

LET'S

GO

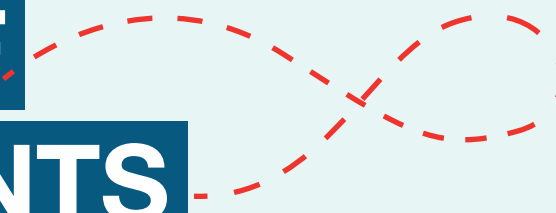
A Case for Municipal Control and a Comprehensive Transportation Vision for the Five Boroughs



**NEW YORK CITY COUNCIL
SPEAKER COREY JOHNSON**

MARCH 5, 2019

TABLE OF CONTENTS



EXECUTIVE SUMMARY	6
SUMMARY OF RECOMMENDATIONS	8
A Vision for Municipal Control	8
GOVERNANCE:	8
FINANCES:	8
Increasing Accessibility	9
A Master Plan for City Streets	9
TO IMPROVE BUS SERVICE:	9
TO CREATE LIVABLE STREETS:	10
TO ENCOURAGE SAFE, SUSTAINABLE TRANSPORTATION:	10
TO REDUCE CONGESTION:	10
TO ADDRESS CLIMATE ADAPTATION:	10
Rethinking the BQE	10
WHY TRANSPORTATION?	11
COMMON MODES OF TRANSPORTATION IN NEW YORK CITY	13
BETTER TRANSIT MEANS A BETTER NEW YORK	14
Better Transit is Better for the Economy	14
A More Fair City	15
A Safer City	15
A Greener New York	16
HOW WE GOT HERE	17
THE SUBWAY	18
Early Mass Transit Policy	18
The Need for Great Expansion	19
Completion of the Dual Systems and the Rise of the IND	21
Unification of the System	22
Post-World War II: Rise of the Automobile and the New York City Transit Authority	22
Fiscal Crisis	24
A Lack of Focus and Investment	25
Recent History: Another Slow Decline	25
SUBWAY ACTION PLAN	26
ACCURACY OF PERFORMANCE STATISTICS	28
A CRISIS OF CONFIDENCE – THE L TRAIN SHUTDOWN	29
LOCAL TRANSPORTATION POLICY	30
A VISION FOR MUNICIPAL CONTROL	32
GOVERNANCE	33

What's Not Working.....	33
STRUCTURE OF THE MTA.....	33
MTA BOARD	34
Recommendation: Establish Big Apple Transit—the BAT	35
TRANSFER CONTROL OF THE SUBWAY AND BUSES TO THE CITY	35
BUILDING A BETTER BOARD	35
MOBILITY CZAR	36
REGIONAL COOPERATION	36
OVERSIGHT	37
FISCAL TRANSPARENCY	37
What's Not Working.....	37
UNSUPPORTED DEBT AND CAPITAL.....	37
DISTRACTED AND UNFOCUSED CAPITAL PLANNING PROCESS	38
Recommendation: Model BAT's Structure on the City's Water System	39
ENSURE ADEQUATE FUNDING	40
OUTSIDE REVIEW OF FUNDING.....	40
FINANCING AUTHORITY	41
OPERATIONS	41
Recommendation: Create More Transparency in Budgeting	41
CAPITAL PLANNING.....	41
OPEN DATA	42
Recommendation: Address Debt	42
ADDRESSING EXISTING MTA DEBT RESPONSIBLY.....	42
WHAT MTA DEBT SERVICE MEANS FOR BAT.....	43
BALANCING THE BUDGET	43
What's Not Working.....	43
Recommendation: Dedicate Congestion Pricing to BAT Budget	44
Recommendation: Swap State Aid with State Sales Tax.....	45
Recommendation: Expand the City's Revenue Authority	45
Recommendation: Potential Revenue Sources	45
PAYROLL MOBILITY TAX	46
INCREASE THE CORPORATE TAX SURCHARGE IN NEW YORK CITY	46
INCREASE CITY BUSINESS TAX RATES	46
MILLIONAIRES TAX	46
INCREASE MCTD SALES TAX IN NEW YORK CITY	46
REFORM THE TRANSFER TAXES	47
COLLECT PILOTS FROM PRIVATE HIGHER EDUCATION INSTITUTIONS AND HOSPITALS	47
EXTEND THE GENERAL CORPORATION TAX TO INSURANCE COMPANY BUSINESS INCOME.....	47
PARKING METER FEES	47
END OR AMEND INEFFICIENT TAX BREAKS	47
COST SAVINGS AND CAPITAL SPENDING	48
What's Not Working.....	48
LABOR AND OPERATING INEFFICIENCIES	48
WORK RULES.....	48
LABOR COSTS GROWING	48
CONSTRUCTION AND PROCUREMENT	49
SHAPING OF PROJECTS.....	50
PROCUREMENT	50
SELECTION OF CONTRACTORS	50
CHANGE ORDERS.....	51
SCAFFOLD LAW	51

Recommendation: Reduce Costs.....	52
OPERATING EXPENSES	53
PROCUREMENT	53
CONCILIATORY LABOR REFORM	54
Recommendation: Develop a Responsible Financial Plan	55
BUDGET ASSUMPTIONS	55
BAT OPERATING BUDGET	57
Recommendation: Fund the BAT's Capital Program.....	57
Recommendation: Hold Commuter Railroads Harmless	58
FARES	59
What's Not Working.....	59
Recommendation: Reform the Fare System.....	60
LACK OF ACCESSIBILITY.....	61
What's Not Working.....	61
THE SUBWAY DOESN'T SERVE OVER ONE MILLION NEW YORKERS.....	61
COPING WITH AN INACCESSIBLE SYSTEM.....	63
BUSES.....	63
ACCESS-A-RIDE.....	64
Recommendation: Use Zoning Tools to Improve Accessibility	65
EXISTING TOOLS.....	65
EXPANDING AND STRENGTHENING THESE TOOLS	65
Recommendation: Train Bus Operators in Accessibility Annually	66
A COMPREHENSIVE TRANSPORTATION VISION FOR THE CITY.....	67
PLANNING	68
What's Not Working.....	68
Recommendation: Five Year Master Plan for City Streets	69
Considerations for a Master Plan under Municipal Control.....	72
BUSES.....	69
What's Not Working.....	69
RIDERSHIP	70
BUS PERFORMANCE	70
SLOW PROGRESS TO IMPROVE SERVICE	71
DESIGN AND ENFORCEMENT	73
BUS ROUTE PLANNING	74
Recommendation: Install a Minimum of 30 Miles Of Bus Lanes Per Year.....	74
Recommendation: Bring Transit Signal Priority to At Least 1,000 Intersections per Year.....	74
Recommendation: Implement Route Redesigns and Bus Stop Upgrades Citywide By 2025	75
Recommendation: Install Bus Lanes, Bus Lane Cameras, and TSP on Every Single Bus Route by 2030.....	75
Recommendation: Increase Bus Ridership to 16 percent of New Yorkers' Trips by 2030.....	75
CREATING LIVABLE STREETS	75
What's Not Working.....	75
STREET REDESIGNS	76
PEDESTRIANIZED SPACES	76
PUBLIC SPACES	77
Recommendation: Dramatically expand the City's Plaza Program	78
Recommendation: Quadruple the Number of Shared Streets by 2025.....	78
Recommendation: Redesign and Make Every Signaled Intersection Accessible by 2030.....	79
BICYCLES	79

What's Not Working.....	79
BENEFITS OF BIKE INFRASTRUCTURE	80
BIKE LANES	81
BIKE SHARE	82
BARRIERS TO BIKE RIDING.....	83
Recommendations: Require Minimum Design Standards for Protected Bike Lanes	83
Recommendation: Install At Least 50 Miles of Protected Bike Lanes Per Year	83
Recommendation: Complete a Fully Connected Bike Network By 2030.....	83
Recommendation: Increase Bike Ridership To 14 Percent of New Yorkers' Trips By 2050.....	84
CONGESTION AND PRIORITIZING CARS.....	84
What's Not Working.....	84
CONGESTION.....	84
For-hire Vehicles	84
Trucks and Deliveries	85
PARKING POLICIES	86
Recommendation: Rein in Placard Abuse	86
Recommendation: Overhaul Commercial Loading Zones, Truck Routes, and Parking Policies By 2025	86
Recommendation: Reduce Private Car Ownership by Half By 2050.....	87
CLIMATE ADAPTATION AND RESILIENCY	87
What's Not Working	87
GREEN INFRASTRUCTURE: STREETS AND PLAZAS.....	88
CITY FLEETS	88
Recommendation: Prioritize Green Infrastructure in Transportation Projects	88
Recommendation: Reduce The Size of the City's Vehicle Fleet by At Least 20 Percent By 2025 and Transition to 100 Percent Renewable Energy Sources By 2050	88
FUTURE OF THE BQE	89
What's Not Working.....	89
RECONSTRUCTION OF THE BQE	89
INDUCED DEMAND.....	89
Recommendation: Explore Alternatives to Reconstruction.....	90
CONCLUSION	91
APPENDIX: DEDICATED TAXES IN MTA WATERFALL AND STATE/LOCAL SUBSIDIES	94
APPENDIX: CURRENT MTA TAX AND SUBSIDY REVENUE SOURCES.....	95
APPENDIX: CURRENT OPERATING BUDGET OF BAT COMPONENTS.....	96
NEW YORK CITY TRANSIT AUTHORITY	96
STATEN ISLAND RAIL ROAD	98
MTA BRIDGES AND TUNNEL	99
MTA BUS COMPANY	100
APPENDIX: CURRENT 2015-2019 CAPITAL PROGRAM	101

EXECUTIVE

SUMMARY





EXECUTIVE SUMMARY

Transportation is the lifeblood of New York. It's the only governmental program most people encounter every day. Whether riding the subway to get to work, hopping on the bus to go to the doctor, taking a car to visit family, or just walking down the sidewalk to pick up groceries, transportation is ever-present in our lives. Smart, well-developed transportation policy can significantly improve economic conditions and enhance public safety and climate outcomes. Poorly crafted policy can be devastating.

The City's subway and bus service—our mass transit system—is run by the Metropolitan Transportation Authority (the MTA) a state controlled entity that is overseen by the legislature. The City's streets and sidewalks on the other hand, are largely controlled by the City.

The City's subway and buses are in a state of crisis. Service interruptions are common and delays are frequent. Not surprisingly, the MTA is facing a crisis of credibility. Riders are losing faith, either spending hours each week leaving earlier and earlier just to make sure they're on time, or abandoning the system altogether in favor of cars.

Our streets and sidewalks are also in crisis. We have too many cars on the road causing traffic and greenhouse gas emissions, not enough space for more environmentally safe modes of transportation such as buses and bikes, and we don't provide anywhere near enough opportunity for mobility impaired New Yorkers to navigate the City.

Making matters worse, the City lacks a coordinated and integrated transit strategy. The MTA and the City do not and cannot effectively and comprehensively coordinate their activities. The reason is simple—they are separate systems under the control of different entities each with its own set of priorities. For New York City, the core of this problem is that the MTA is run by the State and its decisions are not always influenced by what's in the City's best interests.

It's time for the City to take back control of the subway and buses so that we can establish and implement our own transportation priorities. This report closely examines the problems associated with the current MTA governance structure and proposes a detailed plan, including proposed operating and capital budgets and new revenue streams, for a City controlled entity to run our mass transit

system. Recognizing that failures of government come from failures of accountability and responsibility, the report proposes three key elements for the new system: accountability, transparency, and oversight.

Understanding that the subway and buses are just one part of the City's mobility equation, we also need improvements to other transit modes. This report examines the current state of City controlled transportation and proposes a comprehensive strategy to improve mobility on the City's streets and sidewalks. For decades, the City has prioritized cars over people. We need to right those historic wrongs and bring equity to the City's streets. Alternative transit options must be convenient, accessible, and appealing to break the car culture, and this effort will require integrated and streamlined planning for all modes of transportation.

Finally, the report studies and outlines the benefits and opportunities inherent in a fully integrated transportation system. A unifying policy underlying all forms of transportation under City control will allow us to make our transportation systems stronger and our streets greener, improving the economic prospects, and safety of New Yorkers.

SUMMARY OF RECOMMENDATIONS

A Vision for Municipal Control

GOVERNANCE:

- **A New Mass Transit System for New York City—the BAT.** The State must transfer New York City Transit, the Manhattan and Bronx Surface Transit Operating Authority, the MTA Bus Company, the Staten Island Rapid Transit Operating Authority, MTA Bridges and Tunnels, and a portion of operations at MTA Headquarters to a new entity controlled by the City—Big Apple Transit (BAT).
- **Accountable Governance.** The system needs one person in charge. Under the BAT, that would be the Mayor. Riders and taxpayers would know who controls the system and who to hold accountable.
- **Create a Diverse Board.** Every BAT Board Member would be a New Yorker who uses our mass transit system, and there would be requirements that the Board be comprised of members with a diverse set of skills and expertise.
- **Model BAT's Structure on the Water Board.** The BAT would resolve issues of political interference and a lack of clear financial support by taking a page from the operations of a successful, capital-intensive municipal operation: the City's water system. Like that system, BAT's operations would be part of the City's budget and subject to the same vigorous oversight and planning process that other City agencies currently undergo. Similarly, BAT's financial plan would also be periodically reviewed by a third party engineering firm to ensure that these financial plans provide sufficient resources to keep the system viable over the long-run. These concrete steps will prevent any future backsliding in maintenance and investment to guarantee New Yorkers a reliable transit system.

FINANCES:

- **Address Existing MTA Debt Service.** Recent federal tax law changes make it advisable to keep the existing MTA around long enough to finish servicing its current debt. To do that, fares, tolls, and certain dedicated taxes would first flow through the legacy MTA to service that debt before flowing back to BAT and the commuter railroads. Going forward, BAT and the commuter railroads would issue bonds, not the MTA. This would ensure that existing MTA debt will be responsibly addressed, while freeing the new system to make desperately needed capital investments.
- **Pass Congestion Pricing.** The current MTA has an operating deficit that BAT will inherit. Congestion pricing represents an obvious source of revenues for transit. Not only would it raise a substantial amount of needed revenues, but it is necessary to control rising congestion. However, congestion pricing revenues alone will not be enough to address this inherited deficit. Including \$1.1 billion in congestion revenues and assuming a 10 year capital plan that funds the FastForward plan, BAT will start out with annual budget deficits of just under \$600 million. If the State Legislature fails to pass an acceptable congestion pricing plan in 2019, the Council can and should pass its own plan.
- **End Inefficient Procurement.** Cost savings should be central to any effort to fill that gap. The MTA's procurement process is inefficient and drives up the cost and length of time it takes to execute a capital project. BAT should receive many of the same advantages that the City's School Construction Authority enjoys, including an exemption from Wicks Law, which requires building projects to be subdivided into smaller, more inefficient contracts; design-build authority which combines design and construction contracting to remove bottlenecks when redesigns are needed; the ability to qualify the lowest bidder on a project to ensure BAT gets not just fair prices, but also a contractor who can successfully execute an on-time job; and other contracting improvements.

- **Address Labor Costs.** The MTA is also faced with growing labor costs. BAT would follow the City's example in its recent work with labor unions to address health care costs. BAT would partner with labor to identify cost savings targets in work rules, health care, overtime, and other specific areas and share a portion of those savings with the workers.
- **Provide Local Taxing Authority.** Even if cost savings are enough to fill the inherited gap, successful municipal control of the system would require the State to delegate an enhanced degree of taxing authority to the City and BAT. Otherwise, the only available revenue source would be to raise fares, which puts a disproportionate burden on working families. Considering how important physical mobility is to economic mobility, fares should not become the first stop to filling a revenue need—it should be the very last stop.
- **Increase Revenues That Are Fully Deductible.** The best place to start the search for revenues is with those taxes that remain fully deductible from Federal taxes. While recent federal tax reform largely limited the ability of individuals to deduct state and local taxes, it has largely left corporations with much of their ability intact. This means that the Federal government will effectively subsidize about 20 percent of City tax increases. Considering the Federal government's failure to invest in major infrastructure needs in the City and around the country, it only seems fair to focus on taxes that force the federal government to contribute, albeit indirectly. Therefore, taxes like the existing MTA payroll mobility tax, the MTA corporate tax surcharge, and the City's two business taxes should be the first taxes considered to fill the gap. We should have a broader discussion of other potential taxes to consider, some of which are presented in the report.
- **Continue to Support Commuter Railroads.** Municipal control cannot be done by short-changing the commuter railroads. In fact, the initial proposed BAT model shows that the railroads could end up with \$200 million more in annual revenues, though exactly how existing MTA funding streams are shared between BAT and the commuter railroads should be subject to further research and negotiation. In addition, regional cooperation should continue through a new organization.
- **Reform the Regressive Fare System.** Municipal control of the subway and buses includes a commitment to ending the practice of funding transit on backs of our most vulnerable populations through regular fare hikes. With expanded revenue authority, the City would be able establish a sustainable and progressive funding scheme to ensure our transit system is available to all.
- **Improve the Capital Budget Process.** Under BAT, the capital budget would follow the City's process, including a lengthy public review period and multiple public hearings. This would provide an opportunity for real scrutiny and actual debate about the best ways to invest in the system. In addition, as the capital budget includes major projects with long-term completion dates the budget should be crafted to look ten years out—not the current five.

Increasing Accessibility

Despite the urgent moral imperative to upgrade stations so that all New Yorkers can safely access the subway, zoning tools to require or incentivize new construction next to subway stations to include new station entrances and elevators are available only in select areas of the city. We must expand and strengthen zoning for station accessibility so that every development site by a subway station is evaluated for this potential and allowed a density bonus for including access improvements. This zoning action could accelerate the cost-effective implementation of ADA accessibility at dozens of stations across New York and help us finally deliver on the promise of transit equity for our most vulnerable."

A Master Plan for City Streets

Establishing a five-year integrated plan for bicycle, bus, vehicle, ferry, and pedestrian infrastructure informed by a robust public engagement process would bring cohesion to what is now a patchwork system of upgrades. Improving the City's streetscape not only helps support mass transit by making sure buses can run more efficiently, but it also encourages the use of transportation alternatives that make our streets safer and neighborhoods greener. In order to achieve these goals, we need to set aggressive benchmarks for success. As part of the Master Plan, we must:

IMPROVE BUS SERVICE:

- **Install of at least 30 miles of bus lanes per year.** Every new bus lane should be camera enforced and physically separated from traffic along appropriate corridors where camera enforcement proves ineffective.
- **Bring Transit Signal Priority (TSP) to at least 1,000 intersections per year.** The City must speed the activation of TSP across the entire bus system, to ensure the bus network takes full advantage of the proven benefits of TSP wherever feasible.
- **Install bus lanes, bus lane cameras, and TSP on every single bus route by 2030.** Every redesigned bus route must feature a combination of bus lanes, bus cameras, and TSP by 2030 to ensure that no riders are left behind.
- **Implementation of route redesigns and bus stop upgrades citywide by 2025.** We must double the pace at which NYCT is currently running the redesign process to fully complete and implement new routes and upgrades, including bus shelters,

benches and Real Time Passenger Information (RTPI), by 2025. In the absence of municipal control, the City must partner with NYCT to achieve these goals.

CREATE LIVABLE STREETS:

- **Dramatically expand the City's Plaza Program.** Expanding the program to consider all publicly owned land has the potential to dramatically expand the amount of safe, pedestrian-only public spaces throughout the City, foster and cultivate interest in public space investments, and create opportunities for the installation of green infrastructure to improve air quality and public health outcomes, among other benefits.
- **Quadruple the number of Shared Streets by 2025.** The City should prioritize and dramatically expand its Shared Streets program to increase the number of pedestrianized streets that restrict vehicle access to at least a dozen corridors by 2025.
- **Redesign and make every signaled intersection accessible by 2030.** DOT should install Vision Zero safety and accessibility features—including pedestrian islands, signal-protected crossings, wider sidewalks, accessible pedestrian signals (APS), detectable warnings, curb ramps, and bus and bike lanes—to improve intersection design and make every single intersection with a pedestrian signal accessible to seniors and people with disabilities by 2030.

ENCOURAGE SAFE, SUSTAINABLE TRANSPORTATION:

- **Require minimum design standards for protected bike lanes.** Nearly a quarter of the City's "protected" bike lanes installed in 2018 reportedly lacked a physical barrier, offering cyclists "just green paint and prayer." Without clear design standards and minimum thresholds for a "protected" lane that include physical barriers to protect riders from vehicles, we cannot hold the City accountable to meet bike infrastructure goals.
- **Install at least 50 miles of protected bike lanes per year.** Informed by new design standards for true protected lanes, the City should significantly increase the installation of this critical, life-saving infrastructure to at least 50 miles per year.
- **Complete a fully connected bike network by 2030.** Annual goals for protected bike lanes must all contribute to the achievement of this long-term goal to serve every square mile of the City's street grid with bike infrastructure by 2030.
- **Increase bike ridership to 14 percent of trips by 2050.** We can make significant strides in reducing emissions through investments in bike infrastructure.

REDUCE CONGESTION:

- **Rein in placard abuse.** Legislation currently before the Council would help to reduce the number of placards, bring order and accountability to the system, increase enforcement, and target the most dangerous parking practices by requiring enforcement officers to call for towing of any vehicle blocking a bike lane, bus lane, crosswalk, or fire hydrant.
- **Overhaul commercial loading zones, truck routes, and parking policies by 2025.** A failure to sufficiently address the commercial loading zones, truck routes, and parking policies that help keep our City running will only foster chaos on our streets and frustration among businesses and residents.
- **Reduce private car ownership by half by 2050.** Reducing the share of car trips should remain the City's central goal when it comes to managing vehicle traffic and reducing emissions.

ADDRESS CLIMATE ADAPTATION:

- **Reduce the size of the City's vehicle fleet by at least 20 percent by 2025 and transition to 100 percent renewable energy sources by 2050.** Aiming to bring the entirety of the City's fleet to 100 percent renewable energy sources and reduce the overall number of fleet vehicles on the road over the next few decades will help the City "lead by example" as the Clean Fleet plan suggests.
- **Prioritize green infrastructure in transportation projects.** The City should be required to test and study the feasibility of permeable pavements, as outlined in DOT's 2016 Strategic Plan, and consider the installation of green infrastructure in every single capital project it pursues, particularly in communities of color.

Rethinking the BQE

Before spending \$4 billion to reconstruct a 1.5 mile stretch of highway, the City should study alternatives to the reconstruction of this Robert Moses-era six lane road, including the removal of the BQE in its entirety. A study and planning effort to overhaul the BQE should start with public engagement and be accompanied by sufficient plans to improve public transit options and mitigate the impacts of truck traffic in each scenario, particularly in environmental justice communities throughout the City. The reimagining of the BQE should be coupled with a truck route redesign initiative.

WHY



TRANSPORTATION?

WHY

TRANSPORTATION?

Transportation isn't just the way we get around, it's the way we live. The average one-way commute in New York is almost 36 minutes.¹ That's 12.5 days a year we can't spend relaxing, earning money, learning, or with loved ones.² Over 750,000 City residents commute over an hour each way to work.³ If you live in the outer boroughs, your commute can easily run 90 minutes each way. That's over 31 days—an entire month—each year spent in transit.

And that's just getting to and from work. Living in the City—from seeing a doctor to shopping to visiting friends and family—means being on the move. Our transportation policies impact virtually all New Yorkers, and if we get it right, those policies can significantly improve economic, safety, and climate outcomes for our City.

However, right now, almost nothing related to transportation in the City is working. Vehicle ownership rates are rising. Uber and Lyft trips are skyrocketing. Subway and bus trips are declining. Our streets remain crowded and dangerous, prioritizing cars over people and public transit to everyone's detriment. The City has failed to put forth a comprehensive, long-term vision for our streetscapes, which has resulted in slow and piecemeal progress toward building out a safe, equitable and sustainable City.

Political accountability at the MTA is non-existent. This simply isn't working. But there is a better way. We can get New York moving again with municipal control of the subway and buses and a comprehensive transportation vision for the City.

This report details the ways in which transportation impacts our lives, the history of transportation policy in New York City, why State control of the subways and buses isn't working, how municipal control will create a better system for riders, and how we can improve local transportation planning.

Better Transportation Means a Better New York

The average New Yorker spends

12.5 days

a year commuting to work. Outer Borough residents can spend as many as

31 days

out of the year commuting.



Subways are delayed

70,000

times per month



Between 2012 and 2018, bus ridership dropped by

15%

30%

of the City's carbon emissions come from transportation.



Over five years, congestion will cost the New York metro area economy

\$100 billion



Every Year in Traffic Crashes

4,000

New Yorkers are seriously injured

200

New Yorkers are killed



vehicles seriously

INJURE OR KILL A NEW YORKER

EVERY 2 HOURS



Sources:

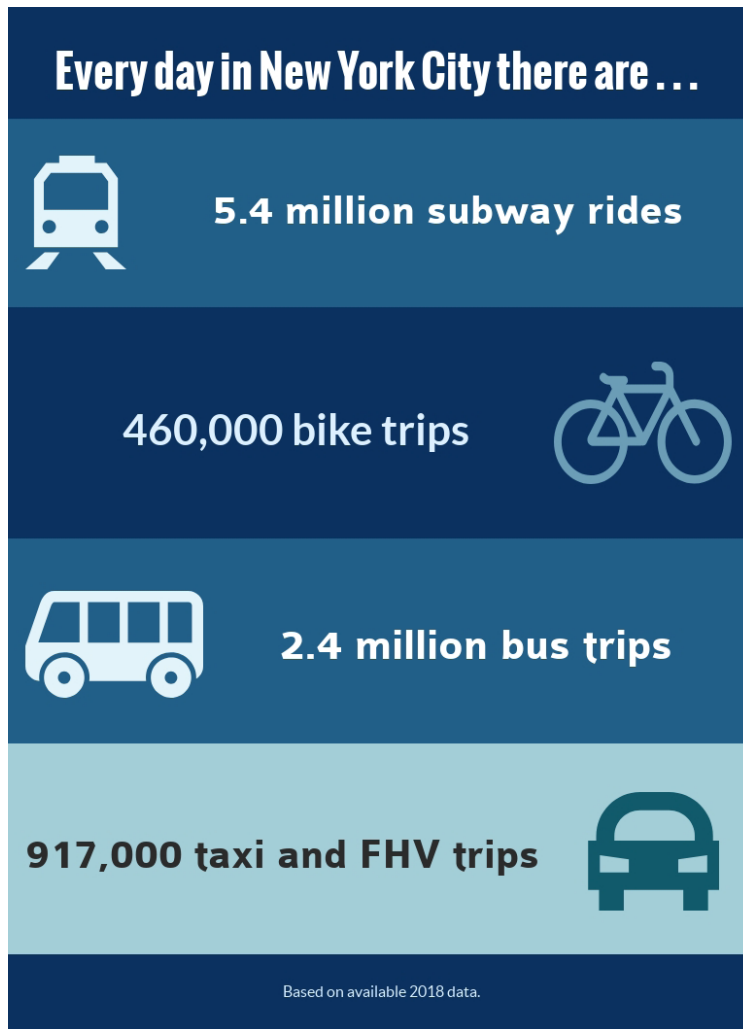
Michael Kolomatsky, *Think Your Commute is Bad?* N.Y. TIMES, Feb. 22, 2018
N.Y.C. Sustainability, Transportation, available at <https://www1.nyc.gov/site/sustainability/codes/transportation.page> (last accessed Feb. 11, 2019)
Emma G. Fitzsimmons, *Subway's Slide in Performance Leaves Straphangers Fuming*, N.Y. TIMES, Feb. 22, 2017
Clayton Guse, *NYC bus and subway ridership falling fast, threatening the MTA's budget and upgrade plan*, N.Y. DAILY NEWS, Feb. 22, 2019
Fix N.Y.C. Advisory Panel, *Fix NYC Advisory Panel Report*, (Jan. 2018)
City of New York, *Vision Zero*, available at <https://www1.nyc.gov/site/visionzero/index.page> (last accessed Feb. 14, 2018)

¹ Michael Kolomatsky, *Think Your Commute is Bad?* N.Y. Times, Feb. 22, 2018, available at <https://www.nytimes.com/2018/02/22/realestate/commuting-best-worst-cities.html>.

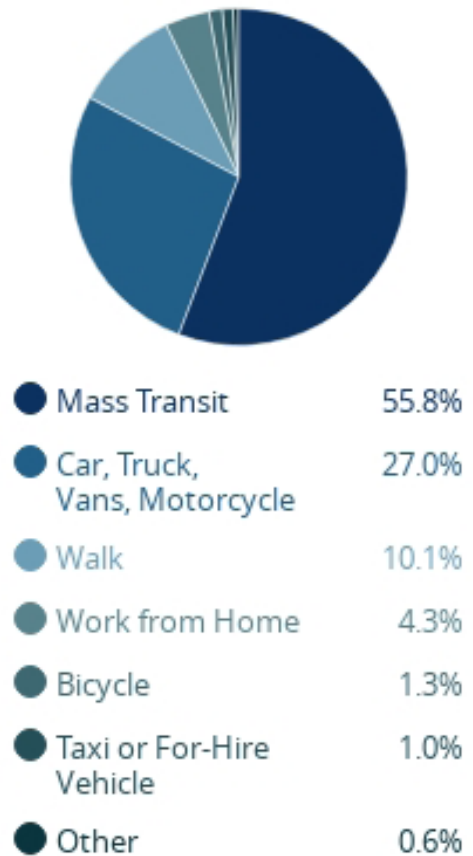
² Assuming five days a week, 50 weeks a year.

³ Pratt Center for Community Development, *Bus Rapid Transit*, available at <https://prattcenter.net/projects/transportation-equity/bus-rapid-transit> (last accessed Feb. 8, 2019).

COMMON MODES OF TRANSPORTATION IN NEW YORK CITY



How New Yorkers Get to Work



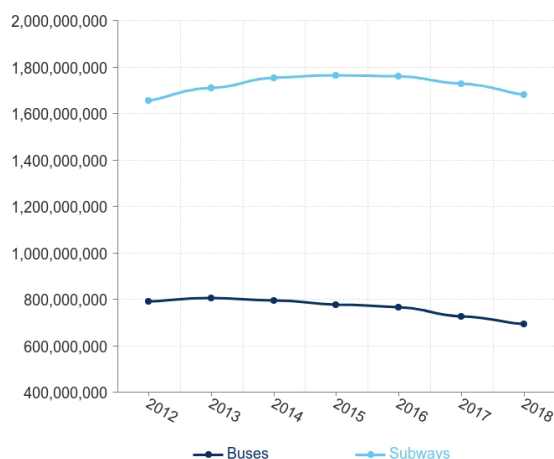
Source: U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates: Means of Transportation to Work by Selected Characteristics.

Annual Ridership by Mode, New York City, 2012 to 2017 (in millions)⁴

	2012	2013	2014	2015	2016	2017
Subway	1,655	1,708	1,751	1,763	1,757	1,727
Bus	788	803	793	777	764	725
Taxis/For-Hire Vehicles	429	426	432	450	480	543
Bike	107	127	141	152	159	164
Ferry	31	31	31	32	34	35
Total	3,009	3,095	3,149	3,173	3,194	3,195

⁴ Bruce Schaller, *Making Congestion Pricing Work for Traffic and Transit in New York City* (Mar. 7, 2018), available at <http://www.schallerconsult.com/rideservices/makingpricingwork.pdf>.

Subway and Bus Ridership 2012 to 2018



BETTER TRANSIT MEANS A BETTER NEW YORK

Better, smarter transit policy has far reaching implications. A commitment to rebuilding a modern efficient public transportation network would enable travel to be:⁵

- **Faster.** Improvements to public transportation networks can save passengers time via increased frequency and/or travel time, which in turn improves the travel time of drivers who suffer lower amounts of congestion on the roads. This time savings produces economic benefits for employers and workers as commuters spend less time in traffic and more time engaged in productive activities. It also allows for even greater flexibility for workers to find and keep jobs.
- **More reliable.** Better on-time rates for subway and buses enable passengers to reduce the “buffer time” in their travel schedules, further improving the effective speed of transportation. As improved public transportation reduces congestion on the roads, this benefit also spills over to drivers who will suffer fewer delays due to collisions or backups. This increased transit consistency can lead to improved productivity, reliability, and logistics management for businesses.
- **Cheaper.** Investment in public transportation reduces reliance on personal automobile ownership, and all its attendant costs, including the cost of car ownership, fuel, parking, and road wear and tear.
- **Safer.** Using mass transit is safer for passengers and it makes the streets safer for other vehicles, pedestrians, and cyclists.

Increased public transit ridership will result in greater transportation efficiency for everyone. Road space is constrained by the physical limitations of geography, and generating more road space via expensive new construction does little to improve the situation because those new roads will be quickly filled with additional drivers.⁶ To make matters worse, the reality of congestion is that when you add more drivers to the road, the situation worsens for everyone as traffic backs up in bottlenecks, parking spots are harder to find, and noise and pollution fill the air. Public transportation is different. The more people that use public transportation the better it gets, so long as we make a commitment to serving those new passengers.⁷

Better Transit is Better for the Economy

Public transportation is an economic multiplier that creates jobs, enhances the tax base, and improves the functioning of businesses across the City. Mobility creates opportunity and more efficient economic growth. While job creation and economic returns on infrastructure spending and public services are not unique to investments in public transportation, public transportation stands apart in several important ways. Investment in public transportation creates more jobs than other kinds of spending, it equalizes access to opportunity and success, gives employers access to a larger labor pool, and it fuels the dense economic engine that makes New York City the one-of-a-kind city that it is. A 2014 study by the American Public Transportation Association lays out the multi-pronged benefits of investment in transportation infrastructure and operations for each \$1 billion spent on public transportation.

Economic Impact	Per \$ Billion of Capital Investment	Per \$ Billion of Operations Investment	Per \$ Billion of Average Investment
Output (Business Sales)	\$2.9 billion	\$3.1 billion	\$3.0 billion
GDP (Value Added)	\$1.3 billion	\$2.0 billion	\$1.7 billion
Labor Income	\$0.9 billion	\$1.4 billion	\$1.3 billion
Tax Revenue (Federal, State, Local)	\$266 million	\$500 million	\$432 million
Jobs	15,900	24,200	21,800

Like most types of infrastructure spending, investment in our public transportation network provides extensive economic stimuli in the form of direct, indirect, and induced job creation.

5 American Public Transportation Association, *Economic Impact of Public Transportation Investment* (May 2014), pages 4-8, available at <https://www.apta.com/resources/reportsandpublications/Documents/Economic-Impact-Public-Transportation-Investment-APTA.pdf>.

6 Eric Jaffe, *Public Transportation Does Relieve Traffic Congestion, Just Not Everywhere*, CityLab, April 1, 2013, available at <https://www.citylab.com/transportation/2013/04/public-transportation-does-relieve-traffic-congestion-just-not-everywhere/5149/>.

7 Herbert Mohring, *Optimization and Scale Economies in Urban Bus Transportation*, *American Economic Review*, pages 591-604 (1972).

These benefits run the gamut from direct hires for operations, management, and maintenance; to supporting downstream contractors and suppliers; and ultimately, to further economic multipliers as consumer retail spending is improved by the supported wages.

Unlike and above other types of infrastructure spending, improvements to our subway and buses serve double duty by making the rest of the City run more smoothly. New York City's mass transit systems are what enable us to exist as a global metropolis. Our subway and buses provide mobility and market access—businesses have access to a region-defining, diverse, and skilled workforce, in addition to a massive customer base. Our transit system also enables spatial agglomeration economies—which allows businesses to cluster together in high enough concentrations to achieve increased efficiencies and economies of scale.

Investment into public transportation's core function—moving people—further stimulates economic growth by reducing the frictions that would otherwise depress personal and business activity.⁸

A More Fair City

The past few decades have given New York City a first-hand look at the boons public transportation can deliver to our lower-income communities, and the economic growth the City receives in return.⁹ Neighborhoods with efficient transportation are a lifeline for lower income communities and are one of the strongest contributing factors to an escape from poverty.¹⁰ It is a complex relationship with significantly more at play than simply getting people to their jobs faster.¹¹ Reliable public transportation brings together workers with the jobs that best suit their abilities, a matching that benefits everyone.¹² It provides access to the healthcare, schooling, food, and goods necessary to maintain a life in the City;¹³ and in its absence, when public transportation becomes erratic, it's the lower income populations that feel the brunt of the loss in the form of lost wages, forgone opportunities, and more severe consequences at work.¹⁴

An issue brief by the Manhattan Institute, “New York’s Eco-

nomic Future Rides on Its Subways,” makes the case for a transportation-equity imperative, not only to make life better for the people who need the system, and to bring more people into the fold, but because our economic future depends on it. New York City's path out of the fiscal crisis of the 1970s was built on subway tracks. The City's population grew, and employment with it, as part of the City's climb out of economic stagnation. All of this was enabled by a transportation network that could connect people with opportunity.¹⁵ The work is not done. Thirty years ago, investment into the subways set the stage for decades of growth, but we must continue that investment and increase the system's reach, reliability, capacity, and affordability for all New Yorkers in order to secure those gains and more going into the next thirty years.¹⁶

A Safer City

Vehicles seriously injure or kill a New Yorker every two hours.¹⁷ That means nearly 4,000 New Yorkers are seriously injured and 200 are killed each year in traffic crashes. The dangers are particularly stark for children and seniors. Being struck by a vehicle is the leading cause of injury-related death for children under the age of 14, and the second leading cause for seniors.¹⁸

We've made significant progress under Vision Zero, with a 28 percent decline in traffic fatalities and a 45 percent decline in pedestrian fatalities as of March 2018.¹⁹ Traffic deaths dropped to 200 in 2018, a record low.²⁰ Yet pedestrian deaths increased last year to 114, from 107 in 2017.²¹

It doesn't have to be this way. Every traffic death is preventable. By breaking the car culture, getting more people onto mass transit, and improving transit planning, we can save lives and make the City a better, healthier, safer place to call home. Mass transit is one of the safest modes of urban transportation. Heavy rail, such as subways, and transit buses have approximately half the fatality rate for their users and bystanders per passenger mile compared to automobiles.²² And in addition to the straight-forward benefit of giving more residents better access to a safer mode of transportation, increased occupancy of mass transit (filling empty seats) tends to further

8 *Economic Impact of Public Transportation* (May 2014), Exhibit A-2, at page 68.

9 Nicole Gelinas, New York's Economic Future Rides on Its Subways, Manhattan Institute Issue Brief (July 2018), available at <https://media4.manhattan-institute.org/sites/default/files/1B-NG-0718.pdf>.

10 Mikayla Bouchard, *Transportation Emerges as Crucial to Escaping Poverty*, N.Y. Times, May 7, 2015, available at <https://www.nytimes.com/2015/05/07/upshot/transportation-emerges-as-crucial-to-escaping-poverty.html>.

11 Raj Cjetty and Nathaniel Hendren, *The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County-Level Estimates*, Harvard University and the National Bureau of Economic Research (May 2015), page 70, available at https://scholar.harvard.edu/files/hendren/files/nbhds_paper.pdf.

12 The mobility provided by public transportation gives employers access to “a broader and more diverse labor market, offering better fit between desired and available worker skills.” American Public Transportation Association, *Economic Impact of Public Transportation* (May 2014) at page 9.

13 Pedro Nicolaci da Costa, *There's a Major Hurdle to Employment that Many Americans Don't Even Think About – and It's Holding the Economy Back*, Business Insider, January 27, 2018, available at <https://www.businessinsider.com/lack-of-transport-is-a-major-obstacle-to-employment-for-americas-poor-2018-1>; Gillian B. White, *Stranded: How America's Failing Public Transportation Increases Inequality*, The Atlantic, May 16, 2015, available at <https://www.theatlantic.com/business/archive/2015/05/stranded-how-americas-failing-public-transportation-increases-inequality/393419/>.

14 New York City Comptroller Scott M. Stringer, *The Human Cost of Subway Delays: A Survey of New York City Riders* (July 8, 2017), available at <https://comptroller.nyc.gov/reports/the-human-cost-of-subway-delays-a-survey-of-new-york-city-riders/>.

15 Gelinas (July 2018) at pages 4-5.

16 *Id.* at page 10.

17 City of New York, *Vision Zero*, available at <https://www1.nyc.gov/site/visionzero/index.page> (last accessed Feb. 14, 2018).

18 *Id.*

19 City of New York, *Vision Zero: Four Year Report* (Mar. 2018), available at <https://www1.nyc.gov/assets/visionzero/downloads/pdf/vision-zero-year-4-report.pdf>.

20 Emma G. Fitzsimmons, *Traffic Deaths in New York City Drop to 200, a Record Low*, N.Y. Times, Jan. 1, 2019, available at <https://www.nytimes.com/2019/01/01/nyregion/traffic-deaths-decrease-nyc.html>.

21 *Id.*

22 Litman, *Evaluating Public Transit Benefits and Costs*, Victoria Transport Policy Institute (July 24, 2018), pages 42-44; Steer Davies Gleave, *What Light Rail Can Do For Cities*, Passenger Transport Executive Group, February 2005, pages 77-79, available at http://www.urbantransportgroup.org/system/files/general-docs/WhatLightRailCanDoforCitiesMainText_0218.pdf.

reduce the average injury to bystanders per passenger-mile because a full bus is just as safe as an empty one.²³ The positive safety benefits of increased mass transit use is well established by studies demonstrating a strong inverse correlation between transit ridership and traffic deaths (per capita), particularly in large cities.²⁴ One estimate is that each ten percent increase in public transit's share of passenger miles traveled is accompanied by a 1.5 percent reduction in traffic fatalities.²⁵

A Greener New York

When it comes to the City's public transportation and streets, we cannot afford to let our sustainability, resilience, and climate justice goals remain an afterthought. Since the City committed to reduce greenhouse gas emissions by at least 80 percent by 2050 (80 x 50), we have made virtually zero progress in reducing transportation emissions, which account for nearly a third of the City's greenhouse gases.

Between 2005 and 2015, the City reduced transportation emissions by just five percent, accounting for an overall 1.2 percent reduction in emissions.²⁶ Despite our City's world famous subway system, a slightly larger share of our City's emissions comes from transportation—30 percent—than the national average.²⁷ Private vehicles also account for a higher share of our transportation emissions—83 percent—than the national average of 60 percent.²⁸

Investing in the City's public transit infrastructure with the goal of increasing the use of public transportation will significantly reduce the City's greenhouse gas emissions. According to the Federal Transit Administration, if just one driver per household switched to taking public transportation for a daily commute, it would reduce each household's annual carbon footprint by over eight percent.²⁹ Subways produce less than a quarter of the greenhouse gas emissions per passenger mile than an average single-occupancy vehicle.³⁰ The fuel efficiency of a



fully occupied bus is six times greater than that of the average single-occupant vehicle—but even a bus with as few as seven passengers is more fuel efficient than a private car.³¹ Buses, at an average of about a quarter full, emit 33 percent lower greenhouse gas emissions per passenger mile than the average single occupancy vehicle; that savings increases to 82 percent when the bus is completely full.³²

Overall, mass transit consumes half the energy of private transportation, and emits only five percent of the carbon monoxide, eight percent of the volatile organic compounds, and 50 percent the carbon dioxide and nitrous oxide, per passenger-mile.³³ These benefits exist on a life-cycle scale—manufacturing, maintenance, infrastructure construction, and fuel production—as well as on an operational timeline.³⁴ Increased mass transit ridership is also associated with lower urban noise and water pollution, improving quality of life for everyone in the City.³⁵

²³ Litman (July 24, 2018) at page 42.

²⁴ *Id.* at page 44.

²⁵ Jim P. Stimpson, et al., *Share of Mass Transit Miles Traveled and Reduced Motor Vehicle Fatalities in Major Cities of the United States*, Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 91, No. 6 (2014), page 1139, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4242857/pdf/11524_2014_Article_9880.pdf.

²⁶ Mayor's Office of Sustainability, *Inventory of New York City Greenhouse Gas Emissions in 2015* (April 2017), available at https://www.dec.ny.gov/docs/administration_pdf/nycghg.pdf.

²⁷ N.Y.C. Sustainability, *Transportation*, available at <https://www1.nyc.gov/site/sustainability/codes/transportation.page> (last accessed Feb. 11, 2019); United States Environmental Protection Agency, *Fast Facts on Transportation Greenhouse Gas Emissions*, available at <https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions> (last accessed Feb. 11, 2019).

²⁸ N.Y.C. Sustainability, *Transportation*; United States Environmental Protection Agency, *Fast Facts on Transportation Greenhouse Gas Emissions*.

²⁹ Aaron Gordon, *New York's Transit Woes and the Looming Climate Crisis are Inextricably Linked*, Curbed NY, Oct. 8, 2019, available at <https://ny.curbed.com/2018/10/8/17952564/un-climate-change-report-new-york-transportation>.

³⁰ U.S. Department of Transportation Federal Transit Administration, *Public Transportation's Role in Responding to Climate Change* (Jan. 2010) available at <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>.

³¹ *Id.*

³² *Id.*

³³ Robert J. Shapiro, et al., *Conserving Energy and Preserving the Environment: The Role of Public Transportation*, American Public Transportation Association (July 2002), page 9, available at <https://www.apta.com/resources/reportsandpublications/Documents/shapiro.pdf>.

³⁴ Mikhail V. Chester, *Life-cycle Environmental Inventory of Passenger Transportation in the United States*, Institute of Transportation Studies (2008), pages 256-59, available at <https://escholarship.org/uc/item/7n-29n303#page-36>.

³⁵ Litman (July 24, 2018) at page 54.

HOW WE

GOT HERE



HOW WE GOT HERE

Before discussing the problems we face today and potential solutions, it is important to understand where we've been. The history of transportation policy in New York City is a history of the City itself—great highs, incredible challenges, reformers fighting those with misplaced priorities, and plenty of struggles with the State for control of our own destiny.

THE SUBWAY

Early Mass Transit Policy

In 1800s, New York's economy boomed and the population soared, but development was generally limited to small areas Manhattan, the South Bronx, and parts of Brooklyn.³⁶ These areas had elevated trains or surface transit, allowing residents to commute to jobs in Manhattan.³⁷ Many simply lived within walking in order to avoid commuting. This left more than 75 percent of the City's land space underutilized while the rest was dangerously overpopulated.³⁸

Early advances in transit—such as omnibuses and horse cars—allowed more affluent New Yorkers to move further north in Manhattan, leaving new immigrants and the working class in ever deteriorating conditions in lower Manhattan.³⁹ Omnibuses were large horse drawn carriages that charged a set fee and operated along set routes.⁴⁰ As the omnibuses simply ran directly on City streets, which were generally not paved and did not have traffic lanes, they were later displaced by horse cars, which ran on steel rails, allowing for a better, faster right of way and the ability to carry more passengers.⁴¹

As the population boomed, it was becoming clear that housing significant percentages of new immigrants into tenement buildings in downtown Manhattan was not just unwise, but it was threatening the future of the City.⁴² Moderate advances in transportation did help to improve the ability of the City to

move the population around, but were woefully insufficient to handle massive growth. The late 1860s saw the establishment of the City Department of Health to help combat the spread of disease and passage of building regulations, but as the population density did not wane, problems continued.⁴³ Reformers did propose rapid transit as a solution, but while advances were bogged by technological and financial problems, the real hurdle was politics.⁴⁴

Both State and City approval was needed to build new rapid transit lines.⁴⁵ Yet, innovation was feared by politicians invested in surface level transit companies, so much so that the first underground project was done in secret, with Alfred Beach using a permit to design a pneumatic mail tube to build the City's first underground transit line, with City and State leaders completely unaware of its true scope.⁴⁶ The tube ran under Broadway between Murray and Warren, literally right beneath the same politicians Beach feared would shut him down.⁴⁷ Pneumatics proved too difficult to scale, but elected officials putting self-interest above the needs of the City also helped to kill any chance of expansion.

The next few decades saw many failed proposals for a subway system, so the City turned away from underground transit to elevated lines and streetcars.⁴⁸ Again, these improvements did help somewhat to alleviate overcrowding; but they simply did not open up enough land for development.⁴⁹ Further, the elevated lines created a great deal of blight where they ran, splattering oil on passersby and causing deafening noise for up to 19 hours a day.⁵⁰

1904

**FIRST SUBWAY
LINE OPENS**

1913

**CITY SIGNS THE
DUAL CONTRACTS**

1925

**95% OF CITY LIVES
WITHIN 1/2 MILE
OF THE SUBWAY**

1932

**CITY-OWNED IND
SUBWAY OPENS**

1940

**CITY BUYS
PRIVATELY-
RUN SUBWAYS,
UNIFYING SYSTEM**

1953

**STATE CREATES
THE NEW YORK
CITY TRANSIT
AUTHORITY**

1968

**STATE CREATES
THE METROPOLITAN
TRANSPORTATION
AUTHORITY**

36 Peter Derrick, *Tunneling to the Future – The Story of the Great Subway Expansion that Saved New York* (2001), page 2.

37 *Id.*

38 *Id.*

39 *Id.* at pages 16-17.

40 Clifton Hood, *722 Miles – The Building of the Subways and How They Transformed New York* (Centennial Edition 2004), page 38.

41 *Id.* at pages 38-39.

42 Derrick (2001) at pages 17-20.

43 *Id.* at pages 19-20.

44 *Id.* at page 24.

45 *Id.* at page 24.

46 Hood (2004) at pages 42-46.

47 *Id.* at pages 45-46.

48 Derrick (2001) at pages 28-30.

49 *Id.* at page 32.

50 Hood (2004) at pages 54-55.

After the business community began supporting subway proposals in the 1890s, the necessary interests briefly aligned to allow for construction of a subway line.⁵¹ In 1900, after receiving State authorization to allow municipal funding to go toward development of the system, the City offered to finance construction of a system that would be built, managed, and operated by privately owned companies.⁵² This proposal garnered attention from the private sector and the first line, operated by the Interborough Rapid Transit Company (IRT), opened in October 1904, less than five years after breaking ground.⁵³

The scope of the original subway lines, running through Manhattan into a handful of stops in Brooklyn and the Bronx, was narrow as the State limited the City's borrowing capacity and few companies were interested in taking on the financial risks of running a new enterprise.⁵⁴ While the subways proved incredibly popular, once again, politics stalled expansion. Corruption, competing interests, and conflicting views on how the government and the private sector should interact in the realm of transit, including the belief amongst some that competition was the best way to get a fulsome transit system, prevented any real progress for years.

The Need for Great Expansion

By 1910, New York was the most crowded city in the world.⁵⁵ More people lived in Manhattan than in 33 of the 46 states.⁵⁶ The borough had an average density of 161 people per acre while Queens had just 3.8, barely ahead of Staten Island at 2.2.⁵⁷ As Manhattan was bursting at the seams, thousands of acres sat undeveloped in the outer boroughs.⁵⁸

At the turn of the century, Queens was mostly rural.⁵⁹ There were a few manufacturing areas and markets, but the vast majority of the borough was undeveloped.⁶⁰ Queens was so far removed from the hustle and bustle of Manhattan that

residents took day trips there to spend time "in the country."⁶¹ Residents could visit farms in Woodside and Corona⁶² and go bird hunting right off Thomson Avenue.⁶³ Jackson Heights still mainly had dirt roads.⁶⁴ Queens held enormous potential as a new residential base for New York, but getting to Manhattan from areas like Jackson Heights took an hour to an hour and a half.⁶⁵ Once the subway was built, a trip to Grand Central took 22 minutes.⁶⁶

The original subway system was a great advancement, but was overcrowded from the first day of operations and it only got worse as the years went by.⁶⁷ As bad as the subway became, it was nothing compared to the living conditions of the City's working class. In the early 1900s, over two-thirds of New York City's population lived in tenements.⁶⁸ The Lower East Side was the most densely populated neighborhood in the world.⁶⁹ Three room, not three bedroom, apartments would often house up to 10 people.⁷⁰

The City was evolving. Skyscrapers were rising as the economy became less dependent on manual labor. One third of the City's jobs were white collar.⁷¹ But manufacturing jobs were still the most common, particularly for new immigrants.⁷² To access these manufacturing jobs, workers needed to live nearby, which generally meant living in a tenement. Tenement living was bleak. Sunshine and fresh air were nonexistent inside.⁷³ Twenty people could share a single toilet.⁷⁴ Baths were a luxury.⁷⁵ Crime was rampant and families struggled to maintain close bonds due to the lack of privacy.⁷⁶ Outside, it was almost as bad. Trees and public parks were for the affluent and were rarely sited near tenements.⁷⁷ Kids played on crowded, dangerous streets, not in playgrounds.⁷⁸

The impact on health was tremendous. Contagious disease and illness from poor sanitation was rampant.⁷⁹ Rates of tuberculosis in Manhattan were rising rapidly at the turn of the

51 Derrick (2001) at pages 35-37.

52 *Id.*

53 *Id.* at pages 41-45.

54 *Id.* at pages 37, 45.

55 *Id.* at page 90.

56 Hood (2004) at page 135.

57 *Id.*

58 *Id.* at page 136.

59 *Id.* at page 168.

60 *Id.* at page 169.

61 *Id.*

62 *Id.*

63 *Id.*

64 *Id.* at page 173.

65 *Id.* at pages 174-75.

66 *Id.* at page 175.

67 Derrick (2001) at page 91.

68 *Id.* at page 3.

69 *Id.*

70 *Id.*

71 *Id.* at page 94.

72 *Id.*

73 *Id.* at pages 97-98.

74 *Id.*

75 *Id.* at pages 98-100.

