Unlocking the grid: strategies to reduce vehicle CONGESTION in Manhattan

Gale A. Brewer
Manhattan Borough President

Introduction

Manhattan's gridlocked traffic is as iconic as Central Park, the Chrysler Building, or the Museum of Modern Art—but a lot less pleasant to be stuck in. The volume of people, cars, trucks, and buses traveling our streets each day is massive, contributing to a host of problems for our borough.

A 2013 study by the U.S. Census Bureau found that commuters entering Manhattan cause its population to practically double each day—from 1.58 million to 3.08 million—by far the largest fluctuation in the country. This volume has helped earn New York the dubious distinction as the second most congested U.S. city, bested only by Los Angeles. And our congestion will only get worse as New York City and the metropolitan area continue to grow.

Every New Yorker has a story attesting to this worsening problem. As Borough President, I hear these stories almost daily – the carpooling office workers stuck for hours trying to enter the Lincoln tunnel, the frustrated taxi drivers and passengers stuck on Seventh Avenue after a concert lets out at Madison Square Garden, the bus riders delayed by increasingly slower rides across Manhattan.

To get a broad view of this problem, I called a public hearing on September 17, 2015. Transportation analysts, advocates, and industry experts offered unique analyses of Manhattan's congestion problem and solutions for addressing it. Since then, we have also heard from constituents, policy experts, and advocates via email, phone, mail, and social media. These ideas and those presented at our hearing are an important part of this report.

There is no single solution to Manhattan's congestion problem; we can only combat it on multiple fronts, including:

- Improving public transit infrastructure,
- Implementing a fairer tolling system in all boroughs,
- Building new cross-Hudson routes, and
- Enacting short-term measures.

THE STATS

Average Manhattan travel speeds:

↓9%

2010-2014.

Source: NYC Dept. of Transportation

25,000

new for-hire vehicles since 2011.

Source: NYC Taxi and Limousine Commission

I look forward to working with my fellow elected officials, transportation experts, advocates, and community members to implement these proposals.

Sincerely,

Gale A. Brewer

Gale A. Brewer

1. Improve Public Transit

As the largest transit agency in North America, the Metropolitan Transportation Authority moves an astounding 2.73 billion people annually via its vast network of subways, buses, and commuter trains. Each day, 5.5 million people ride New York City's subway. Los Angeles would need for its entire population of 3.8 million to ride the subway 1.5 times a day to reach that number.

Historically, good transit (of all kinds) has contributed much to the growth of New York as a global capital. But our investment in transportation is now lagging far behind our growth – and risks choking that growth.

A 2015 report by the New York State Comptroller's office found that nearly half a million subway trains were delayed from March 2013 to March 2014, causing the MTA to fall far below its goal of ensuring on-time trains nearly 92% of the time, and that in 2014, the subway's on-time performance averaged just 74% for weekdays and 81% on weekends.[2]

What's more, the transit system's subpar and unreliable service itself causes many to take to driving their cars on our already-congested streets. An obvious way to decrease this congestion is to do all we can to strengthen the city's public transit system.

The Citizens Budget Commission estimates that at its current repair rate, it will take the MTA 50 years to make all needed repairs to the system's 468 stations.[3] The MTA has budgeted nearly one-fifth of its recently approved capital program, or $3 billion, to carry out repairs, which will help.

But much more funding is needed: only 16% of the system's stations meet the MTA's own standards of being in "good repair." Not only is that unacceptable for the millions of daily commuters, but it also poses a significant risk to the future viability of our transit infrastructure.

THE STATS

83%
of subway stations are in poor condition

37%
of the MTA's mainline signals have outlived their useful life

Source: General Contractors Association of New York[1]

This is not the transit system of a world-class city.

In October, 2015, the Governor and the Mayor reached an agreement to "fully fund" the MTA's 2015-2019 capital plan using $3.2 billion from the city, $8.3 billion from the state and $17 billion generated by the MTA itself. But as of this writing, the state has yet to explain where its share of the funding will come from, despite the recent passage of a Fiscal Year 2016-17 state budget agreement that expanded on these capital commitments—although the budget legislation did include a $14 billion increase in the MTA's debt limit, suggesting that the MTA would fund its part of the capital plan with more debt.

Prepare for climate change. We must ensure that our transportation system is prepared for a warming climate and the extreme weather it causes. The system's vulnerability was made painfully clear in the aftermath of Hurricane Sandy, which inflicted $5 billion worth of damage to the MTA system, most of it caused by flooded subway tunnels. Although the system is now better prepared to absorb a Sandy-caliber storm, it is far from immune.

