

How to Balance the MTA's Budget

A Report of the Citizens Budget Commission

June 27, 2006



FOREWORD

Founded in 1932, the Citizens Budget Commission (CBC) is a nonprofit, nonpartisan civic organization devoted to influencing constructive change in the finances and services of New York State and New York City governments. This report was prepared under the auspices of the CBC's Competitiveness Committee, which we co-chair. The other members of the Committee are Lawrence D. Ackman, Paul R. Alter, Paul T. Bader, Seth P. Bernstein, Lawrence B. Bittenwieser, Herman R. Charbonneau, Roger W. Einiger, Bud Gibbs, Barry Gosin, David R. Greenbaum, Jack D. Hidary, Peter A. Joseph, Jerome Katz, Eugene Keilin, Walter T. Kicinski, Alan M. Klein, Peter C. Kornman, Marianne E. Kozlowski, Hugh R. Lamle, David Lebenstein, Louis Lowenstein, Randy M. Mastro, Stephen W. Nislick, Tony Orbe, Steven M. Polan, Lester Pollack, Hector Prud'homme, Carol Raphael, John B. Rhodes, Arthur H. Rosenbloom, Heather L. Ruth, Donald Schapiro, Clarence Schwab, Jonathan Siegfried, Adam Solomon, Richard B. Teiman, W. James Tozer, Jr., Cynthia King Vance, Ronald G. Weiner, Robin L. Wiessmann, Kevin Willens, H. Dale Hemmerdinger, ex-officio.

In focusing on this issue, the Competitiveness Committee is building on its previous work and that of the CBC's Debt and Capital Investment Committee. In 1999 the Competitiveness Committee, then co-chaired by David Greenbaum and Hector Prud'homme, completed a study of *Transportation Infrastructure and New York's Competitiveness*. It compiled comparative information on the transportation systems of the world's leading cities and concluded that New York suffered competitive weaknesses in the high cost of its services and their relatively low quality. In 2004 the Debt and Capital Investment Committee, then chaired by Karen Daly and David Greenbaum, completed a report on *Financing Transportation Services in the New York Region* which first developed the principles for financing that are applied in this report.

The report was prepared under the direction of Charles Brecher, Executive Vice President and Director of Research at the CBC and a Professor at New York University's Wagner School. Selma Mustovic, Senior Research Associate at the CBC, provided critical research support and helped draft the report. Alexandra Simon, a graduate student at the Wagner School, served as a research assistant for the project. Eric Rothman and Jean Shia of Hamilton, Rabinovitz & Altschuler, Inc. provided consulting services in the early stages of the project and developed the model for projecting future revenue requirements. Eric also provided helpful comments on preliminary drafts of the report.

Staff of the MTA were cooperative in providing information for developing the revenue and expenditure projections presented in this report and in clarifying ways in which they differ from usual MTA practices. Gary Lanigan, Director of Budget and Financial Management, provided helpful comments on a draft report. Anthony Japha, recently retired from the MTA, was another constructive reader. We are also grateful to staff of the Regional Plan Association, who shared background material from their research on revenue options. In addition, Alexis Perotta, Chris Jones and Jeff Zupan of the RPA provided helpful comments on a draft report. Elliot Sander of New York University's Rudin Center also provided useful comments on the preliminary draft. The willingness of these individuals to provide assistance and suggestions does not necessarily

mean that they agree with the recommendations, but it does reflect their generosity and concern for the subject.

Fred P. Hochberg

David Tanner

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TABLE OF CONTENTS

INTRODUCTION	1
TRENDS IN MTA FINANCING.....	3
Expenditures	5
Revenues	6
Recurring Deficits	9
CAPITAL PLANS AND INVESTMENTS	11
Sources of Capital	11
Uses of Capital	13
THE FISCAL OUTLOOK: GROWING DEFICITS	17
HOW TO BALANCE THE MTA’S BUDGET	19
Future Expenditure Requirements	22
Future Revenue Requirements	24
Options for Increasing the Cross Subsidy from Auto Users	27

INTRODUCTION

A defining feature of the New York regional economy is the concentration of employment in its central business district, the 8.5 square miles below 60th Street in Manhattan. With about 2 million jobs, this area is one of the largest and densest clusters of economic activity in the world.¹ This unique amalgam of talent, and the associated benefits of agglomeration, makes New York vital, dynamic and attractive to a variety of firms.

The effective functioning of this central business district is critically dependent on an extensive and efficient transportation system. Of the 2 million people working there, relatively few live close enough to walk to work. The vast majority depend on some form of transportation. Of everyone entering the central business district on a typical weekday (for work and other reasons) about two thirds come by mass transit and one third by auto.²

The Metropolitan Transportation Authority (MTA) is by far the largest provider of transportation services in the region. Within New York City it operates an extensive subway system with 660 miles of track and 490 stations, a fleet of 4,483 buses and a separate railroad running 14 miles across Staten Island. Connecting Manhattan with the suburban counties are two commuter railroads, the Long Island Railroad and Metro-North, with a combined total of 1,369 miles of track and 244 stations, plus a fleet of 412 buses serving routes originating in the suburban counties.³ For those using autos, the agency operates tunnels connecting Manhattan with Brooklyn (the Brooklyn Battery Tunnel) and Queens (the Midtown Tunnel) and bridges joining Manhattan with the Bronx and Queens (the Triborough Bridge) and Manhattan with the Bronx (the Henry Hudson Bridge). In addition, it operates four other bridges that join boroughs other than Manhattan or areas within a borough.

The MTA transports the majority of those working in the central business district to their jobs. Of the 2.4 million people traveling to the hub each weekday by bus or subway, 86 percent use MTA facilities; the remainder rely primarily on services operated by New Jersey Transit or the Port Authority. The MTA's bridges and tunnels account directly for about 9 percent of the personal vehicles entering the central business district on a weekday morning, with the others coming from New Jersey via Port Authority facilities or using the non-tolled bridges over the East River operated by the City of New York.⁴

Providing these services is expensive. As shown in Table 1, the MTA's operating expenses are budgeted to exceed \$9 billion in 2006. New York City mass transit services required nearly \$5.3

¹ New York Metropolitan Transportation Council, *2003 Hub Bound Travel Report*, January 2006, page 1-23, Table 13B.

² New York Metropolitan Transportation Council, *2003 Hub Bound Travel Report*, January 2006, Table 14. Mass transit includes commuter railroads, ferries and tramways.

³ Metropolitan Transportation Authority webpage: <http://www.mta.nyc.ny.us>, March 1, 2006.

⁴ New York Metropolitan Transportation Council, *2003 Hub Bound Travel Report*, January 2006, Table 5. This figure for autos is conservative as it does not account for vehicles using the MTA bridges, including the Triborough, Throgs Neck, Henry Hudson, and Bronx-Whitestone as a part of their route to the central business district.

billion or about 56 percent of the total. Railroad and bus services to the suburbs consumed another \$1.9 billion or 21 percent. The highway bridges and tunnels cost over \$400 million or 5 percent. The rest of the expenses were to repay long-term debt and the headquarters operations.

Table 1
MTA Expenses by Type of Service, 2006
(dollars in millions)

MTA Agency:	Total Funds	Percent of Total
New York City Transit	\$5,049	56%
Long Island Railroad	1,013	11%
Metro-North Railroad	795	9%
Long Island Bus	112	1%
Bridge and Tunnels	418	5%
MTA Headquarters	285	3%
Debt Service	1,340	15%
MTA Reserve	75	1%
Total	\$9,087	100%

Source: Metropolitan Transportation Authority, *MTA 2006 Adopted Budget February Financial Plan 2006-2009*, February, 2006.

Note: Expenses exclude depreciation.

Despite its essential role in sustaining the New York economy, the MTA is not financed in a consistent or sensible manner. Current public policies leave it with repeated operating deficits and capital investments insufficient to keep its facilities in state of good repair.

This report suggests alternative financing policies for the MTA that would balance its operating budget, provide sufficient capital to accelerate the pace at which its facilities are brought to a state of good repair, and improve the quality of its services. The report begins with an examination of recent trends in the agency's operating budget, identifying changes in revenue sources and expenditures. The second section considers the capital program and progress toward restoring the systems to a state of good repair since the low point of maintenance and investment in the 1970s. The next two sections assess the future prospects for the operating budget and capital program. They point to the likelihood of growing deficits and investment shortfalls. The final section also presents guidelines for more effective policies and elaborates the fiscal implications of those policies for taxpayers, MTA customers, and auto users.

TRENDS IN MTA FINANCING

The MTA, chartered in 1965, is an amalgam of six previously established agencies operating in the region – the New York City Transit Authority, which operated subway and bus lines primarily in Brooklyn and Queens; the Manhattan and Bronx Surface Transit Operating Authority, which also provided bus service; the Staten Island Rapid Transit Operating Authority, which provided the rail service on Staten Island; the Long Island Railroad, a commuter line serving Long Island; Conrail commuter lines serving the northern suburbs and extending into Connecticut, which became the Metro-North Railroad; and the Triborough Bridge and Tunnel Authority, which operated toll facilities for vehicles. The goal was to better coordinate the services and to permit the surplus revenues from the tolled bridges and tunnels to help subsidize the mass transit services. The new entity also represented a renewed commitment by the Governor and Legislature to use State resources to support mass transit and shift some of the financial responsibility from the New York City municipal government to the State and its broader tax base.

The MTA's first 15 years were a fiscal failure. In a period which included the City of New York's brush with bankruptcy, the agency was starved for funds, and federal grants intended as capital investments were diverted to support operations (and keep fares down). The system's facilities, which had already suffered from decades of neglect, continued to deteriorate, reliability declined, and the quality of service was much diminished.

In the early 1980s the MTA Board, under the leadership of Richard Ravitch, launched a campaign to restore the agency's reliability and service capacity. New State legislation dedicated certain tax revenues to the MTA for operating purposes. A new system of capital planning, spanning five-year periods, was established, and State capital funding was increased. In addition, the MTA was authorized to issue its own revenue bonds, providing a new source of capital. Fare and toll increases were authorized to raise additional revenues four times during this decade: for example, New York City Transit fares increased from 60 cents to 75 cents in 1981, to 90 cents in 1984, to \$1.00 in 1986, to \$1.15 in 1990.

