

# J00J00

## Maryland Transportation Authority

### *Operating Budget Data*

(\$ in Thousands)

	<u>FY 06 Actual</u>	<u>FY 07 Working</u>	<u>FY 08 Budget</u>	<u>FY 07-08 Change</u>	<u>% Change Prior Year</u>
Nonbudgeted Fund	\$223,285	\$257,419	\$233,777	-\$23,642	-9.2%
<b>Total Funds</b>	<b>\$223,285</b>	<b>\$257,419</b>	<b>\$233,777</b>	<b>-\$23,642</b>	<b>-9.2%</b>

- The Maryland Transportation Authority's (MdTA) fiscal 2008 budget is \$233.8 million, a decrease of \$23.6 million, or 9.2%, from the fiscal 2007 budget. Without a decrease of \$43.0 million due to completion of payments to the Maryland Department of Transportation for the Transit Initiative, MdTA's budget would have increased \$19.4 million, or 7.5%.
- The largest increases in the budget were for additional equipment (\$8.4 million), personnel expenses (\$6.2 million), and replacement equipment (\$2.1 million).

### *PAYGO Capital Budget Data*

(\$ in Thousands)

	<u>Fiscal 2006 Actual</u>	<u>Fiscal 2007 Legislative</u>	<u>Fiscal 2007 Working</u>	<u>Fiscal 2008 Request</u>	<u>Fiscal 2008 Budget</u>
Nonbudgeted Fund	\$164,270	\$691,510	\$641,412	\$832,799	\$832,799
<b>Total Funds *</b>	<b>\$164,270</b>	<b>\$691,510</b>	<b>\$641,412</b>	<b>\$832,799</b>	<b>\$832,799</b>

\*MdTA tentatively approves a preliminary budget in November for the benefit of the General Assembly. Its trust agreement requires MdTA to prepare a preliminary budget by May 31 and adopt a final budget by July 1. Because of these timing constraints, the capital budget data presented above reflects cash flow forecasts from the draft fiscal 2007-2012 *Consolidated Transportation Program* (CTP). Therefore, these numbers will not match the numbers provided later in the document which reflect cash flow forecasts from the final fiscal 2007-2012 CTP.

- MdTA's fiscal 2008 capital budget is \$832.8 million, which is an increase of \$191.4 million, or 29.8%, over the fiscal 2007 capital budget. The increase is largely due to the construction schedule for the Express Toll Lanes (ETLs) on I-95 north of Baltimore and interchange improvements on MD 695 at Quarantine Road.

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

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***Operating and PAYGO Personnel Data***

	<b><u>FY 06 Actual</u></b>	<b><u>FY 07 Working</u></b>	<b><u>FY 08 Budget</u></b>	<b><u>FY 07-08 Change</u></b>
Regular Operating Budget Positions	1,574.00	1,604.00	1,634.00	30.00
Regular PAYGO Budget Positions	<u>98.00</u>	<u>111.00</u>	<u>114.00</u>	<u>3.00</u>
<b>Total Regular Positions</b>	<b>1,672.00</b>	<b>1,715.00</b>	<b>1,748.00</b>	<b>33.00</b>
Operating Budget Contractual FTEs	27.50	28.00	26.00	-2.00
PAYGO Budget Contractual FTEs	<u>2.00</u>	<u>2.00</u>	<u>2.00</u>	<u>0.00</u>
<b>Total Contractual FTEs</b>	<b>29.50</b>	<b>30.00</b>	<b>28.00</b>	<b>-2.00</b>
<b>Total Personnel</b>	<b>1,701.50</b>	<b>1,745.00</b>	<b>1,776.00</b>	<b>31.00</b>

**Vacancy Data: Regular Positions**

Turnover, Excluding New Positions	50.69	2.90%
Positions Vacant as of 12/31/06	230.00	13.41%

- MdTA's fiscal 2008 budget includes 1,748 regular positions, 33 of which are new positions. The new positions include 30 operating positions and 3 capital positions.
- The new operating regular positions include 15 administrative staff, 13 operations positions, and 2 MdTA Police positions. The three capital regular positions are for facilities development and strategic development.

## ***Analysis in Brief***

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### **Major Trends**

***Toll Revenue Growth Stagnant, Downward Revision in Assumptions Necessary:*** Toll revenues decreased slightly from fiscal 2005 to 2006. Fiscal 2005 toll revenue was \$274.8 million and decreased to \$274.3 million in fiscal 2006. Based on this slight decline, a downward revision was made in future toll revenue growth. The January 2006 growth assumption across all facilities was 1.8% and was reduced to 1.5% in January 2007.

***Use of Electronic Toll Collection Continues to Increase:*** The use of electronic tolling continues to increase. Fifty-two percent of all tolled vehicles in fiscal 2006 utilized electronic tolling. Electronic toll collection includes both the use of E-ZPass and automatic vehicle identification decals. E-ZPass will be the only method of toll collection available on the ETLs being constructed on I-95.

***Size of the MdTA Board Expanding:*** In accordance with Chapter 1 of the 2006 special session, the number of MdTA board members increased from six to eight. The new law took effect January 1, 2007, but the Governor has not yet appointed the new members. In addition, two members whose terms have recently expired are continuing service until they are reappointed or new members are named. In all, the Governor, with the consent of the Senate, has the ability to make four immediate appointments to the eight-member MdTA board.

### **Issues**

***InterCounty Connector (ICC):*** MdTA is moving forward with construction of the ICC. Construction is set to begin in spring 2007. Two lawsuits were filed against the project in December 2006. Although Maryland was not named as a defendant in either lawsuit, the Attorney General filed a motion to intervene to protect Maryland's interests. The \$2.4 billion cost of the project and the finance plan remain unchanged. The finance plan requires a payment of at least \$50.0 million from the general fund in each year from fiscal 2007 to 2010. The fiscal 2008 Governor's budget proposes deferring the fiscal 2008 payment. Although a recently updated project schedule and cash flow forecast show that the proposed deferral will not hamper MdTA's ability to move forward on the project, given current and future budgetary pressures on the general fund, it may be more advantageous to make the transfer in fiscal 2008. **The Department of Legislative Services (DLS) recommends against deferring the fiscal 2008 repayment from the general fund to MdTA. Although making the transfer will require reductions elsewhere in the budget to maintain a positive cash balance, given future budgetary pressures, payment of \$211.9 million in fiscal 2009 and 2010 would be especially difficult.**

***John F. Kennedy (JFK) Memorial Highway and Construction of ETLs:*** MdTA is currently undertaking another large capital project to add capacity to the most congested portion of the JFK Memorial Highway north of Baltimore. The project will add two managed lanes in each direction. Toll rates will vary based on time of day and congestion. From 2005 to 2007, the project cost has

increased by 44% for a total of \$1.2 billion. **DLS recommends MdTA address the use of congestion pricing and open road tolling, large increases in project costs for JFK Memorial Highway, and whether the State Highway Administration (SHA) should play a greater role in current and future MdTA projects given SHA's extensive construction management experience.**

***MdTA's Financial Forecast and Large Increases in Capital Spending:*** Over the past six years, the total cost of MdTA's six-year capital program has increased by over 600%. However, during that same time, toll revenues have only increased by 87%. In addition, MdTA plans to issue revenue bonds over the next six years of \$2.5 billion. By fiscal 2010, MdTA will exceed its statutory debt outstanding limit of \$1.9 billion. In regard to toll revenues, following a slight decline in toll revenues from fiscal 2005 to 2006, MdTA revised its revenue growth assumptions downward. In order to continue to meet its financial coverage ratios, MdTA will have to increase tolls in, or prior to, fiscal 2011. **DLS recommends MdTA discuss the effect that the simultaneous construction of two large capital projects is having on the rest of the capital program; MdTA's financial position and debt management; the recent downward revision in revenue growth; projected toll increases; and MdTA's willingness to utilize several smaller toll increases rather than one large one.**

***Task Force on Traffic Capacity Across the Chesapeake Bay:*** The Task Force on Traffic Capacity Across the Chesapeake Bay was created by MdTA in 2005 to help identify and understand the need for additional capacity across the Chesapeake Bay. Its final report, issued in August 2006, concluded that the issue of capacity across the Chesapeake Bay is complex and controversial but also compelling. It called for a study of a transit alternative and more detailed traffic studies to be completed in order to help the decision-making process. Although the task force was not charged with selecting a location or project for development, its findings will help MdTA if it decides to move forward to the National Environmental Policy Act process. **MdTA should discuss the task force process and findings, identify future steps and a proposed timeline, comment on the current status of the additional studies that MdTA is undertaking, and identify other congestion strategies MdTA is pursuing.**

## **Operating Budget Recommended Actions**

1. Nonbudgeted.

## **PAYGO Budget Recommended Actions**

1. Nonbudgeted.

## **Updates**

***Cecil/Harford Bridges Workgroup:*** In 2006, MdTA created the Cecil/Harford Bridges Workgroup to allow State, local and municipal elected officials and other stakeholders to provide advice and recommendations to MdTA regarding the Thomas J. Hatem Memorial (Hatem) Bridge, Tydings Bridge, and their associated toll plazas. Over the course of several meetings, MdTA and SHA officials presented workgroup members with information on a variety of issues and asked for their feedback. In response to recommendations from the workgroup, MdTA and SHA are addressing a number of concerns regarding the Hatem Bridge reconstruction, tolling at the two facilities, and other local traffic issues.

***Westbound Bay Bridge Redecking:*** In 2002, MdTA contractors began the process of resurfacing 95 spans of the westbound Bay Bridge. In 2004, MdTA inspectors noticed minor cracking which became more widespread over the next year. Following the recommendation of a consultant, MdTA contractors had to redo much of the resurfacing work, leading to miles-long traffic backups and a \$7 million cost overrun. Assessment of the financial responsibility of the situation is an ongoing matter. Altogether, the rehabilitation of the westbound bridge has gone from a four-year, \$45 million project to an eight-year, \$120 million project.

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***Budget Analysis***

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**Program Description**

The Maryland Transportation Authority (MdTA), established under Title 4 of the Transportation Article, has exclusive authority relating to the financing, construction, operation, maintenance, and repair of Maryland's toll facilities and any other revenue-generating projects authorized under that title. MdTA divides its facilities into three regions and has jurisdiction over the following facilities:

- **Northern Region** – includes the John F. Kennedy (JFK) Memorial Highway (I-95) and the Thomas J. Hatem Memorial (Hatem) Bridge;
- **Central Region** – includes the Baltimore Harbor (I-895) and Fort McHenry (I-95) tunnels and thruways, the Francis Scott Key (Key) Bridge (I-695), and I-395 leading to Baltimore City; and
- **Southern Region** – includes the Harry W. Nice Memorial (Nice) Bridge and the William Preston Lane, Jr. Memorial Bridge (Bay Bridge). The Seagirt Marine Terminal, developed by MdTA, is leased to the Maryland Port Administration (MPA).

Most recently, MdTA has been working in partnership with the State Highway Administration (SHA) to construct the \$2.4 billion InterCounty Connector (ICC), a new east-west highway that will link I-270 and I-95.

Membership of MdTA's Board is comprised of eight members (increased from six per Chapter 1 of the 2006 special session) appointed by the Governor with the advice and consent of the State Senate. The Secretary of the Maryland Department of Transportation (MDOT) serves as the chairman of MdTA. MdTA's revenues are held separately from the Transportation Trust Fund (TTF), and the agency operates off-budget.

MdTA's police force is responsible for security and law enforcement services at all of MdTA's toll facilities, except JFK Memorial Highway, which is patrolled by the State Police. MdTA is also under contract with the Maryland Aviation Administration (MAA) and MPA to provide law enforcement services at the Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall Airport) and MPA-operated facilities at the Helen Delich Bentley Port of Baltimore (Port).

To achieve its vision of "creating EZ passage throughout Maryland," MdTA has identified the following key goals:

- move people and goods efficiently and effectively;
- enhance customer and employee safety while protecting people and property;

- invest, finance, and build new transportation facilities with MDOT and other agencies to meet Maryland's transportation needs; and
- improve external and internal customer service and performance.