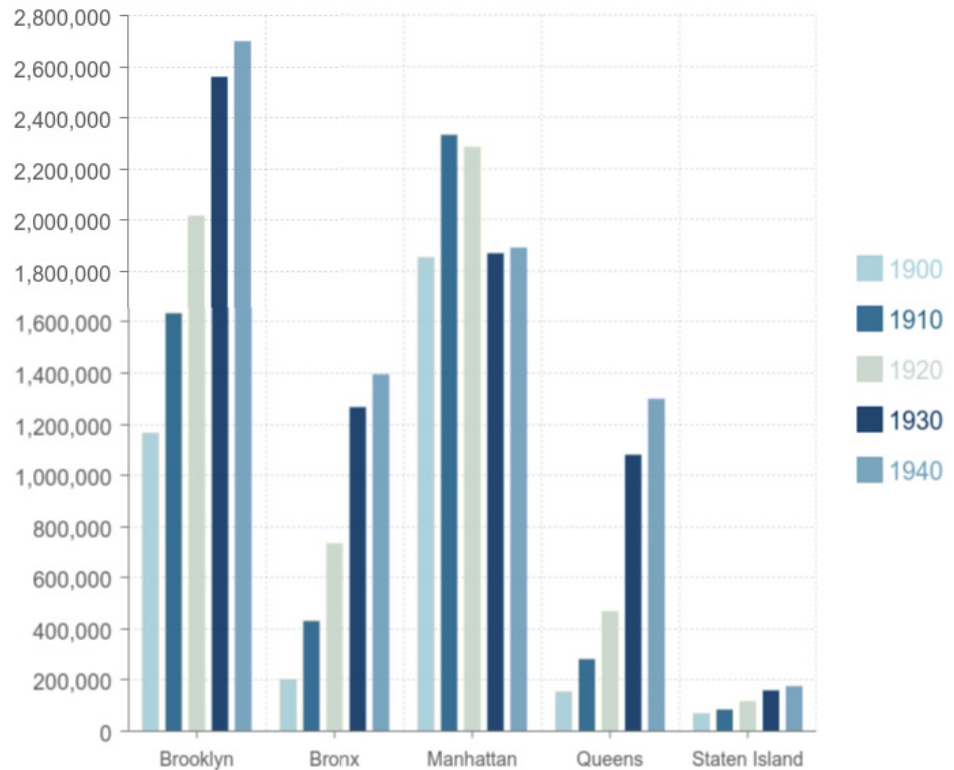
76 *Id.* at pages 105-06.

77 *Id.* at page 98.

78 *Id.*

79 *Id.* at pages 100-01.

How the Subway Changed Population Growth 1900 to 1940



century. The disease was highly communicable, and so tenements became a breeding ground.⁸⁰ Those afflicted suffered for years and could rarely afford to leave home, so fellow residents were continually put at risk.⁸¹ These conditions hit children particularly hard. Jacob Riis found that in some buildings, the infant death rate was one in ten.⁸² As more New Yorkers became aware of the situation in tenements, overcrowding began to be seen as “a menace to our civilization.”⁸³ To improve conditions for those in tenements, the City tried public health measures, improved public education, and reformed housing.⁸⁴ But it eventually became clear they were “stemming the tide with a broom.”⁸⁵

Reformers began calling for rapid transit lines to be simultaneously constructed further into the Bronx and Brooklyn and to Queens in order to open up more of the City for housing.⁸⁶ Similar proposals had been around since the 1860s, but by the early 1900s the City realized that improving living conditions through expansion was the responsibility of government and could not be left to private corporations.⁸⁷ This viewpoint borrowed from thinkers like Charles Cooley, whose “theory of transportation” stated that transit underlies social development and is at the same time determined by development.⁸⁸ He believed transportation had to be conducted according to a comprehensive plan and by unified methods. Planning had to be done by a public body for the good of society as a whole.⁸⁹ Cooley also believed that mass transit had to be affordable for the working class.⁹⁰

The path to simultaneous, significant expansion was rocky.⁹¹ Those supporting a plan felt deeply that better transit was the key to a better city and thus civic leaders underwent years of planning and painstaking negotiations, defended against full-fledged public relations campaigns by the private operators of the existing system, waged battles with political rivals, and survived legal challenges before new lines, known as the Dual Systems (also referred to as the Dual Contracts) could be built.⁹² The City and the State-created Public Service Commission approved the Dual System plan in 1913.⁹³ Under the plan, the City financed construction of the lines and turned over operations to two private companies—the IRT and the Brooklyn Rapid Transit Company (BRT), who controlled much

⁸⁰ *Id.* at pages 103.

⁸¹ *Id.* at pages 103-04.

⁸² Jacob Riis, *How the Other Half Lives* (Project Gutenberg Edition 2014), pages 61-64.

⁸³ Derrick (2001) at page 102.

⁸⁴ *Id.* at page 91.

⁸⁵ *Id.* at page 112.

⁸⁶ *Id.* at page 92.

⁸⁷ *Id.* at page 91.

⁸⁸ *Id.* at page 107.

⁸⁹ *Id.* at page 108.

⁹⁰ *Id.* at page 109.

⁹¹ *Id.* at pages 118, 122-23.

⁹² *Id.* at pages 186-21.

⁹³ *Id.* at pages 220-21.

of Brooklyn's elevated lines.⁹⁴

With this expansion, the City more than doubled existing track mileage from 296 to 621.⁹⁵ The New York City subway system became bigger than all other rapid transit systems in the world combined.⁹⁶ Not only was mileage doubled, service capacity tripled.⁹⁷ New York City, barely a collection of loosely related lands just decades before, was now fully unified by the subway.⁹⁸

The new lines opened up what came to be known as the "subway suburbs," bringing rapid transit service to Queens for the first time and thus allowing for direct, fast commutes to Manhattan from Long Island City, Astoria, Corona, Flushing, and Jamaica.⁹⁹ This allowed working class families to have housing with light and ventilation and separate bathrooms, bedrooms, and kitchens.¹⁰⁰

The new system, which was almost entirely finished by 1920, was a wild success in terms of improving the lives of millions of New Yorkers. By 1925, 91 percent of City residents lived within half a mile of a subway line.¹⁰¹ However, neither the City nor the private operators of the lines saw the anticipated fiscal boom. The financial assumptions underlying the contracts were upended as World War I caused sharp increases in cost of labor and construction materials.¹⁰² Politicians who blocked any attempts to raise the five-cent fare further complicated the situation.¹⁰³

Completion of the Dual Systems and the Rise of the IND

By 1920, even after tremendous expansion, the subway was facing overcrowding and delays, yet strategies about how to oversee the IRT and the Brooklyn-Manhattan Transit (BMT) Corporation, formerly the BRT, differed.¹⁰⁴ At the time, newly elected Governor Nathan Miller wanted the State to oversee transit policies.¹⁰⁵ In 1921, the State created the Transit Commission to develop a plan to resolve the operational issues of the systems.¹⁰⁶ However, at the time, Mayor John Hylan had

grand plans for a municipal system and did not truly accept the Transit Commission's authority.¹⁰⁷ Intent on pursuing his own agenda, Mayor Hylan did everything in his power to block planned expansion projects by private operators.¹⁰⁸

During Hylan's second term, he again put forth plans for a new municipal subway.¹⁰⁹ The stage for a City-owned and operated subway was set when New York State Senator James Walker sponsored legislation to abolish the Transit Commission and put forth another bill to permit the City to borrow additional funds for subway construction. Despite the fact that the legislation was controversial, a compromise was reached to adjust the mission of the State Transit Commission, leading to the creation of the Independent Subway System (IND).¹¹⁰ Under this compromise, the State required that the existing systems be overseen by the Transit Commission and that the new City-owned and operated lines would be under the supervision of the New York City Board of Transportation.¹¹¹ In addition, Mayor Hylan could not absorb any existing lines for his new system—it would have to co-exist with the BMT and IRT lines.¹¹² Finally, the State required that the City system be self-sustaining, meaning that eventually the IND would have to charge a six, seven, even a ten-cent fare to break even.¹¹³

The political struggle between the State and City over the subways continued into 1925, when Governor Alfred E. Smith, who also sought greater control of the subway system through the Transit Commission, launched an investigation of the IRT and BMT due to the poor quality of the systems.¹¹⁴ The investigation found that Hylan and the Board of Estimate had repeatedly refused to adopt proposals for new routes.¹¹⁵ During Hylan's term, he was frustrated with the Transit Commission and was critical of both the BMT and IRT, frequently chastising them for bad service, unbuilt lines, and overcrowding, that he himself was responsible for thwarting.¹¹⁶ The public grew tired of the politics and ultimately, State Senator Walker defeated Hylan later that year in his re-election bid.¹¹⁷ But the IND lived on.

The IND drew criticism from the start given the financial

94 Subway FAQ: A Brief History of the Subway, available at https://www.nycsubway.org/wiki/Subway_FAQ:_A_Brief_History_of_the_Subway (last accessed Mar. 1, 2019).

95 Derrick (2001) at pages 221, 233.

96 *Id.* at page 221.

97 *Id.* at page 222.

98 *Id.*

99 *Id.* at page 176.

100 *Id.* at pages 231-32.

101 Hood (2004) at page 179.

102 Derrick (2001) at pages 234-35.

103 *Id.* at pages 235-37.

104 Joseph B. Raskin, *The Routes Not Taken: A Trip Through New York City's Unbuilt Subway System*, Fordham University Press (2013). ProQuest Ebook Central.

105 *Id.*

106 *Id.*

107 Roger P. Roess and Gene Sansone, *The Wheels that Drove New York: A History of the New York City Transit System* (2013).

108 Raskin (2013) at page 71.

109 Vivian Heller, *The City Beneath Us: Building the New York City Subways*, New York Transit Museum (2004), page 43.

110 Raskin (2013).

111 *Id.*

112 Roess and Sansone (2013) at page 211.

113 Raskin (2013).

114 *Id.*

115 *Id.*

116 *Id.*

117 *Id.*

problems facing the City during the Great Depression.¹¹⁸ After receiving assistance from the federal government, the Board of Transportation was able to forge ahead and the IND expanded into Queens, the Bronx, and Brooklyn in the early to mid-1930s.¹¹⁹ While the IND's expansion plans included many significant improvements, the Board of Transportation struggled financially, and by the late 1930s began to scale back on projects.¹²⁰ The City's other financial obligations, including rising costs of social services, raised questions of the merits of more spending on the IND.¹²¹ By the end of 1940, the IND system was complete, but the era of mass transit expansion was essentially over.¹²²

Unification of the System

By 1940, the financial model of the private and City subway lines had collapsed. The IRT and BMT were struggling due in part to the low fare and increased competition from the IND. The City's own deficit climbed as it was forced to use its tax dollars to make bond interest payments that should have been covered by fares on the IRT and BMT lines.¹²³ Consolidation seemed to be the logical answer, so the City purchased the failing IRT and BMT for \$326 million, which was financed by municipal bonds at three percent interest rate, and consolidated their operations with the IND into the newly formed New York City Transit System.¹²⁴ The Board of Transportation, under the control of then-Mayor Fiorella LaGuardia, oversaw the Transit System, along with the City's buses and streetcar services.¹²⁵ The Board thus became the largest publicly owned mass transit system in North America.¹²⁶

By inheriting the subways along with the BMT's large surface transportation system—which included routes that ran through all of Brooklyn, extended into Queens and touched on Manhattan—the City took on immense operational and financial challenges.¹²⁷ There weren't any free transfers between the divisions.¹²⁸ Many routes, particularly on the elevated lines, were redundant.¹²⁹ Streetcar service was expensive and disliked by Mayor LaGuardia, who required a complete conversion of streetcar operations by 1960.¹³⁰ Fare increases were strongly

opposed by the public and retaining the nickel fare had been a key selling point for the public in supporting unification.¹³¹

State politics also disrupted the unification even before it was finalized. In anticipation of potential consolidation, Senator Arthur Wicks of Kingston proposed a law that would eliminate any existing seniority for IRT and BMT workers and prohibit the hiring of workers who weren't U.S. citizens.¹³² While a weaker version was later passed, it still caused great consternation for the Transportation Workers Union (TWU) and further complicated labor negotiations.¹³³

Initially, the consolidation appeared to be a financial success. During World War II, ridership rose due to increased employment and restrictions on private automobile use due to fuel rationing.¹³⁴ The war created a brief spike in operating revenues that distorted the financial situation.¹³⁵ During the Board's first full year operating the system, it generated a surplus of \$27.4 million, which was used to pay off interest on the bonds used for the BMT and IRT. However, by 1946, post-war inflation and changing demographics would force the City to increase the fare and grapple with long term funding.¹³⁶

Post-World War II: Rise of the Automobile and the New York City Transit Authority

In the post-war era, the automobile began to supplant mass transit as the preferred mode of transportation, due in no small part to a shift in federal, state, and local policies.¹³⁷ For example, in 1956, President Eisenhower signed the Federal Highway Act, which dedicated \$25 billion to build more than 40,000 miles of limited access highways across the nation.¹³⁸ No comparable investment was made in mass transit. The interstate program funded 90 percent of urban expressway costs and public transit was largely left out of the picture.¹³⁹ The post-war era also saw the rise of Robert Moses, who strongly favored personal vehicles and believed that public transit was for the poor.¹⁴⁰ By the 1950s, subways were considered outdated and highways seen as the glamorous, modern way to get around.¹⁴¹

¹¹⁸ Andrew J. Sparberg, *From a Nickel to a Token: The Journey from Board of Transportation to MTA* (2015 Print).

¹¹⁹ Raskin (2013).

¹²⁰ Roess and Sansone (2013).

¹²¹ Sparberg (2015 Print).

¹²² *Id.* at page 218.

¹²³ *Id.*

¹²⁴ *Id.* at page 1.

¹²⁵ Sparberg (2015 Print).

¹²⁶ *Id.* at page 2.

¹²⁷ *Id.* at page 6.

¹²⁸ Sparberg (2015 Print).

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.* at pages 11-12.

¹³⁷ Michael N. Danielson and Jameson W. Doig, *New York: Politics of Urban Regional Development* (1982), pages 205-06.

¹³⁸ Jay Young, *Infrastructure: Mass Transit in 19th and 20th Century Urban America* (March 2015).

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ Emily Nonko, *Robert Moses and the decline of the NYC Subway System*, CURBED NEW YORK, Jul. 27, 2017, available at <https://ny.curbed.com/2017/7/27/15985648/nyc-subway-robert-moses-power-broker>.



Against this backdrop, the Board of Transportation continued to face issues of funding overall system maintenance. By 1948, a fare increase to ten cents was necessary yet highly unpopular, but it did not resolve the system's financial trouble. Fares were raised again in 1950, from seven to ten cents for buses and 12 to 15 cents for the subway.¹⁴²

None of the measures instituted by the Board of Transportation served as long-term funding solutions.¹⁴³ Labor, material, and energy costs for the transit system continued to rise and the capital needs of the aging system remained underfunded. The system was overcrowded and plagued with poor service, which caused ridership to decline.¹⁴⁴ City leaders opposed raising fares again. Instead, many hoped to use revenues from the Triborough Bridge and Tunnel Authority (TBTA) or to increase taxes.¹⁴⁵ Governor Thomas Dewey opposed both measures,

instead supporting a new, State-created entity that would mandate that the fare be set to cover all operating costs.¹⁴⁶

On June 15, 1953, the State Legislature abolished the Board of Transportation and created the New York City Transit Authority (NYCT) as a public benefit corporation to manage and operate all City-owned bus, trolley, and subway routes.¹⁴⁷ NYCT created a structure of diffuse accountability—with two members appointed by the Governor, two by the Mayor, and one selected by the other four members.¹⁴⁸ Later, these members were replaced by three full-time, salaried members, though the ratio of mayoral and gubernatorial appointees remained.¹⁴⁹

By lease agreement,¹⁵⁰ the City transferred all the transit facilities owned by the City at the time to the NYCT.¹⁵¹ The lease agreement authorized the NYCT “to take jurisdiction, control,

¹⁴² Sparberg (2015 Print) at page 63.

¹⁴³ *Id.* at page 80.

¹⁴⁴ *Id.*

¹⁴⁵ Danielson and Doig (1982).

¹⁴⁶ Sparberg (2015 Print).

¹⁴⁷ Metropolitan Transportation Authority, *supra* note 15; see Title 9 of Article 5 of the N.Y. Public Authorities Law.

¹⁴⁸ Sparberg (2015 Print).

¹⁴⁹ *Id.*

¹⁵⁰ The lease agreement has since been amended and renewed on April 19, 1960; March 6, 1962; March 20, 1962; October 5, 1962; April 7, 1965; March 31, 1982; and April 11, 1995.

¹⁵¹ N.Y. Public Authorities Law § 1203.

possession and supervision of such transit facilities, materials, supplies and property.”¹⁵² The master lease states that the amount of capital costs incurred by NYCT that the City has to provide cannot exceed \$5 million per year unless otherwise authorized by the Mayor. Furthermore, State law specifically authorizes NYCT to incur capital costs in its own name which “shall not be payable by the city.”¹⁵³ Under the law, every individual capital project of more than \$1 million be presented to the Mayor and the Board of Estimate (whose duties and powers have now largely been absorbed by the Council) for their determination as to the project’s compatibility with “sound planning for the development or redevelopment of the city.”

After signing the lease, NYCT quickly raised fares to 15 cents and introduced the token as the form of payment.¹⁵⁴ In 1966, fares were raised again, to 20 cents.¹⁵⁵ Under the Authority, the system remained fairly stable; however, the State’s intervention did not address growing deficits from a lack of investment, leaving the system in a precarious position.

The issues facing the NYCT came to a head during the very first moments of Mayor John Lindsay’s first term. On January 1, 1966, after negotiations regarding a new contract stalled, TWU went on strike, stopping all subway and bus service in the City.¹⁵⁶ Lindsay was intent on challenging what he believed to be undue influence of municipal unions, but eventually settled with TWU for nearly the same amount the union initially demanded.¹⁵⁷ In addition to unions, Lindsay was keen to take on Robert Moses and orient the City away from cars and back to mass transit.¹⁵⁸ He campaigned on taking money from the TBTA to fund the subway.¹⁵⁹ Soon after taking office, he proposed merging the NYCTA and the TBTA into a new entity, the City Transportation Administration.¹⁶⁰ Moses bashed the plan as an illegal raid that would hurt drivers and bondholders.¹⁶¹ He organized supporters, including former Mayor Robert Wagner, former Governor Dewey, and union leaders, leaving Lindsay with few allies.¹⁶²

Despite Moses’s ability to rally support, his power paled in comparison to Governor Nelson Rockefeller, who also had designs on TBTA’s funds and wanted to establish a regional transportation entity. Governor Rockefeller, along with William

Ronan, who would become the first chief of the MTA, first took ownership of the bankrupt commuter railroads serving Westchester and Long Island.¹⁶³ Ronan then devised a plan to take over NYCTA and use TBTA revenues to repair and expand the system. They succeeded and pursuant to State law, on March 1, 1968, the Metropolitan Transportation Authority (MTA) was born.¹⁶⁴ Rockefeller successfully commandeered some of the City’s most valuable assets and in return, granted the City just three out of nine seats on MTA’s Board.¹⁶⁵

Fiscal Crisis

The State’s capture of the subways and TBTA did deliver some new funding, along with a commitment to reserve “thirty years of do-nothingism.”¹⁶⁶ Ronan announced a “Program for Action,” also known as the “Grand Design,” that called for dramatic expansion of the subway system, including the long-promised Second Avenue line.¹⁶⁷ However, once again, the State’s solution did not address the long-term financial health of the subway. The system’s deficit rose from \$70 million in 1969 to \$120 million the next year.¹⁶⁸ Ronan’s plans for expansion largely faltered as financial reality began to set in.¹⁶⁹

In the early 1970s, New York was entering a period of falling tax receipts, and declining manufacturing and flight of the middle class to the suburbs disrupted the economy. The State had to borrow to fill budget gaps.¹⁷⁰ The assumption at the time was that this would be temporary, but by 1975, the U.S. economy was in a recession and banks grew concerned by the amount of debt the State had accrued.¹⁷¹

At the City level, Lindsay continued to advocate for mass transit to no avail. He proposed a regional transit district in the tristate area that would utilize federal money and funds from a new payroll tax.¹⁷² Ronan’s successor at the MTA echoed Lindsay’s call three years later, but neither gained traction.¹⁷³

By the mid-1970s, the City was in dire straits and had little ability to support transit. Mayor Abe Beame was warned that “managers” would have to take over the budget if the City was unable to cut spending, and the City was no longer able

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ Sparberg (2015 Print).

¹⁵⁵ *Id.*

¹⁵⁶ Vincent Cannato, *The Ungovernable City* (2002 Print), Chapter 3.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ Nicole Gelinas, *Savior of the Subways*, CITY JOURNAL, Oct. 23, 2014, available at <https://www.city-journal.org/html/savior-subways-11450.html>.

¹⁶⁴ Metropolitan Transportation Authority, *supra* note 15; see Title 11 of Article 5 of N.Y. Public Authorities Law.

¹⁶⁵ N.Y. Laws 1967, c. 717.

¹⁶⁶ Sydney H. Schanberg, *Ronan Lays Transit Crisis to a 30-Year Lag in City*, N.Y. TIMES, Aug. 25, 1968, available at <https://www.nytimes.com/1968/08/25/archives/ronan-lays-transit-crisis-to-a-30year-lag-in-city-ronan-lays.html>.

¹⁶⁷ Danielson and Doig (1982) at pages 235-36.

¹⁶⁸ *Id.* at page 236.

¹⁶⁹ *Id.* at pages 237-38.

¹⁷⁰ Kim Philips-Fein, *The Legacy of the 1970s Fiscal Crisis*, THE NATION, Apr. 16, 2013, available at <https://www.thenation.com/article/legacy-1970s-fiscal-crisis/> (last accessed February 12, 2019).

¹⁷¹ *Id.*

¹⁷² Danielson and Doig (1982) at pages page 240.

¹⁷³ *Id.*

to bond.¹⁷⁴ Unable to borrow, the City struggled to pay employees, which caused unions to organize strikes. Sanitation workers were laid off and garbage collection lagged.¹⁷⁵

As the decade wore on, years of underfunding and deferred maintenance began to take its toll on the system.¹⁷⁶ Weaker finances meant less capital investment and, in the City, much of that investment was spent on expansion projects that were never completed, rather than maintenance.¹⁷⁷ The result was that the subway was depreciating at more than four times the rate of capital replenishment.¹⁷⁸ By some calculations, the subway alone had an estimated value of \$40 billion in 1980, yet it was receiving less than \$140 million annually for capital maintenance (in current dollars).¹⁷⁹

Consequently, in May 1981, MTA Chairman Richard Ravitch appealed to Governor Hugh Carey, members of the State Legislature, and 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.”¹⁸⁰

In June 1981, the State Legislature responded and passed the Transportation System Assistance and Financing Act of 1981, which gave the MTA authority to issue bonds for needed funding.¹⁸¹ The following September, the first modern five-year capital program (1982-1986) totaling \$7.2 billion was approved, thus initiating the decades long rebuilding of the City’s public transportation system.¹⁸² Soon after, capital programs for 1987-1991, 1992-1999, 2000-2004, 2005-2009, and 2010-2014 followed.¹⁸³ Today, the MTA is implementing its seventh iteration of the capital program, the 2015-2019 Capital Plan.¹⁸⁴

A Lack of Focus and Investment

Investments made during the Ravitch era caused notable improvements, but the City’s subway system remains one of the worst performing rapid transit system in the world, in large part due to recent disinvestment.¹⁸⁵ Over the few decades,

Republicans and Democrats alike have slashed MTA budgets or co-opted money earmarked for critical maintenance and investments for their own pet projects and political priorities.¹⁸⁶

Governor George Pataki eliminated State subsidies for the system, ended state funding for capital work, and required the MTA to rely entirely on fares, tolls and revenue from taxes and fees earmarked for transit.¹⁸⁷ As a result, the subway’s farebox recovery rate is higher than most other transit systems in North America.¹⁸⁸ Making matters even worse, in 1995, Governor Pataki also began to cut taxes and redirect revenues, pulling more than \$200 million in funds earmarked for transportation.¹⁸⁹ In 2000, Pataki also authorized the refinancing of \$12 billion in debt, which earned bankers and bond underwriters an estimated \$85 million, but significantly increased the MTA’s reliance on debt-funding.¹⁹⁰ Governors Spitzer, Paterson, and Cuomo all followed suit, reportedly diverting a combined total of at least \$850 million in funds over the last twenty years.¹⁹¹

Historically, the City funded about ten percent of the MTA’s total budget, but began to lower that percentage in the 1990s under Mayor Giuliani.¹⁹² Giuliani cut the City’s contribution to the MTA’s operating and capital budget by \$400 million in 1994.¹⁹³ Aside from an investment in Hudson Yards, Mayor Bloomberg kept that funding level totally stagnant.¹⁹⁴

Mayor de Blasio has, for the most part, followed suit committing only to modest budget increases during his tenure. The City committed \$2.5 billion to the current 2015-2019 capital plan for long-term infrastructure projects and an additional \$418 million in 2018 toward the Subway Action Plan.¹⁹⁵

Recent History: Another Slow Decline

Subway and bus ridership has been declining since 2016, despite the fact the City’s population and economy are growing. As subway performance declines, riders are leaving the system. Between 2015 and 2018, ridership dropped five percent.¹⁹⁶

174 Philips-Fein, Apr. 16, 2013.

175 *Id.*

176 Mark Seaman, et al., *From Rescue to Renaissance: The Achievements of the MTA Capital Program 1982–2004*, NYU Wagner Rudin Center for Transportation Policy & Management (Dec. 2004), available at <https://wagner.nyu.edu/files/news/rescue.pdf>.

177 *Id.*

178 *Id.*

179 *Id.*

180 Permanent Citizens Advisory Committee to the MTA, *The Road Back: A Historic Review of the MTA Capital Program* (May 2012), available at <http://www.pcac.org/wp-content/uploads/2014/09/The-Road-Back.pdf>.

181 *Id.*

182 *Id.*

183 *Id.*

184 Metropolitan Transportation Authority, *MTA Capital Program 2015-2019 Amendment No. 2* (May 2017), available at http://web.mta.info/capital/pdf/WEB2015-2019Program_reduced.pdf.

185 *The Road Back: A Historic Review of the MTA Capital Program* (May 2012); Brian M. Rosenthal, et al., *How Politics and Bad Decisions Starved New York’s Subways*, N.Y. TIMES, Nov. 18, 2017, available at <https://www.nytimes.com/2017/11/18/nyregion/new-york-subway-system-failure-delays.html>.

186 Rosenthal, et al., Nov. 18, 2017.

187 *Id.*

188 *Id.*

189 *Id.*

190 Ray Rivera, *M.T.A. and its Debt, and How They Got That Way*, N.Y. TIMES, Jul. 26, 2008, available at <https://www.nytimes.com/2008/07/26/nyregion/26mta.html>.

191 Rosenthal, et al., Nov. 18, 2017.

192 Transportation Alternatives Magazine, *Rudy’s Transit Cuts* (March/April 1995), page 4, available at <https://www.transalt.org/sites/default/files/news/magazine/952MarAprapr/04transit.html>.

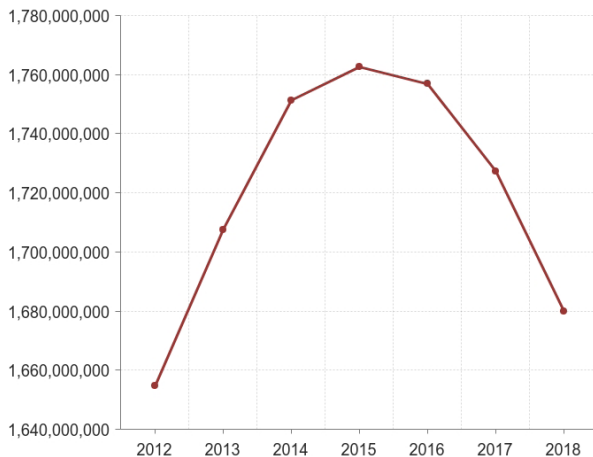
193 James McKinley Jr., *Officials Fear Budget Cuts Will Slow Transit Repairs*, N.Y. TIMES, Nov. 9, 1994, available at <https://www.nytimes.com/1994/11/09/nyregion/officials-fear-budget-cuts-will-slow-transit-repairs.html>.

194 Rosenthal, et al., Nov. 18, 2017.

195 Danielle Furfaro, *MTA Wants Even More Money From de Blasio*, N.Y. POST, Apr. 21, 2003, available at <https://nypost.com/2018/04/05/mta-wants-even-more-money-from-de-blasio/>.

196 Clayton Guse, *NYC bus and Subway Ridership Falling Fast, Threatening the MTA’s Budget and Upgrade Plan*, N.Y. DAILY NEWS, Feb. 22, 2019, available at <https://www.nydailynews.com/new-york/ny-metro-sub->

Changes in Subway Ridership 2012 to 2018

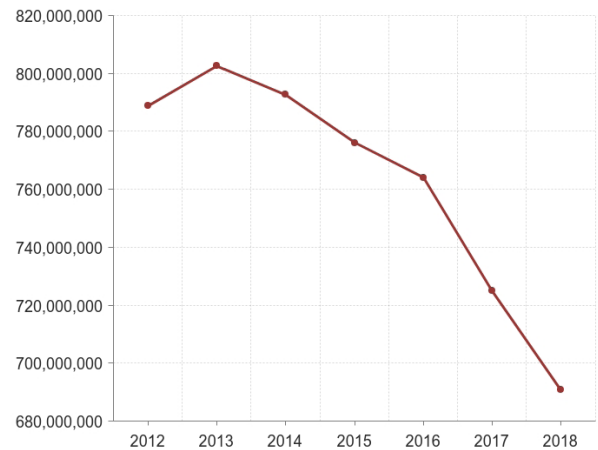


The situation is even more dire for buses. Bus ridership continues to drop. Between 2012 and 2018, bus ridership declined by nearly 15 percent.¹⁹⁷ In the first half of 2018, ridership fell by another 5.36 percent.¹⁹⁸ The MTA estimates that bus ridership will continue to decline through at least 2022.¹⁹⁹

Since 2012, subway performance has been steadily worsening, reaching a low point in 2017 when delays more than doubled to more than 70,000 per month.²⁰⁰ In 2017, the subway system experienced several highly publicized incidents that created service disruptions that rippled through the system, including:

- A power outage at Seventh Avenue and 53rd Street station in Manhattan disrupted the signal system, causing delays on the B, D, F, M, A, C, E, J, Q, G, and R trains during the morning rush hour.²⁰¹
- Two power outages within three days impacting the Q, B, N, and R lines in Brooklyn.²⁰²
- A summer power outage during evening rush hour that left

Decline in Bus Ridership 2012 to 2018



MTA Bus Company and NYCT Bus Ridership

F train passengers stranded between the West 4th Street and Broadway-Lafayette Street stations.²⁰³ Passengers were forced to wait in the train without air-conditioning and lights for over 45 minutes.²⁰⁴

- A southbound A train derailed at 125th Street during morning rush hour, filling the cars with smoke and forcing hundreds of passengers to evacuate.²⁰⁵
- A track fire near St. Nicholas Avenue during morning rush hour caused injuries to nine passengers and required suspension of the B and C lines.²⁰⁶
- A southbound Q train derailed during the morning rush hour, causing delays on the B and Q lines through late afternoon.²⁰⁷

SUBWAY ACTION PLAN

On June 29, 2017, Governor Andrew Cuomo declared that the subway system was in a “State of Emergency,”²⁰⁸ ordering the MTA to prepare a reorganization plan within 30 days and a

way-bus-ridership-decline-20190222-story.html.

197 *Id.*

198 Bus Turnaround Coalition, *Fixing NYC's Buses: 2018 Progress Report* (2018), available at <http://busturnaround.nyc/wp-content/uploads/2018/09/BusTurnaround-2018-Progress-Report-FINAL.pdf>.

199 MTA 2019 Final Proposed Budget, November Financial Plan 2019-2022, Volume 2 *MTA 2019 Final Proposed Budget, November Financial Plan 2019-2022, Volume 2* (Nov. 2018) at V.305, available at <http://web.mta.info/news/pdf/MTA-2019-Final-Proposed-Budget-Nov-Financial-Plan-2019-2022-Vol2.pdf>.

200 Emma G. Fitzsimmons, *Subway's Slide in Performance Leaves Straphangers Fuming*, N.Y. TIMES, February 12, 2017, available at <https://www.nytimes.com/2017/02/12/nyregion/subway-complaints-straphangers-fuming.html>.

201 Eli Rosenberg, *Why A Midtown Power Failure Snarled Your Morning Subway Commute*, N.Y. TIMES, Apr. 21, 2017, available at <https://www.nytimes.com/2017/04/21/nyregion/manhattan-power-outage-subway-commute.html>.

202 Nicole Brown and Vincent Barone, *Power Outage at DeKalb Avenue Causes Service Changes, Delays*, MTA says, AMNY, May 9, 2017, available at <http://www.amny.com/transit/power-outage-at-dekalb-avenue-causes-service-changes-delays-mta-says-1.13586278>.

203 Sarah Maslin Nir, *A Hot Mess for F-Train Subway Riders Trapped in Cars*, N.Y. TIMES, Jun. 6, 2017, available at <https://www.nytimes.com/2017/06/06/nyregion/f-train-subway-no-power-panic.html>.

204 *Id.*

205 Noah Goldberg et al., *Two Subway Supervisors Suspended in Aftermath of A train Derailment*, N.Y. DAILY NEWS, Jun. 28, 2017, available at <http://www.nydailynews.com/new-york/subway-supervisors-suspended-train-derailment-article-1.3284904>.

206 Aidan Gardiner, *9 People Injured After Track Fire Suspends B and C Trains*, FDNY says, DNA INFO, Jul. 17, 2017, available at <https://www.dnainfo.com/new-york/20170717/inwood/b-c-train-subway-track-fire-fdny-mta>.

207 Danielle Furfaro and Natalie Musumeci, *Another Subway Derails During 'Summer of Hell'*, N.Y. POST, Jul. 21, 2017, available at <http://nypost.com/2017/07/21/another-subway-derails-during-summer-of-hell/>.

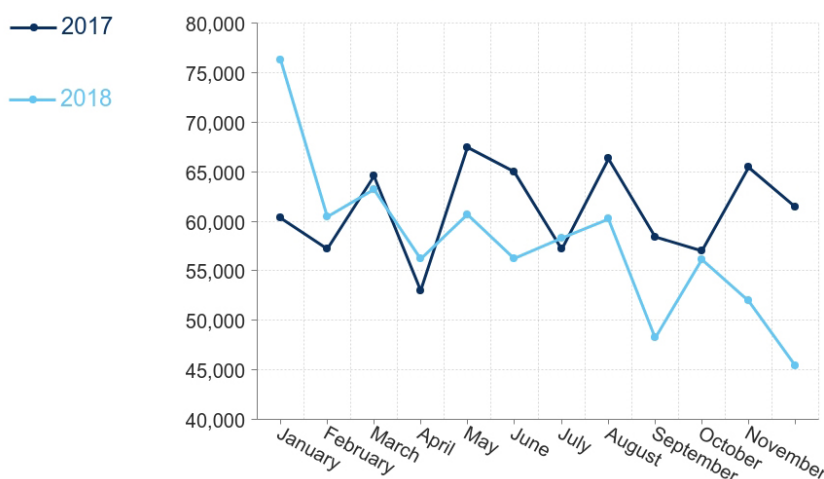
208 Office of Governor Andrew M. Cuomo, Exec. Order No. 168, (Jun. 29, 2017), available at https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/Executive_Order_Disaster_Emergency.pdf; Emma G. Fitzsimmons, *Cuomo Declares a State of Emergency for New York City Subways*, N.Y. TIMES, Jun. 29, 2017, available at https://www.nytimes.com/2017/06/29/nyregion/cuomo-declares-a-state-of-emergency-for-the-subway.html?_r=0.

review of its capital plan within 60 days.²⁰⁹ Later that summer, the MTA announced a plan to stabilize and improve the subway system called the “Subway Action Plan” (SAP).²¹⁰ Phase I of the Plan has focused on the key drivers of 79 percent of “major incidents” that cause delays in the system. An MTA review found that signals, tracks, or power issues caused 54 percent of these delays; four percent by stations issues; seven percent by medical incidents; five percent by fire; five percent by car problems; and four percent by water issues.²¹¹ Thus, the review found the majority of the causes of “major incidents” could be attributed to issues with the MTA’s infrastructure maintenance.²¹² The MTA argued that—for a price tag of \$456 million in operating costs, which would cover hiring 2,700 additional employees, and \$380 million in capital costs—Phase I would stabilize the system.²¹³ The MTA called on the City to fund half of the Plan. In March 2018, after months of reluctance, the Mayor contributed \$418 million to fund the SAP.²¹⁴

Phase I included more than 30 action items such as repairing cars, tracks, and signals, improving power, and working to improve customer communication, with the goal of delivering progress within a year.²¹⁵ However, a year after the Plan was implemented, results were negligible and in some months in 2018, delays were up. For example, the number of major incidents in July 2018 was higher than in July 2017.²¹⁶ The MTA argued that improvements were slow to materialize due to delays in funding the Plan.²¹⁷

However, despite the limited successes early in the SAP, some progress is materializing. In January 2019, the MTA announced that, as a result of SAP being fully funded, the subway system saw a number of notable improvements, including sealing more than 4,000 leaks, cleaning drains along 418 miles of underground track, repairing 20,000 track defects, and repairing and rebuilding 1,700 signal components.²¹⁸ December 2018 was the fourth month in a row with sustained improvement with the best on-time performance in four years. That month,

Comparison of Weekday Subway Delays 2017 and 2018



on-time performance was 72.6 percent, a nearly ten percent increase from 62.9 percent in December 2017. The number of weekday trains delayed also markedly improved, with 45,418 delays, down from 61,441 in December 2017.²¹⁹

While the MTA points to the SAP as the reason for the subway’s improved performance, others argue that the improvements in the system can be attributed to NYCT President Andy Byford’s operational reforms.²²⁰ Recently, Aaron Gordon, writing for *Signal Problems*, argued that one of the major reasons the subway’s performance actually worsened over the years was because the agency lost focus on operational basics, writing “it wasn’t a maintenance problem it was a management problem.”²²¹

Andy Byford officially began his tenure as President of NYCT in January 2018 and quickly rolled out a series of changes. Byford found that NYCT needed to fix the operational and cultural practices within the agency in order to improve service.²²² This initiative, called Save Safe Seconds, directs employees to focus on measures that safely increase train speeds.²²³

Byford conducted the first system-wide test of the subway’s 2,000 signal timers, which automatically stops a train if it is going above a posted speed limit, and found that 16 percent were miscalibrated.²²⁴ In order to avoid having the emergency

209 Emma Whitford, *Cuomo Declares MTA ‘State of Emergency,’ Complains about ‘Nasty’ Tweets*, GOTHAMIST, Jun. 29, 2017, available at http://gothamist.com/2017/06/29/cuomo_mta_emergency_funds.php.

210 Metropolitan Transportation Authority, *NYC Subway Action Plan*, available at http://www.mtamovingforward.com/files/NYC_Subway_Action_Plan.pdf (last accessed February 20, 2019).

211 *Id.*; Major incidents measure incidents that disrupt 50 trains or more, and are separated in 6 categories reported monthly in MTA Board materials and on the MTA’s data dashboard.

212 *Id.*

213 *Id.*

214 Vincent Barone, *Half of MTA Subway Action Plan Funding to be Paid by NYC, de Blasio Spokesman Says*, AMNY, March 31, 2018, available at <https://www.amny.com/transit/mta-subway-funding-1.17789464>.

215 NYC Transit Press Release, *MTA New York City Transit Announces Continued Progress on Subway Action Plan*, (January 20, 2019), available at <http://www.mta.info/press-release/nyc-transit/mta-new-york-city-transit-announces-continued-progress-subway-action-plan>.

216 Fitzsimmons, Emma, *They Vowed to Fix the Subway a Year ago. On-time Rates are Still Terrible*, N.Y. TIMES, July 23, 2018, available at <https://www.nytimes.com/2018/07/23/nyregion/nyc-subway-delays-failure.html?smtype=cur&smid=tw-nytimes>; MTA Data Dashboard: Major Incidents available at <http://dashboard.mta.info/> (Weekday Data from A and B Divisions); and data compiled from MTA Transit Committee Board Books.

217 MTA New York City Transit Announces Continued Progress on Subway Action Plan (January 20, 2019).

218 *Id.*

219 *Id.*

220 Aaron Gordon, *The Subway Action Plan is not Making the Subway Better. Here’s what is*, SIGNAL PROBLEMS, January 2019, available at <https://signalproblems.substack.com/p/the-subway-action-plan-is-not-whats>.

221 *Id.*

222 *Id.*

223 *Id.*

224 Gordon, January 2019.



brake tripped by a signal timer, many train operators overcompensated by slowing trains down even further.²²⁵ As transit advocates have long cited speed limits and signal timers as a cause of slow service, Byford's commitment to removing faulty timers and increasing speed limits holds great promise for improving performance.²²⁶

ACCURACY OF PERFORMANCE STATISTICS

While recent improvements in service seem encouraging, it can be difficult to accurately assess the performance of the system.²²⁷ For example, during the discussion surrounding funding of the SAP and the State demanding that the City pay half, the City argued that they had little information about

what exactly they would be paying for and how they would be able to measure progress.²²⁸ The MTA generally makes limited data available to the public and even that information can be compiled in misleading ways.²²⁹ Recently, the New York City Comptroller released a report arguing that the MTA has a history of using data to mislead the public and claiming that “numerous internal MTA analyses concluded that the MTA's databases and delay tracking protocols were routinely unable to accurately identify the causes of delays and...chronically misattributed delays to “overcrowding.”²³⁰ Despite knowing that there was no way to categorize certain delays, the MTA publicly promoted data that placed the blame for poor performance on overcrowding.²³¹ In addition, according to the report, rather than indicate that they did not know the cause of particular

²²⁵ *Id.*

²²⁶ Emma G. Fitzsimmons, *Why Your Subway Train Might Start Moving Faster*, N.Y. TIMES, Dec. 10, 2018, available at <https://www.nytimes.com/2018/12/10/nyregion/new-york-subway-delay.html>; Benjamin Kabak, *With signal timers in sight, Byford Set to Speed up Trains, Hopefully*, 2nd AVE. SAGAS, Dec. 11, 2018, available at <http://secondavenuesagas.com/2018/12/11/with-signal-timers-in-sight-byford-set-to-speed-up-trains-hopefully/>.

²²⁷ Transit Center, *Memo to MTA Board: You're Measuring Performance Wrong. Here's What to Do Instead* (Nov. 1, 2016), available at <http://transitcenter.org/2016/11/01/memo-to-mta-board-youre-measuring-performance-wrong/>.

²²⁸ Vincent Barone, *Half of MTA Subway Action Plan funding to be paid by NYC, de Blasio Spokesman Says*, AMNY, March 31, 2018, available at <https://www.amny.com/transit/mta-subway-funding-1.17789464>.

²²⁹ N.Y.C. Comptroller William C. Thompson, *Off Track: A Review of NYC Transit's Service Indicators and Recommendations for Improvement*, Sept. 2009, available at <https://comptroller.nyc.gov/wp-content/uploads/documents/sept09-OffTrack.pdf>.

²³⁰ NYC Comptroller, Scott Stringer, *The Crisis Below: An Investigation of the Reliability and Transparency of the MTA's Subway Performance Reporting* (February 2019), available at <https://comptroller.nyc.gov/reports/the-crisis-below-an-investigation-of-the-reliability-and-transparency-of-the-mtas-subway-performance-reporting/>.

²³¹ *Id.*

delays, the MTA would distribute delays with unknown causes among the other fifteen delay categories.²³²

Under Byford, NYCT has committed to focusing on determining the root cause of delays and has removed “overcrowding” as a delay classification, however it was replaced by a general category called “operating environment.”²³³ For example, in December 2018, over 30 percent of delays were categorized as due to “operating environment,” the largest single category of causes.²³⁴

While subway performance may be improving and the MTA might be learning from better data, the data still lacks transparency, which limits policy makers’ ability to hold the agency accountable and understand how and where funds should be appropriated.

A CRISIS OF CONFIDENCE – THE L TRAIN SHUTDOWN

The declines in subway service and ridership are not the only causes for alarm. In 2019, after years of planning and coordination with the City, the MTA reversed its decision to completely shut down the L train just months before the closure was scheduled to begin. Setting aside the fact that the City spent millions of dollars preparing for the shutdown, the rapid about-face called into question the power structure of the MTA and the real role it plays in major decisions.

In 2012, saltwater from Hurricane Sandy flooded the L train’s Canarsie Tunnel causing extensive damage such as corrosion of cables, power infrastructure, and track equipment, resulting in much needed repairs.²³⁵ In order to complete these repairs, the MTA considered two options: (1) a partial closure of one of the L train’s tubes for a three year period, which would result in an eighty percent decrease in train service, (2) or a full closure of the entire tunnel for 18 months, which was later adjusted to 15 months.²³⁶ Either option would impact the 225,000 riders who take the L train through the Canarsie Tunnel on an average weekday.²³⁷

After a lengthy public outreach campaign to gather feedback from elected officials, community groups, and riders, the

MTA opted for a full closure of the L train between the Eighth Avenue stop in Manhattan and the Bedford Avenue stop in Brooklyn beginning in April 2019.²³⁸ The MTA and the New York City Department of Transportation (DOT) embarked on a years-long process to coordinate on mitigation efforts to support impacted riders, including increased bus service.²³⁹

However, in January 2019, four months before the planned shutdown, Governor Cuomo, announced that a full shutdown could be averted and that the MTA could perform the repairs while keeping the L train running during weekdays and only close one of the two tubes on nights and weekends.²⁴⁰ The Governor stated that by using technology from Europe, repairs could be made without closing the tunnel and that the entire project could be completed in 12 to 15 months.²⁴¹

The original shutdown would have fully rehabilitated the Canarsie Tunnel, including demolition and reconstruction of duct banks, track, track bed, cable ducts and associated cables, concrete lining, and installation of tunnel lighting and fire systems.²⁴² Plans also included the implementation of resiliency measures such as the construction of resilient cables and ducts and the installation of a new discharge line to protect the tunnel from future storms.²⁴³ The MTA also planned to implement additional station upgrades along the L train line to improve accessibility and circulation. These upgrades included new stairways and four ADA-compliant elevators at the First Avenue and Bedford Avenue stations; station capacity enhancements at the Union Square station; and platform repairs, ADA boarding areas, and repairs to track wall, columns and floors at the Third and Sixth Avenue stations.²⁴⁴ In addition, the plan included a new Avenue B substation and other infrastructure to allow more trains to run on the L train line.²⁴⁵

As of late February 2019, few details regarding the new plan have been released. During a January 15, 2019 Board meeting, many Members raised questions regarding the safety, longevity, and timeframe for the new approach, in addition to raising concerns as to why the Board was not consulted regarding the decision.²⁴⁶ While the Board’s approval is required for “major service changes,” it appears that the change in

232 *Id.*

233 Dan Rivoli, *NYC Transit will Stop Blaming Train Delays on “Overcrowding,”* N.Y. DAILY NEWS, Jun. 17, 2018, available at <https://www.nydailynews.com/new-york/ny-metro-mta-subway-delays-andy-byford-20180616-story.html>.

234 Jose Martinez, Twitter, Jan. 18, 2019, available at <https://twitter.com/JMartinezNYC/status/1086385594589167616>.

235 Christopher Robbins, *L Train Service Between Brooklyn & Manhattan May Be Shut Down For Years*, GOTHAMIST, Jan. 13, 2016, available at http://gothamist.com/2016/01/13/l_train_tunnel_closure_years.php; MTA New York City Transit, *Canarsie Tunnel Repairs: Planning Ahead for the Crisis*, page 1, available at http://web.mta.info/sandy/pdf/Canarsie_Tunnel_Plans.pdf (last visited Feb. 20, 2019).

236 Devin Gannon, *L Train Shutdown Will Be 15 Months Instead of 18 Months*, 6sqft, Mar. 20, 2017, available at <https://www.6sqft.com/l-train-shutdown-shortened-by-3-months/>; Emma G. Fitzsimmons, *Shutdown or Less Service? M.T.A. Weighs 2 Options for L Train Project*, N.Y. TIMES, May 5, 2016, available at https://www.nytimes.com/2016/05/05/nyregion/shutdown-or-less-service-mta-weighs-2-options-for-l-train-project.html?_r=0.

237 MTA and DOT Presentation, *Fixing the L Line’s Canarsie Tunnel* (June 8, 2017), available at http://web.mta.info/sandy/pdf/Canarsie-6-08-17_website.pdf.

238 Gannon, Mar. 20, 2017.

239 Gersh Kuntzman, *READ ALL ABOUT IT: Full MTA/DOT L Train Update*, STREETSBLOGNYC, Oct. 30, 2018, available at <https://nyc.streetsblog.org/2018/10/30/read-all-about-it-full-mtadot-l-train-update/>.

240 Aarian Marshall, *New York Has Averted A Subway Line Shutdown. Now What?* WIRED, Jan. 4, 2019, available at <https://www.wired.com/story/new-york-subway-l-train-bikes-pedestrian/>; Emma G. Fitzsimmons, *Full Shutdown of L Train is Halted by Cuomo*, N.Y. TIMES, Jan. 3, 2019, available at <https://www.nytimes.com/2019/01/03/nyregion/l-train-shutdown.html>; Spectrum News NY1, *MTA Confirms L Train Shutdown to Begin on April 27* (Oct. 30, 2018), available at <https://www.ny1.com/nyc/all-boroughs/news/2018/10/30/l-train-shutdown-date-for-brooklyn-manchattan-tunnel-set>; Fitzsimmons, May 5, 2016.

241 Fitzsimmons, Jan. 3, 2019; Liz Robbins, *The L Train Shutdown Was Just Canceled. What Exactly Does That Mean?* N.Y. TIMES, Jan. 3, 2019, available at <https://www.nytimes.com/2019/01/03/nyregion/l-train-brooklyn-manchattan-shutdown.html>.

242 MTA, *MTA Seeks to Accelerate Canarsie Tunnel Rehabilitation and Station Improvement, Completing Work in 15 Months* (Mar. 17, 2017), available at <http://www.mta.info/press-release/nyc-transit/mta-seeks-accelerate-canarsie-tunnel-rehabilitation-and-station>.

243 *Id.*

244 MTA New York City Transit, *Canarsie Tunnel Repairs: Planning Ahead for the Crisis*, page 2, available at http://web.mta.info/sandy/pdf/Canarsie_Tunnel_Plans.pdf (last accessed Feb. 20, 2019).

245 *Id.*

246 Benjamin Kabak, *Following Contentious Board Meeting, MTA Officials Strongly Suggest L Train Plan a Done Deal*, Second Avenue Sagas, Jan. 16, 2019, available at <http://secondavenuesagas.com/2019/01/16/following-contentious-board-meeting-mta-officials-strongly-suggest-l-train-plan-a-done-deal/>.

the plans to repair the Carnasie Tunnel will not go before the Board for approval.²⁴⁷

One major unanswered question concerns silica dust. In 2014, when the MTA considered a partial shutdown with repair work to be completed on nights and weekends, the MTA concluded that this option, though ideal, posed a safety risk for workers and subway riders.²⁴⁸ As a result of Hurricane Sandy, the Carnasie Tunnel's bench wall, which holds important electric cables needs to be rebuilt, but there is a dangerous dust particle called silica that exists in the bench wall.²⁴⁹ If inhaled at certain levels, silica dust can cause lung disease or lung cancer.²⁵⁰ The MTA decided in 2014 that a partial shutdown was impossible due to the special precautions it would need to take to mitigate the harm of silica dust being kicked up by removing the damaged bench wall.²⁵¹ While the engineering firm responsible for the new plans stated that any silica dust issues will be managed under the new plan, many Board Members and elected officials continue to call for more information.²⁵²

While the Board and the public await further details on the cost, timeline, and design for a partial tunnel closure, the MTA has announced that many of the original mitigation efforts—including shuttle buses between Brooklyn and Manhattan, a “bus way” along 14th Street, an HOV3 lane on the Williamsburg Bridge, and an extended G train—would not proceed.²⁵³ In addition, a new L train weeknight and weekend schedule was released, revealing that riders will face 20-minute intervals between train arrivals.²⁵⁴

LOCAL TRANSPORTATION POLICY

For nearly a century, New York City has suffered from regressive transit policies. The decline of the City's public transit system and the car-centricity of our streets date back to Robert Moses's first days in public service during the 1920s.²⁵⁵ According to long-time labor mediator Theodore Kheel, Moses “was hostile to mass transit and hostile to poor New Yorkers.”²⁵⁶

Over the course of his forty-year reign, Robert Moses built 13 expressways through all five boroughs of the City, targeting

and devastating low-income, immigrant neighborhoods over wealthier whiter ones to make room for more cars.²⁵⁷ For example, instead of placing the Robert F. Kennedy Bridge's exit ramp in the Upper East Side, which would have been the more efficient location given the vast majority of traffic travelled to the bridge from below 100th Street, Moses chose to build it in Harlem instead, needlessly clogging the neighborhood with cars.²⁵⁸ He dug up a large swath of Red Hook's working class neighborhood to build the Brooklyn-Queens Expressway (BQE), which now starkly divides Red Hook from Carroll Gardens.²⁵⁹ The BQE trench that slices through Cobble Hill and Carroll Gardens would have extended through Hicks Street in present-day Brooklyn Heights had it not faced opposition from the more politically powerful residents that pushed for the creation of the Promenade.²⁶⁰ His Cross-Bronx Expressway through the South Bronx displaced residents in East Tremont, which Robert Caro links to white flight and the subsequent disinvestment in those neighborhoods as lower-income people of color moved in.²⁶¹

Many of the issues the City grapples with today—inadequate tunnel capacity under the Hudson River, bringing the Long Island Rail Road to the east side of Manhattan, and the lack of public transit to New York's airports—were actively dismissed by Robert Moses in the 1950s.²⁶² For example, when he was asked to reserve space on the Van Wyck Expressway to accommodate future public transit at an extra cost of less than \$2 million dollars, he ignored it.²⁶³ A few years later, a rail link to serve that same corridor was priced at 150 times the initial estimated cost.²⁶⁴

Infamously, Moses allegedly designed Long Island's Southern State Parkway with low clearances to prevent buses from ever reaching Jones Beach and rejected the inclusion of mass transit in the middle of the highway—which would have doubled the capacity of the LIRR at just a four percent increase to the total project cost.²⁶⁵

New York City's five bridges credited to Robert Moses—the Verrazano, Triborough, Henry Hudson, Bronx-Whitestone, and Throgs Neck—intentionally exclude opportunities for

²⁴⁷ *Id.*

²⁴⁸ Emma G. Fitzsimmons, *Cuomo Swooped in a L-Train Savior, but M.T.A. Rejected Similar Approach Over Safety Concerns*, N.Y. TIMES, Jan. 15, 2019, available at <https://www.nytimes.com/2019/01/15/nyregion/l-train-mta-subway.html>; Jake Offenhartz, *Will Toxic Silica Dust Derail Cuomo's Last Minute L Train Fix?* GOTHAMIST, Jan. 8, 2019, available at http://gothamist.com/2019/01/08/silica_dust_l_train_mta.php.

