

Metropolitan Transportation Authority

Exploring New Ways for Governing & Financing the MTA



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Exploring Ways to Strengthen & Develop NYC's Transit Authorities

Prepared by | Olin Berger, Li Chen, Elisabeth Harnier, Mika Maekawa, Sabina Martyn, Ni Ni
Managers | Maureen Loman and Ben Ong
Advisor | Rohit Aggarwala
Client | Regional Plan Association



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EXECUTIVE SUMMARY

New York City is the most populous city in the USA, and its public transit system is an integral component of city life and the economic prosperity of the entire state. The Metropolitan Transportation Authority (MTA) is the state-run public benefit corporation that provides transit to the greater New York City area. It is made up of several subsidiaries, including the New York City Transit (NYCT) Subway, NYCT Bus, MTA Bus, Staten Island Railroad (SIRR), Metro North Railroad (MNR), Long Island Railroad (LIRR) and the Triborough Bridge and Tunnel Authority (TBTA).

The MTA is challenged by a fundamental disconnect between the location of decision-making (Albany, the state capitol of New York) and the location of greatest impact (New York City). One frequently proposed method of addressing this challenge is to shift control of the local subsidiaries - NYCT Subway, NYCT/MTA Buses, and the Staten Island Railroad - to the mayor of NYC. This report evaluates the current state of governance and financing within the MTA and presents scenario-based projections of the financial effects of agency restructuring. A quantitative analysis provides evidence that a shift of some agencies to mayoral control would not significantly impact current financial problems for NYC-based agencies, but would push commuter railroads towards financial self-sufficiency. A case study of London's Transport for London provides an example of a similar transit system that recently moved to mayoral control and the benefits accrued from this change.

The ridership of each of the MTA entities (other than the TBTA) was calculated to determine rider origin, specifically with respect to the proportion of riders from the five boroughs comprising NYC and the seven surrounding counties within the Metropolitan Transportation Commuter District (MTCD). It was found that the local transit (subway, buses and SIRR) is comprised of approximately 80% NYC-based riders. In contrast, the commuter railroads are comprised mainly of riders from outside NYC. Nearly 60% of ridership on the MNR stems from the seven counties surrounding NYC, while LIRR ridership origin is 75% from those same counties.

The New York State government oversees the MTA's budget and contributes nearly 40% of the agency's budget through state-controlled subsidies and tax revenues. This fiscal reliance on the state creates a financial model that is vulnerable to both socio-economic and political changes. NYC-based transit relies upon tax revenue to fill its large operating deficit and this gap is not automatically decreased if local transit were to be shifted to mayoral control. A more equitable distribution of subsidies, however, could allow commuter rail systems to fully eliminate their operating deficits.

From an analysis of tax revenue and subsidies, it was determined that MTA funding sources do not accurately reflect usage of MTA services by county of origin. Shifting the NYC based transit agencies to mayoral control could improve institutional clarity and accountability of these agencies, with little impact on the fiscal situation of these transit systems. A fare increase of \$0.73-0.76 or a subsidy increase of 43-46% may be required to fill the current operating deficit of NYC transportation agencies. Further research into fare or tax increases within New York City is required to fully comprehend the political and financial cost of mayoral control of local transit agencies.

LIST OF ACRONYMS USED

B&T	Bridge and Tunnel
KWIC	Kids' Well-being Indicators Clearinghouse
LIRR	Long Island Railroad
MCTD	Metropolitan Commuter Transportation District, "Transportation District"
MMTOA	Metropolitan Mass Transportation Operating Assistance
MTA	Metropolitan Transportation Authority
MNR	Metro-North Line
MRT	Mortgage Recording Tax
MTRC	Mass Transit Railway Corporation, Hong Kong's public transportation company
MTTF	Metropolitan Transportation Trust Fund
NYCT	New York City Transit
PMT	Payroll Mobility Tax
SIRR	Staten Island Railroad
TBTA	Triborough Bridge and Tunnel Association
TfL	Transport for London

I. PURPOSE

Research for this report has been conducted by the workshop team on behalf of the Regional Plan Association (RPA) to analyze the current governance and finance structure of New York's Metropolitan Transportation Authority (MTA), with the purpose of identifying methods by which to improve efficiency and financial returns.

Preliminarily, this report a) identifies the home county, if among the five boroughs or the seven counties within the commuting district, of MTA ridership; b) determines the origin and allocation of dedicated taxes that go into the MTA's operating funds; and c) discerns whether funding accurately reflects ridership and governance structure. Finding that they do not, this report analyzes the current governance structure to improve institutional clarity, accountability, and ability to reinvest in infrastructure to match peer mass transportation systems around the world. Through identification of best practices among peer systems, London's Transport for London (TfL) was chosen for comparative analysis due to its qualitative similarities to the political history of New York's MTA. TfL's recent switch to mayoral control has seen great success. The mayor's strategic allocation of resources has benefited the system both politically and financially, and it is possible that the same result could be achieved in NYC.

To justify a potential switch from the current shared governance structure, this report conducts a financial comparison between local transportation agencies and commuter rail by exploring two different scenarios. In the first scenario, we hypothesize that the control of subsidiaries are split while maintaining revenues and subsidies in their current state. The second hypothesis analyzes different financial scenarios under mayoral control: tax redistribution and financial restructuring of entities under the MTA. This exercise is aimed to find the most feasible solution to support mayoral control and to frame recommendations based on the report's findings.

Finally, the report will discuss the implementation and further steps that can be taken to advance solutions when considering mayoral control for the MTA.

II. BACKGROUND

The MTA provides public transportation for around one third of the entire transit-using population of the United States. The transportation services provided by the MTA are often described as foundational for the economic and social health of the region, as the MTA is responsible for developing a unified mass transportation policy for the entire New York metropolitan area. The social necessity of the services provided by the MTA allows the system to operate as a public service rather than a profit-generating system. The current financial structure of the MTA relies heavily on taxes and subsidies governed by the State of New York.¹ This

¹ Dedicated taxes and subsidies account for 43% of operating revenues in the 2014 Final Proposed Budget (MTA, *November Financial Plan 2014-2017*).

fiscal reliance on the state creates a financial model that is unsustainable without active political support. In recent years, when this support has wavered, the MTA has been required to rely increasingly on debt—at present, running a long-term debt of over \$32 billion—to finance capital projects and routine maintenance of its systems.² Increased borrowing has led to the share of operating revenues allocated to debt repayment to outweigh investments to improve system infrastructure.³

The consolidation of the MTA into the state managed agency it is today began in the 1960's, in order to take advantage of excess bridge and toll revenues that continue to support public transit. This subsidization has continued over the years, increasing in scale with the development of the Dedicated Tax Fund and reliance on other state-determined funds. This financial dependence on external sources limits the ability of the MTA to right its own financial course, leading to ever increasing debt. Those with the authority to change this financial structure are not adequately incentivized to do so by a governmental structure that dilutes both the impacts of managerial decisions as well as the political repercussions caused by change.

III. DIAGNOSIS

Initial research showed many discrepancies in the current, opaque system of the MTA's governance and finance. Joint control between New York State and New York City has served to reduce accountability and allowed for redundancies and inefficiencies to flourish, as evident in the agency's growing debt and inability to complete capital projects on schedule or maintain a state of good repair across the system. Public transportation in New York City predominantly serves its residents, yet its decision making body is partially removed from considerations of ridership and the agency's area of impact. Competing priorities of the governing board, which is comprised of a disproportionate number of state appointments and headed by a CEO and Chairman appointed by the state, from that of NYC riders is exemplified in budget decisions: the state government maintains significant control of nearly 40% of the budget, which comes from state-controlled subsidies and tax revenue.⁴ For many NYC residents it is counterintuitive that accountability for the city's transit system lies beyond the purview of their elected official. Ultimately, such a structure inhibits progress by discouraging investment in infrastructure and improvements.

² Financial estimates of the MTA's 2013 net deficit prior to inclusion of debt service total close to \$1 billion. (MTA, *November Financial Plan 2014-2017*).

³ The 2014 Final Proposed Budget allocates 3.2% of revenues to "Maintenance and Other Operating Contracts" and 13.4% to "Debt Service."

⁴ Dedicated taxes and subsidies account for 43% of operating revenues in the 2014 Final Proposed Budget (MTA, *November Financial Plan 2014-2017*)

IV. EXPLORATION OF RELEVANT TRANSIT AUTHORITIES

Preliminary research also included an overview of the managerial and financial structures of comparably relevant mass public transit authorities and systems, both domestically and abroad. In our study, we examined in depth six peer transit systems from cities of Vancouver, Washington, D.C., Singapore, Hong Kong, Stockholm, and London. The reason for this is to identify commonalities in terms of best practices that the MTA could potentially draw upon and adopt into the context of New York City.⁵

Relevant takeaways included incorporation of a smart business approach, value capture (or recapture) strategies, and governance restructuring within the organization. Other common indicators of success emphasized the importance of a strong framework supporting accountability, transparency, and evaluation.

A survey of the six aforementioned systems found London to be the most relevant case study for both New York City and the MTA. This stems from the fact that both mass transit authorities and systems are over 100 years old. Additionally, both are also serving large, growing cities and their respective surrounding areas. Finally, both systems have dealt with decades of underinvestment from their ruling government parties leading to negligence of infrastructure improvements, safety modernization, and station refurbishment work, resulting in financial losses.