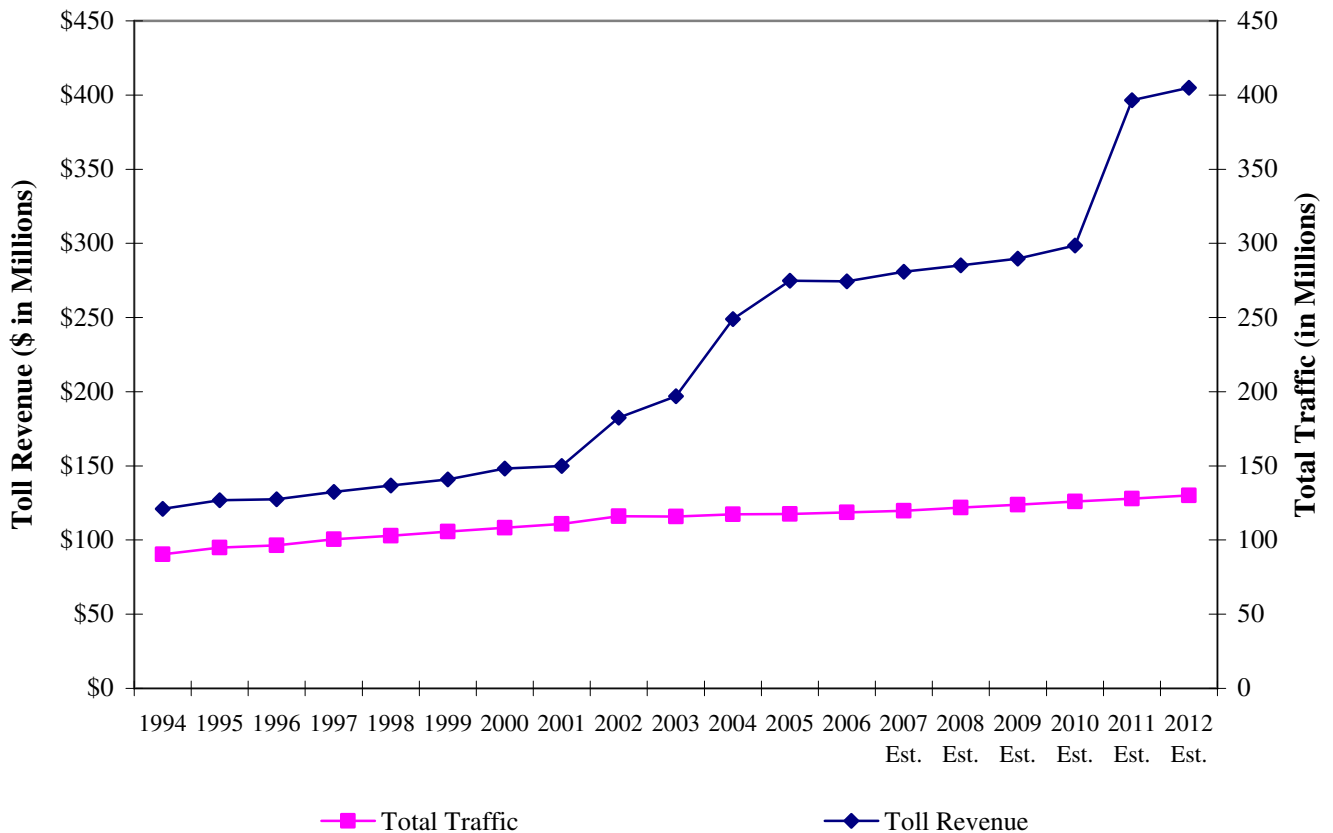
### **Performance Analysis: Managing for Results (MFR)**

In February 2006, MdTA released a new strategic plan. Following the release of the strategic plan, a business planning process was initiated to revise MdTA's short-term goals, objectives, and performance measures. The changes to this year's MFR submission reflect the results of that planning process. Most notably, MdTA now utilizes four goals (noted above) instead of the six previous goals.

In order to achieve its vision of creating EZ passage throughout Maryland, MdTA's first goal is to efficiently and effectively move people and goods across the State. To exemplify the movement of people and goods, **Exhibit 1** shows the annual tolled traffic and toll revenue at all MdTA facilities from fiscal 1994 through 2012. Total tolled traffic in fiscal 2006 was 118.6 million, an increase of 1.0 million, or 0.9%, over fiscal 2005. Toll revenue in fiscal 2006 was \$274.3 million, a decrease of \$0.5 million, or 0.2%, from fiscal 2005.



**Exhibit 1**  
**Annual Tolled Traffic and Toll Revenue**  
**Actual Fiscal 1994-2006 and Estimated Fiscal 2007-2012**



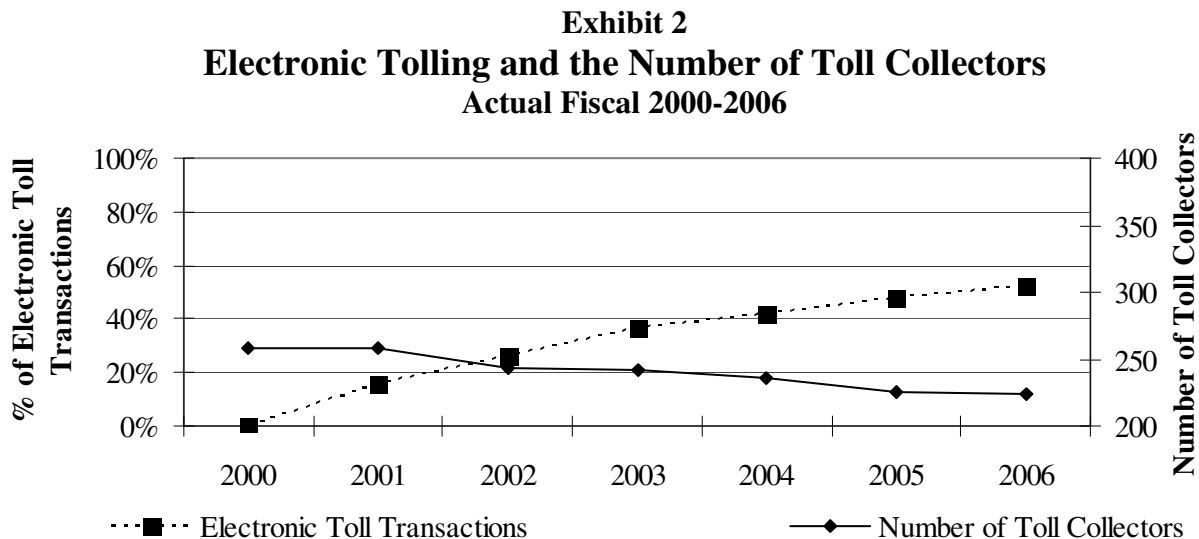
Source: Maryland Transportation Authority

## Electronic Tolling

Electronic toll transactions expedite the toll collection process, reduce delays at toll plazas, and allow for efficient movement of goods and people. MdTA continues to aggressively market its E-ZPass program to increase customer awareness and usage. Other initiatives meant to increase usage of E-ZPass include dedicated E-ZPass lanes, the implementation of speed differential at E-ZPass lanes, and the availability of “E-ZPass on the Go.” The E-ZPass on the Go program aims to create greater access to E-ZPass transponders by allowing the purchase of transponders at select retail locations, such as certain supermarkets and Motor Vehicle Administration branches. The strategy appears to be working, as the total number of E-ZPass active accounts increased by 24.1% from fiscal 2005 to 2006.

The use of electronic tolling continues to increase. **Exhibit 2** shows the percentage of electronic toll transactions and the number of toll collector positions. Electronic toll transactions include all E-ZPass transactions, as well as automatic vehicle identification (AVI) decals used at the Hatem Bridge. As might be expected, as the percentage of tolls collected electronically continues to increase, the number of toll collector positions declines.

E-ZPass electronic toll collection is available at all seven toll facilities, as well as throughout the northeastern part of the United States. E-ZPass was implemented at the Baltimore and Fort McHenry tunnels and the Key Bridge in 2001 (its predecessor, M-TAG was implemented in 1999). E-ZPass installation took place at the other four toll facilities in 2001 and early 2002. Electronic toll collection will be the only method of toll collection available on the ICC and the Express Toll Lanes (ETLs) currently being constructed on I-95 north of Baltimore. These facilities will utilize open road tolling, whereby an overhead gantry system collects tolls at highway speeds. These projects will also be the first to utilize congestion toll pricing, which allows for varying toll rates based on traffic, time of day, and other factors to aid in congestion-free travel.



Source: Maryland Transportation Authority

## Commuter Plans

As a means of lessening the impact of tolls on commuters, MdTA has established commuter plans. Commuter plans are available for the Baltimore Region, the Bay Bridge, and the Nice Bridge. The plans provide for a set number of trips at a discounted price, to be used within 60 days. **Exhibit 3** shows the facilities that each plan may be used for, the cost, and the number of trips for each type of plan.

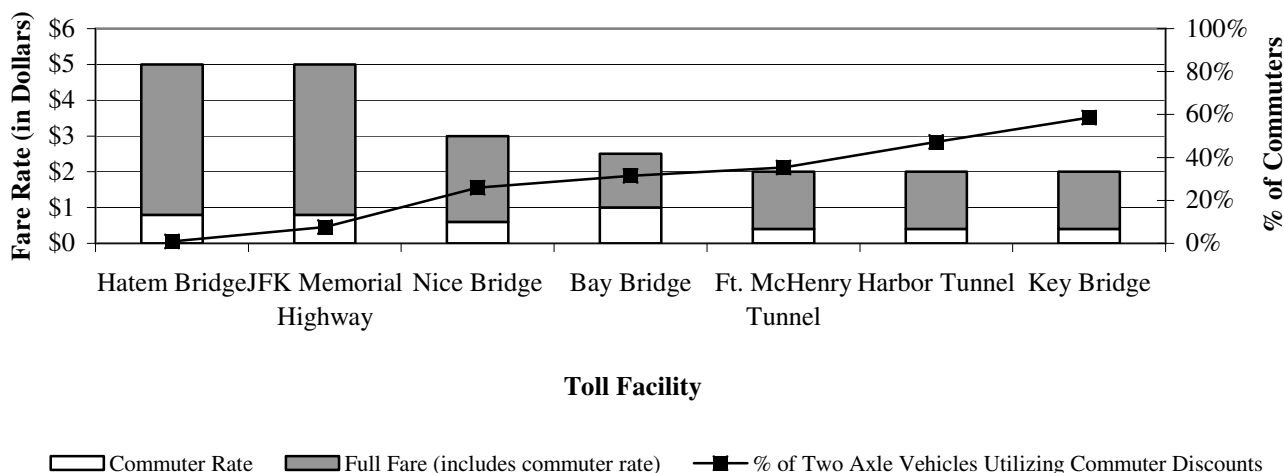
**Exhibit 3**  
**E-ZPass Commuter Plans**

<u>Plan Name</u>	<u>Facilities Plan May be Used At</u>	<u>Cost</u>	<u>Trips</u>
Baltimore Region	Fort McHenry Tunnel, Harbor Tunnel, Key Bridge, JFK Memorial Highway, and Hatem Bridge	\$20	50
Bay Bridge	Bay Bridge	\$25	25
Nice Bridge	Nice Bridge	\$15	25

Source: Maryland Transportation Authority

Commuter plans provide a significant cost savings for frequent travelers. Savings at the JFK Memorial Highway and Hatem Bridge amount to \$4.20 per trip, a savings of 84%. **Exhibit 4** shows the total cost per trip by facility for commuters and for those paying full fare. It also includes the percentage of two axle vehicles that utilize commuter discounts by facility. The largest percentage of commuter discount usage is seen at the Key Bridge and Harbor Tunnel at 59% and 47%, respectively. Commuter usage at Hatem Bridge is significant (approximately 90%); however, only 1% utilize E-ZPass due to the prevalent use of AVI decals.

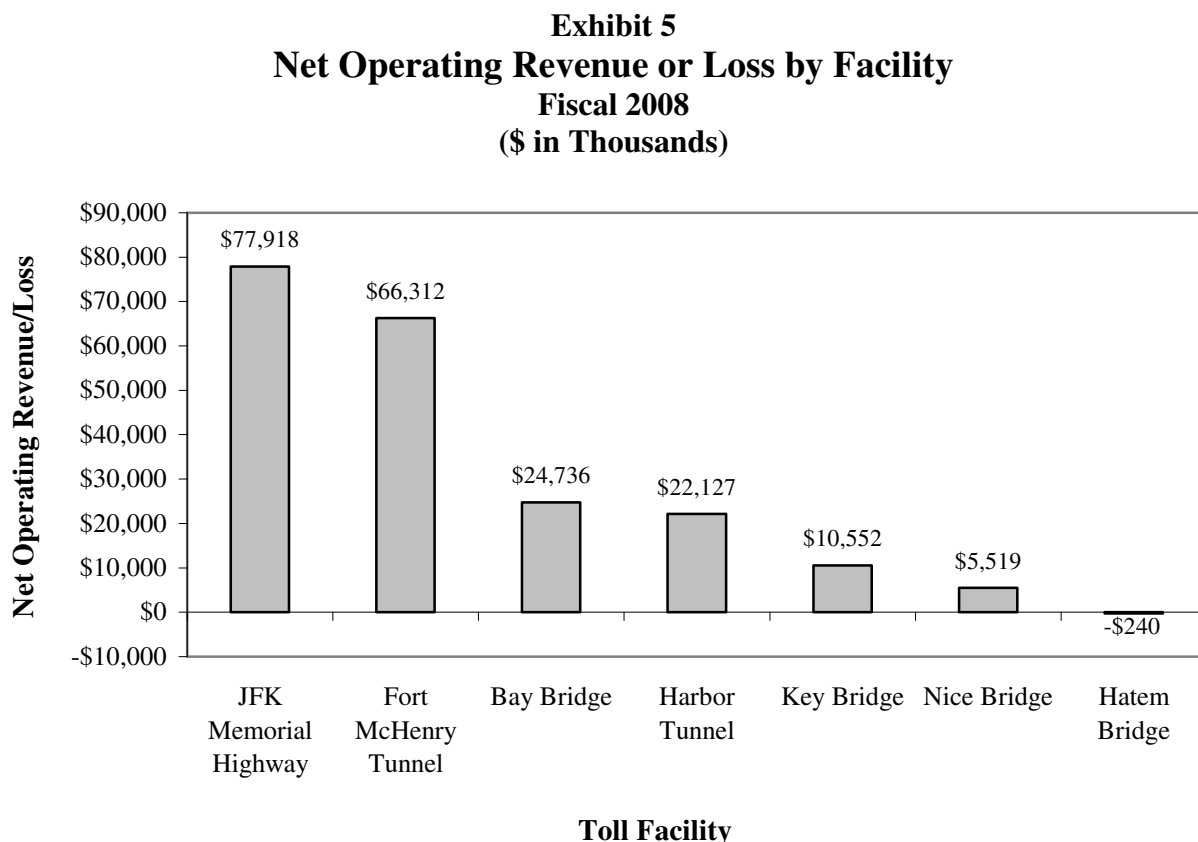
**Exhibit 4**  
**Commuter Savings Per Trip and Commuter Usage by Facility**  
**Fiscal 2006**



Note: Tolls collected on the JFK Memorial Highway, Nice Bridge, and Bay Bridge are collected one-way only.  
 Source: Reznick Group Auditor's Report and Financial Statements of MdTA, Fiscal 2006

## Revenues and Expenditures by Facility

Maryland is unique in that all toll facilities are operated by one agency. Toll revenues from all facilities are pooled to cover financing, construction, operations, maintenance, and law enforcement costs. These pooled resources strengthen MdTA's financial position. **Exhibit 5** shows the net operating revenue or loss for each facility. JFK Memorial Highway and the Fort McHenry tunnel produce nearly 70% of all net operating income. The net operating measure looks at the difference between toll and concessions revenue minus operating and patrol expenses.



