



**Maryland Department of Transportation**  
The Secretary's Office

**Martin O'Malley**  
Governor

**Anthony G. Brown**  
Lt. Governor

**Darrell B. Mobley**  
Acting Secretary

**Leif A. Dormsjo**  
Acting Deputy Secretary

December 13, 2012

The Honorable Edward J. Kasemeyer  
Chairman  
Senate Budget and Taxation Committee  
3 West Miller Senate Office Building  
Annapolis MD 21401-1991

The Honorable Norman Conway  
Chairman  
House Appropriations Committee  
121 House Office Building  
Annapolis MD 21401-1991

The Honorable Sheila Hixson  
Chair  
House Ways and Means Committee  
131 House Office Building  
Annapolis MD 21401-1991

Dear Chairs:

Please see the attached report prepared by the Maryland Transit Administration (MTA) concerning *MTA's Farebox Recovery Ratios*. This report was prepared to meet the requirements set forth in Chapter 397, Acts of 2011 in HB 72 of the Budget Reconciliation and Financing Act. The language requires:

*"For fiscal year 2009 and each fiscal year thereafter, the Administration shall separately recover from fares and other operating revenues at least 35 percent of the total operating costs for:*

- *The Administration's bus, light rail, and Metro subway services in the Baltimore region; and all passenger railroad services under the Administration's control.*

*The Administration shall submit, in accordance with § 2-1246 of the State Government Article, an annual report to the Senate Budget and Taxation Committee, House Ways and Means Committee, and House Appropriations Committee by December 1 of each year that includes:*

*Separate farebox recovery ratios for the prior fiscal year for:*

- *Bus, light rail, and Metro subway services provided by the Administration in the Baltimore region;*
- *Commuter bus service provided under contract to the Administration in the Baltimore region; and*
- *Maryland Area Rail Commuter (MARC) service provided under contract to the Administration;*

*A discussion of the success or failure to achieve the farebox recovery requirement established in paragraph (1) of this subsection; and*

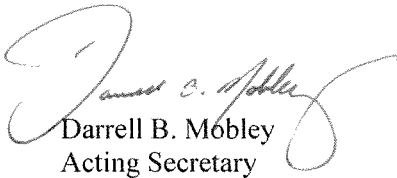
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*Comparisons of farebox recovery ratios for the Administration's mass transit services and other similar transit systems nationwide; and*

*The estimated fare prices necessary to achieve the farebox recovery requirement established in paragraph (1) of this subsection for the next fiscal year."*

Please feel free to contact Mr. Ralign Wells, Administrator, Maryland Transit Administration, at 410-767-3943 if you have questions regarding this report. Of course, you should always feel free to contact me directly.

Sincerely,



Darrell B. Mobley  
Acting Secretary

Attachment

cc: Members of the Budget Committees  
Mr. Ralign Wells, Administrator, Maryland Transit Administration

A Report to the Maryland General Assembly  
Senate Budget and Taxation Committee,  
House appropriations Committee, and  
House Ways & Means Committee

regarding

Maryland Transit Administration – Farebox Recovery  
(House Bill 72, Chapter 397, Acts 2011)

Maryland Department of Transportation

December 2012

# Maryland Transit Administration – Farebox Recovery (House Bill 72, Chapter 397, Acts 2011)

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## Introduction

This report was prepared to meet the requirements of Chapter 397, Acts of 2011 (HB 72), the *Budget Reconciliation and Financing Act of 2011*. The language directs:

*“Operating costs for the Maryland Transit Administration (MTA) continue to increase; specifically, fuel, spare parts, labor and contracted service costs have outpaced the available revenues from fares despite a continued increase in ridership over that same period. The committees are interested in understanding the financial and ridership impacts of various revenue and expenditure options that MTA might pursue in order to meet the statutory farebox recovery level. By December 15, 2010, MTA should submit a report that outlines:*

- *potential scenarios for increasing farebox in fiscal 2011 or 2012;*
- *the ridership and revenue/expenditure impact of those scenarios;*
- *the impact to MTA’s budget and to the Transportation Trust Fund forecast of those scenarios; and*
- *the efficiencies in service that could be undertaken to improve the farebox.”*

## Background

Historically, the MTA has been subject to requirements that a certain percentage of operating expenses for its system be recovered from farebox revenue.

Chapter 684, Acts of 2008 (HB 1185) amended the farebox recovery requirement to 35% and explicitly added farebox recovery data to MTA’s annual performance report.

Chapter 397, Acts of 2011 (HB 72), provided MTA “may not reduce the level of services provided by the administration for the purpose of achieving the farebox recovery requirement.”