²⁴⁹ Offenhartz, Jan. 8, 2019.

²⁵⁰ *Id.*

²⁵¹ *Id.*

²⁵² Fitzsimmons, Jan. 15, 2019.

²⁵³ David Meyer, *Cuomo's New L-Train Shutdown Plan Is Basically As Bad As We Expected*, STREETSLOGNYC, Feb. 13, 2019, available at <https://nyc.streetsblog.org/2019/02/13/cuomos-new-l-train-shutdown-plan-is-as-bad-as-we-expected/>.

²⁵⁴ *Id.*

²⁵⁵ Emily Nonko, *Robert Moses and the decline of the NYC Subway System*, CURBED NEW YORK, July 27, 2019, available at <https://ny.curbed.com/2017/7/27/15985648/nyc-subway-robert-moses-power-broker>.

²⁵⁶ Michael Powell, *A Tale of Two Cities*, N.Y. TIMES, May 6, 2007, available at <https://www.nytimes.com/2007/05/06/nyregion/thecity/06hist.html>.

²⁵⁷ Nonko, July 27, 2019.

²⁵⁸ Sarah Schindler, *Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Built Environment* (Apr. 2015), YALE L.J., available at <https://www.yalelawjournal.org/article/architectural-exclusion>.

²⁵⁹ Suzanne Spellman, *How Master Builder Robert Moses Transformed Brooklyn as We Know It*, BROWNSTONER, Feb. 29, 2016, available at <https://www.brownstoner.com/history/robert-moses-brooklyn-power-broker-bqe-expressway/>.

²⁶⁰ *Id.*

²⁶¹ Robert A. Caro, *The Power Broker: Robert Moses and the Fall of New York* (Vintage Books Edition Sept. 1975), pages 860-861.

²⁶² Nonko, July 27, 2019.

²⁶³ Caro (Vintage Books Edition Sept. 1975) at page 907.

²⁶⁴ Nonko, July 27, 2019.

²⁶⁵ Caro (Vintage Books Edition Sept. 1975) at pages 318-319; Nonko, July 27, 2019.

mass transit.²⁶⁶ He redirected funds for the Second Avenue Subway, which remains unfinished, to build more bridges and highways on two separate occasions—once in 1942 and again in 1954.²⁶⁷ Not only did Moses redirect funds that would have gone to the Second Avenue Subway, but by 1955, he controlled authorities that sat atop war chests large enough to completely revitalize the region's mass transit.²⁶⁸ The surplus funds from the TBTA could have paid for:

- Complete modernization of the LIRR;
- Building parking garages on top of transit facilities in Queens and Nassau County to encourage mass transit use;
- Building commuter parking terminals in Suffolk County;
- Building the Second Avenue Subway, including a branch to Queens;
- Extending subway service to Eastern Queens;
- Extending the Nostrand Avenue subway in Brooklyn to serve Mill Basin; and
- Renovating Dekalb Avenue station to improve service between Brooklyn and Manhattan.²⁶⁹

In his Pulitzer Prize winning biography of Robert Moses, Robert Caro wrote, “[w]hen Robert Moses came to power in New York in 1934, the city’s mass transportation system was probably the best in the world. When he left power in 1968, it was quite possibly the worst.”²⁷⁰

Years after Robert Moses’s tenure, efforts to claw back his car-centric vision for the City continued to face stiff headwinds at the local, state, and federal level. Under Mayor Lindsay in the early 1970s, Sam Schwartz developed the “Red Zone” plan to ban cars from lower Manhattan during business hours, which Lindsay failed to implement.²⁷¹ In 1974, Mayor Beame canceled the implementation of the City’s first attempt at congestion pricing—a plan developed by Sam Schwartz and supported by Mayor Lindsay to reinstate tolls on the East River Bridges.²⁷² The Natural Resources Defense Council (NRDC) sued the City to enforce the plan. In response, the Environmental Protection Agency (EPA) ordered the City to put tolls in place by 1977, but the City fought back in federal court.²⁷³

When the City lost, two members of Congress representing the City overturned the plan with the Moynihan-Holtzman Amendment to the Clean Air Act, which allowed the Governor to halt tolls if the State could show it would use all available financial resources to meet basic public-transportation needs.²⁷⁴ The Reagan Administration accepted the State’s plan, allowing the City to drop any plan to add new tolls.²⁷⁵

In the late 1970s, Mayor Koch prioritized public transit and bicycling infrastructure at the outset of his three terms in office, building the first of the City’s bus lanes along Madison Avenue and the City’s first on-street protected bike lanes.²⁷⁶ However, he too caved to political pressure. After President Jimmy Carter and Governor Hugh Carey reportedly mocked the Mayor’s bicycle infrastructure, Koch tore out those protected bike lanes just a month after they were installed. It took over a quarter century for the City to reinstate a protected bike lane.²⁷⁷ By the end of his tenure, Mayor Koch had fully reversed his pro-transit policies, attempting to ban bikes completely along avenues in Midtown—an effort that became tied up in litigation and was never fully implemented.²⁷⁸

In the 1990s, Mayor Giuliani cracked down on pedestrians, increasing the penalty for jaywalking from two dollars to fifty dollars and setting up steel barriers along crosswalks on 29th and 50th Streets to keep pedestrians out of the way of vehicles.²⁷⁹ In 1998, Giuliani announced a broad-based “attack on uncivilized drivers, bicyclists, and pedestrians” in a speech laden with language that implied cyclists were responsible for their own deaths through recklessness.²⁸⁰

Under Mayor Michael Bloomberg, the City pursued a number of transportation projects that prioritized pedestrians, bicyclists, and bus riders. During Mayor Bloomberg’s tenure, the City added 400 miles of bike lanes, launched Select Bus Service (SBS) with NYCT, brought bike share to New York, and redesigned Times Square with new pedestrian spaces.²⁸¹

266 Nonko, July 27, 2019.

267 *Id.*

268 Caro (Vintage Books Edition Sept. 1975) at page 929.

269 *Id.*

270 *Id.* at page 933.

271 Molly McArdle, *This Transportation Engineer Won’t Give Up on Moving New York City*, NEXT CITY, May 2, 2016, available at <https://nextcity.org/features/view/move-ny-plan-transportation-plan-gridlock-sam-schwartz>.

272 Aaron M. Renn, *When New York City Tried to Ban Cars—the Extraordinary Story of “Gridlock Sam,”* THE GUARDIAN, June 1, 2016, available at <https://www.theguardian.com/cities/2016/jun/01/new-york-city-ban-cars-gridlock-sam-schwartz-manhattan>.

273 *Id.*

274 A. O. Sulzberger Jr., *City Drops Proposal to Charge Bridge Tolls*, N.Y. TIMES, Sept. 15, 1981, available at <https://www.nytimes.com/1981/09/15/nyregion/city-drops-proposal-to-charge-bridge-tolls.html>.

275 *Id.*

276 Ben Fried and Ed Koch, 1973: The Bicycle “Must Be Included” in NYC Transpo System, STREETS BLOG NYC, Feb. 1, 2013, available at <https://nyc.streetsblog.org/2013/02/01/ed-koch-1973-the-bicycle-must-be-included-in-ny-transpo-system/>; Charles Komanoff, *The Bicycle Uprising: Remembering the Midtown Bike Ban 25 Years Later*, STREETS BLOG NYC, Aug. 7, 2012, available at <https://nyc.streetsblog.org/2012/08/07/the-bicycle-uprising-remembering-the-midtown-bike-ban-25-years-later/>.

277 Fried and Koch, Feb. 1, 2013.

278 Komanoff, Aug. 7, 2012.

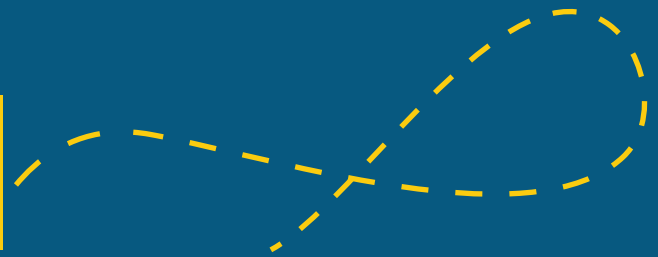
279 John Kaehny, *Giuliani Takes on the Pedestrian*, TRANSPORTATION ALTERNATIVES MAGAZINE, Mar./Apr. 1998, available at <http://transalt.org/sites/default/files/news/magazine/982MarApr/barriers/>.

280 Kit. R. Roane, *Fatal Bicycle Accidents Reach 10-year High*, N.Y. TIMES, Feb. 27, 1998, available at <http://transalt.org/sites/default/files/news/media/1998/980227nytimes.html>.

281 Samantha Shankman, *10 Ways Michael Bloomberg Fundamentally Changed How New Yorkers Get Around*, BUSINESS INSIDER, Aug. 7, 2013, available at <https://www.businessinsider.com/how-bloomberg-changed-nyc-transportation-2013-8>.

A VISION FOR

MUNICIPAL CONTROL



A VISION FOR MUNICIPAL CONTROL

GOVERNANCE

What's Not Working

STRUCTURE OF THE MTA

New York City's mass transit system suffers from a flawed governance model and a lack of political accountability. The City's subway and buses are part of the MTA, a public benefit corporation that is responsible for developing and implementing a unified mass transit policy for New York City and the seven New York metropolitan-area counties of Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester.²⁸²

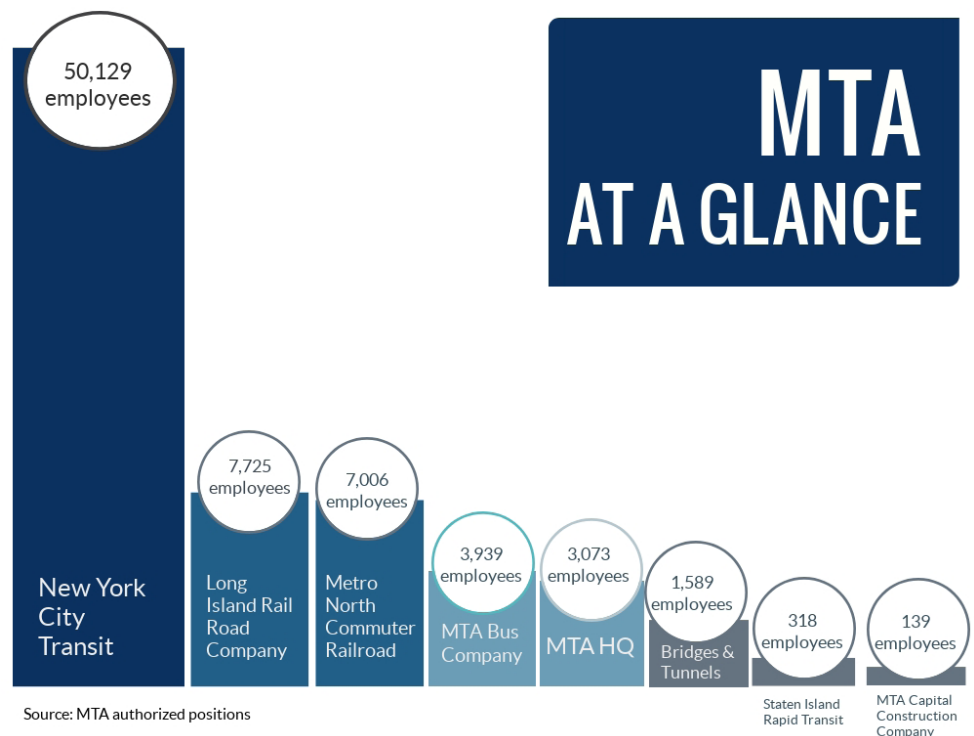
As a public benefit corporation, the MTA functions as a quasi-private corporation with broad powers, including the ability to issue bonds and take on debt, enter into contracts and leases, create its own by-laws, and appoint officers and employees.²⁸³ In addition, the MTA has power to acquire transportation facilities within the commuter district, levy tolls and fares, and "may do all things it deems necessary, convenient or desirable to manage, control and direct the maintenance and operation of" its transportation facilities.²⁸⁴ Local governments are explicitly prohibited from exercising jurisdiction over transportation facilities or their activities and operations.²⁸⁵

By expressly constraining the ability of New York City over the MTA's work within its borders, New York City residents lose a direct lever to determine the direction and priorities of their transit system. Rather than having direct line between the ballot box and the subway, the electoral power is muddled by the structuring the system as part of a larger regional body. While regional transit governance does have its advantages, it also runs the risk of diffusing political will. Political paralysis, lack of clear agenda, and finger pointing can easily result when the powers that control

the system have conflicting political perspectives. The MTA's governing structure has led to this very result.

The MTA's work is carried out by a myriad of subsidiary and affiliate entities, though the revenues from all authorities and subsidiaries support the organization as a whole. The MTA operations that represent the local transit system in New York City include NYCT, which operates the subway and the majority of the City's bus network.²⁸⁶ Additional bus service is provided by NYCT's subsidiary, the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA) and the MTA Bus Company.²⁸⁷ The Staten Island Rapid Transit Operating Authority (SIRTOA) runs the Staten Island Railroad.²⁸⁸

Another affiliate of the MTA, the former Triborough Bridge and Tunnel Authority (TBTA), which is now called the MTA Bridges and Tunnels (B&T), is empowered to construct and operate toll bridges and tunnels and other public facilities in New York City. Currently, it operates and maintains seven bridges and two



282 N.Y. Public Officers Law §§ 1263, 1264; Metropolitan Transportation Authority Description and Board Structure Covering Fiscal Year 2009, available at <http://web.mta.info/mta/compliance/pdf/Description%20and%20Board%20Structure.pdf>.

283 N.Y. Public Officers Law § 1265.

284 N.Y. Public Authorities Law § 1266.

285 N.Y. Public Authorities Law § 1266(b).

286 N.Y. Public Authorities Law § 1201.

287 N.Y. Public Authorities Law § 1203-a.

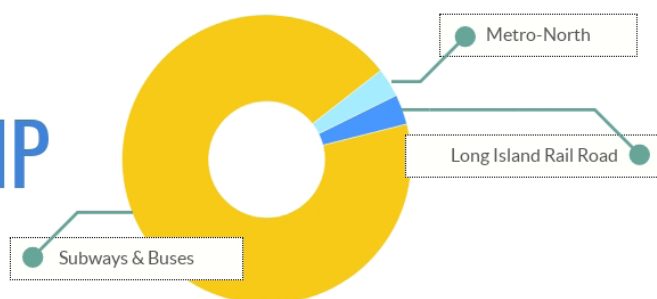
288 Laws of 1981, Chapter 314, § 16.

tunnels within the City of New York.

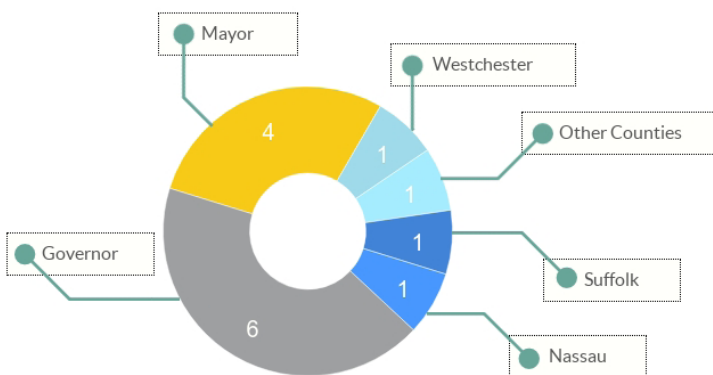
In addition, the MTA controls the State's two commuter railroads, the Long Island Rail Road Company (LIRR) and the Metro-North Commuter Railroad Company (MN-CRC).²⁸⁹

Finally, there are two entities that provide overall support to the aforementioned components. The MTA Capital Construction Company is a relatively new agency formed in 2003 to manage the expansion of mega-projects and lower Manhattan infrastructure projects, such as the East Side Access Project at Grand Central Terminal, the Second Avenue Subway, the Fulton Transit Center, and others. The MTA Headquarters provides consolidated functions for numerous MTA components, overall security, and planning and operations for the system as a whole.

MTA RIDERSHIP SHARE



MTA BOARD VOTE SHARE



MTA BOARD

The MTA is, ostensibly, controlled by the Board. The MTA's Board includes 17 voting members and six rotating non-voting seats held by representatives of organized labor and the Permanent Citizens Advisory Committee (PCAC), which serves as a voice for users of MTA transit and commuter facilities.²⁹⁰

The only non-residency requirement for voting Board Members is that they have experience in one of the following areas: transportation, public administration, business management, finance, accounting, law, engineering, land use, urban and regional planning, management of large capital projects, labor relations, or "experience in some other area of activity central to the mission of the [MTA]."²⁹¹

The composition of the Board has changed over time, but one constant is the disfavoring of the City. The MTA Board was originally composed of nine Members appointed by the Governor, three of which were recommended by the Mayor.²⁹² During the 1970s, the Board was expanded to include representation for the surrounding counties, diluting the City's already limited share.²⁹³ Today, Mayoral appointees cast only

four of the fourteen votes on the Board. The Governor appoints six Members, including the Chair, and officials from suburban counties appoint seven Members, four of which cast a collective vote.²⁹⁴ The Chair may cast a second vote in the case of a tie, further increasing the power of the State's appointments.²⁹⁵ This arrangement gives the City little power over major decisions, despite the fact that almost 90 percent of MTA ridership occurs on the City's subway and buses.²⁹⁶

The Board approves major decisions, including fare increases, service changes, and capital improvement projects.²⁹⁷ However, the Chair wields considerable power as CEO of the MTA, holding responsibility "for the discharge of the executive and administrative functions and powers of the authority."²⁹⁸ As CEO, the Chair not only supervises each of its eight subsidiaries, but directly controls a management team of 14 within MTA Headquarters—including a President, Managing Director, Chief Financial Officer, Chief Development Officer, and Chief of Staff—as well as over 3,000 employees.²⁹⁹

²⁸⁹ Laws of 1963, Chapter 324, § 1.

²⁹⁰ MTA Leadership, available at <http://web.mta.info/mta/leadership/> (last accessed February 26, 2019).

²⁹¹ N.Y. Public Authorities Law § 1263.

²⁹² N.Y. Laws of 1967, Chapter 717.

²⁹³ Danielson and Doig (1982) at page 235.

²⁹⁴ N.Y. Public Authorities Law § 1263(1). The Governor technically appoints all Members of the Board; however, appointments for the City and from suburban counties are made "on the written recommendation" of the relevant executive.

²⁹⁵ N.Y. Public Authorities Law § 1263(3).

²⁹⁶ Metropolitan Transportation Authority, 2017 Annual Report (May 2018), available at http://web.mta.info/mta/compliance/pdf/2017_annual/SectionA-2017-Annual-Report.pdf; The MTA Network: Public Transportation for the New York Region, available at <http://web.mta.info/mta/network.htm> (last accessed Feb. 26, 2019).

²⁹⁷ Emma G. Fitzsimmons, *Can You Name an M.T.A. Board member? No, Really. Name One*, N.Y. TIMES, Jan. 24, 2019, available at <https://www.nytimes.com/2019/01/24/nyregion/nyc-mta-board.html>.

²⁹⁸ N.Y. Public Authorities Law § 1263(4).

²⁹⁹ 2017 Annual Report (May 2018); Management Team, available at <https://new.mta.info/transparency/leadership/management-team> (last accessed Feb. 26, 2019).

Recommendation: Establish Big Apple Transit —the BAT

TRANSFER CONTROL OF THE SUBWAY AND BUSES TO THE CITY

New York City transit system must be responsive to the residents it serves. The best way to do this is by restoring municipal control over the mass transit facilities and their operations in the five boroughs. The proposed Big Apple Transit (BAT) would include City control of NYCT and its subsidiary, MaBSTOA, as well as SIRTOA, MTA Bus Company, and MTA Bridges and Tunnels. It would also assume about two-thirds of the operations of the MTA Headquarters to help with the management of the BAT.

MTA Subsidiary and Affiliate Entities

The remaining entities, including the two commuter railroads, the suburban bus system, and the MTA Capital Construction Authority could be spun-off into a new MTA, or be reformulated into a new structure.³⁰⁰ The First Mutual Transportation Assurance Company should also continue to operate, but will need a reformulation to reflect the new transit structures.³⁰¹

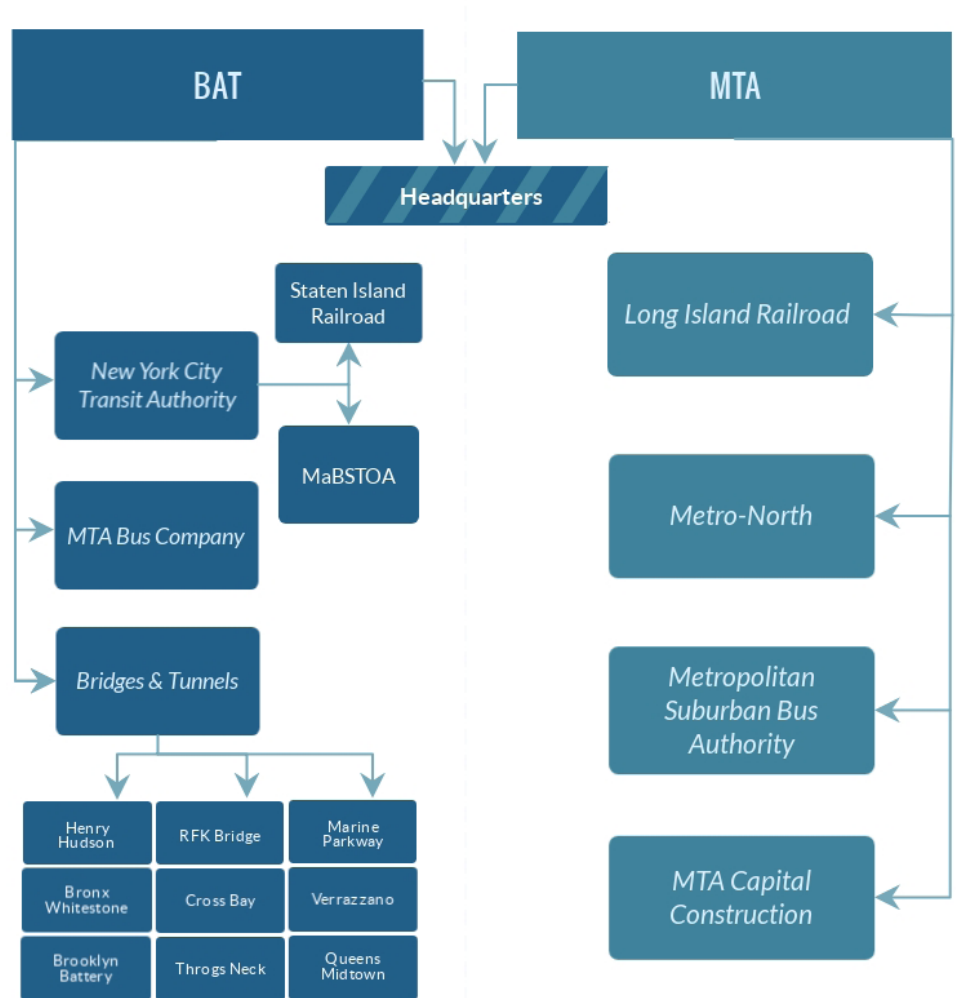
BUILDING A BETTER BOARD

Creating a system that is responsive to the needs of New York City means holding one person responsible for its success. In addition, a Board can provide invaluable service in managing the system while having some independence from the executive and the legislature. A potential model for governance of the BAT system follows.

The Mayor would appoint a majority of the members and the Chair to the BAT Board. The five Borough Presidents and the Public Advocate would each appoint one member to the Board, but these members will each have one half of a vote to keep the size of the Board manageable. The Permanent Citizens Advisory Committee (PCAC) and organized labor would

A NEW ORGANIZATIONAL STRUCTURE

The New Big Apple Transit will control entities previously managed by the MTA for improved efficiency & accountability to New Yorkers



maintain their advisory positions on the BAT Board.

Mass transit isn't just about making the trains run on time, it's about serving the population of the City. The membership of the BAT Board should not only reflect the people it serves, it should be compromised of a diverse set of New Yorkers with expertise in a wide range of areas. At a minimum, all Board Members:

- Must be City residents;
- Must be regular BAT users; and

³⁰⁰ The Capital Construction Authority (CCA) does handle projects, like the Second Avenue Subway, that are associated with BAT. However, CCA is not included in the budgetary overviews in this report as it operates effectively like an in-house capital construction arm, where all of its expenses are paid from capital project funds. Those funds, in turn, are represented in the budgets for BAT and the legacy-MTA as debt service that pays for those capital projects. So even though the CCA's budget is not specifically presented here, the costs associated with its work are represented.

³⁰¹ The First Mutual Transportation Assurance Company is a captive in-house insurance and reinsurance coverage for the entire MTA system. As a captive insurance company, it can only insure related entities. Therefore, the split will require this entity to be reformed to reflect the new system.

- May not hold elected office on the City, State, or federal level.

In addition, there should be Members with the following qualifications:

- Transportation or transit planning;
- Urban planning, including sustainability and resiliency;
- Advocacy for individuals with disabilities;
- Demographics, social trends, or the needs of low-income New Yorkers;
- Capital planning or civil engineering; and
- Finance.

The Mayor's appointees, including the Chair, would all be subject to approval by the City Council. All appointees will serve for a three-year term and are not subject to term limits.

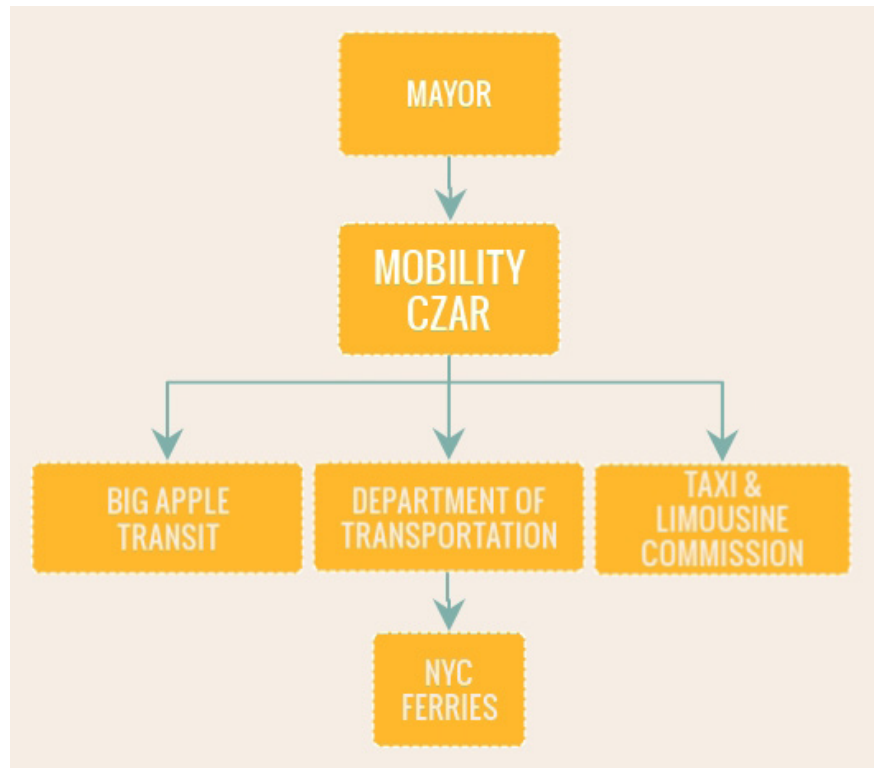
In addition, BAT Board members should be subject to the City's conflicts of interest laws and treated as employees with "substantial policy discretion."³⁰² This means Board Members would be required to file annual financial disclosures and would be prohibited from:

- Using their position for financial gain;
- Accepting gifts from anyone doing business with BAT;
- Having a financial relationship with anyone doing business with BAT;
- Soliciting donations for a candidate for public office;
- Lobbying before the BAT for one year after leaving the Board; and
- Serving in certain political leadership positions.³⁰³

MOBILITY CZAR

Transit is about interconnectivity. No part of the City's transit eco-system—its subway, buses, streets, sidewalks, pedestrians, plazas, taxis, for-hire vehicles, ferries, and bicycles—exist in a vacuum. One of the greatest benefits of local control of the subway and buses is that the City can finally have a comprehensive vision for transit. The Mayor would appoint a Mobility Czar, a Deputy Mayor level position in City Hall with a staff that can coordinate the various transportation policies and activities in the City.

The portfolio of the Mobility Czar should include the BAT, as well as DOT and TLC.³⁰⁴ In addition, EDC should transfer



functions relating to ferry service to DOT. Providing for supervision of all transit modalities by the Mobility Czar would allow the City to better coordinate end-to-end services, that would expand upon London's model, which proved to significantly reduce reliance on cars after the city integrated its systems.³⁰⁵

REGIONAL COOPERATION

Commuters from outside the City are critical to New York's financial success. In addition to bringing in an important segment of the City's work force, Metro-North and LIRR's 38 stations in the Bronx, Brooklyn, and Queens serve many City residents who cannot easily access the subway or buses.³⁰⁶

Under the BAT model, it will be critical for the City and the commuter railroads to continue working together on matters such as station maintenance, coordination of service during emergencies, any shared revenue streams, and finding ways to support shared ridership.

Advocates have long called for lowering fares on commuter rail within the five boroughs to make it a more realistic option for New Yorkers. This could leverage existing unused capacity to relieve pressure on the subway and bus system and give people another option for faster commutes.

The MTA currently has several subsidy programs for riders using both commuter railroads and the subway and buses. At a minimum, these programs should be continued. Ideally, the

³⁰² N.Y.C. Charter § 2603.

³⁰³ *Id.*

³⁰⁴ New York City DOT, *About DOT*, <http://www.nyc.gov/html/dot/html/about/about.shtml> (last accessed Feb. 26, 2019).

³⁰⁵ Nicole Badstuber, *Six things other cities can learn from Transport for London's success*, THE CONVERSATION, June 16, 2015, available at <http://theconversation.com/six-things-other-cities-can-learn-from-transport-for-londons-success-42901>.

³⁰⁶ MTA Metro-North Railroad, available at <http://web.mta.info/mnr/html/mnrmap.htm> (last accessed Feb. 27, 2019); MTA Long Island Rail Road, available at <http://web.mta.info/lirr/Timetable/lirrmap.htm> (last accessed Feb. 27, 2019).

BAT and the commuter railroads would look for opportunities to improve and expand these programs to facilitate easier commutes.

- The CityTicket program charges \$4.25 on Metro North and LIRR travel within City limits on weekends. The limitation of the CityTicket to weekends means that most commuters, whether local or from outside the City, don't benefit from the program.³⁰⁷
- The Atlantic Ticket pilot program, also known the Freedom Ticket, offers a discounted fare of \$5 for all trips between southeast Queens and Brooklyn's Atlantic Terminal, but does not offer a discount for Manhattan-bound commuters and does not provide free transfers to the subway or bus except through a \$60 joint LIRR/NYCT weekly pass. Additionally, it is not available for purchase on train cars or through the MTA's mobile ticketing app.³⁰⁸



Any local governance model must include a permanent, standing body for continued cooperation and regional planning. Transit coordination of services in the City and the commuter rails could continue under the umbrella of the MTA or under the New York State Department of Transportation. Alternatively, the State could give a greater role in transit planning and more authority to the New York Metropolitan Transportation Council—the MPO that serves most of the region that the MTA services.³⁰⁹

OVERSIGHT

The City Council would establish a standing committee to oversee the BAT. With subpoena authority over the BAT, the Council could serve as a check and ensure that the system is meeting the needs of the City.

FISCAL TRANSPARENCY

What's Not Working

The City's transit system has suffered from a lack of fiscal transparency. Running one of the world's largest and oldest subway systems and an extensive bus system is expensive. However, political pressures around taxes, fares, and vested interests have prevented honest conversations about the ap-

propriate level of funding needed to reliably operate the City's transit system.

In a very basic sense the level of service provided is a function of two things:

1. the costs of running that system and,
2. the financial resources available.

If costs increase, then financial resources need to increase, or service levels will deteriorate. This may not always be readily apparent. The authority's history of meeting its capital needs illustrates this. Demands for capital costs were increasingly addressed by forcing the MTA to self-finance those capital costs without actually providing long-term funding streams adequate to cover the debt. This gave the short-term appearance of addressing fiscal needs while ignoring the long-term ramifications on service delivery.

UNSUPPORTED DEBT AND CAPITAL

Today, 52 percent of the capital program is MTA debt-funded. Only 30 years ago, the share was less than a third.³¹⁰ As discussed above, the shift toward greater funding through MTA debt began during the Pataki Administration.³¹¹ According to the State Comptroller, debt service will increase by 26 percent between 2018 and 2022, to eventually reach \$3.3 billion.³¹² That means debt service payments will account for 18.6 percent of total revenue and 36.5 percent of fare and toll

³⁰⁷ MTA, CityTicket, available at <http://web.mta.info/mta/cityticket.htm> (last accessed Feb. 26, 2019).

³⁰⁸ MTA, Press Release, *LIRR Debuts Atlantic Ticket with Brooklyn and Queens Officials*, June 15, 2018, available at <http://www.mta.info/news/2018/06/15/lirr-debuts-atlantic-ticket-brooklyn-and-queens-officials>.

³⁰⁹ New York Metropolitan Transportation Council, *Who We Are*, available at <https://www.nymtc.org/ABOUT-US/who-we-are> (last accessed Feb. 26, 2019).

³¹⁰ Rosenthal, et al., Nov. 18, 2017.

³¹¹ *Id.*

³¹² New York State Comptroller Thomas P. DiNapoli, *Financial Outlook for the Metropolitan Transportation Authority*, Report 8-2019 (Oct. 2018), page 2, available at <https://www.osc.state.ny.us/osdc/rpt8-2019-mta-financial-outlook.pdf>.

revenue.³¹³ Outstanding debt could potentially reach \$41.9 billion by 2022, which is almost an \$8 billion increase in outstanding debt since 2016, and this projection does not take into account the 2020-2024 capital program.³¹⁴

Within the last fifteen years, the MTA's operating budget increased 64 percent, going from \$9.45 billion to over \$15 billion between 2002 and 2017. During this fifteen year span, debt service was the highest contributing factor to the increase in operating expenses, going up 192 percent between 2002 and 2017. In 2018, the MTA released the 2019 preliminary budget and operating expenses are expected to cost \$16.7 billion in 2019, with debt service on bonds for capital programs accounting for 16 percent of that budget. The more that the MTA's capital plans continue to rely on debt, the more constrained the MTA's future borrowing capacity may become.

Concerns relating to debt caused Standard & Poor's, one of the "Big Three" credit rating agencies, to lower its issuer credit rating for the MTA twice in 2018, from AA-minus to A-plus to A. Though S&P cited many offsetting factors for its rating, such as complimenting MTA's budget practices, it called for needed new revenue amidst rising costs and decreasing ridership. It should be noted that MTA's rating from the other two major agencies, Moody's and Fitch, remained unchanged in 2018.

S&P's downgrade largely stems from its calculation of MTA's debt service coverage, which by its measure is not sufficient given current revenues. S&P does note that pledged revenue coverage on each source of credit looks much better, and other rating agencies' calculations paint MTA's debt affordability more favorably. When discussing revenue coverage on MTA's debt service, it's important to point out that MTA's bond covenants provide important protections to bondholders to ensure it meets its debt service obligations, and MTA still secures a fairly healthy bond rating and is able to borrow at relatively low cost because of that.

The reluctance to address adequate funding is not unusual in the State's stewardship of the MTA. Most recently the Governor threatened to hold back a fare increase as punishment to the MTA's slow movement on service improvements. The MTA Board met on November 15, 2018 to consider a final proposed budget for 2019-2022 which called for continued biennial 4 percent fare and toll increases to be implemented in March 2019 and warned that "[i]f projected fare and toll increases are not implemented, our financial situation will quickly deteriorate as revenue will not be able to keep pace with inflation and other cost growth."³¹⁵ Cuomo argued against such fare increase: "I'm against the fare increase," he said. "The MTA's first job is to look within. There is waste. There is inefficiency that currently goes on at the MTA that has to end. Period."³¹⁶ Then,

this January, the scheduled vote on the MTA fare increase was delayed until late February after Cuomo again reiterated his opposition and was joined by Lawrence Schwartz, his appointee and the head of the MTA Finance Committee: "I can never support a fare increase unless there's some kind of performance improvement metrics that insures the riders that they are going to continue to see, hopefully in the future, better service and more reliability,"³¹⁷ Schwartz said. This was a direct attack on the transit system's fiscal stability.

These recent developments demonstrate how it has become too easy for those in control of the MTA to discuss fares and tax subsidies as if they are divorced from the ability of the City's transit system to provide reliable service.

DISTRACTED AND UNFOCUSED CAPITAL PLANNING PROCESS

The bulk of the MTA's spending is on capital projects, which include basic upkeep such as replacement of train cars and buses, as well as the construction of new transit facilities and lines. MTA's five-year capital planning process is yet another feature of the system that obfuscates accountability through a power-sharing measure where many of the players involved have little functional power. The Governor, the Mayor, the State Senate Majority Leader, and the Speaker of the State Assembly each have full veto power over the MTA's capital spending budget through the Capital Program Review Board, which was created by State law in 1981.³¹⁸ The MTA Board is required to submit two five-year capital program plans to the Capital Program Review Board.³¹⁹ One plan is for the capital program for New York City Transit and Staten Island Rapid Transit Operating Authority, and the other plan is for the capital program

CAPITAL PROGRAM REVIEW BOARD

- **Additional layer that is not part of the MTA board.**
 - **Governor, New York City Mayor, State Assembly Speaker, and State Senate Leader appoint representatives.**
 - **The Mayor's representative can only weigh in on proposals that affect NYCT and SIR.**
 - **Board members have 90 days to review.**
 - **Board members may reject a plan but not make amendments.**
-

313 *Id.*

314 *Id.* at page 15; MTA, Finance Year End Report Final, pages 1-2, available at <http://web.mta.info/mta/news/books/docs/FinanceYearEndReportFinal0117.pdf> (last visited Feb. 22, 2019).

315 MTA 2019 Final Proposed Budget, November Financial Plan 2019-2022, Volume 1 MTA 2019 Final Proposed Budget, November Financial Plan 2019-2022, Volume 1 (Nov. 2018) at 1.6, available at <http://web.mta.info/news/pdf/MTA-2019-Final-Proposed-Budget-Nov-Financial-Plan-2019-2022-Vol1.pdf>.

316 Governor Andrew Cuomo on WNYC Brian Lehrer Show, Nov. 19, 2018, available at: <https://www.wnyc.org/story/the-brian-lehrer-show-2018-11-19>.

317 Jenna DeAngelis and Lawrence Schwartz, *MTA Delays Vote On Fare Hikes Until February*, CBS New York, Jan. 24, 2019, available at <https://newyork.cbslocal.com/2019/01/24/mta-fare-hike-vote/>.

318 Transportation System Assistance and Financing Act of 1981, 1981 N.Y. Laws 1396; Robin Herman, *Assembly Passes \$5.6 Billion Plan for M.T.A. Aid*, N.Y. TIMES, June 23, 1981, available at <https://www.nytimes.com/1981/06/23/nyregion/assembly-passes-5.6-billion-plan-for-mta-aid.html>.

319 N.Y. Public Authorities Law § 1269-b.

for the other commuter rails. The Mayor's veto extends only to the portion of the plan relating to New York City Transit and the Staten Island Railway.³²⁰

There is no option to modify the Plan, only to reject it outright. Unless one member of the Capital Program Review Board vetoes it within 90 days, the capital budget is approved; however, the Board has no authority to make changes to the budget.³²¹ This "all of nothing" approach combined with the fact that the City has no authority to shape the development of the Capital Plan, from its overall size down to the individual projects and priorities included, illustrates the limitations of the Review Board approach.

Further, instead of providing elected officials with the ability to provide true oversight to the capital spending process and to share in accountability for the MTA's spending, the Board has provided a venue allowing politicians to advance other funding priorities and pet projects.

- In 1987, Norman J. Levy, a Nassau County Republican and the Review Board representative for the Senate majority leader, vetoed the plan because he favored a greater funding allocation to the commuter rail lines.³²²
- In 1996, Assemblywoman Catherine T. Nolan, representing Assembly Speaker Sheldon Silver, vetoed changes to the plan. At the heart of the dispute was an effort by Assembly Democrats to force MTA Chairman, E. Virgil Conway to negotiate with them over the contents of a future capital program.³²³
- In 1999, Senate Majority Leader Dean Skelos vetoed the first budget proposal for the 2000-2004 capital plan because a comparable plan for funding highways had not been proposed yet.³²⁴
- In 2005, both State Legislature Review Board members vetoed the plan. Reports suggested that dissatisfaction with the spending plan had nothing to do with the MTA, but instead centered on whether to pay union-rate wages to nonunion workers on other State-funded projects.³²⁵
- In 2008, Assembly Speaker Sheldon Silver sent a letter to the MTA threatening to veto the plan if the Fulton Street Transit Center was not included.³²⁶ A month later, the MTA released its 2008-2013 Capital Plan,³²⁷ including funding for the project Fulton Street.³²⁸

- In 2014, Governor Cuomo's appointee formally vetoed the \$32 billion plan, saying the decision was "made with-out prejudice to any particular element or project that is contained in the proposal."³²⁹ The plan included a large funding gap, which was believed to be the reason for the veto.³³⁰

While some Mayors have attempted to use the Review Board to influence spending, a Mayor has never wielded his veto to block a capital spending plan. In February 2004, Mayor Bloomberg objected to the MTA changing the spending formula in favor of the commuter rails. However, as the Mayor only has a veto of the City portion, he resorted to other avenues to assert influence. First, Bloomberg explored legal avenues to argue that the City has a financial interest in suburban projects, so it should have an effective veto of all capital spending plans.³³¹ Next, Bloomberg lobbied Assembly Speaker Silver to use his veto over the plan. Ultimately, Bloomberg dropped his legal threats and opposition to the suburban-friendly spending plan after the MTA agreed to take over the private bus system, which the City was subsidizing at \$150 million a year.³³²

Recommendation: Model BAT's Structure on the City's Water System

The City's transit system must be funded at a level that guarantees reliable and efficient service that reflects the demands of the City's residents. This requires an open, transparent, and responsive budget process that puts service provision as bedrock budgeting principle that cannot be easily overturned. The City's water system provides a model of how this could be achieved.

BAT could be incorporated into the City's overall structure similar to the way the City's water system works. In that system, there are three key entities: the Water Board, the New York City Municipal Water Finance Authority (MWFA), and the Department of Environmental Protection (DEP).

The water system is self-funded by revenue collected through water and sewer rates. The Water Board sets rates annually and is responsible for ensuring that the operating and capital needs of the system can be met. The MWFA provides funding through the issuance of bonds and other debt instruments to finance the capital projects required to keep the system

320 N.Y. Public Authorities Law § 1269-a(2).

321 N.Y. Public Authorities Law § 1269-b.

322 *State Senate Republicans Assail Transit Aid Plan*, N.Y. TIMES, Jan. 22, 1987, available at <https://www.nytimes.com/1987/01/22/nyregion/state-senate-republicans-assail-transit-aid-plan.html>.

323 *Senate Republicans Block Transit Plan*, N.Y. TIMES, Dec. 22, 1999, available at <https://www.nytimes.com/1999/12/22/nyregion/senate-republicans-block-transit-plan.html>.

324 *Id.*

325 Sewell Chan, *Veto of M.T.A. Capital Plan Stalls Repairs and Construction*, N.Y. TIMES, July 2, 2005, available at <https://www.nytimes.com/2005/07/02/nyregion/veto-of-mta-capital-plan-stalls-repairs-and-construction.html>.

326 Letter from Sheldon Silver, Speaker of the New York State Assembly, to Elliot Sander, Executive Director and Chief Executive Officer of the Metropolitan Transportation Authority (Jan. 30, 2008), available at <https://nyassembly.gov/Press/20080130/letter.pdf>.

327 Metropolitan Transportation Authority, *MTA Capital Plan 2008-2013* (Feb. 2008), available at <http://web.mta.info/mta/budget/pdf/2008-2013%20Capital%20Plan.pdf>.

328 Rosenthal, et al., Nov. 18, 2017.

329 Jorteh Senah, *State Review Board Nixes MTA Capital Program*, N.Y. PUBLIC RADIO, Oct. 3, 2014, available at <https://www.wnyc.org/story/state-transportation-department-pulls-stop-sign-mta-capital-program/>.

330 Benjamin Kabak, *Capital Program 2015-2019: City Council Talks as CPRB Rejects*, for NOW, 2nd AVE. SAGAS, Oct. 7, 2014, available at <http://secondavenuesagas.com/2014/10/07/capital-program-2015-2019-city-council-talks-as-cprb-rejects-for-now/>.

331 Mike McIntire, *City Weighs Going to Court Over New Metro-North Cars*, N.Y. TIMES, Feb. 26, 2004, available at <https://www.nytimes.com/2004/02/26/nyregion/city-weighs-going-to-court-over-new-metro-north-cars.html>.

332 Corey Kilgannon, *Private Buses Pose Challenge For the M.T.A.*, N.Y. TIMES, Apr. 26, 2004, available at <https://www.nytimes.com/2004/04/26/nyregion/private-buses-pose-challenge-for-the-mta.html>.

running. The MWFA's borrowing is backed by water and sewer charges. DEP, a City agency, bills and collects on the approximately 835,000 water accounts on behalf of the Water Board. DEP also operates and maintains the water and sewer system on behalf of the Board.³³³

This potential model would have the advantage of creating a transparent budgetary and oversight process, allow for a stand-alone bonding process, and ensure that the system remains self-funded through fares, dedicated tax subsidies, and available federal, and state-aid.

ENSURE ADEQUATE FUNDING

BAT could also follow the water system's structure for determining fares. In the water system, rates are set by an independent board, but for BAT this function could be taken over by the BAT Board. In the water system, the Water Board sets the water rates so that they cover the operating costs and the debt service costs associated with the water system's capital program.³³⁴ This allows for a clear method for setting water rates that ensure the financial viability of the water system:³³⁵

1. The Authority projects the annual debt service for bonds issued to finance capital projects and certifies the annual debt service expense to the board;
2. OMB projects the system's operating expenses and certifies that amount to the board;
3. The System's consulting engineer certifies that the annual expenses and capital investments are appropriate to maintain the viability of the system;
4. The board adopts an annual budget based on the certified expenses and adopts a rate that will produce sufficient revenues to fund the System.

BAT could adopt a version of this, with several modifications, to reflect that the transit system receives dedicated tax subsidies. In step three, OMB could include any revenues dedicated or allocated to the new transit system and thereby certify a net operating expense. Then in step four, the BAT Board would adopt fares that, *including any tax revenue*, provide sufficient revenues to fund the system.

This mirrors the function that the City's property tax plays in the City's budgeting process and how the City continually adopts a balanced budget. In that process,³³⁶ the City is required to set the property tax rates to a level to raise the difference between the expense budget and all other tax revenues as forecast by the Mayor.³³⁷ In practice, the City assumes a property tax revenue based on an average rate that has remained unchanged since January 1, 2009,³³⁸ and limits the City's expense budget to that revenue estimate plus all other revenues. Similarly, the fares for BAT would be required to be set at a level that balances BAT's operating budget with all its other revenues.

Tax revenues could be appropriated by the City in its budget process, or the taxes could be directly paid to BAT. By appropriating the City tax levy dollars through the budget process, the City would have a direct method to control the fares. If the City were to decide to lower fares, they could allocate increased City-tax levy dollars to reduce the need for fares to cover the operations and debt service of the system. The appropriation method has the advantage that it considers transit fares and the subsidy to the system in the context of all other budget priorities facing the City and its residents. Conversely, this becomes yet one more (large) item that is part of the budget process.

Alternatively, taxes could be directly allocated to BAT. Assuming the State provided for local authority, the City could control whether to raise or lower the tax rates as a way to adjust the tax subsidies to the system. These dedicated taxes would not flow into the City's general fund but rather a fund that could only be used by BAT. This would still allow the City to have a say in the fare level but would do so outside of the regular budget process. It could be timed to occur at a separate point in the calendar year so as to allow greater oversight of the appropriate revenue mix of subsidy and transit fares. This may also provide a better bonding rating to the system as directly dedicated revenues will likely be viewed as a more stable source than those subject to annual appropriations.

Whichever method is chosen, the net result is the same: a system where the City can still directly control the fares, but is also required to do so in a fiscally responsible way. It removes fare discussions from one of political pandering, to become a more serious policy discussion of what is the appropriate fare and tax subsidy mix to fund the operations of the system.

OUTSIDE REVIEW OF FUNDING

Another key feature of the water system model is an outside review of the adequacy of expenses and capital investments. This serves as a backstop to prevent future decisions to short-change capital investment as a method to hold down rates. However, unlike the current water system model, the consulting engineer could be chosen by a third party not directly involved with the governance of BAT.

Oversight by a third party would follow the model of the City's pension fund as a technique to guarantee independent and rigorous oversight. The City's pension funds are financed through a contribution of their members, the participating employers (e.g. the City), and investment earnings of the funds. The Actuary, a position appointed by the Mayor and approved by the pension boards, plays a key role in ensuring the pensions are adequately funded. This office produces a set of demographic and economic assumptions that underpin how much interest the current funds can safely be expected to

³³³ New York City Water & Sewer System, *Comprehensive Annual Financial Report 2018*, available at <https://www1.nyc.gov/assets/nyw/downloads/pdf/nyw-annual-report-18.pdf>.

³³⁴ New York Water Board, *New York City Water and Wastewater Rate Report – FY 2019*, available at https://www1.nyc.gov/assets/nywaterboard/downloads/pdf/blue_book/nyc_rate_report_fy19.pdf.

³³⁵ *Id.*

³³⁶ N.Y.C. Charter § 1516.

³³⁷ N.Y.C. Charter § 1515(a).

³³⁸ City Council Resolution 408 of 2019, Report of the Committee on Finance, Exhibit C.

earn, as well as the future demand on the pension funds. The Actuary periodically reviews these assumptions and methods used to determine employer contributions, recommends changes, and the Boards of Trustees of the five funds must adopt any changes. These changes can result in gaps or surpluses that, in turn, directly impact the City's required contribution to those funds. This opens the possibility of a conflict between the long-term needs of the pension funds and the short-term demands on the City's budget.

Therefore, to ensure that the assumptions are appropriate and sufficient over the long-term, the City's Charter mandates the Comptroller select an independent actuary "to review and comment upon the financial soundness and probity of the actuarial assumptions employed by the city to calculate contributions to the city pension funds."³³⁹ Following this model for independent engineering oversight by an independent third party would help ensure that assumptions in BAT's financial plan are sufficiently focused on long-term viability and not just the short-term needs.

FINANCING AUTHORITY

The MWFA is the entity that issues bonds and other debt instruments to cover the capital work needed to support the water system. Revenues from the operation of the system are obligated first to the MWFA to cover the debt service and its operating expenses.

This allows for dedicated revenues, in this case water and sewer charges, to back the bonds making it easier to finance the system. If bondholders know the revenue stream that is to pay the bonds is obligated to them, they will view those bonds as less risky. That will lower the cost of the bond financing. Indeed, the original rationale for the current water system was to provide a lower cost of capital for the City's water system.³⁴⁰

Similarly, BAT could have an arm called the Big Apple Transit Capital Construction Authority (BAT-C) that would fulfill a similar purpose. BAT-C would issue bonds backed by transit fares and/or tax subsidies.

While all State public authorities have to submit project-related financings for review by the Public Authorities Control Board, most local public authorities are not subject to PACB (including the Housing Development Corporation, the Municipal Water Finance Authority, the Transitional Finance Agency, and the Health and Hospitals Corporation, all of which issue revenue bonds and only sometimes receive voluntary subsidy by City or State). Similarly, BAT-C should not be subject to PACB review.

OPERATIONS

Since DEP, a City agency, operates the water system, the operations and maintenance of the system are embedded in the City's budget process. These operations, which amount to approximately \$1.4 billion in spending annually, are identified in eight different units of appropriation (U/A), the basic building blocks of the City's budget. In order to provide transparency and accountability, BAT will require even more units of appropriation due to its much larger size. The Administration should determine the necessary units of appropriation jointly with the Council, and commit to including additional units of appropriation as appropriate in the future, to ensure adherence to the Charter-mandate for narrow, programmatic units of appropriation.

These DEP operations are then analyzed and discussed as part of the regular budget hearing process, including two proposed budgets by the executive branch which are followed up by oversight hearings prior to any adopted budget.³⁴¹

These operating costs are funded by a lease payment made by the Water Board to the City. Costs associated with DEP's work but not related to the water and sewer system, such as air and noise monitoring or hazardous material emergency response, are not funded by Water Board payments, but are paid with City tax-levy funding. This means that all this work exists in DEP's budget, but the funding streams and operations remain separate fiscally. This allows detailed oversight of the City's water system but while keeping it in the context of DEP's larger mission of environmental protection and public health.