Source: Maryland Transportation Authority Financial Forecast, February 2007

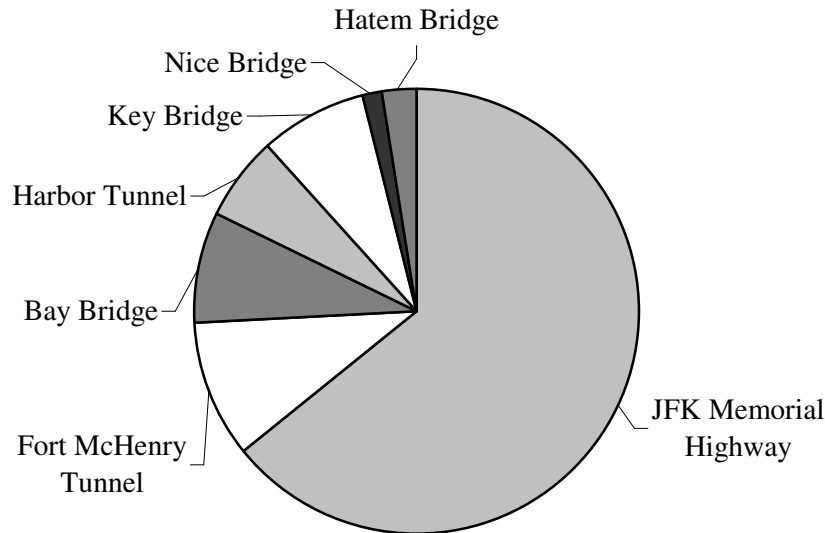
These operating revenues are pooled together and supplemented by other MdTA revenue, such as investment income, payments from MDOT for the Seagirt Marine terminal lease and reimbursement payments for police services provided by MdTA Police at the Port and BWI Marshall Airport, to pay for debt service, general operating expenses, and capital projects.

MdTA's capital program is also supplemented by the issuance of bonds backed by toll revenues. In fiscal 2008, MdTA projects a bond issuance of \$535.0 million, both to support the capital program at existing facilities and for capital construction costs for the ICC. Capital costs funded by MdTA revenue bonds with a 25- or 30-year maturity allow the cost of the project to be spread over a generation of tollpayers that will use the facility.

**Exhibit 6** shows the distribution of capital expenditures for existing toll facilities in fiscal 2008. Capital expenditures may vary greatly from year to year depending on what rehabilitation projects may be going on at that time for each facility. In fiscal 2008, 64% of all non-ICC capital expenditures will be spent on improvements at the JFK Memorial Highway, primarily for construction of the ETLs.

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**Exhibit 6**  
**Capital Expenditures for Existing Facilities**  
**Fiscal 2008**



Source: Maryland Transportation Authority Financial Forecast, February 2007

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### **MdTA Police, Commercial Vehicle Safety Division, and Courtesy Patrol**

In order to maintain the movement of people and goods throughout the State, MdTA relies on its police force and its Courtesy Patrol Program. MdTA Police have primary law enforcement responsibility for all MdTA toll facilities except for JFK Memorial Highway. They also provide law enforcement services for the Port and BWI Marshall Airport. Law enforcement on the JFK Memorial Highway is performed contractually by the Maryland State Police. **Exhibit 7** shows the number of collisions and disabled vehicles that MdTA Police and the State Police responded to at MdTA toll facilities, as well as the number of citations issued. The exhibit also shows the number of inspections, vehicles weighed, and citations, as well as the fines assessed by the Commercial Vehicle Safety Division. Finally, the exhibit shows the number of driveovers and other assistance calls performed by the Courtesy Patrol Program. Driveovers are a service provided only at the Bay Bridge for drivers who are unwilling to drive across the bridge themselves. MdTA has issued a request for proposals to secure a private contractor to provide this service in the future.

**Exhibit 7**  
**Services Provided by MdTA Police, State Police, and Courtesy Patrol**

	<u>CY 2005</u>	<u>CY 2006</u>	<u>Change</u>	<u>% Change</u>
<b>Law Enforcement at MdTA Toll Facilities *</b>				
Collisions	1,890	1,779	-111	-5.9%
Citations	70,841	58,295	-12,546	-17.7%
Disabled vehicles	10,219	9,154	-1,065	-10.4%
<b>Commercial Vehicle Safety Division</b>				
Inspections	17,814	22,542	4,728	26.5%
Vehicles weighed	444,679	470,970	26,291	5.9%
Citations	15,408	17,148	1,740	11.3%
Inspection fines	\$1,595,502	\$1,763,625	\$168,123	10.5%
Overweight vehicle fines	\$959,605	\$951,364	-\$8,241	-0.9%
Citation fines	\$2,555,107	\$2,695,847	\$140,740	5.5%
<b>Courtesy Patrol Program</b>				
Driveovers	3,322	3,379	57	1.7%
All other assistance	21,160	25,536	4,376	20.7%

\*MdTA Police provide law enforcement at all MdTA toll facilities except the JFK Memorial Highway. MdTA contracts with the Maryland State Police for law enforcement on JFK Memorial Highway.

Source: Maryland Transportation Authority

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

The fiscal 2008 operating budget decreases by \$23.6 million, or 9.2%. However, the underlying growth in the budget is masked by a \$43.0 million decrease as the result of completion of transfers to MDOT for the Transit Initiative. Under the Transit Initiative \$237.1 million was transferred from MdTA to the TTF to support transit operating and capital expenditures, as well as fare reductions. The transfers took place from fiscal 2002 to 2007 – \$22.1 million in fiscal 2002 and \$43.0 million in all other years. Without the decrease due to the final payment of the transit initiative, MdTA's operating budget would have increased \$19.4 million, or 7.5%.

Large increases in the fiscal 2008 budget include:

- \$8.4 million for additional equipment, including \$1.3 million for the purchase of additional police vehicles for the take-home program and \$5.5 million for ongoing information technology programs;
- \$6.2 million for personnel expenses, including \$3.4 million for salaries and \$2.1 million for pensions;

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- \$2.1 million for replacement equipment;
- \$1.3 million for E-ZPass contract costs; and
- \$0.7 million for credit card fees.

**Exhibit 8** provides further details on changes in the fiscal 2008 budget.

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**Exhibit 8**  
**Governor's Proposed Budget**  
**Maryland Transportation Authority**  
**(\$ in Thousands)**

<b>How Much It Grows:</b>	<b>Nonbudgeted <u>Fund</u></b>	<b><u>Total</u></b>
2007 Working Budget	\$257,419	\$257,419
2008 Governor's Budget	<u>233,777</u>	<u>233,777</u>
Amount Change	-\$23,642	-\$23,642
Percent Change	-9.2%	-9.2%

**Where It Goes:**

**Personnel Expenses**

Salaries .....	\$3,387
Pension .....	2,073
Employee and retiree health insurance .....	611
Unemployment .....	215
Social Security .....	19
Overtime .....	13
Deferred compensation .....	-102
Other .....	-3

**Other Changes**

Additional equipment .....	8,442
Replacement equipment .....	2,054
E-ZPass contract costs .....	1,297
Credit card fees .....	716
Insurance .....	200
Indirect costs for Maryland State Police patrol of JFK Memorial Highway .....	151
Professional services contracts .....	113
Vehicle expenses .....	92

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**Where It Goes:**

Telephone.....	75
Maintenance service and equipment rental .....	65
Trust agreement expenses .....	64
Uniforms .....	59
Heating fuel.....	57
Office supplies, postage, and printing.....	56
Training.....	55
Maintenance materials.....	52
Leased office space .....	41
Debt service.....	-10
Reciprocity fees.....	-36
Publicity and advertising.....	-71
Snow removal.....	-533
Transfer to Maryland Department of Transportation for Transit Initiative.....	-43,000
Other adjustments.....	206
<b>Total</b>	<b>-\$23,642</b>

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

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## **MdTA Revenue Bonds**

**Exhibit 9** provides the schedule of debt service payments and total debt outstanding for MdTA debt (debt backed by MdTA facilities). At the end of fiscal 2006, MdTA had three bond issues outstanding:

- 1992 Series bonds were issued in August 1992 for \$162.1 million and advance refunded a portion of the outstanding 1985 Series bonds, funded a deposit to the 1992 Series Reserve Subaccount, and paid bond issuance costs;
- 1998 Series bonds were issued in April 1998 for \$16.4 million and advance refunded a portion of the outstanding Transportation Facilities Projects Revenue Bonds, 1991 Series, and funded the 1998 Series Reserve Subaccount; and
- 2004 Series bonds were issued in June 2004 for \$160.0 million to fund MdTA's capital program.

Total MdTA debt outstanding on existing bonds is expected to fall from \$261.5 million in fiscal 2006 to \$228.6 million in fiscal 2008. However, MdTA plans to issue additional bonds in fiscal 2008 of \$535.0 million. Including the fiscal 2008 bond issuance, debt outstanding at the end of fiscal 2008 will be \$806.3 million, well below the statutory cap of \$1.9 billion.



**Exhibit 9**  
**Debt Service Payments and Debt Outstanding (MdTA Debt)**  
**Fiscal 2006-2008**  
**(\$ in Thousands)**

<b><u>Debt Service Payments</u></b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>
1992 Series Bonds	\$15,415	\$0	\$0
Capital Appreciation Bonds – 1992 Series	0	15,420	15,415
1998 Series Bonds	9,985	0	0
2004 Series Bonds	8,033	9,033	9,027
<b>Total Debt Service Payments</b>	<b>\$33,433</b>	<b>\$24,453</b>	<b>\$24,442</b>
<b><u>Debt Outstanding</u></b>			
1992 Series	\$101,495	\$86,075	\$70,660
1998 Series	0	0	0
2004 Series	160,000	159,000	157,955
<b>Total Debt Outstanding</b>	<b>\$261,495</b>	<b>\$245,075</b>	<b>\$228,615</b>

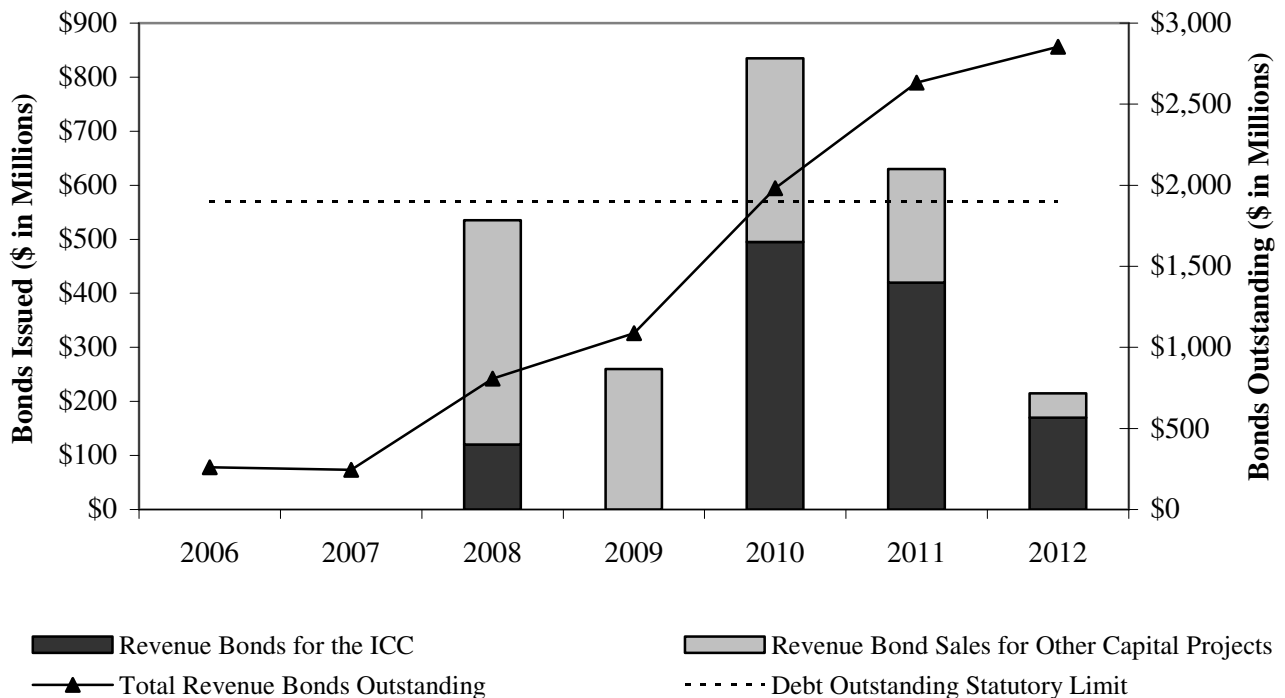
Source: Maryland Transportation Authority

**Exhibit 10** shows the amount of bonds projected to be issued for the ICC and other capital projects as well as total bonds outstanding in each year from fiscal 2006 through 2012. After not issuing any revenue bonds since fiscal 2004, MdTA plans a revenue bond issuance of \$535.0 million in fiscal 2008. During the period from fiscal 2008 to 2012, MdTA plans to issue \$2.5 billion worth of debt. Approximately \$1.2 billion of these bonds are to fund construction of the ICC. The remaining \$1.3 billion is to support MdTA's capital program.

