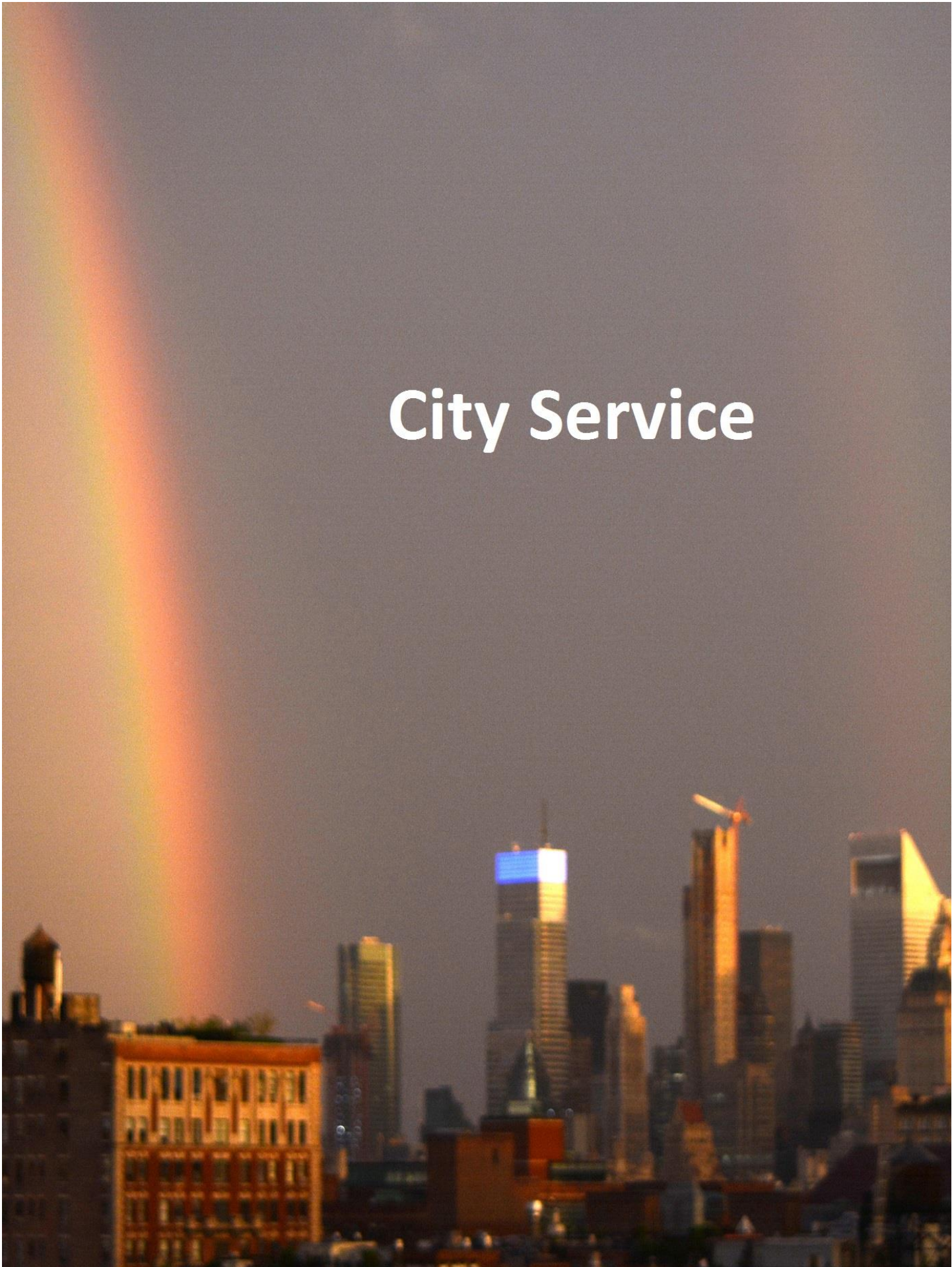


# City Service



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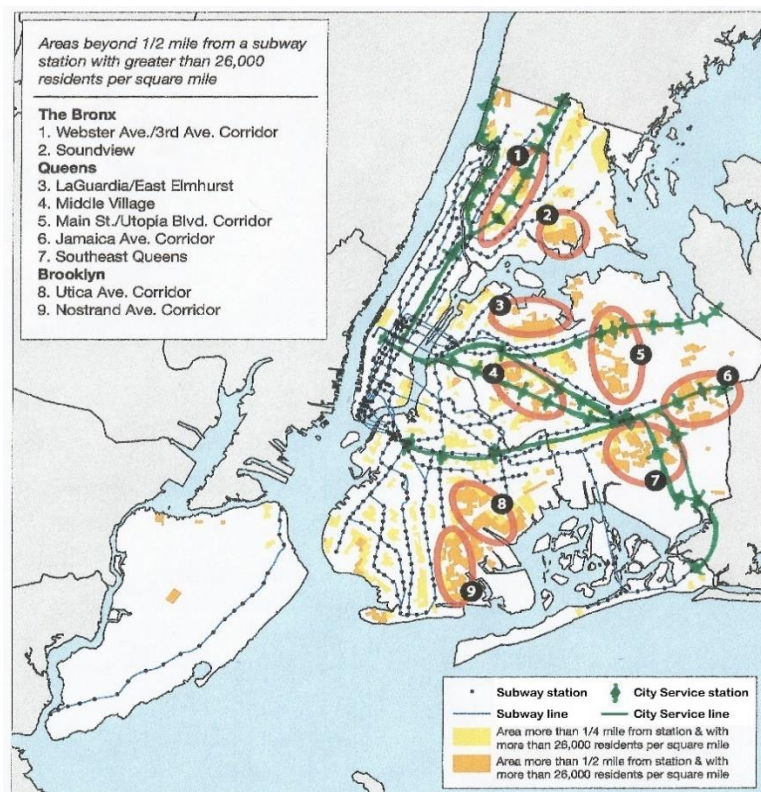
## OVERVIEW OF CITY SERVICE

City Service is a plan to add a new train service (parallel to the current commuter rail services) on the existing, underutilized LIRR and Metro North tracks in the city at SUBWAY PRICES (with FREE TRANSFERS from and to buses and subways). City Service requires no new construction, would not overcrowd current commuter service and could be introduced in a matter of months in an incremental manner at very little cost. This new, inexpensive rail service would be very popular. City residents could participate in a lottery for special, monthly City Service Metro Cards, ensuring that these passes would be distributed fairly among all residents – including the large number of current drivers, bus and subway riders and Express bus riders, as well as the very small number of commuter rail customers. In five years, when East Side Access is completed, City Service could be carrying hundreds of thousands of daily riders, taking pressure off the overcrowded subways and providing fast and inexpensive train service to residents in neighborhoods of the city that currently lack nearby subways.

Currently, the MTA offers very infrequent commuter rail service at the more than three dozen LIRR and Metro North stations in the city. Many of these stations are in underserved neighborhoods of the Bronx and Queens (circled in orange on the MTA map below). Very few of the people in these “transit deserts” can afford to pay \$200 per month for commuter rail passes that do not provide free transfers to subways. This has resulted in low ticket revenue for the MTA and long commutes by car or by bus and subway for the people. The MTA solution has been to increase bus service, but slow buses are not the answer. MTA data shows that bus trips cost the MTA about \$1.00 per mile per rider more than rail trips. The MTA subsidizes long, slow Express Bus trips by over \$35 per rider per day. Running City Service trains on the commuter tracks (added in green to the MTA map) would provide fast, inexpensive commutes for riders and save the MTA tens of millions of dollars a year by switching riders from buses to trains.

### **MTA Map of Underserved Neighborhoods with City Service Routes Added**

The fact that the MTA is split into three separate agencies – Metro North, the LIRR and New York City Transit – creates some challenges. For safety and operating reasons, it is better if the new City Service is administered by the commuter railroads with which it is sharing tracks. The commuter railroads would gain new revenues from the sale of City Service Metro Cards to former drivers and bus passengers and lose some revenues from current train riders switching to the cheaper City Service. Strong leadership at the top of the MTA is needed to ensure an equitable distribution of revenues and savings among the three agencies.



