>\$909,931</b>
<b>Fiscal 2004</b>					
Legislative Appropriation	\$0	\$532,819	\$0	\$0	\$532,819
Cost Containment	0	0	0	0	0
Budget Amendments	0	4,000	0	0	4,000
<b>Working Appropriation</b>	<b>\$0</b>	<b>\$536,819</b>	<b>\$0</b>	<b>\$0</b>	<b>\$536,819</b>

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

## *X00A00 – Public Debt*

### **Fiscal 2003**

Fiscal 2003 actual expenditures totaled \$909.9 million, which is \$414.7 million more than the legislative appropriation. Significant changes include:

- \$410.9 million added to expenditures in special fund budget amendments attributable to bond refunding;
- \$4.3 million in additional debt service costs (\$14 million budget amendment less \$9.7 million reverted back to the ABF);
- \$1.3 million reverted to the general fund attributable to actual arbitrage penalties being below estimated penalties. Chapter 66, Acts of 2003 altered the accounting method for bond sale proceeds from a project to a cash flow basis which allowed more flexibility and reduced penalties; and
- \$888,000 in additional special funds to support a sinking fund payment for Qualified Zone Academy Bonds.

### **Fiscal 2004**

In fiscal 2004 a \$4 million special fund budget amendment was approved. The amendment added funds to support higher than anticipated debt service costs.

**Object/Fund Difference Report  
Public Debt**

<u>Object/Fund</u>	<u>FY03 Actual</u>	<u>FY04 Working Appropriation</u>	<u>FY05 Allowance</u>	<u>FY04 - FY05 Amount Change</u>	<u>Percent Change</u>
<b>Objects</b>					
13 Fixed Charges	\$ 909,931,291	\$ 536,818,783	\$ 567,859,625	\$ 31,040,842	5.8%
<b>Total Objects</b>	<b>\$ 909,931,291</b>	<b>\$ 536,818,783</b>	<b>\$ 567,859,625</b>	<b>\$ 31,040,842</b>	<b>5.8%</b>
<b>Funds</b>					
01 General Fund	\$ 92,683,610	\$ 0	\$ 0	\$ 0	0.0%
03 Special Fund	727,385,334	536,818,783	567,859,625	31,040,842	5.8%
09 Reimbursable Fund	89,862,347	0	0	0	0.0%
<b>Total Funds</b>	<b>\$ 909,931,291</b>	<b>\$ 536,818,783</b>	<b>\$ 567,859,625</b>	<b>\$ 31,040,842</b>	<b>5.8%</b>

Note: The fiscal 2004 appropriation does not include deficiencies, and the fiscal 2005 allowance does not reflect contingent reductions.

**Fiscal Summary  
Public Debt**

<u>Unit/Program</u>	<u>FY03 Actual</u>	<u>FY04 Legislative Appropriation</u>	<u>FY04 Working Appropriation</u>	<u>FY03 - FY04 % Change</u>	<u>FY05 Allowance</u>	<u>FY04 - FY05 % Change</u>
01 Redemption and Interest on State Bonds	\$ 496,869,518	\$ 532,818,793	\$ 536,818,783	8.0%	\$ 567,859,625	5.8%
05 Related Expenses on State Bonds	413,061,773	0	0	-100.0%	0	0%
<b>Total Expenditures</b>	<b>\$ 909,931,291</b>	<b>\$ 532,818,783</b>	<b>\$ 536,818,783</b>	<b>-41.0%</b>	<b>\$ 567,859,625</b>	<b>5.8%</b>
General Fund	\$ 92,683,610	\$ 0	\$ 0	-100.0%	\$ 0	0.0%
Special Fund	727,385,334	532,818,783	536,818,783	-26.2%	567,859,625	5.8%
<b>Total Appropriations</b>	<b>\$ 820,068,944</b>	<b>\$ 532,818,783</b>	<b>\$ 536,818,783</b>	<b>-34.5%</b>	<b>\$ 567,859,625</b>	<b>5.8%</b>
Reimbursable Fund	\$ 89,862,347	\$ 0	\$ 0	-100.0%	\$ 0	0.0%
<b>Total Funds</b>	<b>\$ 909,931,291</b>	<b>\$ 532,818,783</b>	<b>\$ 536,818,783</b>	<b>-41.0%</b>	<b>\$ 567,859,625</b>	<b>5.8%</b>

Note: The fiscal 2004 appropriation does not include deficiencies, and the fiscal 2005 allowance does not reflect contingent reductions.