London's experience in successfully shifting to mayoral control through the creation of TfL suggests that a change in responsibility is a crucial factor in achieving institutional revitalization and improving operations.

What Works?: The London Case

A change in the United Kingdom's government in 1997 opened up the possibility of putting London's public transport system under the mayoral control. The mayoral role and Transport for London (TfL) were both created in 2000, with the latter acting as the local body implementing the Mayor's transport strategy to manage transport services. This change also enabled the involvement of the private sector through a Public-Private Partnership (PPP). Although the PPP contract was proven to be only partly successful, with parts of the system being nationalized in 2008 and 2010, the Mayor managed to improve the performance of London's public transport system significantly over the last decade.⁶ This is partly the result of introducing several long-term initiatives, such as investing in new infrastructure, while working towards the Mayor's goal of fully privatizing the system.

⁵ Appendix A for further details.

⁶ Stevens, Andrew. "City Mayors: Ken Livingstone - Mayor of London." *City Mayors: Ken Livingstone - Mayor of London*. City Mayors: Former Mayors, 28 Apr. 2008. Web. 20 Feb. 2014.

In 2012, TfL's London Underground reported a fare-box operating ratio of 91%⁷. Simultaneously, a new governance structure has been introduced aimed at increasing transparency and consistency in presenting financial information. New governance also means greater alignment of information between the Business Plan and Budget and the quarterly monitoring reports. These reports are carried out by the Budget and Performance Committee to scrutinize the Mayor's budget proposal, while also reviewing quarterly returns and issues that the Mayor decides on. While still faced with financial and political difficulties, the change in governance structure has led to a transformation and revitalization of the public transport system, internally and externally.⁸

V. PRELIMINARY RESEARCH SUMMARY

So far, this paper has explored the MTA's historical background and conducted a diagnosis of the transport system. This has helped to identify that discrepancy in the MTA's governance and financial structure, as well as a dissonance among elected responsibility and the system's operator and users have led to the agency's growing debt.

To find the best scenarios that would allow for change, such as reorganizing the governance and financial structure, preliminary research of six different transit systems of cities in the US, Canada, Europe and Asia was conducted. The research included a diagnosis of each system's historical background, fare control and governance structure, review and restructuring paths, and value capture possibilities. The findings of each city system were then analyzed for transferability and relevance to New York and the MTA.

Although public transportation systems in Hong Kong and Singapore are among the most successful in the world, the different historical backgrounds and structure made it difficult to relate to New York and the MTA. Transferability between Vancouver, Washington D.C, Stockholm and New York were modest, mostly because of different financial and civic structures.

Transport for London has proven to be the system with the most transferability and qualitative similarities to the MTA's political history and was therefore chosen for comparative analysis. TfL's recent switch to mayoral control has seen great success, with the mayor's strategic allocation of resources benefitting the system both politically and financially.

⁷ Annual Report and Statement of Accounts 2011/12. TfL. pp. 71, 74. "Fares revenue on LU was £1,981m and operating expenditure on the Underground was £2,178m"

⁸ Begg, David, "World Class? London's Transport: Progress and future challenges", P.11"
http://w3.siemens.com/topics/global/en/goingunderground/Documents/PDF/World_Class_D_Begg.pdf

Next steps, therefore, include analyzing the financial and political impacts a switch to mayoral control would bring to the MTA and whether moving away from the current shared governance structure is justifiable.

To do so, this report will determine rider origin of the MTA subsidiaries to gain an overall understanding of the breakdown of ridership, which can then be compared to the source and distribution of financing and its impact on decision-making for the organization. The report will then determine the origin and allocation of dedicated taxes that go into the MTA's operating funds to discern whether funding accurately reflects ridership and governance structure.

Further steps include conducting a financial comparison between local transportation agencies and commuter rail by exploring two different scenarios. In the first scenario, we hypothesize that the control of subsidiaries are split while maintaining revenues and subsidies in their current state. The second hypothesis analyzes different financial scenarios under mayoral control: tax redistribution and financial restructuring of entities under the MTA. This exercise is aimed at find the most financially feasible solution for the agency and to frame recommendations based on the report's findings.

VI. ANALYSIS I: DETERMINING RIDER ORIGIN OF MTA SUBSIDIARIES

The composition of ridership of each subsidiary of the MTA provides important insights for comparing user-origin demographics to the geographic sources of financing and decision-making for the agency. The 2008 MTA Customer Travel Survey and other primary and secondary sources were used to develop a conceptual understanding of the residential origin of riders of the NYCT Subway, NYCT & MTA Buses, SIRR, MNR, and LIRR. Ridership of each subsidiary was broken down by percentage of NYC residents, residents of the seven other state counties within the MTCDC, residents from outside of these counties but within NY state, out-of-state travelers, and tourists. These ridership estimates were then used with the findings on MTA tax revenue sources to draw conclusions regarding the fiscal equity of subsidy allocation.

A. Ridership Determination Method

The percentage of riders on the MTA who do not live in New York City but live in New York State was calculated using the following equation:

$$\text{Total MTA Ridership} = \text{NYC Riders} + \text{Non-NYC Riders}$$

$$\begin{aligned} \text{NYC Riders} &= \text{Workers} + \text{Adult Students} + \text{Children} + 30\% \text{ Other} \\ \text{Non-NYC Riders} &= \text{NY State Residents (within 7 surrounding counties)} + \text{NY State Residents} \\ &\quad (\text{rest of NY State}) + \text{Out of State Residents} + \text{Tourists} \end{aligned}$$

Total MTA Ridership: This was obtained using the average weekday ridership numbers in 2012, tracked by the MTA and published on their website for each of the MTA modes of transit (NYC Subway, NYCT and MTA Bus, SIRR, LIRR, and MNR)⁹.

NYC Riders: The results database from MTA's 2008 New York Customer Travel Survey was used to determine the proportion of riders that take each mode of MTA transit¹⁰. The survey was done on New York City residents, and the data used was based on weekday commuter travel by riders above the age of 18 travelling to and from work or school only. Percentages of survey respondents taking NYC Subway, NYC and MTA Bus, SIRR, LIRR, and MNR were recorded.

The population of New York City and the employment rate were used to estimate the number of workers in New York City. The population of New York City, an estimated percentage of the city between the ages of 18 and 24 (10% based on 2012 US Census)¹¹, and an estimated percentage of 18-24 year-olds that are enrolled in school (70% based on data from KWIC)¹² were used to estimate the number of adult students in New York City. The employment rate was

⁹ Public Transportation for the New York Region. MTA.info. 2012.

¹⁰ 2008 New York Customer Travel Survey Database. NuStats, for MTA. August 2009.

¹¹ 2010 Demographic Profile. American Fact-Finder. United States Census Bureau. 2010.

¹² High School Graduates Intending to Enroll in College-Public Schools. KWIC Indicator Narrative. New York State Kids' Well-Being Indicators Clearinghouse.

used to estimate the number of workers¹³. The percentage of riders on each mode of transit and the numbers of workers and adult students were used to estimate the number of commuters (workers and adult students) taking each mode of transit.

The population of New York City and the percentage of New York City residents under the age of 18 were used to estimate the population of New York City that is under the age of 18¹⁴. The number of workers and adult students was added to the number of children, and an additional error margin of 30% was added to account for other types of non-commuter resident travel based on the proportion of non-workers and non-students who took the survey. These numbers were summed to determine an estimate of the number of New York residents using each mode of MTA transit.

The NYC/MTA bus calculation was adjusted using a report from New York City Economic Development Corporation that stated a ratio of New York City residents taking the subway to bus to be 2:1¹⁵. Applying this ratio to the data from the travel survey allowed for a refinement of the ridership numbers.

Non-NYC Riders: The average number of tourist visitors to NYC was obtained¹⁶ and the percentage of these tourists taking public transit was assumed to be 80%. It was also assumed that tourists would take transit twice as often in a day as regular users of the MTA, and all of this information was used to obtain an estimate of the number of tourists using the MTA on an average weekday. The proportions of riders using each mode of MTA transit from the Travel Survey were used to estimate the number of tourists using each mode of transit.

The NYC ridership numbers and the tourist numbers were subtracted from the total average weekday ridership on each of the modes of MTA transit, in order to estimate the number of riders on each type of transit that were either from out-of-state, or from New York State counties but not New York City.

Given the need to distinguish the tax paying counties from the remaining counties in New York State, re-calibration was done to split “non-local” commuters into two “super-commuter” groups with riders originating from either New York or Non-New York state, using a 2009 NYU Wagner study¹⁷. The percentage of Non-NYC commuters from tax-paying counties were assumed to be 91% while 9% assumed to have originated from non-taxed New York counties.

¹³ NYS Economy Added More than 108,000 Private Sector Jobs in Past Year. New York State Department of Labour. April 2014.

¹⁴ State & County Quickfacts: New York. United States Census Bureau. 2012.

¹⁵ Economic Snapshot: A Summary of New York City’s Economy. New York City Economic Development Corp. October 2013.

¹⁶ NYC Statistics. Total Visitors to NYC 2010-2012. NYCGo.com.

¹⁷ Commuting to Manhattan: A study of residence location trends for Manhattan workers from 2002 to 2009. New York University Wagner School of Public Service. March 2012.