By the early 1990s, service improvements were evident. Much of the aged rolling stock and bus fleet had been replaced, delays were far less frequent, and passengers had some faith the system was getting better.

Table 2 summarizes trends in the MTA's operating finances from 1992 to 2005. Developments in revenues, expenses, and net results in these years are each worth examining.

Table 2
MTA Operating Revenue and Expenses, Fiscal Years 1992-2005
(dollars in millions)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average Annual Percent Change
Revenues:															
Operating Revenues	\$3,027.7	\$3,160.4	\$3,219.8	\$3,228.3	\$3,700.3	\$3,781.4	\$3,732.6	\$3,842.0	\$4,033.0	\$4,052.0	\$4,053.0	\$4,523.0	\$4,837.0	\$5,198.0	4.6%
Fares	\$2,374.0	\$2,434.7	\$2,494.2	\$2,486.5	\$2,891.0	\$2,929.4	\$2,848.2	\$2,929.0	\$3,093.0	\$3,137.0	\$3,120.0	\$3,501.0	\$3,740.0	\$3,993.0	4.4%
Tolls	\$653.7	\$725.7	\$725.6	\$741.8	\$809.3	\$852.0	\$884.4	\$913.0	\$940.0	\$915.0	\$933.0	\$1,022.0	\$1,097.0	\$1,205.0	5.2%
Dedicated Taxes*	\$706.2	\$872.8	\$945.7	\$881.5	\$956.7	\$992.1	\$1,319.4	\$1,315.0	\$1,462.0	\$1,630.0	\$1,668.0	\$2,016.0	\$2,453.0	\$3,048.0	13.0%
General Fund Subsidies	\$699.6	\$649.9	\$652.4	\$637.2	\$611.5	\$588.3	\$562.3	\$586.0	\$555.0	\$580.0	\$593.0	\$560.0	\$575.0	\$596.0	-1.3%
Federal	\$93.1	\$93.2	\$90.7	\$73.0	\$43.3	\$32.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-100.0%
State	\$240.6	\$202.4	\$203.8	\$204.8	\$205.8	\$207.7	\$208.5	\$209.0	\$216.0	\$217.0	\$230.0	\$191.0	\$206.0	\$230.0	-0.4%
Local & Other	\$365.9	\$354.3	\$357.9	\$359.4	\$362.4	\$347.9	\$353.8	\$377.0	\$339.0	\$363.0	\$363.0	\$369.0	\$369.0	\$366.0	0.0%
Other Sources	\$291.9	\$308.2	\$330.3	\$171.8	\$42.0	\$34.8	\$92.6	\$45.0	\$314.0	\$86.0	\$15.0	\$558.0	\$332.0	\$286.0	-0.2%
Total Revenues	\$4,725.4	\$4,991.3	\$5,148.2	\$4,918.8	\$5,310.5	\$5,396.6	\$5,706.9	\$5,788.0	\$6,364.0	\$6,348.0	\$6,329.0	\$7,657.0	\$8,197.0	\$9,128.0	5.6%
Expenses:															
Labor	\$3,514.1	\$3,640.0	\$3,749.9	\$3,638.9	\$3,411.4	\$3,460.3	\$3,495.9	\$3,694.0	\$4,006.0	\$4,286.0	\$4,494.0	\$4,919.0	\$5,048.0	\$5,437.0	3.7%
Salaries & Wages	\$2,528.0	\$2,647.7	\$2,770.6	\$2,653.9	\$2,625.5	\$2,645.2	\$2,716.5	\$2,884.0	\$3,091.0	\$3,294.0	\$3,395.0	\$3,544.0	\$3,645.0	\$3,819.0	3.5%
Retirement & Benefits	\$986.1	\$992.3	\$979.3	\$985.0	\$785.9	\$815.1	\$779.4	\$810.0	\$915.0	\$992.0	\$1,099.0	\$1,375.0	\$1,403.0	\$1,618.0	4.2%
Capital	\$692.6	\$808.0	\$844.4	\$858.7	\$902.5	\$1,025.8	\$1,163.0	\$1,360.0	\$1,416.0	\$1,576.0	\$1,693.0	\$2,015.0	\$2,163.0	\$2,458.0	11.1%
Depreciation & Amortization	\$463.2	\$614.0	\$543.3	\$554.0	\$612.2	\$711.6	\$781.5	\$907.0	\$982.0	\$1,067.0	\$1,135.0	\$1,235.0	\$1,344.0	\$1,474.0	10.1%
Interest on Long-Term Debt	\$229.4	\$194.0	\$301.1	\$304.7	\$290.3	\$314.2	\$381.5	\$453.0	\$434.0	\$509.0	\$558.0	\$780.0	\$819.0	\$984.0	12.9%
Other	\$867.3	\$943.3	\$1,066.8	\$928.5	\$954.3	\$1,003.9	\$1,055.1	\$1,223.0	\$1,274.0	\$1,606.0	\$1,448.0	\$1,495.0	\$1,664.0	\$1,886.0	6.7%
Materials & Supplies	\$262.0	\$275.9	\$296.1	\$294.5	\$278.9	\$285.2	\$332.7	\$360.0	\$403.0	\$445.0	\$402.0	\$416.0	\$370.0	\$405.0	3.7%
Fuel & Power	\$253.8	\$261.8	\$279.7	\$260.2	\$259.3	\$253.7	\$236.6	\$247.0	\$281.0	\$279.0	\$278.0	\$298.0	\$298.0	\$396.0	3.8%
Public Liability & Claims	\$88.0	\$137.5	\$138.9	\$49.3	\$47.0	\$83.0	\$99.5	\$125.0	\$140.0	\$106.0	\$140.0	\$207.0	\$133.0	\$90.0	0.2%
Other Expenses	\$263.5	\$268.1	\$352.1	\$324.5	\$369.1	\$382.0	\$386.3	\$491.0	\$450.0	\$776.0	\$628.0	\$574.0	\$863.0	\$995.0	11.7%
Total Expenses	\$5,074.0	\$5,391.3	\$5,661.1	\$5,426.1	\$5,268.2	\$5,490.0	\$5,714.0	\$6,277.0	\$6,696.0	\$7,468.0	\$7,635.0	\$8,429.0	\$8,875.0	\$9,781.0	5.6%
Revenues - Expenses	(\$348.6)	(\$400.0)	(\$512.9)	(\$507.3)	\$42.3	(\$93.4)	(\$7.1)	(\$489.0)	(\$332.0)	(\$1,120.0)	(\$1,306.0)	(\$772.0)	(\$678.0)	(\$653.0)	5.4%
Rev-Exp as a % of Total Expenses	6.9%	7.4%	9.1%	9.3%	0.8%	1.7%	0.1%	7.8%	5.0%	15.0%	17.1%	9.2%	7.6%	6.7%	7.4%

Sources: Metropolitan Transportation Authority, *Comprehensive Annual Financial Report*, 1992-2005 editions.

*Dedicated taxes reflect the net tax revenue after funds restricted for debt service and capital projects for years 1992 through 1997. These amounts were: 1992 = \$119, 1993 = \$62, 1994 = \$41, 1995 = \$86, 1996 = \$71, 1997 = \$114.

Expenditures

From 1992 to 2005 total expenditures increased from \$5.1 billion to \$9.8 billion, an annual average growth rate of 5.6 percent. Moreover, in 1995 the Transit Authority's police force was transferred from the MTA to the New York City Police Department, removing what was then a nearly \$300 million annual expense from the MTA's budget. If an adjustment is made for this transfer, the MTA's expenditures for items excluding the police grew at an estimated rate of about 7.1 percent annually.⁵

The payroll, including direct wages and fringe benefits, is the MTA's largest expense, accounting for 56 percent of the total in 2005. Salaries and wages grew at an annual rate of about 3.5 percent over the period (unadjusted for the police transfer). This growth can be attributed primarily to contractual wage increases, rather than more employees. The police transfer in 1995 reduced the number of workers by about 4,000. Other employees have increased in recent years, but the total current number of employees of 63,884 is still less than 65,465 in 1994, which included the police force.⁶ MTA employees belong to 62 different unions, the largest of which is the Transit Workers Union (TWU). Between 1992 and 2003 the contract was renegotiated four times, with the contracts typically spanning about three years.⁷ Many MTA employees are currently working without a contract, because the MTA and the TWU have not yet reached a new labor agreement to replace the contract that expired on December 15, 2005. Other transit employees are also working without contracts, specifically three-quarters of the employees at Metro-North and the Triborough Bridge and Tunnel Authority. In addition, all of the contracts with the employees of the Long Island Rail Road will have expired by December 31, 2006.

Fringe benefits have grown at an average annual rate of 4.2 percent, but the figure rises to 8.4 percent if adjustment is made for the police transfer.⁸ Driving this growth have been double-digit annual increases in health insurance costs, a national phenomenon, unusually large increases in required pension fund contributions since 2000 (in the wake of the decline in the stock market and due to benefit enhancements granted by the State Legislature).⁹

Transportation is a capital intensive service, and the costs of capital—depreciation and interest on long-term debt—are the MTA's second largest expense item. In 2005 they totaled \$2.5 billion or one-quarter of the total, compared to just 14 percent in 1992. Depreciation has grown at an annual average rate of 10.1 percent as the MTA has expanded its program of capital investments and these new assets are depreciated. Interest on long-term debt has grown at an annual average rate of 12.9 percent. This reflects the agency's increased reliance on its revenue bonds as a source of capital. The very rapid increase in interest cost in the two most recent years is related

⁵ This is the rate for total expenditure growth from 1996 to 2005 based on the data in Table 2.

⁶ MTA website: <http://www.mta.nyc.ny.us/mta/network.htm>, May 15, 2006.

⁷ The contracts are for the periods May 1, 1991 to June 30, 1994; July 1, 1994 to September 30, 1997; October 1, 1997 to December 15, 1999; December 16, 1999 to December 15, 2002; and December 16, 2002 to December 15, 2005.

