



THE ROAD BACK

A Historic Review of the MTA Capital Program
May 2012



PERMANENT CITIZENS ADVISORY COMMITTEE TO THE MTA
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Executive Summary

This review highlights the political, financial, and infrastructure challenges that have comprised the last thirty years' struggle to rebuild the region's most important transportation asset. Issues featured are the amount of funds that were needed; where the money went; how the funds were raised; and, most importantly, the benefits to the riders that resulted. Also discussed is the role of watchdog that the Permanent Citizens Advisory Committee (PCAC) has played throughout this period. The PCAC rider councils—the Long Island Rail Road Commuter Council (LIRRCC), the Metro-North Commuter Council (MNRCC), and the New York City Transit Rider Council (NYCTRC)—were born out of the first capital program initiative in 1981 because legislators wanted a way to represent the riders' interests, given the large commitment of funds that were being approved. Finally, cautionary remarks and recommendations are made as the Metropolitan Transportation Authority (MTA) continues its efforts to restore and expand this crucial component of New York City's prosperity.

Modern Capital Programs

In May 1981, MTA Chairman Richard Ravitch wrote an impassioned letter to then-Governor Hugh Carey, members of the legislature, and New York City Mayor Ed Koch, pleading "that prompt action be taken to meet the increasingly desperate situation of public transit in New York: first, by immediately enacting the MTA's capital legislation; and second, by adopting a subsidy program to alleviate the impact on the fare of MTA's spiraling deficit." In June 1981, the legislature finally responded and passed the Transportation System Assistance and Financing Act of 1981, which gave the MTA authority to issue bonds for needed funding. In the following September, the first modern five-year capital program totaling \$7.2 billion was approved, thus initiating the thirty-year rebuilding of New York City's vital public transportation system.

Capital programs for 1987–1991, 1992–1999, 2000–2004, 2005–2009, and 2010–2014 followed the historic 1982–1986 effort. Funded totals through 2011 in current dollars are nearly \$84.3 billion; in 2011 dollars, \$116.7 billion. Clearly, the magnitude

of these amounts indicates a sustained commitment to restoring and maintaining the MTA system.

Benefits

The value of this investment has been evident as well. It is startling to see how much ridership and the basic performance of the system have improved. Today, it seems almost incredible that in 1982 subway cars had a mean distance between failure (MDBF) of a mere 7,186 miles; it is now over 170,000 miles. This dramatic increase in MDBF was aided not only by new rolling stock, but also by upgrades to shops and the introduction of a scheduled maintenance system. Ridership on subways has risen 66 percent and on buses, 30 percent; and major felony crime in the subways has dropped an astonishing 82 percent.

Likewise, the commuter railroads' performance has soared since 1982. The MDBF for both the LIRR and MNR have improved by an enormous 708 percent and 502 percent, respectively, over the period. This metric particularly jumped in 2003 when the new M-7 cars were put into service. Ridership escalated as well, with LIRR increasing 14 percent and MNR 69 percent.

Increased capital investment also produced many environmental improvements such as the addition of air conditioning to trains and buses, the removal of graffiti, and the substantial reduction in track fires.

Debt Burden

Unfortunately, over these thirty years the MTA has been forced to incur an increasing level of debt in order to finance the continued rehabilitation of the transit system. Today, the MTA has \$32 billion in long-term debt (bonds) on its balance sheet. This debt is supported by farebox revenues and tolls, and a bevy of dedicated taxes, all subject to economic cycles. These bonds currently require a \$2.3 billion annual debt service, which must come out of operating revenues. The recently approved funding for the remaining three years of the current capital program also

places a heavy emphasis on debt, including a \$2.2 billion low-interest loan from the Federal Railroad Administration in order to finish the East Side Access mega project.

Findings and Recommendations

The MTA's staggering ongoing annual debt obligation presents a major challenge for the new MTA leadership. While the MTA Finance Department does an admirable job of timely bond management to take advantage of interest rate changes, it is a daunting and complicated task to juggle the various facets of the debt and cash flow.

The PCAC offers the following recommendations for the pursuit of financial solutions:

1. Other sources of direct subsidies must be found. Public-private partnerships need to be pursued, such as value capture from new developments around train and subway stations.
2. A strong push needs to be made in Washington for more federal dollars to be available to the MTA in the next transportation funding reauthorization.
3. The dedicated tax fund must be protected for the exclusive use of the MTA.
4. New York City must give a larger sustained amount of financial support for the capital program.
5. While not part of the capital program, adequate maintenance, funded by the operating budget, has a direct impact on capital replacement: the better the maintenance, the more capital investment can be delayed. The anticipated 7.5 percent fare increase in 2013 is not expected to provide enough funding for operations. Further, MTA's annual \$2.3 billion debt service must come out of operations along with any Pay As You Go (PAYGO) funds. New York State and

New York City should match the riders' sacrifice and increase their direct funding of service operations by a similar amount.

6. The reality of the need to increase the state gas tax, implement tolling on the East River Bridges, and enact some form of congestion pricing must be faced. There are few new funding sources left to tap.
7. Related to the above recommendation is the gloomy outlook for the next capital program: sources for additional funds are nowhere in sight. Planning for the financial support of the 2015–2019 capital program must start now.

Over the last thirty years, the MTA has been aiming to bring the transit system back to a state of good repair, implement a cycle of normal replacement, and promote new initiatives. According to the MTA's Twenty Year Capital Needs Assessment, 2010–2029 (2009), there are still many capital programs to be completed before these goals are met and the system will be economically competitive with those of other global cities:

While past investments have restored many of the system's assets, there is a significant backlog of assets that still require rehabilitation. And many assets that have been restored in past programs will reach the end of their useful lives over this twenty year period and require replacement.

On a fully unconstrained basis, the agencies' needs are even greater than what is included in this assessment since more backlogged State of Good Repair needs exist than can be implemented. (p. 9)

As a closing cautionary note—the significant financial needs for regeneration and modernization of the MTA transit system are not going to go away anytime soon. Policy makers and elected officials must take heed.

Acknowledgements

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A particular thank you goes to our PCAC research associate, Karyl Berger, who waded through piles of old reports in the PCAC office and found incredibly useful material about early efforts to support the MTA capital program.

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Introduction

The Permanent Citizens Advisory Committee (PCAC) to the Metropolitan Transportation Authority (MTA), as part of its legislatively mandated mission to advocate for MTA riders, regularly prepares policy documents to bring awareness to issues that the MTA and elected officials need to address. This report commemorates the thirty-year anniversary of the MTA capital program, describing the difficult process of rebuilding the largest public transportation provider in the western hemisphere. There is an additional motivation for noting this milestone: the PCAC rider councils—the Long Island Rail Road Commuter Council (LIRRCC), the Metro-North Commuter Council (MNRCC), and the New York City Transit Rider Council (NYCTRC)—were born out of the first capital program initiative in 1981 because legislators wanted a way to represent the riders’ interests, given the large commitment of funds that were being approved.

This review highlights the political, financial, and infrastructure challenges that have comprised the last thirty years’ struggle to resurrect the region’s most important transportation asset. Issues featured are the amount of funds that were needed; where the money went; how the funds were raised; and, most importantly, the benefits to the riders that resulted. Also discussed is the role of watchdog that PCAC has played throughout this period. Finally, cautionary remarks and recommendations are made as the MTA continues its efforts to restore and expand this vital system.

Historic Journey

In November 1980, the MTA issued *Staff Report of Capital Revitalization for the 1980’s and Beyond*. Accompanying this document was a statement by Richard Ravitch, then-MTA chairman, that outlined five proposed new sources of funding: bonds from a federal commitment, Triborough Bridge and Tunnel Authority (TBTA) bonds, MTA farebox bonds, Port Authority (for new buses), and tax incentives.¹ In an analysis done by the PCAC in February 1981 on this report, it was noted that

¹ For an in-depth description of the struggle to fund the first capital program, see James Lardner, “Painting the Elephant,” *New Yorker* magazine, June 25, 1984.

“the MTA has averaged less than \$300 million for capital replenishment [prior to 1981]. The current ten year plan calls for \$1.4 billion to be spent each year—almost five times the present expenditure rate.”²

In April 1981, the MTA issued a voluminous, in-depth report listing recommended capital project priorities for 1981–1985. On May 12, 1981, MTA Chairman Ravitch wrote an impassioned letter to Governor Hugh Carey, members of the legislature, and New York City Mayor Ed Koch. He wrote:

I am writing to urge, in the strongest possible terms, that prompt action be taken to meet the increasingly desperate situation of public transit in New York: first, by immediately enacting the MTA’s capital legislation; and second, by adopting a subsidy program to alleviate the impact on the fare of MTA’s spiraling deficit.

For the past six months, since the MTA laid out the facts in its capital revitalization statement, I have been asserting that it is absolutely urgent to arrest the accelerating physical deterioration of the region’s transportation system and restore it to a state of good repair. I have said that in our judgment it will take \$14 billion of 1980 dollars to do the job over the next ten years. I have proposed legislation that would provide, not all of the funds, but enough to enable us to begin.³

In late June 1981, the legislature did respond to Ravitch’s pleas and passed the Transportation System Assistance and Financing Act of 1981. This act not only provided the MTA authority to issue bonds for needed funding, but it also created a control measure, the MTA Capital Program Review Board (CPRB).⁴ This board consists of four voting members, appointed by the governor, representing the

² Donald King Cirillo, *A Review of MTA Chairman Richard Ravitch’s Statement on Funding Sources for Capital Revitalization*. New York: PCAC (February 1981), 21.

³ Richard Ravitch, letter to Governor Hugh Carey, members of the legislature, and New York City Mayor Ed Koch. May 12, 1981.

⁴ The MTA bridges and tunnels capital program is not subject to CPRB approval.

governor, state senate, state assembly, and New York City mayor.⁵ Each has veto power over the capital program. There are two nonvoting members, representing the minority party in the senate and assembly. Approval of the capital budget is presumed unless, within ninety days, a member vetoes it.⁶

Finally, on September 25, 1981, the MTA board approved a five-year capital program for 1982–1986 and submitted it to the CPRB. It was approved on December 22, 1981, for capital improvements totaling \$7.2 billion; it was amended on August 8, 1986, for \$8.7 billion;⁷ the final total for the first capital program was \$7.66 billion.

In 1983, Ravitch, having accomplished his mission and weary from the battles with Albany and Washington DC, resigned. He was succeeded by Robert Kiley, former head of the Boston transit system, who was selected to address operational issues. Capital programs for 1987–1991, 1992–1999, 2000–2004, 2005–2009, and 2010–2014 followed.

Table A, below, summarizes the CPRB MTA thirty-year capital program, showing funded totals through 2011 in current dollars, reaching just under \$84.3 billion; in 2011 dollars, \$116.7 billion. Clearly, the magnitude of these amounts indicates a sustained commitment to restoring and maintaining the MTA system.

The road back for the MTA is summarized well by former MTA CEO Elliot Sander in his 2008 State of the MTA Address:

What has transpired since the Ravitch plan is nothing short of breathtaking. Since 1982, the MTA has invested \$76 billion dollars to rebuild 200 subway and rail stations and 700 miles of track. We've also rebuilt

⁵ This member can only vote on issues that pertain to NYCT, its subsidiaries, and the Staten Island Railway (SIR) (Title 11, §1269-a).

⁶ While this board wields absolute power over the MTA capital program proposals, it is hard to track down. It doesn't have a website, and legislative staff members serve its administrative needs.

⁷ The MTA views the capital plan as a continuous process of review and improvement due to opportunities for additional funding, low bids, and reevaluation of existing work and new areas of needed work. However, a change of a capital element exceeding 10 percent of that set forth in the approved plan must be submitted to the CPRB (Title 11, §1269-b).

or purchased 6,400 subway cars and 10,000 buses. The results are extraordinary. Trains now last 40 times longer between breakdowns. The introduction of MetroCard and E-Z Pass has revolutionized people's travel habits and ridership has soared by nearly 40 percent. And through the use of successful policing strategies, first by the former NYC Transit Police Department, and now by the NYPD and MTA Police, crime within the system has dropped to record lows. Obviously, we have come a long way and we've learned a lot of valuable lessons.⁸

Agency Spending Patterns

Over the years, purchases have varied widely among the agencies depending on their initial immediate needs; and having satisfied those needs, the emphasis moved on to other modernizing requirements. Tables B-1 through B-3 highlight the shift in expenditures over the thirty-year period. Amounts are shown in current

Table A
Total (funded) Capital Program, all agencies, 1982-2011
Current and 2011 Dollars
 (in million \$)

Agency Total	10 years 1982-1991	8 years 1992-1999	10 years 2000-2009	Funded 2 years 2010-2011	Current ² 30 years 1982-2011	2011 \$ ¹ 30 years 1982-2011
NYCT	\$ 11,030.6	\$ 12,590.6	\$ 21,922.0	\$ 5,033.0	\$ 50,576.2	\$ 72,938.4
LIRR	1,864.7	2,479.2	4,563.2	1,001.0	9,908.1	14,017.8
MNR	1,503.7	1,643.5	3,187.8	667.4	7,002.4	10,051.8
MTA Bus	-	-	646.6	129.3	775.9	906.3
WTC/Security	-	-	249.0	100.0	349.0	400.4
MTA Interagency	-	-	648.0	230.2	878.2	1,015.4
Total Core Program	\$ 14,399.0	\$ 16,713.3	\$ 31,216.6	\$ 7,160.9	\$ 69,489.8	\$ 99,330.1
MTACCC	-	157.7	12,646.0	1,981.6	14,785.3	17,376.6
Total CPRB Program	\$ 14,399.0	\$ 16,871.0	\$ 43,862.6	\$ 9,142.5	\$ 84,275.1	\$ 116,706.7

Source: MTA

Note: numbers may not add due to rounding.