Statute limits MdTA revenue bonds outstanding at \$1.9 billion. As also shown in Exhibit 10, MdTA is expected to exceed this amount beginning in fiscal 2010. By fiscal 2012, bonds outstanding will be well above this statutory cap, totaling \$2.9 billion. In order to continue issuing bonds as included in the forecast, MdTA will need the legislature's approval to increase its total debt limit.

In addition to a limit on total debt outstanding, MdTA is limited by three financial coverage ratios. MdTA is currently meeting all of these coverage requirements and will continue to do so throughout the forecast period. The rate covenant compliance ratio, as stipulated in the trust agreement, requires that net revenues must be at least 1.00 times the amount deposited into the Maintenance and Operations Reserve Account and must also be 1.20 times greater than debt service. The fiscal 2008 rate covenant compliance ratio is projected to be 3.73, which remains well above the 1.00 minimum. The second coverage ratio is the debt service coverage ratio. Although the trust agreement stipulates that net revenues must be 1.20 times greater than debt service, MdTA maintains an administrative ratio that requires it to be above 2.00. MdTA is well above this in fiscal 2008, with a projected debt service coverage ratio of 5.55. The final ratio is an administrative one that requires the ratio of total cash to toll revenues to be greater than 1.00. The fiscal 2008 ratio is projected at 1.50, but then drops to 1.01 in fiscal 2009.

**Exhibit 10**  
**Bond Sales and Debt Outstanding**  
**Fiscal 2006-2012**



Source: Maryland Transportation Authority Financial Forecast, February 2007

### MdTA Conduit Financing

Besides MdTA debt, MdTA also issues debt on behalf of other entities, called conduit financing. Most of the recent stand-alone debt issued has related to the \$1.4 billion expansion project at BWI Marshall Airport. This debt has helped finance the Elm Road parking facility, pedestrian bridges, roadway improvements, a central utility plant, and a new consolidated rental car facility. The debt is backed by fees at BWI Marshall Airport. MdTA has also issued debt on behalf of the Washington Metropolitan Area Transit Authority (WMATA) to finance three parking facilities at Largo, New Carrollton, and College Park. This debt was issued for \$40.0 million and is backed by lease payments from WMATA. Most recently, MdTA issued \$23.8 million worth of bonds to finance the Calvert Street parking garage in Annapolis for State employees. Debt service will be pledged from revenues of lease payments made by the Department of General Services. **Exhibit 11** shows debt outstanding on MdTA stand-alone projects. The debt service for these projects is paid by the revenues from the projects and does not affect MdTA's budget.

**Exhibit 11**  
**Debt Service Payments and Debt Outstanding on Stand-alone Projects**  
**Fiscal 2006-2008**  
**(\$ in Thousands)**

	<u><b>2006</b></u>	<u><b>2007</b></u>	<u><b>2008</b></u>
<b><u>Debt Service Payments</u></b>			
2002 A&B Series – BWI Marshal Airport Elm Road garage	\$18,955	\$20,345	\$20,719
2002 Series – BWI Marshall Airport rental car facility	9,037	9,031	9,023
2003 A&B Series – various BWI Marshall Airport projects <sup>1</sup>	1,974	8,073	5,764
2004 Series – WMATA parking garages	1,880	2,905	2,903
2005 Series – Calvert Street Parking Garage	479	985	1,561
<b>Total Debt Service Payments</b>	<b>\$32,325</b>	<b>\$41,339</b>	<b>\$39,970</b>
 <b><u>Debt Outstanding</u></b>			
2002 A&B Series – BWI Marshal Airport Elm Road garage	\$253,875	\$246,365	\$238,180
2002 Series – BWI Marshall Airport rental car facility	113,425	111,665	109,825
2003 A&B Series – various BWI Marshall Airport projects <sup>1</sup>	69,700	64,100	60,900
2004 Series – WMATA parking garages	40,000	38,960	37,890
2005 Series – Calvert Street Parking Garage	23,760	23,760	23,175
<b>Total Debt Outstanding</b>	<b>\$500,760</b>	<b>\$484,850</b>	<b>\$469,970</b>

BWI Marshall Airport: Baltimore/Washington International Thurgood Marshall Airport

WMATA: Washington Metropolitan Area Transit Authority

<sup>1</sup> The fiscal 2007 and 2008 debt service payments are estimates only, as they are variable rate passenger facility charge revenue bonds.

Source: Maryland Transportation Authority

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## **PAYGO Capital Program**

### **Program Description**

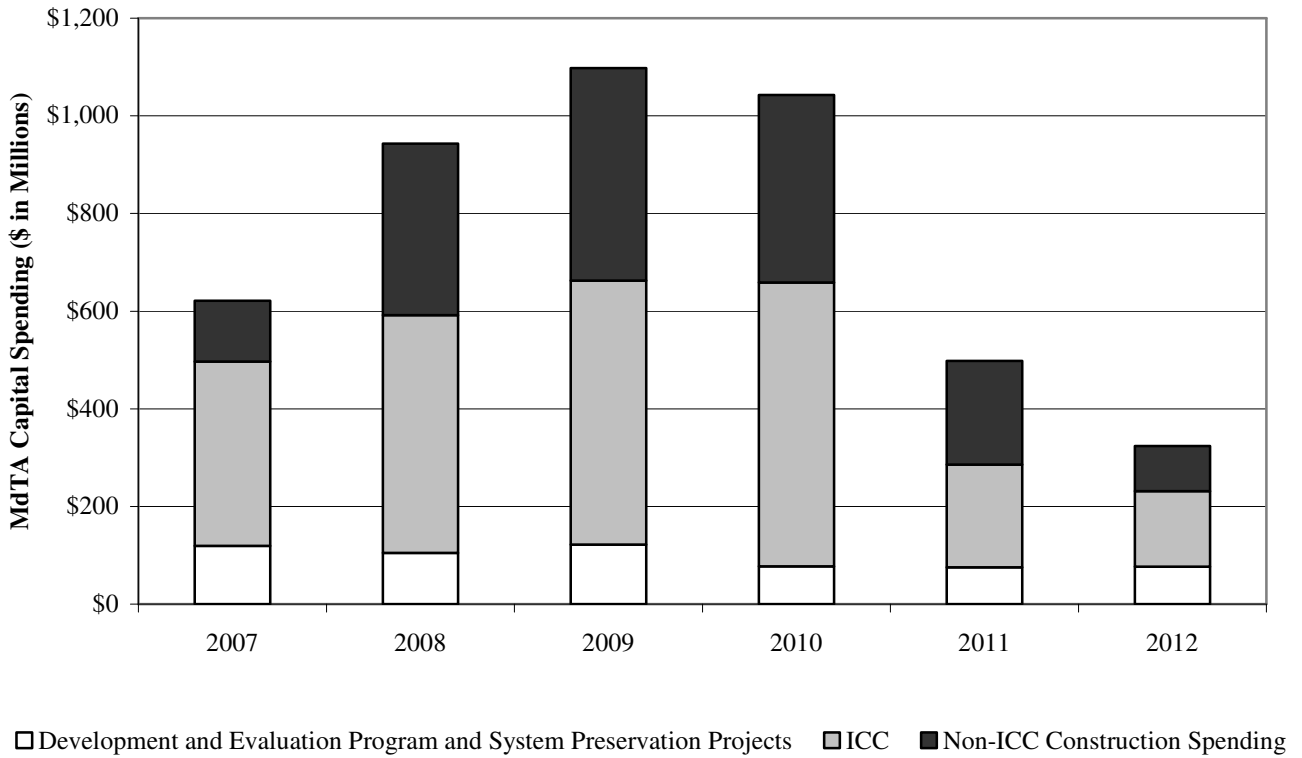
MdTA's capital program involves the construction and maintenance of revenue-generating transportation facilities throughout the State. In addition to the seven toll facilities for which it is responsible, MdTA finances construction of certain facilities at BWI Marshall Airport and the Port. Projects at BWI Marshall Airport are repaid through a passenger facility charge assessed on airplane tickets for enplaning passengers, a customer facility charge assessed on rental cars, and parking revenues. MdTA also constructed the Seagirt Marine Terminal, for which MPA provides a revenue-based operating payment for use of the terminal. Currently, MdTA is undertaking two large capital projects. The first involves construction of the ICC, an east-west road connecting I-270 and I-95. The second is construction of ETLs on a 9.6 mile stretch of I-95 north of Baltimore.

### ***Fiscal 2007 to 2012 Consolidated Transportation Program (CTP)***

The fiscal 2007-2012 CTP shows an increase in total capital projects of \$321.8 million from fiscal 2007 to 2008. This large increase is the result of project schedules for the ETLs on I-95 north of Baltimore (\$155.9 million), interchange improvements at I-695 and Quarantine Road (\$21.3 million), and improvements to the I-95 and MD 24 interchange (\$16.3 million). **Exhibit 12** shows the expected capital expenditures in each year. Large expenditures in fiscal 2008 to 2010 are the result of simultaneous construction of two large projects, the ICC and construction of ETLs on I-95.

**Exhibit 13** provides a list of major MdTA CTP construction projects funded in fiscal 2008. The seven projects listed account for 95% of all major projects in the construction program for fiscal 2008.

**Exhibit 12**  
**MdTA Capital Expenditures by Year**  
**Fiscal 2007-2012**



Source: Maryland Transportation Authority, January 2007 *Consolidated Transportation Program*

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**Exhibit 13**  
**MdTA Major Construction Projects Funded in Fiscal 2008**  
**(\$ in Thousands)**

<b><u>Project</u></b>	<b><u>FY 2008</u></b>	<b><u>Total \$</u></b>	<b><u>Completion of Fiscal Cashflow</u></b>
Bay Bridge Westbound Bridge Deck Rehabilitation – rehabilitate the westbound bridge deck. Phase I involves truss, beam and girder spans. Phase II involves suspensions and thru-truss spans. Project also involves selective painting of some of the structural steel.	\$21,900	\$119,666	2009
I-95 JFK Memorial Highway MD 24 Interchange Construction – involves improvements to the I-95/MD 24 interchange, upgrades to MD 24 and reconstruction of the MD 24/MD 924 interchange.	23,925	68,744	2010
Interchange improvements at MD 695 and Quarantine Road – involves interchange improvements on MD 695 at Quarantine Road including a new commercial vehicle inspection facility.	21,851	49,694	2010
Harbor Tunnel Thruway Canton Viaduct Bridge Deck Replacement – replace the deck on the Canton Viaduct Bridge from the north portal entrance to Holabird Avenue.	14,815	42,980	2010
Bridge, Roadway, and Signage Rehabilitation on I-95 South of the Fort McHenry Tunnel – involves the rehabilitation of all of I-95 and I-395 south of the tunnel. Includes resurfacing of 61 bridge decks and related structural repairs; resurfacing of roadways; replacement and upgrades of existing signs; miscellaneous safety improvements; and inspection and repair of highmast light poles and sign structures.	19,604	114,663	2012
I-95 JFK Memorial Highway Express Toll Lanes Construction – involves the construction of two managed lanes in each direction from I-895 north to north of MD 43. Also involves the improvement of the I-95 interchanges with I-895, I-695, and MD 43.	\$209,565	\$1,164,848	2012
InterCounty Connector Construction – construction of a new east-west, multimodal highway in Montgomery and Prince George’s counties between I-270 and I-95/US 1.	487,439	2,445,909	2012
<b>Total</b>	<b>\$799,099</b>	<b>\$4,006,504</b>	

Source: Maryland Transportation Authority, January 2007 *Consolidated Transportation Program*

## **Projects Added to the Development and Evaluation (D&E) Program**

One project was added to the D&E program. The project involves the improvement of existing commercial vehicle inspection facilities at the Harbor Tunnel, Fort McHenry Tunnel, Key Bridge, and Nice Bridge. The project will provide MdTA with adequate facilities to conduct safety and weighing activities, as current facilities do not allow for the level of enforcement necessary at these locations. Planning is set to take place in fiscal 2008 and 2009 for a total cost of \$0.7 million.

## ***Issues***

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### **1. InterCounty Connector**

Planning studies for the ICC concluded with the Record of Decision (ROD) being approved by the Federal Highway Administration (FHWA) in May 2006. Following the issuance of the ROD, right-of-way (ROW) acquisitions began. ROW acquisitions will predominantly take place in fiscal 2007 and 2008 but will continue at a slower pace through fiscal 2010.

As shown in **Appendix 2**, the project is divided into five separate contracts. Contract A includes 7.2 miles extending from I-270/I-370 to MD 97 and three interchanges. The request for proposals for Contract A was issued in July 2006 and award of the contract is expected to take place in spring 2007. The estimated cost of Contract A is \$340 million to \$410 million. This segment of the project is expected to open to traffic in mid 2010.

The request for proposals for Contract C, extending 3.8 miles east to west from US 29 to I-95, as well as 1.9 miles running north to south along I-95, will be issued in March 2007, and the notice to proceed is expected in fall 2007. The advertising and award of Contracts B, D, and E will take place throughout 2007 to 2009. The sequencing of contracts is based on the complexity of the interchanges and expected time to complete.