⁸ See note 5.

⁹ MTA 2003 *Comprehensive Annual Financial Report*, pg. 20

to a large-scale debt restructuring implemented in 2002, which refinanced about \$13.5 billion of previously issued debt and rescheduled the debt service payments over a longer period.

Aside from labor and capital, remaining expense items comprised about 19 percent of total expenses in 2005. This includes the cost of fuel and power, liability claims, materials and supplies, and a variety of other items. This set of expenditures grew at an annual average rate of 6.7 percent over the period.

Revenues

Fares. The largest source of revenue for the MTA is the fares it charges riders. In 2005 they totaled nearly \$4.0 billion, or about 44 percent of all revenues. In the 1992-2005 period fare revenues grew at an annual average rate of 4.4 percent, but this growth was erratic. While some of the increase can be attributed to an increase in commuters as the economy improved in the late 1990s, the more important factor was periodic changes in fare policy. The Board increased subway and bus fares from \$1.15 to \$1.25 in 1992 and then to \$1.50 in 1995.¹⁰

More dramatic changes took place in 1997 and 1998 with the widespread implementation of Metrocards. In 1997 two- and three-fare zones were eliminated and free transfers were permitted between buses and subways using the Metrocard. In 1998 Metrocards were used to provide volume discounts, including weekly and monthly cards with unlimited rides. These initiatives represented a significant fare reduction; in 1998 the MTA estimated the lost revenue at \$518 million annually.¹¹

After the fare reductions associated with the introduction of the Metrocard, the fare remained stable for five years. In May 2003 the price of a single ride was raised one-third from \$1.50 to \$2.00, with an increase in volume discounts from 10 to 20 percent, though by that time the majority of riders were using the weekly and monthly Metrocards. The price of the weekly cards increased 24 percent from \$17 to \$21, and the price of the monthly card was increased 11 percent from \$63 to \$70.¹² In February 2005 the single ride remained priced at \$2.00, but the weekly card was increased 14 percent to \$24, and the monthly 8.5 percent to \$76.¹³

¹⁰ Commuter railroads LIRR and MNR (excluding Connecticut) increased fares on the commuter lines 15 percent in 1990 (Connecticut lines of MNR increased fares in 1991), and 9 percent in 1995. Source: Sims, Calvin, "MTA Offers Plan to Avoid Commuter Lines' Fare Increases." *New York Times*, 10/22/91, Section B, Page 1 and MTA *1995 Comprehensive Annual Financial Report*, pg. 4.

¹¹ MTA *1997 Comprehensive Annual Financial Report*, pg. 11.

¹² The 2003 commute line fare increases averaged about 25 percent. MTA *2003 Comprehensive Annual Financial Report*, pg. 10

¹³ The 2005 fare increases on the commuter lines averaged about 5 percent. Source: MTA 2005 Adopted Budget, *February Financial Plan 2005—2008*, Section IV.

Tolls. A second type of user charge for the MTA is the tolls collected at its bridges and tunnels. In 2005 this type of revenue exceeded \$1.2 billion or about 13 percent of total revenues. During the 1992-2005 period toll revenues increased an average of 5.2 percent annually.

The increase in toll revenues is driven by two factors. First, the number of vehicles using the MTA facilities has increased steadily since 1997, following a drop in the early 1990s. From 1995 to 2005 the net increase was nearly 13 percent, from 266 million to 300 million vehicles.¹⁴

Second, the MTA has increased the toll charges. The tolls vary among the facilities, but an increase of 20 percent was implemented in early 1993 for all MTA facilities.¹⁵ In 1995 and 1996 the MTA phased-in the E-Z Pass system of electronic toll collection at its facilities, and in March 1996 tolls were raised for passenger vehicles from \$3.00 to \$3.50 at the major crossings and from \$1.50 to \$1.75 at the others. However, E-Z pass users received significant discounts and use of the passes grew rapidly.

In 2003, in conjunction with the transit fare increases, the tolls were also raised. The cash toll was raised from \$3.50 to \$4.00 on the major crossings and from \$1.75 to \$2.00 on most others; the fee was also increased for E-Z Pass users, but they continued to receive discounts of at least 50 cents at each facility. The 2005 transit fare increase also was accompanied by a toll increase; cash and E-Z Pass passenger vehicles paid 50 cents more at the major crossing and 25 cents more at most other crossings.

Dedicated Taxes. In addition to collecting fares and tolls, the MTA receives revenues in the form of state and local taxes dedicated to it. Four mechanisms dedicate taxes to the MTA – the Mass Transportation Trust Fund (MTTF), the Metropolitan Mass Transportation Operating Assistance Fund (MMTOA), the Mortgage Recording Tax (MRT), and certain New York City taxes.¹⁶

Mass Transportation Trust Fund (MTTF). Statewide a set of State taxes and fees are dedicated to transportation (highway and mass transit) and placed in a special fund, the Statewide Dedicated Funds Pool. The revenues dedicated to this fund are petroleum business taxes, motor fuel excise taxes (which were increased to 3/8 of 1 percent on June 1, 2005), motor vehicle registration fees and various drivers license fees. Each year as part of the appropriation process, the Legislature divides these funds among agencies engaged in transportation, including the MTA. The MTA's share of the statewide fund is transferred to the MTTF and reserved for its

¹⁴ URS Corporation, *History and Projection of Traffic, Toll Revenues and Expenses, and Review of Physical Conditions of the Facilities of Triborough Bridge and Tunnel Authority*, Prepared for the Triborough Bridge and Tunnel Authority, April 27, 2006, p. E-16.

¹⁵ Dao, James, "Residents of 3 Areas Given Exemption From Tolls." *New York Times*, 1/26/93, Section B, pg. 2.

¹⁶ The latest available estimates of 2005 revenues in individual funds used in the following paragraphs are from the MTA's 2006 Adopted Budget. They do not add to the more recent estimate of the total State and local dedicated taxes in 2005 that is presented in Table 2, because the budgeted estimates have not been updated to reflect actual results.

use. Recently about 34 percent of the statewide designated revenues have been allocated to the MTTF. The MTA's estimate of the 2005 MTTF revenues in its 2006 Adopted Budget is \$552.5 million

Metropolitan Mass Transportation Operating Assistance Fund (MMTOA). Revenues for the MMTOA are taxes authorized by State legislation, but imposed only in the MTA's service district of New York City and seven surrounding counties. These region-specific taxes are a 3/8 percent sales tax, a corporate franchise tax on certain transportation and transmission companies, a surcharge on certain business taxes, and a regional addition to the statewide petroleum business tax. These taxes are collected by the State and put in the MMTOA. The funds are then appropriated to the MTA annually as part of the budget process. In 2005 these revenues were budgeted at \$983.6 million.

Mortgage Recording Tax (MRT). The MRT is actually two taxes. The first, designated MRT-1, is a tax of .30 percent on debt secured by certain mortgages on property in the MTA service region, a rate that was increased from .25 percent on June 1, 2005. The second, MRT-2, is a tax of .25 percent on another type of mortgage, those for improvements of residential structures with one to six units. Both taxes are collected by New York City or one of the seven counties within the MTA service region, and transferred to the MTA. In the case of the MRT-2, the MTA is obliged to return a portion of the tax to each of the suburban counties. The amount is based on a formula which accounts for the county's share of the revenue generated and the growth in that revenue since 1989. In 2005 the budgeted net proceeds of the MRT for the MTA were \$725.5 million.

New York City Taxes. The City of New York dedicates two local taxes to support mass transit. The City has its own MRT in addition to the State MRT described above, and a part of that local tax (.625 percent on commercial mortgages of \$500,000 or more) is dedicated to the transit operations of the MTA. The City also has a real property transfer tax, and a portion of that tax (1.0 percent on commercial sales over \$500,000) is dedicated to the transit operations of the MTA. In 2005 these dedicated taxes, sometimes called the "Urban Tax Subsidy," were budgeted at \$503.9 million.

As shown in Table 2, the State and local dedicated taxes taken together were more than \$3.0 billion or 33 percent of the MTA's total revenues in 2005. These sources grew at an annual average rate of 13.0 percent from 1992 to 2005, leading the share to more than double from its 1992 proportion of 15 percent. A significant part of this increase is related to the boom in the real estate market since the mid-1990s and its impact on the real estate related taxes.

State and Local General Fund Subsidies. In addition to dedicated taxes, the State and local governments subsidize the MTA by providing additional funds appropriated annually from their general funds. The State has an operating assistance program, and that program requires the relevant local governments to match the State's contribution. In 2005 the State allocated an estimated \$190.9 million, and that generated another \$198.4 million from local matching funds.

The State law creating the MTA permits the agency also to charge local governments in its district for the cost of maintaining commuter railroad passenger stations in their jurisdiction. In 2005 the MTA assessed New York City and the seven counties an estimated \$133.1 million for this purpose.

The State of Connecticut pays the MTA for the estimated operating deficit of the part of the New Haven line of Metro-North serving Connecticut. In 2005 this amount is estimated to be \$52.1 million.

Taken together, state and local subsidies have not been a growing source of revenue for the MTA. While the cost-linked payments from Connecticut and from localities for commuter rail station maintenance have increased, the more discretionary payments driven by State appropriations and matched locally have declined. From 1992 to 2005 combined state and local subsidies dropped from \$606.5 million to \$566.3 million or from 13 percent to 7 percent of the total.

Until 1997 the MTA received an operating subsidy from the federal government under its mass transit assistance programs. The subsidy exceeded \$90 million annually in the early 1990s, but was phased out by changes in the federal legislation. However, as will be discussed below, the federal government continues to provide significant aid in the form of grants to support the capital program.

Other Revenue. Two points should be made about the “other” revenue category in Table 2. First, in the early years it included a payment from the City of New York to cover the cost of the transit police force. When this force was merged with the New York City Police Department, the City no longer made these payments, and the costs were moved to the City’s budget.

Second, in recent years the MTA has had large one-time revenues. In 2003 this included an insurance settlement related to the terrorist attacks in 2001.