¹Bureau of Labor Statistics (http://www.bls.gov/data/inflation_calculator.htm) conversion using mid-point of program.

²The value of a dollar at the time at which it is measured.

⁸ Available from <http://www.mta.info/mta/news/public/somta.html>

dollars, but percent distribution has been used for comparability and to better emphasize the components to which the agencies gave priority. Because approval of the 2012–2014 years in the current capital program is tied to efficiency savings in categories that have not yet been identified, a breakdown of the last three years' anticipated spending has not been included in this discussion.

NYCT

In the first ten years, New York City Transit concentrated on subway cars, spending nearly a third of its funds (\$3.9 billion) on new equipment and refurbishing existing units (Table B-1).

In the next eight years (1992–1999), refurbishing ended and another \$2.1 billion (16.4 percent) was used to boost the growing fleet of new cars. Also during this period, the emphasis shifted to stations, with \$2.7 billion (21.4 percent) directed to improving the neglected conditions. In the decade from 2000–2009, the pattern continued as new cars represented a \$4.2 billion expenditure, with stations close behind at \$3.9 billion, together comprising almost 40 percent of the program.

Throughout the capital programs, funding for buses grew steadily, from 4.3 percent of the program in the first ten years to nearly 19 percent in the first two years of the current capital program. Track, structures, and equipment have remained at around 10 percent of funds, while signals and communications have increased steadily in importance, representing nearly a quarter of the \$5 billion budget for the 2010–2011 period. Funding priority has also been given to new subway cars (18.5%) in the current program.

LIRR

In contrast, the LIRR in the first capital program focused on a badly needed expansion of the Hillside maintenance facility; at \$631 million it represented nearly 30 percent of the first ten years' funding (see Table B-2). The second highest investment, passenger stations, at 15.2 percent, primarily consisted of Penn

Station passenger access enhancements (\$196.1 million) and high-level platform improvements (\$47.7 million).

In the following eight years, nearly a billion dollars, almost 40 percent of the capital budget, was spent on rolling stock, consisting of replacement of aging diesel locomotives and coaches, and electric cars. Station modernization (platform and overpass improvements, station building rehabs, and parking improvements) took the second largest financial bite (17.5%).

During the 2000–2009 capital programs, new cars (M-7s)⁹ were nearly 30 percent of the budget, while track represented 19.1 percent, up from almost 10 percent in the first ten years. Annual track rehabilitation plus Jamaica capacity improvements and the Jay Interlocking reconfiguration made up the bulk of the nearly \$875 million spent on track work during the ten years. The first two years of the current program once again focuses on rolling stock funding, at a third of the budget, with track at 19.3 percent.

MNR

As with LIRR, MNR needed to focus on rolling stock during the first two capital programs (Table B-3). Nearly \$354 million was spent primarily on 142 M-3 cars, seven locomotives, and 54 M-4 electric cars. However, the railroad spent almost as much (20.4%) on track and line structures, primarily for interlocking improvements, the Park Avenue tunnel rehabilitation, and cab signaling. Other significant investments included almost \$137 million for Grand Central Terminal (GCT), featuring the creation of the North End Access; the Harmon Shop modernization and a new shop at Brewster; and the electrification of the New Harlem line.

During the 1990s, MNR continued to invest heavily in track and line structures (34.6%), which included cyclical track renewal, rail bed improvements, and bridge rehabilitation and preservation. There was also an increased investment in stations

⁹ This was a joint procurement with MNR.

(29.1%), dominated by work at GCT, rehabilitation and restoration of platforms and overpasses, parking improvements, and investment in ADA key stations.¹⁰

The procurement (jointly with LIRR) of new M-7 electric cars for use on the Hudson and Harlem lines, and M-8s for use on the New Haven line (jointly with the Connecticut Department of Transportation [CDOT]) governed the next decade of capital spending. Station improvements received continued emphasis, primarily for the Hudson line and the New Haven line stations in New York State. Further investment was also made for the replacement of outmoded facilities at Harmon Yards, a new carwash for the Highbridge Yard, and the expansion of the Brewster Yard.

In the current 2010–2014 capital program (Table B-3), the first two years are focused on completing the purchase of up to 380 M-8 cars (MNR, 35%; CDOT, 65%) to modernize the New Haven Line electric fleet

MTA Bus Company

MTA Bus Company was established in late 2004 to take over private bus routes operated under contract to the NYC Department of Transportation. The routes were absorbed on a staggered schedule, beginning with Liberty Lines Express in January 2005 and ending with Triboro Coach Corp. in February 2006. As part of the takeover, NYC allocated \$132 million of its federal funding for the purchase of approximately 300 new express and local buses to improve public transportation in the areas served by the city's franchised bus companies. A reserve of \$242 million was set

¹⁰ For a discussion of the ADA key stations requirement, see PCAC's 2008 report, *Welcome Aboard: Accessibility at the MTA*, available from http://www.pcac.org/wp-content/reports/2008_ADA_accessibility.pdf

Table B-1
NYCT, including SIRTOA,
capital program: 1982-2011
 (in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2011 2 years	% Dist
Buses	\$ 476.5	4.3%	\$ 1,065.0	8.5%	\$ 1,515.5	6.9%	\$ 941.1	18.7%
Car, overhauls/rebuilt/rehab	1,953.6	17.7%	123.6	1.0%				
Depots	568.8	5.2%	546.9	4.3%	1,180.4	5.4%	47.2	0.9%
Line equipment	537.7	4.9%	655.7	5.2%	1,189.7	5.4%	61.2	1.2%
Line structures	602.8	5.5%	741.8	5.9%	1,601.9	7.3%	215.6	4.3%
Misc./emergency	195.9	1.8%	886.7	7.0%	1,236.4	5.6%	205.8	4.1%
New cars/subway cars	1,646.4	14.9%	2,066.3	16.4%	4,172.5	19.0%	929.1	18.5%
New routes	267.0	2.4%	650.3	5.2%				
Passenger stations	835.0	7.6%	2,699.9	21.4%	3,897.8	17.8%	591.6	11.8%
Power/traction power	505.7	4.6%	230.7	1.8%	697.6	3.2%	119.7	2.4%
Security	48.1	0.4%	220.6	1.8%	49.9	0.2%		
Service vehicles	113.7	1.0%	68.4	0.5%	230.1	1.0%	22.7	0.5%
Shops and yards	988.4	9.0%	221.5	1.8%	789.2	3.6%	100.5	2.0%
Signals and communications	956.2	8.7%	1,219.4	9.7%	3,232.6	14.7%	1,214.4	24.1%
Staten Island Railway					59.7	0.3%	41.9	0.8%
Track, structures, equipment	1,334.8	12.1%	1,193.8	9.5%	2,068.7	9.4%	542.4	10.8%
Total	\$ 11,030.6	100.0%	\$ 12,590.6	100.0%	\$ 21,922.0	100.0%	\$ 5,033.2	100.0%

Source: MTA

Table B-2
LIRR
capital program, 1982-2011
 (in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2011 2 years	% Dist
Communications and signals	\$ 245.7	13.2%	\$ 112.1	4.5%	\$ 492.7	10.8%	\$ 128.2	12.8%
Electrification	234.6	12.6%						
Line structures	147.2	7.9%	186.5	7.5%	503.3	11.0%	120.5	12.0%
Miscellaneous	54.1	2.9%	193.0	7.8%	294.2	6.4%	63.3	6.3%
Passenger stations	283.3	15.2%	434.4	17.5%	515.7	11.3%	7.7	0.8%
Power			16.4	0.7%	227.5	5.0%	54.1	5.4%
Rolling stock	58.5	3.1%	988.8	39.9%	1,365.6	29.9%	358.7	35.8%
Security	1.3	0.1%						0.0%
Shops and yards	630.8	33.8%	153.9	6.2%	290.5	6.4%	75.4	7.5%
Track	209.2	11.2%	394.1	15.9%	873.7	19.1%	193.1	19.3%
Total	\$ 1,864.7	100.0%	\$ 2,479.2	100.0%	\$ 4,563.2	100.0%	\$ 1,001.0	100.0%

Source: MTA

Table B-3
MNR
capital program, 1982-2011
 (in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2011 2 years	% Dist
Communications and signals	\$ 132.9	8.0%	\$ 79.5	4.8%	\$ 147.1	4.6%	\$ 104.8	15.7%
Electrification	63.5	3.8%				0.0%		
Miscellaneous	35.1	2.1%	110.3	6.7%	165.8	5.2%	27.3	4.1%
Network expansion			37.4	2.3%		0.0%		
Power	281.7	17.0%	40.2	2.4%	130.0	4.1%	57.3	8.6%
Rolling stock	353.9	21.4%	239.3	14.6%	1,056.2	33.1%	245.5	36.8%
Shops and yards	159.3	9.6%	88.8	5.4%	532.1	16.7%	34.8	5.2%
Stations	293.5	17.7%	478.7	29.1%	712.6	22.4%	76.4	11.4%
Track and line structures	337.4	20.4%	569.4	34.6%	444.0	13.9%	121.5	18.2%
Total	\$ 1,657.2	100.0%	\$ 1,643.5	100.0%	\$3,187.8	100.0%	\$ 667.60	100%

Source: MTA

aside for further bus improvements by the MTA Board.¹¹ The investment in the MTA Bus Company at the end of 2004 was \$502 million (see Table C).¹²

The MTA Bus Company inherited a substantial bus fleet and maintenance network in need of significant modernization. In the 2005–2009 capital program another \$144.5 million was spent on upgrading the MTA Bus Company fleet and other capital improvements.¹³ The MTA Bus Company’s 2010–2014 capital program, totaling \$325 million, builds upon these past investments and provides the resources needed to restore, replace, and modernize significant portions of the agency’s fleet and infrastructure. Of the \$325 million, \$212 million is allocated for the purchase of 285 new buses, and another \$87 million is planned for facility and equipment investments.

Currently, the MTA Bus Company operates the tenth largest bus fleet in the United States and Canada, serving nearly 400,000 riders daily. With a fleet of over 1,300 buses, the agency operates forty-five local bus routes serving the Bronx, Brooklyn and Queens, and thirty-five express bus routes between Manhattan, the Bronx, Brooklyn, and Queens.¹⁴

¹¹ Under the original agreement, the city leased all of its bus-related assets to the MTA, including approximately 450 new buses and two bus depots. The city set aside resources originally allocated to the LaGuardia Airport subway extension for a reserve, to be used for additional fleet replacement, facilities, and other necessary capital improvements. (APTA, May 3, 2004, http://www.apta.com/passengertransport/Documents/archive_434.htm). Currently, capital funding is a federal funds allocation from the New York City Department of Transportation, approximately \$30 million annually, which requires a 20 percent match—10 percent New York City and 10 percent New York State (per discussion with MTA staff).

¹² Available from http://www.qgazette.com/news/2004-12-02/Front_Page/

¹³ The 1,250 buses inherited from the private companies were, on average, between fourteen and sixteen years old. Considering that the NYCT standard retires buses once they are in service for twelve years, more than half of the inherited buses had to be replaced. As of July 2007, MTA Bus had replaced about 859 buses. Seven hundred fifty-nine were newly purchased through a joint procurement with NYCT. The other one hundred were refurbished NYCT buses. By the end of 2007, the fleet had more than 1,400 buses with an average age of 4.7 years. See the MTA Inspector General’s report on the MTA Bus Company, at <http://mtaig.state.ny.us/assets/pdf/08-07.pdf>

¹⁴ See MTA, <http://www.mta.info/busco/about.htm>

Table C
MTA Bus Company
capital programs, 2000-2011

(in millions)

Category	2000-2004 5 years	2005-2009 5 years	2010-2011 2 years
MTA Bus Company projects	\$ 502.05	\$ 144.50	\$ 129.30
Total	\$ 502.05	\$ 144.50	\$ 129.30

Source: MTA

World Trade Center (WTC)/Security

After 9/11 a new “agency” for security was created in the capital program. As seen in Table A, \$249 million was allocated in the 2000–2009 period, and \$100 million for the first two years of the current program, and \$235 million for the last three years. For the current program, MTA police expenditures were moved from Interagency to the Security agency. Also, security funds formerly assigned to MTACCC are now under WTC/Security.

MTA Interagency

This category (see Table A) represents mostly planning and customer service costs (\$535.4 million) for 2000–2009. In the current capital program, \$259 million (out of \$325 million), is dedicated to the Business Service Center (BSC) at \$75 million, and the rehabilitation of the Jay Street facility¹⁵ for \$184 million; the balance is for long-range planning support.

¹⁵ With the recent cutbacks in personnel, the Jay Street facility is no longer needed for the BSC. The building is leased from New York City. It contains extensive communication equipment belonging to NYCT. New York University (NYU) has expressed an interest in the building for a new technology initiative. The MTA is going to relinquish control and be compensated to move the equipment to a ground floor above the subway.