LIRR ridership was calculated by identifying the average weekday ridership in NYC versus Non-NYC stations. The LIRR NYC versus no-NYC ridership was determined to be 8% and 92%, respectively, using LIRR average weekday ridership numbers from the LIRR Ridership Book (2012)¹⁸. These percentages for LIRR as well as super-commuters for NYC Subway, MTA/NYC Buses, and SIRR were applied to the out-of-NYC ridership numbers to determine the new ridership percentage of riders from taxed vs. non-taxed counties.

MNR ridership was determined using a 2007 MTA Ridership Survey¹⁹. Based on rider origin city, the travel database associated with this survey was used to calculate the MNR ridership breakdown between NYC residents, surrounding five counties within the MCTD, other NY state counties, and out-of-state residents.

The proportional makeup of the ridership for each of the MTA modes of transit was calculated by dividing the number of users from each demographic by the total number of users of that mode of transit. The estimated ridership origin for each subsidiary is presented in the table below.

		NYC Subway	SIRR	NYC/ MTA Bus*	MNR*	LIRR*
NYC Residents	(5) Boroughs	78%	77%	82%	4%	8%
Non-NYC Residents	(7) MCTD NY Counties	9%	10%	8%	58%**	74%
	Other NY Counties	1%	1%	1%	8%	7%
	Out-of-State	11%	11%	9%	29%	0%
	Tourists	2%	2%	1%	0%	0%

Table 1. Estimation of MTA ridership origins for each transit subsidiary of the MTA.

*Data supplementary to the 2008 MTA Travel Survey was used to refine ridership estimates for NYC/MTA Bus, MNR and LIRR.

**Calculation was performed for surrounding 5 MTCD counties (Rockland and Orange are not included).

B. Discussion

Table 1 shows that the NYC Subway, SIRR, and MTA/NYC Buses are utilized most heavily by NYC tax-paying residents. For these three agencies of the MTA, the ridership from the surrounding seven counties and the out-of-state ridership are also around 10%. Tax revenue to the MTA is mainly from NYC residents and residents of the surrounding seven counties. Thus, if

¹⁸ 2012 Long Island Railroad Ridership Book. MTA Service Planning Department.

¹⁹ 2007 MTA/Metro-North Railroad Origin-Destination Survey Database. RSG Inc, for MTA. October 2008.

ownership of these entities were transferred to the city, the fiscal impact to the MTA would be primarily due to loss of tax revenue from the surrounding seven counties.

In contrast, the commuter subsidiaries – MNR and LIRR – are predominantly utilized by riders from the counties surrounding NYC. In the case of MNR this segment represents 58% of ridership, and in LIRR, it represents 74% of ridership. The MNR, as a commuter train that provides service to Connecticut, also has a notable out-of-state ridership of 29%.

C. Limitations

The main limitation in this exercise is the lack of data available from the MTA analyzing the county of origin of its ridership from outside of NYC's five boroughs. As such, estimations on the ridership breakdown were made using data from various sources. These estimations contribute to the degree of error in these calculations. Such errors are partially accounted for through the 30% "other" category in NYC-based ridership applied to the data from the 2008 MTA Travel Survey, however it is possible that there are other types of riders that were not accounted for, such as non-working, non-student, non-tourist users from outside of NYC. Further, the proportion of riders surveyed from each borough in this survey was not exactly reflective of their relative populations, therefore rider habits may have been skewed in the results.

Some degree of inaccuracy can be attributed to challenges in accounting for ridership on buses. This is because, unlike the rest of MTA, several bus lines (Select Bus Service) rely on the honor system for charging customers a fare. There could also be a disproportionate number of non-workers, non-students, non-tourists (individuals who are not captured within categories used in these studies) that is not reflected in the assumptions that were applied to the other MTA modes of transit. The MNR calculation for ridership from surrounding counties also has limitations because the primary source, the ridership survey, was only done for the three main MNR lines, thus omitting two of the seven counties in the transportation district (Suffolk and Nassau).

VII. ANALYSIS II: FINANCIAL COMPARISON OF LOCAL TRANSPORTATION AGENCIES AND COMMUTER RAIL

A. Introduction

The separation of the transportation related subsidiaries of the MTA into City-controlled agencies (NYC Transit, MTA Bus, and the Staten Island Railroad) and State-controlled agencies (Long Island Railroad and Metro-North Railroad) could entail significant changes to the financial structure of each organization. The following financial analysis of these organizations provides a platform from which to consider the manner in which these changes may take place. A more complete understanding of the strengths and weaknesses inherent to the current financial makeup of the MTA will allow for a more robust consideration of potential changes to these structures. Examples of potential financial restructuring are provided in order to display the considerations that must be taken into account if or when such a restructuring should occur.

Currently, the MTA maintains a substantial operating deficit subsidized by a combination of state and local taxes and direct subsidies. These subsidies are essential to the operation of the MTA and originate primarily from within the counties comprising the Metropolitan Transportation Commuter District (MTCD) which includes the counties of New York, Bronx, Kings, Queens, Richmond, Rockland, Nassau, Suffolk, Orange, Putnam, Dutchess, and Westchester. The goal of this study is to determine which subsidies are most closely tied to specific counties of origin regarding receipts and how these subsidies are distributed in terms of the counties served by the agencies receiving them. This information will provide a framework with which to analyze the current equity of subsidy collection and distribution

B. Methodology

Combined Agency Financial Data

All financial data for the models included in this section were retrieved from the MTA 2014 Adopted Budget.²⁰ Net Operating Income for each subsidiary was taken from consolidated accrued statements of operations according to combined totals of “reimbursable/non-reimbursable.” Dedicated taxes are presented on an accrual basis and subsidy allocations are presented on a cash basis, as no subsidy information is provided within the February Financial Plan on an accrual basis. “Local Transit” is the aggregate of NYC Transit, MTA Bus, and Staten Island Railroad. “Commuter Railroads” is the aggregate of Metro North Railroad and Long Island Railroad.

Combined Agency Tax & Subsidy Breakdown

All data for these charts were retrieved from the MTA 2014 Adopted Budget, February Financial Plan 2014 - 2017 Subsidy Allocations per transit agency (“Local Transit” and “Commuter

²⁰ Metropolitan Transportation Authority. “MTA 2014 Adopted Budget: February Financial Plan 2014-2017.” 21 Feb 2014.

Railroads” defined as above). Percentages are determined using the total cash amounts from the “2013 Final Estimate.”

Definition of “Relevant Taxes and Subsidies”

Our research concluded that the subsidies most likely to be significantly affected by the dissolution of the MTA would be the joint payments to the MTA funded by taxes levied on the counties forming the MCTD. “Relevant Taxes and Subsidies” are defined as those taxes and subsidies paid to the MTA whose origin and dispersal could be clearly delineated between the five counties within the MCTD that make up New York City and the remaining seven counties, termed “Commuter Counties.” Taxes whose origins could be separated by county of receipt but that could not be attributed primarily to entities existing solely within those counties (e.g. the Corporate Surcharge Tax) are not included in the list of “Relevant Taxes and Subsidies.” Based upon this classification system, “Relevant Taxes and Subsidies” include: the Mortgage Recording Tax, the Payroll Mobility Tax, and the MTA District Sales Tax. MTA Bridges and Tunnels Operating Surplus Transfer Subsidy is also included in “Relevant Taxes and Subsidies” for the purposes of calculating percentages of relevant taxes distributed.

Mortgage Recording Tax Calculation

The data used to calculate the Mortgage Recording Tax was obtained from the New York State Department of Taxation and Finance’s Annual Statistical Report of New York State Tax Collections’ 2012-13 Statistical Tables, Table 26 “Mortgage Tax Collections by County, State Fiscal Year 2013.” Calculated totals include the sum of “Additional Tax 1” and the “Special Assistance Fund” per Section 253, “Recording Tax” of New York State Tax Law. Legal distribution requirements were obtained from Section 261, “Payment over and distribution of taxes” of New York State Tax Law.²¹

Payroll Mobility Tax Calculation

The data used to calculate the Payroll Mobility Tax (PMT)- “Average Weekly Wages” and “Employments” for New York State and 12 MTA related counties”- was obtained from the U.S. Bureau of Labor Statistics. Gross Annual Payroll was calculated by multiplying the 52 working weeks by the Average Weekly Wage of each county. The “PMT rate,” which is 34 cents out of \$100 wages, was applied to the Gross Annual Payroll to reach the total Payroll Mobility Tax.²² The proportion of the Payroll Mobility Tax collected from the five New York City counties (78%) and the seven Non-New York City counties combined (23%) was calculated by the ratio of amounts collected to amount distributed to the agencies servicing these regions.

²¹ Findlaw. “N.Y. TAX. LAW § 261: NY Code - Section 261: Payment over and distribution of taxes.” Accessed on April 10th, 2014 at <http://codes.lp.findlaw.com/nycode/TAX/11/261>

²² “Employers – Metropolitan Commuter Transportation Mobility Tax (MCTMT).” *Employers – Metropolitan Commuter Transportation Mobility Tax (MCTMT)*. New York State Department of Taxation and Finance, 11 Dec. 2013. Web. 21 Feb. 2014.