The three water system entities also publish a combined comprehensive annual financial report (CAFR), which includes analysis and discussion of the system, financial statements and schedules, and an independent auditors report. BAT could follow a similar model, allowing fiscal monitors and oversight bodies the ability to examine the system's overall finances together.

Recommendation: Create More Transparency in Budgeting

CAPITAL PLANNING

A budget is a statement of priorities. The public and elected officials need a better sense of the needs of the system than is currently provided by the MTA and how we can best improve it. Since the capital budget includes major projects with long term completion dates the budget should be crafted to look ten years out—not the current five.³⁴² Further, priorities must be outlined through a transparent process that should be explained to the public so they know how their tax dollars will be spent. Under municipal control, BAT's capital budget would be incorporated into New York City's budget process, which already

339 N.Y.C. Charter § 96.

340 Laws of New York, 1984 Chapter 513.

341 N.Y.C. Charter §§ 246, 253.

342 Metropolitan Transportation Sustainability Advisory Workgroup, *Report* (Dec. 2018), available at <https://pfny.org/wp-content/uploads/2018/12/2018-12-Metropolitan-Transportation-Sustainability-Advisory-Workgroup-Report.pdf>

achieves these outcomes. The City's system—which currently includes a lengthy public review process and multiple public hearings—would provide real scrutiny and actual debate about the best ways to invest in the system.

OPEN DATA

In order to regain trust from the public, BAT would comport with best practices on sharing data and information. All financial documents and data regarding system performance would be available in machine-readable formats. FOIL requests would be accepted by email, not simply through an online portal that makes tracking difficult. In addition, all Board materials would be posted online no less than 24 hours before a meeting.

Recommendation: Address Debt

ADDRESSING EXISTING MTA DEBT RESPONSIBLY

The proposed breakup of the existing MTA structure necessitates a plan for servicing the MTA's outstanding debt.

Given the covenants governing pledged revenues for that debt and the recent end of tax-exempt advanced bond refunding,³⁴³ it is not possible to simply transfer MTA debt to new authorities—the BAT or a potential new commuter rail authority. While the proposed new authorities would be able to issue new debt going forward, a legacy MTA institution would need to remain for as long as is needed to complete servicing its existing debt. This legacy MTA would have no operational purpose other than paying its debt service.

This institutional framework would affect the flow of funds from current MTA-pledged revenues to the new transit authorities. MTA's bond covenants necessitate that farebox revenues, along with all other revenues pledged or made available to the MTA, are sufficient to first pay its debt service, and second its operating expenses. While the bond covenants require the generation of sufficient revenue from all sources, they are backstopped by specified revenues. In particular, the bond covenants are structured so that the MTA is required, in the absence of sufficient revenue from other sources, to raise farebox and toll revenues to a level sufficient to meet these needs.³⁴⁴ Because of this requirement, it is not a simple task to divorce the MTA's revenues from its outstanding bonds.

Therefore, the current MTA should remain solely to service existing MTA bonds,³⁴⁵ with all other activities being transferred to the newly spun-off entities. The MTA could retain extremely limited powers of setting fares that would allow them to do so only in the case that dedicated revenues were insufficient to cover debt service.³⁴⁶ While this power would remain on the books, it need never be used, so long as BAT and the commuter railroads ensure adequate coverage to existing MTA debt. Moreover, BAT could offset any fare increases by providing an equivalent credit to riders. The net result would be a

transfer of additional funds to the MTA, with no net change in the fare charged to the rider.

MTA-pledged revenues, along with farebox and toll revenues, would need to flow first through the legacy MTA (to pay the debt service on its existing debt), and only then down to the new transit authorities. Those “waterfall” revenues should be split between BAT and the commuter railroads based on a pre-defined formula. That formula should take into account a diverse number of factors, such as history, fare revenues, operating and capital needs, among others that require a level of analysis beyond the scope of this report. As such, it is suggested that the exact split be the subject of negotiations as part of the larger split of the MTA. Indeed, as part of a negotiated settlement for this plan, the existing fares could be lowered by the MTA to level that ensures adequate debt coverage but no more. This would be matched with corresponding increases by BAT and the commuter railroads on fare surcharges. The resultant net fare paid by the rider would not change, but more of the fares would go directly to the administering entity, and only a portion of the fare necessary to service debt would go through the legacy MTA.

While this analysis assumes that the MTA would continue to issue the approximately \$12 billion necessary to close out the current MTA 2015-2019 Capital Plan, we would expect subsequent borrowing to be issued by the new authority under local control. We would also expect any revenue pledged directly to BAT, combined with any remaining MTA-pledged revenue, to fund BAT's operating budget and service its debt. As it pertains to current MTA-pledged revenues and toll and farebox revenues, any borrowing undertaken by the new authority would be subordinate to existing MTA debt. This arrangement points to the need for new funding sources to be at sufficient levels and reasonable stability to provide adequate revenue coverage on new debt service to satisfy bondholders and credit rating agencies. Without this, the new authority's credit rating would suffer and borrowing costs would grow.

The relationship between the New York Local Government Assistance Corporation (LGAC) and the Sales Tax Asset Receivable Corporation (STAR) is one model for a cascading flow of funds that first services the debt of a state public authority and then the debt of a local entity. The state established LGAC in 1990 under the Public Authorities Law as a public benefit corporation to issue bonds or notes to make payments to local governments and school districts to help them smooth cash flow. The bonds are backed by a one percent rate of the State's sales tax, which flows through the Local Government Assistance Tax Fund, with any remainder going to the state treasury. The City established STAR in 2004 as a local development corporation under the Not-For-Profit Corporation Law to retire debt by issuing bonds backed by annual payments by LGAC. While LGAC's annual payment to STAR is subject to annual appropriation by the State, failure by the State to make

343 See Tax Cuts and Jobs Act, Public Law 115-97, 115th Congress § 13532 (2017). The MTA took advantage of advanced refunding to substantially restructure its debt service and achieving savings in 2002, 2012, and 2017.

344 See, e.g., 2002 MTA General Resolution Authorizing Transportation Revenue Obligations § 610, available at <http://web.mta.info/mta/investor/pdf/TRBRES2002.pdf>.

345 Including MTA bonds that will be issued to cover the 2015-2019 capital plan.

346 Since these revenues more than cover debt service, it is doubtful this power would ever be used. It would exist simply to address bond covenants.

the appropriation “traps” both the payment and any remaining sales tax in the Local Government Assistance Tax Fund. While the purpose of the LGAC–STAR arrangement is different from the MTA–BAT arrangement, it shows that cascading flows of funds can be designed with close cooperation between the City and the State.

New York Sales Tax Revenue Bonds provide a simpler example of state bonds serviced by pledged revenues in excess of debt service, with excess spilling over and flowing to other sources. Here too the State created bonding authority based on a one percent rate of the State’s sales tax, with sales tax receipts in excess of debt service flowing to the state treasury.³⁴⁷

WHAT MTA DEBT SERVICE MEANS FOR BAT

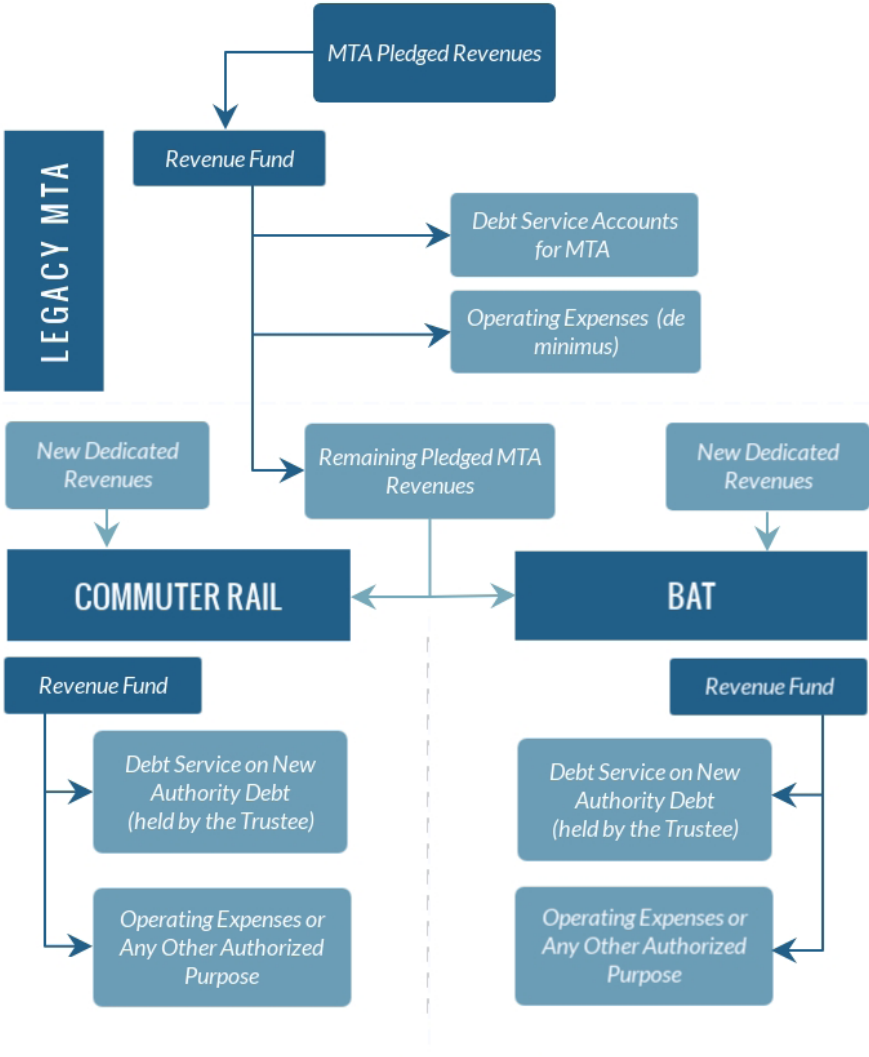
As discussed earlier, MTA’s spending on debt service has been highlighted as an issue by fiscal monitors; however the plan presented in this report should address those concerns. With the creation of BAT, the MTA will live on solely to service its outstanding debt, with this legacy MTA having first claim to farebox revenues as mandated by its bond covenants. Since farebox revenue on its own is more than sufficient to meet MTA debt service requirements until the remainder of its debt is retired, this should assuage any current bondholder concerns over MTA debt service coverage would no longer be applicable.

In addition, the plan for municipal control contains solutions to most of the concerns posed by rating agencies that could bolster the reputation of BAT in the eyes of bondholders and rating agencies. While S&P’s rating outlook for the MTA is currently negative, what it calls for in order to improve it—that the MTA secure additional sustainable funding for operations and capital—is something the plan for municipal control provides, for example, S&P specifically cites congestion pricing as a possibility, which in addition to providing funding, would incentivize increased ridership, offsetting some of the decline noted by S&P. Additional savings, as called for in this plan, would also lower the borrowing requirements and operating costs of BAT.

347 N.Y. Finance Law § 92-h(2).

PROPOSED FLOW OF FUNDS

A Proposal to Fund the MTA & Two New Authorities for Commuter Rail & Big Apple Transit



BALANCING THE BUDGET

What’s Not Working

The current transit crisis in the City is in part a budgetary one caused by a dysfunctional governance structure without accountability or transparency. Thus far, this report has outlined steps to address the root cause of the budgetary crisis. This section will outline steps that can be taken to directly address it. Cost savings should be an initial step in closing that gap, but flexibility in raising additional revenues if cost savings do not fill that gap are critical to the long-term success of the City’s transit system.



This crisis is a result of growing costs not matching up with available resources. As shown earlier, State and City financial support for the MTA has not kept pace with the need. The MTA consistently publishes capital plans with insufficient identified revenue streams. Funding those plans becomes a tug of war between the State, who in recent years has been reluctant to create new funding streams, and the City, who while demonstrating the political appetite to create new revenue streams, lacks the legal authority to do so.

Fares cannot remain the sole source of easily accessible revenue for the transit system. Other sources must be readily accessible to the system ensure a flexibility to meet demands. Initial sources of revenues should be those that have other positive impacts on the City.

Recommendation: Dedicate Congestion Pricing to BAT Budget

The City needs a congestion pricing plan that will both reduce traffic congestion and generate much-needed funding to fix our mass transit system. In addition to environmental and safety benefits, reduced congestion would allow buses to move faster and goods to be delivered more efficiently. Any new funding generated through congestion pricing must be dedicated solely to New York City's transportation system, as well as other projects supporting the City's transportation-related priorities.

As most parties agree that congestion pricing is a critical potential revenue source for City's transit system, it is therefore included in the financial plan to help fill the gap. Though we assume that revenues associated with that option are included, the exact revenues from this plan will depend on the specific structure of the pricing scheme. For the purposes of the budgeting exercise, this report assumes the \$1.1 billion revenues estimated by the Fix NYC Advisory Panel and also cited in other congestion pricing proposals. This does not include the \$400 million in revenues from increased charges on for-hire vehicles, which is already accounted for in the source MTA figures. For purposes of this report, it is assumed that build out will take 1.5 years, resulting in half of the revenue impact in 2021, with 2022 being the first year of the full \$1.1 billion in revenues.

It should be noted that the congestion pricing proposal included in the Governor's 2019 proposed budget would take away home rule authority from New York City, use the City's roads and bridges to generate revenues that could be used to pay for projects that may not reflect the City's priorities. Instead the Legislature should respect the City's home rule authority to establish a congestion pricing program that meets the City's needs.

Congestion pricing is key to both the future of the mass transit and to combat harmful traffic trends. If the State Legislature fails to pass an acceptable congestion pricing plan in 2019, the Council should exercise its home rule authority and pass its own.

Recommendation: Swap State Aid with State Sales Tax

The MTA's capital plan has historically involved direct State aid. Since this State aid is subject to appropriation via the State budget process, it is subject to political pressures and gamesmanship at the State level, something that would likely increase if the City took over parts of the system. Therefore, to remove this political football, and ensure a more stable funding source, the BAT could swap out future State Aid with taking over part of the State's sales tax authority within the five boroughs. Currently, the State charges a four percent tax on sales transactions throughout the State, including the City. The State could lower this within the City of New York, while the BAT's sales tax authority would be raised by a commensurate amount. This would not impact the sales tax rate charged within the five boroughs, but would divert more of it directly to transit operations. This mirrors the idea presented earlier in this report to swap out City aid with some of the City's own taxing authority.

Recommendation: Expand the City's Revenue Authority

A critical aspect to successful municipal control of the City's transit system will be the flexibility to tap a diverse set of funding streams to repair and maintain the system. That entails an ability to directly adjust that mix of revenues as need and economic circumstances warrant. Indeed, a major cause for the current crisis in the City's transit system stems from a historic mismatch between the resources needed to maintain a viable system, and the resources available to it. Taking municipal control of transit without some sort of municipal control of revenues would set the system up for failure. Congestion pricing alone may not be sufficient over the long-run. Therefore, municipal control of the City's transit system must also include direct municipal control over a larger share of the City's revenue base.

Currently the City has extremely limited ability to directly raise and lower any tax rate without express State authorization.³⁴⁸ Similarly, it does not have the ability to create, amend, or even end exemptions to any tax without State authorization, a power that can be useful in offsetting negative impacts of tax rate changes. This stems from the fact that taxing authority is not considered a home rule power under the State constitution.³⁴⁹

As a result, the City must lobby the State for authorization anytime it wants to raise tax revenues to pay for increased City services or investments, or to provide targeted tax relief within its taxes. For example, in 1991 then Mayor Dinkins had to convince Albany (and not easily)³⁵⁰ to allow the City to raise its personal income tax to pay for anti-crime initiatives such as additional police officers and an expanded youth program. Ini-

tiatives that contributed to the subsequent decline of the City's then high crime rate.³⁵¹

This is not a blanket call to simply raise or lower taxes in New York City, though that power is vital. Rather, it is a recognition that assuming the enormous responsibility of not just running, but also fixing, the New York City transit system will require the ability by the City to flexibly mix and match funding streams to address specific needs or garner efficiencies from bringing control locally.

For example, the City could assign some of its sales tax to BAT in return for taking over some of BAT's highly volatile mortgage recording tax (MRT).³⁵² The City is better able to plan around volatile revenue streams because its property tax tends to be counter-cyclical to economic cycles. The City could also assign some of its sales tax revenue in lieu of financial support via budgetary appropriation. Assignment has advantages over appropriation, as it recognized as a more stable funding stream by bond-holders, thereby reducing BAT's debt service.

Therefore, to avoid mistakes of the past, local control of the transit system must be accompanied by delegation of taxing power to the City.

Recommendation: Potential Revenue Sources

The exact amount of cost savings achievable with municipal control is difficult to discern, particularly without direct access to MTA files. Therefore, it cannot be assumed that BAT's operating gap will be filled simply by cost savings, and new or expanded revenues may be needed. The following options provide a list of some, but not all, ideas of how the gap could be filled. Besides the adequacy of resources, the economic and political stability of such resources needs to be considered. As noted above, these revenue sources should be accompanied by local authority to implement and adjust these taxes as needed. The following proposals represent some ideas on how additional revenues could be raised for BAT.

Preferred options have a common feature; they retain full deductibility under the Federal tax code. The Federal government is not doing its job supporting infrastructure in this country. BAT's problems are part of a national \$2 trillion funding gap for infrastructure through 2025.³⁵³ Additional funding out of the expense side of the Federal budget is unlikely with this President and Senate. However, we can get support from the tax side of the Federal budget by choosing taxes that are still fully deductible. We could raise the payroll mobility tax, the corporate franchise tax surcharge, or some of the City's business taxes. Because of deductibility, more than one-fifth of the cost of these taxes will be picked up by the Federal government.

348 N.Y. Const. art. XVI, § 1; even with the Property Tax which the City has control over the exact levy to be raised, the City does not have direct control over the rates charged (see NYS RPT Article 18).

349 See Richard Briffault, *Local Government and the New York State Constitution*, 1 HOFSTRA L. & POL'Y SYMP. 79, 102 (1996).

350 Ralph Blumenthal, *Dinkins on Crime; Dinking Proposes Record Expansion of Police Forces*, N.Y. TIMES, Oct. 11, 1990, available at <https://www.nytimes.com/1990/10/03/nyregion/dinkins-on-crime-dinkins-proposes-record-expansion-of-police-forces.html>.

351 Michael Powel, *Another Look at the Dinkins Administration, and Not by Giuliani*, N.Y. TIMES, Oct. 25, 2009, available at <https://www.nytimes.com/2009/10/26/nyregion/26dinkins.html>.

352 In Fiscal 2007, the MRT generated over \$1.5 billion for the City. Three years later, it generated only \$386 million – a decline of 77 percent.

353 American Society of Civil Engineers "Infrastructure Report Card 2017" <https://www.infrastructurereportcard.org/the-impact/economic-impact/>

Summary of Preferred Tax Revenue Options	
Payroll Mobility Tax	\$1 billion
Corporate Tax Surcharge	\$1 billion
NYC Business Taxes	\$1 billion

PAYROLL MOBILITY TAX

This tax is currently imposed on employers and self-employed individuals doing business in the metropolitan commuter transportation district (MCTD). Only employers with payroll expense exceeding \$312,500 and self-employed individuals with net earnings of \$50,000, for the tax year, are subject to the mobility tax. The rates currently range from 0.11 percent to 0.34 percent of payroll. Increasing the tax rates, within New York City, to between 0.22 percent and 0.67 percent would raise an additional \$1 billion in revenues.

INCREASE THE CORPORATE TAX SURCHARGE IN NEW YORK CITY

The MTA surcharge is applied to the portion of a company's corporate franchise tax attributable to its business activity in the MCTD.³⁵⁴ The surcharge rate is set by the Commissioner of the Department of Taxation and Finance as necessary, to enable the state to meet or exceed its financial projection for the surcharge. The rate has increased gradually since 2014 (17 percent), and is currently set at 28.9 percent for 2019. The State projects that the surcharge would yield \$1.23 billion in 2019, \$1.28 billion in 2020, \$1.33 billion in 2021, and \$1.4 billion in 2022. Using the average growth rate of the State's forecast, the Finance Division projects revenues from the surcharge to be \$1.46 billion in 2023 and \$1.53 billion in 2024. The Finance Division estimates that about 75 percent of the surcharge revenues are collected from C Corporations in the City, which are generally larger businesses.³⁵⁵

This proposal would delegate the power to the implement this surcharge in New York City to the City's Finance Commissioner. It would then require the City to increase its target projection of the MTA Surcharge revenues by \$1 billion annually from 2020 through 2024. The additional \$1 billion would be raised from corporations in New York City that are subject to the surcharge. This means that a corporation in Nassau County, for example, paying the MTA surcharge would not be subject to this additional \$1 billion. Raising an additional \$1 billion in revenue from corporations in the City would require the Commissioner to increase the surcharge rate for those corporations from 28.9 percent to reach 61.4 percent. Meanwhile, the corporations that are not in the City would only see their rate increase five percent in 2020.

INCREASE CITY BUSINESS TAX RATES

The City's business taxes, the General Corporation Tax (GCT) and the Unincorporated Business Tax (UBT) together bring in over \$6 billion to the City each year. To raise an additional billion dollars from these taxes, the City would need to raise rates by 17 percent. The GCT Tax rate would have to be raised from 8.85 percent to 10.35 percent.³⁵⁶ The UBT rate would have to be raised from 4 percent to 4.68 percent.³⁵⁷

Summary of Other Revenue Options	
Millionaires Tax	\$600 million
Sales Tax	\$1 billion
Transfer Tax Reform	\$400 million to \$1 billion
PILOTs from Private Higher Ed & Hospitals	\$147 million
Tax Insurance Companies	\$150 million
Parking Meters	\$117 million to \$234 million
End or Amend Inefficient Tax Breaks	Unknown

MILLIONAIRES TAX

Currently, the City's top personal income tax (PIT) bracket starts at \$90,000 for married couples filing jointly, \$60,000 for head of households, and \$50,000 for single filers. This means that teachers, police officers, and other middle-income filers are in the same 3.876 percent bracket as hedge fund managers and top executives of Fortune 500 firms. This proposal would increase the City's PIT rate from 3.876 percent to 4.41 percent for individuals with incomes over \$500,000, head of households with income over \$750,000, and married couples with combined incomes over \$1 million. OMB estimates a Millionaires Tax would generate \$700 million to \$800 million. City Council's Finance Division believes it would generate slightly less, approximately \$600 million.

INCREASE MCTD SALES TAX IN NEW YORK CITY

The sales tax paid in New York City is comprised of three parts: a City Sales Tax rate of 4.5 percent, a State Sales Tax rate of 4 percent, and a 0.375 percent surcharge levied in the MCTD dedicated to supporting the MTA. Increasing the MCTD sales tax in New York City from 0.375 percent to 0.75 percent, and limiting the increase to just New York City, would raise approximately \$1 billion in additional revenue. The total sales tax in the City would go from 8.875 percent to 9.25 percent.

³⁵⁴ The MCTD includes New York City, Dutchess County, Nassau County, Orange County, Putnam County, Rockland County, Suffolk County, and Westchester County.

³⁵⁵ Estimated using NYC's gross city product as a share of the gross domestic product of the MCTD.

³⁵⁶ Currently, the GCT has progressive rates ranging from 4.425 percent to nine percent, depending on the type and size of the corporation. However, majority of the corporations pay a GCT rate of 8.85 percent.

³⁵⁷ See appendix for full rate changes.

REFORM THE TRANSFER TAXES

The City and State currently levy taxes on the transfer of real property as well as on the value of a mortgage whenever it is recorded with the City. The City’s Comptroller has proposed eliminating the Mortgage Recording Tax (MRT), which generates around \$400 million a year, and replacing it with a progressively structured Transfer Tax, that goes up to as much as 8 percent on the high end,³⁵⁸ but would result in lower transfer tax rates for many residential properties below \$5 million in value. However, this proposal is limited to residential properties, which for these taxes are limited to one to three family homes, individual residential condominium units, and individual cooperative units and does not include large residential properties such as rental buildings, which are considered commercial. Therefore, this proposal would result in commercial transactions having a lower rate than residential ones for properties over \$5 million in value. The proposed reform could be extended to address that discrepancy by mimicking the reform for commercial properties (eliminate the MRT and adjust the RPTT), which would raise an additional \$400 million. Another option would be to increase RPTT on properties with transaction values of over \$5 million so that their combined MRT and RPTT rates would not be lower than those for residential properties. This would raise roughly \$600 million, which combined with the original proposal could result in up to \$1 billion in additional revenues.

COLLECT PILOTS FROM PRIVATE HIGHER EDUCATION INSTITUTIONS AND HOSPITALS

The City’s Independent Budget Office (IBO) regularly publishes revenue options for the City. In its most recent version, published in December 2018, IBO estimates that if the City were to enter into agreements with private higher-education institutions and hospitals to pay payments-in-lieu-of-taxes (PILOTs), the City could generate approximately \$147 million. Under State law, property owned by these institutions is exempt from the City’s property tax. In Fiscal Year 2019 that exemption amounted to \$1.3 billion, of which \$147 million was comprised of property used for housing students, faculty, and staff. This proposal would have the City seek agreements for these institutions to make payments similar to those that other residential property owners make through the property tax. Similar agreements have been created in other cities and states.³⁵⁹

EXTEND THE GENERAL CORPORATION TAX TO INSURANCE COMPANY BUSINESS INCOME

Another option from IBO’s list of revenue options for the City is to eliminate the exemption for insurance companies from the City’s business taxes. Insurance companies are the only major business category that do not pay the City’s business taxes, though they are subject to state and federal taxation. This tax

was originally based on the premiums earned by insurance companies within the City, but was eliminated in 1974. IBO estimates this exemption cost the City \$510 million in Fiscal 2018.³⁶⁰

The one concern with this tax is that many other states with insurance taxes reserve the ability to implement retaliatory taxation. That means that if New York raises its taxes on insurance companies, which would include those based in other states, those states could in turn raise taxes on insurance companies based in New York City that do business in those states. That could cause insurance companies to relocate outside of the City to avoid the retaliatory taxes, which in turn could undermine the revenues raised by this tax, and reduce other taxes that those companies generate through their operations in New York City.

PARKING METER FEES

The City anticipates revenue of \$229 million in Fiscal 2019 and \$234 million in the outyears from the collection of parking meter fees. If the City were to increase parking meter fees by 100 percent, it could generate an additional \$229 million in Fiscal 2019 and \$234 million in the outyears and if it were to increase fees by 50 percent, it could generate an additional \$114 million in Fiscal 2019 and \$117 million in the outyears. However, it should be noted that parking meter revenue may not necessarily increase in tandem with meter increases, as an increase in fee rates may dissuade drivers from parking on the street. Further there are many blocks with the Central Business District that are currently unmetered, and so additional revenues could be generated by expanding the geography of metered streets in those areas.

Parking Meter Fees, Fiscal 2019-2022 (\$ in millions)				
	2019	2020	2021	2022
Current Projection*	\$229	\$234	\$234	\$234
Additional Revenue from a 50% Increase in Meter Fees	\$114	\$117	\$117	\$117
Additional Revenue from a 100% Increase in Meter Fees	\$229	\$234	\$234	\$234

*Source: Mayor’s Office of Management and Budget. February 2019 Financial Plan. Revenue 2019-2023.

END OR AMEND INEFFICIENT TAX BREAKS

City tax breaks for economic and housing development total nearly \$5.7 billion in Fiscal 2019.³⁶¹ The purpose of these tax breaks is to induce economic activity or to encourage an

358 NYC Comptroller 2018, *NYC For All: The Housing We Need* (Nov. 29, 2018), available at <https://comptroller.nyc.gov/reports/nyc-for-all-the-housing-we-need/>.
359 Independent Budget Office, *Revenue Options: Eliminating or Reducing Tax Breaks* (2018), available at <https://ibo.nyc.ny.us/cgi-park3/2018/12/28/revenue-options-eliminating-or-reducing-tax-breaks/>.
360 *Id.*
361 Department of Finance, 2019, *Annual Report on Tax Expenditures Fiscal Year 2019*, available at https://www1.nyc.gov/assets/finance/downloads/pdf/reports/reports-tax-expenditure/ter_2019_final.pdf.

outcome that meets a specific policy goal by reducing the tax burden on business or property owners. So when those breaks work as intended, the listed price does not always reflect an actual cost to the City as the tax break might be off tax revenues that would not have occurred without the break. However, if that same economic activity would have occurred without the tax break, or even different activity of a similar economic value, then these tax breaks represent wasted tax dollars. Therefore, ending these tax breaks, or amending them to be more efficient can result in greater revenues.

Recognizing this, the City Council passed Local Law 18 of 2017, which set up a process for IBO to conduct regular, in-depth annual evaluations of specific economic development tax breaks. The first report following this law, “Worth the Cost? An Examination of the Commercial Revitalization & Commercial Expansion Programs,” issued by IBO last year, found the two programs were largely ineffective and frequently subsidized investments that would likely have occurred anyway. These programs provided \$27 million in tax breaks in Fiscal 2019 year, and so ending this program could be expected to increase City revenues by a commensurate amount in future years.³⁶²

As more evaluations are released, we can expect the City to identify more ineffective and outdated tax expenditure programs. Expanding the evaluation process to including housing development programs could increase potential realizable funds. A critical partner in this will be the State, as the majority of these tax breaks are codified in State law, therefore requiring State action to end or amend these tax breaks.

COST SAVINGS AND CAPITAL SPENDING

What's Not Working

LABOR AND OPERATING INEFFICIENCIES

Inefficiencies in the operation and management of the MTA may be caused by the very nature of its governance structure. The MTA is a public benefit corporation that is responsible for overseeing the management of eight subsidiaries and affiliates that function largely as independent entities. Each subsidiary has its own President who is responsible for the general management and operations of each entity.³⁶³ Each entity also has its own managerial staff as well as its own human resources, procurement, and legal departments.³⁶⁴

This non-integrated governance structure has been criticized as leading to duplication and slow decision-making because sister agencies sometimes contribute to each other's decision-making process.³⁶⁵ If each subsidiary is removed from under the MTA's umbrella, they could each function independently on their own.

WORK RULES

Union work rules are established by collective bargaining agreements, which set out the terms and conditions of employment for union employees.³⁶⁶ Certain union work rules may hamper operating efficiency and increase labor costs. Work rules that have been cited as increasing operating costs include allowing union employees to gain overtime for shifts over eight hours, which in 2017 came at a \$1.2 billion cost to the MTA; and allowing bus drivers to receive half pay between their morning and evening shifts (the swing shift) although they are not working during this time.³⁶⁷

While much of the focus regarding work rules is on cost, adjustments could focus on improving rider experience, which in turn could lead to increased ridership and more financial stability for the MTA. For example, while the need for multiple employees on trains will decrease as signal systems are upgraded, the subway's customer service experience could be improved by assigning employees to each station to assist passengers in the event of delays or service changes and to alert the proper authorities in the case of medical incidents.

The MTA has a longstanding history with labor unions. Much of the workforce for New York City mass transit entities is unionized. In total, there are 70 different union contracts involving MTA employees.³⁶⁸ While the MTA approves new contracts with labor, the State often wields considerable influence in the process due to the Governor's ability to intervene.³⁶⁹ This power is yet another advantage held by the State that gives it considerable control over the finances and operations of the system.

LABOR COSTS GROWING

Over the years, the MTA's labor expenses have continued to climb. In Calendar Year 2007, the MTA spent about \$7.3 billion on labor costs.³⁷⁰ That figure reached \$9.2 billion in 2013, and by 2017, labor expenses had grown to \$11.2 billion. The MTA's current financial plan anticipates labor expenses will continue to grow to \$12.8 billion by Calendar Year 2022. This reflects

³⁶² This increase would not be from the current \$27 million in tax breaks awarded under these programs, but from preventing future enrollment in these programs.

³⁶³ Metropolitan Transportation Authority, *Governance Guidelines* (Mar. 26, 2014), page 3, available at http://web.mta.info/mta/compliance/pdf/Governance_Guidelines.pdf.

³⁶⁴ Paul Berger, *Cuomo's Talk of Tearing Up MTA Timed to Upcoming Budget Season*, WALL STREET JOURNAL, Jan. 8, 2019, available at <https://www.wsj.com/articles/cuomos-talk-of-tearing-up-mta-timed-to-upcoming-budget-season-11546991237>; Metropolitan Transportation Sustainability Advisory Workgroup Report, (Dec. 18, 2008), page 10, available at <https://pfny.org/wp-content/uploads/2018/12/2018-12-Metropolitan-Transportation-Sustainability-Advisory-Workgroup-Report.pdf>.

³⁶⁵ Berger, Jan. 8, 2019.

³⁶⁶ Associated Builders and Contractors, Inc., *Outdated Union Work Rules Driving Up MTA Costs* <https://www.abcnys.org/outdated-union-work-rules-driving-up-mta-costs/> (last visited Feb 19, 2019).

³⁶⁷ Nicole Gelinias, *The Trouble With Creating a 'New MTA'*, MANHATTAN INSTITUTE, Dec. 4, 2017, available at <https://www.manhattan-institute.org/html/trouble-creating-new-mta-10806.html>; Benjamin Kabak, *TWU Sticking Point: Overtime Bus Drivers*, 2ND AVE. SAGAS, Feb. 26, 2013, available at <http://secondavenuesagas.com/2013/02/26/twu-sticking-point-overtime-bus-drivers/>; Jaya Saxena, *MTA Chair calls Union Work Rules a 'Shame'*, GOTHAMIST, May, 10, 2010, available at http://gothamist.com/2010/05/10/mta_chair_calls_union_work_rules_a.php.

³⁶⁸ Metropolitan Transportation Sustainability Advisory Workgroup Report (Dec. 18, 2008).

³⁶⁹ Richard Pérez-Peña, *Pataki, Not Bloomberg, Has Almost Total Control of M.T.A.*, N.Y. TIMES, Dec. 10, 2002, available at <https://www.nytimes.com/2002/12/10/nyregion/pataki-not-bloomberg-has-almost-total-control-of-mta.html>.

³⁷⁰ MTA 2009 Final Proposed Budget November Financial Plan 2009–2012. Complete Financial Plan Report, Volume 2, available at <http://web.mta.info/mta/budget/>.

Labor Expenses	2007	2017	2018*	2019*	2020*	2021*	2022*	Percent Change 07 -22	Average Annual Change
Payroll	4,327	5,700	5,938	6,232	6,312	6,374	6,504	50.3%	3.4%
Overtime	586	1,202	1,324	1,002	998	1,021	1,037	77.0%	5.1%
Health & Welfare	659	1,282	1,404	1,532	1,617	1,710	1,821	176.3%	11.8%
OPEB Current Payment	271	574	626	693	756	824	899	231.7%	15.4%
Pensions	897	1,442	1,440	1,460	1,430	1,413	1,361	51.7%	3.4%
Other-Fringe Benefits	562	1,045	1,143	1,146	1,163	1,188	1,213	115.8%	7.7%
Reimbursable Overhead	1	(4)	(3)	(4)	(2)	(2)	(1)	N/A	N/A
Total Labor Expenses	7,304	11,240	11,872	12,062	12,273	12,529	12,833	75.7%	5.0%

*Note: Projected, not actual

Source: MTA Financial Plans, 2009 - 2019

MTA Labor Expenses 2007-2022



a projected 6.4 percent increase between 2019 and 2022. As the table below shows, the main drivers of growth in labor costs has been health insurance costs and payments for other post-employment benefits (OPEB). Overtime has grown at a faster pace than payroll. All of this suggests that part of what is driving costs is inefficient management of labor.

CONSTRUCTION AND PROCUREMENT

In comparison to other cities in the United States and around the world, the ability for New York City to expand and improve existing facilities has been limited. The recently completed Phase I of the Second Avenue Subway, which now serves over 200,000 riders daily, cost \$4.5 billion and consisted of just two new miles of track and three stations.³⁷¹ Subway tunnels in other cities typically cost between \$200 million and \$1 billion per mile.³⁷² Phase I cost approximately \$2.3 billion per mile, making it the world's most expensive subway line, per mile.³⁷³

By contrast, other dense urban centers around the world are making major investments in transit expansion. London is planning \$59 billion in investments, including 31 new miles of rail.³⁷⁴ Paris is investing \$25 billion to create four new lines with more than 120 miles of track.³⁷⁵

In addition to the high cost of construction, the MTA's capital projects also often take far longer than anticipated to complete. For example, Phase I did not begin until 2004 and was not completed until 2016.³⁷⁶ The MTA has long maintained that the cost and timeline had to do with the City's complicated infrastructure and the age of the system. However, the MTA's

371 MTA, *Second Avenue Subway Phase 1*, available at http://web.mta.info/capital/phase1_sas.html; Raphael Pope-Sussman, *The Insanely Expensive Second Avenue Subway*, *GOTHAMIST*, Dec. 29, 2016, available at http://gothamist.com/2016/12/29/2nd_ave_subway_explainer.php#photo-1.

372 Stephen J. Smith, *Does New York Know It Has a Transit Cost Problem?* *NEXT CITY*, Feb. 27, 2014, available at <https://nextcity.org/daily/entry/does-new-york-city-know-it-has-a-transit-cost-problem/>; US Rail Construction Costs, *PEDESTRIAN OBSERVATIONS*, Jun. 5, 2011, available at <https://pedestrianobservations.com/2011/05/16/us-rail-construction-costs/>; *Comparative Subway Construction Costs, Revised*, *PEDESTRIAN OBSERVATIONS*, June 3, 2013, available at <https://pedestrianobservations.com/2013/06/03/comparative-subway-construction-costs-revised/>; Julia Vitullo-Martin, Regional Plan Association, *Building Big for Less* (May 16, 2017), available at <http://lab.rpa.org/building-big-less/>.

373 Raphael Pope-Sussman, Dec. 29, 2016.

374 See Testimony of the N.Y.C. Department of Transportation, Hearing of the Committee on Transportation (Jun. 5, 2017), available at <http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3053413&GUID=347C-F03A-2A96-4456-9429-1C04DC5191BC&Options=&Search=>.

375 Hearing of the Committee on Transportation (Jun. 5, 2017).

376 Raphael Pope-Sussman, Dec. 29, 2016.

planning process, selection of contractors, procurement policies, and inefficient management can all be directly linked to late, over budget projects.³⁷⁷

SHAPING OF PROJECTS

Mega-projects are often seen as legacy defining for a politician. They stand as landmarks, ultra-visible to current constituents, and which will far outlast their terms in office. The allure of mega-projects, and even smaller upgrades and improvements, can lead to political actors applying undue pressure on agency staff to undervalue their cost and promise impracticable timelines for completion.³⁷⁸ The inclination to make a politically popular project work often continues into environmental impact assessments completed by technical consultants hired by the MTA, which often show a bias for the initial proposal.³⁷⁹ Next, the MTA selects consultants that prepare the design and engineering proposals that will be bid on by contractors.³⁸⁰ As reality sets in, project delays, change orders, and cost overruns can abound.³⁸¹

Former MTA CEO Thomas Prendergast recently spoke out about the flaws in these initial planning stages, remarking that “[s]o much of the path of outcome is set in the first 15% of the project, when we basically have no people and no money. The elements are cast in stone then, and we spend [the] rest of [the] project dealing with the constraints we’ve been dealt early on.”³⁸² The Regional Plan Association (RPA) also found that the MTA engages with impacted communities on projects too late in the process, which can create delays as new issues must be addressed.³⁸³

PROCUREMENT

New York State has been slow to update its antiquated public procurement laws, which were shaped in response to graft and waste associated with major public projects in the Tammany-era, and which remain today “an archaic and counter-productive statutory scheme.”³⁸⁴

By default, public construction projects in New York State proceed according to an often-inefficient process known as “design-bid-build.” Local governments and school districts are required to award all contracts for public work over specified

minimum amounts through a competitive sealed bid process to the lowest responsible bidder.³⁸⁵ The requirement to choose a lowest responsible bidder restricts consideration of the best value across a project’s full-life cycle, or the consideration of other procurement methods.

Moreover, under the provisions of Wicks Law, governments must separately bid out contracts for each trade on larger building projects, increasing contracting complexity, reducing flexibility, and diffusing accountability.³⁸⁶ Additional laws restricting professionals from practicing across domains further complicate the process by imposing separation between designer and builder.³⁸⁷ The architects and engineers who design projects can’t help contractors understand what they’re bidding on, and, likewise, the contractors are unable to offer design services as part of their bids, which might permit them to improve constructability of the plans. Only when the builders run into inevitable problems executing the designers’ plans do they communicate, resulting in change orders that increase the cost and delay the progress of the project.³⁸⁸

The most common alternative procurement method, popular for private procurements and for public procurement outside New York, is the design-build method. It permits projects to be designed and built by a joint venture of a designer and a contractor. Collaboration between designer and constructor can help prevent errors and omissions during the design phase and the resulting changes at higher costs that result from the mandatory separation of designer and builder during construction.³⁸⁹ Design-build collaboration is often initiated by a request for proposal process that permits the weighing of bids by holistic assessment of value, in which price is only one criteria.

SELECTION OF CONTRACTORS

MTA uses the lowest qualified bidder model, which often results in higher costs when new contractors must repair and finish the work of inexperienced firms that submit artificially low bids.³⁹⁰ Rebidding and emergency repairs can cost millions of dollars and take time, which can significantly hamper a project.³⁹¹ RPA credits this selection model as one of the reasons for the delays and cost overruns on East Side Access.³⁹² Additionally, the MTA rarely punishes vendors for going over budget or late deliveries, leaving others with little incentive to

377 Brian Rosenthal, *The Most Expensive Mile of Subway Track on Earth*, N.Y. Times, December 28, 2017, available at <https://www.nytimes.com/2017/12/28/nyregion/new-york-subway-construction-costs.html>.

378 Regional Plan Association, *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018), available at <http://library.rpa.org/pdf/RPA-Building-Rail-Transit-Projects-Better-for-Less.pdf>.

379 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018) at page 34.

380 *Id.*

381 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018).

382 *Id.* at page 34.

383 *Id.* at page 23.

384 Construction Law Committee of the New York City Bar Association, *21st Century Construction 20th Century Construction Law Update* (Feb. 2014), available at <https://www2.nycbar.org/pdf/report/uploads/20072665-21stCenturyConstruction20thCenturyLawUpdated.pdf>. A preliminary survey conducted by the New York City Bar Construction Law Committee to “age” the State’s built environment statutes in 2014 revealed that 14 percent of the then current laws had been originally enacted by the time of the Great Depression in 1929, 37 percent by the end of World War 2 and close to half by 1960.

385 N.Y. General Municipal Law § 103(1).

386 N.Y. General Municipal Law § 101.

387 N.Y. Business Corporation Law § 1506; see generally N.Y. Education Law Ch. 16, T. VIII.

388 Citizens Budget Commission, *Don’t Block Design-Build* (Mar. 15, 2015), available at <https://cbcny.org/research/dont-block-design-build>.

389 Construction Law Committee of the New York City Bar Association, *Report on the 2016-17 Article VII Budget Bills* (Mar. 2016), available at <https://www2.nycbar.org/pdf/report/uploads/20073073-2016-17Budget-ConstructionModernizationConstructionReportFINAL3.28.16.pdf>.

390 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018) at page 23.

391 *Id.* at page 3.

392 *Id.* at pages 23-24.

meet set goals.³⁹³

Once a contractor is selected, labor conditions are determined through negotiations between unions and construction companies, none of whom have any incentive to keep costs down.³⁹⁴ The MTA is left out of this process entirely, leaving it no opportunity to influence decisions that could help to control costs. According to an analysis by the New York Times, labor rules for workers on capital projects add four times more staff to projects than elsewhere in the world.³⁹⁵

CHANGE ORDERS

The failure to utilize design-build and general poor scoping of projects causes serious ripple effects throughout the project. The change order process presents one of the biggest challenges to finishing a project on time and on budget.³⁹⁶ Reduction in change orders alone is estimated to result in a minimum six percent cost-savings.³⁹⁷

Notably, once projects are underway, the operating agency may not have the necessary staff to process change orders.³⁹⁸ It can take NYCT staff nine months, on average, to process even simple change orders.³⁹⁹ As NYCT requires additional layers of review for more costly change orders, this process can take far longer with more complex changes.⁴⁰⁰

The complexities of working with the MTA don't just impact the Authority's bottom line. Contractors and vendors are hesitant to work with the MTA, which receives 3.5 bids per contract as compared to other cities that receive eight bids.⁴⁰¹ Those contractors that are willing to do business with the MTA add a premium to bids of between 15 and 25 percent in anticipation of delays and change orders.⁴⁰²

Change orders have plagued some of the MTA's recent mega projects. Phase I of the Second Avenue Subway required thousands of change orders.⁴⁰³ During just a four-month period of Phase I of the Second Avenue Subway, the 96th Street Station had over 50 change orders as the contractor rushed to meet the December 2016 opening deadline.⁴⁰⁴ Additionally, 30 percent of the entire Second Avenue Subway electrical package was modified with change orders after construction began, impacting the entire project.⁴⁰⁵ An emphasis on aes-

thetics of the project, such as requiring granite that could only be purchased in the U.S., further added to the high costs.⁴⁰⁶

The East Side Access project is emblematic of each of these issues. The MTA has acknowledged that East Side Access has suffered because the agency set unrealistic budgets and timelines without understanding how complex the project would be.⁴⁰⁷

East Side Access Timeline and Cost Estimate⁴⁰⁸

Date	Cost	Completion Date
1999	\$4.3 billion	2009
2003	\$5.3 billion	2011
2004	\$6.3 billion	2012
2009	\$7.3 billion	2016
2012	\$8.3 billion	2019
2014	\$9.7 billion	2021
2015	\$10.2 billion	2022
2018	\$11.2 billion	2022

Among the issues MTA cites as its own failures are splitting East Side Access into 50 contracts, with "frequent" conflicts; requiring unnecessary design changes well into construction, and overpaying for some contracts that were not competitively bid.⁴⁰⁹ However, the MTA places most of the blame for delays on a lack of cooperation by Amtrak.⁴¹⁰ RPA argues that political pressures drove many of the initial decisions that have caused delays and under-budgeting.⁴¹¹ Additionally, while the MTA points to a lack of cooperation from Amtrak, RPA notes that the project has also suffered because of an unwillingness between the Long Island Rail Road and Metro North to share platforms and operating space in Grand Central Station.⁴¹²

SCAFFOLD LAW

Construction by the MTA, and indeed all contracting entities public and private in New York State, is especially expensive

393 Rosenthal, December 28, 2017.

394 *Id.*

395 *Id.*

396 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018).

397 N.Y.C. Council Committee on Finance Jointly with Subcommittee on Capital Budget, Testimony of Budget Director at the Mayor's Office of Management and Budget Melanie Hartzog, Mar. 20, 2018, pages 42-43, available at <https://legistar.council.nyc.gov/View.aspx?M=F&ID=6206829&GUID=3679BEF3-85FE-40EA-B4B0-FD1DC0F5FF04>.

398 *Id.*

399 *Id.* at page 38.

400 *Id.*

401 Rosenthal, December 28, 2017.

402 *Id.*

403 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018) at page 15.

404 *Id.* at page 38.

405 *Id.* at page 15.

406 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018).

407 Alfonso A. Castillo, *East Side Access price goes up again, now stands at \$11.2B*, *Newsday*, Apr. 15, 2018, available at <https://www.newsday.com/long-island/east-side-access-tour-1.18020231>.

408 *Id.*

409 *Id.*

410 *Id.*

411 *Building Rail Transit Projects Better for Less: A Report on the Costs of Delivering MTA Megaprojects* (February 2018) at page 20.

412 *Id.*

because of the high liability costs imposed by Scaffold Law.⁴¹³ Despite MTA's history of working to effectively manage risk and promote safety for workers and customers, MTA insurance costs have risen to seven percent of contracted construction value.⁴¹⁴

Enacted in 1921, Scaffold Law derives from the 1885 Act 'for the protection of life and limb' which imposed liability on anyone "who shall knowingly or negligently furnish and erect... improper scaffolding...."⁴¹⁵ The law was expanded in 1947 to include coverage for workers who fall from elevated devices other than scaffolds. The law was amended further in 1969 to place responsibility for safety practices squarely on "[a]ll contractors and owners and their agents."⁴¹⁶ While on its face the Scaffold Law deals with work-related construction injuries involving a fall from a height or being struck by a falling object, judicial decisions have expanded its scope to impose liability for work-related injuries tangentially involving the effects of gravity, including horizontal movement, if the injuries are sustained on or near a construction site or during an enumerated activity, such as repairing.⁴¹⁷

When injured on the job, Workers' Compensation is generally the exclusive legal remedy against the employer and tort recovery from third-parties is limited by the principle of comparative negligence.⁴¹⁸ In New York State, however, Scaffold Law has been interpreted to impose absolute vicarious liability, with no inquiry into worker contributory negligence,⁴¹⁹ on owners, contractors and other parties that are not the worker's employer for a range of work-related construction injuries. Empirical studies looking at data from other states before and after a repeal of their own scaffold laws suggest that it blunts contractors' incentives to invest in worker safety, doesn't result in safer worksites, and in fact correlates with *increased* workplace injury rates.⁴²⁰

Navigating this expansive liability, insurance carriers in the construction market have either left New York altogether, reducing competition and increasing prices, or have remained while



increasing premiums, which are passed on to all contracting entities. New York is the only state left that has a scaffold law, and the cost to insure a construction project in New York is ten times higher than it is in other states.⁴²¹ One striking example of these dynamics at work is the cost of insuring the East Side Access project to link the Long Island Rail Road to Grand Central. Liability insurance was initially bound for \$93 million in 2002, but as projected completion has been pushed back from 2010 to 2020, the cost of coverage has swelled to \$584 million, a 557 percent increase that reflects these structural changes to the insurance marketplace.⁴²²

Recommendation: Reduce Costs

Addressing the operating deficits and underfunded capital program can be done largely through two methods: reducing costs or identifying new or additional revenues. Congestion pricing would be beneficial to the City, the State and the planet

413 N.Y. Labor Law §§ 240 and 241(a).

414 Michael R. Hattery, et al., *Final Report to New York Civil Justice Institute: The Costs of Labor Law 240 on New York's Economy and Public Infrastructure*, Nelson A. Rockefeller Inst. of Gov't of the State Univ. of New York (Dec. 31, 2013), page 38.

415 Barry R. Temkin, *New York's Labor Law Section 240: Has It Been Narrowed or Expanded by the Courts Beyond the Legislative Intent?* 44 N.Y.L. SCH. L. REV. 45, n.31 (2000).

416 The law was expanded in 1947 to include coverage for workers who fall from elevated devices other than scaffolds. The law was amended further in 1969 to place responsibility for safety practices squarely on "[a]ll contractors and owners and their agents."

417 Construction Law Committee of the New York County Lawyer's Association, *New York's Scaffold Law and Pending Reforms* (Nov. 6, 2014), available at https://www.nycla.org/siteFiles/Publications/Publications1729_0.pdf.

418 See CPLR §§ 1401 and 1411.

419 "Negligence, if any, of the injured worker is of no consequence." *Rocovich v. Consolidated Edison Co.*, 78 N.Y.2d 509, 513 (1991).

420 Hattery, et al. (Dec. 31, 2013) at page 10.

421 Willis Towers Watson, *Mitigating the Impact of the NY Labor Law* (Oct. 2017), available at <https://www.willistowerswatson.com/-/media/WTW/PDF/Insights/2017/10/mitigating-the-impact-of-the-ny-labor-law-wtw.pdf>.

422 Will Bredderman, *Critics Blame Scaffold Law for Megaproject's Insurance Costs Ballooning 557%*, CRAIN'S N.Y., July 30, 2018, available at <https://www.crainsnewyork.com/article/20180730/POLITICS/180739992/critics-blame-scaffold-law-for-megaproject-s-insurance-costs-ballooning-557>.

even without considering the fiscal impact. In addition, it is a source of revenue that would be useful in any reform. As such, it is included in the BAT financial plan. The next step in the reform would be to identify any potential cost savings to close the gap. Below is a discussion of areas where such savings might be found.

OPERATING EXPENSES

As noted earlier, the current structure of the MTA is the result of more than 50 years of combination, mergers and consolidations. Much of the existing structure reflects that history. As such, BAT takeover of the City's transit system should include an independent and detailed audit of the management, operations, processes, and performance of the entire system—with any findings, conclusions, and recommendations published publicly.

BAT should continue the MTA's practice for the last decade of pursuing administrative reductions, operational consolidations, strategic initiatives and improved business practices.⁴²³ For example, MTA leadership very recently suggested it was weighing a consolidation plan that would combine the various legacy operations at each independent agency, such as overlapping accounting and human resources functions.⁴²⁴ BAT would propose to do that and more, such as additionally consolidating management across the agencies it took over. Integration of multiple entities under the BAT would also allow for more streamlined processes, which would increase efficiency within the organization and eliminate redundancy.⁴²⁵

Liberating the Big Apple Transit Operations Agency (BAT-O) from unnecessary legacy operating expenses through reorganization and consolidation is important, but only half of the task. We must also ensure the Big Apple Transit Capital Authority (BAT-C) is exempt from a range of outdated legal requirements that impose additional costs and delays on many public construction projects.

PROCUREMENT

While the MTA is itself design-build eligible,⁴²⁶ may use best value criteria in selecting bids, and is exempt from multiple-prime contracting, its capital procurement process often functions as if it had no such procurement privileges.⁴²⁷ To outperform the MTA on capital procurement, BAT-C will certainly need to have the same privileges, and will then have to make

maximum use of them. Comprehensive public construction reform for all public contracting entities across New York State would provide procurement flexibility to both BAT-C and the City of New York.

The School Construction Authority (SCA) is one example of a local State authority with extraordinary powers, including some of the same privileges that should be granted to BAT-C. The SCA was created in 1988 by the New York State Legislature for the purpose of constructing and renovating educational facilities throughout the five boroughs.⁴²⁸ A driving force behind the creation of the SCA was to “remov[e] bureaucratic snags that ... had inflated costs and created delays ... in the building and renovation of city schools.”⁴²⁹ To that end, the legislation creating the SCA contains several explicit exemptions from various laws and rules that apply to other authorities and City agencies, which would be similarly helpful to BAT-C.