Recurring Deficits

Perhaps the most striking trend evident in Table 2 is the recurring operating deficits. The MTA had a deficit in 12 of the 13 years examined. The only surplus was in 1996, the year following a large fare increase, and that surplus was less than 1 percent of operating expenses. In contrast, the deficits have typically been in the hundreds of millions of dollars, and have become exceptionally large in the most recent years. The deficits exceeded \$1.1 billion in two of the five most recent years, sums that are the equivalent of more than 15 percent of operating expenses.

How can an organization repeatedly run large deficits, but not go bankrupt? The answer is linked closely to the concept of depreciation. Generally accepted accounting principles recognize depreciation, the loss in value of a capital asset related to its use during the year, as an operating expense. Depreciation is not a cash outlay; the expense does not require writing a check or paying a bill, but is still real use of resources and a decline in the value of assets. In order for an

organization to have a balanced budget under generally accepted accounting principles, its operating revenues should equal its operating expenses including depreciation. As shown in Table 2, this is not the case for the MTA, and its audited financial statements reflect this fact.

However, because depreciation is a non-cash expense, it is possible to have operating deficits yet still meet cash flow needs (“meet the payroll”). This is typically what the MTA does. In addition, the MTA prepares its budget and judges whether it is in balance using an accounting format that deviates from generally accepted accounting principles. Its financial plans deduct depreciation from the total operating expenses. This modified presentation of expenses is compared to revenues in deciding whether the agency has a deficit or surplus. Thus, recent discussions of the “surplus” at the MTA do not refer to a surplus as defined by generally accepted principles; rather they refer to an amount of cash available at the end of the year that exceeds the budgeted estimate for revenues. For example, in 2005 the MTA Board debated the possible uses of a “surplus” of \$1,044 million;¹⁷ this was not a surplus as defined by generally accepted accounting principles (in fact, in 2005 there was a deficit of \$653 million), but it was more accurately an amount by which actual revenues for some sources exceeded the amount in the adopted budget.

The practice of not recognizing depreciation as an operating expense in budgets and financial plans has important implications for the MTA’s capital budget. In effect, part of the capital budget (which should be an investment, not an expense, and should create new physical assets) pays for operating expenses. That is, a part of the capital budget devoted to replacement needs such as buying buses and subway cars is actually offsetting the depreciation expenses for this equipment. Because much of the capital budget is financed with borrowing, the net effect is to pay for an operating expense with borrowed funds.

The practice of borrowing to pay for operating expenses is linked to the MTA’s large and growing indebtedness. Its debt outstanding grew from \$7.8 billion in at the end of 1992 to \$14 billion at the end of 2000 and to nearly \$22 billion at the end of 2005.¹⁸ It is projected to reach \$32 billion in 2010.¹⁹ Debt service is projected to grow from \$1 billion in 2005 to \$1.8 billion by 2009, an increase of 78 percent. This, in turn, has implications for the operating budget as the cost of debt servicing is consuming an increasing chunk of the operating revenues; debt service is expected to grow as a share of total revenues from an average of about 12 percent between 1996 and 2005 to 20 percent by 2009.

¹⁷ See memorandum from Katherine N. Lapp to Chairman Kalikow and MTA Board Members, “MTA 2006 Final Proposed Budget November Financial Plan 2006-2009,” November 16, 2005.

¹⁸ Metropolitan Transportation Authority, *Comprehensive Annual Financial Report*, 1992, 2000 and 2005 editions.

¹⁹ Office of the State Comptroller, *Financial Outlook for the Metropolitan Transportation Authority*, Report 1-2007, May 2006.

CAPITAL PLANS AND INVESTMENTS

The MTA's current capital planning arrangements date from 1982, when a new system was established. The agency develops a five-year plan showing sources and uses of capital. This plan is reviewed by a Capital Program Review Board comprised of a representative of the Governor, the Mayor of New York City, and the majority leaders of the State Senate and Assembly. While the five-year capital plan does not need to be approved by the Legislature, often time statutory amendments must be enacted (such as increasing the authorized bond cap) in order to implement the plan. To the extent the plan calls for grants from the State and City, these must be approved separately as part of those governments' annual budget processes.

Five-year plans were developed and approved spanning the periods 1982-1986 and 1987-1991. These plans provided \$7.6 billion and \$8.2 billion, respectively. A plan for the 1992-1996 period was approved at the start of that period, but State leaders changed their policies in 1995. This led to a revision in the initial plan for 1992-1996 and adoption of a new plan to cover the period from 1995-1999. The revised plan for 1992-1996 provided \$9.4 billion, and the plan for 1995-1999 provided \$12.6 billion. In 2000 a plan for the period 2000-2004 was approved providing \$17.1 billion. In April 2005 the MTA Board approved a revised plan for the period 2005-2009 totaling \$21.3 billion.

Sources of Capital

The two basic categories of capital sources for the MTA are grants from general governments and borrowing in capital markets using bonds backed by pledges of future revenues. As the agency's capital plans evolved through 2004, the trend was a reduction in government grants and a more than offsetting increase in borrowing (see Table 3). The most recent plan extending to 2009 anticipates a revival of general government assistance.

Government grants comprised 54 percent of the first five-year plan and nearly two-thirds of the second plan, but subsequently dropped to only 30 percent of the last plan. Grants from the federal government have increased; in contrast the State eliminated its payments beginning in the 1992-1996 plan and the City cut its commitment by more than half in the last plan.

Table 3
MTA Capital Plan Funding, 1982-2009
(dollars in millions)

	1982-1986		1987-1991		1992-1996		1995-1999		2000-2004		2005-2009	
	<u>Amount</u>	<u>Percent</u>										
Government Subsidies:	\$4,180	54%	\$5,173	62%	\$4,750	47%	\$5,013	38%	\$5,417	30%	\$10,584	50%
Federal	\$1,934	25%	\$3,112	38%	\$3,673	36%	\$3,770	29%	\$4,882	27%	\$6,716	32%
State	\$1,509	20%	\$879	11%	\$0	0%	\$104	1%	\$0	0%	\$1,450	7%
Local	\$737	10%	\$1,182	14%	\$1,077	11%	\$1,139	9%	\$535	3%	\$2,418	11%
Revenue Bonds	\$2,615	34%	\$2,032	25%	\$3,781	37%	\$5,915	45%	\$6,943	39%	\$9,317	44%
Debt Restructuring	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$4,505	25%	\$0	0%
Other Sources	\$903	12%	\$1,077	13%	\$1,645	16%	\$2,295	17%	\$1,036	6%	\$1,384	7%
Total Cost	\$7,698	100%	\$8,282	100%	\$10,176	100%	\$13,223	100%	\$17,901	100%	\$21,285	100%

Sources: Data for 1982-1991 from Metropolitan Transportation Authority, *Capital Program 1982-1991*, As Proposed to the Capital Program Review Board, October 1991; Data for 1992-1996 from Metropolitan Transportation Authority, *Capital Program 1992-1996*, As Proposed to the Capital Program Review Board, February 1995; Data for 1995-1999 from Metropolitan Transportation Authority, *Capital Program 1995-1999*, Approved by the Capital Program Review Board March 1999; Data for 2000-2004 from Metropolitan Transportation Authority, *The MTA Plan for 2000-2004 Capital Plan, Strategic Business Plan and Financial Plan*, September 29, 1999; Data for 2005-2009 from Metropolitan Transportation Authority, *Proposed MTA Capital Program 2005-2009*, September 29, 2004.

Borrowing was increased as a direct response to the cuts in State and City grants. In 1995 State legislation authorized greater bond issues by the MTA. New revenue bonds rose from \$3.8 billion or 37 percent of the total in the 1992-1996 plan to \$5.9 billion or 45 percent of the total in the 1995-1999 plan. The 2000-2004 plan included \$6.9 billion in new revenue bonds and the equivalent of another \$4.5 billion in borrowing through a large-scale restructuring of previously issued debt. The \$4.5 billion attributed to the restructuring consist in part of \$2.6 billion in reserves previously held for the refunded bonds; this money was used by the MTA for capital projects, but it effectively increased borrowing because the reserves would have been used to make final payments on the previously issued debt. About \$1.5 billion of this amount was made available in order to replace funds from the State Transportation Bond Act, which was rejected by voters in November 2000. The remaining \$1.9 billion attributed to the restructuring is actually the issuance of new bonds. However, this new borrowing is claimed to be made possible by the restructuring. It reduced debt service requirements in the 2000-2004 period, and the short-run “slack” created in the debt service burden was absorbed with new bond issues without increasing the annual debt service payments in those few years. However, the total debt service over the life of the restructured bonds is much higher than under the previous schedule. The restructuring reduced debt service only in the initial years; total debt service payments and debt service requirements in later years were substantially increased by the restructuring and the issuance of new bonds.²⁰

The approved plan for 2005-2009 continues a strong reliance on borrowing against MTA revenues, but also relies on increased federal aid and increases in subsidies from the City and State. The MTA would borrow \$9.3 billion or 44 percent of the total, with \$5.1 billion of those bonds backed by new dedicated taxes authorized in 2005. The federal government is expected to provide \$6.7 billion or 32 percent of the total. The City's contribution is \$2.4 billion, including nearly \$2 billion earmarked for an extension of the Flushing Line subway to the far West Side. In a change of policy, the State committed to a \$1,450 million contribution to be funded by State general obligation bonds approved by the voters in November 2005.

Uses of Capital

The MTA has three major categories for describing the uses of its capital investments. “State of good repair” (SOGR) refers to projects that are necessary to correct for past deferred maintenance or to replace equipment that is beyond its useful life. “Normal replacement” refers to projects intended to keep the system in a state of good repair by replacing components at the end of their useful life. “System improvements” refers to projects that go beyond normal replacement by providing improved service quality and/or greater efficiency; this category also includes projects that expand system capacity such as new lines.

²⁰ Office of the State Comptroller, Report 1-2006, *Financial Outlook for the Metropolitan Transportation Authority*, May 2005.