The MTA estimates that there are 5,600 points – such as staircases and vents – where floodwater could enter the subway system. Transportation officials estimate that billions more will need to be

invested to prevent flood damage through these exposed areas. Though it carries a steep price tag, resiliency is not an area where we can afford to cut costs.

Expand "City Ticket" program. The MTA has started a weekend pilot program that allows riders to travel within the five boroughs on Metro North and the Long Island Railroad for a reduced fare of $4.25. By offering this reduced fare, City Ticket encourages residents of neighborhoods unserved or underserved by the main subway system to take public transit instead of driving. As several panelists pointed out at our congestion hearing, the program as it stands is just a start. If this plan were put into effect seven days a week and integrated with the current MetroCard system, City Ticket could dramatically speed commutes and get more commuters off the roads and onto trains. The MTA should present clear data on the projected costs of implementing such a program and, if feasible, consider adoption.

Expand Select Bus Service. While other major cities have created popular, user-friendly bus systems, New York City bus service is often slow and unreliable. Ridership is decreasing as a result: in 2009 local bus ridership averaged almost 2.5 million weekday trips, falling to almost 2.1 million in 2014 – a decrease of 7%. The effect is even more pronounced in Manhattan, where weekday trips averaged almost 532,925 in 2009 and fell to 447,858 in 2014, a decrease of nearly 17%.

By introducing Select Bus Service (SBS), the MTA took a step toward reversing this trend. SBS buses travel dedicated lanes and allow commuters to swipe their MetroCard prior to boarding, both of which speed up travel times. The MTA reported a 15% to 18% increase in on-time travel and a 9% increase in ridership on its First and Second avenue routes over the course of a year.[4] Currently, however, Manhattan has only four SBS routes: the M15, M34, M60, and M86. We need additional routes, particularly crosstown, to help decrease bus commute times and ease congestion.

In addition, dedicated bus lanes could be added to the Lincoln Tunnel to help speed bus times and encourage commuting. The tunnel currently operates only one eastbound lane during morning peak travel times. A westbound lane should be created as well.

Expand ferry service. For too long, our waterways have been overlooked as an important tool in fighting congestion. Mayor de Blasio's plans to expand the city's ferry service across the five boroughs – announced in his 2015 State of the City address – came as a welcome corrective to this neglect. New stops at Grand Street, 23rd Street, and 34th Street within the Central Business District on Manhattan's East Side are expected to come into service in 2017. When fully operational, the NYC Economic Development Corporation estimates that Citywide Ferry Service will provide around 4.6 million trips per year across six total routes.

This plan does, however, present a couple of concerns. First, New York Water Taxi – which provides ferry service in Manhattan and parts of Brooklyn – maintains they will be forced out of business, and to lay off 200 workers, given the administration's decision to contract with one of its competitors. This eventuality would also threaten the viability of the South Street Seaport Museum, which earns close to $600,000 annually thanks to its lease with New York Water Taxi on Pier 16. Citywide ferry service is an admirable goal, but one that needs to be accomplished with minimal impact on jobs and this important cultural institution.

Second, the Mayor's new citywide ferry service does not include plans for Manhattan's West Side. It also lacks of a provision to allow commuters a free transfer from ferries to subway and bus lines, which could easily discourage use. Additional West Side routes should be added when possible, and plans made to integrate an expanded ferry service into the MTA system.

Increase the state gas tax. Another way to generate additional transit revenue is to implement a gas tax. The national gas tax has remained stagnant at 18.4 cents per gallon since 1993. Although New York State taxes gas at a higher level than most states (42.6 cents per gallon), gas prices are now at their lowest rate in years, hovering just above $2 per gallon in New York City in February 2016. As a result, revenues generated by gas taxes for transportation projects are down. Other states across the country – including those like Georgia and Utah under fiscally conservative administrations – have already taken advantage of lower crude oil prices by raising their gas taxes to generate needed revenue for transportation projects. New York should do the same.

2. Implement fairer bridge & tunnel tolls.

There's a way to both reduce congestion on Manhattan streets and also create a revenue stream for mass transit imporvements: implement a fair tolling plan for bridges and tunnels leading into Manhattan.

Drivers of cars and trucks are currently allowed to "bridge shop" when deciding how to enter Manhattan, often opting to cross one of the four no-toll East River bridges – the Brooklyn, Manhattan, Williamsburg, and Queensboro bridges – rather than cross others with tolls. It makes no sense to allow drivers to enter the most congested and gridlocked part of our city for free, while charging heavily for entry to much less congested parts of the borough.