The State has exempted SCA from certain burdensome contracting procedures and requirements, including an exemption from following Wicks Law by awarding multiple-prime contracts.⁴³⁰ While the state requires SCA to grant large capital contracts to the lowest responsible bidder, the SCA is at least permitted to create guidelines for the qualification of bidders and may restrict bidding to pre-qualified vendors,⁴³¹ and may circumvent the competitive bidding process upon a determination the competitive bidding is impractical or inappropriate.⁴³² Meanwhile, the State has not extended design-build authority to the SCA, despite lobbying by the City.⁴³³

State law also exempts the SCA from a range certain of local land use review procedures, providing a guide for exceptions that BAT-C would seek. Actions of the SCA related to its capital plan, site selection, conveyance of property, and design and construction are not subject to “any general, special or local law, city charter, administrative code, ordinance or resolution governing uniform land use review procedures, any other land use planning review and approvals, historic preservation procedures, architectural reviews, franchise approvals and other state or local review and approval procedures governing the use of land and the improvements thereon within the city.”⁴³⁴ Moreover, capital projects undertaken by the SCA are not subject to “the provisions of the charter of the city relating to site selection, land use review procedures, art commission review procedures, general standards and cost limits, project scope and design procedures, or contract registration and vouchering procedures.”⁴³⁵

423 MTA 2019 Final Proposed Budget, November Financial Plan 2019-2022, Volume 1 (Nov. 2018).

424 Joint – Senate Standing Committee on Corporations, Authorities and Commissions and Senate Standing Committee on Transportation, Testimony MTA Managing Director Veronique Hakim, Feb. 19, 2019.

425 Metropolitan Transportation Sustainability Advisory Workgroup Report, (Dec. 18, 2008), page 10, available at <https://pfnyc.org/wp-content/uploads/2018/12/2018-12-Metropolitan-Transportation-Sustainability-Advisory-Workgroup-Report.pdf>.

426 N.Y. Public Authorities Law § 1209(6); N.Y. Public Authorities Law § 1265-a(1). The authorization is expiring and a legislation amendment to the 2019 executive budget proposes to extend through June 2025. See <https://www.budget.ny.gov/pubs/archive/ty20/exec/30day/ted-artvii-newpart-rr.pdf>.

427 Building Rail Transit Projects Better for Less (Feb. 2018) at page 41-42; Metropolitan Transportation Sustainability Advisory Workgroup, Report. (Dec. 2018).

428 See N.Y. Public Authorities Law § 1725 et. seq., known as the “New York City School Construction Authority Act.”

429 Selwyn Raab, *School-Building Agency Changes the Old Rules*, N.Y. TIMES, Oct. 18, 1989, available at <https://www.nytimes.com/1989/10/18/nyregion/school-building-agency-changes-the-old-rules.html>.

430 N.Y. Public Authorities Law § 1735(1). However, unless extended by the State Legislature, the SCA's Wicks-exemption expires June 30, 2019.

431 N.Y. Public Authorities Law § 1734(6).

432 N.Y. Public Authorities Law § 1734(5).

433 N.Y. Legis. Assemb. A06667, Reg. Sess. 2017-2018. (N.Y. 2017).

434 N.Y. Public Authorities Law § 1730(1).

435 *Id.*



Proposed Scaffold Law reforms would introduce a comparative negligence standard in which liability is proportional to fault, in situations where a worker's injury is found to have been caused by that worker's failure to follow safety training or use available safety devices. Scaffold Law reform would not limit recovery available under workers compensation, and it would dramatically reduce insurance costs for BAT.

CONCILIATORY LABOR REFORM

Finding savings in operating costs is difficult given the heavily unionized workforce of the transit system. Wages, benefits and many work rules have been established in collective bargaining and are legally protected. Therefore, any plan involving the workforce needs the buy in of that workforce.

One strategy to achieve savings used by New York City could be replicated by BAT. In May 2014, the Administration and the Municipal Labor Committee (MLC) announced an agreement

to work together to find health care savings of \$3.4 billion over four fiscal years (Fiscal 2015 through Fiscal 2018). This came about largely to offset some of the \$14 billion gross cost of settling labor contracts, all of which had expired under Mayor Michael Bloomberg.

This savings agreement is notable for two reasons. Firstly, it produced structural changes to the delivery and administration of health care for City employees, which saved the City money. Secondly, the agreement stipulated that should savings exceed the \$3.4 billion minimum, the first \$365 million would go back to the workforce as a bonus payment, and anything beyond that would be split between the City and the workforce. The agreement thus had favorable conditions for all parties involved.

One possible idea would be to mimic these savings. This would prove challenging as far as health care, but an agreement on other fringe benefit savings could happen. One possibility would be to consolidate any supplemental health and

welfare benefits into a single fund, which could be managed by the MTA Labor Coalition. This coalition is made up of 17 unions and represents 54,000 employees of the MTA.

Combining these funds into a single fund would yield savings from economies of scale in administration and enhanced bargaining power when negotiating prices for services with benefit providers, including drug prices. Additionally, this model of finding savings could be applied to other parts of BAT's labor force, such as reviews of work rules.

While much of the focus regarding work rules is on cost, work rule changes could also focus on improving rider experience, which in turn could lead to increased ridership and more financial stability for the MTA. For example, while the need for multiple employees on trains will decrease as signal systems are upgraded, the subway's customer service experience could be improved by assigning employees to each station to assist passengers in the event of delays or service changes and to alert the proper authorities in the case of medical incidents.

Recommendation: Develop a Responsible Financial Plan

The budget for BAT is presented here as an exercise to understand the feasibility of municipal control of the City's transit system and to demonstrate that local control will not have a negative impact on the finances of the commuter railroads.

BUDGET ASSUMPTIONS

For purposes of this exercise, this report makes a series of assumptions on which to base the model. These assumptions are made for the aforementioned purposes, and should not be taken as official positions for how a negotiated split should be structured.

The first assumption is that municipal control would start in 2020.⁴³⁶ Figures included the budget represent a simplified unification of the most recent adopted operating budgets, including revenue and expense estimates with no other changes. Therefore, it incorporates the same budgetary assumptions in those plans, including ridership rates and biennial fare and toll increases of four percent net in 2019 and 2021.

Revenues are assigned to the various components based on current splits in MTA's budget except for those that flow through the legacy-MTA, which include fares and pre-congestion pricing bridge and tunnel toll revenues. Those revenues would service the legacy-MTA debt service, and then would "waterfall" to BAT and the commuter railroads. As noted earlier, this report does not propose an exact split of how those funds should waterfall between BAT and the railroads. So for purposes of this budget exercise, this plan assumes that 80 percent of waterfall revenues are allocated to BAT and 20 percent allocated to the commuter railroads; a split that most closely follows the current split in MTA funding.⁴³⁷ Furthermore,

we assume that two-thirds of MRT and PMT revenue from MTA Headquarters would be allocated to BAT which mirrors the share of that operation BAT is expected to assume. These assumptions were made for budgeting purposes and are based off of relative expense ratios, though any final revenue sharing details should be subject to negotiation.

Currently, MTA receives \$7.8 billion annually in taxes and other subsidies to support its operations. As indicated in the table below, BAT would receive \$1 billion in direct subsidies,⁴³⁸ with a further \$8.8 billion in revenues (which include taxes, subsidies and farebox revenue) that will waterfall from the legacy MTA (in the bond market revenue flows that cascade from high priority entities downward like this are often called waterfalls). Remaining funds come from capital financing programs and miscellaneous revenues like advertising and rents.

The borrowing assumed in the financial plan is based on the assumed need for two five year Capital Plans, for which the proposed plan assumes BAT will require borrowing of \$16.8 billion. For purposes of simplification, borrowing is evenly distributed through the years corresponding to each capital plan, even though this is unlikely to be the case in practice.

Debt service is calculated based on interest rates assumed in MTA's current financial plan. For the outyears, interest rates are adjusted based on a forecast of municipal bond interest rates created by IHS Markit. Borrowing for future capital plans beginning in 2020 is assumed to be issued by BAT. All existing MTA debt, and any anticipated borrowing to finish previous capital plans, is assumed under the MTA debt service budget.

This financial plan inherits an operating deficit from the current MTA operations. Municipal control of the system will require that the deficit be closed, and the capital plan remains funded. The following section outlines strategies to address these issues.

As noted earlier, revenues will first flow to the legacy MTA to pay the debt service associated with that entity before flowing into BAT (and the other MTA spun-off components). This model would remain in place until the MTA extinguishes all its debt, at which point those revenues would be directly assigned to BAT and the commuter railroads.

While the operating budget is based on existing published documents, this report assumes a new capital budget as the most recent one was first introduced four years ago, and does not reflect recent recognition of a need for increased capital spending. Therefore, it assumes a new capital plan based upon information publicly available.

⁴³⁶ This year was chosen as it represents the earliest clean break point looking forward.

⁴³⁷ As shown in the *Hold Commuter Railroads Harmless* section of this report, this split actually leaves the railroads with over \$200 million more in annual funding than they currently get. This bump in funding should not be taken as a recommendation, but is chosen to show the viability of the plan.

⁴³⁸ See Appendix for breakout.

BUDGET OVERVIEW

The budget is presented here in several steps starting with the legacy-MTA and ending with the BAT's budget and financing plan.

MTA					
	2020	2021	2022	2023	2024
Revenue					
Farebox	6,144	6,134	6,144	6,267	6,392
Toll Revenue	1,990	1,998	1,998	2,038	2,079
Dedicated Taxes ³	5,762	5,926	6,107	6,229	6,353
Total Revenues	13,896	14,058	14,249	14,533	14,824
Operating Expenses					
Debt Service (MTA Debt)	2,840	3,080	3,223	3,450	3,455
Total Operating Expenses	2,840	3,080	3,223	3,450	3,455
MTA Revenue After Debt Service	11,056	10,979	11,026	11,083	11,369

Waterfall of MTA Revenue					
	2020	2021	2022	2023	2024
MTA Revenue for Waterfall	11,056	10,979	11,026	11,083	11,369
Revenue for BAT	8,844	8,783	8,821	8,867	9,095
Revenue for Commuter Rail	2,211	2,196	2,205	2,217	2,274
MTA Net Balance	-	-	-	-	-

BAT					
	2020	2021	2022	2023	2024
Revenue					
Waterfall from MTA	8,844	8,783	8,821	8,867	9,095
State/Local Subsidies	1,014	924	1,062	1,083	1,105
Capital & Other Reimbursement	1,376	1,266	1,268	1,293	1,319
Other Revenue	533	548	556	568	579
Total Revenues	11,768	11,520	11,707	11,811	12,098
Operating Expenses					
Labor	9,029	9,152	9,415	9,603	9,795
Non-Labor	2,761	2,810	2,875	2,933	2,991
MTA HQ Expense (2/3)	480	489	500	510	520
Debt Service (New BAT Debt)	75	150	253	355	457
Total Operating Expenses	12,345	12,601	13,043	13,400	13,763
Net Surplus/(Deficit)	(577)	(1,081)	(1,336)	(1,590)	(1,665)
Congestion Pricing	-	550	1,100	1,100	1,100
Net Surplus/(Deficit) after Congestion Pricing	(577)	(531)	(236)	(490)	(565)

Financing Assumptions					
	2020	2021	2022	2023	2024
BAT	1,685	1,685	1,685	1,685	1,685

Source: NYC Council Finance estimates based on MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2, dollars in millions



BAT OPERATING BUDGET

BAT's operating expenses are approximately \$12.3 billion for Calendar Year 2020 and grow to nearly \$13.8 billion by Calendar Year 2024. Labor costs comprise the largest single category of spending at \$9 billion in 2020 and grow to \$9.8 billion by 2024, though as a percentage of total expenses labor costs decrease slightly over the financial plan period. As a brand new entity, BAT's debt service costs start small and grow as it begins to borrow to fund its capital needs in the 2020 – 2029 Capital Plan.

BAT's total revenues are \$11.8 billion for Calendar Year 2020 and grow to \$12.1 billion in Calendar Year 2024. The greatest share of BAT revenues come from the combined fare, toll, and dedicated tax revenue remaining for BAT after existing MTA debt service is paid. These revenues total \$8.8 billion in Calendar Year 2020 and grow to \$9.1 billion in Calendar Year 2024. State and local subsidies, which include operating assistance, the NYC Transportation Assistance Fund,⁴³⁹ and other funding agreements, total \$1 billion in Calendar Year 2020 and grows moderately to \$1.1 billion by Calendar Year 2024.

BAT's Operating Budget, before any new revenues, closes with a gap of \$577 million in Calendar Year 2020. The operating gap widens to \$1.7 billion by Calendar Year 2024, though the introduction of congestion pricing revenues will moderate outyear gaps. After congestion pricing, gaps remain under \$600 million over the course of the financial plan and are anticipated to be closed by new revenue streams.

A financial plan with a longer time horizon is difficult to construct due to the diminishing accuracy of forecast beyond five years. However, the sizeable capital needs facing BAT mean that to ensure long-term viability of the system, funding streams beyond the amount needed to cover the gap are

recommended. So while funding streams of about \$600 million will be needed in the short term to address the funding gap, having an easily accessible source of at least \$1.5 billion should be authorized. If excess funding is available in the early years it could be used for pay-as-you-go capital. This would reduce debt service in the long run and improve the financial condition of BAT.

Recommendation: Fund the BAT's Capital Program

On May 23, 2018, MTA's NYCTA President Andy Byford presented the Subway "Fast Forward" plan at MTA's May board meeting, which is expected to be a significant portion of the 2020-2024 MTA Capital Program. Notable highlights of the plan include upgrading and accelerating the installation of subway signal updates and accelerating the pace of station accessibility.

At this time, the total cost of the Fast Forward Plan remains ambiguous. However, it has been estimated that it could cost approximately \$40 billion over 15 years to fund the Plan. According to the Wall Street Journal, a source familiar with the plan stated that MTA estimates that fixing the subway system will cost approximately \$43 billion and take approximately 15 years. The source stated that the plan would cost \$19 billion over the first five years, \$18 billion over the following five years, and \$6 billion in the final five years.⁴⁴⁰

Working under this \$40 billion 15-year estimate, and including other capital needs outside of the plan, such as the bridges and tunnels, we assume that the first five years of the new plan will be \$24.8 billion. The following five years is based off that number, with a 10 percent adjustment for inflation for a total of \$27.3 billion. This results in a total 10 year capital plan of \$52.1 billion.

Currently, MTA receives \$7.2 billion in Federal funding and \$8.6 billion in State funding for the 2015-2019 Capital Program. Overall, Federal and State funds represent 24.1 percent and 28.5 percent, respectively, of the current Capital Program (excluding Bridge and Tunnel Bonds and PAYGO). For the proposed 2020-2029 BAT Capital Program, we assume that BAT would receive the current proportion of funding from Federal and State governments. As such, BAT would receive \$12.6 billion from Federal Funding and \$14.9 billion from the State, as well as \$5.3 billion in City capital funding, or equivalent revenue streams from those entities. Furthermore, we anticipate a five percent savings in BAT capital spending, totaling \$2.6 billion. The remaining \$16.8 billion would need to be funded by the City or new recurring revenue.

⁴³⁹ These are revenues from the surcharges imposed on for-hire vehicle trips that start or terminate in, or traverse, Manhattan below 96th Street.

⁴⁴⁰ Paul Berger, *New York's Subway, Bus Overhaul Will Take 15 Years, Cost \$43 Billion*, WALL STREET JOURNAL, May 23, 2018, available at <https://www.wsj.com/articles/new-yorks-subway-bus-overhaul-will-take-15-years-cost-43-billion-1527106797>.

2020-2029 BAT Capital Program (\$ in millions)

Program	2020-2029
Core Capital Program	
New York City Transit	\$ 41,612
MTA Bus	1,050
Second Avenue Subway	3,150
Core Subtotal	\$ 45,812
Bridges and Tunnels	6,300
Total 2020-2029 Capital Program	\$ 52,112

2020-2029 BAT Capital Program Estimated Funding Sources (\$ in millions)

	Proposed 2020-2029
Total 2020-2029 Program costs	\$52,112
Funding Currently Projected	
Federal Capital	\$12,558
State of New York Capital	\$14,851
City of New York Capital	\$5,250
Total 2020-2024 Funds Available	\$32,659
Funding Gap Before Savings*	19,452
Anticipated Savings	2,606
Funding Gap After Savings	\$16,847

*funding gap to filled by the City

Note: Savings Target is 5%

Recommendation: Hold Commuter Railroads Harmless

BAT would not include the commuter railroads: Long Island Rail Road and Metro-North Railroad. However, these entities could still receive support to run their operations at levels similar to the amounts they receive now under the MTA. The exact amount of revenues they receive will be greatly dependent on how the waterfall of revenues from the legacy-MTA is split between BAT and the railroads. As noted earlier, the example BAT budget was presented with an assumption of 80 percent of the waterfall going to BAT. This percentage was chosen as it represented an approximate distribution that did not leave the railroads with less funds than currently expected in MTA budget documents. In fact, the 80-20 split would leave the railroads with a slight bump from their current position.⁴⁴¹

The first part of the chart outlines the current revenues available to the commuter railroads, after accounting for debt service. MTA's most recent financial plan estimates the railroads combined have \$2.21 billion of operating revenues and \$2.02 billion of dedicated taxes and subsidies in 2020. Offsetting their debt service leaves the railroads with \$3.3 billion in total post-debt revenues in 2020.

The proposed plan is based off of the current MTA revenue estimate and is effectively a plan to split the MTA into two components: BAT and the Commuter Railroads. Therefore, any current MTA resources that do not go to BAT, become resources that go to the commuter railroads. The second part of the chart above walks through that process by taking current total MTA revenue projections (\$18.4 billion in 2020). Then it offsets all of the current MTA debt service (\$2.8 billion in 2020), the total revenues at BAT (\$11.8 billion in 2020), and finally accounts for the cost of the railroads taking over about one-third of the operations of MTAHQ (\$240 million in 2020).

Commuter Railroads Revenues Net of Legacy MTA Debt Service

	2020	2021	2022
Current Net Revenues			
Operating Revenues	2,211	2,202	2,159
Dedicated Taxes & Local Subsidies	2,021	2,219	2,253
Offset Debt Service	940	1,063	1,139
CURRENT NET REVENUES	3,292	3,359	3,273
Proposed Revenues Net of Debt Service & New Expenses*			
Total Current MTA Revenues ⁴⁴¹	18,354	18,448	18,657
Offset Current MTA Debt Service	2,840	3,080	3,223
Offset MTA HQ 1/3 Operating Expenses	240	245	250
Offset MTA Revenues to BAT	11,768	11,520	11,707
PROPOSED NET REVENUES	3,505	3,604	3,478
Net Increase/(Decrease) in Revenues in Proposed Plan	213	245	205

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Vol 2; NYC Council Finance Division Estimates (Dollars in millions)

⁴⁴¹ This row is total current MTA revenue, not limited to revenue flowing to the legacy MTA in MTA overview section above.

That leaves the commuter railroads with about \$3.5 billion of post-debt revenues in 2020, or about \$213 million more than under current MTA budget documents.

The exact difference from current MTA projections will rest on how the legacy-MTA revenue waterfall is split between BAT and the railroads. However, this exercise demonstrates that the financial plan presented for BAT in this report is not done at the expense of the commuter railroads.

FARES

What's Not Working

Whether the fault lies with intransigence up in Albany or the Frankenstein's monster of the state-created MTA, it's the City's residents that have been forced to bear the weight of the financial bungling of their mass transit system. As the system has fallen into disrepair, the State and the MTA have increasingly relied on fare increases, at a rate far outpacing inflation, in lieu of financial discipline and tough policy solutions.⁴⁴²

When the IRT first opened its doors in City Hall the price of a fare was five cents—115 years later, the price would be around \$1.30 today if it had kept pace with inflation.⁴⁴³ Instead, today a SingleRide ticket costs \$3.00 and even more draconian hikes have been proposed if new revenue streams are not found.⁴⁴⁴

The result of decades of greater-than-inflationary fare hikes is that New York City commuters are forced to shoulder an unfairly disproportionate share of the MTA's bloat. The MTA, already less efficient than its peers, places over 70 percent of the burden of running the subway (including operational bloat) on its passengers,⁴⁴⁵ while comparable agencies charge around 50 percent.⁴⁴⁶ Some at the MTA cite this high "farebox operating ratio" (total fares divided by total operating costs) as evidence of efficiency or self-sufficiency.⁴⁴⁷ However, inefficient management has led to skyrocketing costs⁴⁴⁸ while service quality has plummeted.⁴⁴⁹ What the MTA's high farebox collections really evidence is that the Authority has dipped, frequently and deeply, into passenger pockets in order to make up for its shortcomings, and that behind it all, Albany has failed in providing sound funding alternatives.

MOBILITY ISN'T JUST A TRANSIT ISSUE, IT'S A SOCIAL JUSTICE ISSUE AND AN ECONOMIC JUSTICE ISSUE

Year	Base Fare	2019 Value
1904	\$0.05	---
1913 ⁵	\$0.05	\$1.28
1948	\$0.10	\$1.06
1953	\$0.15	\$1.42
1966	\$0.20	\$1.58
1970	\$0.30	\$2.00
1972	\$0.35	\$2.14
1976	\$0.50	\$2.26
1980	\$0.60	\$1.94
1981	\$0.75	\$2.17
1984	\$0.90	\$2.22
1986	\$1.00	\$2.30
1990	\$1.15	\$2.27
1992	\$1.25	\$2.28
1995	\$1.50	\$2.51
2003	\$2.00	\$2.77
2009	\$2.25	\$2.68
2013	\$2.50	\$2.75
2015	\$2.75	\$2.69

The MTA and the State point to fare evasion as the reason for the system's woes,⁴⁵⁰ but it is a symptom of the MTA's

442 Libby Kane, *Here's exactly how much the price of a New York City subway ride has changed over the last 100 years*, BUSINESS INSIDER, Mar. 23, 2015, available at <https://www.businessinsider.com/how-much-the-price-of-the-new-york-city-subway-has-changed-2015-3>.

443 CPI Inflation Calculator, U.S. Bureau of Labor Statistics, available at <https://data.bls.gov/cgi-bin/cpi/calc.pl>; Diane Pham, *All the MTA Fare Hikes of the Last 100 Years*, 6SOFT, Mar. 23, 2015, available at <https://www.6soft.com/all-the-mta-fare-hikes-over-the-last-100-years-plus-a-video-of-when-it-cost-just-15-cents/>.

444 David Klepper, *Cuomo to lawmakers: Congestion tolls or 30 percent fare hike*, ASSOCIATED PRESS, Feb. 7, 2019, available at <https://www.apnews.com/7554fd0993c24a2eb5f3943a466bbb16>.

445 Federal Transit Administration Transit Agency Profiles, *MTA New York City Transit* (2017), available at https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2017/20008.pdf.

446 Federal Transit Administration Transit Agency Profiles, *Chicago Transit Authority* (2017), available at https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2017/50066.pdf; Federal Transit Administration Transit Agency Profiles, *Southeastern Pennsylvania Transportation Authority* (2017), available at https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2017/30019.pdf.

447 Clyde Haberman, *Assessing the Financial Burden of Being an M.T.A. Rider*, N.Y. TIMES, Dec. 13, 2012, available at <https://cityroom.blogs.nytimes.com/2012/12/13/assessing-the-financial-burden-of-being-an-m-t-a-rider/>.

448 Brian M. Rosenthal, *M.T.A. Construction Costs 'Threaten to Strangle' Growth, Report Warns*, N.Y. TIMES, Feb. 5, 2018, available at <https://www.nytimes.com/2018/02/05/nyregion/mta-construction-costs-threaten-to-strangle-growth-report-warns.html>.

449 State Comptroller Thomas P. DiNapoli, *Financial Outlook for the Metropolitan Transportation Authority Report 8-2019* (Oct. 2018), available at <https://www.osc.state.ny.us/osdc/rpt8-2019-mta-financial-outlook.pdf>.

450 Governor Cuomo and Mayor de Blasio Announce 10-Point Plan to Transform and Fund the MTA, February 26, 2019, available at <https://www.governor.ny.gov/news/governor-cuomo-and-mayor-de-blasio-announce-10-point-plan-transform-and-fund-mta> (last accessed Mar. 1, 2019); *Fare evasion at NYCT*, Special Finance Committee Ridership/Fare Evasion Presentation (Dec. 3, 2018), available at http://web.mta.info/mta/news/books/docs/special-finance-committee/Fare-evasion-board-doc_181130.pdf.

failures, not the cause.⁴⁵¹ “Do we think people gratuitously jump turnstiles because they have nothing better to do? That seems like such a farfetched claim I can’t believe anyone with half a brain would make it,” asked Yale Professor Issa Kohler-Hausmann.⁴⁵² Rather than address the frustrations with the system’s affordability and reliability, the MTA’s “cure” for the problem has resulted in a disproportionate targeting of poor and minority communities, and served only to create more problems for the communities they impact.⁴⁵³ Nine out of ten of individuals arrested for turnstile jumping are people of color, and black or Hispanic neighborhoods make up all of the top 10 neighborhoods with the highest arrest rate.⁴⁵⁴ It is already a terrible state of affairs to criminalize being poor,⁴⁵⁵ we cannot double down and further target our communities of color.

The burden of rapidly increasing subway fares puts a boot on the back of New York City’s most vulnerable populations. 43.5 percent of City residents live in poverty or near-poverty, which for a two-adult, two-child family means an annual income of less than \$32,402 and \$48,603 respectively.⁴⁵⁶ These individuals and their families are highly dependent on public transportation, more so than similar populations in the state and nation,⁴⁵⁷ but a \$2.75 barrier to entry can prevent them from going to class, finding employment, or receiving healthcare. And then when fares go up, they are the people who are hurt the most. These personal experiences collected by the Community Service Society are just a thin slice of the problems facing New Yorkers.

- Darius J. had to drop out of City College just six courses short of an Associate’s degree. When he learned about a free computer training course he thought his fortunes had turned—but he couldn’t afford a MetroCard to get to class. His choice? Walking over an hour each way, in the winter, from West Harlem to 138th Street in the Bronx to continue his education.⁴⁵⁸
- Manny A. worked his entire life as a contract worker and manual laborer and still had to choose between either putting food on the table or buying a MetroCard to look for work.⁴⁵⁹ And although there are some government services that might help with obtaining a MetroCard, he couldn’t afford the time to get past those administrative

hurdles—his priority is his job search.

- Leslie W., a substitute teacher, has lost out on hours because she could not afford the fare to get to the school. Limited transportation options cabin her employment opportunities and also her opportunities for advancement. She had to stop attending classes because she can’t afford the transportation expense. The ever-rising fares feel like “an attack,” she says, on the City’s working class who struggle financially just to make it out their door.⁴⁶⁰

This is just a sampling of the challenges low-income and working class New Yorkers face every day. One out of four of New York’s poor have not been able to receive medical care because of the barrier posed by subway and bus fares, one out of three have been prevented from pursuing job opportunities.⁴⁶¹

While Fair Fares is a good first step at addressing fare equity, we can and should go further. The working class have the most volatile and least flexible job schedules,⁴⁶² and suffer from the highest degree of turnover and instability.⁴⁶³ They should not have to make yet another administrative filing, attend yet another appointment date, *just* to afford the transportation to get to their jobs.

DECADES OF REGRESSIVE FARE POLICY HURT THE RIDERS WHO CAN AFFORD IT LEAST.

Recommendation: Reform the Fare System

Fare reform could address the tragedy of decades of regressive fare policy: our poorest residents pay into a system that keeps the streets (relatively) clear for the City’s wealthiest.⁴⁶⁴ Fare reform to address this injustice is a civil imperative. But more than that, it has the potential to improve the economic viability of life in the City for New Yorkers of all stripes, and is part and parcel of transforming the City into a greener, safer, and more efficient home for all of us. Numerous studies show that the *physical* mobility provided by public transit and an

451 Emma G. Fitzsimmons and Edgar Sandoval, *How Rampant Is fare Evasion? At Times Square, One Rider a Minute Sneaks In*, N.Y. TIMES, Dec. 24, 2018, available at <https://www.nytimes.com/2018/12/24/nyregion/subway-fare-evasion.html>; Ross Barkan, *The MTA is using fare evasion as an excuse for its failures*, CITY & STATE, Dec. 12, 2018, available at <https://cityandstateny.com/articles/opinion/commentary/mta-fare-evasion.html>.

452 Anna Flagg and Ashley Nerbovig, *Subway Policing In New York City Still Has a Race Problem*, GOTHAMIST, Sept. 12, 2018, available at http://gothamist.com/2018/09/12/subway_policing_in_new_york_city_st.php.

453 Anna Flagg and Ashley Nerbovig, *Subway Policing In New York City Still Has a Race Problem*, GOTHAMIST, Sept. 12, 2018, available at http://gothamist.com/2018/09/12/subway_policing_in_new_york_city_st.php; Harold Stolper and Jeff Jones, *The Crime of Being Short \$2.75*, Community Service Society (Oct. 2017), available at <http://www.cssny.org/publications/entry/the-crime-of-being-short-2.75>.

454 Anna Flagg and Ashley Nerbovig, *Subway Policing In New York City Still Has a Race Problem*, GOTHAMIST, Sept. 12, 2018, available at http://gothamist.com/2018/09/12/subway_policing_in_new_york_city_st.php.

455 Harold Stolper and Jeff Jones, *The Crime of Being Short \$2.75*, Community Service Society (Oct. 2017), available at <http://www.cssny.org/publications/entry/the-crime-of-being-short-2.75>; “The law, in its majestic equality, forbids the rich as well as the poor to sleep under bridges, to beg in the streets, and to steal bread.” Anatole France, *Le Lys Rouge* (1894), Chapter 7.

456 Mayor’s Office of Operations, *New York City Government Poverty Measure 2005-2016* (Apr. 2018), available at https://www1.nyc.gov/assets/opportunity/pdf/18_poverty_measure_report.pdf.

457 Harold Stolper and Nancy Rankin, *The Transit Affordability Crisis: How Reduced MTA Fares Can Help Low-Income New Yorkers Move Ahead*, Community Service Society (Apr. 2016), page 6, available at <http://www.cssny.org/publications/entry/the-transit-affordability-crisis>.

458 *Id.* at page 2.

459 *Id.* at page 7.

460 *Id.* at page 15.

461 *Id.* at page 13.

462 David Vinik, *Low-wage Workers Deserve Predictable Work Schedules*, NEW REPUBLIC, Apr. 15, 2015, available at <https://newrepublic.com/article/121528/lack-scheduling-flexibility-low-income-workers-big-problem>.

463 Kristin F. Butcher and Diane Whitmore Schanzenbach, *Most Workers in Low-Wage Labor Market Work Substantial Hours*, in *Volatile Jobs*, Center on Budget and Policy Priorities (July 24, 2018), available at <https://www.cbpp.org/research/poverty-and-inequality/most-workers-in-low-wage-labor-market-work-substantial-hours-in>.

464 Stolper and Rankin (Apr. 2016) at page 6.

efficient commute is strongly correlated with upward *economic* mobility and opportunity,⁴⁶⁵ and that decreases to income inequality are strongly linked to decreases in crime.⁴⁶⁶ Simply put, public transportation gives people bootstraps;⁴⁶⁷ it helps them move around in the city, earn educations, find jobs, and get to work. The benefits of this accrue to everyone, even non-riders.

It's time to rethink fare policy.

- Fare increases should not be the be-all and end-all for transit funding.
- A fare freeze, targeted fare reductions, and a fareless system *should* be on the table, until such a time when increases might be pegged to inflation and nothing more.
- We should conduct an exploration of other funding sources that better support the City's subway and buses as public goods. Nothing should be off the table.
- We should not be limited to the parochial view that the only person who benefits from public transportation is the passenger. New York City's subway and buses fuel the most powerful economic engine in the State, country, and world—the system's funding should reflect that.
- Fare reform must include a commitment to providing more heavily discounted fares made more widely available to the New Yorkers that need it. Public transit should be a bridge that brings people and opportunity together, not a financial wall.

LACK OF ACCESSIBILITY

What's Not Working

THE SUBWAY DOESN'T SERVE OVER ONE MILLION NEW YORKERS

Over 11 percent of City residents—totaling over one million people—have a disability and more than 1.6 million residents—19 percent of the City—are over age 60.⁴⁶⁸ Hundreds of thousands of these New Yorkers cannot use most of the City's subway stations as only 24 percent, or 118 out of 472,

are accessible.⁴⁶⁹ Among these hundreds of thousands are persons with mobility disabilities, seniors, and parents with children under age five. The City Comptroller reported that “New York City's ADA transit deserts [or neighborhoods with inaccessible subway stations] are home to 199,242 mobility-impaired residents, 341,447 seniors above the age of 65, and 203,466 children below the age of five.”⁴⁷⁰ For seniors and parents with young children, the lack of elevators in New York City subway stations creates some burden, but for the disabled, it creates a barrier and the denial of a public service.

Under the Americans with Disabilities Act of 1990 (ADA), NYCT was given the mandate to identify key stations and develop a plan to make them accessible by 2020.⁴⁷¹ Key stations were to be selected considering the following criteria:

- “(1) stations where passenger boardings exceed average station passenger boardings on the rail system by at least fifteen percent, unless such a station is close to another accessible station;
- (2) transfer stations on a rail line or between rail lines;
- (3) major interchange points with other transportation modes, including stations connecting with major parking facilities, bus terminals, intercity or commuter rail stations, passenger vessel terminals, or airports;
- (4) end stations, unless an end station is close to another accessible station; and
- (5) stations serving major activity centers, such as employment or government centers, institutions of higher education, hospitals or other major health care facilities, or other facilities that are major trip generators for individuals with disabilities.”⁴⁷²

NYCT submitted a key station plan in 1992 to the Federal Transit Administration agreeing to make 54 subway stations accessible to persons with disabilities by 2010.⁴⁷³ This plan was amended in 1994 to 100 stations by 2020.⁴⁷⁴ The 1994 plan also reported that 15 of the 54 original key stations were made accessible as of September 30, 1994.⁴⁷⁵ By 2002, this total grew to 30 key stations and 13 non-key stations.⁴⁷⁶ By 2008, an additional 37 key stations were made accessible, bringing the total to 67 key stations.⁴⁷⁷ Between 2008 and 2017, 22 more key stations were added to this list, bringing

465 Raj Chetty, et al., *Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States*, *The Quarterly Journal of Economics* 129, No. 4, 2014, pages 36-40, available at <https://www.nber.org/papers/w19843.pdf>.

466 Pablo Fajnzylber, et al., *Inequality and Violent Crime*, J.L. & Econ., vol. XLV, Apr. 2002; available at <https://sitesources.worldbank.org/DEC/Resources/Crime%26Inequality.pdf>; Gary S. Becker, *Crime and Punishment: An Economic Approach*, *Essays in the Economics of Crime and Punishment*, 1974, available at <https://www.nber.org/chapters/c3625.pdf>.

467 Todd Litman, *Evaluating Transportation Equity*, *Victoria Transport Policy Institute*, Nov. 2018, page 9, available at <http://www.vtpi.org/equity.pdf>.

468 AccessibleNYC (2018), available at <https://www1.nyc.gov/assets/mopd/downloads/pdf/accessiblenyc-2018.pdf>.

469 Greg Mocker, *Mother's Death in Subway Station Focuses Attention on Accessibility and Elevators* (Jan. 29, 2019) <https://pix11.com/2019/01/29/mothers-death-in-subway-station-focuses-attention-on-accessibility-and-elevators/> (last accessed Feb. 6, 2019); MTA, *Funding for Subway Station ADA Accessibility Approved* (Apr. 26, 2018), available at <http://www.mta.info/news/2018/04/26/funding-subway-station-ada-accessibility-approved> (last accessed Feb. 6, 2019).

470 Office of the New York City Comptroller, *Service Denied: Accessibility and the New York City Subway System* (July 2018), available at <https://comptroller.nyc.gov/reports/service-denied-accessibility-and-the-new-york-city-subway-system/> (last accessed Feb. 5, 2019).

471 49 CFR §37.47(c) – (d). Unless an extension has been granted allowing for accessibility to be achieved for all key stations by year 2020, public entities operating public transportation services (such as NYCT) were required under the ADA to make key stations accessible no later than July 26, 1994. In NYCT's case, an extension has been granted.

472 49 CFR § 37.47(b).

473 Office of the State Comptroller, *A Report By the New York State Comptroller: Metropolitan Transportation Authority – New York City Transit, Rapid Transit Services for Persons with Disabilities* (2001), pages 1-2, available at <https://www.osc.state.ny.us/audits/allaudits/093004/01s69.pdf>.

474 *Id.* at pages 1-2.

475 *Id.* at page 3.

476 *Id.*

477 Permanent Citizens Advisory Committee, *Welcome Aboard: Accessibility at the MTA* (Oct. 2008), Executive Summary Page iii, available at <https://www.pcac.org/wp-content/uploads/2014/09/Welcome-Aboard-Accessibility-at-the-MTA.pdf>.

NYCT closer to its goal with a total of 89 ADA compliant key stations.⁴⁷⁸ To reach its goal under the ADA, NYCT must make the 11 final key stations fully accessible by 2020.

While NYCT is on track to reaching its goal of 100 key stations by 2020, only 118 of its 472 subway stations are accessible to persons with mobility disabilities. This slow pace in achieving accessibility for its disabled population is at odds with the City's values. Of the 122 neighborhoods served by the subway system, 62 do not have an accessible station. Furthermore, the subway system is not only lacking accessible stations, it also often fails to maintain its elevators in operable working condition.⁴⁷⁹ For example, between July 2014 and June 2015, the system averaged 25 elevator outages averaged each day, with as many as 46 outages on a bad day and as low as seven outages on a good day.⁴⁸⁰ Elevator outages lasted an average of five and a half hours, and the longest outage lasted a period of 27 days.⁴⁸¹ One tally of elevator breakdowns revealed an average breakdown rate of 53.2 outages per elevator in 2015.⁴⁸²

In 2017, it was reported that two-thirds of all subway elevators broke down at least once trapping passengers inside.⁴⁸³ In a recent report from the City Comptroller whose office surveyed 65 elevators and escalators throughout the City, it was found that the MTA did not perform scheduled maintenance

on 80 percent of the surveyed elevators and escalators, and when maintenance was completed, it was often performed late.⁴⁸⁴ The Comptroller's Office also found that the MTA "did not systematically monitor whether defects found in elevators and escalators were corrected."⁴⁸⁵ There were also reports in

TRANSIT ACCESSIBILITY

How NYC Has Failed Seniors & People with Disabilities

11%

of New Yorkers self-identify as living with a disability, totaling

1 million people 



but just

24%

of subway stations are accessible

Buses are often the only accessible option for New Yorkers, but drivers are not sufficiently trained in operating accessibility equipment, leaving riders to fend for themselves. Bus bunching, insufficient enforcement of cars blocking bus stops & snow removal also present significant accessibility challenges.



As of June 2018, only

2.4%

of the City's 7,500 signaled intersections are accessible

Sources:

City of New York, AccessibleNYC (2018) available at <https://www1.nyc.gov/assets/mopd/downloads/pdf/accessiblenyc-2018.pdf>
 Greg Mocker, Mother's Death in Subway Station Focuses Attention on Accessibility and Elevators (Jan. 29, 2019) <https://pix11.com/2019/01/29/mothers-death-in-subway-station-focuses-attention-on-accessibility-and-elevators/> (last visited Feb. 6, 2019);
 Disability Rights Advocates, Class Action Lawsuit Alleges NYC Sidewalks Won't be Safe for Blind Pedestrians for 170 years, available at <https://dralegal.org/press/class-action-lawsuit-alleges-nyc-sidewalks-wont-be-safe-for-blind-pedestrians-for-170-years/> (last accessed Feb. 22, 2019)

⁴⁷⁸ Transit Center, *Access Denied: Making the MTA Subway System Accessible to All New Yorkers* (2017), page 4, available at <http://transitcenter.org/wp-content/uploads/2017/07/AccessDenied.pdf>.

⁴⁷⁹ *Complaint CIDNY, et al. v. MTA, et al.* (Apr. 25, 2017), page 34, available at <https://www.cidny.org/wp-content/uploads/2018/03/CIDNY-v.-MTA-SDNY-Complaint.pdf>.

⁴⁸⁰ *Access Denied: Making the MTA Subway System Accessible to All New Yorkers* (2017) at page 14.

⁴⁸¹ *Id.* at page 14.

⁴⁸² Sarah M. Kaufman, et al., NYU Wagner Rudin Center for Transportation Policy and Management, *Bringing Innovation to Paratransit* (Dec. 2017), Executive Summary Page, available at <https://wagner.nyu.edu/files/faculty/publications/Bringing%20Innovation%20to%20Paratransit.pdf> (last accessed Feb. 8, 2019).

⁴⁸³ William Neuman, *\$1 Billion Later, New York's Subway Elevators Still Fail*, N.Y. TIMES, May 19, 2008, available at <https://www.nytimes.com/2008/05/19/nyregion/19elevators.html?mtrref=undefined>.

⁴⁸⁴ James Barron, *For Disabled Subway Riders, the Biggest Challenge Can Be Getting to the Train*, N.Y. TIMES, July 26, 2018, available at <https://www.nytimes.com/2018/07/26/nyregion/disabled-subway-riders-elevators.html>.

⁴⁸⁵ *Id.*



2017 that three of the fifteen elevators with the highest number of outages were less than one year old.⁴⁸⁶

COPING WITH AN INACCESSIBLE SYSTEM

For those with disabilities, the lack of elevators in New York City subway stations is a significant hurdle. Many of them are forced to “climb mountains” to reach their destination. A short subway ride totaling a few minutes can easily turn into an hours long journey because individuals with mobility disabilities are either forced to first travel backwards in the opposite direction of their destination in order to reach an accessible station, or they are constantly rerouted during their journey because they often arrive at their destination station only to find out that the elevator is out of service.⁴⁸⁷ In cases where elevators are out of service, some wheelchair users have been forced to get back on the train and travel back to the station where they began or to a different accessible station and then take the bus to their destination or completely give up on traveling overall.⁴⁸⁸ One person described the experience this way: “[w]hen we plan to travel, we always have to plan for a lot more time than it would take someone normally to travel around the city.”⁴⁸⁹

BUSES

For seniors and those with a disability, the bus is often the only accessible mode of public transportation available given the dismal state of accessibility on the subway and at subway stations. According to the MTA, NYCT was “the first public

agency in the world to have a bus fleet 100 percent accessible to customers who use wheelchairs. Every bus is accessible to people in wheelchairs via front or rear-door lifts; many newer buses have low floors that enable customers to enter via front-ramp doors.”⁴⁹⁰

However, seniors and people with disabilities still face significant barriers when it comes to the City’s buses. This is due in part to a lack of training for bus operators in using their wheelchair equipment. The City’s express buses, in particular, are difficult to operate: “most models still sport wheelchair lifts that are more complicated to operate than the newer, flip-out ramps, and require the bus driver to come outside to open it.”⁴⁹¹

As reported in *City Limits* in 2018, some bus riders are forced to call on bystanders and family members to ensure they get onto the bus safely:

“The first time Jean Ryan tried to board a city bus in her wheelchair more than a decade ago, a homeless bystander had to show the driver how to operate the vehicle’s wheelchair lift. It’s a lesson Ryan has had to repeat herself a number of times in the years since, she says: showing a bus driver how to use the equipment needed to get her on and off the bus. Sometimes, if her 10-year-old grandson is in tow, he’ll be the one to offer the tutorial.”⁴⁹²

Further, there is insufficient enforcement against cars blocking bus stops, which prevents drivers from being able to pull up to the curb to board disabled riders.⁴⁹³ Challenges for disabled riders increase during the winter. Bus stops, which after snow storms are cleared by the City’s contractor, JCDcaux, are also

486 Vincent Barone, *MTA Subway Elevators Break Down at Alarming Rate, Advocates Say*, AMNY, Nov. 14, 2017, available at <https://www.amny.com/transit/mta-subway-elevators-1.14981016>.

487 Barron, July 26, 2018; David Meyer, *Disability Advocates Want to Give Andy Byford’s Subway Accessibility Plan Some Teeth*, STREETSLOGNYC, July 18, 2018, available at <https://nyc.streetsblog.org/2018/07/18/disability-advocates-want-to-give-andy-byfords-subway-accessibility-plan-some-teeth/>.

488 Barron, July 26, 2018; Meyer, July 18, 2018; *Complaint CIDNY, et al. v. MTA, et al.* (Apr. 25, 2017) at pages 3 and 20.

489 Meyer, July 18, 2018.

490 M.T.A., *Buses*, available at <http://web.mta.info/nyc/facts/ffbus.htm> (last accessed Feb. 11, 2019).

491 Jeanmarie Evelly, *City Buses are Wheelchair-Accessible, But Disabled Riders Still Face Obstacles*, CITY LIMITS, July 2, 2018, available at <https://citylimits.org/2018/07/02/city-buses-are-wheelchair-accessible-but-disabled-riders-still-face-obstacles/>.

492 *Id.*

493 *Id.*

sometimes not accessible because they fail to do the job.⁴⁹⁴

ACCESS-A-RIDE

The ADA requires public entities to provide paratransit services to individuals with disabilities that are “comparable to the level of designated public transportation services provided to individuals without disabilities using such system.”⁴⁹⁵ New York City provides this service through its Access-a-Ride program. Access-a-Ride is a private door-to-door transportation service offered to people whose disabilities prevent them from accessing public transportation.⁴⁹⁶

However, this program does not replace the City’s obligations under the ADA to make key stations accessible; nor does it replace NYCT’s obligations under the ADA to make its subway fully accessible whenever NYCT undergoes alterations to any of its stations.⁴⁹⁷ Access-a-Ride is also not an excuse to refuse to install elevators for the sole reason that persons with mobility disabilities are offered an alternative option. In addition to the ADA, New York City’s Human Rights Law prohibits discrimination against individuals with an actual or perceived disability by refusing, withholding from, or denying such persons “the full and equal enjoyment, on equal terms and conditions, of any of the accommodations, advantages, services, facilities or privileges” that the subway system offers.⁴⁹⁸



New York City Subway Stations: ADA Access



As long as 76 percent of the subway remain inaccessible, persons with disabilities will lack the ability to equally enjoy and take advantage of a public transportation service that would

494 Erik Bascome, *City Releases Snow Removal Plan for MTA Bus Stops*, S.I. LIVE, Nov. 2018, available at <https://www.silive.com/news/2018/11/city-releases-snow-removal-plan-for-mta-bus-stops.html>.

495 42 U.S.C. §12143(a).

496 *Access-a-Ride*, available at <https://www1.nyc.gov/nyc-resources/service/992/access-a-ride> (last accessed Feb. 8, 2019).

497 Under the ADA, “alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.” Alterations do not include “normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems...unless they affect the usability of the building or facility.” United States Access Board, *ADA Standards for Transportation Facilities*, available at <https://www.access-board.gov/guidelines-and-standards/transportation/facilities/ada-standards-for-transportation-facilities/single-file-version> (last accessed Jan. 14, 2019).

498 N.Y.C. Admin. Code §8-107(4)(a)(1)(a).

otherwise be available to them if they were not physically limited by their disability.

Recommendation: Use Zoning Tools to Improve Accessibility

EXISTING TOOLS

The New York City Zoning Resolution (Z.R.) includes several different kinds of mechanisms to facilitate transit-related improvements, including (but not limited to) improved circulation and safety, lighting, as well as above and below-ground easements for subway station access.

The most widespread existing tool is the requirement to relocate subway stairs from the sidewalk into new developments in certain high density commercial districts, including Special Midtown, Special Lower Manhattan, Special Downtown Brooklyn, Special Long Island City, and Special Union Square Districts, for new development on zoning lots of 5,000 square feet or more in lot area.⁴⁹⁹ The zoning text provides that this provision “may also require satisfaction of additional obligations under the Americans with Disabilities Act of 1990 (ADA), including the ADA Accessibility Guidelines. The New York City Transit Authority should be consulted with regard to any such obligations.”

In 1974, New York City established the “Special Transit Land Use District,” a zoning tool to require developers adjacent to future subway stations for the Second Avenue line to consult with the MTA and City Planning Commission (CPC) regarding the provision of easements to facilitate station access improvements.⁵⁰⁰ If it is determined through this consultation that a transit easement volume is necessary to accommodate future station improvements such as an elevator, the improvements could either be constructed as a part of the new development or an easement could be set-aside for future construction.

Despite existing for decades along the planned Second Avenue line, the Department of City Planning (DCP) has only recently begun applying this “check-in” requirement for easements as a part of neighborhood rezonings. In the East Harlem neighborhood rezoning, it is currently being added by a follow-up action, while for the Inwood neighborhood rezoning, it was added mid-process by an A-text application.⁵⁰¹

In order to facilitate more significant subway station improvements, ZR Section 74-634 establishes a Special Permit for a 20 percent floor area bonus available in high-density commercial districts in Manhattan and Downtown Brooklyn. Various Special Districts covering high density commercial areas such as Lower Manhattan and Downtown Brooklyn have sections that reference the 74-634 Special Permit and list specific sub-

way stations for eligibility.⁵⁰² A mandatory version of this tool exists around Court Square in Long Island City.⁵⁰³ As a City Planning Commission Special Permit, applying for this bonus requires a full ULURP application with extensive environmental review and public process. According to a DCP study from 2014, only ten projects had undertaken this Special Permit or the Court Square version from 1982 through 2014.⁵⁰⁴

In 2017, the Department of City Planning created a new Special Permit bonus system for the East Midtown Subdistrict of the Special Midtown District, allowing certain qualifying sites to obtain between 2.7 and 5.4 additional FAR in exchange for provision of specified transit system improvements for targeted facilities within the district.⁵⁰⁵ This mechanism includes an option for financial contributions into a “Public Realm Improvement Fund,” an interest-bearing account overseen by a “Public Realm Improvement Fund Governing Group” consisting of 13 members—seven from City agencies appointed by the Mayor, one from a citywide civic organization appointed by the Manhattan Borough President, one for the Manhattan Borough President, one from the City Council member representing the local district, one from the Speaker, one from Community Board 5, and one from Community 6. The Governing Group maintains the list of eligible and priority improvements for allocation of the funds, and it is required to annually update this list, known as the “Concept Plan,” and provide information on how funding has been allocated thus far.

EXPANDING AND STRENGTHENING THESE TOOLS

Despite being considered a best practice in ensuring coordination between private development and transit planning, the requirement for station-adjacent developers to consult with the MTA and CPC on station access easements currently only exists along the partially built Second Avenue Subway and the recently enacted Inwood Special District. The subway station stairs relocation requirement and Special Permit to allow a bonus in exchange for significant station access improvements only exist in high-density commercial districts.

As a result, New York is forgoing potential opportunities to facilitate much-needed station access improvements throughout the City in a cost-effective way. Considering the imperative to accelerate the implementation of ADA access and improve the flow of passengers in our increasingly crowded subway stations, these existing tools should be strengthened and applied citywide to development adjacent to all stations.

499 N.Y.C. Zoning Resolution Section 37-40.

500 N.Y.C. Zoning Resolution Section 95-00.

501 N.Y.C. Department of City Planning, *East Harlem Follow-Up Actions*, available at <https://zap.planning.nyc.gov/projects/2018M0390>; N.Y.C. Planning Commission, Uniform Land Use Review Procedure Application No. N 18025A ZRM Special Inwood District Rezoning, available at <https://www1.nyc.gov/assets/planning/download/pdf/about/cpc/180205a.pdf>.

502 N.Y.C. Zoning Resolution Section 74-634.

503 N.Y.C. Zoning Resolution Section 117-44.

504 N.Y.C. Department of City Planning, *History of NYC Transit Bonuses 1982-2014*, available at https://www1.nyc.gov/assets/planning/download/pdf/plans-studies/vanderbilt-corridor/history_of_transit_bonuses.pdf.

505 N.Y.C. Zoning Resolution Section 81-641.



1. Require certification for easements for every development site adjacent to a subway station.

Requiring certification for transit access easements at every development site⁵⁰⁶ within 200 feet of a subway entrance would ensure that these opportunities are evaluated and could meaningfully accelerate the construction of improvements such as ADA access elevators at stations across the City.

2. Create a citywide zoning incentive to facilitate implementation of station access improvements.

In order to facilitate and incentivize developers to contribute to subway access improvements, a zoning incentive on the model of the ZR 74-634 subway station improvement bonus (20 percent density bonus) should be established and be made available citywide alongside the certification requirement for easements.

Applying these two recommendations citywide would require every development site adjacent to a subway station to evaluate the potential for station access improvements and pair this evaluation with a powerful new incentive to accelerate implementation.

3. A preliminary analysis of land use data within 200 feet of subway stations finds that 397 out of the 472

stations in the system have at least one “soft site” (likely future development site) where these proposals may apply to help facilitate station access improvements.⁵⁰⁷ This includes 300 out of the 354 stations that currently lack ADA access.

The Nostrand Avenue A/C station provides a good example of a station where these zoning tools would have particularly significant potential for facilitating access improvements including ADA access. The station is surrounded by numerous one-story commercial buildings that are likely to be redeveloped in the future, but there are currently no applicable zoning tools to enable station access improvements.

Recommendation: Train Bus Operators in Accessibility Annually

We need to overhaul our transit system for improved accessibility, which will require substantial, long-term capital investments, and a sustained and reliable funding stream for system maintenance. In the short-term, however, every single bus operator should receive high-quality training in the operation of accessibility equipment on an annual basis to better serve the City’s 1.64 million older adults and New Yorkers with disabilities.

⁵⁰⁶ As established in N.Y.C. Zoning Resolution Section 37-40, a lot size of 5,000 sqf is considered to be the minimum feasible size for including an easement, zoning lots smaller than this could be exempt.