Table 4
Capital Plan Spending by Need Category, 1982-2009
(dollars in millions)

<u>Need Classification</u>	<u>1982-1991</u>		<u>1992-1999</u>		<u>2000-2004</u>		<u>2005-2009</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
SOGR	\$11,026	69%	\$7,167	37%	\$4,814	27%	\$5,005	24%
Normal Replacement	\$799	5%	\$6,500	34%	\$6,327	35%	\$9,175	43%
System Improvement	\$3,995	25%	\$3,000	16%	\$2,476	14%	\$2,002	9%
Network Expansion & Other Expenses	\$160	1%	\$2,661	14%	\$4,285	24%	\$5,103	24%
Total	\$15,980	100%	\$19,329	100%	\$17,901	100%	\$21,285	100%
Depreciation								
Amount	N/A		\$5,187		\$5,763		\$8,945	
As a Percent of Normal Replacement	N/A		80%		91%		97%	

Sources: Percent distribution of need categories data for 1982-1991, 1992-1999 and 2000-2004 from Seaman, Mark, Allison L.C. de Carreno, and Seth English-Young, *From Rescue to Renaissance: The Achievements of the MTA Capital Program 1982 - 2004*, Rudin Center for Transportation Policy & Management, NYU Robert F. Wagner Graduate School of Public Service, December 2004, <<http://wagner.nyu.edu/news/rescue.pdf>> (May 24, 2006); Data for percent distribution of need categories in 2005-2009 from Metropolitan Transportation Authority, *Proposed MTA Capital Program 2005-2009*, September 29, 2004; For sources of data on the total size of individual capital programs see sources and notes in Table 3; For sources of depreciation data see sources and notes in Table 2.

Note: The 1992-1996 plan was extended to 1999 with a five-year plan for 1995-1999. Data on deed categories are more readily available for the whole 1992-1999 period covered by the two plans, rather than for the two periods covered by each plan individually.

N/A - Not Available.

As shown in Table 4, during the first ten years of the MTA's capital plans, SOGR projects absorbed fully 70 percent of the capital funds. In contrast, normal replacement was a relatively small item, because few of the systems had yet been brought to a state of good repair.

SOGR projects continued to be a major item in each of the more recent capital plans, rising to \$4.8 billion in the 2000—2004 plan. Between 1992 and 2004 about \$12 billion was spent on SOGR, and the total since 1982 is \$23 billion. Yet these large investments still leave major components of the system short of a state of good repair (see Table 5). The Long Island Railroad is in the best shape with all of its components except line structures brought to a state of good repair by 1994; however, its line structures will not be restored until 2014. Metro-North also has many components in a state of good repair, but its line structures also will not be fully restored until 2026, and all its stations will not be restored until 2020.

The mass transit facilities still require major investments in order to be brought to a state of good repair. The bus fleet was restored by 1986, and subway cars and mainline track by 1991. But other needs remain substantial. All yard facilities will not be in a state of good repair until 2018; less than half the subway stations have been renovated, and they all will not have been done until at least 2026; the ancient signaling system will not be restored to good repair until 2027.

The extended schedule for achieving a system-wide state of good repair derives from two considerations. First, the available capital resources are not being devoted exclusively to this objective. In the proposed 2005-2009 plan, fully \$9.2 billion or 43 percent of the total resources are allocated to normal replacement, a sum required to keep the components already at a state of good repair at that level. In effect, this is the replacement cost value of current depreciation. Another \$7.1 billion or 33 percent of the total is being reserved for system improvements and network expansion projects, despite the still unachieved system-wide state of good repair. These include \$2.0 billion for the City-funded extension of the Flushing line and \$2.5 billion for progress on other expansions including the Second Avenue subway, the linking of the Long Island Railroad to Grand Central Terminal, and a new JFK airport rail link. About \$5.0 billion is allocated to making progress on SOGR projects. This sum represents a smaller share of the total resources (24 percent) than in any previous plan.

Second, MTA leadership does not believe it is practical to move toward a state of good repair at a more rapid pace. They argue that service disruptions and other obstacles would become intolerable to customers if SOGR work was done more extensively in coming years. Others question this judgment, particularly with respect to the pace of subway station renovations and signal and communication system replacement or upgrading.²¹

The extent to which the capital program subsidizes operating expenses can be assessed by comparing the depreciation expenses in each capital plan period to capital spending for "normal replacement." As shown in Table 4, depreciation expenses equaled 80 percent of the normal

²¹ Office of the State Comptroller, Report 1-2006, *Financial Outlook for the Metropolitan Transportation Authority*, May 2005.

replacement investments in the 1992-1999 period and 91 percent in the 2000-2004 period. For the 2005-2009 period, the figure is projected at 97 percent. This spending represents an offset to an operating deficit rather than true new capital investments. For the 2005-2009 period, the more than \$8.9 billion that offsets depreciation is fully 43 percent of the total capital plan.

Table 5
MTA Progress to SOGR by Item, as of 2004

Item	Year Restored to SOGR	Year Expected to Reach SOGR
NEW YORK CITY TRANSIT		
Subway Car Fleet	1991	
Bus Fleet	1986	
Mainline Subway Track	1991	
Mainline Switches	1997	
IRT Subway Line Signals	2003	
Bus Depots		2010
Pump Rooms		2008
Power Substations		2015
Line Structures		2014
Yard Switches		2011
Yard Track		2012
Car Maintenance/ Overhaul		2019
ADA Key Stations		2014
Tunnel Lighting		2016
Yard Signals		2018
Subway Stations		2024
Signals		2027
LONG ISLAND RAILROAD		
Power	1983	
Track	1985	
Cars	1986	
Shops & Yards	1991	
Communication & Signals	1991	
Stations	1994	
Line Structures		2010-2014
METRO-NORTH RAILROAD		
Track	1986	
Cars	1992	
Communication & Signals	1999	
Power	2004	
Shops & Yards		2010-2014
Stations		2020
Line Structures		2026

Source: *MTA 2000-2004 Capital Program, MTA Capital Needs Assessment 2000 - 2019*

THE FISCAL OUTLOOK: GROWING DEFICITS

What are the fiscal implications of following current policies? Table 6 summarizes the MTA's most recent financial plan for 2006-2009, prepared in February 2006.

Expenditures increase about \$1.8 billion or 17 percent from \$10.6 billion to \$12.5 billion. Growth in the cost of capital accounts for \$950 million or more than half of the total increase. This is due to the growing asset base that is subject to depreciation and the increased reliance on revenue bonds to finance the capital program.

The rise in labor costs pushes up the total increase by about another \$640 million. It is due to an assumed labor settlement with pay raises equal to projected inflation (approximately 2 percent annually) plus increases in fringe benefit costs including health insurance that are at a higher rate. The number of full-time employees is expected to fall from 63,390 in 2005 to 61,099 in 2008.

In contrast, revenues increase by less than 4 percent or \$332 million. With respect to fares and tolls, the plan reflects the increases approved in March 2005, but no subsequent increases. Ridership and utilization are estimated to have declined in 2005 in response to the fare increase, but are expected to resume longer-term growth trends in the subsequent years.

The dedicated taxes are projected to increase by about \$129 million or 4.9 percent over the four-year period. This is preceded by an expected drop-off in dedicated taxes in 2006, which is due to a cooling of the real estate market and declines in proceeds from the mortgage recording tax as interest rates rise. Local subsidies increase modestly to reflect higher station maintenance costs, but the State general fund subsidy is assumed to remain constant at \$191 million.

The combination of a large pre-existing deficit and of baseline assumptions that expenditure growth far outpaces revenue growth creates huge future deficits. In the MTA's plan the deficits grow from \$2.0 billion in 2006 to \$3.5 billion in 2009, or from 19 percent to 28 percent of operating expenses. Compared to 2005, the deficit in 2009 jumps from 7 percent to 28 percent of operating expenses.

The MTA Board has not indicated how it will respond to this troubling situation. They have indicated an intention to raise fares and tolls in 2007 in order to yield growth in those revenues of 5 percent. However, this would add only about \$250 million annually, far less than the \$3.5 billion gap. Absent other policy changes, the MTA might resort to diverting even more of its capital program to cover operating costs, pointing to a return to a downward spiral in the condition of facilities and operating performance reminiscent of the 1970s. To avoid this economically dangerous scenario, new policy initiatives are necessary.

Table 6
MTA Operating Revenues and Expenses, 2006-2009
(dollars in millions)

	2006	2007	2008	2009
Revenues:				
Operating Revenue	\$4,972.0	\$5,019.0	\$5,068.0	\$5,093.0
Fares	3,734.0	3,779.0	3,821.0	3,844.0
Tolls	1,238.0	1,240.0	1,247.0	1,249.0
Dedicated Taxes	2,620.9	2,733.1	2,712.9	2,749.7
General Fund Subsidies	578.0	591.8	604.7	622.4
State	190.9	190.9	190.9	190.9
Local & Other	387.1	400.9	413.8	431.5
Other Sources	440.0	453.0	465.0	478.0
Total Revenues	\$8,610.9	\$8,796.9	\$8,850.6	\$8,943.1
Expenses:				
Labor	\$5,843.0	\$6,030.0	\$6,268.0	\$6,487.0
Salaries & Wages	3,863.0	3,943.0	4,070.0	4,181.0
Retirement & Benefits	1,980.0	2,087.0	2,198.0	2,306.0
Capital	2,969.0	3,279.0	3,572.0	3,919.0
Depreciation & Amortization	1,629.0	1,794.0	1,941.0	2,102.0
Debt Service*	1,340.0	1,485.0	1,631.0	1,817.0
Other	1,836.0	1,909.0	1,986.0	2,085.0
Materials & Supplies	416.0	444.0	478.0	483.0
Fuel & Power	424.0	411.0	408.0	418.0
Public Liability & Claims	187.0	195.0	204.0	214.0
Other Expenses	809.0	859.0	896.0	970.0
Total Expenses	\$10,648.0	\$11,218.0	\$11,826.0	\$12,491.0
Revenues - Expenses	(\$2,037.1)	(\$2,421.1)	(\$2,975.4)	(\$3,547.9)
Rev-Exp as a % of Total Expenses	19.1%	21.6%	25.2%	28.4%

Sources: Metropolitan Transportation Authority, 2006 Adopted Budget, *February Financial Plan 2006-2009*, February 2006.