MTA District Sales Tax Calculation

MTA sales tax data was obtained from “2012-2013 New York State Tax Collections”²³, the data Local Tax Collections in fiscal year 2013 reflected the combined tax of the County Tax with an average rate of 4.5% and the Sales Tax with average rate of 0.375%. Total sales tax was calculated by multiplying the sales tax rate of 0.375% by the amount of the taxable dollars which are the result of dividing the Local Tax Collected with the combined tax rate 4.875%.²⁴ The Sales Tax component of the MMTOA Subsidy comprises approximately 53%. Broken down by county, the five NYC boroughs/counties contribute about 63.93% while the seven MTCDC counties contribute the remaining 36.07% of that 53% (or \$725 million of the \$1.3 billion MMTOA Subsidy in 2012)²⁵.

Results

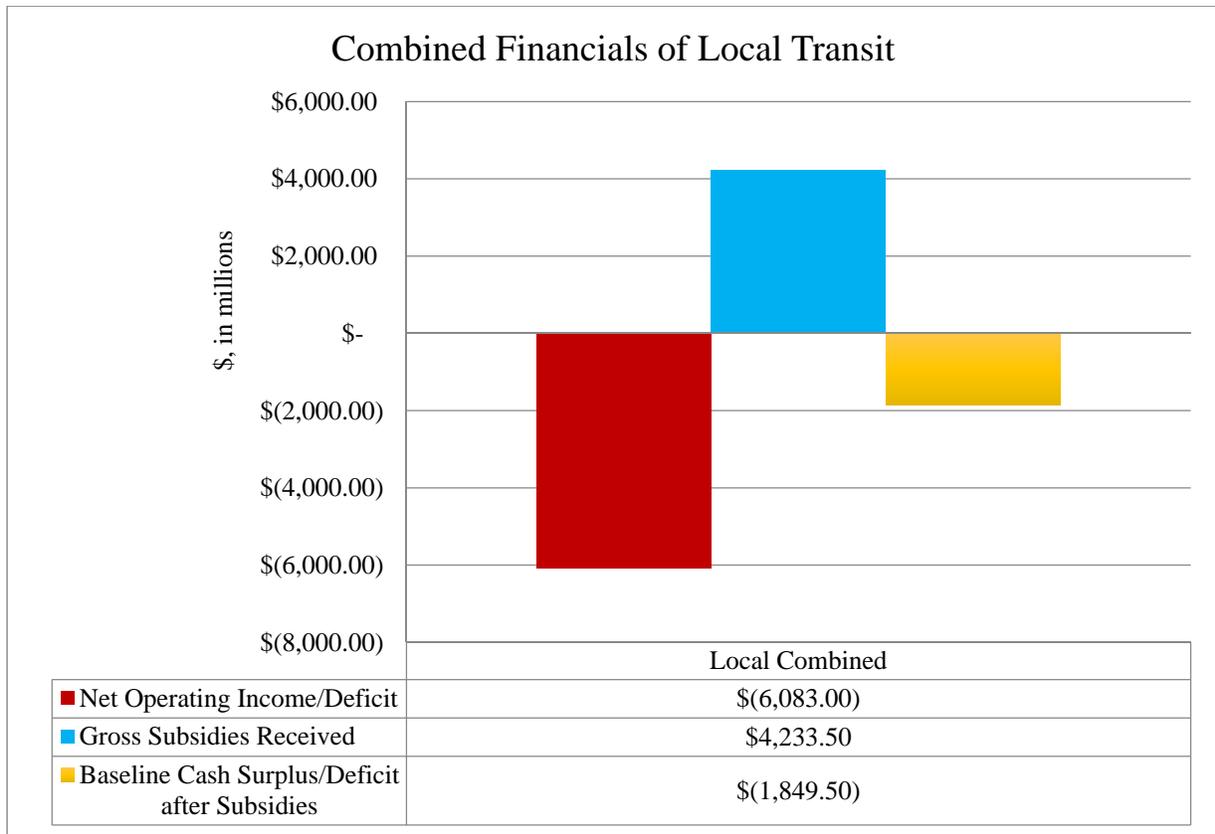


Figure 2 displays the combined financials of the NYC Transit, MTA Bus, and Staten Island Railroad.

Within the 2014 Adopted Budget these agencies combined run an accrued deficit of \$6.08 billion. After cash adjustments, this deficit still remains a significant \$3.16 billion dollars. This

²³ Page 47, “2012-2013 New York State Tax Collections”, http://www.tax.ny.gov/pdf/stats/stat_fy/2012_13_annual_statistical_report_of_ny_state_tax_collections.pdf

²⁴ “New York Sales Tax Rates.” *New York Sales Tax Rates*. RAND New York Statistics, 25 Jan 2012. Web. 16 Apr. 2014.

²⁵The complete table of calculated contributions from each county’s sales tax can be found in Appendix C.

deficit is covered by the combination of Dedicated Tax Funds and subsidies received by these three agencies, totaling \$4.23 billion. However, without the cash adjustment within the budgeting process, these subsidies would not be enough to fully cover the combined operating deficit.

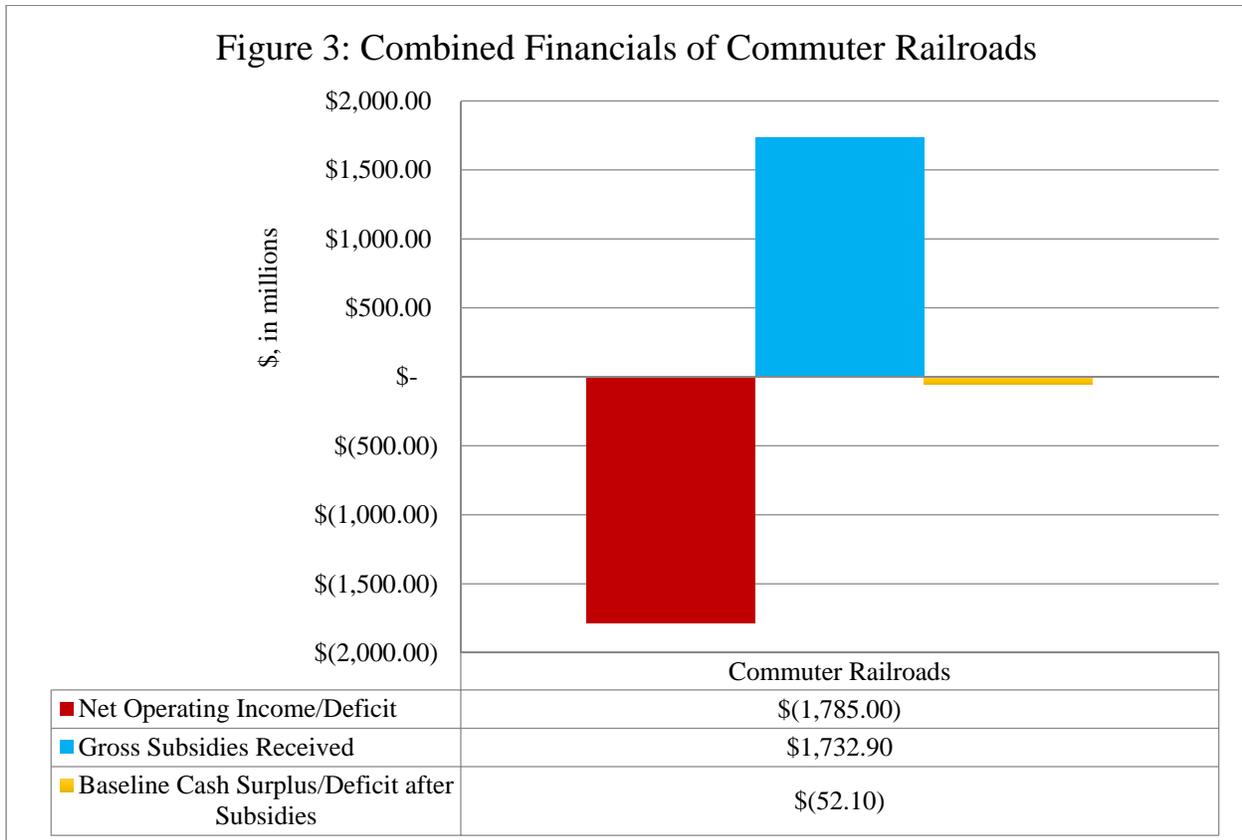


Figure 3 displays the combined financials of the Metro-North Railroad and the Long Island Railroad.

In the 2014 Adopted Budget these agencies run a combined deficit of \$1.79 billion accrued, and \$1.19 billion cash, which is covered by a \$1.73 billion dollar subsidy comprised of Dedicated Tax Funds and other subsidies. As with the NYC local transit agencies, the subsidy provided to the Commuter Railroads would not be enough to fully cover the combined operating deficit without the cash adjustment within the budget.

These figures make clear the current reliance on taxes and subsidies over operating revenue by all MTA subsidiaries providing transportation services. A division of the current governance structure will likely significantly influence the composition of these funds. The following charts provide a breakdown of the taxes and subsidies to these agencies. A clear understanding of this configuration will assist in the determination of those funds most integral to the operation of these entities.