⁵⁰⁷ N.Y.C. Department of City Planning and N.Y.C. Department of Finance, *Property Land Use Tax Lot Output “PLUTO” data*, available at <https://www1.nyc.gov/site/planning/data-maps/open-data/dwn-pluto-map-pluto.page>. Analysis by New York City Council Land Use Division, “soft sites” are privately owned sites of 5,000 sqf or larger built to less than 50 percent of potential density than would be allowed by current zoning with a 20 percent density bonus for transit improvements.

A COMPREHENSIVE TRANSPORTATION VISION FOR THE CITY



A COMPREHENSIVE TRANSPORTATION VISION FOR THE CITY

PLANNING

What's Not Working

Despite having full control of our streets, the City has failed to put forth a long-term vision for our streetscapes, which suffer from insufficient investments and a status quo culture that prioritizes cars over New Yorkers' health and safety. As a result, the City has made slow and piecemeal progress toward building out a safe, equitable and sustainable transportation network that serves all New Yorkers.

This lack of progress and vision has left New Yorkers pitted against one another in a battle over the City's finite street grid. Our crowded, congested and dangerous streets cost the City's economy roughly \$20 billion a year.⁵⁰⁸ Our buses, which serve over 2.4 million riders, the vast majority of whom are low-income and people of color, are the slowest and most unreliable in the country. There remain huge gaps in accessibility for seniors and people with disabilities on our streets and across all forms of transit. The City's targeting and victim-blaming of cyclists—particularly immigrant delivery workers—continues to persist. Communities of color are underserved by life-saving bike and pedestrian safety infrastructure. There has been a complete lack of progress toward reducing transportation emissions, which account for nearly a third of the City's greenhouse gases. And our second-class, disjointed system of protected bike lanes covers barely two percent of the City's streets and actively discourages sustainable forms of transit.

Too often, the interventions proven to bring improved connectivity, safety, and performance to the City's transit system face significant opposition from communities and elected officials. This opposition is stoked by the City's lack of comprehensive vision for the system, as with a piecemeal approach, communities feel unfairly targeted by interventions that remove street parking and change the way traffic flows through their neighborhoods. As a result, the City has historically taken a path of least resistance approach to street improvements, serving the neighborhoods that pose the least opposition rather than the

neighborhoods that need improvements most. The upgrades that make a tangible difference in riders' daily lives, like bus shelters, benches, and Real Time Passenger Information (RTPI) are prioritized by a handful of elected officials able to use discretionary funds to fill glaring gaps in their districts rather than objective criteria for making citywide investments.

The same lack of prioritization and long-term, strategic vision has resulted in a complete mismatch between the City's funding priorities and the interventions that will bring the greatest benefit to the system. Take, for example, the City's investment and subsidies to expand ferry service. With over five million riders last year, the expanded NYC Ferry service has by some measures improved the City's transit network.⁵⁰⁹ However, NYC Ferry system has not meaningfully increased the capacity of our transit infrastructure; one bus route—the Bx12, a crosstown local and SBS route that connects Manhattan to the Bronx—saw 14.9 million riders in 2017: over 340 times the riders served by NYC Ferry routes combined. In addition, the City's environmental review revealed that the operation of the expanded ferry service would potentially result in significant adverse impacts on air quality that would “not be possible to fully mitigate.”⁵¹⁰

CROWDED, CONGESTED AND DANGEROUS STREETS COST THE CITY'S ECONOMY ROUGHLY \$20 BILLION A YEAR.

Further, the subsidized cost to taxpayers for each NYC Ferry continues to swell, reaching ten dollars per ride last year.⁵¹¹ When asked recently about why the City chose to subsidize the expansion of NYC Ferry service—which primarily serves higher-income waterfront neighborhoods—over investments into the City's bus system, which serves the City's neglected and low-income subway deserts, the Mayor reportedly replied “‘that’s not something that was a front-burner issue in year one, year two,’ because other than SBS, the MTA runs buses.”⁵¹²

508 Fix N.Y.C. Advisory Panel, *Fix NYC Advisory Panel Report*, (Jan. 2018) available at <http://www.hntb.com/HNTB/media/HNTBMediaLibrary/Home/Fix-NYC-Panel-Report.pdf>.

509 Yoav Gonen and Danielle Furfaro, *De Blasio Reveals NYC Spends \$10 Subsidizing Each Ferry Ride*, N.Y. Post, Jan. 14, 2019, available at <https://nypost.com/2019/01/14/de-blasio-reveals-nyc-spends-10-subsidizing-each-ferry-ride/>.

510 Yannic Rack, *Environmental Impact Study Warns of Ferry Service's Air Pollution*, THE VILLAGER, May 19, 2016, available at <https://www.thevillager.com/2016/05/environmental-impact-study-warns-ferry-services-air-pollution/>.

511 Gonen and Furfaro, Jan. 14, 2019.

512 Sally Goldenberg, Twitter, Feb. 7, 2019, available at <https://twitter.com/SallyGold/status/1093611830319218698> (last accessed Feb. 14, 2019).

The City needs a new vision and direction for local transportation. One that brings equity back to the City's streets and rights historic wrongs that have left our streets congested, dangerous, and inaccessible to many City residents.

Recommendation: Five Year Master Plan for City Streets

The City needs a new vision for our streets: one that articulates the City's goals and sets bold and measurable targets to which our elected officials and government agencies can be held accountable. The Department of Transportation should complete a comprehensive master plan for City streets once every five years. Establishing a five-year integrated plan for bicycle, bus, vehicle, ferry, and pedestrian infrastructure would bring cohesion to what is now a patchwork system of upgrades—which often results in the watering down or elimination of projects that then cause ripple effects throughout the City.

A comprehensive planning process, in which communities will be presented with a long-term vision for the future of citywide transit rather than a series of piecemeal pedestrian spaces, bus and bike lanes, will challenge New Yorkers to do their fair share to bring the City's transit network into the 21st century. The plan should go through a robust and inclusive public engagement process to collect and incorporate community input on the plan and expedite its implementation upon adoption, particularly in neighborhoods underserved by transit.

A plan informed by community input, and grounded in objective cost-benefit analyses that weigh investments against their benefit to New Yorkers—rather than political expediency of a particular project—has the potential to radically transform our City for the better.

This long-term vision for the City's streetscapes would prioritize and promote safety; increase mobility and livability on the City's streets; maximize the efficient use of the public right of way; improve the quality and efficiency of our bus system, and increase access to high-quality public transit, particularly for people with low incomes and people of color; encourage alternatives to driving; reduce congestion and emissions; enhance connectivity of the transit network; support and encourage multi-modal and intermodal transportation; improve accessibility to transit for all New Yorkers; and advance the City's sustainability, resilience and climate justice goals.

The Master Plan will require the City to meet key milestones to improve our bus, bike and pedestrian infrastructure, outlined in the following sections of the report. There is no doubt the planning process would be best completed under the municipal control framework outlined in this report, to streamline



processes and expedite upgrades. For example, under our current transportation system, local bus routes are designed by the State, but operated by the City. This simple fact creates all kinds of logistical and political inefficiencies. But even in the face of that challenge, there is no excuse for the neglect and degradation of our bus system which, on a daily basis, serves well over the total populations of Austin and San Francisco, combined. The City must act now. With political will, rational planning, robust public engagement, sufficient resources, and the cooperation of leaders like NYCT President Andy Byford, these key milestones to improve our street grid are well within reach.

BUSES

What's Not Working

Bus infrastructure is a critically important piece of the City's transportation system. In addition to serving over two million New Yorkers, the City's bus network is a core feature of Andy Byford's Fast Forward Plan to modernize transportation in the City, filling service gaps to mitigate the impacts of subway closures and reductions in service that will be required for critical maintenance and repair. However, riders are fleeing the system. As noted above, since 2012, bus ridership declined by nearly 15 percent.⁵¹³

Buses are also one of the most efficient, cost-effective and adaptable forms of public transportation that local governments can pursue. Compared to other forms of public transportation like subways and light rails, new and adjusted bus routes can be implemented in far less time and at far less cost to the City.

The proposed Brooklyn Queens Connector (BQX) provides a useful point of comparison. The BQX is expected to cost \$2.7

513 Guse, Feb. 22, 2019.

billion to build and \$30 million a year to operate.⁵¹⁴ A new SBS line following the same route would cost \$1.9 million to operate, about 15 times less than the annual operating costs for the proposed BQX.⁵¹⁵ Construction costs for SBS routes range between \$7 million and \$27 million,⁵¹⁶ which means that even at its highest, capital construction costs for SBS would amount to about one percent of the total cost of building the BQX, all while providing about the same added capacity to the system.⁵¹⁷ Similarly, the two-mile extension of the Second Avenue Subway cost over 160 times more than the most costly SBS route.⁵¹⁸

RIDERSHIP

Buses also plays a critical role in serving some of the City's most vulnerable residents. The city's bus commuters are more likely to be foreign born (55 percent) and people of color (75 percent) than subway riders.⁵¹⁹ Many of these New Yorkers have likely been pushed out to subway deserts by rising housing costs.⁵²⁰ The average personal income of bus commuters is \$28,455—far lower than the average for subway commuters of \$40,000.⁵²¹ Despite their critical role in the City's transit network, New York City's buses and the riders that rely on its service are suffering from severe neglect and disinvestment.

BUS PERFORMANCE

New York City's buses are extremely unpredictable and the slowest of any big city in the country, leaving millions of bus riders without access to reliable public transportation.⁵²² According to the DOT, the average City bus travels at just 7.4 miles per hour.⁵²³ In busy commercial dis-

tricts, the average speed is less than four miles per hour.⁵²⁴

Slow service often leads to buses arriving at stops at the same or close to the same time. So-called “bus bunching” leads to less predictable service and long waits for riders. According to the Bus Turnaround Coalition's 2018 report, 13.4 percent



514 David Meyer, *EXCLUSIVE: Sunset Park Nixed From de Blasio's Brooklyn-Queens Streetcar Fantasy*, STREETSBLGNYC, Aug. 29, 2018, available at <https://nyc.streetsblog.org/2018/08/29/exclusive-sunset-park-nixed-from-de-blasios-brooklyn-queens-streetcar-fantasy/>.

515 *Id.*

516 N.Y.C. Department of Transportation and M.T.A. New York City Transit, *Select Bus Service*, available at <http://www.nyc.gov/html/brt/downloads/pdf/brt-routes-fullreport.pdf>.

517 Meyer, Aug. 29, 2018.

518 Nicole Gelinias, *Here's Why It Took a Century and \$4.5 Billion to Add Just Three Subway Stops in New York City*, DAILY BEAST, Dec. 31, 2016, available at <https://www.thedailybeast.com/heres-why-it-took-a-century-and-dollar45-billion-to-add-just-three-subway-stops-in-new-york-city>.

519 M.T.A. Facts and Figures, *Buses*, available at <http://web.mta.info/nyct/facts/ffbus.htm> (last accessed Feb. 7, 2019).

520 Regional Plan Association, *Pushed Out: Housing Displacement in an Unaffordable Region* (Mar. 2017) available at <http://library.rpa.org/pdf/RPA-Pushed-Out-Housing-Displacement-in-an-Unaffordable-Region.pdf>.

521 N.Y.C. Comptroller Scott Stringer, *The Other Transit Crisis: How to Improve the NYC Bus System* (Nov. 2017), available at <https://comptroller.nyc.gov/reports/the-other-transit-crisis-how-to-improve-the-nyc-bus-system>.

522 Bus Turnaround Coalition, *Bus Turnaround: 2018* (2018) available at <http://busturnaround.nyc/wp-content/uploads/2018/07/BusTurnaroundAction-Plan.pdf>.

523 Caroline Spivak, *NYPD launches crack down on cars parked in bus lanes*, CURBED, Jan. 24, 2019, available at <https://ny.curbed.com/2019/1/24/18196441/nypd-tow-truck-squad-launches-crack-down-on-cars-parked-in-bus-lanes>.

524 *Id.*

Building Better Bus Service

Transit signal
priority (TSP) can
improve bus
speeds by up to
25%



Barcelona's Bus Route
Redesign effort
increased ridership by
22 million
rides per year



Basic upgrades like bus
shelters, benches & real time
passenger information cut
perceived wait times by
half



of buses arrived bunched in October 2017 compared to 10.7 percent two years earlier.⁵²⁵

Poor, slow, unreliable service has no doubt contributed to a decline in bus ridership. Beginning in the early 1970s, bus ridership was in steady decline as riders increasingly opted for taxis, vans, and private cars.⁵²⁶ Bus ridership between 1980 and 1990 plummeted from 589 million riders to 468 million riders, a decrease of more than 20 percent.⁵²⁷ Between 1990 and 2000, ridership nearly doubled to 699 million riders.⁵²⁸ This surge in ridership was likely in part due to the introduction of the unlimited MetroCard in 1998, which integrated fares and allowed free transfers from buses to the subway.⁵²⁹

Since the introduction of the unlimited MetroCard, however, bus ridership has once again steadily declined, from 697 million riders in 2010 to 651 million riders in 2015.⁵³⁰ DOT attributes the dip in ridership to service cuts implemented by NYCT in response to the 2008 economic recession.⁵³¹ In the summer of 2010, 38 bus routes were cut entirely, with another 76 running shorter routes or shorter hours.⁵³² In 2013, 17 of those routes were restored or enhanced,⁵³³ which may help explain the only time period in the last decade in which there was a slight ridership rebound, with an increase of 10 million

riders between 2012 and 2013.⁵³⁴

Advocates and transit experts have warned that ridership decline is the symptom of a vicious “death spiral,”⁵³⁵ which may only gain momentum with fare hikes, or service cuts that could be instituted in the absence of a fare increase in order to control costs.⁵³⁶ This decline in ridership has only exacerbated the NYCT’s steep operating deficits. In June 2018, the MTA reported that bus revenues were \$100 million less than what they expected.⁵³⁷

SLOW PROGRESS TO IMPROVE SERVICE

Select Bus Service was first introduced in 2008 as a form of bus rapid transit (BRT) to increase the speed, reliability, and capacity of bus service.⁵³⁸ SBS features more frequent service, bus lanes, sidewalk extensions, also known as bus bulbs, off-board fare collection machines, and Transit Signal Priority (TSP), a system that coordinates buses and traffic signals to reduce the time buses are stopped at lights.⁵³⁹ In 2013, the first five SBS routes achieved some success, increasing ridership by ten percent and speeding up travel by 20 percent.⁵⁴⁰ In response, the City expanded SBS routes modestly.⁵⁴¹ However,

525 Bus Turnaround: 2018 (2018).

526 Thomas J. Lueck, *New York's Bus Ridership Surges After Long Decline*, N.Y. TIMES, Dec. 22, 1998, available at <https://www.nytimes.com/1998/12/22/nyregion/new-york-s-bus-ridership-surges-after-long-decline.html?auth=login-email>.

527 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

528 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

529 Tourism and Transport Forum, *Ticket to Ride: Reforming Fares and Ticketing for Sustainable Public Transport* (Dec. 2016), available at <http://www.ttf.org.au/wp-content/uploads/2017/01/TTF-Ticket-to-Ride-Fare-and-ticketing-Paper.pdf>.

530 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

531 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

532 Matthew Schuerman, *A Guide to NYC Bus and Subway Service Cuts*, W.N.Y.C., Jun. 25, 2010, available at <https://www.wnyc.org/story/71362-a-guide-to-nyc-bus-and-subway-service-cuts/>.

533 CBS News, *MTA Restoring Bus Routes Cut in 2010*, C.B.S. NEWS, Jan. 4, 2013, available at <https://newyork.cbslocal.com/2013/01/04/mta-restoring-bus-routes-cut-in-2010/>.

534 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

535 Erin Durkin, *New York City subway and bus services have entered 'death spiral,' experts say*, THE GUARDIAN, Nov. 20, 2018, available at <https://www.theguardian.com/us-news/2018/nov/20/new-york-city-subway-bus-death-spiral-mta-fares>.

536 Stephen Nessen, *MTA Passes \$17 Billion Budget for 2019 As Agency Approaches 'A Precipice'*, GOTHAMIST, Dec. 13, 2018, available at http://gothamist.com/2018/12/13/mta_budget_subway_fares.php; Benjamin Kabak, *Fare hikes and service cuts and death spirals, oh my!* 2ND AVE. SAGAS, Nov. 18, 2018, available at <http://secondavenuesagas.com/2018/11/18/fare-hikes-and-service-cuts-and-death-spirals-oh-my/>.

537 Paul Berger, *MTA Predicts Annual Subway, Bus Revenue Will Be \$100 Million Less Than Expected*, WALL STREET JOURNAL, Jul. 25, 2019, available at <https://www.wsj.com/articles/mta-predicts-annual-subway-bus-revenue-will-be-100-million-less-than-expected-1532558494>.

538 City of New York, *Mayor Bloomberg, Mta Executive Director and CEO Sander, and DOT Commissioner Sadik-Khan Unveil New MTA Select Bus Service (SBS) System* (Mar. 25 2018), available at <https://www1.nyc.gov/office-of-the-mayor/news/101-08/mayor-bloomberg-mta-executive-director-ceo-sander-dot-commissioner-sadik-khan-new>.

539 *Id.*

540 City of New York, *Mayor Bloomberg, DOT Commissioner Sadik-Khan, DDC Commissioner Burney, and MTA Chairman Prendergast Announce Launch of Select Bus Service on Nostrand/Rogers Avenues* (Nov. 18, 2013), available at <https://www1.nyc.gov/office-of-the-mayor/news/371-13/mayor-bloomberg-dot-commissioner-sadik-khan-ddc-commissioner-burney-mta-chairman-prendergast/#/0>.

541 *Id.*

er, to date, only fifteen SBS routes have been implemented.⁵⁴² In 2017, DOT announced a plan to bring SBS service to 21 new routes by 2027.⁵⁴³ Moreover, the MTA has threatened to halt the planned expansion of SBS in an attempt to make a dent in its massive and growing operating budget deficit.⁵⁴⁴

Bus lane and street design, better enforcement, and TSP can all be implemented by the City, but the implementation of SBS routes requires close coordination with NYCT. When news broke this summer that NYCT was putting the SBS expansion on hold, DOT reported having no advance notice despite their partnership in running the program, raising serious concerns about the lack of coordination between these agencies and the future of SBS.⁵⁴⁵

Andy Byford's 2018 "Bus Plan" calls for a full redesigned of the entire bus network by 2021, which would include all-door boarding with the New Fare Payment System (NFPS) that will allow riders to "tap and go," expanding off-peak service, and improved customer experience measures including new bus maps, RTPI and digital information screens.⁵⁴⁶ Under the plan, NYCT has committed to work with DOT to expand TSP, bus lanes, queue jumps, bus shelters, accessibility at bus stop, stop space balancing, and expanded bus lane enforcement.⁵⁴⁷ While the plan was widely celebrated by transit advocates as a win for buses and public transportation in the City, as the MTA looks at stalling SBS expansion and cutting service in response to budget shortfalls, the details of its implementation have become increasingly unclear.⁵⁴⁸ Without sufficient funds for the improvements laid out in the Bus Action Plan—and critically, NYCT's coordination with the City agencies responsible for street redesigns—the plan will have an extremely limited impact on service improvements, if any at all.

The City's progress and goals for the implementation of dedicated bus lanes have been modest, at best. As of June 2018, the City had installed roughly 120 miles of bus lanes.⁵⁴⁹ Just 15 miles of bus lanes were added between 2017 and 2018's progress reports, a good portion of which were from long-delayed projects.⁵⁵⁰

Currently, none of the City's bus lanes are physically protected from other traffic. DOT has implemented two primary types of bus lanes: curbside lanes, where parking and standing at the curb is not permitted and offset bus lanes, which are one lane away from the curb, and therefore allow for curbside parking and standing. All of the City's bus lanes have signs posted along the route and the lanes themselves are either marked

Considerations for a Master Plan under Municipal Control

A comprehensive plan for the City's streets would benefit New Yorkers regardless of who or what entity manages the MTA; today, DOT has full control over our streets and has both the power and the resources to radically transform our streetscapes for increased and improved accessibility, safety, connectivity, and resilience. Municipal control would simply bolster the comprehensive plan's process and outcomes, ensuring the plan is driven and implemented by an entity that can meaningfully connect and improve the full scope of our transit network, including our buses, subways, bridges and tunnels.

Municipal control would enable better coordination between mass transit and DOT—something sorely lacking now. For example, when news broke this summer that NYCT was putting the SBS expansion on hold, DOT reported having no advance notice despite their partnership in running the program, raising serious concerns about the lack of coordination between these agencies and the future of SBS.¹ Municipal control would also improve the efficiency and efficacy of the City's bus route redesign effort, enabling the City to take a comprehensive approach to route overhaul, street redesign and the capital investments necessary to optimize bus operations—and allow for more responsiveness to changes in the City's population and the needs of residents. Municipal control would best position the City to engage communities on route redesign proposals and stop consolidation, to take in account job centers, institutions like hospitals and schools, public housing, and accessibility gaps in the City's subways system.

Municipal control would also present significant opportunities to plan for and mitigate the impacts of climate change. The MTA's Climate Adaptation Task Force Resiliency Report takes a step in the right direction, listing the many ways the MTA's assets are vulnerable to climate impacts and identifying the resiliency projects the Authority will prioritize.² Yet five years after Superstorm Sandy halted the operation of the City's subways, we still do not fully understand the scope or scale of the investments the subway system will demand to remain operational in the face of inevitable sea level rise, storm surge, extreme winds, heat waves and heavy rain. Through municipal

1 Bus Turnaround Coalition, *Fixing NYC's Buses: 2018 Progress Report* (2018), available at <http://busturnaround.nyc/wp-content/uploads/2018/09/BusTurnaround-2018-Progress-Report-FINAL.pdf>

2 M.T.A., *Climate Adaptation Task Force Resiliency Report* (April 2017), available at <http://web.mta.info/sustainability/pdf/ResiliencyReport.pdf>.

542 N.Y.C. Comptroller Scott Stringer, *Improving Select Bus Service: Putting the Rapid in Bus Rapid Transit* (Apr. 20, 2018), available at <https://comptroller.nyc.gov/reports/improving-select-bus-service-putting-the-rapid-in-bus-rapid-transit/>.

543 L.L. 2015/036; David Meyer, *De Blasio Announces 10-Year Plan for 21 More Select Bus Service Routes*, STREETSBLGNYC, Oct. 20, 2017, available at <https://nyc.streetsblog.org/2017/10/20/de-blasio-announces-10-year-plan-for-21-more-select-bus-service-routes/>.

544 Paul Berger, *Subway, Bus Cuts Loom as MTA Faces Financial Crisis*, WALL STREET JOURNAL, Aug. 14, 2018, available at <https://www.wsj.com/articles/subway-bus-cuts-loom-as-mta-faces-financial-crisis-1534279819>.

545 *Bus Turnaround: 2018* (2018).

546 M.T.A., *Bus Action Plan* (Apr. 2018), available at http://web.mta.info/nyct/service/bus_plan/bus_plan.pdf.

547 *Id.*

548 Riders Alliance, *The Wins on the Bus*, available at <http://www.ridersny.org/2018/05/01/the-wins-on-the-bus/> (last accessed Feb. 11, 2019); James Brasuell, *New York MTA Threatens Service Cuts, Increased Fares*, PLANETIZEN, Nov. 26, 2018, available at <https://www.planetizen.com/news/2018/11/101673-new-york-mta-threatens-service-cuts-increased-fares>.

549 David Meyer, *Bus Drivers and Riders Call on Mayor de Blasio to Build 60 More Miles of Bus Lanes*, STREETSBLGNYC, Jul. 31, 2018, available at <https://nyc.streetsblog.org/2018/07/31/bus-drivers-and-riders-call-on-mayor-de-blasio-to-build-60-more-miles-of-bus-lanes/>.

550 *Bus Turnaround: 2018* (2018).

“Bus Only” and/or painted red.⁵⁵¹ All of our bus lanes only restrict traffic during certain hours of the day, and many offer midday hours where parking and deliveries are permitted.⁵⁵²

TSP, which essentially shortens red lights for idling buses and extends green lights for approaching buses, is critically important to improving bus service. City buses spend about 21 percent of their time stopped at red lights.⁵⁵³ The City’s buses have been equipped with TSP technology necessary since 2017,⁵⁵⁴ yet 92 percent of bus routes were operating without its benefits.⁵⁵⁵ The Mayor’s Preliminary Ten-Year Capital Strategy set aside \$2.66 million over five years for the installation of TSP at 300 intersections per year, over five years.⁵⁵⁶

DESIGN AND ENFORCEMENT

A combination of effective enforcement and good design in bus lanes is also critical to bringing service improvements to bus riders. An April 2018 report from the Comptroller’s office highlights that the implementation of SBS has failed to deliver on its core goal: increased bus ridership.⁵⁵⁷ According to the Comptroller’s report, of the nine routes implemented prior to 2016, five experienced a ridership decline in comparison to the year prior to implementation when those routes existed as local or limited routes, reducing ridership by 0.2 percent in total.⁵⁵⁸ The Comptroller’s report attributes this failure to poor implementation, design flaws, poor maintenance, oversight, and enforcement.⁵⁵⁹

Camera enforcement is widely regarded as exponentially more effective than police officer enforcement, but requires authorization from the State Legislature as a result of a State law that limits camera enforcement to 16 of 234 bus routes.⁵⁶⁰ In his 2019 State of the City speech, Mayor de Blasio committed to advocate for more camera enforcement at the State Legislature and increase the New York Police Department’s (NYPD) enforcement with seven dedicated tow truck teams for continual enforcement and towing.⁵⁶¹ The Governor’s 2019 State Budget included escalating penalties for blocking a bus lane and would authorize the City to install an unlimited number of bus cameras, which would significantly improve bus service for riders.⁵⁶²

control, the City would be positioned to take into consideration the City’s full transit network, including our roads, bridges and waterways, to assess the City’s transit assets, estimate the costs of necessary improvements and prioritize investments appropriately to best prepare the City for these existential threats.

A “Mobility Czar,” a deputy mayor responsible for citywide transportation policy, would coordinate DOT, BAT, and TLC to seamlessly produce, implement and update a comprehensive plan on a regular basis. Oversight of the City’s subways would allow for the plan to optimize subway transfers, integrate transit contingency plans for subway repairs and maintenance that interrupt service, and better prepare for the inevitable impacts of climate change and sea level rise on our transit network.

Unlike New York, cities throughout the world physically separate bus lanes from traffic using a bollard, curb, median, or elevated surface, which prevents, rather than merely discourages, the interference of vehicles altogether.⁵⁶³ New York’s bus lanes, which are not separated from traffic, are often used as “de facto drop-off and delivery zones.”⁵⁶⁴

Physically separated routes have the potential to increase bus speeds along routes where even camera enforcement does not effectively keep cars from blocking the right of way. Two-way separated bus lanes in the median along key corridors, which have yet to be tested in New York City, also help keep buses free from conflicts with deliveries, turning vehicles, and double-parked cars wherever possible, as recently suggested by Eric Goldwyn at New York University’s Marron Institute.⁵⁶⁵ These design interventions can also create opportunities to install green infrastructure in areas of the City to manage storm water, reduce runoff, and improve air quality.⁵⁶⁶ Despite these benefits, Mayor de Blasio committed to pilot just two miles of physically separated bus lanes in his 2019 State of the City address.

The design of bus stops, including the installation of bus shelters, benches, and RTPI are also important drivers of bus ridership and bus rider satisfaction.⁵⁶⁷ Studies have found that

551 City of New York, Select Bus Service, available at <https://www1.nyc.gov/html/bmta/html/about/bus-lanes.shtml> (last accessed Feb. 11, 2019).

552 *Id.*

553 David Meyer, *City Budget Gives Buses a Key Boost at Intersection*, STREETSBLGNYC, Feb. 8, 2019, available at <https://nyc.streetsblog.org/2019/02/08/city-budget-gives-buses-a-key-boost-they-need-at-intersections/>.

554 *Id.*

555 David Meyer, *Trottenberg in No Hurry to Accelerate Rollout of Traffic Signals That Speed Up Buses*, STREETSBLGNYC, May 17, 2019, available at <https://nyc.streetsblog.org/2018/05/17/trottenberg-in-no-hurry-to-accelerate-rollout-of-traffic-signals-that-speed-up-buses/>.

556 City of New York, Preliminary Ten-Year Capital Strategy: Fiscal Years 2020-2029, available at <https://www1.nyc.gov/assets/omb/downloads/pdf/ptyp2-19.pdf> (last accessed Feb. 11, 2019).

557 *Improving Select Bus Service: Putting the Rapid in Bus Rapid Transit* (Apr. 2018).

558 *Id.*

559 *Id.*

560 David Meyer, *Hike in NYPD Bus Lane Enforcement Barely Makes a Dent for Riders*, STREETSBLGNYC, Oct. 23, 2018, available at <https://nyc.streetsblog.org/2018/10/23/hike-in-nypd-bus-lane-enforcement-barely-makes-a-dent-for-riders/>.

561 City of New York, Mayor de Blasio: Delivering our Promise to Make New York City the Fairest Big City in America, available at <https://www1.nyc.gov/office-of-the-mayor/news/021-19/mayor-de-blasio-delivering-our-promise-make-new-york-city-fairest-big-city-america#0> (last accessed Feb. 11, 2019).

562 New York State, FY 2020 New York State Executive Budget, Transportation, Economic Development and Environmental Conservation: Article VII Legislation, available at <https://www.budget.ny.gov/pubs/archive/fy20/exec/artvii/ted-artvii.pdf>, (last accessed Feb. 11, 2019).

563 *Improving Select Bus Service: Putting the Rapid in Bus Rapid Transit* (Apr. 2018).

564 David Meyer, *Bus Lanes Alone Aren’t Enough to Give NYC Buses a Clear Path*, STREETSBLGNYC, Jan. 19, 2017, available at <https://nyc.streetsblog.org/2017/01/19/bus-lanes-alone-arent-enough-to-give-nyc-buses-a-clear-path/>.

565 Eric Goldwyn, *How to Get Riders Back on the Bus*, CITY & STATE, Feb. 19, 2019, available at <https://www.cityandstateny.com/articles/policy/infrastructure/fixing-nyc-bus-could-gain-more-mta-riders.html>.

566 Hamed Hakmelahi, et al., *Green Infrastructure in Urbanized Areas and Roadway Projects* (May 2017), American Society of Civil Engineers, available at <https://ascellibrary.org/doi/10.1061/9780784480618.027>.

567 TransitCenter, *From Sorry to Superb: Everything You Need to Know about Great Bus Stops* (October 2018), available at https://transitcenter.org/wp-content/uploads/2018/10/BusReport_Spreads.pdf.

amenities like bus shelters can actually reduce the perceived time for the same wait, significantly improving rider's daily experience with the system. A University of Minnesota study found that riders at stops without amenities who waited for 10 minutes perceived that time to be 21 minutes.⁵⁶⁸ Amenities like bus shelters, benches, and RTPI reduced that perceived wait time to just 11 minutes.⁵⁶⁹ For women who felt unsafe at bus stops, these amenities cut the perceived wait time in half.⁵⁷⁰

Of the City's 16,000 bus stops, just 22 percent have shelters.⁵⁷¹ The MTA has unilateral control over bus stop locations, but the City's DOT is responsible for bus stop design and construction, yet another example of how the City's transit system would benefit from the consolidation of these agencies' functions. In 2006, DOT entered into a 20-year contract with JCDecaux (formerly Cemusa) to own and manage bus shelters; accounting for advertisement space, the installation of these bus shelters is actually revenue positive for the City.⁵⁷² However, it is unclear how or whether DOT prioritizes spending and locational decisions for bus stop amenities. A 2018 TransitCenter report notes "the majority of new shelters replaced existing shelters, whose locations had been decided years ago. For the 200 additional shelters, DOT didn't set criteria for prioritizing which stops should get a new shelter. Instead, the Department requested proposals from City Council Members and Community Boards, a stark contrast to Metro Transit's approach of asking the riders — the people with the most direct concern and knowledge."⁵⁷³

That same TransitCenter report found that RTPI is one of the most desired amenities by riders.⁵⁷⁴ At the time TransitCenter released its report, DOT had installed real-time information at 220 bus stops as of 2018 with a commitment to install 150 more of these signs by the end of 2018, a goal cited in NYCT's Fast Forward plan.⁵⁷⁵ Similar to bus shelters, the installation of RTPI is driven and funded primarily by local elected officials including City Council Members, State Assembly Members, and Borough Presidents.⁵⁷⁶ While the City Council's funding and advocacy is largely responsible for the rollout of this useful infrastructure, this method of planning and funding infrastructure has caused disparities across the system.⁵⁷⁷

BUS ROUTE PLANNING

The City would benefit significantly from design upgrades like physical separation, queue jumps, bus bulbs, accessibility improvements and amenities like bus shelters, benches, and

BUS LANES ARE PROVEN TO INCREASE BUS SPEEDS AND RELIABILITY OF SERVICE FOR THE CITY'S 2.4 MILLION BUS RIDERS.

RTPI. However, all of these interventions require capital investments and the installation of permanent infrastructure, which is why we must first and foremost prioritize the redesign of our bus routes. The MTA and transit activists alike have called for a complete overhaul of the City's bus routes to better align bus service with travel patterns, consolidate stops, and streamline underutilized routes.

An overhaul of Staten Island's bus routes was completed and implemented this past fall.⁵⁷⁸ However, the study, redesign and implementation of that overhaul has taken NYCT three full years from start to finish.⁵⁷⁹ At NYCT's current pace, the MTA is nowhere near on track to fulfill the Bus Plan's commitment to complete system-wide redesign by 2021.⁵⁸⁰

Recommendation: Install a Minimum of 30 Miles Of Bus Lanes Per Year

As one of the most efficient, cost-effective, and adaptable forms of public transit that the City can pursue, we must at least double the rate at which the City is building out our bus infrastructure, starting with bus lanes. Bus lanes are proven to increase bus speeds and reliability of service for the City's 2.4 million bus riders.

Every new bus lane should be camera enforced and physically separated from traffic along appropriate corridors where camera enforcement proves ineffective. In addition to the physical separation of bus lanes, the plan should also prioritize the implementation of two-way separated bus lanes in the median along key corridors, to keep buses free from conflicts with deliveries, turning vehicles, and double-parked cars wherever possible.

Recommendation: Bring Transit Signal Priority to At Least 1,000 Intersections per Year

Mayor de Blasio's recent commitment to bring TSP to 300 intersections per year is encouraging. These upgrades, however, do not require any significant capital infrastructure investments. TSP takes advantage of the NYC Wireless Network,

⁵⁶⁸ *Id.*

⁵⁶⁹ *Id.*

⁵⁷⁰ *Id.*

⁵⁷¹ *Id.*

⁵⁷² *Id.*

⁵⁷³ *Id.*

⁵⁷⁴ *Id.*

⁵⁷⁵ *Id.*

⁵⁷⁶ *Id.*

⁵⁷⁷ *Id.*

⁵⁷⁸ David Meyer, *MTA's Staten Island Bus Overhaul Points the Way Forward for the Rest of NYC*, STREETSBLOGNYC, Jun. 1, 2017, available at <https://nyc.streetsblog.org/2017/06/01/mtas-staten-island-bus-overhaul-points-the-way-forward-for-the-rest-of-nyc/>.

⁵⁷⁹ M.T.A., *We're Speeding Up Staten Island*, available at <http://52.44.0.255/> (last accessed Feb. 11, 2019).

⁵⁸⁰ M.T.A., *Bus Action Plan* (Apr. 2018), available at http://web.mta.info/nyct/service/bus_plan/bus_plan.pdf.

signal controllers, and the MTA's existing Bus Time vehicle location system.⁵⁸¹ The City must speed the activation of TSP across the entire bus system, to ensure the bus network takes full advantage of the proven benefits of TSP wherever feasible.

Recommendation: Implement Route Redesigns and Bus Stop Upgrades Citywide By 2025

Transit experts and agencies agree that our bus routes need a full redesign to better align bus service with travel patterns, consolidate stops, and streamline underutilized routes. In Barcelona, similar route redesign efforts increased bus ridership by 22 million rides per year.⁵⁸²

We must double the pace at which NYCT is currently running that redesign process to fully complete and implement new routes and upgrades by 2025. This would allow for more efficient service and, when coupled with municipal control, more responsiveness to changes in the City's population and the needs of residents. We must engage communities on route redesign proposals and stop consolidation, taking into account job centers, institutions like hospitals and schools, public housing, and accessibility gaps in the City's subway system.

Any redesign process should collect input from bus riders on where stop amenities including shelters, benches, and RTPI are needed most. The City should then create and make public its criteria for the prioritization of amenities and rollout upgrades including shelters, benches, and RTPI along with the redesign by 2025 to optimize the system.

Recommendation: Install Bus Lanes, Bus Lane Cameras, and TSP on Every Single Bus Route by 2030

Incremental goals to expand bus infrastructure must be coupled with a long-term vision for the improved efficiency of the system as a whole. While it is easiest for the City to prioritize routes that pose the least opposition, rather than those that will bring the most benefit to the system, in order to meaningfully improve the bus network and get New Yorkers back onto buses, every single redesigned bus route must feature a combination of bus lanes, bus cameras, and TSP by 2030 to ensure that no riders are left behind.

The City must take these considerations into account at the outset of the route redesign process, as some neighborhoods and bus routes will require substantial redesigns to accommodate features like median and physically separated bus lanes that are proven to improve service. This milestone may even

require the prohibition of private vehicle traffic on key corridors altogether to prioritize transit.

Recommendation: Increase Bus Ridership to 16 percent of New Yorkers' Trips by 2030

New York City's bus fleet is among the largest in the world, yet New Yorkers are choosing to use the system just eight percent of the time. Every year, the people who can afford it, choose other options, increasing congestion on our City's streets and driving further disinvestment. The goals set forth by a comprehensive plan should explicitly aim to increase bus ridership to help the City reach its 80 X 50 goals, the City's commitment to reduce greenhouse gas emissions by at least 80 percent by 2050.

CREATING LIVABLE STREETS

What's Not Working

With 12,750 miles of sidewalks, 74 pedestrian plazas, more than 30,000 acres of parkland, and countless neighborhoods filled with shops, restaurants, and housing, New York City is often cited as the most walkable city in the world.⁵⁸³ More than a quarter of trips for New Yorkers were walking trips and the numbers keep growing in all five boroughs.⁵⁸⁴

Between 2009 and 2015, pedestrian traffic increased 36 percent in the Bronx, 165 percent in Queens Plaza, 293 percent on the Hudson River Greenway, with Old Fulton Street seeing the largest percentage increase in the City at the north entrance to Brooklyn Bridge Park in Dumbo.⁵⁸⁵ Between 2009 and 2015, the number of pedestrians increased 18 percent on weekdays and 31 percent on the weekends citywide.⁵⁸⁶

New York City should be a pedestrian paradise, yet in many parts of the City, pedestrians fight for space in crosswalks and even on sidewalks. From vehicles creating obstructions to spaces so narrow that pedestrians are forced onto the street, our public spaces too often put the needs of vehicles ahead of people. Despite the City's progress in creating pedestrian-friendly spaces in recent years, we remain far behind the curve in the conscious prioritization of pedestrians in the public right of way. Compared to Paris, London, and Madrid's plans to pedestrianize entire city centers as core features of their Vision Zero Plans,⁵⁸⁷ as compared to our efforts to pedestrianize streets, which have been piecemeal and timid, and are often

581 N.Y.C. Department of Transportation, *Green Means Go: Transit Signal Priority in NYC* (2017), available at <http://www.nyc.gov/html/brt/downloads/pdf/brt-transit-signal-priority-july2017.pdf>.

582 Eric Goldwyn and Alon Levy, *A Fantasy Map for Brooklyn's Buses That's Grounded in Reality*, CITYLAB, Nov. 19, 2019, available at <https://www.citylab.com/perspective/2018/11/brooklyn-bus-route-redesign-mta-new-york/575716/>.

583 Charis Atlas Heelan, *The World's Most Walkable Cities*, FROMMER'S, available at <https://www.frommers.com/slideshows/819366-the-world-s-most-walkable-cities> (last accessed Feb. 26, 2019); Laura Laker, *Where is the world's most walkable city?*, GUARDIAN, Sept. 12, 2017, available at <https://www.theguardian.com/cities/2017/sep/12/walkable-city-worlds-most-new-york-melbourne-fes-el-bai>; NYC Plaza Program, *List of Plazas*, available at <https://www1.nyc.gov/html/dot/downloads/pdf/list-of-plazas.pdf>; NYC Parks, *About the New York City Department of Parks & Recreation*, available at <https://www.nycgovparks.org/about> (last accessed Feb. 26, 2019).

584 N.Y.C. Department of Transportation, *Citywide Mobility Survey* (Aug. 2017), available at <http://www.nyc.gov/html/dot/downloads/pdf/nycdot-citywide-mobility-survey-report-2017.pdf>; Winnie Hu, *New York's Sidewalks Are so Packed, Pedestrians Are Taking to the Streets*, N.Y. TIMES, Jun. 30, 2016, available at <https://www.nytimes.com/2016/07/01/nyregion/new-york-city-overcrowded-sidewalks.html>.

585 Winnie Hu, *New York's Sidewalks Are so Packed, Pedestrians Are Taking to the Streets*, N.Y. TIMES, Jun. 30, 2016, available at <https://www.nytimes.com/2016/07/01/nyregion/new-york-city-overcrowded-sidewalks.html>.

586 *Id.*

587 Gersh Kuntzman, *Paris Leads 'Vision Zero' New York With Pedestrianized City Center*, STREETSBLOGNYC, Nov. 15, 2018, available at <https://nyc.streetsblog.org/2018/11/15/paris-leads-vision-zero-new-york-with-pedestrianized-city-center/>.

Creating Livable Streets

The pedestrian plaza at Times Square decreased pedestrian injuries by

40%



from 62 injuries between 2006 & 2008 to 37 between 2014 & 2016.

Injuries to all street users on 9th Ave. in Manhattan decreased by

58%



when DOT installed pedestrian islands, protected bike lanes, and split-phase signals.

Businesses along Pearl Street Plaza in Brooklyn saw a



172%

increase in retail sales as a result of the plaza's implementation which transformed underutilized parking

glossed over or omitted completely in the context of the City's broader Vision Zero goals.⁵⁸⁸ Simply put, the City remains mired in a car culture.

The prioritization of pedestrians in streets makes cities safer, more equitable, more attractive, more sustainable, and even more economically productive. Even with large numbers of pedestrian and concentrated neighborhoods throughout the City, we are far behind the curve when it comes to prioritizing the creation of pedestrian space.

STREET REDESIGNS

Vehicles seriously injure or kill a New Yorker every two hours, with nearly 4,000 New Yorkers seriously injured and 200 killed in traffic crashes each year.⁵⁸⁹ Virtually all of these incidents could be prevented or their harm mitigated through improved street design.

As of March 2018, DOT had completed 356 Vision Zero safety engineering projects, targeting priority locations identified through crash data and pedestrians killed or seriously injured between 2009 and 2013.⁵⁹⁰ According to the City's Vision Zero Four Year Report, these projects "span a wide range of improvements, from the creation of pedestrian plazas to the installation of bike lanes, signals, crosswalks and other forms of traffic calming interventions."⁵⁹¹ According to DOT Commissioner Polly Trottenberg, the City completed a total of 138 street improvement projects in 2018.⁵⁹²

Where they have been implemented, these street redesign elements have seen enormous success. After protected bike lanes, pedestrian islands, and split-phase signals were installed on Ninth Avenue in Manhattan, injuries to all street users decreased by 58 percent.⁵⁹³ After street safety improve-

ments were installed on First and Second Avenue, injuries decreased 37 percent even though bike-traffic volume increased 177 percent. The City recently announced it will double-down on the installation of Leading Pedestrian Intervals (LPIs) which give pedestrians a head start at crosswalks, a commitment to build at least 50 "Vision Zero safety engineering" improvements annually (a goal the City already regularly surpasses), and retune traffic lights to discourage speeding.⁵⁹⁴ These interventions, in particular, have resulted in up to a 50 percent reduction in pedestrian deaths and injuries where they have been implemented.⁵⁹⁵

These small scale interventions have been remarkably successful, but ultimately cover just a tiny fraction of the 47,000 intersections across the City.⁵⁹⁶ Without concrete, long-term goals for redesigning streets and intersections, it is difficult if not impossible to objectively measure the City's progress on transforming our streetscapes for improved safety.

PEDESTRIANIZED SPACES

Over the last decade, the City has made some progress in prioritizing pedestrians, primarily through the implementation of three popular programs spearheaded by DOT: 1) Summer Streets & Weekend Walks; 2) DOT's Plaza Program, and 3) the City's Shared Streets initiative. Hundreds of thousands of

BETWEEN 2009 AND 2015, THE NUMBER OF PEDESTRIANS INCREASED 18 PERCENT ON WEEKDAYS AND 31 PERCENT ON THE WEEKENDS CITYWIDE.

⁵⁸⁸ City of New York Mayor Bill de Blasio, *Vision Zero Action Plan* (2014), available at <https://www1.nyc.gov/assets/visionzero/downloads/pdf/nyc-vision-zero-action-plan.pdf>.

⁵⁸⁹ City of New York, *Vision Zero*, available at <https://www1.nyc.gov/site/visionzero/index.page> (last accessed Feb. 14, 2018).

⁵⁹⁰ City of New York, *Vision Zero: Four Year Report* (Mar. 2018), available at <https://www1.nyc.gov/assets/visionzero/downloads/pdf/vision-zero-year-4-report.pdf>.

⁵⁹¹ *Id.*

⁵⁹² Emma G. Fitzsimmons, *Traffic Deaths in New York City Drop to 200, a Record Low*, N.Y. TIMES, Jan. 1, 2019, available at <https://www.nytimes.com/2019/01/01/nyregion/traffic-deaths-decrease-nyc.html>.

⁵⁹³ *Vision Zero: Four Year Report* (Mar. 2018).

⁵⁹⁴ N.Y.C. DOT, *Borough Pedestrian Safety Action Plans, Vision Zero Update*, Feb. 19, 2019, available at <https://www1.nyc.gov/html/dot/downloads/pdf/vz-2019-update-city-hall.pdf>.

⁵⁹⁵ Gersh Kuntzman, *De Blasio Touts New "Pedestrian Safety" Plans, But They Have a Long Way to Go*, STREETS BLOG NYC, Feb. 19, 2019, available at <https://nyc.streetsblog.org/2019/02/19/de-blasio-touts-new-pedestrian-safety-plans-but-they-have-a-long-way-to-go/>.

⁵⁹⁶ N.Y.C. Department of Transportation, *Traffic Signals*, available at <http://www.nyc.gov/html/dot/html/infrastructure/signals.shtml> (last accessed Feb. 14, 2019).

residents, visitors and businesses have enjoyed the benefits of these programs, which range from reduced injuries and death to significant increases in retail sales. However, these programs are slow-growing and very limited in scope.

Modeled on events that happen all across the globe, Summer Streets closes off streets to vehicle traffic along seven miles of roadways in Manhattan on three consecutive Saturdays in August.⁵⁹⁷ Weekend Walks expanded that concept, to 123 multi-block events spanning all across the City in 2018.⁵⁹⁸

The Plaza Program is built upon the principles of “Tactical Urbanism” which prioritizes short-term, community-based projects, like pop-up parks, which are often low-cost and “offers a way to gain public and government support for investing in permanent projects, inspiring residents and civic leaders to experience and shape urban spaces in a new way.”⁵⁹⁹ These spaces are stewarded by non-profit organizations, which are granted limited opportunities to subsidize their obligations through fundraising, sponsorships, and concessions like kiosks and food markets.⁶⁰⁰ July 2018 marked the ten year anniversary of DOT’s plaza program, which has resulted in the creation of 74 plazas citywide, covering 30-acres in the City’s roadways.⁶⁰¹

These plazas have been remarkably successful in improving pedestrian safety in City streets. At Times Square, pedestrian injuries have plummeted since the implementation of the Times Square pedestrian plaza, falling from an average of 62 injuries per year between 2006 and 2008 to 37 between 2014 and 2016—a 40 percent reduction.⁶⁰² Small businesses also see a huge benefit. Businesses on Pearl Street in Brooklyn, for example, saw a 172 percent increase in retail sales as a result of the implementation of Pearl Street Plaza, which transformed underused parking.⁶⁰³

In a city like New York where people choose to walk over a quarter of the time, the creation of pedestrian spaces can still bring significant environmental benefits to communities by decreasing pollution and improving air quality in dense City centers and environmental justice communities; and increasing permeable surfaces and planted areas that absorb rain water to reduce strain on the City’s combined sewer system and the pollution of the City’s water bodies.

A “shared street” is designed for slow travel speeds where

pedestrians, cyclists, and motorists all share the right of way.⁶⁰⁴ DOT’s Shared Streets initiative began as a temporary, neighborhood-scale approach to prioritizing pedestrians in the public right of way. Shared Streets was not entirely unprecedented, with areas like South Street Seaport and Jamaica Queens prioritizing pedestrians and cyclists in the public right of way.⁶⁰⁵ In August 2016, the City tried the first scaled up Shared Streets event in the Financial District, where DOT limited car traffic on a 60-block section for five hours on a Saturday.⁶⁰⁶ NYPD put up barriers along the edge of the neighborhood with officers on hand to let vehicles through, aided by temporary five mile per hour speed limit signs, giving pedestrians and cyclists priority in the public right of way.⁶⁰⁷ In 2017, DOT tested out the idea again in Chinatown from 5pm to 9pm on the first three Fridays in August.⁶⁰⁸

Overall, the Shared Streets experiments in 2016 should be regarded as an outright success in prioritizing pedestrian safety in densely trafficked neighborhoods. However, since the idea was tested, the City has scaled back its scope significantly from entire neighborhoods in its pilot phases to small slivers of streets in the City’s permanent iterations. A permanent Shared Street in Flatiron was completed in August 2017 along a one-block corridor of Broadway, where pedestrians outnumber motorists twenty to one.⁶⁰⁹ In 2018, the City completed a second shared street on East 43rd Street, between Lexington and Third Avenues in Manhattan.⁶¹⁰ Aside from those two small scale projects, and plans for implementation on Willoughby Street in Brooklyn at some point this year, the City has articulated no plans to expand the program or revisit the bigger, neighborhood-scale shared space concept.⁶¹¹

PUBLIC SPACES

Compared to other cities across the world, New York is far behind the curve with respect to prioritizing pedestrians and cyclists in public spaces. The term “*woonerf*,” roughly translated as “living streets” is a Dutch term coined back in 1960s to describe a street or a group of streets that function as shared public space for pedestrians, cyclists and very slow-moving vehicles.⁶¹² These spaces look remarkably similar to the City’s Shared Street concept. There are more than 6,000 “*woonerf*” zones in the Netherlands.⁶¹³ In England and Wales, these streets are called “home zones;” as of 2013, there were more

597 N.Y.C DOT, About Summer Streets (2018), available at <https://www1.nyc.gov/html/dot/summerstreets/html/about/about.shtml> (last accessed Feb. 28, 2019).

598 N.Y.C Weekend Walks (2018) available at <https://www1.nyc.gov/html/dot/weekendwalks/html/find/find.shtml> (last accessed Feb. 28, 2019).

599 Mike Lydon, Anthony Garcia, *Tactical Urbanism* (Mar. 2015) available at <https://islandpress.org/books/tactical-urbanism>.

600 Ed Janoff, *Reflections on 10 Years of the NYC Plaza Program*, PUBLIC SQUARE, Jul. 24, 2018, available at <https://www.cnu.org/publicsquare/2018/07/24/reflections-10-years-nyc-plaza-program>.

601 *Id.*

602 Krison Capps, *Why More People Didn't Get Hurt in Times Square*, CITYLAB, May 18, 2017, available at <https://www.citylab.com/transportation/2017/05/why-more-people-didnt-get-hurt-in-times-square/527253/>.

603 N.Y.C. Department of Transportation, *Measuring the Street* (2012) available at <http://www.nyc.gov/html/dot/downloads/pdf/2012-10-measuring-the-street.pdf>.

604 N.Y.C DOT, Presentation to Community Board 6:43rd Street Shared Street (Nov. 6, 2017) available at <http://www.nyc.gov/html/dot/downloads/pdf/43rd-street-east-midtown-shared-street-nov2017.pdf>.

605 Stephen Miller, *DOT Studying Shared Space for Three Blocks Next to Willoughby Plaza*, STREETSBLGNYC, Sept. 17, 2014, available at <https://nyc.streetsblog.org/2014/09/17/dot-studying-shared-space-for-three-blocks-next-to-willoughby-plaza/>.

606 David Meyer, *First-Ever “Shared Streets” Brings Stress-Free Streets to Financial District*, STREETSBLGNYC, Aug. 15, 2016, available at <https://nyc.streetsblog.org/2016/08/15/first-ever-shared-streets-brings-stress-free-streets-to-financial-district/>.

607 *Id.*

608 N.Y.C. Department of Transportation, Twitter, Aug. 3, 2017, available at https://twitter.com/NYC_DOT/status/893204333189369856 (last accessed Feb. 14, 2019).

609 N.Y.C. Department of Transportation, *Flatiron Shared Street: CB5 Transportation Committee* (Mar. 2017) available at <http://www.nyc.gov/html/dot/downloads/pdf/flatiron-shared-street-mar2017.pdf>.

610 N.Y.C. DOT, *Borough Pedestrian Safety Action Plans, Vision Zero Update*, Feb. 19, 2019, available at <https://www1.nyc.gov/html/dot/downloads/pdf/vz-2019-update-city-hall.pdf>.

611 <https://www1.nyc.gov/html/dot/downloads/pdf/vz-2019-update-city-hall.pdf> at page 13

612 Paul Hockenos, *Where “Share the Road” is Taken Literally*, N.Y. TIMES, Apr. 26, 2013, available at https://www.nytimes.com/2013/04/28/automobiles/where-share-the-road-is-taken-literally.html?_r=0.