Capital Construction Company

In 2003, the MTA board authorized the creation of the MTA Capital Construction Company (MTACCC) as a new subsidiary with the specific mission to plan, design, and construct major MTA expansion and security projects for the operating agencies. Primarily, this includes East Side Access, which will bring LIRR into a terminal under GCT; phase 1 of the Second Avenue subway; extension of the 7 line to the Hudson Yards; and the Fulton Transit Center (see Table A).

Financing

In the late 1970s, the largest contributor (78%) to the NYCT capital program was the federal government, through grants from the Urban Mass Transportation Administration¹⁶ and the Federal Aid to Urban Systems program.

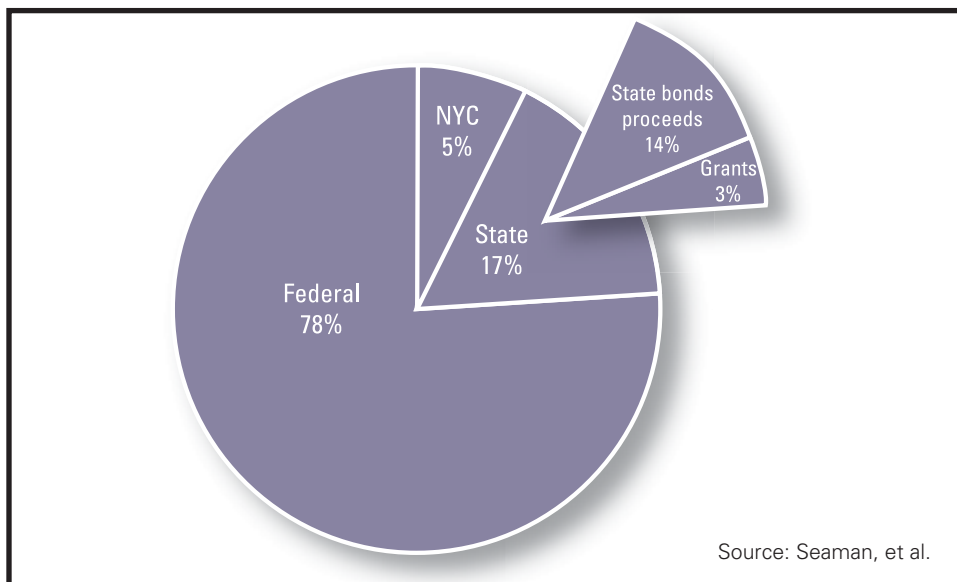


Fig. 1. MTA Capital Program Funding Sources, 1975–1978

¹⁶ Now known as the Federal Transit Administration (FTA).

1982–1991 Capital Programs

For the first capital program, after a rigorous campaign by Ravitch for funding commitments at all levels, the MTA received:

From federal sources

- Approval to sell depreciation tax benefits¹⁷
- Favorable financing terms for subway car manufacturers overseas¹⁸
- Increased federal transit funding in 1982
- Unused funds from the canceled Westway project

From state sources

- Ten-year commitment for transit subsidies (direct appropriations) against which bonds could be written (known as “contract bonds”)
- Authority to issue bonds backed by the farebox

From New York City

- Increased funding to NYCT

Also, importantly, Ravitch was able to have the capital planning process streamlined: the NYS Legislature authorized a five-year planning process and a Capital Program Review Board (CPRB) to approve any changes.¹⁹

Robert Kiley replaced Ravitch in 1983 and spent his efforts reorganizing the internal management structure of NYCT. The next capital program (1987–1991) moved ahead, propelled by the momentum of the first program. The funding breakdown for the first ten years is shown in Figure 2 below. Debt financing is a darker shade.

¹⁷ Known as “safe harbor” leases, part of the Economic Recovery Act of 1981. With the help of New York representatives in the US Congress, a provision was placed in the act that allowed the MTA to sell its depreciation tax benefits, worth an estimated three-quarters of a billion dollars. See James Lardner, “Painting the Elephant,” *New Yorker* magazine, June 25, 1984, 59–60, for a recounting of this impressive maneuver.

¹⁸ The Japanese Export-Import Bank provided the financing for the first order of new cars to be purchased from Kawasaki (Lardner, 61).

¹⁹ Seaman, et al., 5–6.

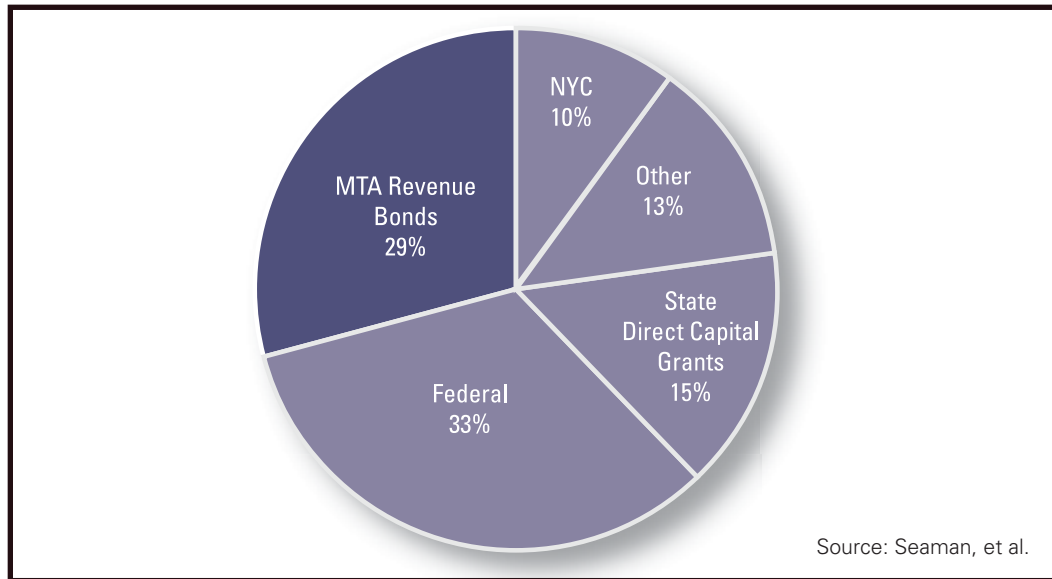


Fig. 2. MTA Capital Program Funding Sources, 1982–1991

1992–1999 Capital Program

The momentum of the first ten years unfortunately stalled by 1991. Things were better—new cars, no graffiti, and improved service. Hidden problems such as old signal systems, new ADA requirements and the pressing desire for an automated fare collection system were now driving the need for capital investment; but Albany was not impressed. In 1992, MTA won an increased share of the petroleum business tax (PBT), a good basis for new bond issues, but New York State dropped its direct grants to the capital program (paying the debt service on bonds issued under the first two capital plans). The MTA was now expected to issue more debt based on dedicated tax funds (DTF) such as the petroleum business tax, motor fuel tax, motor vehicle fees, a $\frac{1}{4}$ percent district sales tax, and a franchise tax (see Figure 3). This put the MTA at higher risk because DTFs are more susceptible to the economic cycles. The biggest risk, however, is that the state legislature is not obligated to make appropriations to fund the MTA dedicated tax fund, and there is no guarantee that will happen. It is the MTA that is obligated to investors on the bonds that are

issued.²⁰ Under this new scenario, the anticipated five-year 1992–1996 program was extended through 1999.²¹ It also didn't help that New York City reduced its yearly contribution in support of the NYCT in 1992.²²

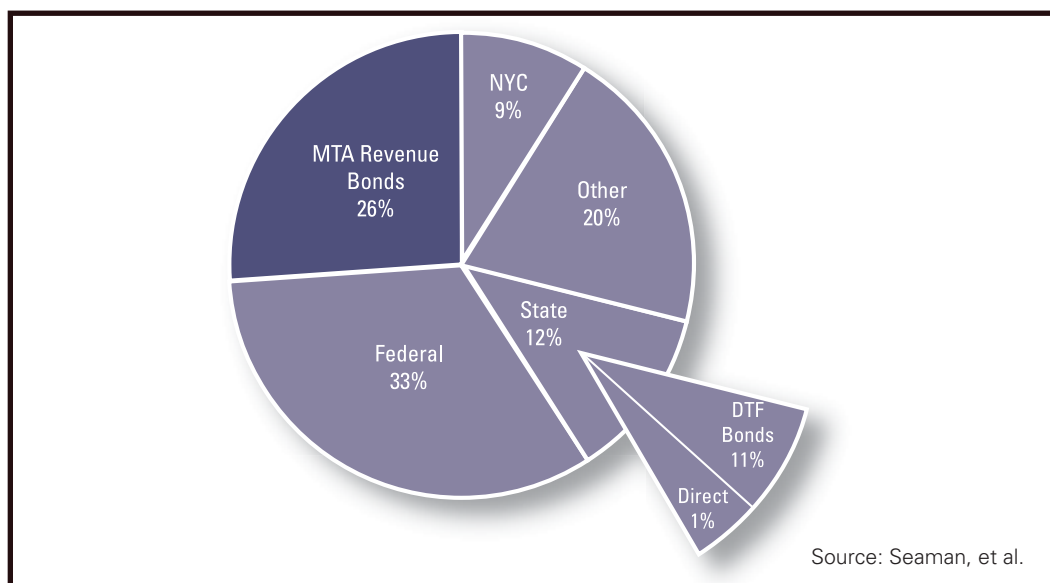


Fig. 3. MTA Capital Program Funding Sources, 1992–1999

2000–2004 Capital Program

Besides the new bond issues that were necessary due to the reliance on DTFs, the 2000–2004 program took another turn that increased the debt funding even more. A restructuring of existing debt (state contract bonds from the 1980s) supplied the MTA with greater borrowing power but committed the Authority to high levels

²⁰ Seaman, et al. pp. 11–12.

²¹ According to Peter Derrick, transportation historian, in 1995 then-MTA Chairman Virgil Conway, appointed by Governor George Pataki, made a decision to change the next five-year sequence to 1995–1999. This was done in part to make sure that the next MTA capital program (which would have been up for renewal in 1996) would not require any increase in direct state aid, and would not interfere with Pataki's pledge not to raise taxes, as Pataki was up for reelection in 1998.

²² This amount was (in 2004 dollars) \$150 million; however, the city later restored some funding so the annual contribution was only reduced to \$243 million in 1992–1999, from \$277 million for 1982–1991 (Seaman, et al., p. 9).

of debt service far into the future (an increase of bond maturity from thirteen to twenty years).²³ Debt financing made up a huge 65 percent of the support for the 2000–2004 program, the largest amount to date (see Figure 4). To add to the financing challenges, New York City decided to drastically cut its support further, from \$243 million per year in 1992–1999 (9%) to \$95 million (3%).²⁴

Complicating funding needs, the events of September 11, 2001, changed forever the MTA's approach to securing its network and preparing for emergencies. As a result, \$591 million was added to the 2000–2004 capital program for priority investments, with \$143 million of that amount coming from the Federal Emergency Management Agency.²⁵

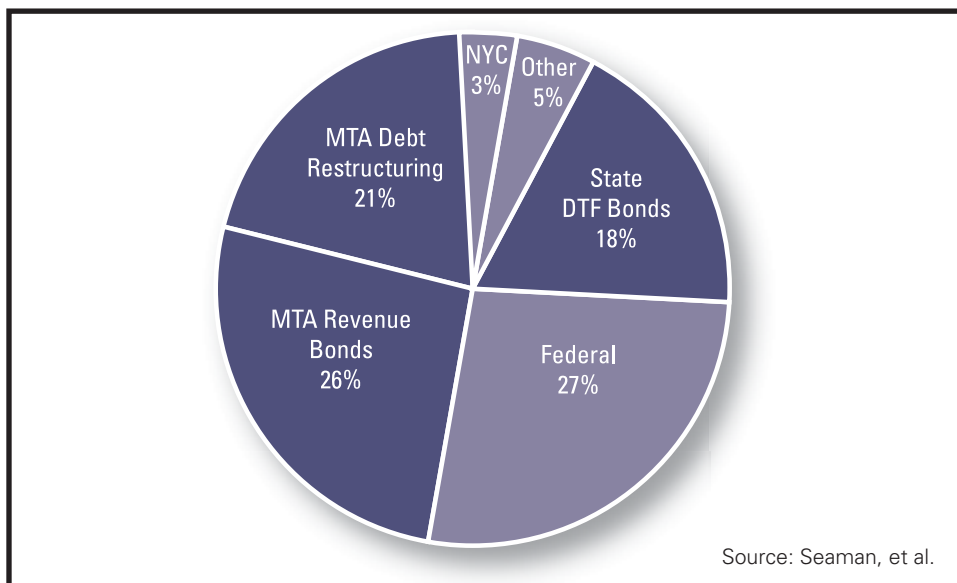


Fig. 4. MTA Capital Program Funding Sources, 2000–2004

²³ A state bond act that would have supported highway projects throughout the state was defeated, leaving a \$1.6 deficit in the MTA capital budget.

²⁴ Seaman, et al., p. 12.

²⁵ MTA capital program, 2005–2009, p. 5.

2005–2009 Capital Program

Direct funding for the next capital program, 2005–2009, benefitted from the Federal American Recovery and Reinvestment Act of 2009, with MTA receiving \$654 million in stimulus funds. An additional \$336 million of federal dollars supported security investments to better strengthen the system. Those sources, plus Federal Formula and Flexible Funds and New Starts, brought the total federal support to 39 percent of the budget for this five-year program (see Figure 5).