## Measurement

The farebox recovery ratio is the ratio of gross revenue to adjusted expenses, and measures only the subsidy level of transit service operated, not efficiency or cost-effectiveness. The numerator of the ratio is gross revenue, which is the total of fare revenue and an allocated share of certain non-passenger operating revenue. The denominator is adjusted expense, which is the gross expense less certain capital and in addition to allocated administrative costs. Tables 1 and 2 summarize the revenue and expense components of the measure.

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**Table 1: Expense inclusions & exclusions, MTA farebox recovery**

Includes	Excludes
Insurance	Paratransit and commuter rail service expenses
Changes in inventory levels	Past pension service liabilities
Pro-rated share of administrative costs	New services for the first 36 months of service
	Capital costs, including 20 percent of revenue vehicle maintenance costs

**Table 2: Revenue inclusions & exclusions, MTA farebox recovery**

Includes	Excludes
Passenger fare revenues	Paratransit and commuter rail revenues
Advertising revenues	New services revenues for the first 36 months
Lease and rental income	

Factors in Revenue and Expenditure Growth

MTA's operating revenue is entirely a function of ridership, which itself is a function of the level of service provided and economic factors such as employment levels and gas prices. In terms of influences on expense, MTA relies heavily on three factors to operate and maintain transit service:

- 1) *Union labor*: Approximately 75% of MTA's workforce is covered by collective bargaining agreements which set wages, hours, conditions of employment, and fringe benefit arrangements. In 2010, at the conclusion of the last round of contract negotiations, an arbitration board awarded employees of the Amalgamated Transit Union (ATU) Local 1300 an hourly wage increase totaling 11.5% from FY 2009-12, and increased pension benefits by approximately 40% in the same period. Table 3 illustrates the increasing share of MTA's budget attributable to these wage and benefit costs.

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**Table 3: MTA Union Labor as Share of Operating Expense**

	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>Projected FY13</b>
Union Labor Cost	\$203,405,809	\$214,980,650	\$236,676,783	\$238,184,050	\$241,532,610.5
<i>Annual Growth</i>	<i>0.00%</i>	<i>5.69%</i>	<i>10.09%</i>	<i>0.64%</i>	<i>1.41%</i>
Total Operating Expense	\$591,720,288	\$610,286,666	\$621,917,180	\$646,795,046	\$663,486,377
<i>Annual Growth</i>	<i>6.30%</i>	<i>3.14%</i>	<i>1.91%</i>	<i>4.00%</i>	<i>2.58%</i>
Union % Of Total	34.40%	35.23%	38.06%	36.83%	36.40%

- 2) *Diesel fuel*: MTA is the largest purchaser of diesel fuel in State government, and the second largest purchaser in the State. In FY 2012, MTA purchased approximately 7.0 million gallons of diesel fuel, costing a total of \$20.7 million. MTA has begun to move its fleets to hybrid-electric buses and increase the use of biodiesel to improve fuel efficiency, but fluctuations in service levels and per gallon prices still present a large cost to MTA. While diesel prices dropped from FY 2008 through FY 2010, prices began to increase through FY 2011 and FY 2012; MTA's price per gallon for diesel fuel increased 49% from FY 2010 to FY 2012. Table 4 below shows diesel fuel price fluctuations in recent years.

**Table 4: MTA Diesel Fuel, Average Price Per Gallon, FY 2008-12**

	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
Jul	\$2.26	\$3.96	\$1.81	\$2.16	\$3.20
Aug	2.23	3.42	2.01	2.23	3.12
Sep	2.39	3.32	1.92	2.24	3.15
Oct	2.48	2.93	2.05	2.41	3.04
Nov	2.78	2.17	2.14	2.49	3.22
Dec	2.78	1.66	2.10	2.65	3.09
Jan	2.79	1.58	2.23	2.77	3.18
Feb	2.79	1.48	2.16	2.94	3.28
Mar	3.28	1.37	2.28	3.22	3.42
Apr	3.52	1.58	2.37	3.40	3.36
May	3.80	1.60	2.32	3.23	3.20
Jun	4.00	1.90	2.19	3.12	2.85
Annual	\$2.92	\$2.25	\$2.13	\$2.74	\$3.18

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- 3) *Repair parts:* MTA's bus fleet has an average age of 7.33 years and an average annual mileage in excess of 34,000 miles. The most-used buses in the fleet cover approximately 50,000 miles per year on average. MTA's Light Rail fleet is over 20 years old, and the Metro subway fleet was purchased and put in service nearly 30 years ago. Both rail fleets increase total mileage annually, and all MTA fleets operate in the full spectrum of weather conditions. The annual mileage accumulated by MTA's aging fleets requires a regular maintenance regimen and a significant inventory of spare parts, many of which have to be re-engineered since manufacturers have gone out of business. The cost of these parts escalates each year, and newer, more sophisticated buses and trains often require more expensive parts.