613 *Id.*

than 70 home zones picked from a pool of hundreds of applicants for government funds.⁶¹⁴

Barcelona, which first experimented with neighborhood-scale pedestrian spaces in the city's El Born district back in 1993, took this concept a step further in 2016 with its "Superblocks" concept—a combined 40-acres of the City's rigid street grid that the City plans to transform into pedestrian-first spaces.⁶¹⁵ The City set the goal to free up seven million square meters of space previously dedicated to vehicle traffic and reduce private car and moped use by 21 percent.⁶¹⁶ Superblocks—which are smaller than an actual neighborhood, but larger than a City block—restrict car access significantly within a nine-block area, limiting car traffic to roughly six miles per hour.⁶¹⁷ Cars are limited to those belonging to local residents and businesses are only allowed to load and unload trucks during specific hours.⁶¹⁸ The city set six major goals for the Superblocks; increase sustainable mobility; promote biodiversity and urban green; reduce energy and water consumption; revitalize public spaces; promote social cohesion; and integrate governance processes by involving citizens in the project design and development actions.⁶¹⁹

In Barcelona, the implementation of these Superblocks faced some opposition from residents and businesses, but since its implementation, walking increased in the area by ten percent and cycling by 30 percent.⁶²⁰ Driving in the Superblock as a whole fell by 26 percent, while rates of driving in the internal streets fell by 40 percent.⁶²¹ The neighborhoods with the first Barcelona Superblocks are now "fully equipped with pedestrian improvements, wider sidewalks, and more street furniture—the advantages of which have gradually sunk in and resistance has largely evaporated."⁶²²

A 1993 study informed by 20 years of pedestrian spaces in Germany and in the United Kingdom, including a survey of 400 shopping centers, similarly noted that while retailers often resist pedestrianization efforts at the outset, "they virtually never campaign for the abandonment of a scheme once it has come into operation... once a scheme has been put in place, traders are often the main people to voice a desire to extend its boundaries or period of operation."⁶²³

The closest the City came to pursuing the concept of the Superblock was DOT's 2016 Shared Streets test run in the Financial District, which reduced vehicle access and speeds within a large swath of lower Manhattan's street grid. Commissioner Trottenberg has noted that other downtown neighborhoods

like SoHo could be pursued for future Shared Streets projects.⁶²⁴ Yet, as noted, the City has failed to prioritize this effort, which requires careful planning, extensive and robust community engagement, technical surveys of the area, and perhaps most importantly, political will.

Recommendation: Dramatically expand the City's Plaza Program

The City's Plaza Program has seen remarkable success in increasing pedestrian safety and creating high-quality public spaces in underutilized roadways throughout the City. Much of the program's success relies on partnerships with nonprofit organizations that have deep connections to their neighborhoods. These organizations propose plaza locations and, if selected, are tasked with activating and stewarding the space. However, the citywide program, spearheaded by DOT, is limited to underutilized roadways and does not consider other publicly owned properties throughout the City. Organizations and communities interested in activating a publicly owned parcel just adjacent to a busy roadway that happens to be owned by the Parks Department, for example, have no clear path to pursue these low-cost, high-impact partnerships with the City.

The scope of the program should therefore be expanded to consider and include underutilized properties that are owned or leased by government agencies other than DOT, beginning with the creation of one central portal to collect proposals from a broader set of communities. A streamlined selection and contracting process should then be created to cut across multiple agencies. Through the expansion of this public space stewardship program and inter-agency coordination, the City should aim to double the acreage activated by the program by 2022.

Expanding the program to consider all publicly owned land, has the potential to dramatically expand the amount of safe, pedestrian-only public spaces throughout the City, foster and cultivate interest in public space investments, and create opportunities for the installation of green infrastructure to improve air quality and public health outcomes, among other benefits.

Recommendation: Quadruple the Number of Shared Streets by 2025

Critical pedestrianization efforts in New York City have taken a backseat to small-scale and incremental Vision Zero interventions, despite their success and popularity. Members of the

614 *Id.*

615 Laura Bliss, *Inside a Pedestrian-First 'Superblock,'* CITYLAB, Aug. 7, 2018, available at <https://www.citylab.com/transportation/2018/08/inside-a-pedestrian-first-superblock/566864/>.

616 *Id.*

617 Martha Bausells, *Superblocks to the Rescue: Barcelona's Plan to Give Streets Back to Residents*, THE GUARDIAN, May 17, 2016, available at <https://www.theguardian.com/cities/2016/may/17/superblocks-rescue-barcelona-spain-plan-give-streets-back-residents>.

618 Feargus O'Sullivan, *Barcelona's Car-Taming Superblocks Meet Resistance*, CITYLAB, Jan. 20, 2017, available at <https://www.citylab.com/transportation/2017/01/barcelonas-car-taming-superblocks-meet-resistance/513911/>.

619 Ajuntament de Barcelona, *Ecology, Urban Planning and Mobility: Superblocks*, available at <https://ajuntament.barcelona.cat/ecologiaurbana/en/what-we-do-and-why/quality-public-space/superblocks> (last accessed Feb. 14, 2019).

620 O'Sullivan, Jan. 20, 2017.

621 *Id.*

622 *Id.*

623 Carmen Hass-Klau, *Impact of Pedestrianization and Traffic Calming on Retailing* (1993) Transport Policy, available at <http://publiekeruimte.info/Data/Documents/rc5abtiq/39/Pedestrianization---retailing.pdf>.

624 David Meyer, *DOT's New Flatiron "Shared Space" — a Rarity or the First of Many?*, STREETSLOGNYC, Aug. 9, 2017, available at <https://nyc.streetsblog.org/2017/08/09/dots-new-flatiron-shared-space-a-rarity-or-the-first-of-many/>.

City Council have begun to identify streets in their districts ripe for pedestrianization, many of which have already tested the elimination of vehicular traffic on a temporary basis.

For example, the City could prioritize:

- The Financial District and Chinatown in Council District 1, where DOT tested its temporary Shared Streets program in 2016 and 2017, respectively.
- Williamsburg's Bedford Avenue in Council Districts 33 and 34, which was closed to traffic every Saturday in June in 2013⁶²⁵ and for pop-up and block party events in more recent years,⁶²⁶ is ripe for permanent pedestrianization which would create more open space in an increasingly crowded neighborhood for passive uses.
- Streets in Brooklyn Heights along Joraleman Street, Downtown Brooklyn, South Williamsburg, East Williamsburg and Bushwick could also be pedestrianized without creating significant adverse impacts on traffic in the area.
- In District 38's Sunset Park, active commercial corridors like 8th Avenue that experience extremely high pedestrian volumes on narrow sidewalks are great candidates for further study to test pedestrianization. And in Council District 3, neighborhood groups have long called for the elimination of cars and trucks along 42nd Street.⁶²⁷

The City should prioritize and dramatically expand its Shared Streets program to increase the number of pedestrianized streets that restrict vehicle access to at least a dozen corridors by 2025. The process should start with public engagement and carefully coordinate commercial deliveries, residential vehicle access, waste hauling and street cleaning to ensure the durability and long-term success of the expansion.

Recommendation: Redesign and Make Every Signalized Intersection Accessible by 2030

DOT should install Vision Zero safety and accessibility features—including pedestrian islands, signal-protected crossings, wider sidewalks, accessible pedestrian signals (APS), detectable warnings, curb ramps, and bus and bike lanes—to improve intersection design and make every single intersection with a pedestrian signal accessible to seniors and people with disabilities by 2030. Vision Zero redesigns have improved just a fraction of the City's signaled intersections and the City

has failed to implement simple upgrades at intersections to improve the dismal state of accessibility for people with disabilities and seniors on our streets.

Investing in APS, in particular, is critical for the City's 200,000 residents with vision disabilities.⁶²⁸ Just 2.4 percent of the City's 7,500 intersections with pedestrian signals are accessible.⁶²⁹ The baseline cost to install APS on existing infrastructure is a little over \$8,800 per intersection.⁶³⁰ The most recent class action lawsuit against the City filed by Disability Rights Advocates on behalf of the American Council of the Blind of New York points out that, while New York City has replaced all of its pedestrian signals at least once since 2000, including the installation of countdown clocks in at least 7,500 intersections since 2006, it has only managed to install APS at 75 intersections per year.⁶³¹

Based on DOT's current annual spending, it would take 170 years and cost the City just under \$330 million to complete the job.⁶³² That cost may seem high, but is in fact far less than what the City has paid out to subsidize NYC Ferry expansion just within the last few years.⁶³³ The City must prioritize investments that meet the needs of people with disabilities—who have been ignored and neglected for far too long. The City should fully fund and expedite the installation of APS at every single intersection with a pedestrian signal. Further, the City should install detectable warnings and curb ramps alongside Vision Zero Design Standard upgrades to make every signalized intersection safe and accessible by 2030.

BICYCLES

What's Not Working

Bicycling is the City's fastest growing mode of transportation. DOT and the Department of Health and Mental Hygiene (DOHMH) estimate that over 460,000 cycling trips are made in the City daily, which is about triple the amount of trips taken 14 years ago.⁶³⁴ In 2017, 828,000 New Yorkers rode a bike regularly—140,000 more than just five years ago.⁶³⁵ Nearly a quarter of New Yorkers, 1.6 million, rode a bike at least once in 2017.⁶³⁶

Bicycling in New York City is growing faster than both its econ-

625 Neighbors Allied for Good Growth, *Williamsburg Walks*, available at <http://nag-brooklyn.org/issues/projects/pastprojects/williamsburgwalks/> (last accessed Feb. 22, 2019).

626 Northside Festival, *Block Party 2018*, available at <https://www.northsidefestival.com/blockparty> (last accessed Feb. 22, 2019).

627 Vision42, *About*, available at <http://vision42.org/> (last accessed Feb. 22, 2019).

628 Disability Rights Advocates, *Class Action Lawsuit Alleges NYC Sidewalks Won't be Safe for Blind Pedestrians for 170 years*, June 27, 2018, available at <https://dralegal.org/press/class-action-lawsuit-alleges-nyc-sidewalks-wont-be-safe-for-blind-pedestrians-for-170-years/> (last accessed Feb. 22, 2019).

629 *Id.*

630 N.Y.C. Department of Transportation, *Accessible Pedestrian Signals Program Status Report*, December 2017, available at <http://www.nyc.gov/html/dot/downloads/pdf/2017-aps-program-status-report.pdf> (last accessed Feb. 22, 2019).

631 *Class Action Lawsuit Alleges NYC Sidewalks Won't be Safe for Blind Pedestrians for 170 years*, June 27, 2018.

632 *Id.*

633 Aaron Gordon, et al., *Foamland Security: Ferry Riders Say de Blasio's Subsidies Spare Them Subway Trauma*, Village Voice, May 15, 2018, available at <https://www.villagevoice.com/2018/05/15/foamland-security-ferry-riders-say-de-blasios-subsidies-spare-them-subway-trauma/>.

634 N.Y.C. Department of Transportation, *Cycling in the City*, available at <http://www.nyc.gov/html/dot/html/bicyclists/cyclinginthecity.shtml> (last accessed Feb. 11, 2019).

635 *Id.*

636 *Id.*

Building out NYC's Bike Infrastructure

Cities that make a strong, sustained commitment to promoting bicycle travel can reduce transit carbon emissions by



11%

True protected bike lanes reduce the average risk to cyclists by **74%** and reduce crashes and injuries by **17%**



Protected bike lanes can increase ridership by up to



171%

with about ten percent of new rides drawn from other transit modes.

omy and population.⁶³⁷ Cycling grew in New York City twice as fast as other major U.S. cities between 2010 and 2015.⁶³⁸ During that period, the City saw significant increases in bike commuters.⁶³⁹ The increase was highest in Manhattan with 98 percent growth, followed by Brooklyn with 83 percent, Queens with 59 percent, Staten Island with 22 percent, and the Bronx with 19 percent.

There is an incredible amount of diversity among cyclists in the City. As of 2017, cyclists overall are more likely to be foreign-born than the general population.⁶⁴⁰ In addition, Hispanic riders were represented proportionally among cyclists, making up 29 percent of both cyclists and the City's population.⁶⁴¹

According to DOT, just three percent of all trips taken by New Yorkers in 2017 were taken by bike.⁶⁴² With the share of zero-emissions bicycle trips still in the single digits, we can make significant strides in reducing emissions through investments in bike infrastructure that is proven to increase safety and ridership. A 2015 study out of the Institute for Transportation and Development Policy predicts that if cities make a strong, sustained commitment to promoting bicycle travel, carbon emissions would reduce transportation emissions by 11 percent. This assumes 14 percent of travel is by bike or e-bike by 2050.⁶⁴³ The City must do more to upgrade our cycling infrastructure to increase ridership, make cycling safe for riders, improve health outcomes and reduce the City's overall share of transportation emissions.

BENEFITS OF BIKE INFRASTRUCTURE

Research consistently demonstrates that physically separated bike lanes improve bike safety and reduce cyclist injuries and death significantly.⁶⁴⁴ A 2014 DOT report on protected bike lanes found a 74 percent decrease in average risk to a cyclist, a 22 percent reduction in pedestrian injuries, a 17 percent reduction in crashes with injuries, increased travel times and even increased retail sales along corridors with protected lanes.⁶⁴⁵

Building bike infrastructure also significantly increases ridership, bringing with it enormous potential to reduce congestion and emissions and ease strain on the city's subway system. Protected bike lanes increased ridership anywhere from 21 to 171 percent, with about ten percent of new rides drawn from other modes.⁶⁴⁶ According to Transportation Alternatives' BikeNYC 2020 survey, two-thirds of the City's riders said they would ride more frequently if the City installed more protected bike lanes.⁶⁴⁷ Of those respondents who had never ridden a bicycle in New York, but would not rule out trying in the future, 80 percent cited fear of drivers as a reason why they have not started riding yet, and 67 percent mentioned the lack of protected bike lanes making them feel unsafe.⁶⁴⁸ Research has also consistently shown that women, in particular, are more likely to ride in areas that are connected to bike lanes or greenways, physically separated from traffic.⁶⁴⁹

637 Transportation Alternatives, *BikeNYC 2020* (Nov. 2017), available at https://www.bikenyc2020.org/dl/BikeNYC_2020_Report.pdf.

638 N.Y.C. Department of Transportation, *Cycling in the City: Cycling Trends in NYC*, (Jan. 2017), available at <http://www.nyc.gov/html/dot/downloads/pdf/cycling-in-the-city-jan2017.pdf>.

639 *Id.*

640 N.Y.C. Department of Transportation, *Safer Cycling: Bicycle Ridership and Safety in New York City* (2017), available at <http://www.nyc.gov/html/dot/downloads/pdf/bike-safety-study-fullreport2017.pdf>.

641 *Id.*

642 N.Y.C. Department of Transportation, *Citywide Mobility Survey* (Aug. 2017), available at <http://www.nyc.gov/html/dot/downloads/pdf/nycdot-citywide-mobility-survey-report-2017.pdf>.

643 Angie Schmitt, *How Much Can Bicycling Help Fight Climate Change? A Lot, If Cities Try*, STREETSblogUSA, Nov. 18, 2015, available at <https://usa.streetsblog.org/2015/11/18/how-much-can-bicycling-help-fight-climate-change-a-lot-if-cities-try/>.

644 Michael Anderson, *The First Major Academic Study of Protected Bike Lanes in the U.S. Is Out*, PEOPLE FOR BIKES, Jun. 2, 2014, available at <https://peopleforbikes.org/blog/the-first-major-academic-study-of-protected-bike-lanes-in-the-u-s-is-out/>.

645 N.Y.C. Department of Transportation, *Protected Bicycle Lanes in NYC* (Sept. 2014), available at <http://www.streetsblog.org/wp-content/uploads/2014/09/2014-09-03-bicycle-path-data-analysis.pdf>.

646 Eric Jaffe, *Protected Bike Lanes Aren't Just Safer, They Can Also Increase Cycling*, CITY LAB, Jun. 2, 2014, available at <https://www.citylab.com/transportation/2014/06/protected-bike-lanes-arent-just-safer-they-can-also-increase-cycling/371958/>.

647 Transportation Alternatives, *BikeNYC 2020* (Nov. 2017), available at https://www.bikenyc2020.org/dl/BikeNYC_2020_Report.pdf.

648 *Id.*

649 Carolyn Szczepanski, *Bike Share's Gender Gap*, The League of American Bicyclists, June 27, 2014, available at <https://bikeleague.org/content/bike-shares-gender-gap> (last accessed Feb. 12, 2019).



BIKE LANES

People on bicycles are among the most vulnerable users of the City's streets. A comprehensive report released by DOT in 2017 revealed that between 2006 and 2014, 3,395 cyclists were either killed or severely injured; 89 percent of cyclist fatalities occurred on streets without bicycle facilities, like bike lanes.⁶⁵⁴ While the City has made some progress to increase rates of cycling and improve cyclist safety, progress to invest in the most effective intervention—protected bike lanes—has moved far too slowly.

As of December 2018 there are roughly 1,217 miles of bike lanes in New York City,⁶⁵⁵ up from roughly half that in 2006.⁶⁵⁶ According to DOT, the City had installed 119.5 miles of on-street protected bike lanes as of December 2018, triple what it was in 2014.⁶⁵⁷ However, the de Blasio Administration fell short of its goal to install 30 miles of protected bike lanes

in 2018⁶⁵⁸ by almost 10 miles, completing just 20.9 miles over the course of the year.⁶⁵⁹ At 119 miles, protected bike lanes cover barely two percent of the City's street grid.⁶⁶⁰

Further, the City's definition of "protected" has recently been brought into question, making it difficult to track the administration's progress on building out this essential infrastructure. The National Association of City Transportation Officials defines a protected bike lane as one that offers "physical protection from passing traffic" in the form of "a parking lane or other barrier between the cycle track and the motor vehicle travel lane."⁶⁶¹ Streetsblog recently reported that nearly a quarter of the City's "protected" bike lanes installed in 2018 lacked such a physical barrier, offering cyclists "just green paint and prayer."⁶⁶² DOT responded to that criticism with the following statement: "a protected bike lane is a path intended for the use of bicycles that is physically separated from motorized vehicle traffic by an open space, vertical delineation, or barrier."⁶⁶³

Research consistently demonstrates that physically sepa-

Bike infrastructure is also an extremely cost-efficient way to improve public health outcomes. A Columbia University Mailman School of Public Health study found that the 45.5 miles of the City's bike lanes built in 2015 likely increased the probability of riding a bicycle by nine percent.⁶⁵⁰ The research team's model then determined that over the lifetime of all residents, bike lane construction produced additional costs of only \$2.79 per person while improving public health outcomes even for those who do not ride, making bicycle infrastructure more cost-effective in improving health than many other preventive approaches.⁶⁵¹ Building bike infrastructure in low-income communities of color can also reduce health inequities.⁶⁵² Yet, as noted, Vision Zero improvements have been largely concentrated in wealthier neighborhoods, particular in Manhattan, leaving most communities of color throughout the City without this critical infrastructure.⁶⁵³

⁶⁵⁰ Jing Gu, et al., *The Cost-Effectiveness of Bike Lanes in New York City* (2017), BMJ Journals, available at <https://injuryprevention.bmj.com/content/23/4/239>.

⁶⁵¹ *Id.*

⁶⁵² Philip Noyes, et al, *Cycling in the City: An In-Depth Examination of Bicycle Lane Use in a Low-Income Urban Neighborhood* (2014), Journal of Physical Activity and Health 11 (1): 1-9.

⁶⁵³ Transportation Alternatives, *BikeNYC 2020* (Nov. 2017), available at https://www.bikenyc2020.org/dl/BikeNYC_2020_Report.pdf.

⁶⁵⁴ *Safer Cycling: Bicycle Ridership and Safety in New York City* (2017).

⁶⁵⁵ City of New York, *Vision Zero: Mayor de Blasio Announces New York City Added Over Twenty Miles of Protected Bicycle Lanes in 2019*, available at <https://www1.nyc.gov/office-of-the-mayor/news/604-18/vision-zero-mayor-de-blasio-new-york-city-added-twenty-miles-protected-bicycle> (last accessed Feb. 11, 2019).

⁶⁵⁶ Winnie Hu, *More New Yorkers Opting for Life in the Bike Lane*, N.Y. TIMES, Jul. 30, 2017, available at www.nytimes.com/2017/07/30/nyregion/new-yorkers-bike-lanes-commuting.html

⁶⁵⁷ N.Y.C. Department of Transportation, *Protected Bicycle Lanes in NYC* (Sept. 2014), available at <http://www.streetsblog.org/wp-content/uploads/2014/09/2014-09-03-bicycle-path-data-analysis.pdf>.

⁶⁵⁸ *Id.*

⁶⁵⁹ Gersh Kuntzman, *De Blasio Built 20.9 Miles Protected Bike Lanes This Year—Yet Falls Short of Record*, STREETSBLGNYC, Dec. 19, 2018, available at <https://nyc.streetsblog.org/2018/12/19/de-blasio-falls-short-of-record-miles-of-protected-bike-lanes/>.

⁶⁶⁰ City of New York, *Infrastructure: Sustainable Streets: 2013 and Beyond* (2013) available at <http://www.nyc.gov/html/dot/downloads/pdf/2013-dot-sustainable-streets-5-infrastructure.pdf>.

⁶⁶¹ National Association of City Transportation Officials, *One-Way Protected Cycle Tracks*, available at <https://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/one-way-protected-cycle-tracks/> (last accessed Feb. 11, 2019).

⁶⁶² Gersh Kuntzman, *FACT CHECK: City Did Not Build 20.9 Miles of Protected Bike Lanes This Year*, STREETSBLGNYC, Dec. 20, 2018, available at <https://nyc.streetsblog.org/2018/12/20/fact-check-city-did-not-build-20-9-miles-of-protected-bike-lanes-this-year/>.

⁶⁶³ *Id.*

rated bike lanes are the most effective ways to improve bike safety and reduce cyclist injuries and death significantly.⁶⁶⁴ A 2014 DOT report on protected bike lanes found a 74 percent decrease in average risk to a cyclist, a 22 percent reduction in pedestrian injuries, a 17 percent reduction in crashes with injuries, increased travel times and even increased retail sales along corridors with protected lanes.⁶⁶⁵

Building bike lane infrastructure also significantly increases ridership, bringing with it enormous potential to reduce congestion, emissions, and to ease strain on the City's subway system. Protected bike lanes can increase ridership anywhere from 21 to 171 percent, with about 10 percent of new rides drawn from other modes.⁶⁶⁶ According to Transportation Alternatives' BikeNYC 2020 survey, two-thirds of the City's riders said they would ride more frequently if the City installed more protected bike lanes.⁶⁶⁷ Of those respondents who had never ridden a bicycle in New York, but would not rule out trying in the future, 80 percent cited fear of drivers as a reason why they have not started riding yet, and 67 percent mentioned the lack of protected bike lanes making them feel unsafe.⁶⁶⁸ Research has also consistently shown that women, in particular—who are vastly underrepresented among cyclists in the City—are more likely to ride in areas that are connected to bike lanes or greenways, physically separated from traffic.⁶⁶⁹

The City's modest bike lane infrastructure goals are often bogged down even further by opposition from communities and elected officials. In Park Slope, two organizations sued the City to remove the Prospect Park West bike lane in 2011.⁶⁷⁰ The lawsuit was initially dismissed and finally dropped in 2016.⁶⁷¹ A protected bike lane that was the result of nearly a decade of advocacy from cyclists in Manhattan on Dyckman St. was removed this past summer, in response to "extensive feedback from the community."⁶⁷² Bike lanes along Skillman Ave. in Queens,⁶⁷³ and Morris Park Ave. in the Bronx⁶⁷⁴ have also faced significant opposition in recent years.

A COMMITMENT TO PROMOTING BICYCLE TRAVEL COULD REDUCE TRANSPORTATION EMISSIONS BY UP TO 11 PERCENT.

BIKE SHARE

Citi Bike, the City's bike share network saw 17.7 million trips in 2018.⁶⁷⁵ In addition to encouraging new users to try cycling, it has brought with it some increased safety for bike riders. DOT's 2017 study found that rates of cyclists who were killed or severely injured (KSI) dropped in areas where Citi Bike was available.⁶⁷⁶ In late 2018, the de Blasio Administration announced it would significantly expand Citi Bike, doubling its footprint over the next five years and tripling its number of bikes from 12,000 to nearly 40,000, some of which will be pedal-assist e-bikes.⁶⁷⁷ The City is also testing out dock-less bike share with a handful of private companies, including Citi Bike, in areas of the City not currently served by the docked Citi Bike system.⁶⁷⁸ Dock-less systems have the potential to significantly and rapidly expand access to bike share across the City without the need to install permanent docking infrastructure. However, this pilot has faced some significant challenges.⁶⁷⁹

The introduction of pedal-assist e-bikes to our bike share program, combined with the expansion of Citi Bike's service area, may also serve to significantly increase rates of cycling in the City and begin to replace outer borough car trips to the Manhattan core. A study out of Portland State University in 2013 found that e-bikes can result in more bike trips, longer bike trips, and increase the diversity of people bicycling including people with a disability or chronic injury.⁶⁸⁰ According to Julie Wood, Vice President at Motivate, "once users get to the point where they're comfortable taking three to five mile trips,

664 Michael Anderson, *The First Major Academic Study of Protected Bike Lanes in the U.S. Is Out*, PEOPLE FOR BIKES, Jun. 2, 2014, available at <https://peopleforbikes.org/blog/the-first-major-academic-study-of-protected-bike-lanes-in-the-u-s-is-out/>.

665 N.Y.C. Department of Transportation, *Protected Bicycle Lanes in NYC* (Sept. 2014), available at <http://www.streetsblog.org/wp-content/uploads/2014/09/2014-09-03-bicycle-path-data-analysis.pdf>.

666 Jaffe, Jun. 2, 2014.

667 BikeNYC 2020 (Nov. 2017).

668 *Id.*

669 Szczepanski, June 27, 2014.

670 Ben Fried, *Good Riddance to the Prospect Park West Bike Lane Lawsuit*, STREETS BLOG NYC, Sept. 22, 2016, available at <https://nyc.streetsblog.org/2016/09/22/good-riddance-to-the-prospect-park-west-bike-lane-lawsuit/>.

671 *Id.*

672 David Meyer, *Unprecedented! DOT Scraps Protected Bike Lane on Dyckman Street*, STREETS BLOG NYC, Aug. 31, 2018, available at <https://nyc.streetsblog.org/2018/08/31/unprecedented-dot-scraps-protected-bike-lane-on-dyckman-street/>.

673 Dave Colon, *Sunnyside's Protected Bike Lanes Are a Go with De Blasio's Support*, CURBED NEW YORK, Jul. 12, 2018, available at <https://ny.curbed.com/2018/7/12/17565718/queens-sunnyside-bike-lane-installation-bill-de-blasio>.

674 Gersh Kuntzman, *DOT Will Move Ahead with Ambitious Safety Plan for Bronx Killing Zone*, STREETS BLOG NYC, Dec. 6, 2018, available at <https://nyc.streetsblog.org/2018/12/06/dot-will-move-ahead-with-ambitious-safety-plan-for-bronx-killing-zone/>.

675 Citi Bike, *Citi Bike Monthly Operating Reports*, available at <https://www.citibikenyc.com/system-data/operating-reports> (last accessed Feb. 14, 2019).

676 *Vision Zero Four Year Report* (March 2018).

677 Citi Bike, *Citi Bike Is Going to Dramatically Expand*, available at <https://www.citibikenyc.com/blog/citi-bike-is-going-to-dramatically-expand> (last accessed Feb. 14, 2019).

678 David Meyer, *DOT Picks Five Companies to Run Dockless Bike-Share Pilots*, STREETS BLOG NYC, Jul. 3, 2018, available at <https://nyc.streetsblog.org/2018/07/03/dot-picks-five-companies-to-run-dockless-bike-share-pilots/>.

679 Gersh Kuntzman, *Eyes on the Street: Pilot Dockless Bike Share on Staten Island is a Joke*, STREETS BLOG NYC, Sept. 10, 2018 <https://nyc.streetsblog.org/2018/09/10/eyes-on-the-street-pilot-dockless-bike-share-on-staten-island-is-a-joke/>; Ben Fried, *A Hit-and-Miss Debut for Dockless Citi Bikes in the Bronx*, STREETS BLOG NYC, Aug. 16, 2018, available at <https://nyc.streetsblog.org/2018/08/16/a-hit-and-miss-debut-for-dockless-citi-bikes-in-the-bronx/>; and Gersh Kuntzman, *Rockaway Dockless Bike Share Pilot Suffers Blow as Pace Pulls Out*, STREETS BLOG NYC, Sept. 27, 2018, available at <https://nyc.streetsblog.org/2018/09/27/rockaway-dockless-bike-share-pilot-suffers-blow-as-pace-pulls-out/>.

680 John McAthur, et al., *E-Bikes in North America: Results from an Online Survey*, Transportation Research Board (Nov. 15 2013), available at https://ppms.trec.pdx.edu/media/project_files/E-bikes_in_North_America.pdf.

that's when these vehicles start really replacing car trips."⁶⁸¹ However, the increased rates for the use of Citi Bike's e-bikes proposed by Motivate since Lyft acquired its operations may limit New Yorkers' interest and access to this new feature.⁶⁸²

These investments to expand the City's bike share network are critical. But with protected bike lane infrastructure covering just a tiny fraction of the City's street grid, the City's cyclists remain incredibly vulnerable to vehicle traffic.

BARRIERS TO BIKE RIDING

While there is an incredible amount of diversity among cyclists in the City, immigrants and people of color, in particular, face significant barriers to riding. In addition to the City's failure to provide lifesaving bike infrastructure in communities of color, a 2016 study of cyclists in New Jersey found that in Black and Latino communities, fears of assault, theft, and police profiling may also form a significant barrier to increased riding. Further, a lack of political power often prevents Black and Latinx riders from having a fair share of input in the bicycle planning process.⁶⁸³

In 2016, *Intersectional Riding* analyzed NYPD data on court summonses and ticketing of commercial and non-commercial bicycling, finding that the NYPD tends to target cyclists of color both where they live and work.⁶⁸⁴ This court summons data is made available on the City's Open Data portal as a result of Local Law 11 of 2012 passed by City Council.⁶⁸⁵ *Intersectional Riding's* analysis found higher rates of non-commercial ticketing in communities of color than majority white communities, and higher rates of commercial ticketing in majority white neighborhoods than communities of color.⁶⁸⁶

The NYPD has also faced significant criticism for its culture of victim-blaming, leaking investigation conclusions to the press, and responding to fatalities by stepping up enforcement on cyclists rather than drivers. Per Transportation Alternative's 2017 report, the "the culture gap is evident in Police Department's policy of responding to bicyclist fatalities with ticket stings that target bicycle riders instead of lawless drivers, and their trend, in the aftermath of crashes, of leaking pre-investigation conclusions to the press, and blaming bicyclists for their own deaths."⁶⁸⁷

Unfortunately, the City has continued to pursue its misguided policy of cracking down on e-bike users, who are predominantly immigrant delivery workers, rather than the employers that are legally liable for the \$500 fines.⁶⁸⁸ For example, following the tragic death of a cyclist in February 2019 near

Times Square, the NYPD reportedly targeted cyclists and even issued an infraction to an adult Citi Bike rider for failing to wear a helmet, which is not illegal.⁶⁸⁹

Recommendations: Require Minimum Design Standards for Protected Bike Lanes

Nearly a quarter of the City's "protected" bike lanes installed in 2018 reportedly lacked a physical barrier, offering cyclists "just green paint and prayer."⁶⁹⁰ Without clear design standards and minimum thresholds for a "protected" lane that include physical barriers to protect riders from vehicles, we cannot hold the City accountable to meet bike infrastructure goals.

These design standards should be coupled with the release of more detailed public data that provides comprehensive information about on-street cycling infrastructure to help cyclists plan the safest route. Making this detailed data available to the public would even allow for app developers to offer an "avoid unprotected bike lanes" option in commonly used route-planning features to encourage ridership over time.

Recommendation: Install At Least 50 Miles of Protected Bike Lanes Per Year

True protected bike lanes are proven to reduce cyclist injuries and death, reduce car trips, strain on the subway system, and improve health disparities and public health outcomes even for those who do not ride. Yet, the City's progress on installing protected bike lanes has been slow-moving and piecemeal, at best, resulting in a disjointed, disconnected system. Further, a lack of bike infrastructure in low-income communities of color has left these neighborhoods without critical and lifesaving infrastructure, potentially exacerbating transportation and health disparities overall. Informed by new design standards for true protected lanes, the City should significantly increase the installation of this critical, life-saving infrastructure to at least 50 miles per year.

Recommendation: Complete a Fully Connected Bike Network By 2030

The connectivity of our bike infrastructure is critical to its success. Annual goals for protected bike lanes must all contribute to the achievement of this long-term goal to serve every square mile of the City's street grid with bike infrastructure by 2030. This goal will ensure that neighborhoods currently underserved by transportation—particularly the City's low-income communities of color and environmental justice communities—are provided with access to this life-saving infrastructure.

681 Patrick Sisson, *Why Electric Bikes Can Provide A Big Jolt to Bikeshare Systems*, CURBED, Jun. 28, 2018, available at <https://www.curbed.com/2018/6/28/17515758/electric-bike-share-cycling-city-transportation>.

682 Amy Plitt, *Citi Bike will increase e-bike fleet by 4,000-and add \$2 surcharge*, CURBED, Feb. 28, 2019, available at <https://ny.curbed.com/2019/2/28/18244989/citi-bike-new-york-electric-bike-surcharge>.

683 Charles Brown, MPA, *Fear: A Silent Barrier to Bicycling in Black and Hispanic Communities* (Sept. 2016), ITE, available at http://njbikeped.org/wp-content/uploads/2016/09/Fear_A-Silent-Barrier-to-Bicycling-in-Black-and-Hispanic-Communities_Sept2016.pdf.

684 Intersectional Riding, *Biking While Working Immigrant* (Dec. 2016) available at <http://www.intersectionalriding.com/2016/12/14/biking-while-working-immigrant/>.

685 N.Y.C. Open Data, *Criminal Court Summonses*, available at <https://data.cityofnewyork.us/Public-Safety/Criminal-Court-Summonses/j8nm-zs7q> (last accessed Feb. 14, 2019).

686 *Biking While Working Immigrant* (Dec. 2016).

687 *BikeNYC 2020* (Nov. 2017).

688 Christopher Robbins, *NYPD Tells Officers: Stop Fining E-Bike Delivery Cyclists*, GOTHAMIST, Jan. 3, 2019, available at http://gothamist.com/2019/01/03/e-bike_summons_tickets_nypd.php.

689 Jake Offenhardt, *Amid Uptick in Cyclist and Pedestrian Deaths, NYPD is Ticketing Cyclists in Bike Lanes*, GOTHAMIST, Feb. 7, 2019, available at http://gothamist.com/2019/02/07/vision_zero_cyclist_nypd.php.

690 Gersh Kuntzman, *FACT CHECK: City Did Not Build 20.9 Miles of Protected Bike Lanes This Year*, STREETSBlogNYC, Dec. 20, 2018, available at <https://nyc.streetsblog.org/2018/12/20/fact-check-city-did-not-build-20-9-miles-of-protected-bike-lanes-this-year/>.

Recommendation: Increase Bike Ridership To 14 Percent of New Yorkers' Trips By 2050

We can make significant strides in reducing emissions through investments in bike infrastructure. If cities reach this long-term goal, we can reduce transportation emissions by 11 percent.⁶⁹¹ The City should explicitly set this goal to help reach our 80 x 50 goals through reductions in transportation emissions.

CONGESTION AND PRIORITIZING CARS

What's Not Working

It is clear the City's streets prioritize cars and vehicles. But beyond that basic fact, there is no clear rationale in how the City manages space in the public right of way. Driving is on the rise; transit riders are increasingly choosing for-hire vehicles over public transit; truck traffic continues to overly burden the City's communities of color and congestion costs the City roughly \$20 billion per year in lost economic activity. New York City is the fourth most congested City in the United States.⁶⁹² Clearly, we must rethink the way our streets prioritize and manage traffic.

CONGESTION

Driving is on the rise in New York City. In 2005, there were 1,672,758 registered vehicles in New York City. By the end of 2017, there were 1,923,041 cars registered to City residents.⁶⁹³ While travel speeds continue to plummet in the City, private-car registration is outpacing population growth.⁶⁹⁴ Even those who don't own cars are increasingly turning to vehicle use. Not surprisingly, the number daily Uber and Lyft trips grew from 60,000 to 600,000 from 2015 to 2018, which almost exactly mirrors the City's 580,000 decline in daily transit ridership.⁶⁹⁵

The increase in car ownership and for-hire vehicle use is contributing to increasing congestion across the City. This impact is particularly acute in the Central Business District, where between 2012 and 2017, travel speeds declined from 9.1 miles per hour to 7.1 miles per hour.⁶⁹⁶ According to a 2019 study, New Yorkers lose an average of 133 hours per year in congestion.⁶⁹⁷

Congestion is estimated to cost the New York metro area economy \$100 billion over the next five years.⁶⁹⁸ Each year, we lose \$9.17 billion in lost travel time, \$2.42 billion in increased operating costs by industry, \$2.54 billion in excess fuel and vehicle operating costs, and \$5.85 billion in total lost revenue.⁶⁹⁹

The environmental impact of transportation, and primarily on-road transportation, is significant, accounting for 30 percent of the City's Greenhouse Gas Emissions.⁷⁰⁰ Between 2005 and 2015, the City reduced transportation emissions by just five percent, accounting for a 1.2 percent reduction in emissions overall.⁷⁰¹

For-hire Vehicles

E-dispatch companies, such as Uber and Lyft, have risen in popularity in the last several years, as they created a way to arrange a trip and payment at the tap of a button. They have become a quick and easy alternative to the deteriorating subway and buses—for those who can afford it. As of March 2018, the New York City Taxi and Limousine Commission had issued licenses to approximately 130,000 vehicles, and were processing approximately 2,000 vehicle applications per month.⁷⁰² Since 2016, the City added 44,000 for-hire vehicle registrations in 2016, more than doubling the number since 2010.⁷⁰³

A 2017 report by transportation consultant Bruce Schaller on growing congestion in the City pointed to the for-hire vehicle sector as a significant contributor.⁷⁰⁴ Notably, the report found that “in 2015, and to an even greater extent in 2016, growth in taxi and for-hire ridership outpaced growth in transit (subway and bus) ridership” and is now the leading source of growth in non-personal vehicle travel in the city.⁷⁰⁵ This growth is particularly significant because in the previous two decades the transit system was able to absorb nearly all of the growth of travel in the City generated by increases in population and economic activity, largely avoiding the increases in congestion that would have otherwise been inevitable.⁷⁰⁶

In August 2018, the City Council passed legislation that paused TLC's ability to issue new for-hire vehicle licenses for one year.⁷⁰⁷ During this time TLC and DOT will study congestion in the for-hire vehicle sector and develop ways to maxi-

691 Angie Schmitt, *How Much Can Bicycling Help Fight Climate Change? A Lot, If Cities Try*, STREETSLOGUSA, Nov. 18, 2015, available at <https://usa.streetsblog.org/2015/11/18/how-much-can-bicycling-help-fight-climate-change-a-lot-if-cities-try/>.

692 Noah Manskar, *Only 3 U.S. Cities Have Worse Traffic Than NYC*, Patch, Feb. 12, 2019, available at <https://patch.com/new-york/new-york-city/only-3-u-s-cities-have-worse-traffic-nyc>.

693 David Meyer, *Car Ownership Continues To Rise Under Mayor de Blasio*, STREETSLOGNYC, Oct. 3, 2018, available at <https://nyc.streetsblog.org/2018/10/03/car-ownership-continues-to-rise-under-mayor-de-blasio/>.

694 Danielle Furfaro, et al., *Why Driving in NYC has somehow gotten even slower*, N.Y. Post, Jun. 15, 2018, available at <https://nypost.com/2018/06/15/why-driving-in-nyc-has-somehow-gotten-even-slower/>.

695 Angie Schmitt, *Study: Uber and Lyft Caused U.S. Transit Decline*, STREETSLOGUSA, Jan. 22, 2019, available at <https://usa.streetsblog.org/2019/01/22/study-uber-and-lyft-are-responsible-for-u-s-transit-decline/>.

696 NYC Department of Transportation, *New York City Mobility Report* (June 2018), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2018-screen-optimized.pdf>.

697 Manskar, Feb. 12, 2019.

698 Fix N.Y.C. Advisory Panel, *Fix NYC Advisory Panel Report*, (Jan. 2018) available at <http://www.hntb.com/HNTB/media/HNTBMediaLibrary/Home/Fix-NYC-Panel-Report.pdf>.

699 Partnership for New York City, *Congestion in Metro New York* (Jan. 2018), available at <http://pfny.org/wp-content/uploads/2018/01/2018-01-Congestion-Pricing.pdf>.

700 Mayor's Office of Sustainability, *Inventory of New York City Greenhouse Gas Emissions in 2015* (April 2017), available at https://www.dec.ny.gov/docs/administration_pdf/nycgghg.pdf.

701 *Id.*

702 N.Y.C. Council Fiscal Year 2019, Preliminary Budget Hearing For-Hire Vehicles Committee, Testimony of TLC Commissioner Meera Joshi, (March 8, 2018).

703 N.Y.C. Department of Transportation, *NYC Mobility Report* (October 2016), available at <http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2016-print.pdf>.

704 Bruce Schaller, *Unsustainable? The Growth of App-Based Ride Services and Traffic, Travel and the Future of New York City* (Feb. 27, 2017), available at <http://www.schallerconsult.com/rideservices/unsustainable.pdf>; Report Overview, available at <http://www.schallerconsult.com/rideservices/unsustainable.htm#overview>.

705 *Id.*

706 *Id.*

707 Local Law 2018/147.

mize the efficiency of vehicles that operate through “high volume services,” which dispatch 10,000 or more trips per day.⁷⁰⁸

Trucks and Deliveries

While the City has sought to mitigate some impacts of congestion caused by FHV, other forms of traffic continue to grow largely unabated. As online shopping increases in popularity, so do deliveries. Now, 41 percent of New Yorkers receive a delivery at their home at least a few times a week.⁷⁰⁹

The City’s regulation of trucks and delivery traffic is erratic. Trucks on City streets raise a host of environmental, traffic congestion, road maintenance, and pedestrian safety issues, especially when they do not comply with the City’s designated truck route rules. That is why the Council passed legislation requiring the City to study and report on truck route compliance and pedestrian and cyclist safety along truck routes. The City was due to deliver that report to the Council in June 2018, but has not yet fulfilled that obligation.

In 2017, the de Blasio administration announced a “Congestion Action Plan” which consisted of “the creation of new moving lanes in Midtown, clearing curbs during rush hours, expanding NYPD enforcement of block-the-box violations, limiting curbside access in crowded corridors, and bringing coordinated attention to recurring traffic spots on local highways.”⁷¹⁰ The City expected a ten percent improvement in speeds in Midtown.⁷¹¹ However, the City failed to meaningfully include small business owners in the planning of the program and completed very little proactive outreach to the affected stakeholders, stoking opposition to the program.⁷¹² The “Clear Curbs” element of the plan was abandoned in August 2018.⁷¹³

Meanwhile, communities of color continue to suffer from an unfair share of truck traffic that causes health disparities and diminishes quality of life. Diesel buses and trucks—which are a major contributor of greenhouse gases—disproportionately impact air quality in these communities. Three quarters of the City’s putrescible and construction/demolition solid waste



travel through a handful of low-income and communities of color in the South Bronx, North Brooklyn and Southeast Queens.⁷¹⁴ A truck routing study by the City’s Department of Sanitation and Business Integrity Commission found that a large share of the 23 million miles traveled by private waste trucks are concentrated along the Gowanus Parkway, Brooklyn-Queens Expressway, and Long Island Expressway, in all of the Bronx and in parts of South Brooklyn and Southeast Queens, compromising the health of the people who live and work along that route.⁷¹⁵ Similarly, the MTA operates 28 bus depots across the five boroughs, 75 percent of which are sited in communities of color.⁷¹⁶ Of the 5,700 buses in operation, 40 percent are diesel-fueled. As the largest bus fleet in the United States, MTA buses emit 577,290 metric tons of greenhouse gases annually.⁷¹⁷

The concentration of truck routes, highways, bus depots and waste transfer stations in the City’s low-income communities of color has acute and harmful impacts on air quality and health in these neighborhoods. Rates of asthma-related hospitalization for children, youth and adults are higher in these environmental justice communities than any other part of the City.⁷¹⁸ Exposure to the particulate matter caused by die-

⁷⁰⁸ *Id.*

⁷⁰⁹ NYC Mobility Report (October 2016).

⁷¹⁰ City of New York, *Mayor de Blasio Announces Initiatives to Help Ease Congestion*, available at <https://www1.nyc.gov/office-of-the-mayor/news/673-17/mayor-de-blasio-initiatives-help-ease-congestion/#/0> (last accessed Feb. 14, 2019).

⁷¹¹ Dan Rivoli, *Mayor de Blasio’s Traffic Congestion Plan Fails to Impress During Test Run*, DAILY NEWS, Apr. 11, 2018, available at <https://www.nydailynews.com/new-york/mayor-de-blasio-traffic-congestion-plan-fails-impress-article-1.3927204>.

⁷¹² Laura Shepard, *City Abandons “Clear Cabs” Program That Reduced Traffic Congestion and Made Roosevelt Island Safer*, STREETSBlogNYC, Aug. 20, 2018, available at <https://nyc.streetsblog.org/2018/08/20/city-abandons-clear-curbs-program-that-reduced-traffic-congestion-and-made-roosevelt-avenue-safer/>.

⁷¹³ Dan Rivoli, *Mayor de Blasio’s Traffic Congestion Plan Fails to Impress During Test Run*, DAILY NEWS, Apr. 11, 2018, available at <https://www.nydailynews.com/new-york/mayor-de-blasio-traffic-congestion-plan-fails-impress-article-1.3927204>.

⁷¹⁴ Transform Don’t Trash NYC, *Clearing the Air: How Reforming the Commercial Waste Sector Can Address Air Quality Issues in Environmental Justice Communities* (2016), available at http://transformdonttrashnyc.org/wp-content/uploads/2016/09/Final-draft-v3_TDT-Air-Qual-Report_Clearing-the-Air-1.pdf.

⁷¹⁵ *Id.*

⁷¹⁶ New York City Environmental Justice Alliance, *NYC Climate Justice Agenda: Midway to 2030* (April 2018), available at <http://www.nyc-eja.org/wp-content/uploads/2018/04/NYC-Climate-Justice-Agenda-Final-042018-1.pdf>.

⁷¹⁷ *Id.*

⁷¹⁸ N.Y.C. Department of Health and Hygiene, *Environmental & Health Data Portal*, available at <http://a816-dohbep.nyc.gov/IndicatorPublic/QuickView.aspx> (last accessed Feb. 14, 2019).

self-burning vehicles exacerbates respiratory illness, and that exposure to particulate matter is responsible for more than 3,000 deaths, 2,000 hospital admissions and 6,000 emergency room visits annually.⁷¹⁹

In the sanitation sector, the City has made some progress to address the concentration of waste transfer stations in overburdened environmental justice communities. The 2006 Solid Waste Management Plan brought more distributional fairness to the siting of waste facilities⁷²⁰ and the recent enactment of Local Law 152 of 2018 will reduce the permitted capacity of waste transfer stations in the most overburdened neighborhoods.⁷²¹ The Mayor and Council have committed to reform the City's commercial waste sector.⁷²² "Commercial Waste Zones: A Plan to Reform, Reroute, and Revitalize Private Carting in NYC" provides a path toward creating a safer and more efficient commercial waste collection system that will reduce truck traffic throughout the city to reduce air pollution, emissions, traffic and safety hazards on City streets among other benefits for workers, carters, and businesses alike.⁷²³

PARKING POLICIES

The City's parking policies and meter rates are incredibly inconsistent across the City. Meters in Manhattan's core area come along with the highest hourly rates. Yet, it remains free to park on streets just adjacent to those meters within the same parking rate zone.⁷²⁴ Meanwhile, Manhattanites are given special exemption from the current tax on rental parking spaces, lowering the rate from 18 percent to roughly ten percent, while garage users from the outer boroughs who arguably have less access to public transit have to pay full rates.⁷²⁵

Further, the City does not even know how much parking is already available on the City's streets, making it nearly impossible to manage as a resource or assess its efficiency as a dedicated space in the public right of way.⁷²⁶ According to an extremely rough estimate by parking policy expert Rachel Weinberger based on her field work in Park Slope and Jackson Heights, there are between 3.4 and 4.4 million on-street parking spaces in New York City.⁷²⁷ Assuming the area of a given parking space is roughly 155 square feet,⁷²⁸ which means that between 18 and 25 square miles of the City's finite street grid is used for car storage, which accounts for about six to eight percent of our land overall and a far larger percent of the City's street grid.

Recommendation: Rein in Placard Abuse

Placards allow holders to avoid parking tickets by utilizing spaces that are restricted, such as loading and no standing zones, or metered spots. There are more than 100,000 parking placards issued to City employees for their personal vehicles. In addition to City-issued permits, counterfeit permits and "unofficial" placards are used to flout parking rules, such as official NYPD or Fire Department gear, union cards, or other items to suggest an affiliation with a City agency.

While the large number of both official and unofficial placards frustrates efforts to manage parking, the immediate harm caused by placards is their often unchecked, illegal use. No placard allows for parking in bike and bus lanes, on sidewalks, in crosswalks, or blocking fire hydrants, yet these uses are common in many areas of the City.

A culture of disregard leads to dangerous abuses. Blocking sidewalks, bike lanes, fire hydrants, and crosswalks put pedestrians and cyclists at risk. Blocking bus lanes increases congestion and can slow the commutes of thousands.

Legislation before the Council would help to reduce the number of placards, bring order and accountability to the system, increase enforcement, and target the most dangerous parking practice by requiring enforcement officers to call for towing of any vehicle blocking a bike lane, bus lane, crosswalk, or fire hydrant.

Recommendation: Overhaul Commercial Loading Zones, Truck Routes, and Parking Policies by 2025

A failure to sufficiently address the commercial loading zones, truck routes, and parking policies that help keep our City running will only foster chaos on our streets and frustration among businesses and residents. The City should start this process by completing a study of on-street parking availability and commercial loading zone locations, to ensure that the planning process moving forward is informed by concrete, objective data rather than public perception of parking availability alone.

This should supplement the truck route study that was due to the Council in June 2018. That overdue study should also be broadened to include concrete plans to significantly expand the City's FreightNYC initiative, which is designed to reduce the City's overall dependence on trucking.⁷²⁹ Residents and businesses that currently use the City's truck routes, on-street parking, and loading zones, must be involved in any reform process before changes are made. Only with sufficient plan-

719 NYC Climate Justice Agenda: Midway to 2030 (April 2018).

720 New York City Department of Sanitation, *Solid Waste Management Plan*, available at <https://www1.nyc.gov/assets/dsny/site/resources/reports/solid-waste-management-plan> (last accessed Feb. 14, 2019).

721 Libby Torres, *City Council Will Try to Curb Environmental Racism on Wednesday*, GOTHAMIST, Jul. 16, 2018, available at http://gothamist.com/2018/07/16/landmark_garbage_bill_takes_aim_at.php.

722 New York City Department of Sanitation, *Commercial Waste Zones Implementation*, available at <https://www1.nyc.gov/assets/dsny/site/resources/reports/commercial-waste-zones-plan> (last accessed Feb. 14, 2019).

723 *Id.*

724 N.Y.C. Department of Transportation, *Parking Rate Map*, available at <https://nycdot.maps.arcgis.com/apps/webappviewer/index.html?id=d12f03e992d741f89bd3b28d1c106dec> (last accessed Feb. 14, 2019).

725 City of New York, *Manhattan Resident Parking Tax Exemption*, available at <https://www1.nyc.gov/site/finance/benefits/vehicles-manhattan-resident-parking-tax-exemption.page> (last accessed Feb. 14, 2019).

726 Adele Peters, *See Just How Much of a City's Land Is Used for Parking Spaces*, FAST COMPANY, Jul. 20, 2017, available at <https://www.fastcompany.com/40441392/see-just-how-much-of-a-citys-land-is-used-for-parking-spaces>.

727 Noah Kazis, *New York Has 81,875 Metered Parking Spaces and Millions of Free Ones*, STREETS BLOG NYC, Mar. 22, 2011, available at <https://nyc.streetsblog.org/2011/03/22/new-york-has-81875-metered-parking-spaces-and-millions-of-free-ones/>.

728 New York City Planning Commission, N 070509 ZRY, Oct. 31, 2007, available at <https://www1.nyc.gov/assets/planning/download/pdf/about/cpc/070509.pdf> (last accessed Feb. 14, 2019).

729 N.Y.C. Economic Development Corporation, *FREIGHTNYC: Goods for the Good of the City* (2018) available at https://www.nycedc.com/sites/default/files/filemanager/Programs/FreightNYC_book__DIGITAL.pdf.

ning and public engagement will such an overhaul succeed. In close collaboration with Small Business Services, the City must engage residents and businesses in a robust and inclusive planning and outreach process to overhaul these systems by 2025.

Recommendation: Reduce Private Car Ownership by Half By 2050

The City's 80 x 50 report sets the explicit goal to reduce personal vehicle travel by 40 percent, from about a third of trips today to 20 percent of trips in 2050. That goal clarifies that 12 percent of trips should remain traditional personal driving trips, with the remaining eight percent made through taxi trips, shared mobility services, car share, or new forms of high-capacity micro-transit services.⁷³⁰ This goal, in combination with advancements in electric vehicle and renewable energy technologies, would help the City reach its 80 x 50 emission reduction goals.

Reducing the share of car trips should remain the City's central goal when it comes to managing vehicle traffic and reducing emissions, but it is just one piece of the puzzle when it comes to managing the City's streets and transit on the whole. Finding ways to reduce rates of car ownership, alongside car use, is also critically important.