Fortunately, in 2005 the New York State voters approved a Transportation Bond Act, and MTA reaped a welcome \$1.45 billion share from the proceeds. Other direct funding included the contribution of \$2.133 billion by New York City for the 7 Line Extension construction project²⁶ (9% of the capital program); and the city's contribution of \$557 million to the core subway and bus capital needs (2% of the capital program). Other sources, totaling \$1.157 billion, included asset sales, program income, and operating income to capital.²⁷

The MTA was still left in a shortfall position whereby once again bonds, backed by farebox revenues and tolls, were issued for a total of \$4.505 billion; and debt secured by DTFs totaled \$5.078 billion. Together these debt instruments funded 39 percent of the 2005–2009 capital program.

²⁶ This was part of an economic development initiative by Mayor Bloomberg's administration in support of the development of the John D. Caemmerer West Side Storage rail yards used by LIRR. However, any overruns would be the responsibility of the MTA.

²⁷ These funds are now referred to as PAYGO (pay as you go funds).

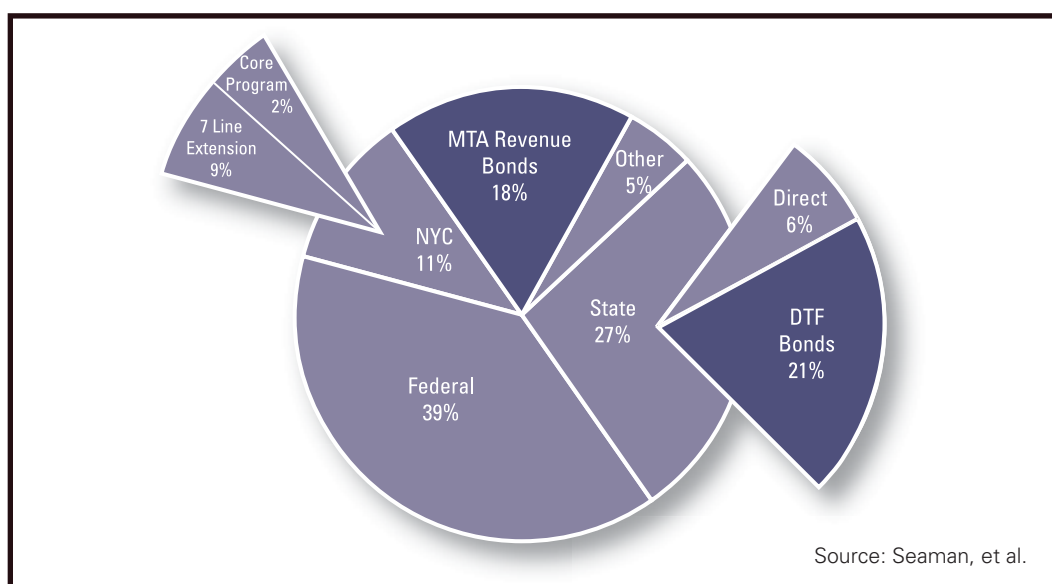


Fig. 5. MTA Capital Program Funding Sources, 2005–2009

2010–2014 Capital Program

The current 2010–2014 capital program funding has been a long saga of hand wringing and political machinations. In 2009, the MTA once again faced a serious shortfall in the projected 2010 operating budget and funding for the coming capital program. As noted previously, the DTF sources unfortunately do not assure stable funding. Five of the MTA's largest sources of dedicated taxes and fees are closely associated with general business conditions: the corporate franchise tax surcharge, MTA district sales tax, petroleum business taxes, mortgage recording tax, and the urban taxes.²⁸ The slowing economy since 2008 greatly reduced revenues from these sources, particularly from the property transfer taxes.

In May 2009, after great debate,²⁹ the NYS Legislature enacted a new regional

²⁸ Separate mortgage recording and transfer taxes in New York City. See the Independent Budget Office (IBO) Fiscal Brief, p. 7. This is an excellent analysis of the tax and fee revenues dedicated to MTA. See Appendix A for a glossary of these dedicated transportation revenue accounts and Appendix B for a schematic on the ways these funds reach the MTA.

²⁹ The proposal for "congestion pricing" did not win enough converts in New York City and Albany.

payroll mobility tax.³⁰ The tax affects employers in the Metropolitan Commuter Transportation District (MCTD), which comprises New York City and Nassau, Suffolk, Westchester, Dutchess, Orange, Rockland, and Putnam Counties. The revenues from this new tax were projected to be \$1.54 billion in 2010. This figure proved to be overestimated as collections came in at \$1.31 billion; but it still represented 30 percent of dedicated tax and fee revenues. And, not surprisingly, this tax created much resentment in the suburban counties.³¹

Also passed were a collection of smaller assessments that apply to the MCTD and are lumped together under the title “MTA Aid” in the MTA financial statements. They include an increase in the auto registration fee of \$25; a supplemental fee of \$1 for driver licenses; a taxicab tax of \$.50 for rides originating in New York City; and an auto rental tax of 5 percent of the rental charge. These taxes were estimated to bring in \$328.3 million in 2010 but only yielded \$247.7 million. It is important to note that these new taxes were given some flexibility: to be used first for securing the \$6 billion in debt needed for the capital program; or, if not so pledged, to be utilized to support the operating budget.³²

To make matters worse, on October 15, 2009, then-Governor Paterson announced a deficit reduction plan to address the state’s forecasted operating deficit for its fiscal year ending March 31, 2010. As a result, the State Legislature reduced its appropriations to the MTA for 2009 by \$143 million. This is the first time that an existing appropriation to MTA has been reduced under circumstances in which the money was derived from a “dedicated” MTA tax and had already been collected by the state. As a result, MTA was forced to cut staff by 15 percent and incorporate service cuts for 2010 in order to produce a balanced operating budget.

³⁰ It was 34 cents per \$100 of payroll applicable to employers in the MTA service area with payrolls over \$2,500 each quarter.

³¹ In response to the complaints from suburban areas, in December 2011, the law was changed: businesses with annual payrolls below \$1.25 million saw the tax disappear, while more than 6,000 businesses with payrolls between \$1.25 and \$1.75 million had their payroll tax cut by as much as two-thirds. An estimated 414,000 self-employed workers will also see their taxes lowered. The new measure would also make elementary and secondary schools—both public and private—exempt from the tax. *Transportation Nation*, December 12, 2011.

³² MTA November 2009 Plan for 2010 and November 2011 Plan for 2012.

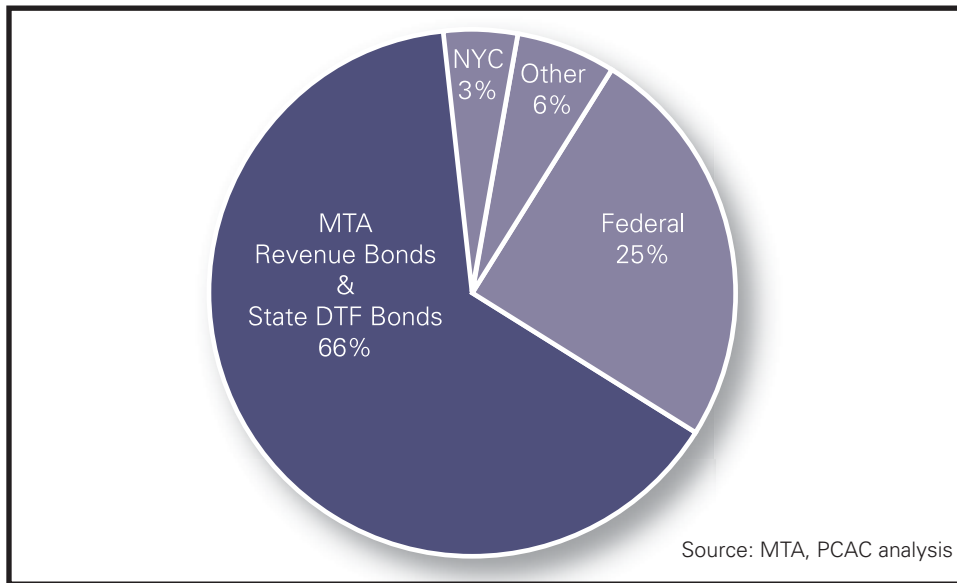


Fig. 6. MTA Capital Program Funding Sources, 2010–2011

Concurrently, the capital program funding also came under serious scrutiny. According to the MTA’s final approved 2010–2014 capital program (Table D):

On September 29, 2009 the MTA Board approved a proposed \$28.08 billion 2010–2014 Capital Program and submitted that plan to the MTA Capital Program Review Board (CPRB) in October 2009 requesting their approval of the \$25.572 billion CPRB portion of that plan. On December 31, 2009, the CPRB vetoed that plan without prejudice to permit additional time to resolve issues related to fully funding the program. The MTA prepared a revised CPRB program totaling \$23.812 billion. The MTA Board approved the revised plan on April 28, 2010 and the CPRB approved it on June 1, 2010.

The revised program was reduced to \$23.812 billion by sharpening the focus of the program to ensure the delivery of specific customer benefits for the lowest cost. Efforts to secure benefits at the lowest cost include examining options for extending the useful life of assets, replacing

Table D
Revised 2010-2014 capital program, all agencies
TOTAL (in millions)

Agency Total	Revised 5 years 2010-2014	Funded 2 years 2010-2011
NYCT	\$ 11,649.0	\$ 5,033.0
LIRR	2,316.0	1,001.0
MNR	1,544.0	667.4
MTA Bus	297.0	129.3
WTC/Security	335.0	100.0
MTA Interagency	315.0	230.2
Total Core Program	\$ 16,456.0	\$ 7,160.9
MTACCC	5,739.2	1,981.6
Total CPRB Program	\$ 22,195.2	\$ 9,142.5

Source: MTA Finance Committee, 12/19/2011

MTA Board 12/21/2011- Capital Program Amendment

Note: This capital program has been approved. Only the years 2010-2011 were initially funded. Years 2012-2014 are now funded, subject to some key assumptions.

Table E
Sources of MTA Capital Program Funding
1975-2011

	1975-1978 ¹	1982-1991	1992-1999	2000-2004	2005-2009	2010-2011
Federal Grants	78%	33%	33%	27%	39.0%	25%
State Bond Debt Service	14%					
NYC Grants	5%	10%	9%	3%	11.0%	3%
State Grants	3%	15%	1%		6.0%	
State DTF Bonds			11%	18%		
MTA Bonds		29%	26%	26%	39.3%	66%
MTA Debt Restructuring				21%		
Other		13%	20%	5%	4.7%	6%
	100%	100%	100%	100%	100.0%	100%

Source: 1975-2004, Seaman, et al.; 2005-2011, MTA

¹NYCT only.

components rather than entire assets, forgoing noncritical investments entirely and scaling back nonessential project elements. In addition, given the projected deficits for the MTA's operating budget, capital projects will be expected to reduce the costs of operations. These savings offset a comparable shortfall of federal funds expected to be available for the 2010–2014 period.^{33,34}

Table E illustrates the historical pattern of capital financing sources, while Figure 7 shows the growth in the MTA's long-term debt (in 2011 dollars), from \$110.4 million in 1981 to \$32,096 billion in 2011.³⁵

As of this writing, the New York State Legislature has just approved a 2012–2013 budget. This financial plan provides for the full funding for the remaining three years of the 2010–2014 capital program (\$13.1 billion), with New York State making a direct contribution of \$770 million.³⁶ While this is good news, part of the plan is to increase the MTA's debt capacity by \$7 billion, from \$34 billion to \$41 billion. MTA has projected the need to borrow an additional \$4.5 billion through bond debt, but it was going to be limited to \$3 billion under its existing limit. While this additional bonding capacity is helpful, the crucial component of the funding strategy, however, is a low-interest-rate, extended maturity Railroad Rehabilitation and Improvement Financing (RRIF)³⁷ loan of \$2.2 billion to support the East Side Access mega project. This will give the MTA needed financial flexibility to meet the federal matching funds requirement for this project. It should be remembered, though, that the RRIF loan

³³ The MTA's 2010–2014 capital program was expected to coincide with the anticipated six-year 2010–2015 federal transportation funding reauthorization. Upon passage MTA would be seeking significant increases in its federal transit subsidies. However, Congress has deferred action on this legislation.

³⁴ MTA's 2010–2014 Capital Program Amendment, p. 1.

³⁵ After reviewing the older MTA annual reports, PCAC would like to see a return to this format which could be posted on the MTA website in pdf format. These are clear presentations of operations and financial status located in one document. Recent annual data are buried in a variety of reports under "Financial Information" in the MTA website "Transparency" section. This makes it difficult to find information and hardly qualifies as "transparency."

³⁶ This represents state subsidies for interest payments on MTA revenue bonds issued 1982–1991, or so-called "contract" payments.

³⁷ Administered by the Federal Railroad Administration

will not be transacted until all of the other funding has been put in place. Concurrent with these financial plans, the MTA has reduced its capital program needs for 2010–2014 to \$22.195 billion (from \$23.812 billion) through efficiency initiatives (see Table F). In any event, it is clear that debt remains the major component of MTA's financing plan for capital expenditures. And, at the end of the day, it must be remembered that the backstop to all of this debt is the farebox, a very sensitive issue.