"Move NY," a thoughtful plan developed by transportation expert Sam Schwartz, would put an end to this practice. Move NY proposes a toll of $5.54 with an E-ZPass (and $8 without) on each of the East River bridges entering Manhattan's central business district (CBD). A vehicle driving south of 60th Street within Manhattan would likewise pay a $5.54 toll.

THE STATS

The Move NY plan could cut congestion

↓15%

while simultaneously raising

↑$1.5 ***billion in new revenue for mass transit.***

Source: MoveNY, www.iheartmoveny.org

Move NY also proposes to simultaneously reduce tolls on bridges with fewer mass transit options. The Triborough, Whitestone, Throgs Neck, and Verrazano-Narrows bridges, for instance, would see a $2.50 reduction in current tolls to $3.04. The Cross Bay, Marine Parkway, and Henry Hudson would see a $1 drop in tolls.

Move NY takes into account the needs of industries whose vehicles must travel our bridges with greater frequency: trucks and other commercial vehicles would pay these tolls only once a day, and yellow and green taxis would be exempt. Taxis would instead pay a series of surcharges: 50 cents on each trip, 15% on all miles traveled south of 96th street, and 20% on any idling time within the CBD. This may sound like a large increase, but taken together, these surcharges will total no more than $1.40 for a three-mile trip, according to Move NY.

Thus, Move NY increases tolls where more mass transit options exist and lowers them where there are fewer options. This is not only fairer, but it would also help redirect traffic that's only passing through the CBD on the way to somewhere else. Move NY advocates estimate that this tolling plan could reduce congestion in the CBD by as much as 15% to 20%.

At the same time it's cutting congestion, the Move NY plan generates approximately $1.5 billion each

year in new toll revenue – which could help fill the MTA's persistent funding gap and ensure that our transportation infrastructure gets needed upgrades without passing the costs onto transit riders via fare hikes.

Those arguing that Move NY is too extreme have suggested a combination of smaller congestion-reduction measures, such as capping the city's for-hire vehicles (FHVs) and regulating the delivery times of commercial drivers. But those smaller steps do not address the larger problem—and could induce more private cars and trucks to enter even slightly less crowded Manhattan streets. If our primary goal is to reduce congestion, we need a plan that will permanently reduce the number of vehicles entering the CBD each day, not stopgap measures.

Move NY is not a perfect plan. A solution to increased traffic and parking issues in the area just north of 60th Street would have to be found. And Move NY does not consider a similar tolling structure for the Hudson River crossings, which may be worthwhile. But despite these shortcomings, Move NY is the best plan presented to date to reduce congestion and increase desperately needed transit funding.

3. Build new cross-Hudson routes.

The Hudson Yards development is estimated to bring an additional 24 million people a year to Manhattan's West Side. The recent 7-train expansion to 11th Avenue and 34th street will help absorb a portion of that area's increased transportation needs, but much more is needed to help ease congestion on Manhattan's West Side. Additional rail connections between Manhattan and New Jersey, for both commuters and freight, would help ease that congestion as well as throughout the CBD.

The Gateway Project would create new high-speed rail corridors by adding 25 train slots for Amtrak and New Jersey Transit trains traveling between Newark Penn Station and New York Penn Station. It would also repair damage done to trans-Hudson tunnels during Hurricane Sandy and modernize the rail system's aging infrastructure. The project has recently gained traction and could double the number of Amtrak and New Jersey Transit trains traveling into Manhattan, vastly increasing their capacity and leading to a decrease in commuters driving into the borough.

In September 2015, New York Governor Andrew Cuomo and New Jersey Governor Chris Christie asked the federal government to fund 50% of Gateway to make this $20 billion project a reality. Two months later, the federal government agreed to pay "no less than 50%" and created the Gateway Development Corporation, which will be overseen jointly by the Port Authority and Amtrak. New York, New Jersey, and the Port Authority will fund the other 50%.

The Gateway Project is an exciting example of local, state, and federal governments and agencies working together on a project that will greatly benefit the region and, we hope, spark similar and much-needed infrastructure projects. New York City must maintain pressure to see this project through to completion.