According to a 2016 working paper out of the University of California, Berkeley's Transportation Sustainability Research Center (TRSC), users of car2go, the world's leading car-sharing company, decreased their greenhouse gas emissions 10 percent on average, and eased the commutes of non-users by eliminating cars from the roads and parking space by eliminating the need for seven to 11 vehicles.⁷³¹

Reducing the number of vehicles produced and purchased, overall, also has an environmental benefit; approximately one-fifth of the emissions a car releases during its lifespan are caused during production.⁷³² Proactive policies to encourage efficient ride- and car-sharing options among current car owners—in combination with an overhaul of the City's on-street parking policies and critical improvements to bus and bike infrastructure—should be pursued to reduce car ownership rates in the City overall. Those policies should also explicitly prioritize vehicles powered by renewable energies and include the installation of charging infrastructure wherever appropriate.

CLIMATE ADAPTATION AND RESILIENCY

What's Not Working

The environmental impact of transportation, and primarily on-road transportation, is significant, accounting for 30 percent of the City's Greenhouse Gas Emissions.⁷³³ Between 2005 and 2015, the City reduced transportation emissions by just five percent, accounting for a 1.2 percent reduction in emissions overall.⁷³⁴ When it comes to the City's public transportation and streets, we cannot afford to let our sustainability, resilience and climate justice goals remain an afterthought. Our City's infrastructure must be upgraded and protected from the harmful impacts of sea level rise and climate change. Transportation projects should prioritize the incorporation of green infrastructure. And the City itself must redouble its efforts to reduce its reliance on private vehicles and fossil fuels in its fleet.

Meanwhile, the City has made minimal progress to protect our City and the critical infrastructure that keeps our economy protected from the existential threats posed by climate change and sea level rise. The City's streets and public transportation infrastructure face significant risks with respect to these threats. In 2015, the New York City Panel on Climate Change (NPCC) projections for 2050 warned of potential sea level rise anywhere between eight to 30 inches, and 100-year flood heights increasing by 12 to 13.8 feet.⁷³⁵ One New York articulates a plan to adapt the City's infrastructure for climate change, improve the redundancy of our transportation system and invest in several coastal resilience projects.

Storms like Sandy—which flooded the Canarsie Tunnel with seven million gallons of water⁷³⁶ and continues to hamper the operations and maintenance of the City's subway system—are predicted to occur more and more frequently.⁷³⁷ The MTA has initiated some resilience projects to better protect the power substations, signal towers, signal compressors, and other rail operations facilities that are located along waterfronts like the Rockaways and Canarsie Tunnel.⁷³⁸ Since the MTA's blue ribbon Commission which convened over a decade ago, however, projects to increase the resiliency of the subway, like the renovation of the Canarsie Tunnel, have been primarily piecemeal and reactive. The MTA's 2017 Resiliency Report begins to list the many ways that the City's aging infrastructure is vulnerable to climate change and highlights a handful of select projects in the pipeline, but the MTA has yet to fully refine or quantify climate risks specific to the Authority's assets or the investments the system will require to keep the subway operational and prevent costly damage.⁷³⁹

730 City of New York, *New York City's Roadmap to 80x50* (Sept. 2016) available at https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080x50%2020160926_FOR%20WEB.pdf.

731 Elliot Martin, Susan Shaheen, *Impacts of Car2Go on Vehicle Ownership, Modal Shift, Vehicles Miles Traveled, and Greenhouse Gas Emissions: An Analysis of Five North American Cities* (Jul. 2016), available at http://innovativemobility.org/wp-content/uploads/2016/07/Impactsofcar2go_FiveCities_2016.pdf.

732 *Id.*

733 Mayor's Office of Sustainability, *Inventory of New York City Greenhouse Gas Emissions in 2015* (April 2017), available at https://www.dec.ny.gov/docs/administration_pdf/nycghg.pdf.

734 *Id.*

735 N.Y.C. Mayor's Office of Recovery & Resiliency, *New York City Panel on Climate Change*, available at <https://www1.nyc.gov/site/orr/challenges/nyc-panel-on-climate-change.page> (last accessed Feb. 14, 2018).

736 Kate Hinds, *L Train Shutdown? Wait for It. Then 'Boom!'*, W.N.Y.C., Feb. 25, 2019, available at <https://www.wnyc.org/story/l-train-tunnel-wont-be-demolished-until-2018-earliest>.

737 Charles Q. Choi, *Hurricane Sandy-Level Floods Likely to Hit NYC More Often*, LIVE SCIENCE, Oct. 11, 2016, available at <https://www.livescience.com/56447-hurricane-floods-more-likely-climate-change.html>.

738 M.T.A., *Climate Adaptation Task Force Resiliency Report* (April 2017), available at <http://web.mta.info/sustainability/pdf/ResiliencyReport.pdf>.

739 *Id.*

GREEN INFRASTRUCTURE: STREETS AND PLAZAS

The U.S. Environmental Protection Agency (EPA) cites the implementation of green infrastructure improvements into regular street redesign and capital projects as one of the primary ways that cities can reduce the urban heat island effect, manage flooding, reduce waterway pollution, spend less money on water management, and protect coastal areas.⁷⁴⁰ However, the City's progress to install green infrastructure has been extremely slow-going. To date, the City has greened 516 acres, which account for about 16 percent of their 2020 goals.⁷⁴¹ But there is very little evidence of proactive coordination between DEP and DOT, who manages the vast majority of street and plaza projects, to integrate green infrastructure into the City's capital projects. In DOT's 2016 Strategic Plan, the agency committed to test permeable pavement and concrete to reduce storm water.⁷⁴² Permeable pavements can present opportunities for the installation of green infrastructure where planted areas would otherwise create accessibility and maintenance challenges in street redesign project. The strategic plan also committed to work with DEP to site new bioswales and green infrastructure designs in streets, sidewalks, plazas, and greenways.⁷⁴³ However, DOT's 2017 progress report on the implementation of that strategic plan made zero mention of the City's coordination with DEP, the status of green infrastructure projects, or the results of DOT's permeable pavement tests.⁷⁴⁴

CITY FLEETS

The City operates the largest municipal vehicle fleets in the United States. As of 2015, diesel trucks accounted for 49 percent of the City's fleet emissions.⁷⁴⁵ In December 2015, the de Blasio administration released the "NYC Clean Fleet" plan, which committed to "lead by example in pursuing 80 x 50 transportation emissions reductions by improving the sustainability of its municipal vehicle fleet."⁷⁴⁶ The Clean Fleet Plan sets the goal to add a total of 2,000 electric vehicles to the City's fleet by 2025, which would make it "the largest government EV fleet in the nation outside the federal government as a whole." In 2017, the City announced it was ahead of schedule, halfway toward its clean fleet goal as of July 2017 with still eight years to go.⁷⁴⁷ With more than 29,000 units, that accounts for just about six percent of the City's fleet and the City has yet to set a higher threshold goal. However, the City's fleet has grown significantly over the last few years to 31,159 cars, a 21 percent increase from the total number of vehicles

in the final year of the Bloomberg Administration.⁷⁴⁸

Recommendation: Prioritize Green Infrastructure in Transportation Projects

Transit projects should be prioritized to help the City meet its obligation to improve air and water quality and reduce the 20 billion gallons of raw sewage and polluted runoff that bypass our sewage treatment plants and end up in the City's waterways. Yet there is very little evidence DOT is actively coordinating with DEP to get the job done. The City should be required to test and study the feasibility of permeable pavements, as outlined in DOT's 2016 Strategic Plan, and consider the installation of green infrastructure in every single capital project it pursues, particularly in communities of color.⁷⁴⁹

Recommendation: Reduce The Size of the City's Vehicle Fleet by At Least 20 Percent By 2025 and Transition to 100 Percent Renewable Energy Sources By 2050

The City operates the largest municipal vehicle fleets in the United States and has made some progress toward reaching its Clean Fleet goals announced in 2015. However, the City's fleet has actually grown by 5,304 vehicles, or 21 percent, from the 25,855 vehicles in the fleet in the final year of the Bloomberg administration in 2013.⁷⁵⁰ Further, the City's Clean Fleet goals articulated in the December 2015 were too modest, transitioning just over six percent of the City's fleet to electricity by 2025.⁷⁵¹

It is worth noting the City is technically ahead of schedule to meet that EV purchase goal,⁷⁵² and that Department of Citywide Administrative Services is currently planning a long-term renewable biofuels contract for the operation of the City's heavy duty vehicles including garbage trucks, Parks Department equipment, Department of Correction buses, NYPD emergency service units, and other heavy and specialized fleets.⁷⁵³ Reaching our 80 x 50 goals is a massive undertaking and will require the City to pursue a combination of electric, biofuel, and other efficiency technologies to reduce emissions in the short-term. However, as electric battery technology improves over the next decade, new technologies emerge and the City's electric grid transitions to a higher proportion of renewable energy sources, the City should set a higher threshold goals.

However, the City must also find ways to reduce the number of

740 United States Environmental Protection Agency, *Reduce Urban Heat Island Effect*, available at <https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect> (last accessed Feb. 14, 2018).

741 N.Y.C. Environmental Protection, *Reducing Combined Sewer Overflows in NYC*, available at https://www1.nyc.gov/html/dep/html/cso_long_term_control_plan/index.shtml (last accessed Feb. 14, 2018).

742 N.Y.L.C.V., *NYC DOT Releases Plan for Green Infrastructure Development*, available at <https://nylcv.org/news/nyc-dot-releases-plan-green-infrastructure-development> (last accessed Feb. 14, 2018).

743 *Id.*

744 N.Y.C. Department of Transportation, *DOT's Progress in 2017*, available at <https://www.nycdotplan.nyc/progress-report> (last accessed Mar. 1, 2019).

745 Mayor's Office of Sustainability, *Inventory of New York City Greenhouse Gas Emissions in 2015* (April 2017), available at https://www.dec.ny.gov/docs/administration_pdf/nycgghg.pdf.

746 City of New York, *NYC Clean Fleet* (Dec. 2015), available at http://www.nyc.gov/html/dcas/downloads/pdf/fleet/NYC_clean_fleet_plan.pdf (last accessed Feb. 14, 2019).

747 City of New York, *ONENYC: Mayor Announces City Electric Vehicle Fleet Ahead of Schedule, Half Way toward Goal*, available at <https://www1.nyc.gov/office-of-the-mayor/news/245-17/onenyc-mayor-city-electric-vehicle-fleet-ahead-schedule-half-way-toward-goal> (last accessed Feb. 14, 2018).

748 Rich Calder, *De Blasio's NYC is loaded with cars – despite 'green' claims*, N.Y. Post, Feb. 20, 2019, available at <https://nypost.com/2019/02/20/de-blasios-nyc-is-loaded-with-cars-despite-green-claims/>.

749 N.Y.L.C.V., *NYC DOT Releases Plan for Green Infrastructure Development*, available at <https://nylcv.org/news/nyc-dot-releases-plan-green-infrastructure-development> (last accessed Feb. 14, 2018).

750 Calder, Feb. 20, 2019.

751 *NYC Clean Fleet* (Dec. 2015).

752 *ONENYC: Mayor Announces City Electric Vehicle Fleet Ahead of Schedule, Half Way Toward Goal* (Apr. 20, 2017).

753 N.Y.C. Department of Citywide Administrative Services, *DCAS to Expand Use of 99% Petroleum-Free Renewable Diesel in City Vehicles*, available at <http://www.nyc.gov/html/dcas/downloads/pdf/fleet/Press-Release-DCAS-to-Expand-Use-of-Renewable-Diesel-in-City-Fleet-Vehicles.pdf> (last accessed Feb. 14, 2019).

vehicles in its fleet by at least 20 percent, to reduce the overall number of vehicles on the road and ensure the City's investments in electric vehicles are in fact replacing the City's fleet rather than expanding it. Aiming to bring entirety of the City's fleet to 100 percent renewable energy sources and reduce the overall number of fleet vehicles on the road over the next few decades will help the City "lead by example" as the Clean Fleet plan suggests.

FUTURE OF THE BQE

What's Not Working

The BQE carries around 153,000 vehicles per day, the vast majority being personal automobiles.⁷⁵⁴ Its origins began with the opening of the Gowanus Expressway in 1941.⁷⁵⁵ Constructed by Robert Moses, the Gowanus Expressway was built along Third Avenue in Sunset Park, despite the pleas from residents to move construction over to Second Avenue, away from the neighborhood's residential areas.⁷⁵⁶ Moses disregarded the community, writing the area off as a "slum" despite having a thriving business corridor serving the working class locals.⁷⁵⁷ More than 100 stores and 1,300 families were evicted during construction.⁷⁵⁸ Those that remained were bathed in dark shadows created by the Parkway.⁷⁵⁹

After the completion of the Gowanus, Moses planned another highway to link the Brooklyn with the Triborough Bridge.⁷⁶⁰ In order to facilitate the southern portion of this new highway—the BQE—Moses had a trench dug through Hicks Streets, destroying the street grid and leaving Red Hook and Carroll Gardens isolated.⁷⁶¹ As with Sunset Park, that portion of Brooklyn was largely working class and had no ability to influence Moses's planning. However, residents of Brooklyn Heights did.⁷⁶² Wealthy homeowners were aghast at the prospect of highway running so close to their homes.⁷⁶³ Moses yielded and instead constructed a "triple cantilever," a two level highway, topped with a park and pedestrian area, now known as the Promenade. The triple cantilever's Promenade prevented much of the noise and pollution that plagued less affluent neighborhoods from impacting nearby property owners.

RECONSTRUCTION OF THE BQE

In 2018, DOT recently announced two potential plans for rebuilding a 1.5 mile segment of the BQE passing through Brooklyn along the East River.⁷⁶⁴ At minimum, the City expects reconstruction to take six years and cost between \$3.2 billion and \$4 billion, with \$1.7 billion currently earmarked by the City.⁷⁶⁵

According to DOT, the roadway's deterioration has reached a breaking point. Concrete-incased steel rebar supporting the structure is corroding from road salt seeping in through cracks – which are in turn widening from cycles of freezing and thawing. This process has reduced the structure's ability to support the weight of vehicles traveling on the roadways. DOT estimates that if nothing is done to address issues with the roadway by 2026, the City will need to impose weight restrictions and close the triple cantilever to trucks. If nothing is done by 2036, the City may need to remove all vehicles from the BQE. DOT also plans to address safety concerns stemming from the BQE's design, including its lack of shoulders and narrow travel lanes.

INDUCED DEMAND

Induced demand is the idea that creating or expanding roads does not reduce traffic congestion, but rather induces or generates it.⁷⁶⁶ The assumption is this: more lanes create more room for cars to flow freely and more quickly, thus reducing traffic. However, the creation of more roads or highway lanes actually encourages more people to drive, thus leading to further road congestion.⁷⁶⁷ Studies have found that for every one percent increase in highway capacity, traffic also increases 0.29 to 1.1 percent in the long term, which is about five years out and up to 0.68 percent in the short term, which is one to two years out.⁷⁶⁸ Researchers suggest that this result be taken into consideration as highway planners develop schemes to expand roadways.⁷⁶⁹

While expanding roads and highways has the effect of inducing more traffic, the same is also true in the reverse. Removing highways or reducing the amount of road space that is available for cars and reallocating it for pedestrian use, or to create bus, cycle, or high occupancy vehicle lanes, can reduce traffic

754 Justin Davidson, *Here's a Solution for Fixing the Brooklyn-Queens Expressway: Get Rid of It*, N.Y. MAGAZINE, Dec. 10, 2018, available at <http://nymag.com/intelligencer/2018/12/heres-a-solution-for-fixing-the-bqe-get-rid-of-it.html> and N.Y.C. Department of Transportation, *Brooklyn Queens Expressway Origin-Destination Study – Appendix C* (2016), available at https://9670f26306f0aa722eb1-bf8a0720b-767c6949515361a19a9737f1.ssl.cf2.rackcdn.com/uploads/document/document/87/Appendix_C_Origin-Destination_Study__NYCDOT__2016.pdf.

755 Caro (Vintage Books Edition 1975) at page 520.

756 *Id.*

757 *Id.* at pages 521-522.

758 *Id.* at page 522.

759 *Id.* at pages 522-523.

760 Christopher Gray, *Brought to Us by the B.Q.E.*, N.Y. TIMES, Jan. 12, 2012, available at <https://www.nytimes.com/2012/01/15/realestate/brooklyn-heights-promenade-streetscapes-brought-to-us-by-the-b-q-e.html>.

761 Suzanne Spellen, *How Master Builder Robert Moses Transformed Brooklyn as We Know It*, BROWNSTONER, Feb. 29, 2016, available at <https://www.brownstoner.com/history/robert-moses-brooklyn-power-broker-bqe-expressway/>.

762 Gray, Jan. 12, 2012.

763 *Id.*

764 Winnie Hu, *The Famed Brooklyn Height Promenade May Close for Years. Here's Why*, N.Y. TIMES, Oct. 4, 2018, available at <https://www.nytimes.com/2018/10/04/nyregion/brooklyn-queens-expressway.html>.

765 *Id.*

766 Sally Cairns, et al., *Disappearing Traffic: The Story So Far* (March 2002), page 13, available at https://nacto.org/docs/usdg/disappearing_traffic_cairns.pdf; See also, Anne Kadet, *Here's a Possible Fix for the Brooklyn-Queens Expressway: Tear it Down*, WALL STREET JOURNAL, Nov. 6, 2018, available at <https://www.wsj.com/articles/heres-a-possible-fix-for-the-brooklyn-queens-expressway-tear-it-down-1541516581>.

767 Sally Cairns, et al., (March 2002) at page 13; Kadet, Nov. 6, 2018; Benjamin Schneider, *Citylab University: Induced Demand*, CITY LAB, Sept. 6, 2018, available at <https://www.citylab.com/transportation/2018/09/citylab-university-induced-demand/569455/>.

768 Angie Schmitt, *The Science Is Clear: More Highways Equals More Traffic. Why Are DOTs Still Ignoring It?* STREETSBLOGUSA, Jun. 21, 2017, available at <https://usa.streetsblog.org/2017/06/21/the-science-is-clear-more-highways-equals-more-traffic-why-are-dots-still-ignoring-it/>.

769 *Id.*

congestion and increase attractiveness to other modes of transportation.⁷⁷⁰ Removing highways allows traffic to disperse more evenly around a city and encourages fewer people to drive.⁷⁷¹ It has also led to economic development and an increase in property values for properties that are situated near freeways.⁷⁷² For example:

In Milwaukee, the city replaced its Park East freeway with a boulevard, which freed up twenty-four acres of space in its downtown neighborhood and attracted \$1 billion of private investment in development projects.⁷⁷³

San Francisco replaced its Central Highway with a boulevard, which revitalized the surrounding neighborhood and caused property values within that area to increase.⁷⁷⁴ According to research, one reason for an increase in property values after highways are removed is the reduction of local traffic within the area.⁷⁷⁵ San Francisco also replaced its Embarcadero Freeway, which increased employment in the area by 23 percent within a decade.

In Portland, Oregon, when the city replaced its Harbor Drive Freeway with a 37-acre park, property values increased in downtown Portland by a yearly average of 10.4 percent.⁷⁷⁶

In Seoul, Korea, when the city removed one its elevated expressways, uncovering the stream that was underneath, the stream attracted 90,000 visitors per day within 15 months of its opening.⁷⁷⁷ Land values also increased by 15 percent and traffic levels were reduced by nine percent after a rapid transit bus system was implemented as part of the project.⁷⁷⁸

The city of Paris developed a policy to reduce the size of its roads, which increased public transit usage by 20 percent within two decades.⁷⁷⁹

Recommendation: Explore Alternatives to Reconstruction

The City has approached this disruptive, multi-billion dollar reconstruction project as inevitable, without pausing to meaningfully consider the alternative investments in transit infrastructure that could be pursued. The BQE in its current form sees an average daily traffic of more than 153,000 vehicles and plays a role in alleviating the City's regional truck traffic; but compared to other transit infrastructure, the BQE does not meaningfully add capacity to the system. On a given weekday, the Grand Central-42nd Street subway stop alone sees more passengers per day than the entirety of the BQE.⁷⁸⁰ Just 10

to 13 percent of the BQE's traffic on the cantilever is comprised of trucks.⁷⁸¹ Over 80 percent of the cantilever's other car trips are intra-city, connecting people in Brooklyn to the other boroughs, and between 28 to 37 percent of the BQE's car trips are intra-Brooklyn.⁷⁸² Investments in public transit that better connect neighborhoods within and across the boroughs could certainly convert some of these car trips to sustainable modes of transit. But those alternative investments have yet to be considered.

The City should study alternatives to the reconstruction of this Robert Moses-era six lane highway, including the removal of the BQE in its entirety. A study and planning effort to overhaul the BQE should start with public engagement and be accompanied by sufficient plans to improve public transit options and mitigate the impacts of truck traffic in each scenario, particularly in environmental justice communities throughout the City. As outlined previously in this report, the overhaul of the City's truck routes is severely overdue. The reimagining of the BQE should be coupled with truck route redesign effort and a dramatic expansion of the City's efforts to increase reliance on freight.

770 Sally Cairns, et al., (March 2002) at page 16.

771 Anne Kadet, Nov. 6, 2018.

772 *Id.*

773 *Id.*

774 *Id.*

775 *Id.*

776 Seattle Urban Mobility Plan, 6 Case Studies in Urban Freeway Removal (January 2008), page 6B-1, available at <https://www.cnu.org/sites/default/files/Spokane%20Case%20Study%201%20-%20Seattle.pdf>.

777 *Id.* at page 6F-1.

778 Seattle Urban Mobility Plan, 6 Case Studies in Urban Freeway Removal (January 2008), page 6F-1, available at <https://www.cnu.org/sites/default/files/Spokane%20Case%20Study%201%20-%20Seattle.pdf>.

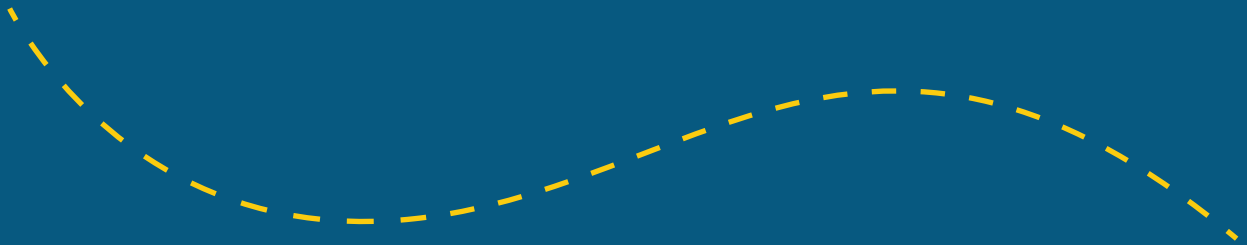
779 Adam Mann, *What's Up With That: Bigger Roads Actually Makes Traffic Worse*, WIRED, Jun. 17, 2014 available at <https://www.wired.com/2014/06/wuwt-traffic-induced-demand/>.

780 M.T.A., *Average Weekday Subway Ridership*, available at http://web.mta.info/nyct/facts/ridership/ridership_sub.htm (last accessed Feb. 25, 2019).

781 N.Y.C. Department of Transportation, *Brooklyn Queens Expressway Origin-Destination Study* (2016), available at https://9670f26306f0aa722eb1-bf8a0720b767c6949515361a19a9737f.ssl.cf2.rackcdn.com/uploads/document/document/87/Appendix_C_Origin-Destination_Study__NYCDOT__2016.pdf.

782 N.Y.C. Department of Transportation, *Brooklyn Queens Expressway Origin-Destination Study* (2016), available at https://9670f26306f0aa722eb1-bf8a0720b767c6949515361a19a9737f.ssl.cf2.rackcdn.com/uploads/document/document/87/Appendix_C_Origin-Destination_Study__NYCDOT__2016.pdf.

CONCLUSION





CONCLUSION

The MTA's current structure robs New York City of the authority to provide a sustainable and equitable transportation system to the City's residents, businesses, and visitors. Subway and bus ridership in the City is falling, and streets are becoming more congested. New York City is falling behind its global peers in investments that make our transit systems sustainable and our neighborhoods greener. After decades of the MTA's failure to properly invest and responsibly plan New York City's transit, the system must be radically reformed, and municipal control of the subway and buses is the only solution that gives City residents an effective voice in making New York the most livable big city in America.

This report outlines how municipal control of the subway and buses is not only feasible, but it also provides new opportunities to invest in transportation alternatives that help the City meet its commitment to establishing a more sustainable and accessible New York.

While serious reform is never easy, New York cannot allow the City's transit system to fall any further into disrepair. Change

has to come from the top. Making the Mayor responsible for transit success and giving the City the authority to properly oversee and invest in our systems will allow City leaders to rebuild our transportation system into the appealing and accessible system it should be. It will take courage from City and State leaders, but a shared commitment to improving the lives of all New Yorkers should bring every leader to the table that is considering how to make municipal control of New York City's subway and buses possible.

The City also needs to envision and implement a comprehensive and strategic street design plan that meets the needs of all New Yorkers—not just drivers—and break the car culture that threatens the health and safety of the City's residents. While the City can accomplish much of this on its own, municipal control of the subway and buses would provide significant opportunity for better coordination and integration of mass transit into its overall transportation planning.

APPENDICES



APPENDIX:

DEDICATED TAXES IN

MTA WATERFALL AND

STATE/LOCAL SUBSIDIES

Dedicated Taxes in MTA Waterfall (\$ in millions)					
	2020	2021	2022	2023	2024
Dedicated Taxes					
Metropolitan Mass Transportation Operating Assistance	1,840	1,918	1,999	2,039	2,080
Petroleum Business Tax	637	637	637	650	663
Mortgage Recording Tax	470	485	499	509	520
MRT Transfer to Suburban Counties	(6)	(7)	(7)	(7)	(7)
Reimburse Agency Security Costs	(10)	(10)	(10)	(10)	(10)
Interest	5	5	5	5	6
Urban Tax	603	604	616	629	641
Other Investment Income	1	1	1	1	1
Payroll Mobility Tax	1,668	1,739	1,811	1,847	1,884
Payroll Mobility Tax Replacement Funds	244	244	244	249	254
MTA Aid (Licensing Fees, Taxi Tax, Auto Rental charge)	308	309	310	316	323
TOTAL	5,762	5,926	6,107	6,229	6,353

State/Local Subsidies 2020 (\$ in millions)						
	MTA	NYCTA	SIRR	MTA Bus Company	Total to BAT	Percent to BAT
New Funding Sources						
NYC Transportation Assistance Fund	\$385	\$360			\$360	93%
State and Local Subsidies						
State Operating Assistance	188	158	1		159	84%
Local Operating Assistance	188	158	1		159	84%
Station Maintenance	181				0	0%
Other Funding Agreements						
City Subsidy for MTA Bus Company*	\$492			\$500	\$500	102%
City Subsidy for Staten Island Railway	54		54		54	101%
CDOT Subsidy for Metro-North Railroad	121				0	0%
NYCT Charge Back of MTA Bus Debt Service		(12)			(12)	
Forward Energy Contracts Program - Gain/(Loss)		(0)			0	
Committed to capital Program Contributions		(205)			(205)	
Drawdown of GASB 45 OPEB Reserves					0	
Total State and Local Subsidies	\$1,608	\$459	\$55	\$500	\$1,014	63%

*Excludes State 18-B Funding

APPENDIX:

CURRENT MTA TAX AND SUBSIDY REVENUE SOURCES

- **Transit Tax Revenue.** The MTA is funded, in part, with tax revenues from the Metropolitan Mass Transportation Operating Assistance Account (Metro Account), the Petroleum Business Tax (PBT), and the Urban Mass Transportation Operating Account (Urban Account). The revenues from these accounts are projected to total \$3.48 billion in 2019, which is \$86 million greater than the November 2018 forecast amount of \$3.4 billion. The Urban Account consists of two separate taxes, the Mortgage Recording Tax (MRT) and the Real Property Transfer Tax (RPTT).
- **Payroll Mobility Tax and MTA Aid.** The Payroll Mobility Tax and MTA Aid is projected to be \$2.15 billion in Calendar Year 2019, a slight increase from the estimated \$2.07 billion in 2018. In 2012, the State Legislature passed a law granting the City authorization to establish a “Hail accessible inter-borough licenses” (HAIL licenses) for livery cabs to provide hail services in certain underserved areas of the City. After overcoming legal challenges, the law was implemented during the second half of 2013, and is anticipated to result in increased MTA Aid revenue for the Authority as the City phases in the additional vehicles.
- **Paratransit.** Pursuant to an agreement between the City and the MTA, the NYCTA assumed operating responsibility for all paratransit services required under the federal Americans with Disability Act of 1990. The City reimburses the NYCTA for 33 percent of net paratransit operating expenses less fare revenues and urban tax proceeds. Total paratransit revenue is expected to be \$215 million in Calendar Year 2019, which includes \$172.8 million from City reimbursements.
- **State Subsidies.** For Calendar Year 2018, the State’s subsidy to the NYCTA’s budget is expected to be \$187.9 million. Of this amount, \$25 million is for school fare reimbursement and \$187.9 million is to match City operating assistance. This funding does not include State dedicated tax revenues to MTA of more than \$5.6 billion (including the Payroll Mobility Tax) expected in 2019.
- **For-Hire Vehicle Surcharge.** The State’s Fiscal 2019 Adopted Budget included legislation to establish a surcharge on For-Hire Vehicle (FHV) trips (including app-based services such as Uber and Lyft) that begin, end, or pass through a congestion zone in Manhattan south of 96th Street, starting in 2019. The surcharge is anticipated to generate about \$415 million in 2019 and \$435 million annually in the outyears, providing \$342 million in 2019, \$301 million in 2020, and \$300 million annually thereafter to maintain the level of effort started with the Subway Action Plan (SAP); another \$50 million is earmarked for outer borough transportation projects, and any remaining funds from the surcharge, currently expected to be \$23 million in 2019 and \$85 million annually thereafter, will be distributed directly to the MTA. As a result, the net impact is favorable to the MTA by \$365 million in 2019 and \$385 million per year starting in 2020.
- **The City’s Contribution.** For Calendar Year 2019, the City’s contribution to the MTA, excluding capital commitments, is approximately \$1 billion. Estimated City subsidies include the following: \$45 million for the NYCTA school fare subsidy, \$15.5 million for the elderly and disabled subsidy, \$172.8 million for paratransit reimbursement, \$187.9 million to match State Operating Assistance, \$528 million for MTA bus subsidy, \$54 million City subsidy for SIRTOA, \$118.6 million for the maintenance and operation of LIRR and Metro North Railroad stations in the City, \$11.5 million for E-Z Pass Payments for City vehicles, and \$3.5 million for Transit Police.

APPENDIX:

CURRENT OPERATING BUDGET OF BAT COMPONENTS

NEW YORK CITY TRANSIT AUTHORITY

The NYCTA, a subsidiary of the MTA, provides bus and subway service to New York City. The NYCTA is responsible for providing safe, clean, and reliable public transportation services to all persons traveling within the City. The NYCTA employs approximately 51,400 workers who are responsible for the operation and maintenance of 5,725 buses and 6,400 subway cars. About 2.4 billion people ride the City's subway and buses each year.

Budget. As approved by the MTA Board, the NYCTA Operating Budget (reimbursable and non-reimbursable) before depreciation and other post-employment benefits is approximately \$10.2 billion for Calendar Year 2019. Of that amount, approximately \$8 billion is for labor costs and \$2.3 billion is

for non-labor expenses. In addition, the Operating Budget includes non-cash depreciation expenses of \$1.9 billion and other post-employment benefit expenses of \$1.4 billion, including pension expense adjustment of \$296.4 million.

Operating Revenue/Expense Projections. The NYCTA projects \$6.3 billion in operating revenues for Calendar Year 2019, which is primarily derived from farebox revenues of \$4.4 billion, capital and other reimbursements of \$1.5 billion, and other revenues of \$479 million. These funds will support the NYCTA's proposed reimbursable and non-reimbursable expenditures of \$10.2 billion, excluding depreciation and other post-employment benefits, in 2019.



NYCTA Financial Plan 2019-2022 (\$ in millions)

Non-Reimbursable and Reimbursable	2017 Actual	2018 Final Estimate	2019 Adopted Budget	2020 Projected	2021 Projected	2022 Projected
Operating Revenue						
Farebox	\$4,487	\$4,438	\$4,391	\$4,404	\$4,394	\$4,397
Other Revenue	424.879	445.618	479.275	491.012	504.602	512.696
Capital & Other Reimbursement.	1,376	1,417	1,458	1,341	1,230	1,231
Total Operating Revenue	\$6,290	\$6,301	\$6,328	\$6,236	\$6,128	\$6,141
Operating Expenses						
Labor Expenses	7,453	7,882	7,956	8,102	8,211	8,436
Non-Labor Expenses	2,057	2,149	2,257	2,232	2,259	2,306
Other Expenses Adjustments	0	0	0	0	0	0
Operating Expenses Before Depreciation, OPEB & ER 1	\$9,510	\$10,031	\$10,212	\$10,335	\$10,470	\$10,743
Depreciation	1,682	1,828	1,878	1,928	1,978	2,029
Other Post Employment Benefit Liab Adj.	1,103	1,350	1,437	1,529	1,627	1,731
GASB 68 Pension Expense Adjust- ment	(\$221.21)	(\$305.53)	(\$296.40)	(\$303.17)	(\$308.94)	(\$308.94)
Environmental Remediation	8.537	0	0	0	0	0
Total Operating Expenses	\$12,082	\$12,904	\$13,231	\$13,488	\$13,765	\$14,194
Net Operating Surplus/(Deficit) Before Debt Service	(\$5,792)	(\$6,603)	(\$6,902)	(\$7,252)	(\$7,637)	(\$8,052)
Debt Service	\$1,279	\$1,294	\$1,325	\$1,368	\$1,444	\$1,491
Net Operating Surplus/(Deficit) Including Debt Service	(\$7,071)	(\$7,897)	(\$8,227)	(\$8,620)	(\$9,081)	(\$9,543)
Dedicated Tax, State & Local subsidies	4,072	4,579	4,418	4,384	4,304	4,500
Deficit after Projected Subsidies	(\$2,998)	(\$3,318)	(\$3,810)	(\$4,236)	(\$4,777)	(\$5,044)
Conversion to Cash						
Less - Depreciation, OPEB, GASB & ER Adj.	2,572	2,873	3,018	3,154	3,296	3,451
Net Cash Surplus/(Deficit) 2	(\$427)	(\$446)	(\$791)	(\$1,082)	(\$1,481)	(\$1,592)

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2

STATEN ISLAND RAIL ROAD

The SIR operates and maintains 63 subway cars over a 14.3 route miles and 28.6 miles of mainline track that serves 22 stations located primarily on the south shore of Staten Island.

Operating Revenue/Expense Projections. The SIR's operating revenue for Calendar Year 2019 is projected to be \$14 million, which includes farebox revenue of \$7 million and other operating revenue of \$2.4 million. The budget projects a combined reimbursable and non-reimbursable expense before depreciation and other post-employment benefits of \$69.75 million. These expenses include \$53.8 million in labor costs and \$16 million in non-labor costs. The depreciation expense and the other post-employment benefit expenses are projected to be \$12 million and \$7.5 million respectively.

Staten Island Rail Road Financial Plan 2019-2022 (\$ in millions)

Non-Reimbursable and Reimbursable	2017 Actual	2018 Final Estimate	2019 Adopted Budget	2020 Projected	2021 Projected	2022 Projected
Operating Revenue						
Farebox	\$6.89	\$6.96	\$7.04	\$7.08	\$7.06	\$7.06
Other Revenue	\$2.54	\$2.45	\$2.47	\$2.47	\$2.47	\$2.47
Capital & Other Reimbursement.	\$3.07	\$2.12	\$4.55	\$4.58	\$4.66	\$4.75
Total Operating Revenue	\$12.50	\$11.53	\$14.06	\$14.13	\$14.19	\$14.28
Operating Expenses						
Labor Expenses	\$48.62	\$50.58	\$53.76	\$51.93	\$52.51	\$52.96
Non-Labor Expenses	\$24.96	\$12.88	\$16.00	\$12.32	\$11.24	\$11.50
Other Expense Adjustments	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses Before Depreciation, OPEB & ER 1	\$73.59	\$63.45	\$69.75	\$64.24	\$63.75	\$64.46
Depreciation	\$10.47	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00
Other Post Employment Benefit Liab Adj.	\$7.08	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50
GASB 68 Pension Expense Adjustment	\$0.46	\$0.60	\$0.50	(\$0.10)	(\$1.10)	(\$1.10)
Environmental Remediation	\$0.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Operating Expenses	\$91.68	\$83.55	\$89.75	\$83.64	\$82.15	\$82.86
Net Operating Deficit/(Deficit) Before Debt Service	(\$79.18)	(\$72.02)	(\$75.69)	(\$69.52)	(\$67.96)	(\$68.58)
Debt Service	\$0.55	\$1.28	\$3.72	\$8.94	\$15.94	\$20.49
Net Operating Deficit/(Deficit) Including Debt Service	(\$79.73)	(\$73.31)	(\$79.41)	(\$78.46)	(\$83.90)	(\$89.06)
Dedicated Tax, State & Local subsidies	\$58.21	\$63.76	\$56.49	\$59.64	\$59.34	\$65.74
			.			
Deficit after Projected Subsidies	(\$21.52)	(\$9.54)	(\$22.92)	(\$18.82)	(\$24.56)	(\$23.32)
Conversion to Cash						
Depreciation, OPEB, GASB & ER Adj.	\$18.10	\$20.10	\$20.00	\$19.40	\$18.40	\$18.40
Net Cash Surplus/(Deficit) 2	(\$3.42)	\$10.56	(\$2.92)	\$0.58	(\$6.16)	(\$4.92)

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2

MTA BRIDGES AND TUNNEL

MTA Bridges and Tunnels (B&T) serves more than 868,000 vehicles each weekday and 310 million vehicles annually on its seven bridges and two tunnels. Surplus revenues from B&T's tolls help support MTA public transit services.

Operating Revenue/Expense Projections. The B&T's operating revenue for Calendar Year 2019 is projected to be \$2 billion, which includes toll revenue of \$2 billion, capital and other reimbursements of \$24 million, other operating revenue of \$19 million, and investment income of \$1 million. The budget projects a combined reimbursable and non-reimbursable expense before depreciation of \$598 million. These expenses include \$296 million in labor costs and \$302 million in non-labor costs. The depreciation expense and the other post-employment benefit expenses are projected to be \$148.4 million and \$67.7 million, respectively. This also includes a pension expense adjustment of \$12.6 million.

MTA Bridge & Tunnel Financial Plan 2019-2022 (\$ in millions)

Non-Reimbursable and Reimbursable	2017 Actual	2018 Final Estimate	2019 Adopted Budget	2020 Projected	2021 Projected	2022 Projected
Operating Revenue						
Toll Revenue	\$1,912	\$1,967	\$1,984	\$1,990	\$1,998	\$3,998
Other Revenue	\$20	\$19	\$19	\$19	\$19	
Capital & Other Reimbursement.	\$21	\$24	\$24	\$25	\$25	\$26
Investment Income	\$1	\$1	\$1	\$1	\$1	\$1
Total Operating Revenue	\$1,955	\$2,011	\$2,028	\$2,035	\$2,044	\$2,044
Operating Expenses						
Labor Expenses	\$270	\$271	\$296	\$300	\$307	\$316
Non-Labor Expenses	\$242	\$305	\$302	\$304	\$313	\$325
Other Expenses Adjustments	\$0	\$0	\$0	\$0	\$0	\$0
Operating Expenses Before Depreciation, OPEB & ER 1	\$512	\$576	\$598	\$604	\$621	\$641
Depreciation	\$241	\$139	\$148	\$159	\$170	\$182
Other Post Employment Benefit Liab Adj.	\$72	\$64	\$68	\$71	\$75	\$78
GASB 68 Pension Expense Adjustment	\$6	\$10	\$13	\$15	\$16	\$17
Environmental Remediation	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses After Depreciation and GASB Adjs.	\$831	\$789	\$827	\$849	\$881	\$919
Less: Depreciation, OPEB, GASB & ER Adj.	\$319	\$214	\$229	\$225	\$261	\$277
Net Operating Surplus/(Deficit) Before Debt Service	\$1,443	\$1,435	\$1,430	\$1,431	\$1,423	\$1,403
Debt Service	\$299	\$281	\$301	\$316	\$345	\$364
Net Operating Deficit/(Deficit) Including Debt Service	\$1,145	\$1,154	\$1,129	\$1,115	\$1,078	\$1,039
Less: Debt Serv NYCT & CRR	\$278	\$382	\$392	\$391	\$388	\$376
Net Cash Surplus/(Deficit) 2	\$867	\$772	\$737	\$724	\$690	\$663

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2

MTA BUS COMPANY

The MTABC was created in September 2004 pursuant to an agreement between the City of New York and the MTA to consolidate the operations of seven private franchise bus companies. The purpose of the takeover was to improve the quality and efficiency of bus service formerly provided by the private bus franchise operators. The agreement calls for the City to pay MTABC the difference between the actual cost of operating the bus routes and all revenues and subsidies received by the MTABC and allocable to the operation of the bus routes. As a result, the costs of MTABC operations are fully reimbursable by the City to the MTA.

Operating Revenue/Expense Projections. The MTABC's operating revenue for Calendar Year 2019 is projected to be \$248 million, which includes farebox revenue of \$221 million, capital and other reimbursements of \$5.9 million, and other operating revenue of \$20.7 million. The budget projects a combined reimbursable and non-reimbursable expense before depreciation of \$824.1 million. These expenses include \$580.5 million in labor costs and \$243.6 million in non-labor costs. The depreciation expense and the other post-employment benefit expenses are projected to be \$54.3 million and \$100.15 million, respectively. This also includes a pension expense adjustment of \$85.9 million.

MTA Bus Company Financial Plan 2019-2022 (\$ in millions)

Non-Reimbursable and Reimbursable	2017 Actual	2018 Final Estimate	2019 Adopted Budget	2020 Projected	2021 Projected	2022 Projected
Operating Revenue						
Farebox	\$217.16	\$219.32	\$221.40	\$221.98	\$221.09	\$221.20
Other Revenue	\$19.83	\$20.54	\$20.66	\$20.80	\$21.51	\$22.37
Capital & Other Reimbursement.	\$4.38	\$5.96	\$5.93	\$5.87	\$5.97	\$6.15
Total Operating Revenue	\$241.38	\$245.81	\$247.99	\$248.65	\$248.56	\$249.71
Operating Expenses						
Labor Expenses	\$558.19	\$579.03	\$580.54	\$573.91	\$580.73	\$608.99
Non-Labor Expenses	\$217.59	\$239.80	\$243.55	\$212.95	\$227.02	\$232.57
Operating Expenses Before Depreciation, OPEB & ER 1	\$775.78	\$818.83	\$824.09	\$786.85	\$807.75	\$841.56
Depreciation	\$58.59	\$54.34	\$54.34	\$54.34	\$54.78	\$56.16
Other Post Employment Benefit Liab Adj.	\$61.68	\$100.15	\$100.15	\$100.15	\$100.15	\$103.30
GASB 68 Pension Expense Adjustment	\$66.05	\$46.30	\$85.90	\$28.20	\$18.70	\$19.20
Environmental Remediation	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Operating Expenses	\$962.31	\$1,019.62	\$1,064.48	\$969.55	\$981.38	\$1,020.21
Net Operating Deficit/(Deficit) Before Debt Service	(\$720.93)	(\$773.81)	(\$816.50)	(\$720.90)	(\$732.82)	(\$770.50)
Debt Service	\$15.13	\$12.99	\$25.65	\$29.43	\$35.08	\$38.76
Net Operating Deficit/(Deficit) Including Debt Service	(\$736.06)	(\$786.80)	(\$842.14)	(\$750.33)	(\$767.89)	(\$809.26)
City Subsidy for MTA Bus Company*	\$461.50	\$549.20	\$528.00	\$492.00	\$519.30	\$554.20
Deficit after Projected Subsidies	(\$274.56)	(\$237.60)	(\$314.14)	(\$258.33)	(\$248.59)	(\$255.06)
Conversion to Cash						
Depreciation, OPEB, GASB & ER Adj.	\$186.53	\$200.79	\$240.39	\$182.69	\$173.63	\$178.66
Net Cash Surplus/(Deficit) 2	(\$88.03)	(\$36.81)	(\$73.75)	(\$75.64)	(\$74.97)	(\$76.40)

*Excludes State 18-B Funding

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2

APPENDIX:

CURRENT 2015-2019

CAPITAL PROGRAM

State law requires the MTA to submit to the New York State Capital Program Review Board (CPRB), for its approval, successive five-year capital programs for the Transit System and MTA Staten Island Railway and the Commuter System. MTA Bridges and Tunnels (MTA B&T) and MTA Bus undertake their own capital planning that is not subject to the CPRB approval. While not required to do so by statute, the MTA has consistently included five-year capital programs for MTA B&T covering the same period. The Authority's \$33.3 billion 2015-2019 Capital Plan was amended and approved by the Review Board on May 31, 2018. The Plan includes funding to purchase 440 new subway cars and 1,381 new buses, replace 72 miles of subway track, replace 127 signal switches, install new elevators at 22 stations, replace 42 elevators, fund signal improvements under the Subway Action Plan, and upgrade and modernize signal technology. It also provides for the expansion of the MTA network by continuing two ongoing projects and launching a third, specifically completing the funding commitment for the East Side Access, launching Phase 2 of the Second Avenue Subway to extend the new line from 96th to 125th Streets, and to begin the expansion of the Metro North Railroad's New Haven Line service into Penn Station.

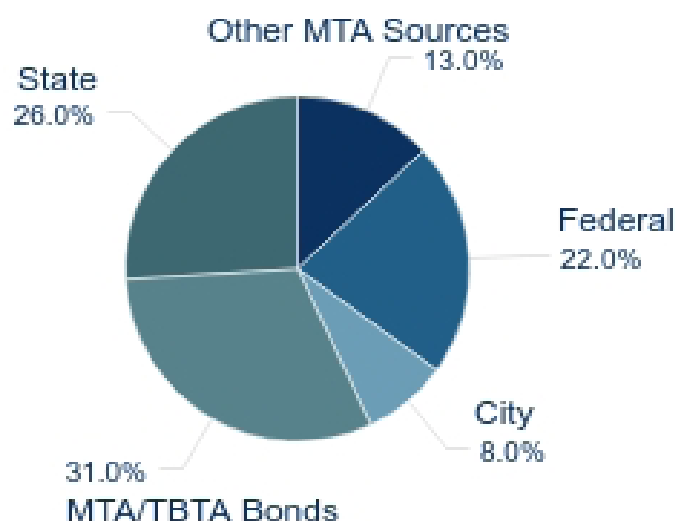
The MTA current Capital Program is primarily funded with bonds (borrowing) at 31 percent (\$10.4 billion), followed by State funding at 26 percent (\$8.6 billion), federal funding at 22 percent (\$7.3 billion), other MTA Source funding at 13 percent (\$4.3 billion), and City funding at eight percent (\$2.7 billion).

2015-2019 MTA Proposed Capital Program (\$ in millions)

Program	2015-2019
Core Capital Program	
New York City Transit	\$16,742
MTA Bus	376
Commuter Rail and MTA Interagency	5,564
Core Subtotal	\$22,682
Network Expansion Projects	7,652
Total 2015-2019 CPRB Program	30,334
Bridges and Tunnels	2,936
Total 2015-2019 Capital Program	\$ 33,270

Source: MTA Capital Program 2015-2019, Amendment No. 3, May 31, 2018

MTA Capital Program Funding 2015-2019



2015-2019 MTA Capital Program Funding Sources (\$ in millions)

	Proposed 2015-2019
Total 2015-2019 Program costs	\$33,270
Funding Currently Projected	
Federal Formula, Flexible/CMAQ, and Misc.	\$6,701
Federal Core Capacity	100
Federal New Starts	500
MTA Bonds	7,968
Pay-as-you-go Capital (PAYGO)	2,145
State of New York Capital	8,640
City of New York Capital	2,666
Asset Sales / Leases	1,018
Other MTA Sources	595
Sub-total	\$30,333
Bridge and Tunnels Bonds (\$2.4b) & PAYGO (\$551m)	2,936
Total 2015-2019 Funds Available	\$33,270
Funding Gap	\$0

Source: MTA Capital Program 2015-2019, Amendment No. 3, May 31, 2018

The May 2018 amendment to the 2015-2019 Capital Program increased the Capital Program by 2.5 percent from \$32.5 billion to \$33.3 billion. Changes to the program include updating project assumptions to reflect the cost estimates and timing of ongoing projects, consolidation of the City of New York sponsored stations budgets in the NYCT program, reflection of emerging new needs across the agencies, reallocation of funds within the East Side Access and Regional Investment programs, updates to B&T's capital program, and identification of capital program elements with ten percent issues that require CPRB approval to progress work.

Federal Formula, Flexible, and Miscellaneous Funding.

The MTA is assuming the 2015-2019 federal formula funding of \$6.7 billion, a decrease of \$255 million from the previous Capital Plan assumption. Based on the recent federal transportation bill reauthorization by Congress, this amount is consistent with the MTA's current level of federal grant funding receipts.

Federal Core Capacity. The amended 2015-2019 Capital Plan includes a \$100 million in federal core capacity funding. The funding will be used to advance the Authority's Canarsie Line power and station improvements project.

Federal New Starts. The amended 2015-2019 Capital Plan includes \$500 million in federal New Starts funding for Phase 2 of Second Avenue Subway. This is in addition to the \$535 million in local funding currently assumed for this project, and it will provide support for the project's commitments during the 2015-2019 period. This proposed New Starts funding is subject to further discussion with the FTA, Congressional appro-

priations, and a future Plan amendment to make available the additional local funding required for the New Starts application process.

MTA Bonds. The proposed plan includes \$8 billion in new MTA bonding capacity for 2015-2019, including \$285 million in bond proceeds generated by savings due to the use of low-interest federal Railroad Rehabilitation and Improvement Financing (RRIF) loan for the Authority's Positive Train Control (PTC) projects. The use of RRIF loan financing generally enables the MTA to borrow at the U.S. Treasury rate and pay it back on a longer maturity and flexible terms.

Pay As You Go (PAYGO) Capital. The MTA plans to use \$2.3 billion in PAYGO capital to leverage new debt service capacity until fully exhausted by the debt service needs of the Authority's bonds.

State Capital Funds. The capital plan includes \$8.6 billion in capital funding from the State to support the plan, including \$250 million to fund the Penn Station Access project and an additional \$174 million of new capital funding to support the NYCT Subway Action Plan.

New York City Funds. The revised 2015-2019 program currently includes an additional \$174 million of new capital funding to support the NYCT Subway Action Plan.

Asset Sales/Leases. The MTA anticipates \$1 billion from other non-bond sources (asset sales and lease), including proceeds from the East and West Rail Yards Payments in Lieu of Sales Tax (\$190 million), proceeds from the proposed de-

velopment of MTA Madison Avenue property pursuant to the Vanderbilt Corridor re-zoning (\$110 million), and resources from the disposition of assets including properties jointly owned with the City (\$300 million).

Other MTA Sources. The MTA Plan anticipates \$595 million in “other” bond and PAYGO sources, including \$530 million

from savings due to the issuance of lower cost Payroll Mobility Tax-backed bonds.

Bridge and Tunnels Bonds. The MTA plans to use \$24 billion in TBTA bonds and \$551 million in PAYGO capital to fund its bridge and tunnel projects over the five years period.

State/Local Subsidies 2020 (\$ in millions)						
Subsidies	MTA	NYCTA	SIRR	MTA Bus Company	Total Municipal Control	Municipal Control Percentage
New Funding Sources						
NYC Transportation Assistance Fund	\$385	\$360			\$360	93%
State and Local Subsidies						
State Operating Assistance	188	158	1		159	84%
Local Operating Assistance	188	158	1		159	84%
Station Maintenance	181				0	0%
Other Funding Agreements						
City Subsidy for MTA Bus Company*	\$492			\$500	\$500	102%
City Subsidy for Staten Island Railway	54		54		54	101%
CDOT Subsidy for Metro-North Railroad	121				0	0%
NYCT Charge Back of MTA Bus Debt Service		(12)			(12)	
Forward Energy Contracts Program - Gain/(Loss)		(0)			0	
Committed to capital Program Contributions		(205)			(205)	
Drawdown of GASB 45 OPEB Reserves					0	
Total Dedicated Taxes & State and Local Subsidies	\$1,608	\$459	\$55	\$500	\$1,014	63%
Inter-agency Subsidy Transactions						
B&T Operating Surplus Transfer	\$649	\$262			\$262	40%
Total Subsidies	\$2,257	\$721	\$55	\$500	\$1,276	57%

*Excludes State 18-B Funding

Dedicated Taxes Breakdown (\$ in millions)					
	2020	2021	2022	2023	2024
Dedicated Taxes					
Metropolitan Mass Transportation Operating Assistance (MMTOA)	1,840	1,918	1,999	2,039	2,080
Petroleum Business Tax (PBT)	637	637	637	650	663
Mortgage Recording Tax (MRT)	470	485	499	509	520
MRT Transfer to Suburban Counties	(6)	(7)	(7)	(7)	(7)
Reimburse Agency Security Costs	(10)	(10)	(10)	(10)	(10)
Interest	5	5	5	5	6
Urban Tax	603	604	616	629	641
Other Investment Income	1	1	1	1	1
Payroll Mobility Tax	1,668	1,739	1,811	1,847	1,884
Payroll Mobility Tax Replacement Funds	244	244	244	249	254
MTA Aid (Licensing Fees, Taxicab Tax, Auto Rental Surcharge)	308	309	310	316	323
TOTAL	5,762	5,926	6,107	6,229	6,353

Source: MTA 2019 Final Proposed Budget November Financial Plan 2019-2022, Volume 2