Source: [http://www.nyc.gov/html/bmt/downloads/pdf/intro\\_to\\_brt\\_phase2.pdf](http://www.nyc.gov/html/bmt/downloads/pdf/intro_to_brt_phase2.pdf)

## **IMMEDIATE INTRODUCTION OF A LIMITED CITY SERVICE**

The MTA has ample equipment and space available on the commuter rail tracks, in the tunnels, at the stations, and at the main rail terminals to immediately add extra City Service trains to the LIRR and Metro North schedules outside of the one hour peak period from 8 to 9 in the morning. Current 2017 schedules show that more than 50 Metro North trains arrive at Grand Central Terminal from 8 to 9 AM compared to less than 40 arrivals in any other one hour period of the day. One crowded ten car City Service train could carry 1400 riders with over 1000 of them seated in the peak direction and at least 600 riders in the reverse commute direction. Each roundtrip would carry 2000 riders. Two trains arriving at their terminals in Manhattan or Brooklyn between 7 and 8 AM and two more between 9 and 10 AM on each of the five commuter routes serving the northeast, central and southeast areas of Queens and the central and western areas of the Bronx (20 roundtrips), with matching service in the evening (20 more roundtrips), would immediately provide fast train service to 80,000 riders a day at subway prices. A limited City Service would immediately reduce dangerous overcrowding on subways such as the #7 line and would also provide many commuters with alternative travel options when lines are closed for repairs. To keep City Service cost effective, new trains should only be added to the schedules when and where there is sufficient ridership demand.

## **EXPANSION OF CITY SERVICE AFTER COMPLETION OF EAST SIDE ACCESS**

East Side Access (described in the MTA document below) is scheduled to be completed in 2022 and will allow for a significant expansion of City Service throughout the day – including in the rush hour periods. This \$10 billion project will connect the LIRR tracks in Sunnyside Queens to eight new platforms under Grand Central Terminal and was designed to expand LIRR service and to give 162,000 LIRR daily riders a choice between using Grand Central or Penn Station for their commutes.

### **MTA | Capital Programs East Side Access**



East Side Access provides new Long Island Rail Road service to the east side of Manhattan, supplementing existing service to Penn Station on Manhattan’s west side and Atlantic Terminal in Brooklyn. The East Side Access megaproject is one of the largest transportation infrastructure projects currently underway in the United States with a history that reaches back to the 1950’s when discussions were first held regarding regional transportation planning. The project encompasses work in multiple locations in Manhattan, Queens and the Bronx and includes more than 8 miles of tunneling.

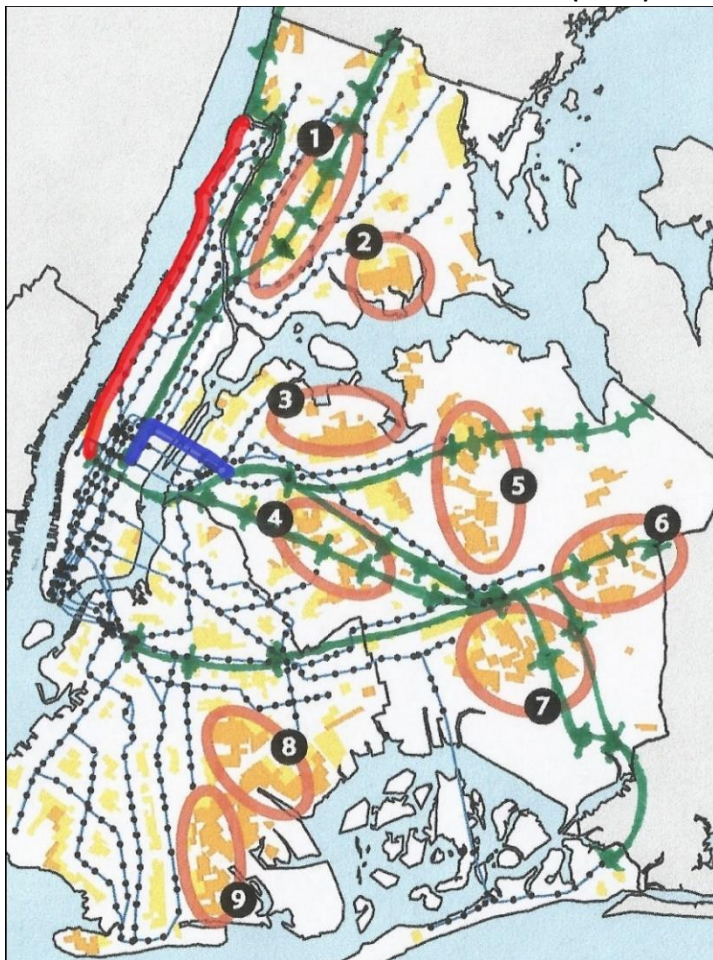
When completed, East Side Access will serve approximately 162,000 customers a day, providing a faster and easier commute from Long Island and Queens to the east side of Manhattan in a new 8-track terminal and concourse below Grand Central Terminal.