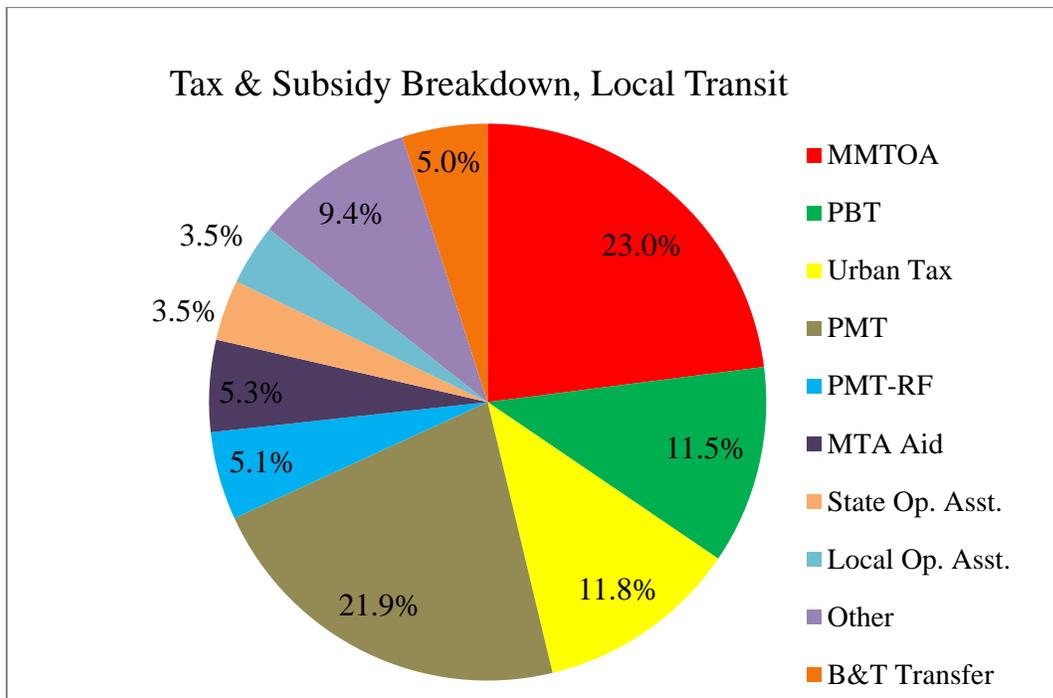


Figure 4, above, displays the proportional reliance of the local transit subsidiaries on the various taxes and fund assistance comprising their gross subsidy.

The local transit providers rely heavily on taxes to comprise their operating subsidy. Taxes compose 73.3% of these agencies' gross operating subsidy with two taxes, the MMTOA and the Payroll Mobility Tax together making up over half of this amount. While individually small in comparison to these two taxes, the combined total of all non-tax subsidies provide 26.7% of the gross subsidy for local transit agencies.

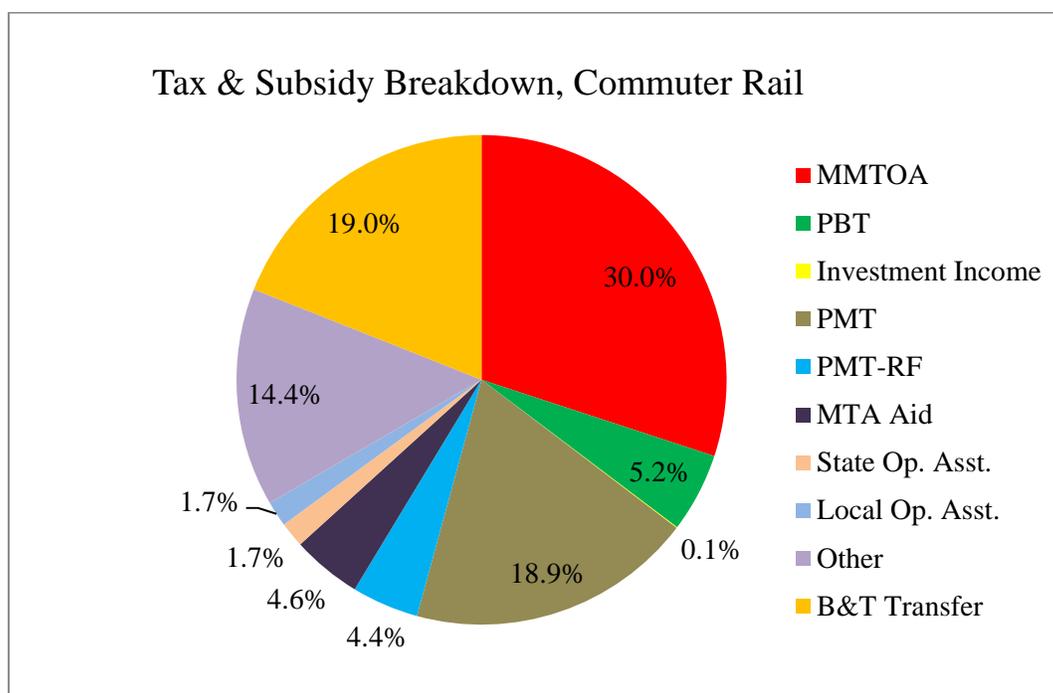


Figure 5 presents the similarities and differences between the structure of subsidization of the local transportation agencies and commuter rail.

Like the local transportation agencies, commuter rail relies heavily on the MMTOA and the PMT, which together form almost half of the gross operating subsidy. However, commuter rails shows a much greater reliance on subsidies than local transit agencies, with the Bridge & Tunnel Surplus Transfer comprising 19% of the total gross subsidy and subsidies in total comprising 41.3% of the gross subsidy compared to 26.7% for the local transportation agencies.

Breakdown of Relevant Subsidies

Relevant taxes and subsidies totaled \$3.2 billion dollars in MTA Fiscal Year 2013, comprising 49% of the gross subsidies provided to the MTA in that period.²⁶ Table 2, below, displays the percentages of each relevant tax receipts and allotments by NYC or Commuter district.

Table 2. Receipt and Distribution of Relevant Taxes²⁷

Tax/Subsidy	% of Relevant Subsidy	% Receipts from NYC	% Paid to NYC Agencies	% Receipts from Commuter Counties	% Paid to Commuter Railroads
MTA Sales Tax	23%	64%	66%	36%	34%
MRT	10%	55%	55%*	45%	45%*
PMT	40%	72%	75%	28%	25%
B&T Surplus	18%	-	39%	-	61%

Table 2 shows the receipt and distribution of New York State taxes relevant to the MTA.

* Denotes allotment required by law should any funds remain beyond those needed to fulfill the operating needs of MTA HQ.

As displayed in Table 2, NYC agencies tend to receive a greater percentage of subsidies than the amount paid by the counties that they service, while the opposite is true for commuter railroads and commuter counties. However, this variance is small, tending to be just a few percentage points and the Mortgage Recording Tax displays a near perfect match between the source and use of funds.²⁸ The true inequity of tax subsidy collection and distribution resides not in the source and use of the taxes alone, but becomes apparent through the comparison of the source and use of these taxes compared to the county of origin of riders utilizing these agencies' services.

²⁶ For a complete breakdown of these taxes, see Appendix E.

²⁷ % of relevant subsidy does not total 100% due to the exclusion of the Payroll Mobility Replacement Fund whose by-county origins were not satisfactorily delineated.

²⁸ Currently none of the agencies represented in this chart receive any MRT funds as all MRT subsidies are completely utilized by MTA Headquarters.

Sources of Relevant Subsidies

- Collected from NYC
- Collected from Commuter Counties
- B&T Surplus

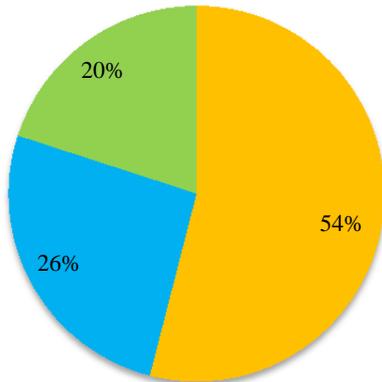


Figure 6 depicts, in percentages, the relevant subsidies collected from New York City residents in orange, Commuter County residents in blue, and the Bridge and Tunnel Surplus in green.

Use of Relevant Subsidies

- Collected from NYC
- Collected from Commuter Counties

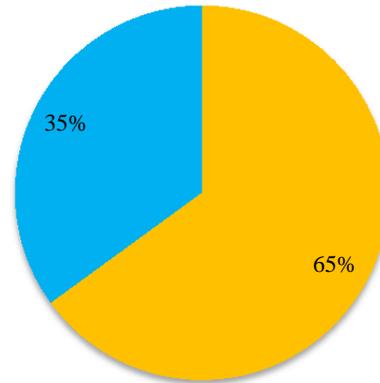


Figure 7 depicts, in percentages, the relevant subsidies distributed, given the amount collected from NYC residents versus Commuter County residents.

Figures 6 and 7 display the imbalances between tax collection and distribution concerning NYC and the Commuter Counties, with both regions displaying greater amounts received than submitted due to the added subsidy from the Bridge and Tunnel Operating Surplus. The direct comparison of collection and distribution amounts does show an imbalance, though slight, as NYC-based agencies receive \$63 million more in “Relevant Subsidies” than NYC provides.²⁹ The true size of the imbalance is most clear when these distribution percentages are compared to ridership. NYC contributes almost 80% of the ridership of the NYC Subway, the MTA’s most highly utilized agency, while contributing little more than half of the “Relevant Subsidies” helping to maintain this agency. Though the dollar amount is not large, the disparity between ridership and subsidy collection highlights the current lack of equity in the subsidization of the MTA by the counties within the MCTD.