* The MTA financial plan format is neither a pure cash or accrual format following generally accepted accounting principles. The MTA format initially identifies depreciation and debt service (including interest and principal repayment) as expenses, while accrual accounting would count depreciation and only interest (not principal repayment) as expenses. The MTA format subsequently includes a "cash" presentation that excludes depreciation, includes all debt service, and includes other modifications. Using this format the February 2006 Plan shows a cash surplus of \$625 million in 2006, but it becomes a deficit of \$1.1 billion in 2008 and \$1.5 billion in 2009.

HOW TO BALANCE THE MTA'S BUDGET

In March 2004 the CBC released a report, *Financing Transportation Services in the New York Region*, which recommended fiscal guidelines that can be applied to the MTA. The recommendations are rooted in the economic concepts of private goods, public goods, and negative externalities.

Private goods are items that an individual can purchase and consume without sharing its benefits. Since the individual receives all the benefits, that purchaser should pay a price that covers its full cost. Motor vehicle use can be viewed as a private good. The driver and passengers are enjoying the benefits provided by a highway, bridge or tunnel. Hence they should pay a price equal to the cost of that service. Subsidizing the service would be economically inefficient, leading to "excess" use because the private benefits exceed the price.

Public goods are benefits enjoyed by third parties as a result of a transaction between two other parties. When this happens, it makes sense to have a public subsidy for the item; the general public should pay for part of the cost because they enjoy some of the benefits. Mass transit services provide some public benefits, because they make possible efficient labor markets that benefit multiple employers and workers in a region. Riders should pay some of the cost, but the others who derive some benefits should share that cost through public subsidies.

Negative externalities refer to harmful consequences to third parties from a transaction between two other parties. Noise and pollution are examples of such negative externalities. When a private activity generates such external consequences, the price of the item should exceed its value to the individual purchaser. The price should include a sum to help compensate third parties for the harmful consequences. This will reduce consumption and its negative consequences or provide sufficient resource to help offset the harm. Motor vehicle use has negative externalities in the form of air pollution and congestion. To help deal with this, the fees charged motorists for highway, bridge and tunnel use should exceed the cost of those facilities.

Based on these concepts, the CBC recommends the following four guidelines for financing the MTA.

1. *The cost of bridge and tunnel facilities should be paid for entirely through user fees paid by motorists.* These private goods should be covered in their price, usually in the form of tolls.
2. *User fees paid by motorists should also generate a surplus large enough to cover one-quarter of the cost of providing mass transit services.* The price for using highways, bridges and tunnels should exceed their cost in order to help compensate for the negative externalities of auto use. This additional price can be paid directly through tolls that more than cover costs and through indirect user charges such as fuel taxes and motor vehicle fees collected by the state and dedicated to the MTA.

3. *Mass transit users should pay fares sufficient to cover one-half the operating cost of those services.* Since mass transit provides a combination of private goods and public goods, its cost should be divided between user fees (fares) and government subsidies. Setting fares at one-half the cost has an inherent appeal of fairness in setting the shares borne by each beneficiary.

The fairness of a fare equal to one-half the cost is highlighted by the public's misperception that they currently pay the full costs with fares. A Marist Poll conducted for the Citizens Budget Commission in June 2005 revealed that 87 percent of New Yorkers believe that a single ride costs \$2.00 or less and that the MTA makes money on each passenger. In reality, in 2004 each ride cost an estimated \$2.66; fares covered only 46 percent of the costs.

Compared to the other major mass transit systems in the United States, the MTA's "farebox recovery ratio," or share of costs covered by fares, is relatively high. As shown in Table 7, in 2005 it was estimated at 42 percent system-wide, with the figure for the subway and bus lines at 44 percent and the commuter lines and Staten Island service considerably lower. The NJ Transit ratio is also 42 percent. The major systems in the United States with a higher ratio are the BART in San Francisco (59 percent), Washington D.C. Transit Authority (44 percent), and Metra in Chicago (44 percent). However, all other systems combined have an average ratio of 35 percent. Rather than use this statistic to argue against fare increases in New York, it is best to view New York and other systems with high recovery ratios as heading in the right direction. The 50 percent target would require a modest increase in New York and would put the system on a sounder financial and managerial footing.

4. *State and local subsidies to mass transit should cover one-quarter of the operating cost of those services and fund "catch-up" capital investments needed to bring the system to a state of good repair due to a history of prior neglect.* If riders pay half the cost of mass transit and motorists cover one-quarter through a cross-subsidy, then the remainder should be paid with public subsidies. This reflects the public goods derived from mass transit. In addition, state government should bear the cost associated with restoring the system to a state of good repair due to negligent behavior in earlier periods. It is unfair to put this burden on current riders or motorists.

Table 7
Mass Transit Farebox Recovery Ratios in Large U.S. Systems, Fiscal Year 2004
(dollars in millions)

<u>Transit System:</u>	<u>Expenses</u>	<u>Ratio</u>
Metropolitan Transportation Authority (MTA)*		
MTA New York City Transit (NYCT)	\$5,725.0	44.4%
MTA Long Island Rail Road (MTA-LIRR)	1,329.0	32.2%
Metro-North Commuter Railroad Company (MTA-MNCR)	939.0	42.5%
Metropolitan Suburban Bus Authority (MTA Long Island Bus)	107.0	34.3%
Staten Island Rapid Transit Operating Authority (SIRTOA)	36.0	12.2%
MTA Weighted Average	\$8,136.0	41.9%
New Jersey Transit Corporation (NJ TRANSIT)	\$1,313.2	41.9%
Other Systems		
San Francisco Bay Area Rapid Transit District (BART)	375.0	58.6%
Washington Metropolitan Area Transit Authority (WMATA)	959.1	43.9%
Northeast Illinois Regional Commuter Railroad Corporation (Metra)	439.4	43.6%
Southeastern Pennsylvania Transportation Authority (SEPTA)	800.8	40.9%
Massachusetts Bay Transportation Authority (MBTA)	841.4	36.1%
Chicago Transit Authority (CTA)	1,120.0	36.1%
Maryland Transit Administration (MTA)	364.2	31.1%
Metropolitan Atlanta Rapid Transit Authority (MARTA)	298.8	31.0%
San Francisco Municipal Railway (MUNI)	431.4	26.5%
Metro Transit	194.5	26.4%
Los Angeles County Metropolitan Transportation Authority (LACMTA)	884.8	25.0%
Miami-Dade Transit (MDT)	309.5	22.0%
King County Department of Transportation (King County Metro)	405.3	19.6%
Weighted Average Excluding MTA, New Jersey Transit	\$7,424.3	35.1%

Sources: Federal Transit Administration, 2004 National Transit Database, *Data Tables for the 2004 National Transit Database Report Year*,
 < <http://www.ntdprogram.com/NTD/NTDDData.nsf/DataTableInformation?OpenForm&2004>> (May 18, 2006);
 Metropolitan Transportation Authority, *2006 Adopted Budget, February Financial Plan 2006-2009*, "Farebox Recovery and Farebox Operating Ratios," and "MTA Consolidated Accrued Statement of Operations By Agency," Part 3, MTA Consolidated 2006-2009 Financial Plan.

* Ratios for the MTA agencies are 2005 estimates

Future Expenditure Requirements

The CBC's recommendations can be used to decide how to balance the MTA's budget in the future. The starting point for this task is to estimate future expenditure requirements. Fortunately, the MTA has recently established a practice of preparing a four-year financial plan that includes expenditure projections. The latest plan, from February 2006, can be used as a basis for estimating future expenditure requirements. Most of the operating expenditures are projected based on reasonable assumptions. However, from the CBC's vantage, some modifications of the MTA plan are appropriate in estimating future costs of capital.

The MTA projects the future cost of capital in its operating budget as a combination of (a) depreciation based on historical costs, and (b) debt service for necessary borrowing. This debt service covers borrowing for capital commitments in prior years and for new projects in the current capital plan. However, the required borrowing is based on assumption that a significant share of the new projects will be financed with direct capital subsidies and that borrowing backed by MTA revenues will be necessary for only a fraction of the new investments.

In projecting future capital costs, the CBC recommends a different approach. First, instead of depreciation based on historical costs, the equivalent of depreciation should be the estimated current cost of replacing capital used in operations. Based on previous studies of normal replacement needs by the MTA, this figure is estimated at about \$1.3 billion annually. The CBC projections assume the MTA would phase-in a policy of funding this amount from operating revenues and federal grants earmarked for this purpose, but between 2005 and 2009 a portion would be financed with borrowing backed by MTA revenues. Second, the CBC projections assume greater borrowing requirements, and hence higher debt service payments, than the MTA plan in the coming years. The CBC assumes that MTA revenue bonds will be needed for all capital investments except those financed by funds from the City of New York (for the extension of the Flushing line) and except for federal funding at amounts based on recent years' experience. In addition, the CBC projections assume that capital investments for "catch-up" work to achieve a state of good repair included in the MTA capital plan will be funded by a direct State subsidy rather than by MTA revenue bonds. This State subsidy is assumed to equal the annual debt service requirement for bonds issued to finance the "catch-up" work.

Table 8 presents projections of the MTA's annual operating expenditure requirements in 2008 and 2009 based on the above assumptions.²² Projections are presented for three alternative scenarios.

- The "baseline" scenario includes the same assumptions as the MTA plan. Labor costs are projected to increase approximately with inflation, and the capital plan includes

²² Other than the assumptions specified above, the CBC projections use the same assumptions as the MTA plan for each category of expenditure. The baseline projection for 2009 is based on an increase from 2008 of the average annual percentage change for each category of expenditure in the period 2004 to 2008.

commitments for new expansion projects as incorporated in the MTA's proposed five-year capital plan.