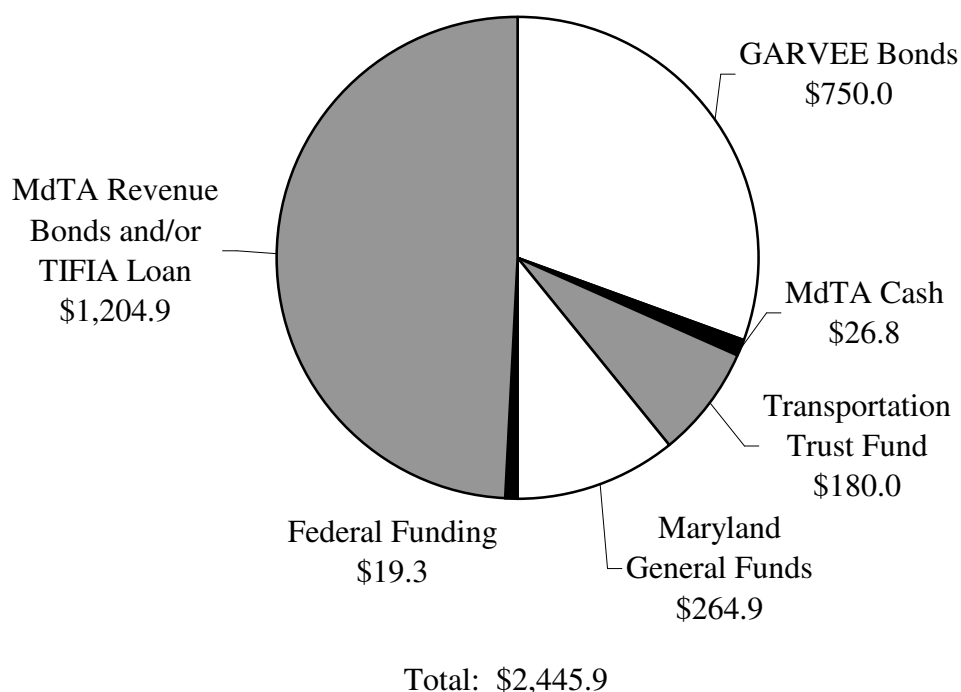
In December 2006, two lawsuits were filed in opposition to construction of the ICC. The first lawsuit was filed by the Audubon Naturalist Society, the Maryland Native Plant Society, and two local residents against FHWA, the U.S. Department of Transportation and the Army Corp of Engineers. The lawsuit alleges that the project is the result of a flawed National Environmental Policy Act (NEPA) process and that other alternatives to the road were not adequately considered. The second lawsuit, filed by Environmental Defense and the Sierra Club, challenged the approval of the ICC by FHWA and metropolitan Washington's Transportation Planning Board on the grounds that the analysis of the road's effect on local pollution was inadequate. Although neither lawsuit included Maryland, MdTA, or MDOT as defendants, Maryland's Attorney General filed a motion to intervene in early February 2007.

### **Finance Plan**

Chapters 471 and 472 of 2005 provide a funding plan for construction of the ICC. The finance plan and total project cost as provided for in statute remains unchanged. The finance plan as adopted provides flexibility. Although it stipulated payment years for the general fund and TTF contributions, it did not specify the number, amount, or timing of Grant Anticipation Revenue Vehicle (GARVEE) or MdTA revenue bond issuances. The current finance plan is shown in **Exhibit 14**.



**Exhibit 14**  
**ICC Finance Plan**  
**(\$ in Millions)**



GARVEE: Grant Anticipation Revenue Vehicle  
TIFIA: Transportation Infrastructure Finance and Innovation Act  
TTF: Transportation Trust Fund

Source: Maryland Transportation Authority

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### **General Fund Payment to the ICC**

In order to support ongoing State spending, the Budget Reconciliation and Financing Act of 2003 transferred \$314.9 million from the TTF to the general fund, with the requirement that the money be repaid to the TTF. During the 2004 session, the Rainy Day Fund statute was amended to require that if there is a surplus of unappropriated funds in the general fund at the close of a fiscal year, the first \$10 million would be retained by the general fund, and the next \$50 million would be repaid to the TTF. In fiscal 2006, \$50 million was repaid to the TTF under this provision.

During the 2005 session, Chapters 471 and 472 deleted the provision that provided for repayment of the TTF from surpluses in the general fund. In its place, repayment was provided through annual payments to MdTA to fund construction of the ICC until the balance was paid in full. Statute requires that at least \$50 million be repaid per year between fiscal 2007 and 2010 and that the remaining balance of \$264.9 million be repaid before fiscal 2010.

The Governor's fiscal 2008 budget includes a transfer of \$53 million to MdTA for construction of the ICC. However, language included in the budget deletes this transfer if legislation (Senate Bill 73/House Bill 57) is enacted that alters the timing of payments to MdTA. Specifically, the bills remove fiscal 2008 as one of the years of repayment, instead requiring that the remaining balance be paid in fiscal 2009 and 2010. **Exhibit 15** shows the repayment plan as it currently exists in statute and the proposed repayment plan if the legislation is enacted.

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**Exhibit 15**  
**General Fund Repayment of Money Borrowed**  
**from the Transportation Trust Fund**  
**(\$ in Millions)**

	<u>Repayment Plan</u> <u>Currently in Statute</u>	<u>Proposed</u> <u>Repayment Plan*</u>
<b>Total Amount Borrowed</b>	<b>\$314.9</b>	<b>\$314.9</b>
Fiscal 2006 Repayment to the Transportation Trust Fund	-50.0	-50.0
Fiscal 2007 Payment to MdTA for the ICC	-53.0	-53.0
Fiscal 2008 Payment to MdTA for the ICC **	-53.0	0
Fiscal 2009 Payment to MdTA for the ICC **	-50.0	-85.0
Fiscal 2010 Payment to MdTA for the ICC **	-108.9	-126.9

\* Proposed repayment plan according to MdTA's most recent cash flow forecast for the ICC.

\*\* Statute requires the payment of at least \$50.0 million in fiscal 2007 through 2010, with the balance to be repaid by 2010. Although a large lump sum payment in the final year is shown here, payments could be more evenly distributed.

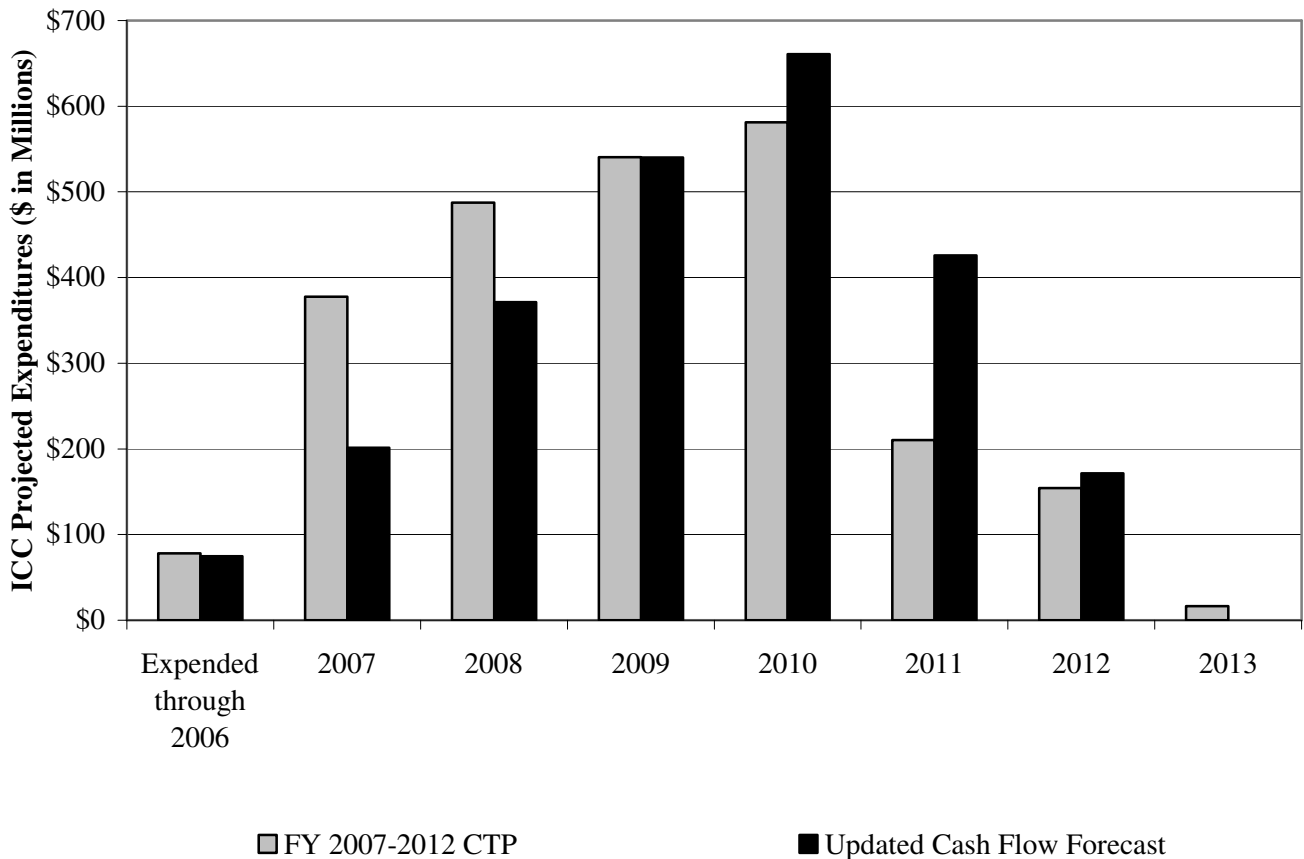
Source: Department of Legislative Services; Maryland Transportation Authority Financial Forecast, February 2007

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### **ICC Cash Flow Changes**

SHA is involved in the project planning and contract administration for the ICC on MdTA's behalf. SHA and MdTA have just recently completed an updating of the project schedule and cash flow forecast. Although the completion date of fiscal 2011 remains in place, much of the expenditures for ROW acquisitions and construction will take place later than originally anticipated. MdTA reports that its initial financing plan was conservative in its cash flow assumptions and assumed that all cash flow would occur at the earliest possible date. As the project has progressed, SHA and MdTA have been able to modify the project schedule and cash flow forecast with more realistic assumptions. **Exhibit 16** shows the changes in the cash flow forecast from the final fiscal 2007-2012 CTP to the most updated version from February 2007. According to the most recent cash flow forecast, with the issuance of \$325.0 million in GARVEE bonds in fiscal 2007, MdTA will have enough money without repayment from the general fund in fiscal 2008 to proceed with the project.

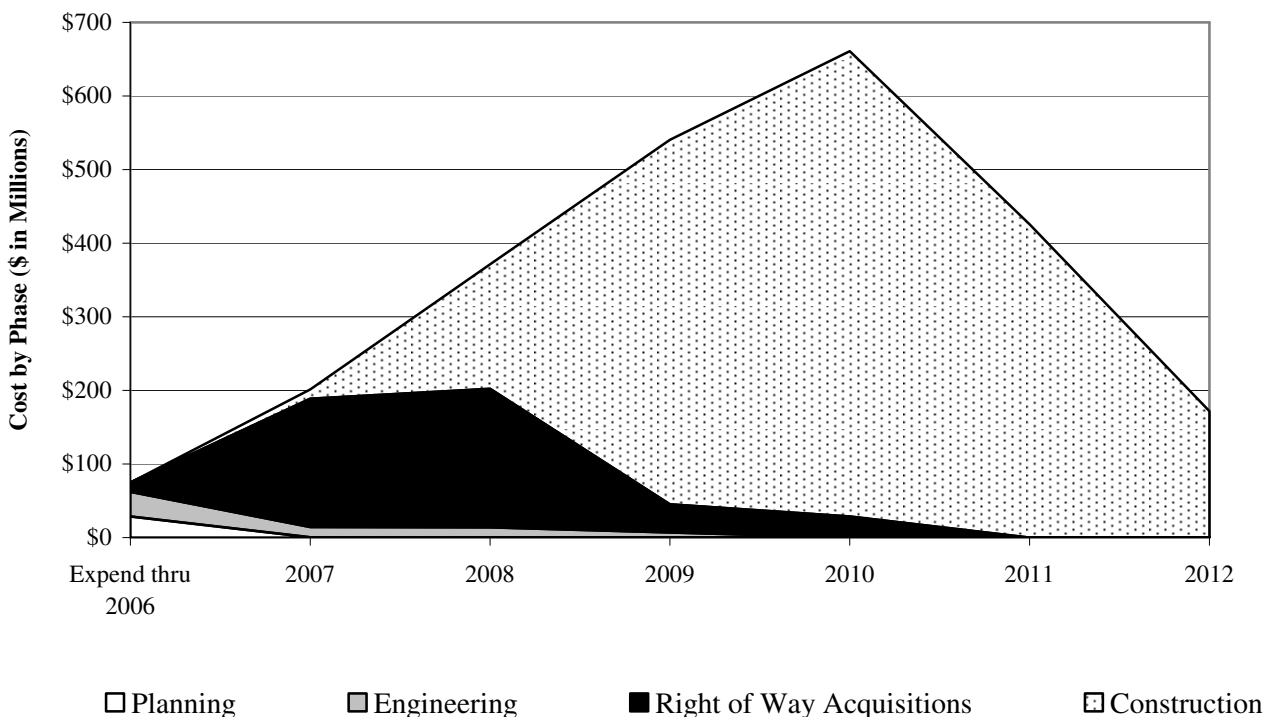
**Exhibit 16**  
**Changes in the ICC Cash Flow Forecast**  
**Fiscal 2006-2013**  
**(\$ in Millions)**



Source: Maryland Transportation Authority, January 2007 *Consolidated Transportation Program*; Maryland Transportation Authority Financial Forecast, February 2007

**Exhibit 17** provides information from the most recent cash flow forecast regarding expenditures by year on each phase of the ICC project. The largest expenditure of funds, \$1.9 billion or 80.4% of expenditures, is committed to construction. The second largest portion is \$429,179, or 18.1%, for ROW acquisitions.