C. Discussion

Splitting the MTA down the lines of local transportation agencies and commuter railroads will likely entail a restructuring of the funding structures of these agencies and affect each agency differently. The local transportation agencies display a reliance on taxes to cover their operating deficits. If the financial structure of these agencies is maintained in a similar fashion after a division of the MTA, there should be plans formulated regarding the maintenance of these

²⁹ See Table 3

funding streams given the city's inability to raise taxes to fund transportation agencies without state approval. Should this be impossible, a fare increase, or significant external financial support, will be necessary.

Commuter railroads show a reliance on the Bridge and Tunnel Transfer surplus to help close these agencies' operating deficits. Significant financial restructuring will be needed should this funding source be removed via a deconstruction of the MTA.

Given that funds from taxes comprise 73.3% of the local transit agencies' gross subsidy, 58.7% of the commuter rail's gross subsidy, and that both of these groups require subsidies in order to avoid a significant operational deficit, a consideration of how best to remodel the current structure of the MTA's tax funds should be a high priority should a division of the agencies comprising the MTA occur.

SCENARIO I: COMPLETE TRANSFER OF B&T SUBSIDY TO CITY TRANSPORTATION AGENCIES

MTA Bridges and Tunnels currently transfers a total of \$554.3 million in subsidies to other MTA subsidiaries, with \$222.8 million or 39% of total B&T subsidy going to New York City-based transportation agencies (NYC Transit, MTA Bus, and the Staten Island Railroad), and \$331.5 million or 61% going to Commuter Railroads (Long Island Railroad and Metro-North Railroad).

In this scenario all \$554.3 million of the B&T subsidy is transferred to City Transportation Agencies to examine potential financial implications of MTA restructuring. To do so, we transferred \$331.5 million subsidy from State-controlled Agencies to City Transportation Agencies. We then determined the financial implications of this subsidy re-allocation by comparing the “Baseline Cash Surplus/(Deficit) after Subsidies” for state and local agencies before and after the restructuring.

Figure 8 displays a decrease in the Baseline Cash Deficit after Subsidies for City Transportation Agencies of 17.92%, from \$1,849.5 million to \$1,518 million. Figure 9 shows an increase in the Baseline Cash Deficit after Subsidies for State-controlled Agencies of 632.28%, from \$52.1 million to \$383.60 million. By comparing these ratios, 17.92% and 632.28%, we see that the complete transfer of B&T subsidies to City Transportation Agencies will have a much greater negative impact on State-controlled Agencies than a positive impact on the City Transportation Agencies.

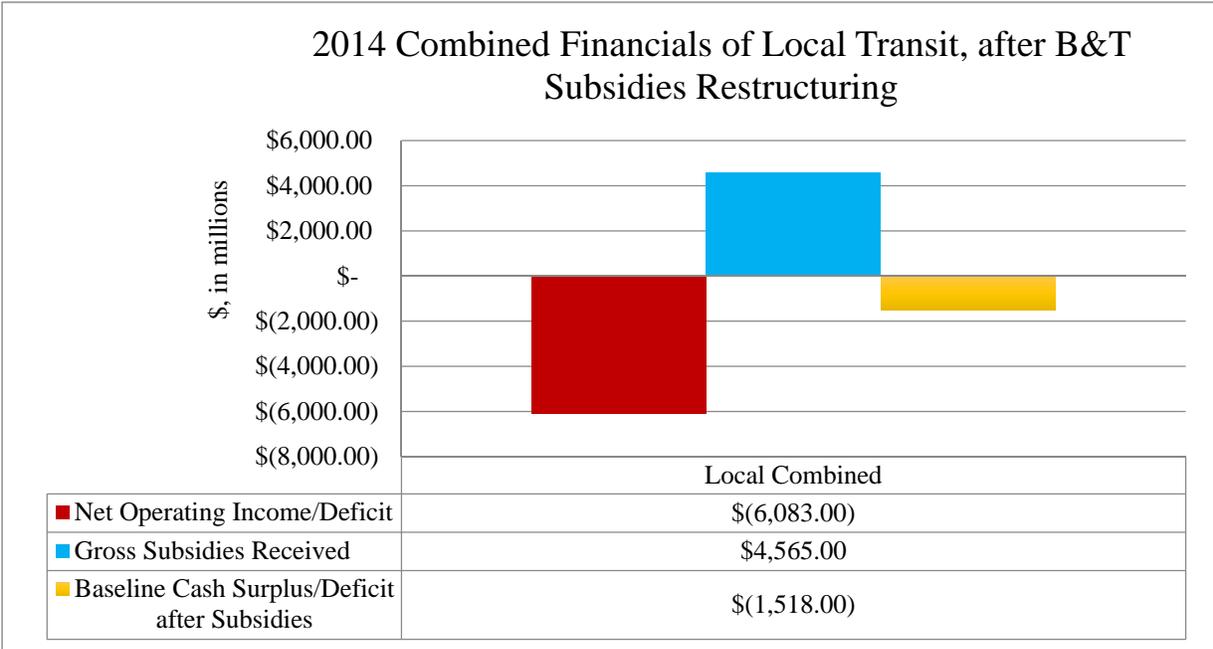


Figure 8 displays a decrease in the Baseline Cash Deficit after Subsidies for City Transportation Agencies of 17.92%, from \$1,849.5 million to \$1,518 million.

Figure 9: 2014 Combined Financials of Commuter Railroads,
after B&T Subsidies Restructuring

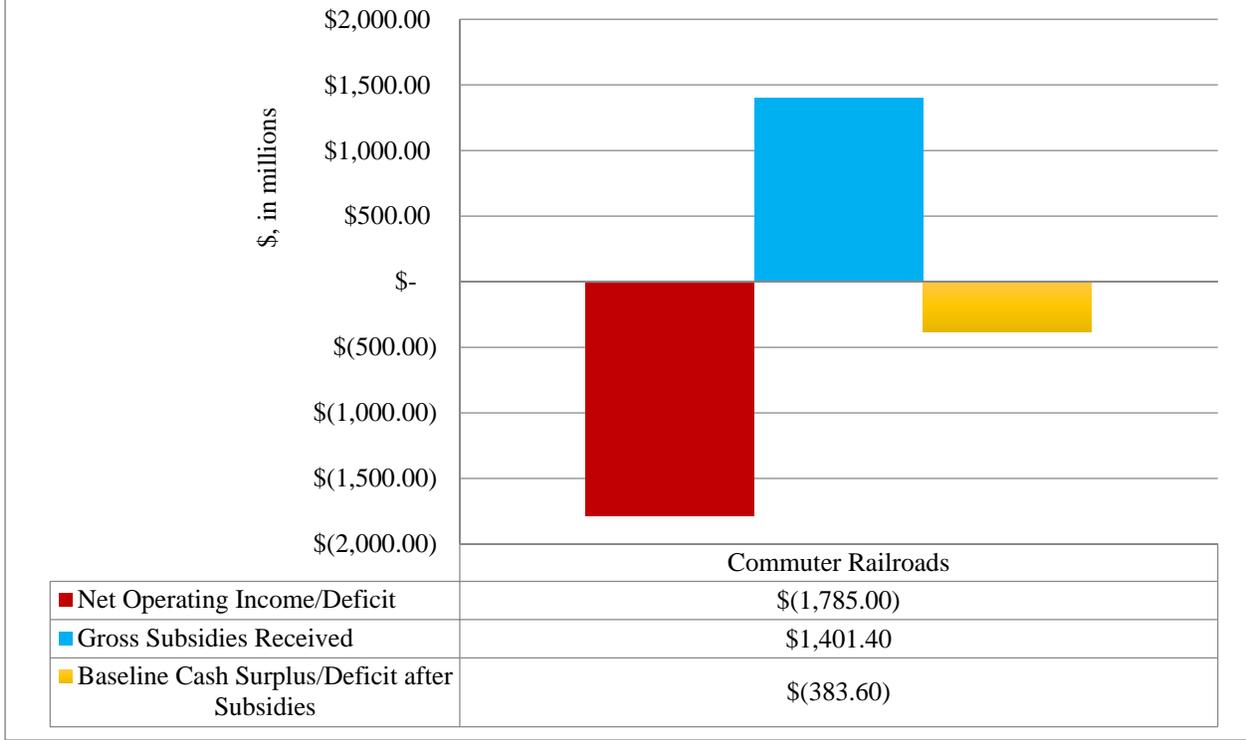


Figure 9 shows an increase in the Baseline Cash Deficit after Subsidies for State-controlled Agencies of 632.28%, from \$52.1 million to \$383.60 million.

SCENARIO II: EQUITABLE DISTRIBUTION OF “RELEVANT SUBSIDIES”

As shown above, the distribution of “Relevant Subsidies” within the MTA does not match the proportion of collections. Currently, agencies servicing New York City receive more in “Relevant Subsidies” than they contribute. This scenario involves the financial implications of equitable distribution so that all agencies receive only the amount of “Relevant Subsidies” collected by the counties they service.