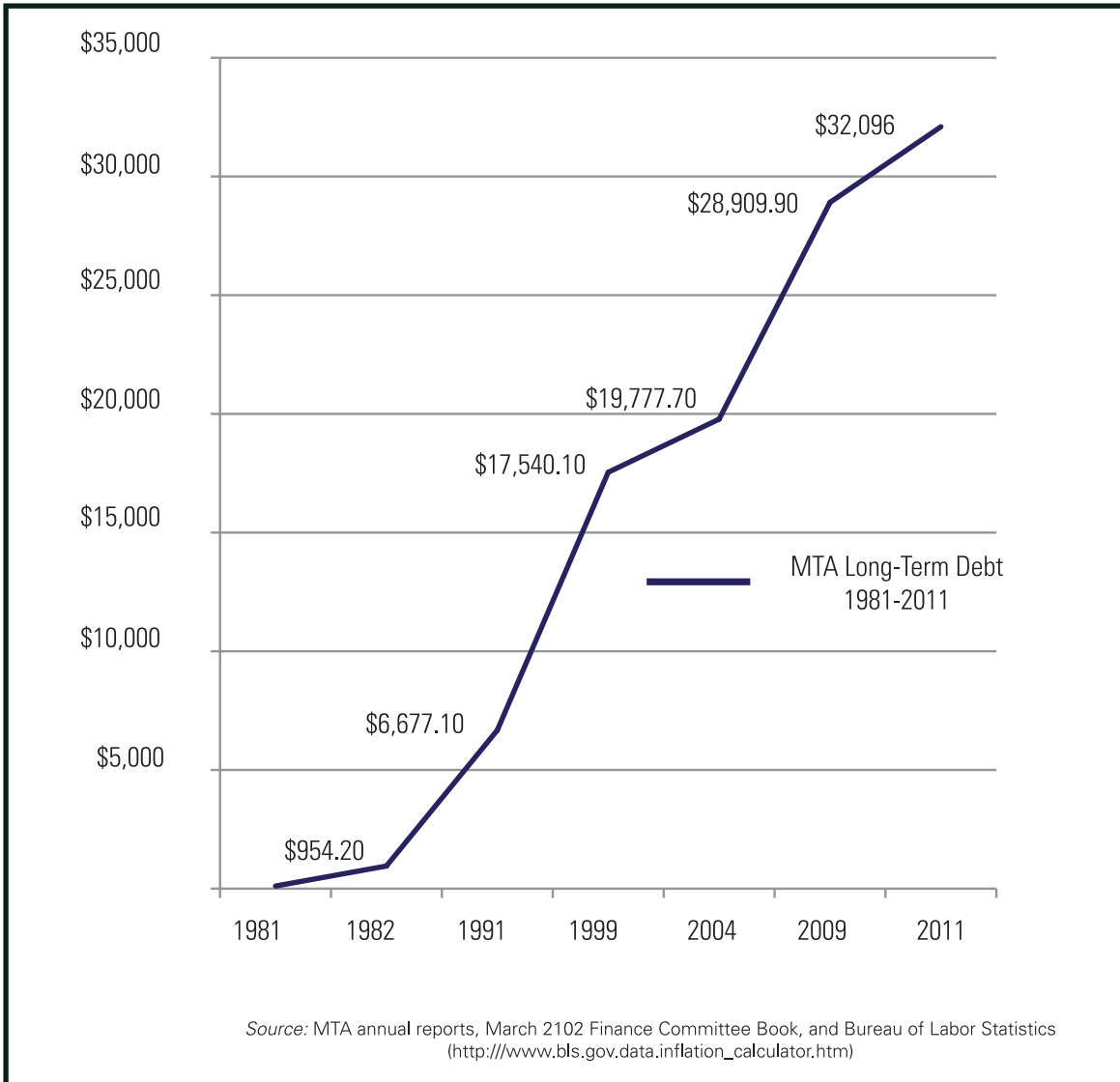


Fig. 7. MTA Long-Term Debt, 1981–2011

Table F**2010–2014 MTA capital program funding sources**

(as supported by the NYS approved budget for 2012–2013, \$ in millions)

Program funding plan	Approved 2010-2011	Approved 2012-2014	Total
Federal formula, flexible and misc.	\$ 2,188	\$ 3,595	\$ 5,783
Federal high speed rail	0	295	295
Federal security	90	135	225
Federal RRIF loan		2,200	2,200
MTA bus federal formula/match	64	103	167
City capital funds	200	562	762
State assistance	0	770	770
MTA bonds	6,000	4,503	10,503
Other	600	890	1,490
Total CPRB Program	\$ 9,142	\$ 13,053	\$ 22,195
Bridges and tunnels dedicated funds	\$ 954	\$ 1,125	\$ 2,079

Source: 2010-2014 MTA Capital Program Amendment, December 2011

Table G**Yearly debt service through 2030
(in millions, as of March 2012)**

\$ 1,112	MTA Revenue Bonds
471	TBTA Revenue Bonds
147	TBTA Subordinate Revenue Bonds
387	MTA DTF Bonds
165	MTA State Contract Bonds
27	MTA Certificates of Participation (2 Broadway)
\$ 2,309	Total

Source: March 2012 MTA Finance Committee Book, Finance Watch, IV-10

Debt Service

The reliance on debt financing leads to a related and concerning topic—debt service. The latest debt amount outstanding is \$32.7 billion,³⁸ *requiring an average annual debt service of \$2.3 billion out of \$12.6 billion in operating revenues* (see Table G).

Benefits

Over the last thirty years a certain level of debt financing was necessary to leverage a nearly \$117 billion (2011 dollars) investment in the system; and as a consequence, the economic rejuvenation of the whole New York City region (now with \$1.3 trillion

Table H
NYCT service improvements, 1982-2011

Ridership (millions)	1982	2011	% Change
Subways	989.3	1,640.0 ¹	66%
Buses	512.3	665.3 ²	30%
MDBF ³			
Subways	7,186.0	172,700	2303%
Buses	941.5	3,340 ²	255%
Subway terminal on-time performance			
	71%	85%	20%
Crime (major felonies)			
Subways	14,306.0	2,543	-82%

Source: PCAC 1984; Seaman, et al., MTA Transit Committee Book, January and February 2012

¹ Does not include Staten Island Railway (SIRTOA); this the highest annual subway ridership since 1950

² Does not include MTA Bus

³ Mean Distance Between Failure (reliability)

³⁸ March MTA Finance Committee Book, p. IV-10.

in economic output, second only to Tokyo).³⁹ Tables H and I highlight some facts in appreciation of the financing efforts of the last thirty years.

It should be remembered that many operating metrics that are kept today, such as “wait assessment” for buses and subways, were nonexistent in 1982. Further, measures that were reported were devoid of any recognition of the riders’ perspective.⁴⁰ Still, it is startling to see how much ridership and the basic performance of the system has improved. Today, it seems almost incredible that the subways had a mean distance between failure (MDBF) of a mere 7,186 miles in 1982 and that now their MDBF is over 170,000 miles. The dramatic increase in MDBF was aided not only by new rolling stock, but also by upgrades to shops and the introduction of a scheduled maintenance system. Likewise, the commuter railroads’ performance improved, though not quite to the level of the subway operations. Much of the gain

Table I
Commuter rail service improvements, 1982-2011

Ridership (millions)	1982	2011	% Change	
LIRR	70.4	80.4	14%	
MNR	48.3	81.8	69%	
Terminal On-Time Performance				
LIRR	89%	94%	5%	
MNR (East of Hudson)	81%	97%	20%	
MDBF (miles)	1989 ¹	2003	2011	% Change 1989-2010
LIRR	21,000	30,000	169,724	708%
MNR	19,000	57,000	114,347	502%

¹ First year MDBF available

Source: Seaman, *et. al.*; PCAC, 1984; February 2012 MNR and LIRR Committee Book

³⁹ Florida, <http://www.theatlanticcities.com/jobs-and-economy/2011/09/25-most-economically-powerful-cities-world/109/>

⁴⁰ See PCAC, *Minutes Matter*, January 2011, p. 44.

in the commuter rail MDBF occurred after 2003 when the new M-7s were put into service (see Tables B-2 and B-3).

Increased capital investment also produced many environmental improvements such as the addition of air conditioning to trains and buses, removal of graffiti, and the substantial reduction in track fires. Most importantly, major felony crime in the subways is down an astonishing 82 percent, a key factor in ridership growth.

Role of PCAC

Since it was formed in 1977, the PCAC has always been an active participant in the MTA capital program discussions and an advocate for adequate funding of the MTA from the state and New York City. In 1981, the PCAC issued a seminal report (noted previously), *A Review of the MTA's Proposed Funding Sources for Capital Revitalization*,⁴¹ which evaluated Chairman Ravitch's proposals for new funding. Of specific concern, even then, were the proposals for bonds backed by fare and toll revenues:

[G]eneral purpose revenue bonds like the type called for by Chairman Ravitch can become a costly endeavor very quickly. . . . Unless some alternative source of funds was utilized to cover the debt service to fare box bonds, the fare itself would simply have to increase in order to absorb the cost.⁴²

Throughout the subsequent thirty-year period, PCAC has weighed in on every capital program funding debate through letters to legislators, memos to and meetings with MTA administration, and public testimony.⁴³ Indeed, PCAC saw the danger in increased debt financing, but to slow or stop the positive outcomes of capital investment was unacceptable. Riders have enjoyed the benefits of new investment—graffiti-free new train cars; new buses with accessibility features; improved

⁴¹ Prepared for PCAC by Donald King Cirillo, financial analyst.

⁴² PCAC, 1981, p. 23.

⁴³ A list of PCAC reports relating directly to capital program issues can be found in Appendix C.

reliability and faster trip times; and reduced crime. That same feeling exists today.⁴⁴

Findings and Recommendations

The MTA's staggering on-going annual debt obligation of \$2.3 billion, presents a major challenge for the new MTA leadership. While it appears that the MTA Finance Department does an admirable job of timely bond management to take advantage of interest rate changes, it is a daunting and complicated task to juggle the various facets of the debt and cash flow.

The PCAC offers the following recommendations for the pursuit of financial solutions:

1. Other sources of direct subsidies must be found. Public-private partnerships need to be pursued, such as value capture from new developments around train and subway stations.
2. A strong push needs to be made in Washington, DC, for more federal dollars to be available to the MTA in the next transportation funding reauthorization.
3. DTFs must be protected for the exclusive use of the MTA.
4. New York City must give a larger sustained amount of financial support for the capital program.
5. While not part of the capital program, adequate maintenance, funded by the operating budget, has a direct impact on capital replacement: the better the maintenance, the more capital investment can be delayed. The anticipated 7.5 percent fare increase in 2013 is not expected to provide enough funding for

⁴⁴ On an additional note, the PCAC has another role with respect to the capital program. The transportation planner position at PCAC has always been funded through a federal grant from the U.S. Department of Transportation (originally UMTA, now FTA) in order to provide outreach activities on the MTA capital program.

operations.⁴⁵ Further, MTA's annual \$2.3 billion debt service must come out of operations along with any PAYGO funds. New York State and New York City should match the riders' sacrifice and increase their direct funding of service operations by a similar amount.

6. The reality of the need to increase the state gas tax, implement tolling on the East River Bridges, and enact some form of congestion pricing must be faced. There are few new funding sources left to tap.
7. Related to the above recommendation is the gloomy outlook for the next capital program: sources for additional funds are nowhere in sight. *Planning for the financial support of the 2015–2019 capital program must start now.*

Over the last thirty years, the MTA has been aiming to bring the transit system back to a state of good repair, implement a cycle of normal replacement, and promote new initiatives. According to the MTA's *Twenty Year Capital Needs Assessment, 2010–2029* (2009), there are still many capital programs to be completed before these goals are met and the system will be economically competitive with those of other global cities:

While past investments have restored many of the system's assets, there is a significant backlog of assets that still require rehabilitation. And many assets that have been restored in past programs will reach the end of their useful lives over this twenty year period and require replacement.

On a fully unconstrained basis, the agencies' needs are even greater than what is included in this assessment since more backlogged State of Good Repair needs exist than can be implemented. (p. 9)

As a closing cautionary note—the significant financial needs for regeneration and

⁴⁵ MTA Chairman Joseph Lhota stated at the PCAC quarterly meeting on March 1, 2012, "The fare increase projected for 2013 (7.5 percent) will have to be used for pension and health care costs — not service. This increase will only allow us to 'tread water'."

modernization of the MTA transit system are not going to go away anytime soon. Policy makers and elected officials must take heed.

Appendix A

A Glossary of Dedicated Transportation Revenue Accounts⁴⁶

Dedicated Funds Pool

The dedicated funds pool (DFP) receives deposits of most of the petroleum business taxes and a large share of the motor fuel taxes and motor vehicle fees collected by the state. The DFP was established in 1991 as part of a broad effort by the state Legislature to continue capital investment in the state's transportation infrastructure. Previously, the MTA received direct capital grants from the state to finance infrastructure development. By statute, 37 percent of the funds collected in the DFP are allocated to the Mass Transportation Trust Fund (MTTF). The other 63 percent of DFP revenue flows to the Highway and Bridge Trust Fund.

Metropolitan Mass Transportation Operating Assistance Account (MMTOA)

This account pools revenue collected from the corporate franchise tax surcharge, MTA district sales tax, the basic petroleum business tax (the basic tax), and corporate franchise tax on transportation and telephone transmission. The account was established in 1980 by State Finance Law 88-a to fund the operating expenses of the MTA subsidiaries and to service the MTA's tax-revenue-backed bonds if the MTTF deposits are insufficient. Funds flow from the account to upstate transit systems according to statute and to the dedicated tax fund (DTF), Long Island Bus, and MTA Bus by appropriation.