**Exhibit 17**  
**ICC Expenditures by Year and Project Phase**  
**Fiscal 2006-2012**  
**(\$ in Millions)**



Source: Maryland Transportation Authority

### **Proposed Deferral of General Fund Payment for the ICC**

Although the updated ICC cash flow forecast provides evidence that MdTA will be able to continue forward on the project without any general fund dollars in fiscal 2008, a larger question still looms about the effect of the proposed deferral on the general fund. The legislation that proposes amending the ICC finance plan only removes fiscal 2008 as one of the payment years. It does not change the overall balance to be repaid of \$211.9 million nor does it extend the length of repayment. Therefore, the general fund would have to repay this amount over only two years instead of three. This increases pressure on the general fund, which already faces a substantial structural deficit.

Furthermore, reopening the ICC finance plan invites future legislation to further modify the repayment plan. Although MdTA has indicated that FHWA, which must annually approve the finance plan, does not view the deferral of the fiscal 2008 general fund payment as a problem, extending the repayment plan beyond fiscal 2010 or reducing the amount of general fund repayment could raise concerns.

The Department of Legislative Services (DLS) recommends against deferring the fiscal 2008 repayment from the general fund to MdTA. Although making the transfer will require reductions elsewhere in the budget to maintain a positive cash balance, given future budgetary pressures, payment of \$211.9 million in fiscal 2009 and 2010 would be especially difficult.

## **2. JFK Memorial Highway Expansion and Construction of Express Toll Lanes**

I-95 is a major corridor that traverses 1,907 miles along the east coast. Within Maryland, I-95 extends 110 miles from the Woodrow Wilson Bridge to the Delaware state line. MdTA owns and operates 49 miles of I-95, designated as the JFK Memorial Highway, which runs from the northern limits of Baltimore City to Delaware. In 2000, MdTA began the process of developing a Master Plan for JFK Memorial Highway to identify long-range transportation needs; establish clear goals for system maintenance, preservation and enhancement; and ensure the development of environmentally sensitive and intermodal-compatible solutions for the study area. MdTA approved the Master Plan in 2003.

The Master Plan divided JFK Memorial Highway into four distinct study areas. **Exhibit 18** shows the study areas utilized in the Master Plan. Section 100, running from the I-95/I-895 split to north of MD 43, is currently under construction and will add two managed lanes in each direction. Section 200 is currently being evaluated in terms of three alternatives: the no build alternate, the addition of two general purpose lanes in each direction, or the addition of two managed lanes in each direction. Section 300 and 400 will be evaluated in the future.

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**Exhibit 18**  
**I-95 Master Plan Study Areas**

<b><u>Section</u></b>	<b><u>Project Limits</u></b>	<b><u>County(s)</u></b>	<b><u>Miles</u></b>	<b><u>Purpose and Need</u></b>	<b><u>Time of Need</u></b>
100	I-895 North to north of MD 43	Baltimore	8	Relieve existing congestion.	2000
200	North of MD 43 to north of MD 22	Harford	17	Relieve congestion resulting from long-term traffic trends as well as existing and planned development.	2005-2015
300	North of MD 22 to north of MD 222	Harford and Cecil	8	Address safety concerns at the Tydings Memorial Bridge and toll plaza. Relieve congestion from long-term regional growth.	2015
400	North of MD 222 to north of MD 279	Cecil	16	Relieve congestion resulting from long-term regional growth and anticipated development.	2020

Source: Maryland Transportation Authority, April 2003 *I-95 Master Plan*

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## **Section 100**

In July 2005, MdTA received federal approval to construct ETLs on Section 100, the most congested portion of I-95 north of Baltimore City. Once complete, there will be two ETLs and four general purpose lanes in each direction. Motorists will have the option of using the general purpose lanes at no cost or paying a toll to use the ETLs.

Construction of the ETLs also requires the replacement of several bridges and interchanges. This includes the I-95/MD 24 interchange and replacement of the Rossville Boulevard, Cowenton Avenue, and Joppa Road bridges. Construction has already begun, and the project is expected to be completed by 2011.

## **Tolling Methods**

### **Congestion Pricing**

As mentioned above, the two new ETL lanes will give drivers the option to pay a toll to travel on less-congested lanes. The tolls will be managed to maintain relatively congestion-free traffic flow, through the use of congestion pricing. Congestion pricing, or value pricing, is a toll setting method whereby the toll rate depends on time of day and the amount of traffic on the road. Generally, drivers will pay higher toll rates under congested conditions and lower toll rates at less congested times. Tolls may vary based on a fixed schedule, such as time of day, or they may be dynamic, meaning that rates depend on congestion at any given time.

Congestion pricing is a fairly new phenomenon but is receiving a lot of attention. President George W. Bush's fiscal 2008 budget includes \$130 million in grants to finance construction of congestion pricing systems. Various forms of congestion pricing exist both internationally and nationally. An example of a project in the U.S. that is most similar to what will be done in Maryland is the 91 Express Lanes in Orange County, California. The Express Lanes project includes four-lanes built in the median of California's Riverside Freeway (State Route 91). The 91 Express Lanes are 10 miles long and toll rates vary from \$1.15 to \$9.25 depending on the time of day. Use of the 91 Express Lanes requires drivers to have transponders for electronic toll collection. An image of the vehicle's license plate is captured for those who do not have transponders, and the vehicle's registered owner is charged toll-evasion fees of \$100 to \$500 depending on the number of offenses.

The ETLs on I-95 and the ICC will be the first toll facilities in Maryland to utilize congestion pricing, though it has been studied for several years for use at existing toll facilities. **DLS recommends that MdTA address the use of congestion pricing, including what advantages and disadvantages it offers, as well as whether there are plans to utilize congestion pricing elsewhere.**

### **Open Road Tolling (ORT)**

The ICC and the ETLs on I-95 will utilize ORT. ORT is a toll collection method whereby tolls are collected at highway speeds via an overhead gantry system. ORT utilizes the E-ZPass

system for electronic toll collection, which eliminates the need for traditional toll booths. Similar to the 91 Express Lanes in California, drivers on I-95 will be able to utilize the general purpose lanes without E-ZPass; however, use of E-ZPass will be mandatory on the ETLs. Drivers using the ETLs without an E-ZPass transponder will be charged toll evasion fees of an amount undetermined at this point. However, vehicles on the ICC will not be required to use transponders. If a driver does not have a transponder they may register to use a video imaging system that will capture an image of their license plates.

ORT may be beneficial because it can reduce toll plaza backups by eliminating the need for drivers to stop, or even slow down, to pay a toll. The fiscal 2007-2012 CTP includes a project in the Development and Evaluation program to study the feasibility of utilizing ORT for the existing toll facility on JFK Memorial Highway (prior to crossing the Tydings Bridge). **MdTA should address the advantages and disadvantages of ORT, as well as whether there are plans to utilize ORT at existing toll facilities. DLS also recommends MdTA discuss the use of video tolling on the ICC and why drivers on the ETLs on I-95 will be charged toll evasion fees instead of utilizing video tolling there as well.**

## **Project Cost**

The cost of the project has increased significantly. In 2005, the estimated construction cost was \$715 million. As a result of changes to address safety concerns and the addition of items that had not been well defined during the planning process, the project's construction cost increased to \$898 million in 2006. As a result of further refinement in design and the use of actual bid price data, the construction cost has increased to \$958 million in 2007, an increase of 34% in only two years.

As would be expected, total project cost, which includes construction, design, ROW, and construction management, has also increased. The total price listed in the fiscal 2006-2011 CTP was \$810.9 million. The total price in the fiscal 2007-2012 CTP is \$1.2 billion, an increase of \$354.0 million, or 43.7%. One should also keep in mind that the \$1.2 billion price tag does not include a number of associated interchange improvements and bridge replacements that will take place in conjunction with the construction of ETLs. These projects, mentioned above, add an additional \$100 million to the project cost. Furthermore, these total project costs are only for Section 100, which includes only a small portion of the total 49 miles included in the I-95 Master Plan. The total cost for improvements on the JFK Memorial Highway will likely exceed the \$2.0 billion originally estimated in the I-95 Master Plan.

The last time that MdTA undertook a large construction project of a new facility was the building of the westbound Bay Bridge, which opened in 1973. Currently, MdTA is constructing two large projects, the ICC and the ETLs on I-95. Construction planning, estimates, and management of the ICC is all being handled by SHA on MdTA's behalf. Since the initial cost estimate for the ICC of \$2.4 billion in 2005, the total projected cost of the project has remained the same.

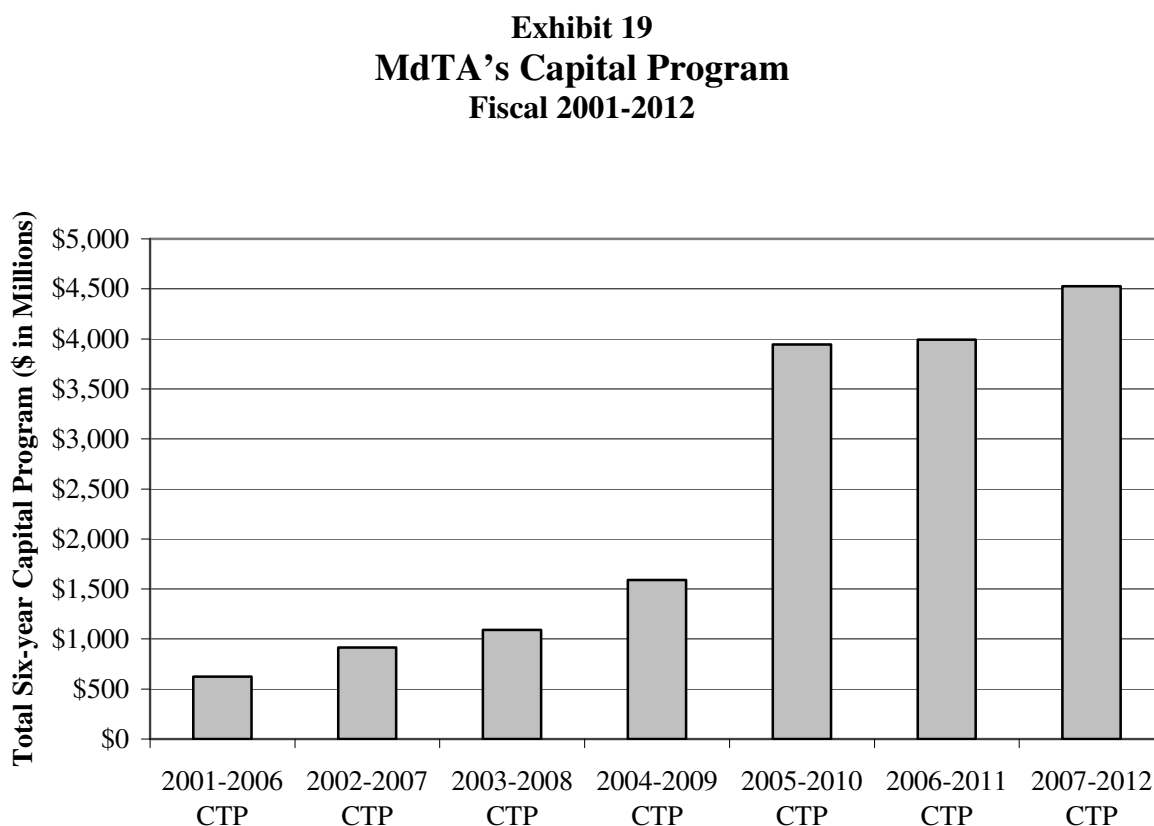
The construction of ETLs on I-95 has been handled solely by MdTA. In the past year, the total cost of the project as reflected in the CTP has increased by \$354.0 million, or 43.7%. Additionally, one of MdTA's major reconstruction projects, the rehabilitation of the westbound Bay

Bridge (described in detail in the second Update included in this analysis) has ballooned from a \$45 million project to a \$120 million project in six years. MdTA's management of the I-95 and Bay Bridge projects shows the value of utilizing SHA as a construction manager, since SHA has much more experience in that area.

**DLS recommends that MdTA discuss the large increases in cost estimates for construction of ETLs on I-95 and the total estimated cost of projects on JFK Memorial Highway over the next 10 years. Furthermore, MdTA should comment on its management of large construction projects and whether SHA should play a greater role in the JFK Memorial Highway project and future projects given SHA's extensive construction management experience.**

### **3. MdTA's Financial Forecast and Large Increases in Capital Spending**

As shown in **Exhibit 19**, over the last six years, MdTA's six-year capital program has grown from \$624.7 million to \$4.5 billion, an increase of over 600%. However, during that same time toll revenues have only increased by about 87%.