Table 3. Equitable Distribution of “Relevant Subsidies” (\$ in millions)

	NYC Transit Agencies	Commuter Railroads
2013 Relevant Subsidies	\$ 1,899.95	\$ 998.57
2013 Relevant Subsidies, after equitable distribution	\$ 1,826.97	\$ 1,061.55
Variance	\$ (62.99)	\$ 62.99
2014 Net Operating Deficit after Gross Subsidies	\$ (1,849.50)	\$ (51.10)

Table 3 shows what the equitable distribution of relevant subsidies would yield, after gross subsidies, for the 2014 Net Operating Deficit.

*Maintains current structure of B&T surplus distribution

A more equitable distribution of Relevant Subsidies has a proportionally small effect on the finances of NYC-based transit agencies, as the estimated variance from such a change is a decrease of \$62.99 million. However, the impact on Commuter Railroads is more significant. The \$62.99 million increase in subsidies received would fully fill the estimated \$52.1 million gap between combined agency operating deficit and gross subsidies received for 2014.

The dissolution of the current structure of the MTA has little short-term financial benefit to offer NYC-based agencies heavily reliant on taxes to make up for limited operational revenue. However, such redistribution is likely to receive significant support from commuter railroads and their associated counties as such a change will likely lead to a net surplus for these agencies. Any fiscal benefit for city-based agencies will likely stem from the ability of the mayor to direct change within local transit agencies as, with current systems in place, there does not appear to be any short-term financial benefit to change.

D. Limitations

All conclusions drawn from the examples above are primarily based upon financial models. While these models allow for the forecasting of potential outcomes, they are limited by their lack of consideration of political realities. The financial performance of a certain model may be entirely irrelevant should the assumptions related to the model be politically unfeasible. However, these models may still be useful in an accommodating political environment.

The models used are based purely off of financial data and do not take into account the manner in which changes to finances may, or may not, affect ridership numbers. Though ridership maintains a significant influence on the financial performance of the MTA and its subsidiaries, the necessity of the services provided by these organizations performs such a crucial public service that our team assumed that no change would drastically affect ridership numbers.

The restructuring example of Complete Transfer of B&T Subsidy to City Transportation Agencies only examined the bundled effects brought to City Transportation Agencies and State-controlled Agencies while failing to take into consideration of the financial implications of each MTA subsidy. This is due to a lack of data of B&T subsidies breakdown allocations. Despite that, this structuring example helps explore the implications of either state or mayoral control.

The determination of “Relevant Subsidies” relied upon the availability of data regarding by-county breakdown of tax receipts. Certain taxes, such as the Corporate Surcharge (allocated within the MMTOA), were not included within “Relevant Subsidies” considered, as the receipt and distribution of this tax could not be clearly delineated by county or agency. At an estimated amount of \$1 billion in 2013, this tax represents a significant portion of the \$6.46 billion in estimated gross subsidies provided to the MTA in 2013. A full analysis of tax redistribution should account for this tax, and others of its nature. In total, the “Relevant Subsidies” analyzed in this report account for 49% of the total 2013 gross subsidy provided to the MTA. As not all of the taxes comprising the gross subsidy are relevant to a discussion of NYC versus Commuter County equity, this percentage represents significant, though not comprehensive, analysis of the potential implications of the dissolution of the MTA on the finances of the involved transit agencies.

VIII. RECOMMENDATIONS AND IMPLEMENTATION

As explained through the scenarios above, a restructuring of the governance of the MTA will be unlikely to lead to any significant financial benefit to NYC-based transit agencies. The proportionally high financial benefit potential for commuter counties, however, implies that the mayor’s political relationships with these counties could improve with a restructuring and could lead to long-term solutions.

Table 4 displays the 2014 Net Operating Deficit of MTA Bus and NYC Transit before and after an equitable distribution of “Relevant Taxes” with all other current subsidies remaining in place and unchanged. “Non-Reimbursable” Net Operating Deficits prior to cash adjustments for these agencies were used in order to provide conservative estimates. Based upon 2013 annual ridership numbers, the Net Operating Deficit of these agencies could be filled by a per-rider fare increase of \$0.73 - \$0.76 or an increase in Gross Subsidy allocation of 43.9% - 46.1%. Given the legal and political difficulties attributed to such large potential increases in taxes, it appears that a fare increase may be the most expedient method of rectifying the financial difficulties of NYC-based agencies within the MTA. Also shown are the fare increases required to replace the MTA Sales Tax, Mortgage Recording Tax, and Payroll Mobility Tax. As these taxes are applied throughout the MCTD to communally subsidize the MTA, it is likely that there will be a political push to remove these taxes should the MTA disband. The fare increases below display the fare increases that would be needed to replace the loss of income from each of these taxes.

Table 4. Potential Program to Eliminate Operating Deficits in NYC Transit Agencies

MTA Bus + NYC Transit		
	Current Tax/Subsidy Allocation	"Equitable Distribution" of Taxes/Subsidies
2014 Net Operating Deficit After Taxes/Subsidies	\$ (1,843,600,000)*	\$ (1,906,590,000)*
Fare increase per rider needed to cover deficit	\$0.73	\$0.76
% Increase of Gross Subsidy needed to cover deficit	43.90%	46.10%
Fare increase needed to replace MTA Sales Tax	\$0.19	\$0.18
Fare increase needed to replace MRT	\$0.07	\$0.07
Fare increase needed to replace PMT	\$0.45	\$0.44

**Table 4 displays the 2014 Net Operating Deficit of MTA Bus and NYC Transit before and after an equitable distribution of “Relevant Taxes.” Operating Deficits depicted in this table represent “non-reimbursable” amounts and are shown prior to “cash adjustments” to reflect the most conservative representation of these agencies’ deficits. Per rider increase calculated utilizing combined ridership numbers from 2013. Fare increases displayed do not account for discounted fares. See Appendix F for detailed calculations.*

IX. CONCLUSION

The creation of the MTA was meant to increase financial support of transit agencies through improved taxation and access to the operating surplus of the Bridge and Tunnel Authority. However, the governance structure that accompanied the creation of the MTA has led to an imbalance between those with the most influence over the agency and those most concerned with the agency's operation. This imbalance has allowed the MTA to rely on subsidies to cover up operational deficiencies and does not promote aggressive change within the agency regarding fiscal policy and system maintenance.

Study of Transport for London, a transit agency similar in scope to those serving NYC, shows that there are benefits to the mayoral control of city-based transportation agencies, made possible by a single managerial vision and political incentive to improve agencies serving the city. Such a change in the governance of the MTA may be a method by which current complications with the MTA's finances and governance can be resolved.

Analysis of the ridership of the agencies comprising the MTA and the subsidies received by these agencies points to an inequitable taxation of Commuter Counties compared to these counties' usage of NYC-based transportation agencies. A more equitable distribution of these taxes does not significantly worsen the fiscal troubles of NYC-based agencies, but has the potential to fill the operating deficit of Commuter Railroads.

Mayoral control of NYC-based agencies of the MTA alone is unlikely to resolve the financial issues currently faced by the MTA. In order to completely cover these agencies' operating deficits, gross subsidies must be raised by almost half or a fare increase of close to one dollar may be required. Neither of these changes is likely to occur given the current governance structure of the MTA. However, mayoral control of the NYC-based agencies may allow for these changes, along with others increasing operational or financial efficiency, to occur.

Nonetheless, mayoral control may be an option for New York City as the first of many steps toward significant change. Politically, mayoral control will likely contribute to greater accountability, which will be beneficial to MTA governance. Shifting power over local transit to the mayor means that he/she will be responsible for the fiscal, operational, and strategic activities of the MTA. This can effectively rid the complicated structural barriers of present governance, where stakeholders have long taken the energy and focus away from the core mission of the MTA: to provide quality services to the public, as well as to enhance the economic viability for New York City. This change can help the MTA better associate investments on the right tools and resources to improve performance.

This report took the first step in analyzing the equity of MTA subsidization and a potential change in governance able to improve the operational and fiscal health of the agency. Limited

availability of data and the assumptions necessary to achieve the results found in this report have left gaps in this research that still need to be filled. Data collection that more comprehensively captures ridership of the NYCT buses, subway, and the SIRR will work towards filling such gaps. Similarly, analysis of the remaining taxes comprising the Gross Subsidy allocated to the MTA will help complete the discussion of the equity of transportation tax collection and distribution. The studies completed here work towards a larger body of research required to fully justify restructuring the MTA. This data will be essential to validate a shift in MTA governance structures.