- The “cost-saving” scenario modifies the baseline scenario in two ways. First, operating costs are reduced to reflect a program of productivity initiatives that reduce operating costs from the baseline level by 2 percent in 2006 and by 2.5 percent annually in each year from 2007 through 2009. Second, the major expansion projects are dropped from the capital plan, reducing needed borrowing and associated debt service costs.
- The “cost-saving plus catch-up” scenario includes all the assumptions for the “cost-saving” scenario, but adds capital spending for a faster pace of catch-up work in achieving a state of good repair. Specifically, the level of such catch-up spending assumed in the MTA five-year plan is doubled. It is assumed to be financed by a State subsidy equal to the debt service cost for this borrowing.

Table 8
MTA Required Expenditures Under Alternative Scenarios, 2008 and 2009
(dollars in millions)

	<u>2008</u>	<u>2009</u>
<u>Baseline Scenario</u>		
Cost of Capital	\$3,643.0	\$4,145.5
Depreciation Equivalent	\$1,969.4	\$2,260.2
Debt Service for Improvement	\$1,613.1	\$1,775.5
Debt Service for SOGR Catch-Up	\$60.5	\$109.8
Other Operating Costs	\$7,990.5	\$8,939.1
TOTAL	\$12,159.2	\$13,084.6
<u>Cost Saving Scenario</u>		
Cost of Capital	\$3,598.1	\$4,048.2
Depreciation Equivalent	\$1,969.4	\$2,260.2
Debt Service for Improvement	\$1,568.2	\$1,678.2
Debt Service for SOGR Catch-Up	\$60.5	\$109.8
Other Operating Costs	\$7,786.3	\$8,005.2
TOTAL	\$11,384.3	\$12,053.4
<u>Cost Saving + Catch-Up</u>		
Cost of Capital	\$3,641.8	\$4,136.0
Depreciation Equivalent	\$1,969.4	\$2,260.2
Debt Service for Improvement	\$1,568.2	\$1,678.2
Debt Service for SOGR Catch-Up	\$104.2	\$197.6
Other Operating Costs	\$7,786.3	\$8,005.2
TOTAL	\$11,428.0	\$12,141.3

The projected 2009 total expenditures vary from \$12.1 billion under the cost saving scenario to almost \$13.1 billion under the baseline scenario. The cost saving scenario reduces capital costs by about \$100 million in 2009; the relatively modest savings from dropping the expansion projects is explained by the fact that the savings are in debt service costs rather than the total planned capital commitments for those projects. The larger planned commitments carry a more modest debt service cost because the commitments translate into cash needs (which the borrowing supports) over a seven year period. The non-capital savings from the productivity initiatives are much larger. The anticipated savings relative to the baseline is over \$900 million in 2009.

The “cost-savings plus catch-up” scenario has total expenditures in 2009 of about \$12.1 billion. Doubling the pace of the SOGR work adds about \$100 million to annual debt service costs. Again, the larger amount of capital investments translates into a more modest annual debt service cost, because the capital commitments translate into cash needs (and borrowing requirements) over an extended period.

Under each scenario the future expenditure requirements are well above actual expenditures in 2005. The percentage increase over the five-year period ranges from 33.8 percent for the baseline scenario to 23.2 percent for the cost-savings scenario. These growing expenditure requirements should be considered relative to likely growth in revenues.

These three scenarios are not recommended policies; rather they are intended to illustrate the fiscal consequences of alternative decisions about operations and capital investments. Moreover, the time frame is also primarily illustrative and not necessarily the period in which new financing policies need be implemented. The guidelines could be phased-in over a longer period in order to ease the transition for the multiple stakeholders.

Future Revenue Requirements

As part of its four-year financial plan, the MTA presents estimates of each of its major revenue sources together with the assumptions behind these projections. These 2009 projected revenues are summarized in the first column of Table 9.

The revenues in Table 9 are classified based on categories relevant to the CBC's financing principles. The fare revenues are fares charged customers on buses, subways and commuter rail lines. They include the fare increases authorized in 2005, but assume no subsequent fare increases. In 2009 projected fare revenues are about \$4.3 billion.

Table 9
MTA Projected Revenues and Revenue Requirements by Type, 2009
(dollars in millions)

	Projected Revenues	Baseline Scenario		Cost Savings Scenario		Catch-Up Scenario	
		Requirements	Percent Increase Required	Requirements	Percent Increase Required	Requirements	Percent Increase Required
Fares	\$4,261.0	\$5,705.5	33.9%	\$5,214.5	22.4%	\$5,214.5	22.4%
Auto Users	\$1,999.5	\$3,516.5	75.9%	\$3,222.0	61.1%	\$3,222.0	61.1%
Cost of B & T	\$663.7	\$663.7	0.0%	\$614.7	0.0%	\$614.7	0.0%
Cross-Subsidy	\$1,335.7	\$2,852.8	113.6%	\$2,607.2	95.2%	\$2,607.2	95.2%
State/Local Subsidy	\$2,675.8	\$2,962.5	10.7%	\$2,717.0	1.5%	\$2,804.9	4.8%
General	\$2,675.8	\$2,852.8	6.6%	\$2,607.2	0.0%	\$2,607.2	0.0%
SOGR Catch-Up	\$0.0	\$109.8		\$109.8		\$197.6	
Federal	\$900.0	\$900.0	0.0%	\$900.0	0.0%	\$900.0	0.0%
TOTAL	\$9,836.3	\$13,084.6	33.0%	\$12,053.4	22.5%	\$12,141.3	23.4%

Revenues from auto user fees in 2009 are projected to be \$2.0 billion. This includes the tolls collected by the MTA at its bridges and tunnels (\$1.3 billion), plus other auto user fees dedicated to the MTA by the State. The latter group of revenues includes the motor fuel taxes and the registration and license fees appropriated from the Mass Transit Trust Fund plus the petroleum business tax revenue in both the Mass Transit Trust Fund and the Mass Transit Operating Assistance Fund.

State and local government subsidies in 2009 are projected to be about \$2.7 billion. This includes all the dedicated taxes other than those classified as auto user fees and the annually appropriated general fund subsidies from state and local jurisdictions. Finally, also shown in Table 9 is the expected \$900 million from the federal government in the form of capital grants available for normal replacement investments.

In the baseline scenario, available revenues fall short of expenditure requirements by \$3.2 billion or a quarter of total projected expenditures. To close this gap following the CBC's guidelines, three basic changes would be required. First, fares would have to be increased by about 34 percent. This is an average annual increase over the five-year period of about 7.6 percent. If applied to the monthly Metrocard price, the increase would be from the current \$76 to over \$102. Second, government tax subsidies would have to increase by \$287 million, or 11 percent. Third, the cross subsidy from auto users would have to more than double; the required increase is nearly \$1.5 billion.

Implementing the steps in the cost-saving scenario would reduce the 2009 gap by about \$1.0 billion, bringing the shortfall to about \$2.2 billion. Closing that gap with the CBC's recommendations would require fare increases of about 22 percent, or a monthly Metrocard price of \$93. It also would require increasing state and local tax subsidies by about 1.5 percent or about \$19 million annually. The necessary increase in the cross-subsidy from auto users would be reduced from the baseline scenario, but would still be a substantial 95 percent or \$1.3 billion.

The catch-up scenario, which doubles the pace of work necessary to achieve a state of good repair, results in few changes from the cost saving scenario. The added debt service costs would be covered with an increase in the State subsidy, but the necessary increases in fares and in the cross-subsidy from auto users are the same as in the cost-saving scenario.

In brief, following the CBC's recommendations would require fare increases of at least 22 percent by 2009, and a small increase in the tax subsidies to the MTA. However, a far larger increase, both in absolute amounts and proportionally, would be required in the cross subsidy from auto users. The new revenues from that source would have to grow by at least \$1.3 billion annually, or at least 95 percent.

Options for Increasing the Cross Subsidy from Auto Users

Raising an additional \$1.3 billion annually from auto users is no easy task. Currently such a cross-subsidy is provided in four ways: “surplus” revenue from tolls on the bridges and tunnels, the dedication of a portion of state registration and license fees for motor vehicles to mass transit, the dedication of a portion of the state’s motor fuel tax to mass transit, and the dedication of petroleum business taxes to mass transit. As is explained below, none of these items individually is likely to be a practical source for \$1.3 billion or more in additional revenue, but some combination of these sources could be a realistic answer. In addition, other new mechanisms also are possible. New congestion pricing policies are an alternative means for raising the needed funds.

Bridge and Tunnel Tolls. The baseline scenario indicates that in 2009 tolls on the MTA’s bridges and tunnels will yield \$1.3 billion, and that operating costs of about \$664 million reduce the available “surplus” to about \$638 million.²³ This is based on recent trends in utilization and the toll increase authorized in 2005 that raised tolls on the major crossings to \$9 in cash and \$8 for the E-Z Pass.

In estimating the impact of the 2005 toll increases, the MTA calculates that a \$1 price increase yields about \$125 million annually in additional revenue.²⁴ Since costs are already covered, all this increase represents an increase in the available cross subsidy to mass transit.

Based on the MTA’s rule of thumb, it would require a toll increase of more than \$10 to raise an additional \$1.3 billion annually. This would increase the E-Z Pass toll on the major crossings from \$8 to \$18 (and the cash toll to \$19). In practice the rule of thumb would probably not hold up; the more than incremental toll increase would likely dramatically reduce utilization and revenues from the initial estimate. More practical and fiscally viable between now and 2009 are toll increases in the range of 25 percent to 50 percent, or increases of \$2 to \$4 per trip. This would likely yield increased annual revenues of about \$230 million to \$425 million, allowing for some reduction in volume due to the higher prices.

Motor Vehicle Fees. Owners and drivers of motor vehicles currently pay the three different types of fees.²⁵ State drivers license fees average about \$5.40 annually for regular licenses. State vehicle registration fees are based on weight and range from \$10 to \$56 annually. New York City levies a \$15 annual auto use fee, and Nassau, Suffolk, and Westchester counties impose a similar fee of \$5.

²³ The operating costs allocated to the bridges and tunnels include debt service, depreciation and a portion of MTA headquarters costs.