Because these three cost elements increase annually due to inflation and market factors, the cost to provide the same level of service in the Baltimore area from year-to-year increases automatically.

The revenue side of the farebox recovery equation is dependent on ridership and fare prices. Research has established that ridership increases are driven first by service availability and quality, and secondly by economic factors such as the relative cost of transit compared to other modes of travel.

Maintaining a *constant* farebox recovery ratio means that ridership (and thus fare revenues) must *increase at the same rate as expenses* each year. To *improve* farebox recovery, ridership and revenue growth must *exceed* the rate of growth in spending, or spending growth must be lower than ridership and revenue growth. Because of the spending factors cited above, MTA would typically need a 4-6% annual increase in Baltimore-area ridership to keep farebox recovery *constant at current levels*. In order to accommodate the 4-6% ridership increase, a corresponding increase in capital would also be required, equating to an additional \$8-10 million annually. This growth in costs is typical of the transit industry, and properties nation-wide face the same issues in providing consistent, quality service while trying to attain sufficient revenues.

Historical farebox recovery expense and revenue totals for Baltimore local service and MARC are shown in Table 5. Note that in FY 2009, low diesel prices and record growth in ridership, MTA decreased expenses and increased revenues, increasing the farebox recovery ratio for Baltimore local service. FY 2010 saw record snowstorms that decreased revenues and the impact of the union arbitration agreement that increased costs, resulting in lower farebox recovery. There was a recovery in ridership in FY 2011 and MTA continued to manage costs resulting in a slight increase in farebox recovery.

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**Table 5: MTA Farebox Recovery Expense and Revenue, FY 2008-12**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
<b>Baltimore-area local service</b>					
Total farebox expense	\$285,426,204	\$277,953,055	\$282,798,224	\$272,639,000	\$304,907,135
Annual increase	8%	-3%	2%	-4%	12%
Total farebox revenue	84,123,558	85,162,843	80,059,893	79,960,297	84,316,927
Annual increase	0%	1%	-6%	0%	5%
Farebox recovery ratio	29%	31%	28%	29%	28%
<b>MARC service</b>					
Total farebox expense	\$65,271,107	\$84,415,429	\$91,556,511	\$76,085,497	\$74,973,730
Annual increase	13%	29%	8%	-1%	-1%
Total farebox revenue	34,438,315	37,181,293	43,839,805	42,001,000	43,182,504
Annual increase	6%	8%	18%	-1%	3%
Farebox recovery ratio	53%	44%	48%	55%	58%

Current Projections

MTA's latest estimate of farebox recovery is shown in Table 6. Farebox recovery ratios for Baltimore-area continue to fluctuate around 30%, ending FY 2012 at 28%. MARC farebox recovery is projected to remain well above the 35% requirement specified in the Transportation Article (Section 7-208) through FY 2014.

**Table 6: Farebox recovery ratios, FY 2011 - 2014 (Est.)**

	Actual FY 2011	Actual FY 2012	Estimated FY 2013	Estimated FY 2014
Baltimore area service	29%	28%	27%	27%
MARC	55%	58%	57%	56%

MARC expense is driven by the level of service and the contracts MTA holds with Amtrak and CSX, who operate MARC service using MTA-owned rail equipment. Amtrak and CSX are responsible for the operations of trains and stations, as well as maintenance of rail equipment and track. While the fees for track access in each contract typically escalate annually, the AAR index was lower in FY 2012 resulting in an increase in farebox recovery. The AAR index is an inflation index composed of railroad-related commodities such as fuel. The costs in our MARC contracts with Amtrak and CSX are linked to the AAR index, so if the AAR index goes up, our costs go up. It's not surprising that in a time of economic recession the index would actually go down. FY 2012 is seen as a one-time event and the index is forecast to increase about 6% annually in future years, adding expense without increasing service.



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Because of this imbalance in expense and revenue growth, farebox recovery on MARC service is projected to decline through FY 2014, though it will remain well above the statutory requirement of 35%. MTA has developed a third party provider agreement for Brunswick and Camden line service currently operated by CSX, which is expected to reduce expense growth in the future.

### Attaining Required Farebox Recovery Ratios

Tables 7, 8, and 9 outline the actions required to meet the 35% Baltimore-area ratio through either fare increases or cuts to existing service levels, beginning in FY 2014 and continuing through FY 2018. Prior to implementing fare or service changes, public hearings and input for both fare increases and service adjustments are required taking approximately six months to implement. Negotiations that are currently underway for a new union contract could also result in cost implications. Due to these factors, implementing either solution in FY 2013 is not feasible.