APPENDIX A: Comparison of Six City Transit Systems for New York Transit System Analysis

	New York	Washington D.C.	Vancouver	Stockholm	London	Singapore	Hong Kong
Currency Ratio	USD	USD	1 USD = 1.11 CND	1 USD = 6.52 SEK	1 USD = 0.6 GBP	1 USD = 1.25 SGD	1 USD = 7.76 HKD
Fare System	Flat rate	Distance based	Zone based	Zone based	Zone based	Distance Based	Distance Based
Serving Population (millions)	19.651	5.2 metropolitan	2.476	2.1 metropolitan	17.7 metropolitan	5.1	7.155
Average Fare Per Ride	\$2.50	\$3	\$2.02	\$3.82	\$ 7.81	SGD \$0.93	HKD \$6.81
Annual Ridership	1.7 billion	340.9 million	1.2 billion	670 million	1.23 billion	775 million	1.6 billion
Average Income (median)	\$63,982		\$63,340			SGD \$47,180	HKD \$248,400
Farebox Recovery Ratio	0.35	0.621	0.519	0.39	0.91	1.25	1.85
Number of Employees	70,000			600	25,000	14,291	21,256
Average Employee Salary (yearly)	\$71,237	\$61,000		\$34,920	\$44,000	SGD \$40,000	
Length of Rail System	1355 km (486 stations)	171.1 km (86 stations)	69.5 km (47 stations)	310 km (150 stations)	402 km (270 stations)	153.2 km (104 stations)	218.2 km (152 stations)
Percent Breakdown of Revenue Sources	Transit Revenue (41%), Dedicated Taxes (35%), Toll Revenue (12%), State and Local Government Subsidies (7%), Other (5%)	Transit Revenue (58%), State and Local Government subsidies (42%)	Transit and Toll Revenue (39%), Motor Fuel Tax (23%), Property Tax (21%), Parking Rights and other Taxes (11%), Senior Government Contributions (6%)	Transit Revenue (60%), Local Taxation Funds (40%)	Transit Revenue (39%), Department for Transport Grants (48%), Congestion Pricing and London Rail (13%)	Transit Revenue (75%), Taxi (12%), Rental (8%), Advertising (3%), Engineering services (2%)	Transit Revenue (38%), Overseas Subsidiaries (37%), Commercial Activities (11%), Property Rental and Management (10%), Other Business (5%)
Percent Breakdown of Expenses	Payroll (32%), Non-Labor (24%), Debt Service (17%), Health & Welfare (11%), Pensions (10%), Overtime (4%), Other Labor (2%)	Operating Expenses (61%), Capital Expenses (39%)	Transit Operations (60%), Interest (12%), Depreciation (11%), Roads, Bridges and Cycling (8%), Administration (7%), Security (2%)			Payroll (38%), Operating (20%), Energy (16%), Depreciation (14%), Maintenance (11%), Interest (2%)	

APPENDIX B: Original Ridership Results from Database

The table below depicts the initial results that were obtained using the database from the 2008 MTA Customer Travel Survey. In order to increase the accuracy of these values, adjustments were made to the bus ridership based on a 2013 EDC study, and to the MNR and LIRR ridership based on a 2007 MNR Travel Survey and a 2012 LIRR Ridership Book, respectively, both issued by MTA. The methodology in determining the final estimate for the ridership is discussed in the body of the report.

	NYC Subway	SIRR	NYC/MTA Bus	MNR	LIRR
NYC Residents	78%	77%	46%	15%	18%
Non-NYC: NY State Ridership	9%	10%	24%	70%	55%
Non-NYC: Out-of-State Ridership	11%	12%	29%	14%	26%
Non-NYC: Tourists	2%	2%	1%	0%	0%

APPENDIX C: Payroll Mobility Tax Distribution from Transportation District Counties

	Avg. Weekly Wages	Avg. Annual Wages	Employment (thousands)	Gross Annual Payroll (\$ millions)	PMT (\$ millions)	%
PMT rate	0.34%					
New York	\$1,108	\$57,616	8,724.80	\$502,688.08	\$1,709.14	
Bronx, NY	\$903	\$46,956	244.5	\$11,480.74	\$39.03	
Kings, NY	\$760	\$39,520	535.3	\$21,155.06	\$71.93	
New York, NY	\$1,667	\$86,684	2424.5	\$210,165.36	\$714.56	
Queens, NY	\$855	\$44,460	536	\$23,830.56	\$81.02	
Richmond, NY	\$802	\$41,704	96.1	\$4,007.75	\$13.63	
MTA 5 Boroughs of NYC Total					\$920.17	71.88%
Rockland, NY	\$954	\$49,608	115.4	\$5,724.76	\$19.46	
Suffolk, NY	\$1,000	\$52,000	634	\$32,968.00	\$112.09	
Westchester, NY	\$1,163	\$60,476	408.1	\$24,680.26	\$83.91	
Dutchess, NY	\$923	\$47,996	111.8	\$5,365.95	\$18.24	
Nassau, NY	\$989	\$51,428	598.7	\$30,789.94	\$104.69	
Orange, NY	\$755	\$39,260	133.3	\$5,233.36	\$17.79	
Putnam, NY	\$656	\$34,112	32.1	\$1,095.00	\$3.72	
MTA Other 7 Total					\$359.91	28.12%

APPENDIX D: Sales Tax Distribution from Transportation District Counties, FY2012

County	County Tax Rate		Local Tax Collections FY 2012	Sales Tax for MMTOA	% contribution to MMTOA
<i>Bronx</i>	4.50%	4.875%			
<i>Kings</i>	4.50%	4.875%			
<i>New York</i>	4.50%	4.875%	\$6,026,404,672	\$463,569,590.15	63.93%
<i>Queens</i>	4.50%	4.875%			
<i>Richmond</i>	4.50%	4.875%			
<i>Dutchess</i>	3.75%	4.125%	\$165,888,087	\$12,760,622.08	
<i>Nassau</i>	4.25%	4.625%	\$1,079,481,313	\$83,037,024.08	
<i>Orange</i>	3.75%	4.125%	\$255,854,263	\$19,681,097.15	
<i>Putnam</i>	4.00%	4.375%	\$51,802,272	\$3,984,790.15	
<i>Rockland</i>	4.00%	4.375%	\$175,301,755	\$13,484,750.38	
<i>Suffolk</i>	4.25%	4.625%	\$1,208,502,982	\$92,961,767.85	
<i>Westchester *less cities</i>	3.00%	3.375%	\$330,288,270	\$25,406,790.00	
<i>*Mt Vernon</i>	4.00%	4.375%	\$17,213,893	\$1,324,145.62	
<i>*New Rochelle</i>	4.00%	4.375%	\$25,707,598	\$1,977,507.54	
<i>*White Plains</i>	4.00%	4.375%	\$49,956,514	\$3,842,808.77	
<i>*Yonkers</i>	4.00%	4.375%	\$40,348,127	\$3,103,702.08	
			\$133,226,132	\$261,565,005.69	36.07%
Total				\$725,134,595.85	100.00%

APPENDIX E: Consolidated Subsidies Accrual Basis (\$ in millions)

Subsidies	2013 - Final Estimate	% of Gross Subsidy	Relevant to Split (Calculated)	% of Relevant Subsidies	\$ from City	% from City	\$ from Suburbs	% from Suburbs	\$ to City	% to City	\$ to Suburbs	% to Suburbs
<u>Dedicated Taxes</u>												
MMTOA	\$ 1,518.20	23.5%										
<i>Sales Tax</i>	\$ 854.90	13.2%	\$ 725.14	23%	\$ 463.57	64%	\$ 261.57	36%	\$ 478.59	66%	\$ 246.55	34%
<i>PBT</i>	\$ 142.00	2.2%										
<i>Corp. Franchise</i>	\$ 58.00	0.9%										
<i>Corp. Surcharge</i>	\$ 1,000.00	15.5%										
<i>Investment In.</i>	\$ -	0.0%										
PBT Receipts	\$ 594.50	9.2%										
MRT	\$ 369.60	5.7%	\$ 308.60	10%	\$ 170.67	55%	\$ 137.93	45%	\$ -	0% or 55% (law)	\$ -	0% or 45% (law)
MRT transfer to Suburbs	\$ (3.60)	-0.1%										
Reimburse Security Cost	\$ (10.00)	-0.2%										
Interest	\$ 4.50	0.1%										
Urban Tax	\$ 528.20	8.2%										
Investment Income	\$ 1.00	0.0%										
<u>PMT & MTA</u>												
<u>Aid</u>		0.0%										
PMT	\$ 1,214.20	18.8%	\$ 1,280.08	40%	\$ 920.17	72%	\$ 359.91	28%	\$ 904.60	75%	\$ 309.60	25%
PMT-RF	\$ 307.20	4.8%	\$ 307.20	10%					\$ 228.90	75%	\$ 78.30	25%

**APPENDIX F: Eliminating Operating Deficits in NYC-based Transit Agencies
(NYC Transit, MTA Bus)**

	Net Operating Deficit (after Subsidies)	Net Operating Deficit (after "Equitable Distribution" of Subsidies)
2013 Net Operating Deficit	\$1,843,600,000.00	\$1,906,590,000.00
Fare increase per rider	\$0.73	\$0.76
% Sidsidy increase	28.5%	29.5%
2013 Combined Ridership	2510076336	2510076336
2014 Gross Subsidy	\$6,464,200,000.00	\$6,464,200,000.00
Amount received from MTA Sales Tax	\$478,590,000	\$463,570,000
Fare increase needed to replace MTA Sales Tax	\$0.19	\$0.18
Amount received from MRT	\$170,670,000	\$170,670,000
Fare increase needed to replace MRT	\$0.07	\$0.07
Amount received from PMT	\$1,133,500,000	\$1,093,640,000
Fare increase needed to replace PMT	\$0.45	\$0.44
Fare increase to replace MTA Sales Tax + MRT + PMT	\$0.71	\$0.69