⁴⁶ These explanations are taken from the New York City Independent Budget Office, *Fiscal Brief*, August 2011. This is an excellent description of how funds flow to the MTA.

Mass Transportation Trust Fund (MTTF)

This fund receives 37 percent of the taxes and fees deposited in the DFP (as noted above). The trust fund was established in 1991 along with the DFP. For 2010, the MTA estimated that 92 percent of trust fund revenue flowed to the DTF to pay debt service on DTF bonds with the balance going to upstate transit entities.

MTA Finance Fund

The MTA Finance fund, which was introduced in 2009, is funded by the payroll mobility tax—a 34 cent per \$100 payroll tax applicable to nearly all private- and public-sector employers operating within the area served by the MTA in New York State. This revenue may be used to service MTA debt and pay operating expenses of the MTA.

Note: On December 7, 2011, the state legislature passed the Governor’s Middle Class Tax Cut and Job Creation legislation that reduces the MTA payroll tax on small businesses while maintaining the necessary funding for the MTA from other sources. The tax will be eliminated for 289,000 small businesses, defined as those having an annual payroll between \$10,000 and \$1.25 million, in the MTA region. Additionally, more than 6,000 businesses with payrolls between \$1.25 and \$1.75 million will see their payroll tax cut by either one-third or two-thirds. The MTA payroll tax cut will also benefit approximately 414,000 self-employed taxpayers. All elementary and secondary schools, public or private, are exempt from the payroll tax under the new law. The new law has no impact on MTA funding because the state will compensate the MTA for all revenue lost by the tax cut.⁴⁷

MTA Aid Trust Account

The MTA Aid Trust Account, also introduced in 2009, is funded by supplemental

⁴⁷ “Governor Cuomo Signs Law to Provide Relief for Small Businesses Through Reduction of MTA Payroll Tax.” Governor Andrew M. Cuomo website. December 12, 2011. <http://www.governor.ny.gov/press/12122011%20PayrollTax%20>

motor vehicle license and registration fees, a supplemental car rental fee, and a fifty-cent charge on taxi rides within the MTA district. These taxes and fees may be used to pay debt service on MTA Bridges and Tunnels' debt or to help pay operating expenses, depending on the need.

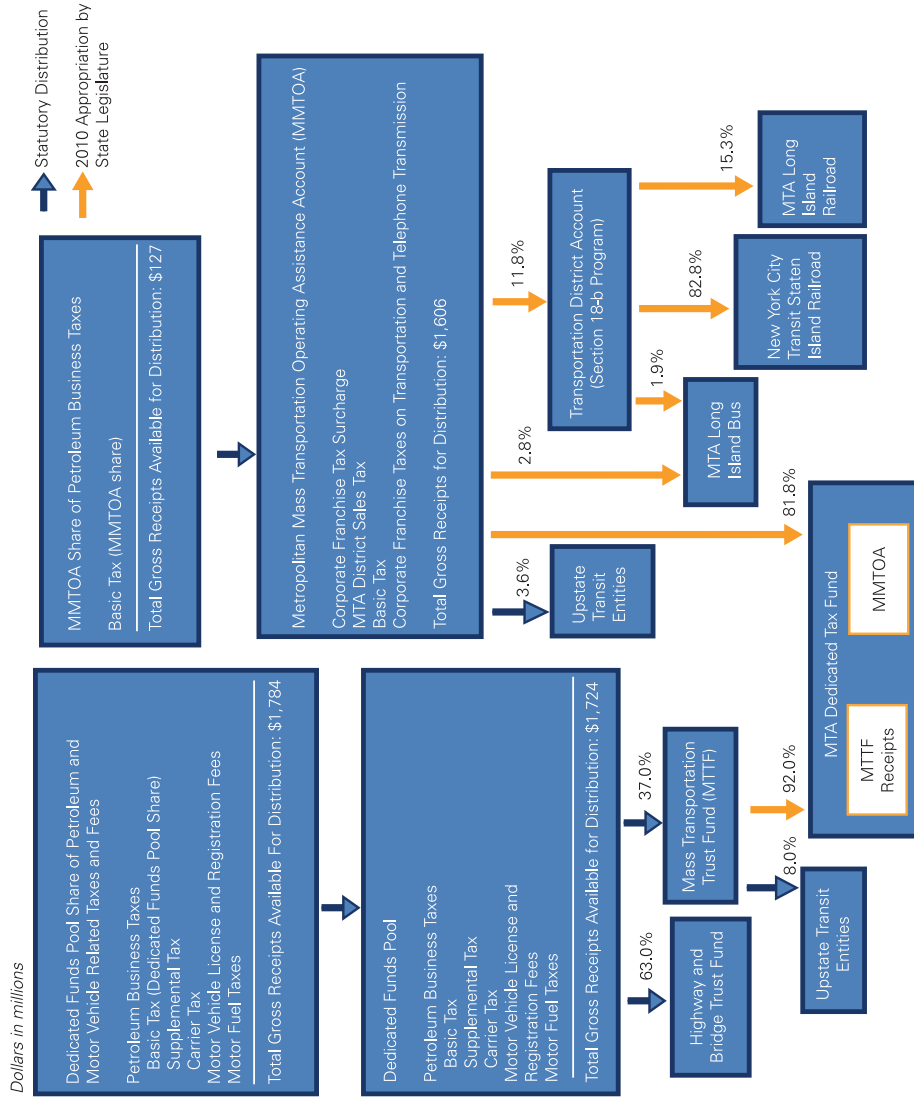
Transportation District Account (Section 18-b Program)

The Transportation District Account (TDA) was created in 1975 in anticipation of continuing operating deficits of the state's mass transportation systems. The TDA receives legislative appropriations for the Section 18-b Program, which helps pay for the operating expenses of MTA operating agencies. The New York State Commissioner of Transportation administers the program. The vast majority of the state's Section 18-b deposits into the Transportation District Account come from specific annual legislative appropriations from MMTOA and a small amount comes from the General Fund.

Appendix B-1

May 2012

2010 Budgeted Allocation of Dedicated Tax and Fee Revenues to Transit System Accounts



SOURCES: IBQ; Metropolitan Transportation Authority 2011 February Financial Plan; Metropolitan Transportation Authority 2010 Combined Continuing Disclosure Filing
NOTES: See page 4 of the text for an explanation of differences between the fiscal year deposits into MMTOA and the budgeted allocation from MMTOA to transit system accounts.

Appendix B-2

The Road Back: A Historic Review of the MTA Capital Program

May 2012

Allocation of Funds Available Directly to MTA and Related Entities, 2010

Dollars in millions



SOURCE: IBO; Metropolitan Transportation Authority, February 2011 Financial Plan

NOTES: Allocations as of March 31, 2011. Dedicated tax and fee revenue figures are final estimate values from February 2011 Financial Plan.

Appendix C

PCAC Reports on MTA Capital Program Issues

A Review of the MTA's Proposed Funding Sources for Capital Revitalization, April 1981

Recommendation/Conclusion:

The researched facts indicate that a shortfall in the funding of the capital revitalization plan will continue to exist even though Chairman Ravitch's funding proposals were all granted.

The Metropolitan Transportation Authority's Capital Program: Part I—Comparison with the Staff Report of Capital Revitalization for the 1980's and Beyond, April 1984

Recommendations:

- Develop additional performance indicators for the capital program. Connect those indicators to the capital program.
- Provide options for the future size of the MTA system.
- Subject capital needs estimates to a benefit-cost test. Conduct alternatives analysis where several rehabilitation options exist.
- Quantify, to the greatest extent possible, the safety, infrastructure integrity, and service quality benefits of each proposed capital project.
- Reexamine NYCTA and Metro-North estimates for track and power work required between 1984 and 1993.

*Passenger Security in the Subways, November 1989*Recommendations:

As it pertains to the capital program, PCAC recommends initiating a Station Security Reconstruction Program, a capital program to redesign and rebuild selected stations to make them more secure.

*Contracting Practices at the MTA: The Case for Innovative Techniques, January 1996*Recommendations:

Three innovative contracting techniques that represent a significant change in methodology and offer the most potential time and cost savings are recommended:

- Offering a contractor a financial incentive to complete a project early.
- Using a bidding technique known as A + B bidding that factors a contractor's estimated completion date into the bid award process.
- Using a contracting method known as design/build, in which one contract is awarded where usually two or more would be awarded.

*A Comparative Study of Financing for the MTA and Other Transit Properties, January 1997*Recommendations:

New York State should provide more direct aid and support the agency at a level similar to how other states fund their chief public transportation systems. Indirect approaches to generating more funds are through some form of new or increased taxes:

- Establish a quarter-percent sales tax in New York State that would be dedicated for public transportation. Within the MTA region, this surcharge would be added to a sales tax surcharge that currently supports

the agency's operations. This would be similar to California's initiatives.

- Convert the motor vehicle registration fee in New York State to a tax assessed against a vehicle's value. Unlike the current system, this "ad valorem" tax would allow for growth in collections and could be used flexibly to support mass transportation.
- Create special taxation districts.
- Use innovative financing techniques such as lease-purchase arrangements that would actually generate income for the MTA, and could be applied to other capital projects.

Privatizing MTA Services, Cost Savings or Political Buzzword, March 1999

Recommendations:

In terms of generating private funding and using private management for capital programs, the PCAC recommends that the MTA:

- Pursue public-private partnerships in which private developers contribute directly to capital construction costs or in which private partners lease public transportation property above or next to stations.
- Invite private retailers to design, construct, and maintain retail spaces in stations in order to shift the financial burden of design and construction to the private sector.
- Capitalize on voluntary programs like Adopt-a-Station and the Franklin Street Economic Development Corporation example, where developers contribute to rehabilitating stations while performing a community service and promoting their philanthropic activities.
- Be aggressive with developers to secure financial contributions when developments negatively impact MTA services, or team with the city or state to legislate a set mandatory exaction on new developments that impact MTA services.
- Work with legislators to implement a tax increment financing mechanism to collect revenues generated by increases to real estate values that occur following transit improvements.
- Use turnkey procurement for stand-alone developments.

Analysis of Alternative Fuel Technologies for New York City Transit Buses,
February 2000

Recommendations:

The Transit Riders Council recommends that NYCT not adopt an all-CNG policy. Cost is a consideration. NYCT would need to spend hundreds of millions of dollars to convert its depots and to replace the bus capacity that would be lost under an all-CNG plan. Annual operating and maintenance expenses appear to be higher for CNG buses than they are for diesel buses. Other agencies have encountered similar issues and have canceled their CNG programs as a result.

Unwelcome Mats—New York's Subway Stations in Despair, August 2008

Recommendations:

- a) The State of New York must increase its support of MTA operations so that maintenance and repairs of station in NYC are not problematic—a steady, predictable source of revenue is needed.
- b) The City of New York must start contributing to the capital improvement of stations in those areas where it seeks to improve economic development, not just the entrances of the subways.
- c) Station-impact fees should be levied on new development or substantial redevelopment projects within a quarter-mile of a subway station.
- d) The local BID's could become involved in plans to keep stations in a state of good repair.
- e) The MTA/NYCT should foster an "adopt-a-station" program whereby neighborhood-corporate partnerships are formed to financially support capital improvements and maintenance of stations.

Glossary of Terms

- ADA.** Americans with Disabilities Act
- BID.** Business Improvement District
- BSC.** Business Service Center
- CDOT.** Connecticut Department of Transportation
- CNG.** Compressed natural gas
- CPRB.** Capital Program Review Board
- DFP.** Dedicated Funds Pool
- DTF.** Dedicated tax funds
- GCT.** Grand Central Terminal
- LIRR.** Long Island Rail Road
- LIRRCC.** Long Island Rail Road Commuter Council, a PCAC rider council
- MCTD.** Metropolitan Commuter Transportation District
- MDBF.** Mean distance between failure
- MMTOA.** Metropolitan Mass Transportation Operating Assistance Account
- MNR.** Metro-North Railroad
- MNRCC.** Metro-North Commuter Council, a PCAC rider council
- MTA.** Metropolitan Transportation Authority
- MTACCC.** MTA Capital Construction Company
- MTTF.** Mass Transportation Trust Fund
- NYCT.** New York City Transit
- NYCTRC.** New York City Transit Riders Council, a PCAC rider council
- PAYGO.** Pay As You Go
- PBT.** Petroleum business tax
- PCAC.** Permanent Citizens Advisory Committee to the MTA
- RRIF.** Railroad Rehabilitation and Improvement Financing
- SIR.** Staten Island Railway