Reaching the prescribed ratio would require either an initial fare increase from \$1.60 to \$2.25 (+37.5%) assuming MTA is able to negotiate a new collective bargaining agreement that is cost neutral. Subsequent fare increases would be required to maintain the 35% farebox recovery level. Fare amounts shown below are rounded.

**Table 7: Fare increases required to meet the 35% farebox recovery ratio (Baltimore) <sup>1, 2</sup>**

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>
Core riders (proj.)	99,348,957	100,025,149	100,709,207	101,401,284	102,101,535
	0.84%	0.68%	0.68%	0.69%	0.69%
Core expense (proj.)	\$315,971,531	\$324,818,734	\$334,498,333	\$344,466,383	\$354,731,481
	2.05%	2.80%	2.98%	2.98%	2.98%
Fares @ 35% FBR	\$110,590,036	\$113,686,557	\$117,074,416	\$120,563,234	\$124,156,018
<b>New fare required</b>	<b>\$2.25</b>	<b>\$2.25</b>	<b>\$2.50</b>	<b>\$2.50</b>	<b>\$2.50</b>
Required annual increase	40.6%	0%	11.1%	0%	0%

<sup>1</sup> All fares rounded up to the nearest \$0.25.

<sup>2</sup> Proposed fares does not include any additional costs for the union contracts which expired in FY 2012 and are currently under negotiations.

Estimated service cuts to meet the 35% farebox recovery level are shown in Table 8. The size of the required service cut shown in Table 8 would necessitate layoffs of both union and management employees, as well as the sale, or retirement of large portions of MTA's bus fleet in advance of their useful life cycle, requiring repayment of federal funds to the Federal Transit Administration.

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**Table 8: Service cuts required to meet the 35% farebox ratio (Baltimore)**

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Core riders (proj.)	99,348,957	100,025,149	100,709,207	101,401,284	102,101,535
Fare revenue (proj.)	\$81,660,131	\$82,218,370	\$82,783,090	\$83,354,416	\$83,932,475
Projected expense	\$315,971,531	\$324,818,734	\$334,498,333	\$344,466,383	\$354,731,481
Expense @ 35% FBR	\$233,314,661	\$234,909,628	\$236,523,114	\$238,155,474	\$239,807,071
Required annual service Cuts to meet FBR	-26%	-28%	-29%	-31%	-32%

A 26% reduction in service would almost certainly affect MTA’s customer base and the future success of Baltimore-area transit operations. A higher fare would most likely motivate some MTA riders to choose other transportation options. The decrease in ridership would in turn result in lower fare revenue, leading to a “vicious cycle” in which a decline in revenue leads to greater reductions in service, which once again would detrimentally impact ridership. Table 9, below, shows the impact on the Transportation Trust Fund of both the fare increase and service reduction options.

**Table 9: Impacts to the Transportation Trust Fund, FY 2014-18**

	FY 2014	FY 2015	FY2016	FY2017	FY2018
<b>MTA fare increases</b>					
Revenue to TTF	\$30,622,549	\$30,828,532	\$31,036,925	\$35,524,266	\$37,475,541
<b>MTA service reductions</b>					
Savings to TTF	(\$82,656,870)	(\$89,909,107)	(\$97,975,219)	(\$106,310,909)	(\$114,924,410)

MTA has made great strides in increasing the efficiency, cost-effectiveness, and productivity of its operations in the last four years. In FY 2012, 90% of MTA’s operating budget went directly to operating statewide transit service. Recent efforts to make MTA more cost-effective include reducing overtime use, implementing a new absenteeism policy, and developing internal systems to track MTA’s efficiency and productivity with regular reviews of data and results.

Additionally, MTA has reduced its management workforce by 13%, deferred system-wide service expansions, and reduced administrative costs by \$8 million since April 2008. Because of the large fixed cost of operations as well as MTA’s commitment to maximizing ridership and available service, gains from efficiency are not sufficient enough to impact significantly the farebox recovery ratio.

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### Conclusion

Farebox recovery provides a good snapshot of changes to MTA's revenue in comparison to expenses, but should only be used to evaluate the MTA's effectiveness and efficiency in the broader context of the performance measures MTA reports annually to the General Assembly and of the MTA's overall mission. MTA was created to meet the need for a public service that could no longer be provided profitably by private enterprise. With that mission, the MTA works continuously to strike the delicate balance between reducing expenses and providing high quality transit service to attract a growing number of riders. MTA is committed to acting as a prudent steward of the taxpayers' resources and will continue to evaluate cost-saving measures while working effectively and efficiently to provide service to its customers at a time when demand for transit and the associated stress on the existing system continues to rise.