Cross-Harbor Freight Tunnel. According to the Port Authority of New York and New Jersey, trucks carry 80% of the 320 million tons of freight moved through the New York City metro area each year.[5] The social costs of the incredible volume of trucks entering and exiting Manhattan each day include increasingly greater congestion, dangerous commuting environments for pedestrians and cyclists, and more air pollution and asthma. The extreme inefficiency of truck transport also harms our local economy: moving goods just two miles from Manhattan to New Jersey can cost the same as transporting goods 500 miles or more in areas of the country better supported by rail.[6] One very

promising alternative to truck transport is the Cross Harbor Rail Freight Tunnel, long championed by U.S. Representative Jerrold Nadler. By connecting Brooklyn, Queens, Long Island, Westchester, and southern Connecticut to the national freight rail grid, this tunnel would take an estimated 500,000 trucks off our congested streets each year while transporting goods more efficiently and safely. The Port Authority of New York and New Jersey and the Federal Highway Administration are currently considering the tunnel's price tag of $7 billion to $11 billion.

While we work together to secure the tunnel's funding, we can take trucks off our congested streets by increasing freight delivery via float bridge systems. The Port Authority found that using our waterways could divert up to 1.7 million tons of trucked freight per year[7] – far less than the 7.2 to 9.6 million tons that a rail tunnel could divert but enough to make a difference on Manhattan streets.

4. Short-term fixes.

Improving public transportation, instituting a fair tolling system, and building new cross-Hudson bridges and tunnels are the best long-term solutions to our city's congestion problem – and we need to be diligent in advocating for them. But we should also consider implementing more modest measures that can provide immediate relief in the short term.

Continue "Vision Zero" efforts. The common-sense reforms of Mayor de Blasio's Vision Zero are essential to reducing the safety risks of congestion. The concept of Vision Zero is simple: no New Yorker should have to fear for his or her life while walking, biking, or driving our streets. We've already passed laws to pull the licenses of cab drivers who critically injure or kill someone by not yielding to pedestrians, crack down on careless drivers, lower speed limits, and redesign dangerous intersections into "complete streets."

Many of Vision Zero's efforts to eliminate traffic fatalities and injuries due to collisions also reduce congestion. Policies aimed at reducing collisions will reduce road and lane closures, which can substantially impede the flow of traffic. And "complete streets," with their shortened pedestrian crossings and protected bike lanes, make it safer for commuters to walk and bike rather than drive. We've made substantial progress with Vision Zero and need to push ahead with further reforms.

Cap sightseeing buses. Limiting the number of double-decker sightseeing buses roaming our streets is another strategy. According to the New York State Department of Transportation (DOT), the number of these buses in the city more than tripled between 2003 and 2013, and as of this writing there are 229 licensed by the NYC Department of Consumer Affairs.[8] These buses impede the flow of traffic by making frequent stops and driving at a leisurely pace conducive to sightseeing, often while operating well below capacity.

To combat this growing problem, the Manhattan Borough President's Office partnered with Council Member Margaret Chin to introduce legislation to cap the number of sightseeing buses at 225. No current licenses would be taken away; rather, once the current number of sightseeing buses dips to 225 through attrition, no new licenses would be granted above this number.

Study for-hire vehicles. The growing for-hire vehicle (FHV) market and its impact on congestion have come under scrutiny in recent months. The de Blasio administration issued a statement citing the growth of app-based competitors like Uber and Lyft as a primary driver of traffic congestion and proposed a cap on the industry as a way to help combat growing gridlock.[9] In a subsequent report, however, the mayor's office cited population growth, freight deliveries, and construction as larger

contributors to congestion than the FHV market, though it did recommend increased enforcement against congestion-causing activities that for-hire and other vehicles engage in, such as idling and double-parking.[10]

We must continue to study how the FHV industry is affecting Manhattan driving patterns. The mayor's report recommends instituting additional commonsense reporting requirements for app-based FHVs as well as yellow/green cabs. Although the Taxi & Limousine Commission is currently collecting data on pickups and in some cases drop-offs, limited information is available on the "cruising" time of vehicles, especially for app-based FHVs, when they are traveling empty or parked on city streets. This needs to be better understood.

Regulate trucks. Truck drivers who illegally deviate from designated city routes contribute to congestion and unsafe commuting conditions. We know that 35% of the 2,389 truck collisions studied by the DOT in 2007 occurred while the driver was operating off of a designated truck route.[11] The NYPD should step up enforcement to ensure proper compliance with designated truck routes.

Trucks exceeding the legal weight limit also contribute to congestion and safety problems in Manhattan. New York State's relatively lax weigh station regulations are partly to blame for this. In Connecticut, every commercial motor vehicle is required to stop at weigh stations, while New Jersey requires any vehicle weighing 10,001 pounds or more to stop and be weighed. New York State should consider a similarly strict standard to crack down on truckers entering Manhattan above the legal weight. We should also provide the DOT and NYPD dedicated resources to ensure that trucks meet additional safety standards, such as proper quality and functioning of tires, brakes, and lights.