SIRTOA. Staten Island Rapid Transit Operating Authority

TBTA. Triborough Bridge and Tunnel Authority

TDA. Transportation District Account

WTC. World Trade Center

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THE ROAD BACK

A Historic Review of the MTA Capital Program

Addendum 2014



PCAC

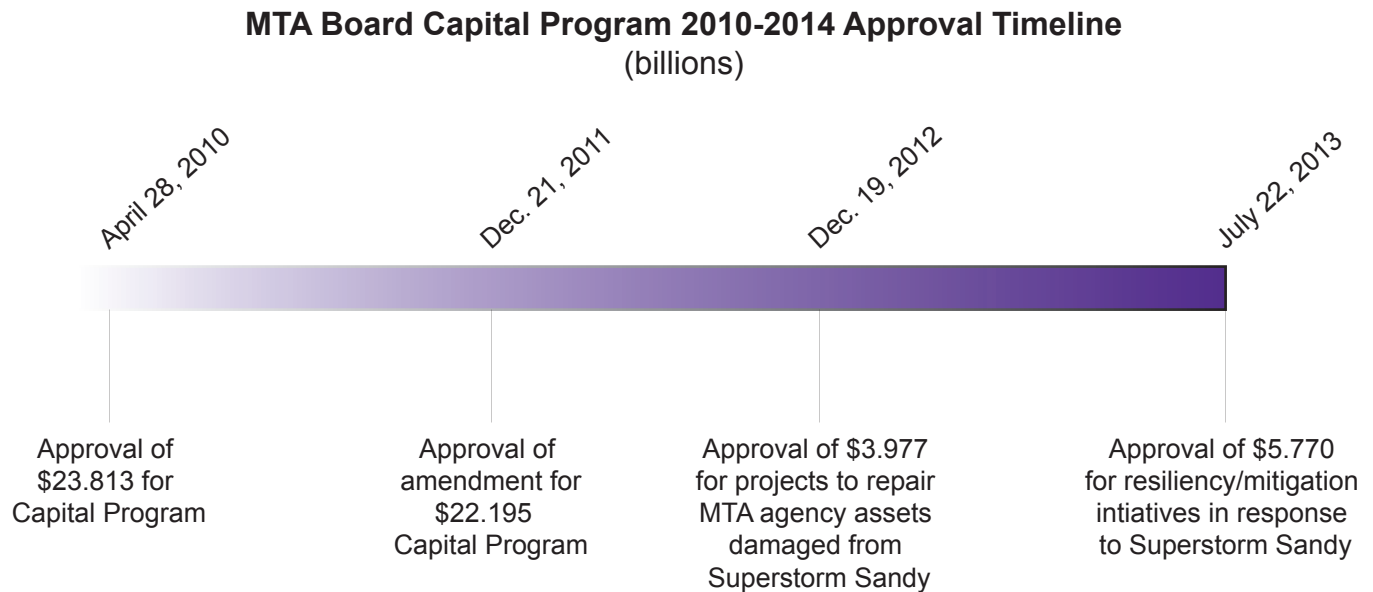
PERMANENT CITIZENS
ADVISORY COMMITTEE TO THE MTA

The purpose of this addendum is to update the facts and figures reported in the Permanent Citizens Advisory Committees' *The Road Back: A Historic Review of the MTA Capital Program* released in May 2012. The Road Back featured "the amount of funds that were needed; where the money went; how the funds were raised; and, most importantly, the benefits to the riders that resulted".¹ At the time of the report's release, The Road Back reported on current approved funds through 2011. Since then amendments have been made to the 2010-2014 Capital Program to include approved funds for the remaining three years (2012-2014) and the introduction of new repair and mitigation initiatives in response to Superstorm Sandy. To keep in accordance with the figures reported in The Road Back, Superstorm Sandy repair funds totaling \$3.977 billion (\$4.755 billion including MTA Bridges & Tunnels) and resilience mitigation initiatives totaling \$5.77 billion have been excluded for the purpose of clarity and consistency. Therefore, the tables and figures presented in this addendum reflect approved Metropolitan Transportation Authority (MTA) agency capital funds excluding resources allocated to Sandy-related projects.

1 Permanent Citizens Advisory Committee to the MTA (PCAC), *The Road Back: A Historic Review of the MTA Capital Program*, (May 2012), i.

2010-2014 Capital Program Amendment History

Figure 1



To achieve funding approval for the remaining three years of the 2010-2014 Capital Program, the MTA Board approved the December 21, 2011 amendment which focused on efficiency improvements, real estate initiatives, and revised financing. This brought the total 2010-2014 Capital Program funds from \$23.813 billion to \$22.195 billion. In addition, as a result of the damage caused by Superstorm Sandy further amendments were approved to provide additional funding to repair and restore MTA assets and resiliency projects to protect from future storms.

The July 2013 amendment focus was given to three main components

1. *Specific revisions to Plan projects to reflect cost savings/efficiency initiatives being implemented to obtain funding savings in accordance with the March 27, 2012 Capital Program Review Board (CPRB) approved amendment*
2. *Modifications to ensure timing of projects reflects updated priorities*
3. *New mitigation initiatives in response to damage as a result of Superstorm Sandy²*

Modern Capital Programs

- Funded totals through 2014 in current dollars are over \$97.3 billion; in 2014 dollars, \$139.5 billion.

Benefits

New York City Transit (NYCT)

- Mean distance between failure (MDBF) in 1982 was only 7,186 miles. In 2011, the MDBF climbed to an astonishing 172,700 miles; 2012 was 162,138 miles; and in 2013 the MDBF decreased to 153,382 miles
- Annual ridership on subways has risen 73 percent from 989 million in 1982 to 1.7 billion in 2013
- Annual ridership on buses has risen 32 percent from 512 million in 1982 to 677.5 million in 2013

Long Island Rail Road (LIRR)

- Annual ridership in 1982 was 71,411,000 and reached 83,384,250 in 2013 for a 16.76 percent increase
- MDBF in 1989³ was 21,000 miles and reached 205,890 miles in 2013, for an astonishing 880 percent increase

Metro-North Railroad (MNR)

- Annual ridership in 1982 was 48,292,000 and reached 83,378,506 in 2013 for a 72.65 percent increase
- MDBF in 1989 was 19,000 miles and reached 156,615 miles in 2013, for an astonishing 724 percent increase

² MTA, *2010-2014 Proposed Capital Program Amendment*, (July 2013), 1.

³ MDBF for LIRR and MNR were first available in 1989

Debt Burden

- Currently, the MTA has \$32,802 billion in long-term debt (bonds)
- These bonds require a \$2.29 billion annual debt service

Agency Spending Patterns

Table A summarizes the CPRB MTA thirty three-year capital program, displaying funded totals through 2014 in current dollars, reaching just under \$97.3 billion; in 2014 dollars, \$139.4 billion.

Table A
Total (funded) Capital Program, all agencies, 1982-2014
Current and 2014 Dollars
 (in million \$)

Agency Total	10 years 1982-1991	8 years 1992-1999	10 years 2000-2009	Funded 5 years 2010-2014	Current ² 33 years 1982-2014	2014 \$ ¹ 33 years 1982-2014
NYCT	\$ 11,030.6	\$ 12,590.6	\$ 21,922.0	\$ 11,642.0	\$ 57,185.2	\$ 84,467.4
LIRR	1,864.7	2,479.2	4,563.2	2,314.0	11,221.1	16,574.5
MNR	1,503.7	1,643.5	3,187.8	1,544.0	7,879.0	11,638.0
MTA Bus	-	-	646.6	297.0	943.6	1,079.0
WTC/Security	-	-	249.0	335.0	584.0	667.7
MTA Interagency	-	-	648.0	202.0	850.0	971.9
Total Core Program	\$ 14,399.0	\$ 16,713.3	\$ 31,216.6	\$ 16,334.0	\$ 78,622.9	\$ 115,398.3
MTACCC	-	157.7	12,646.0	5,865.0	18,668.7	24,053.4
Total CPRB Program	\$ 14,399.0	\$ 16,871.0	\$ 43,862.6	\$ 22,199.0	\$ 97,331.6	\$ 139,451.7

Source: MTA

Note: numbers may not add due to rounding.

¹Bureau of Labor Statistics (http://www.bls.gov/data/inflation_calculator.htm) conversion using mid-point of program.

²The value of a dollar at the time at which it is measured.

Tables B-1 through B-3 highlights the shift in expenditures over the thirty three-year period. Amounts are shown in current dollars, but percent distribution has been used for comparability and to better emphasize the components to which the agencies gave priority.

NYCT

Throughout the first 27 years of the Capital Program, larger investments were made to update and purchase new subway cars and restore passenger stations. In the first two years of the 2010-2014 Capital Program larger investments were made in purchasing new subway cars and in signals and communications. However, after the first two years, new cars were purchased and a new project was added to purchase R211 cars to be ordered at the beginning of the 2015-2019 Capital Program. This accounted for the overall reduction in this category from 18.5 percent in 2010-2011 to 8.8 percent for the entire five-year program. The largest investment categories for NYCT include passenger stations for a distribution of 18.5 percent; signals and communications constituting the largest investment category at 23.9 percent.⁴

Table B-1
NYCT, including SIRTOA,
capital program: 1982-2014
(in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2014 5 years	% Dist
Buses	\$ 476.5	4.3%	\$ 1,065.0	8.5%	\$ 1,515.5	6.9%	\$ 1,459.1	12.5%
Car, overhauls/rebuilt/rehab	1,953.6	17.7%	123.6	1.0%				
Depots	568.8	5.2%	546.9	4.3%	1,180.4	5.4%	470.4	4.0%
Line equipment	537.7	4.9%	655.7	5.2%	1,189.7	5.4%	320.2	2.8%
Line structures	602.8	5.5%	741.8	5.9%	1,601.9	7.3%	508.9	4.4%
Misc./emergency	195.9	1.8%	886.7	7.0%	1,236.4	5.6%	718.2	6.2%
New cars/subway cars	1,646.4	14.9%	2,066.3	16.4%	4,172.5	19.0%	1,020.4	8.8%
New routes	267.0	2.4%	650.3	5.2%				
Passenger stations	835.0	7.6%	2,699.9	21.4%	3,897.8	17.8%	2,157.9	18.5%
Power/traction power	505.7	4.6%	230.7	1.8%	697.6	3.2%	231.8	2.0%
Security	48.1	0.4%	220.6	1.8%	49.9	0.2%		
Service vehicles	113.7	1.0%	68.4	0.5%	230.1	1.0%	103.0	0.8%
Shops and yards	988.4	9.0%	221.5	1.8%	789.2	3.6%	263.2	2.3%
Signals and communications	956.2	8.7%	1,219.4	9.7%	3,232.6	14.7%	2,792.5	23.9%
Staten Island Railway					59.7	0.3%	118.9	1.0%
Track, structures, equipment	1,334.8	12.1%	1,193.8	9.5%	2,068.7	9.4%	1,477.3	12.7%
Total	\$ 11,030.6	100.0%	\$ 12,590.6	100.0%	\$ 21,922.0	100.0%	\$ 11,641.8	100.0%

Source: MTA

Updated page 8 of *The Road Back*

4 MTA, *2010-2014 Proposed Capital Program Amendment*, (July 2013), 10-11.

LIRR

The 2010-2014 Capital Program, investments in tracks nearly doubled to 36.6 percent from 19.1 percent in 2000-2009. LIRR's Track Strategy is to build upon past investments to maintain and upgrade track infrastructure through normal replacement of track components. Major critical investments include the second main line track in Suffolk County. Rolling stock persisted as the second highest investment category, however had decreased to 17 percent from nearly 30 percent in 2000-2009 as aging M-3 cars were replaced.⁵

Table B-2
LIRR
capital program, 1982-2014
(in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2014 5 years	% Dist
Communications and signals	\$ 245.7	13.2%	\$ 112.1	4.5%	\$ 492.7	10.8%	\$ 393.7	17.0%
Electrification	234.6	12.6%						
Line structures	147.2	7.9%	186.5	7.5%	503.3	11.0%	142.5	6.0%
Miscellaneous	54.1	2.9%	193.0	7.8%	294.2	6.4%	170.6	7.4%
Passenger stations	283.3	15.2%	434.4	17.5%	515.7	11.3%	120.1	5.2%
Power			16.4	0.7%	227.5	5.0%	130.0	5.6%
Rolling stock	58.5	3.1%	988.8	39.9%	1,365.6	29.9%	392.7	17.0%
Security	1.3	0.1%						0.0%
Shops and yards	630.8	33.8%	153.9	6.2%	290.5	6.4%	118.1	5.0%
Track	209.2	11.2%	394.1	15.9%	873.7	19.1%	846.1	36.6%
Total	\$ 1,864.7	100.0%	\$ 2,479.2	100.0%	\$ 4,563.2	100.0%	\$ 2,313.8	100.0%

Source: MTA

MNR

In the current 2010-2014 Capital Program, the first two years were focused on completing the purchase of up to 380 M-8 cars. Once these purchases were complete investments shifted from rolling stock to repair shops and yards at 19.6 percent, with track and line structures following at a close 19.5 percent of investments for the entire 2010-2014 Capital Program. The track program focuses on the replacement of ties, rail, and interlockings/switches with cyclical surfacing. Funding in this category also includes repairs to undergrade and overhead bridges in the Metro-North territory.⁶

Table B-3
MNR
capital program, 1982-2014
(in millions, current \$)

Category	1982-1991 10 years	% Dist	1992-1999 8 years	% Dist	2000-2009 10 years	% Dist	2010-2014 5 years	% Dist
Communications and signals	\$ 132.9	8.0%	\$ 79.5	4.8%	\$ 147.1	4.6%	\$ 273.4	17.7%
Electrification	63.5	3.8%				0.0%		
Miscellaneous	35.1	2.1%	110.3	6.7%	165.8	5.2%	76.2	4.9%
Network expansion			37.4	2.3%		0.0%		
Power	281.7	17.0%	40.2	2.4%	130.0	4.1%	104.7	6.8%
Rolling stock	353.9	21.4%	239.3	14.6%	1,056.2	33.1%	245.5	15.9%
Shops and yards	159.3	9.6%	88.8	5.4%	532.1	16.7%	303.1	19.6%
Stations	293.5	17.7%	478.7	29.1%	712.6	22.4%	239.9	15.5%
Track and line structures	337.4	20.4%	569.4	34.6%	444.0	13.9%	301.0	19.5%
Total	\$ 1,657.2	100.0%	\$ 1,643.5	100.0%	\$3,187.8	100.0%	\$ 1,543.8	100%

Source: MTA

Updated page 9-10 of *The Road Back*

⁵ Ibid., 24-25.