Source: Maryland Transportation Authority, January 2001-2007 *Consolidated Transportation Programs*

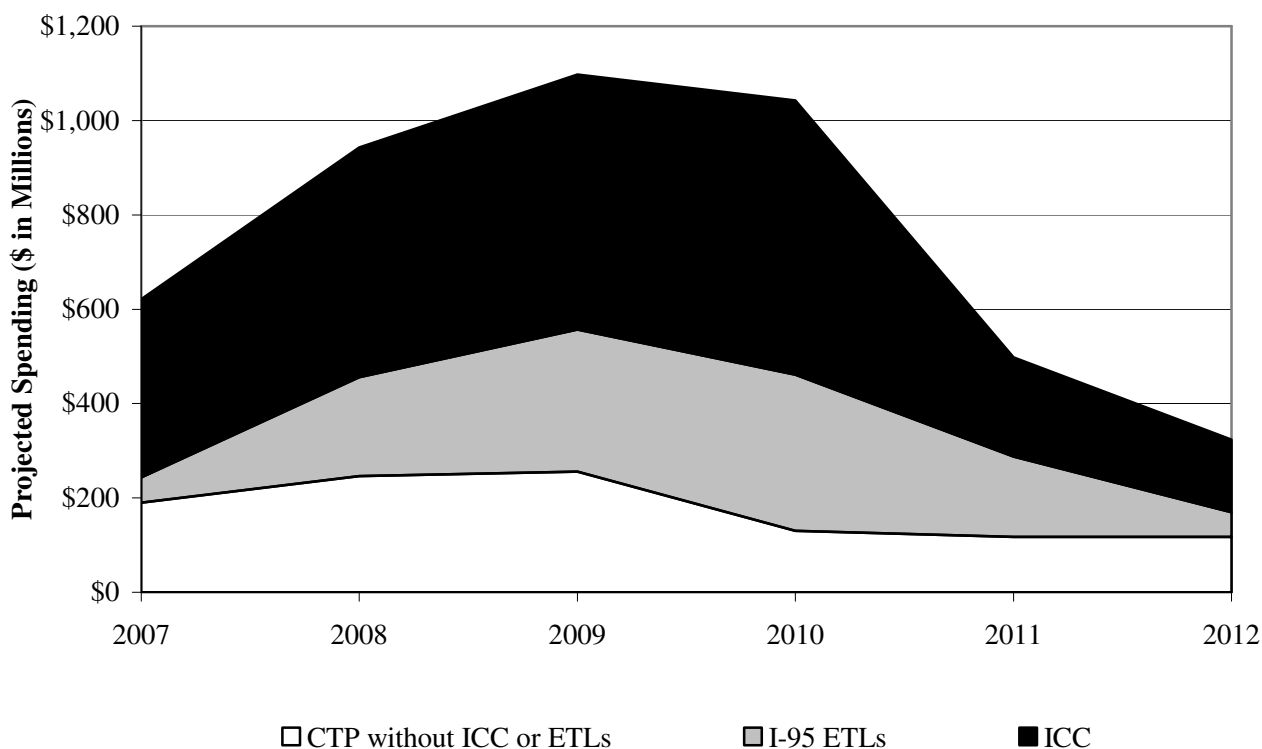
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As discussed in the first two Issues, MdTA is currently undertaking two large capital projects. The first, the ICC, has a total cost of \$2.4 billion, about half of which comes from MdTA cash and revenue bonds. The second is the construction of ETLs on I-95, which has a current cost estimate of \$1.2 billion and is funded entirely by MdTA cash and bonds. Furthermore, the cost of rehabilitating the westbound Bay Bridge has increased by \$75 million over the past six years. **Exhibit 20** shows capital spending for each year of the fiscal 2007-2012 CTP separated by spending on the ICC, the ETLs on I-95, and all other capital projects. In each year of the current CTP, the majority of capital dollars are spent on the ICC and ETLs. In fiscal 2008, these two projects account for 69.4% of all capital spending. At the peak of construction in fiscal 2010, these two projects alone account for 87.5% of all capital spending. **DLS recommends that MdTA discuss the effect that the simultaneous construction of these two large capital projects is having on the rest of the capital program and on MdTA's financial situation in general.**

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**Exhibit 20**  
**Capital Spending by Year and Project**  
**Fiscal 2007-2012 Consolidated Transportation Program**



Source: Maryland Transportation Authority, January 2007 *Consolidated Transportation Program*

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In order to finance this large capital program, MdTA will issue significant revenue bond debt. From fiscal 2007 to 2012, revenue bonds outstanding will increase from \$245.0 million to \$2.9 billion. In fiscal 2010 alone, MdTA will issue a record-setting \$835.0 million worth of revenue

bonds. Total bonds outstanding will begin to exceed MdTA's statutory debt limit of \$1.9 billion in fiscal 2010. MdTA will need to get the legislature's approval to increase the debt outstanding limit in order to continue to issue bonds beyond fiscal 2010.

The discussion of an increase in MdTA's debt outstanding limit will likely have to consider MdTA's recent downward revision in toll revenue growth. Following a slight decline in toll revenue from fiscal 2005 to 2006, MdTA revised its toll revenue growth downward from 1.8% to 1.5%. This accounts for a \$3.4 million decrease in projected toll revenues in fiscal 2007.

### **Toll Rate Increases**

According to its latest financial forecast, in order to maintain its bond coverage ratios, MdTA will need to increase tolls in fiscal 2011. An average toll increase of 30% is necessary, though it is unclear at this time whether the toll increase will be spread across all toll facilities and rate classes or whether a more selective option will be chosen. Since MdTA is already aware of the necessity of raising tolls in the next four years, it has the option of utilizing two smaller increases rather than one large increase.

In fiscal 2008 and 2009, expenditures are expected to exceed revenues by a total of \$212.6 million. This net loss will be paid for by drawing down the MdTA's cash balance. Rather than drawing down these reserves, it would be advantageous for MdTA to increase tolls sooner rather than later. Increased toll revenues in fiscal 2008 would leave MdTA with a higher cash balance at the end of the year. With this higher cash balance, MdTA would not come so close in fiscal 2009 to falling below the administrative coverage ratio relating cash balance to toll revenues.

Furthermore, looking beyond the forecast period, it is likely that another toll rate increase will be necessary in fiscal 2013 as a result of rising debt service payments. Debt service payments for revenue bonds issued through fiscal 2012 will not peak until about fiscal 2016. Unless higher than expected toll revenues are received from the ICC and ETLs on I-95, toll revenues will not keep pace with debt service payments. As a result, the debt service coverage ratio would fall below the minimum administrative ratio in fiscal 2013. To prevent this, MdTA will need to increase tolls in fiscal 2013.

The prospect of toll increases in both fiscal 2011 and 2013 reinforce the need to raise tolls at a slower, more managed pace. As a result of toll increases in 2001 and 2003, rates at many facilities were doubled. An effort should be made to utilize small incremental increases rather than large single-year increases. This policy is better for both tollpayers and the financial standing of MdTA.

MdTA has a statutory obligation to set toll rates at the level necessary to cover debt service and all other expenses. Approval of toll rates is not required by anyone outside of MdTA, although notice of the proposed rate change must be provided to the House and Senate budget committees, the Senate Finance Committee, and the House Ways and Means Committee.

**DLS recommends that MdTA discuss:**

- **the overall financial position of MdTA;**
- **debt management now and in the future;**
- **the recent downward revision in toll revenue growth;**
- **projected toll rate increases; and**
- **MdTA’s willingness to utilize several small toll increases rather than one large one.**

#### **4. Task Force on Traffic Capacity Across the Chesapeake Bay**

##### **Background**

The Task Force on Traffic Capacity Across the Chesapeake Bay was appointed by former MDOT Secretary and MdTA Chairman Robert L. Flanagan to help identify and understand the need for additional capacity across the Chesapeake Bay. The task force was voluntarily created after an expression of legislative interest in the subject. The 22-member task force received detailed information on the history of the existing bridges; reviewed MdTA’s 2004 *Transportation Needs Report*, which provided an assessment of traffic capacity constraints and traffic projections for the Bay Bridge for 2025; and, listened to extensive public comments on the subject. The task force was charged with information gathering and issue identification only and was not to select a specific location or project for development.

The Bay Bridge is the only roadway crossing of the Chesapeake Bay in Maryland. Population and job growth on both sides of the bridge have increased significantly, resulting in increased traffic, congestion, and associated effects (*e.g.*, accidents, increased truck traffic, delays, environmental concerns, etc.). Nearly 26 million vehicles crossed the Bay Bridge in 2005, and that number is increasing each year. Increased congestion, coupled with the lack of an alternative crossing and the need for significant future deck rehabilitation on the eastbound span, all demonstrate the need for a long-term solution.

MdTA developed several short-term strategies to maximize bridge capacity and reduce congestion during the busiest times of the summer months called “Taking the Heat out of Summer Travel.” The program reduced peak-period traffic by 7% in 2005. It included:

- widening toll plaza departures;
- aggressive marketing of E-ZPass;

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- adding more vehicle recovery technicians;
- installing new overhead dynamic messaging signs;
- the “Go Early...Stay Late” program in conjunction with the Department of Business and Economic Development;
- launching the 1-877-BAYSPAN hotline for bridge traffic conditions; and
- enhanced public and media outreach.

In July 2006, MdTA unveiled the “Keep Cool and Pace Your Space” campaign, which added pink rectangles to the Bay Bridge in an effort to reduce tailgating and accidents.

Four zones were studied as potential sites of a new bay crossing. They are:

- Zone 1 – Baltimore County to Kent County (historic northern crossing);
- Zone 2 – Anne Arundel County to Queen Anne’s County (existing Bay Bridge);
- Zone 3 – Anne Arundel/Calvert counties to Talbot County (includes St. Michael’s); and
- Zone 4 – Calvert County to Dorchester County (historic southern crossing).

Each zone is constrained by a number of factors including the range in the width of the Chesapeake Bay from 4 miles at the existing crossing to 25 miles at its mouth in Virginia, water depth ranges from 10 feet in the north to over 100 feet in the south, and widely varying soil conditions.

Given the physical characteristics of the Chesapeake Bay, three types of crossings are possible: a bridge, a tunnel, and ferry service. A tunnel is typically used where navigation restricts the placement of bridge supports; however, tunnels are more susceptible to hazardous material spills and threats to homeland security and can cost up to three times the cost of a bridge at the same location. A ferry service could provide some capacity but would result in longer crossing times and higher costs (fees for cars could range from \$25 to \$40). Although capacity is determined by the number of ferries used, ferries alone could not significantly relieve congestion on the bridge.

Finally, if a crossing were selected in any of the zones, the roads adjacent to the crossing would need to have sufficient capacity to carry traffic to and from the crossing. Since many of these adjacent roadways are already operating at or near capacity, significant improvements to the existing road network would also be necessary.

## **Final Report**

The task force issued its final report in August 2006. The report summarized the information provided to task force members and the public comments received. It concluded that the issue of capacity across the Chesapeake Bay is complex and controversial but also compelling. It further stated that congestion is already a pressing issue that must be dealt with and further delay will only exacerbate the problem. Per the task force's recommendation, more detailed traffic recommendations will be developed to aid in the decision-making process. Additionally, in response to task force members and public comments about the potential for transit service, MdTA, in conjunction with the Maryland Transit Administration, initiated a study of transit as an alternative to a new highway bridge. The study will determine whether a transit-only crossing is feasible, cost-effective, and can provide sufficient additional capacity.

After the transit study and more detailed traffic studies are completed, if MdTA decides to continue evaluating potential alternatives for adding capacity across the Chesapeake Bay, the next step would be to begin a NEPA study. To do this, MdTA must identify a lead federal agency (traditionally FHWA for highway projects or the U.S. Coast Guard for some major bridge projects) and develop the Purpose and Need statement. If a new bridge is the alternative selected, MdTA estimates that it will take 20 years before a new bridge would be operational; therefore, alternative strategies should be developed for the short- and long-term to address congestion.

### **DLS recommends that MdTA:**

- **address the task force process and findings;**
- **identify future steps and a proposed timeline;**
- **comment on the current status of the additional transit and traffic studies that MdTA is undertaking; and**
- **discuss other short- and long-term strategies that MdTA is examining to address congestion on the Bay Bridge, including the possibility of congestion pricing and/or ORT.**

## ***Operating Budget Recommended Actions***

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1. Nonbudgeted.

## ***PAYGO Budget Recommended Actions***

1. Nonbudgeted.

## ***Updates***

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### **1. Cecil/Harford Bridges Workgroup**

In 2006, MdTA created the Cecil/Harford Bridges Workgroup consisting of members of the State Senate and House of Delegates, county and municipal elected officials, economic development and Chamber of Commerce representatives, local community representatives, local business representatives, the Executive Secretary of MdTA and the Administrator of SHA. The purpose of the workgroup was to provide advice and recommendations to MdTA regarding the Hatem Bridge, Tydings Bridge (I-95), and their associated toll plazas.

Hatem Bridge opened to traffic in 1940 and crosses the Susquehanna River between Harve de Grace and Perryville. The \$5.00 toll on eastbound traffic is collected via cash, E-ZPass, or AVI decals. AVI decals may be purchased for \$5.00 per year and allow unlimited passage across the Hatem Bridge. Ninety percent of all vehicles entering the toll booths at Hatem Bridge utilize AVI decals. Approximately 9.3 million vehicles travel over the bridge each year. Since 1980, Hatem Bridge has been operating at a loss ranging from \$400,000 to \$4.6 million per year. The Hatem Bridge is not tolled for revenue but rather to minimize diversions from I-95.

In a somewhat similar fashion to the Bay Bridge Reconstruction Advisory group that was created to provide MdTA with a citizen's perspective on the operations of the Bay Bridge, the workgroup was presented with information and made informed recommendations to MdTA. Topics included the best method of routing traffic during reconstruction of the Hatem Bridge and tolling options for the Hatem Bridge and JFK Memorial Highway. Based on these presentations and their own experiences with the Hatem Bridge and JFK Memorial Highway, workgroup members recommended a number of actions for MdTA and SHA to take. At the final meeting, MdTA reviewed all recommendations with workgroup members and advised if there were any prohibiting factors affecting the recommendations, as well as updated members on ways in which MdTA implemented, or was in the process of implementing, those recommendations.