Evidence suggests that overnight truck deliveries may be an effective way to reduce congestion. A year-long NYC DOT pilot of 33 companies making off-hour deliveries (between 7 p.m. and 6 a.m.) offered encouraging results: travel speeds increased by as much as 75%, and trucks spent an average of only 30 minutes parked curbside while making deliveries rather than the average of 100 minutes spent during peak hours.[12] The program was so successful, that the U.S. DOT Federal Highway Administration provided a grant to the Rensselaer Polytechnic Institute to encourage additional retailers to adopt off hour deliveries as well.[13] NYC DOT is soliciting additional carriers citywide to participate in the Off-Hour Delivery program.

There is some concern, however, that increasing off-hour deliveries could increase the number of collisions owing to driver fatigue, and the program could increase nighttime noise. Any expansion, therefore, must take place with the consultation of the city's Community Boards and citizen groups.

Conclusion.

Though these policy proposals will go a long way toward helping curb our congestion problem in Manhattan, we must stay in continued dialogue around the issue.

To that end, my office will convene meetings on specific recommendations to engage relevant stakeholders in more targeted conversations with specifc implementation plans.

With Move NY, we will be holding a meeting to bring together supporters of the group's proposition with the goal of establishing a stronger framework for action. I look forward to working with my fellow elected officials, transportation experts, advocates, and community members to implement Move NY and other recommendations of this report.

ENDNOTES

1. Cited in Denise Richardson, "Six Million Reasons Albany Fails," Gotham Gazette, July 2015; available at http://gcany.com/press-room/letters-editor.

2. "Train On-Time Performance," a report by New York State Office of the Comptroller, August 2015; available at http://www.osc.state.ny.us/audits/allaudits/093015/14s56.pdf.

3. Jamison Dague, "Sisyphus and Subway Stations," Citizen Budget Commission, September 2015; available at http://www.cbcny.org/sites/default/files/REPORT_STATIONS_09022015_1.pdf.

4. In "M15 on First and Second Avenues: Progress Report," NYC DOT and NYC Transit, June 2011; available at http://www.nyc.gov/html/brt/downloads/pdf/201111_1st2nd_progress_report.pdf.

5. "Cross Harbor Freight Program: Tier 1 Draft Environmental Impact Statement," report by Port Authority of New York and New Jersey, November 2014; available at http://www.panynj.gov/port/CHFP_draft_Tier_1_EIS/00___Cover_for_Cross_Harbor_DEIS.pdf.

6. Ibid.

7. "Cross Harbor Freight Program: Final Tier 1 Environmental Impact Statement," report by the Port Authority of New York and New Jersey, September 2015; available at http://www.panynj.gov/port/cross-harbor.html.

8. Information provided by the New York State Department of Transportation and NYC Department of Consumer Affairs.

9. Matt Flegenheimer, "City Hall, in a Counterattack, Casts Uber as a Corporate Behemoth," New York Times, July 2015; available at http://www.nytimes.com/2015/07/21/nyregion/city-hall-in-a-counterattack-casts-uber-as-a-corporate-behemoth.html.

10. "For-Hire Vehicle Transportation Study," a Report by the Office of the Mayor of New York, January 2016; available at http://www1.nyc.gov/assets/operations/downloads/pdf/For-Hire-Vehicle-Transportation-Study.pdf.

11. According to data from "New York City Truck Route Management and Community Impact Reduction Study," a report by the NYC DOT, March 2007; available at http://www.nyc.gov/html/dot/downloads/pdf/execsum.pdf.

12. "NYC DOT Pilot Program Finds Economic Savings, Efficiencies for Truck Delivers Made during Off-hours," NYC DOT, July 2010; available at http://www.nyc.gov/html/dot//html/pr2010/pr10_028.shtml.

13. "FHWA Announces $200,000 in Grants to Explore Overnight Truck Delivery in New York City Boroughs and Florida," U.S. Department of Transportation, September 2015; available at https://www.transportation.gov/briefing-room/fhwa-announces-200000-grants-explore-overnight-truck-delivery-new-york-city-boroughs.

Many thanks to Shula Warren, MBPO Director of Policy, David Dodge, and Barbara Sutton for their work in shaping this report.

Gale A. Brewer
MANHATTAN BOROUGH PRESIDENT

1 Centre Street, 19th Floor South
New York, NY 10007
(212) 669-8300

431 West 125th Street
New York, NY 10027
(212) 531-1609

www.manhattanbp.nyc.gov
galeabrewer

May 2016