⁶ Ibid., 33-34.

MTA Bus Company

The original MTA Board approved plan called for \$325 million in MTA Bus Company investments. The 2013 approved amendment reduced investments to \$297 million, saving a total of \$28 million. The reduction is a result of efficiency initiatives, the transferring of certain scope to utilize funding from previous capital programs, and identifying work that is not necessary to complete now as current assets are able to meet the needed services.⁷

Table C
MTA Bus Company
capital programs, 2000-2014
(in millions)

Category	2000-2004 5 years	2005-2009 5 years	2010-2014 5 years
MTA Bus Company projects	\$ 502.05	\$ 144.50	\$ 297.00
Total	\$ 502.05	\$ 144.50	\$ 297.00

Source: MTA

Updated page 12 of *The Road Back*

⁷ Ibid., 39.

Agency savings can be seen for NYCT, LIRR, MTA Interagency bringing the total core program from \$16,456 billion to \$16,334 billion. However, due an increase for Metropolitan Transportation Authority Capital Construction Company (MTACCC) from \$5,739 billion to \$5,865 billion and other agency adjustments increased the total CPRB Program from \$22,195 billion to \$22,199 billion. MTACCC increases can be attributed to an increase in the Regional Investments category which includes additional elevators in Grand Central Terminal and a transfer of MTA Interagency funds to the East Side Access (ESA) project.⁸

Table D
Revised 2010-2014 capital program, all agencies
TOTAL (in millions)

Agency Total	Revised 5 years 2010-2014	Funded 2 years 2010-2011	Funded 5 years 2010-2014
NYCT	\$ 11,649.0	\$ 5,033.0	\$ 11,642.0
LIRR	2,316.0	1,001.0	2,314.0
MNR	1,544.0	667.4	1,544.0
MTA Bus	297.0	129.3	297.0
WTC/Security	335.0	100.0	335.0
MTA Interagency	315.0	230.2	202.0
Total Core Program	\$ 16,456.0	\$ 7,160.9	\$ 16,334.0
MTACCC	5,739.2	1,981.6	5,865.0
Total CPRB Program	\$ 22,195.2	\$ 9,142.5	\$ 22,199.0

Source: MTA Finance Committee, 12/19/2011

MTA Board 12/21/2011- Capital Program Amendment

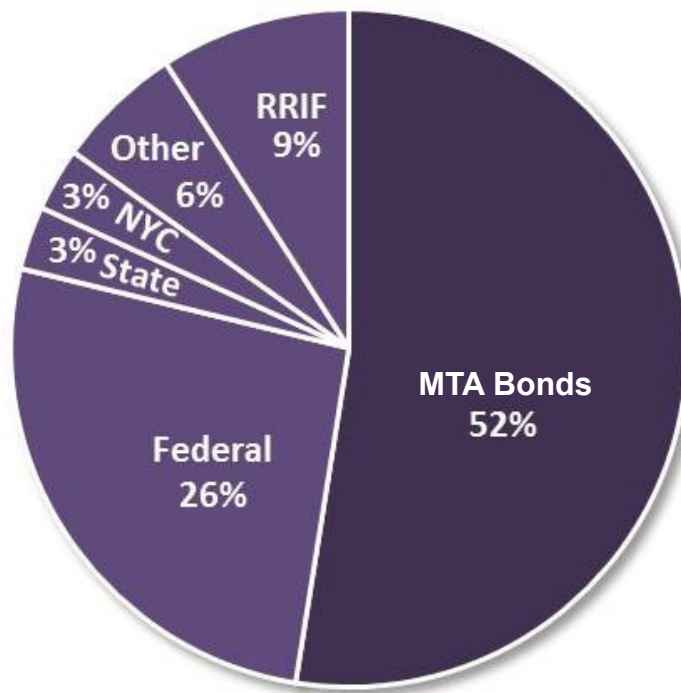
Note: This capital program was initially funded for the first two years (2010-2011);

This table has been updated to include the entire 5 year program (2010-2014);
amendment approved by the MTA Board in July 2013.

Updated page 22 of *The Road Back*

MTA Capital Program Funding Sources 2010-2014

Figure 2



Updated page 21 of *The Road Back*

Table E
Sources of MTA Capital Program Funding
1975-2014

	1975-1978 ¹	1982-1991	1992-1999	2000-2004	2005-2009	2010-2014
Federal Grants	78%	33%	33%	27%	39.0%	26.4%
State Bond Debt Service	14%					
NYC Grants	5%	10%	9%	3%	11.0%	3.4%
State Grants	3%	15%	1%		6.0%	3%
State DTF Bonds			11%	18%		
MTA Bonds		29%	26%	26%	39.3%	52%
MTA Debt Restructuring				21%		
Other		13%	20%	5%	4.7%	6.1%
RRIF Loan*						9.1%
	100%	100%	100%	100%	100.0%	100%

Source: 1975-2004, Seaman, et al.; 2005-2009, MTA; 2010-2014, MTA Independent Auditor's Review Report by Deloitte & Touche LLP, 2013

¹ NYCT only.

*RRIF Loan: Railroad Rehabilitation and Improvement Financing loan to support East Side Access

Updated page 23 of *The Road Back*

2010–2014 MTA Capital Program and MTA Bridges and Tunnels Capital Program include \$10,503 in MTA bonds, \$2,079 in MTA Bridges and Tunnels dedicated funds, \$6,343 in federal funds, \$148 in MTA Bus federal and city match, \$762 from city capital funds, \$1,472 from other sources, and \$770 in state assistance. Also included is a \$2,200 Railroad Rehabilitation and Improvement Financing (“RRIF”) loan to support ESA.⁹

Table F
2010–2014 MTA capital program funding sources
(as supported by the NYS approved budget for 2012–2013, \$ in millions)

Program funding plan	2012 Approved Plan	2013 Approved Plan
Federal formula, flexible and misc.	\$ 5,783	\$ 5,827
Federal high speed rail	295	295
Federal security	225	221
Federal RRIF loan	2,200	2,200
MTA bus federal formula/match	167	148
City capital funds	762	762
State assistance	770	770
MTA bonds	10,503	10,503
Other	1,490	1,472
Total CPRB Program	\$ 22,195	\$ 22,198
Bridges and tunnels dedicated funds	\$ 2,079	\$ 2,079

Source: 2010-2014 MTA Capital Program Amendment, July 2013

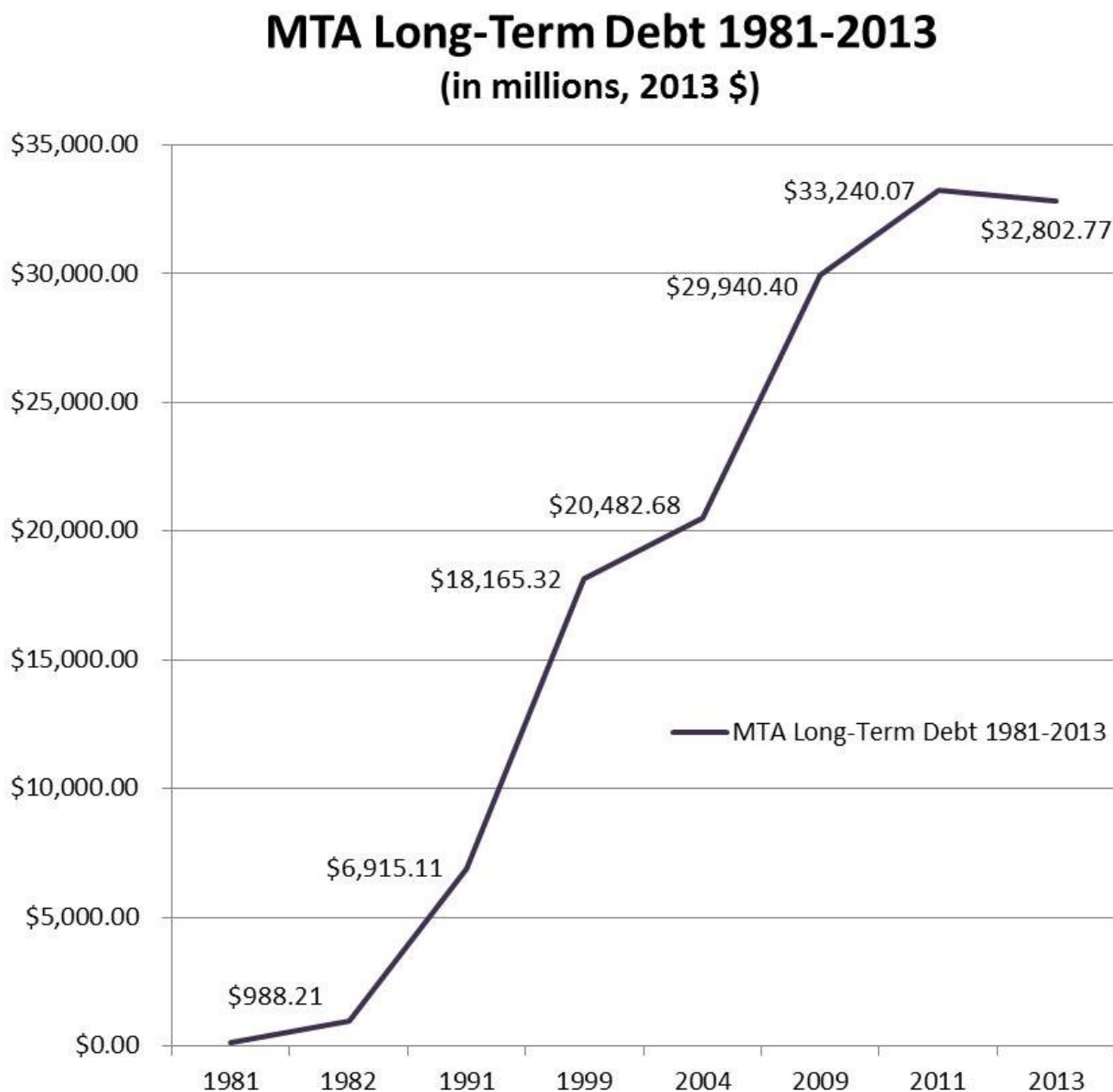
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⁹ Deloitte & Touche LLP, “MTA Independent Auditor’s Review Report”, (January 2014), pp. 15.

Debt Service

The latest debt amount outstanding is \$32.8 billion, requiring an average annual debt service of \$2,299 billion (see Figure 3 and Table G). Totals in Figure 3 have been normalized to reflect 2013 dollars. Therefore, in 2013\$ the long-term debt has decreased from 2011 by \$437.9 million.¹⁰

Figure 3



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¹⁰ MTA, Finance Committee Book, (January 2014), and Bureau of Labor Statistics (http://www.bls.gov.data.inflation_calculator.htm)

Table G
Yearly debt service through 2030
(in millions, as of December 2013)

\$ 1,320	MTA Revenue Bonds
458	TBTA Revenue Bonds
143	TBTA Subordinate Revenue Bonds
361	MTA DTF Bonds
1	MTA State Contract Bonds
16	MTA Certificates of Participation (2 Broadway)
\$ 2,299	Total

Source: January 2014 MTA Finance Committee Book, Finance Watch, IV-4

Over the last thirty-three years, agency investments have resulted in service improvements as can be seen in tables H and I. By 2013, NYCT subway ridership has increased by 73 percent; and 32 percent on transit buses. In addition, MDBF has climbed to 153,382 miles between break-downs for subway cars; and 4,941 miles for transit buses. Subway terminal on-time performance has increased from 71 percent to 80.5 percent; and subway major felonies have decreased by a staggering 82 percent.

Table H
NYCT service improvements, 1982-2013

Ridership (millions)	1982	2013	% Change
Subways	989.3	1,708.0 ¹	73%
Buses	512.3	677.5 ²	32%
MDBF ³			
Subways	7,186.0	153,382	2034%
Buses	941.5	4,941 ²	425%
Subway terminal on-time performance			
	71%	80.5%	13%
Crime (major felonies)			
Subways	14,306.0	2,606	-82%

Source: PCAC 1984; Seaman, et al., MTA 2013 Annual Report

¹ Does not include Staten Island Railway (SIRTOA); this the highest annual subway ridership since 1950

² Does not include MTA Bus

³ Mean Distance Between Failure (reliability)

Annual ridership on LIRR and MNR in 2013 both reached 83.4 billion, for an 18 and 73 percent change, respectively. Terminal on-time performance for both commuter rails reached well above the ninetieth percentile; while MDBF for LIRR since 1989 showed an 880 percent change, and MNR showed a 724 percent change.

Table I
Commuter rail service improvements, 1982-2013

Ridership (millions)	1982	2013	% Change	
LIRR	70.4	83.4	18%	
MNR	48.3	83.4	73%	
Terminal On-Time Performance				
LIRR	89%	94%	5%	
MNR (East of Hudson)	81%	95%	17%	
MDBF (miles)	1989 ¹	2003	2013	% Change 1989-2013
LIRR	21,000	30,000	205,890	880%
MNR	19,000	57,000	156,615	724%

¹ First year MDBF available

Source: Seaman, *et. al.*; PCAC, 1984; MTA 2013 Annual Report

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