Based on the workgroup's recommendations, the following actions have taken place:

- MdTA developed an incident management plan to allow emergency vehicle access to the Hatem Bridge and Harford County Hospital during construction;
- MdTA will create a group to evaluate truck restrictions on the Hatem Bridge during and after construction, including the effect on local businesses;
- MdTA developed a plan for AVI decals to be renewed at no charge during the Hatem Bridge construction;
- SHA will adjust the timing of traffic signals at the US 40/MD 155 intersection to improve traffic flow;

- MdTA is studying the use of high speed toll lanes for the JFK Memorial Highway toll plaza;
- MdTA is studying the legal issues involved in creating a new commuter plan for JFK Memorial Highway; and
- MdTA has contacted the Delaware Department of Transportation regarding the possibility of a shared toll plaza for I-95 at the Maryland and Delaware state line and is willing to study alternative toll plaza locations if a shared facility is not feasible.

## **2. Westbound Bay Bridge Redecking**

There are currently two bridges crossing the Chesapeake Bay from Sandy Point to Kent Island. The first, known today as the eastbound bridge, was opened to traffic in 1952. Its total cost to construct was \$45.0 million, and it provided two lanes, one in each direction, for vehicles to cross the Chesapeake Bay. In its first year, the bridge carried 1.2 million vehicles. Over the next year, traffic on the bridge doubled, straining its capacity.

In 1973, the westbound bridge was opened. At a total cost of \$148 million, it provided for two lanes of westbound traffic and one reversible lane, which allowed for east- or west-bound traffic, depending on the need.

Between 1986 and 1988, the eastbound bridge, then 35 years old, was completely redecked. In 1999, MdTA recommended the redecking of 21 spans of the westbound bridge, as well as resurfacing of the 95 other spans. Phase I of the work began in early 2002, and involved the resurfacing of 95 spans. To achieve this, the top two inches of the deck were milled and overlaid with a concrete product.

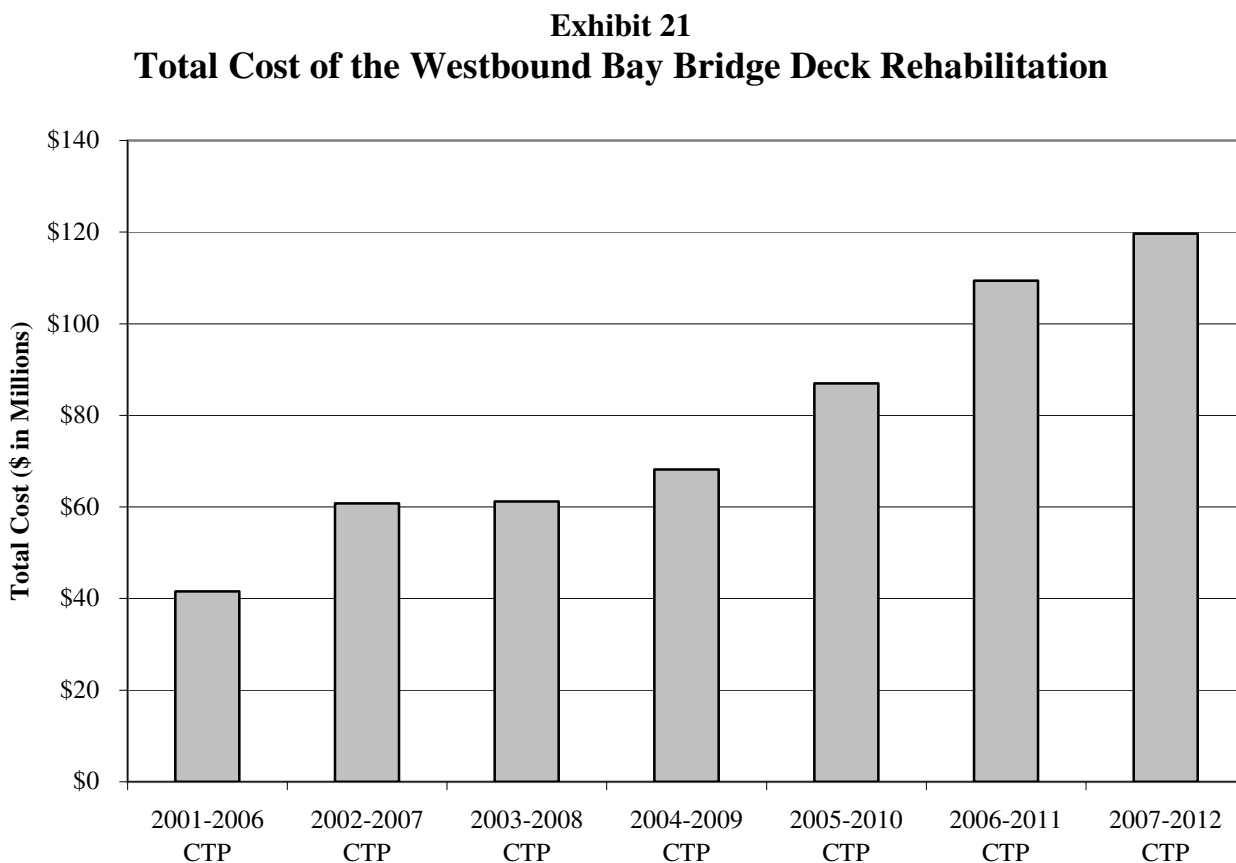
In December 2003, MdTA inspectors noticed minor cracking in the westbound resurfacing and by March 2004, the cracking was more widespread. In March 2004, MdTA asked a consultant to investigate the road condition and offer a solution. The consultant's preliminary report was issued in September 2004 and recommended removing the failed concrete and applying a more traditional road surface. Numerous modifications to the original scope of the work were implemented to eliminate the concrete overlay de-lamination problem. The Bay Bridge Overview Team, appointed by MdTA's chairman, completed its investigation in January 2005. It recommended enhanced surface preparation methods, a new type of concrete overlay material, and strict adherence to weather condition requirements relating to concrete placement and curing procedures.

The cracks in the decking forced the replacement of much of the work already completed. The resulting lane closings led to miles-long backups and added \$7 million to the project cost. The replacement work was completed in 2005. MdTA continues to try to recover this money from the contractor, based on the belief that the contractor was at fault for the problems. However, the contractor denies responsibility and attributes the problem to the project specifications developed by MdTA. Negotiations are ongoing.



Currently, MdTA is working on Phase II of the project. While Phase I focused on resurfacing of the truss, beam, and girder spans, Phase II involves the complete replacement of portions of the deck of the suspension and thru-truss spans. Phase II will utilize a precasting method, whereby the concrete is mixed and set in a laboratory setting. By performing the mixing and setting in a laboratory setting, it removes any detrimental effects from environmental factors, such as cold temperatures and wind, which may have been contributing factors to the previous cracking. This method will require shorter nighttime closures as crews come in and remove a section of the bridge and then replace it with the sections that were mixed and set elsewhere. MdTA believes that although this process may be more expensive, it will result in less disruption for travelers and a better quality product.

**Exhibit 21** shows the total cost of the westbound bridge deck rehabilitation included in the current and six previous versions of the CTP. As the exhibit shows, what began as a four-year, \$45 million project to rehabilitate the westbound bridge has turned into an eight-year, \$120 million project.



Source: Maryland Transportation Authority, January 2001-2007 *Consolidated Transportation Programs*

**MdTA Financial Forecast**  
**Fiscal 2006-2012**  
**(\$ in Millions)**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
<b>Revenues</b>							
Toll Revenues	\$274.30	\$280.80	\$285.20	\$289.70	\$298.50	\$396.60	\$405.00
Concessions	7.80	8.10	8.30	6.00	6.00	10.00	13.00
Investment Income and Other	34.80	27.10	27.50	23.00	20.20	22.90	25.80
Maryland Department of Transportation	35.90	37.60	38.90	40.40	42.00	43.60	45.20
<b>Total Revenues</b>	<b>\$352.80</b>	<b>\$353.60</b>	<b>\$359.90</b>	<b>\$359.10</b>	<b>\$366.70</b>	<b>\$473.10</b>	<b>\$489.00</b>
<b>Expenses</b>							
Operations	\$144.10	\$189.90	\$209.30	\$219.80	\$241.30	\$252.90	\$265.00
MDOT Transfer	43.00	43.00	0.00	0.00	0.00	0.00	0.00
Debt Service	32.30	24.50	24.40	38.50	38.50	58.30	101.30
Capital Program	132.20	219.30	410.20	501.50	415.10	258.80	152.80
ICC Capital	29.80	201.40	371.40	540.20	660.90	425.80	171.60
Less: GARVEE Bond Proceeds	0.00	-325.00	0.00	-425.00	0.00	0.00	0.00
Less: MDOT/Special Federal Funds	-0.60	0.00	-18.70	0.00	0.00	0.00	0.00
Less: Revenue Bond Proceeds	0.00	0.00	-535.00	-260.00	-835.00	-630.00	-215.00
Less: MDOT PAYGO	-38.00	-30.00	-30.00	-30.00	-30.00	0.00	0.00
Less: General Fund Transfers	0.00	-50.00	0.00	-85.00	-129.90	0.00	0.00
<b>Total Expenses</b>	<b>\$342.80</b>	<b>\$273.10</b>	<b>\$431.60</b>	<b>\$500.00</b>	<b>\$360.90</b>	<b>\$365.80</b>	<b>\$475.70</b>
<b>Annual Surplus/Deficit</b>	<b>\$10.00</b>	<b>\$80.50</b>	<b>-\$71.70</b>	<b>-\$140.90</b>	<b>\$5.80</b>	<b>\$107.30</b>	<b>\$13.30</b>
<b>Total Cash Balance</b>	<b>\$430.80</b>	<b>\$511.30</b>	<b>\$439.60</b>	<b>\$298.70</b>	<b>\$304.50</b>	<b>\$411.80</b>	<b>\$425.10</b>
<b>Debt</b>							
Debt Outstanding	\$261.50	\$245.10	\$806.30	\$1,086.80	\$1,982.10	\$2,633.20	\$2,854.70
Ratio of Total Cash to Toll Revenues (Policy 1.0)	1.53	1.77	1.50	1.01	1.00	1.01	1.02
Debt Service Coverage (Policy 2.0)	5.62	6.12	5.55	3.22	2.85	3.51	2.05
Rate Covenant Compliance (Legal 1.0)	1.90	2.28	3.73	2.23	2.00	2.59	1.52



**Object/Fund Difference Report**  
**Maryland Transportation Authority Operating Budget**

<u>Object/Fund</u>	<u>FY06 Actual</u>	<u>FY07 Working Budget</u>	<u>FY08 Budget</u>	<u>FY07-FY08 Amount Change</u>	<u>Percent Change</u>
<b>Positions</b>					
01 Regular	1,574.00	1,604.00	1,634.00	30.00	1.9%
<b>Total Positions</b>	<b>1,574.00</b>	<b>1,604.00</b>	<b>1,634.00</b>	<b>30.00</b>	<b>1.9%</b>
<b>Objects</b>					
01 Salaries and Wages	\$ 100,694,188	\$ 116,111,153	\$ 122,324,498	\$ 6,213,345	5.4%
02 Technical and Special Fees	2,029,235	2,448,053	2,587,627	139,574	5.7%
03 Communication	852,070	830,072	905,045	74,973	9.0%
04 Travel	147,520	119,894	178,489	58,595	48.9%
06 Fuel and Utilities	3,279,974	3,435,600	3,509,600	74,000	2.2%
07 Motor Vehicles	2,781,559	2,763,819	2,855,759	91,940	3.3%
08 Contractual Services	21,256,685	28,733,697	31,106,221	2,372,524	8.3%
09 Supplies and Materials	5,061,742	6,407,695	5,975,784	-431,911	-6.7%
10 Equipment – Replacement	2,621,401	12,243,783	14,297,831	2,054,048	16.8%
11 Equipment – Additional	2,619,750	10,713,782	19,156,119	8,442,337	78.8%
12 Grants, Subsidies, and Contributions	43,000,000	43,000,000	0	-43,000,000	-100.0%
13 Fixed Charges	38,940,409	30,610,988	30,879,862	268,874	0.9%
<b>Total Objects</b>	<b>\$ 223,284,533</b>	<b>\$ 257,418,536</b>	<b>\$ 233,776,835</b>	<b>-\$ 23,641,701</b>	<b>-9.2%</b>
<b>Funds</b>					
07 Nonbudgeted Fund	\$ 223,284,533	\$ 257,418,536	\$ 233,776,835	-\$ 23,641,701	-9.2%
<b>Total Funds</b>	<b>\$ 223,284,533</b>	<b>\$ 257,418,536</b>	<b>\$ 233,776,835</b>	<b>-\$ 23,641,701</b>	<b>-9.2%</b>

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Appendix 3

**Fiscal Summary  
Maryland Transportation Authority**

<u>Program/Unit</u>	<u>FY06 Actual</u>	<u>FY07 Work Budget</u>	<u>FY08 Budget</u>	<u>Change</u>	<u>FY07-FY08 % Change</u>
Operating Program	\$ 223,284,533	\$ 257,418,536	\$ 233,776,835	-\$ 23,641,701	-9.2%
Capital Program	164,269,799	641,411,700	832,798,700	191,387,000	29.8%
<b>Total Expenditures</b>	<b>\$ 387,554,332</b>	<b>\$ 898,830,236</b>	<b>\$ 1,066,575,535</b>	<b>\$ 167,745,299</b>	<b>18.7%</b>
Nonbudgeted Fund	\$ 387,554,332	\$ 898,830,236	\$ 1,066,575,535	\$ 167,745,299	18.7%
<b>Total Appropriations</b>	<b>\$ 387,554,332</b>	<b>\$ 898,830,236</b>	<b>\$ 1,066,575,535</b>	<b>\$ 167,745,299</b>	<b>18.7%</b>

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Appendix 4