²⁴ MTA 2005 Adopted Budget, *February Financial Plan 2005—2008*, Section III-8.

²⁵ Information in this section is from Regional Plan Association, *Financing Options for the MTA Capital Program*, October 2004.

The Regional Plan Association, based on data relating to licenses and registrations in 2002, has estimated the revenue gains from substantially increasing each of these fees for owners or drivers in the MTA region. Specifically, they estimated that an auto use tax of \$50 annually applied in the region would add \$235 million; that an average increase of \$50 annually in registration fees would raise an additional \$260 million; and that hiking the average license fee from under \$6 annually to \$50 annually would raise an additional \$294 million. The combined yield of these measures, \$789 million annually, suggest a maximum revenue figure for higher auto use fees in the coming years. Increases in all three fees of this magnitude are politically unlikely and might fall short of the estimate due to resulting changes in ownership patterns.

Motor Vehicle Fuel Taxes. The state currently imposes an eight cent per gallon tax on motor vehicle fuels. The Regional Plan Association reports that about 3 billion gallons of fuel are sold in the MTA region annually, and they use simple arithmetic to estimate that each one cent increase in that tax region-wide would yield \$30 million annually. This suggest that a 37 cent (or about 450 percent) increase would be needed to raise \$1.1 billion annually (before any adjustment for price elasticity). This large an increase would make the region uncompetitive and likely shift significant purchasing outside the region; in other words, this large an increase is not practical. However, as the Association suggests, an increase of as much as 10 cents per gallon might be practical and would yield an estimated \$300 million annually.

The State's petroleum business tax is applied to a similar, but somewhat broader, base as the motor vehicle fuel tax. Proportionally lower increases in the petroleum business tax rate could, therefore, yield similar amounts. However, the taxing of the broader base (including certain household and commercial uses of fuel other than for motor vehicles) would deviate more from the principle of raising revenue from motor vehicle use. Thus, if fuel taxes are to be used to help pay for the cross subsidy, the motor vehicle tax is the preferable mechanism.

New Congestion Pricing Policies. A potential mechanism for raising revenues from motor vehicle users is so-called "congestion pricing" arrangements. These plans impose charges for access to the central business district by motor vehicles. The primary intention is to encourage a shift from autos to mass transit for hub-bound trips, but they can also have the impact of raising new revenue from the auto users who do not shift.

In the context of New York City, congestion pricing schemes have two basic variations – East River bridge (ERB) tolls and a London-like arrangement under which a fee is collected electronically from autos using any of multiple access points (not limited to bridges and tunnels) to the central business district. Estimating the fiscal impacts of each plan is difficult, but each could yield significant new revenue as well as divert a significant volume of commuters from autos to mass transit.

East River Bridge Tolls. On a typical weekday morning about 213,000 vehicles enter the central business district via one of four bridges connecting the area to Brooklyn or Queens.²⁶ These bridges are owned by the City of New York, and no tolls are collected on them. One policy option is to begin collecting tolls on these bridges, presumably at a price equal to that charged for the MTA bridges and tunnels connecting central Manhattan to the other boroughs.

This policy initiative would engender two basic types of behavioral responses. First, some current auto users would shift to mass transit. This would not generate any new revenue from tolls, and it would increase necessary mass transit expenses (net of any additional fares) in order to serve them. Second, some auto users would change driving routes. This would be accomplished by either shifting to an MTA tunnel (because it was no longer more expensive) or changing to a more distant driving route that still includes a free bridge, and then using Manhattan roadways southbound. Only those who did not make one of these changes would pay the new toll.²⁷

A study by the Regional Plan Association estimates these changes and their fiscal impacts.²⁸ Based on the 2003 MTA toll rates, they estimated that the new tolling policy would generate \$547 million annually from users of the East River bridges owned by the City and would increase tolls collected at the MTA's tunnels by \$159 million, for a combined increase of \$706 million annually. Given the toll increases of approximately 14 percent (from \$7 to \$8) in 2005, the future gross revenue impact is about \$805 million annually.

However this figure is the gross revenue and requires two adjustments in order to reflect added expenses. First, accommodating the added mass transit users would require an estimated \$40 million annually in added expenses by the MTA.²⁹ Second, the City of New York currently spends about \$120 million annually to maintain the major East River bridges.³⁰ If the City continued to operate the bridges and bear these costs, it is unlikely it would devote all the toll

²⁶ New York Metropolitan Transportation Council, *2001 Hub Bound Travel Report: Transportation to the Manhattan Central Business District*, New York Metropolitan Transportation Council, March 2004, Table 11.

²⁷ In addition, some previous MTA facility users might shift to the formerly free bridges because they are more convenient and no longer as congested.

²⁸ Regional Plan Association, *An Exploration of Motor Vehicle Congestion Pricing in New York*, November 2003.

²⁹ For an order of magnitude estimate for NYC, CBC estimated the impact of increasing bus service to accommodate 75% of the RPA's estimated additional transit trips. Key assumptions include: operating loss per trip is \$1 (based on APTA Factbook for NYCT Buses FY 2003), annual capital costs per additional bus are \$170,000 (based on \$2M per bus estimate in MTA Capital Plan and 12-year useful life). Additional bus trips ranged from 20 million (tolling East River Bridges only) to 60 million (full variable pricing, or London-like plan), which require annual transit augmentation costs ranging from \$40 million to \$110 million.

³⁰ CBC used two approaches to estimate annual costs for the East River Bridges. One method extrapolated data from NYC Department of Transportation historical data and projections. The 1993–2011 average capital costs for NYC Bridges is \$90; FY 2006 operating and maintenance costs for *all* NYC DOT bridges is \$33 million, suggesting a total annual cost of around \$120 million. A second method extrapolated data from the Port Authority's three Staten Island Bridges: average cost of operations and maintenance, allocated administrative costs, and depreciation totals \$32 million a bridge. Using this estimate, four bridges would cost around \$120 million per year. This figure is likely to be an over-estimate, as NYC DOT costs are for all bridges and Port Authority bridges include labor costs for toll booths.

revenue to mass transit. A more likely development is that in order for the MTA to collect the toll revenue, it would have to assume the maintenance expenses. The combination of the maintenance expenses and the added mass transit expenses would reduce the net revenue gain to the MTA to about \$645 million annually.

London-like Congestion Fees. In 2003 local government in London implemented a program of motor vehicle charges (initially of approximately \$9, raising it to about \$15 in 2005) for entering the central business district. The charge is paid in advance through cashless media and is enforced with heavy fines through cameras and electronic devices at 174 entry points to the central business district. It has proven to be successful at diverting motorists to mass transit (mostly buses) and reducing traffic and thereby speeding the route times for buses. It has yielded substantial gross revenues, but these have been offset by added expenses for the additional bus service and the new collection system. Current proposals call for increasing the fee in order to generate substantial net revenues in the future.³¹

The Regional Plan association has explored the impacts of establishing a London-like system for the New York central business district. Implementation would be simpler in New York than London. New York has fewer entry points (19 versus 174), and four of these (the two MTA tunnels and two Port Authority tunnels) are already tolled. New collection or enforcement points would be need at the four East River bridges and at the 11 southbound highways and avenues crossing 60th Street.

The most expansive of the congestion pricing options simulated by the Association included tolls at each entry point that were equal to the 2003 MTA tolls (that is, \$7) during daytime hours but were reduced in the night to \$4 and raised during the rush hours to \$10. This plan was estimated to produce gross additional revenues of more than \$1.7 billion annually with about \$258 million additional collected at MTA tunnels, \$76 million additional at Port Authority tunnels, and nearly \$1.4 billion in new revenue generated at the new tolled entry points including the East River bridges.

The Association did not estimate the added expenses that would be needed for this option. The plan is estimated to shift about 60 million trips annually from autos to mass transit; this can be estimated to generate added costs for these services of about \$110 million annually.³² The plan also would require investments (which could be amortized) to establish the electronic enforcement system and ongoing administrative costs for collecting the fees; based on the London experience these costs can be estimated at about \$120 million annually.³³ Finally, because the plan includes tolling the East River bridge entry points, it is reasonable to assume that the previously noted maintenance costs for these bridges (totaling \$120 million annually) would have to be covered by the new revenues. After these expenses are taken into account, the net gain from the plan is an estimated \$1,382 million annually.

³¹ Transport for London, *Congestion Charging Central London, Impacts Monitoring Third Annual Report*, April 2005.

³² See note 25.

³³ See note 26.

Summary of Options. Table 9 summarizes the options discussed for increasing the cross-subsidy from motor vehicle users. Of the options, a London-like pricing plan has the greatest appeal. It would have the largest impact in shifting use from motor vehicles to mass transit, and it has the greatest potential for raising new revenue. Such arrangements require further consideration, but they should be explored seriously and, if warranted, pursued promptly.

If a congestion pricing plan proves impractical or requires an extensive period for implementation, other options for raising the recommended revenue are available. A package of measures involving some combination toll increases, fuel taxes and higher vehicle fees can be constructed to achieve the revenue targets.

Table 10
Annual Revenue From Auto Cross-Subsidy Policy Options
(dollars in millions)

	Annual Net Impact
Congestion Pricing Options	
Toll East River Bridges	\$638
London-like Plan	\$1,382
Other Options	
MTA Bridge and Tunnel Tolls	
\$1 Increase	\$125
\$2 Increase	\$230
\$4 Increase	\$425
Motor Fuel Taxes	
5 Cents per Gallon Increase	\$150
10 Cents per Gallon Increase	\$300
25 Cents per Gallon Increase	\$750
Motor Vehicle Fees	
Low Increase Option**	\$120
High Increase Option***	\$775

**Low Increase Option assumes a \$10 annual increase in motor vehicle registration fees, a \$10 annual increase in drivers license fees, and \$15 per year increase in the Auto Use Tax. Increases are applied only in the MTA region.

**High Increase Option assumes a \$50 annual increase in motor vehicle registration fees, a \$50 annual increase in drivers license fees, and \$50 per year increase in the Auto Use Tax. Increases are applied only in the MTA region.