Source: [http://web.mta.info/capital/esa\\_alt.html](http://web.mta.info/capital/esa_alt.html)

[\(Back to top\)](#) 2

City Service will help justify the tremendous amount of money being put into the East Side Access project. Since East Side Access (shown in blue on the map below) will switch some LIRR trains from Penn Station to Grand Central, it will free up space during the peak periods at Penn Station. Then some regular Metro North Hudson Division trains could use the existing Amtrak right of way under Riverside Park (shown in red) to go to Penn Station. This, in turn, would make space on the Metro North tracks under Park Avenue for City Service trains from the Bronx. So, after East Side Access is completed, there will be ample space, even at the peak of rush hour, to run three or more City Service trains per hour on each of the proposed Metro North and LIRR City Service routes. Fast, subway priced, City Service should eventually attract enough riders to schedule over 150 weekday roundtrips at 30 minute headways through much of the day from 6:30 AM until 11:30 PM with even more frequent service during the rush hours. City Service will carry hundreds of thousands of daily riders when fully operational – more than the Second Avenue subway, more than the #7 line extension and way more than the current plans for East Side Access. Note that, unlike those MTA projects, City Service involves no construction mess or construction budget.

**Expanded City Service in Rush Hours Made Possible by East Side Access to Grand Central Station (in blue) and Hudson Division Access to Penn Station (in red)**



East Side Access will enable City Service to operate frequently throughout the rush hour periods, and City Service will, in turn, justify the tremendous expenditures and work efforts put into the East Side Access project. With City Service in operation, East Side Access will serve half a million or more city and suburban riders.

**Map of Paris Metro & RER**



The Paris commuter rail system, the RER, is fully integrated with the Paris Metro. Inside the city, all riders pay Metro prices and there are free transfers between the systems.

## TICKETING POLICY

The simplest ticketing policy at the start of City Service would involve issuing about 1200 special unlimited monthly Metro Cards (with photos ID's) to city residents by lottery for each scheduled City Service trip. These cards would entitle riders to the usual subway and bus rides and to one ride in each direction at the specified City Service trip times, which would be written on the card. This would prevent overcrowding on peak period City Service trains. Demand for these passes will also give the MTA a chance to gauge demand for different City Service trips and to increase or decrease service accordingly. Regular customers without special City Service passes could ride at the standard fare, both enjoying the more frequent train service and adding to revenues. Note that suburban commuters without passes would have no reason to drive to the city, fill all the local parking spots near stations and cheat the system out of revenues.

One way to distribute City Service Metro Cards would be to have city residents apply online or at an MTA office (or a library) to enter a lottery. They would list their choice of two specific City Service scheduled trains (one in each direction). As the lottery is run, 1200 slots for each trip will be filled in order. When a person is picked whose two selections cannot be filled, that person would be wait-listed and the next person chosen would be considered. Winners, who get their two selections, must then apply in person for their photo ID and pay for the first month's service. The City Service Metro Card with the specific trips printed on it would then be mailed to that person. A winner would be entitled to renew their monthly card 11 more times for a total of one year. If the person fails to renew an expired card for more than a month they would lose their card and the next person wait-listed for those specific times would have an opportunity to apply in person. After East Side Access is completed, allowing for expanded City Service, the ticketing policy concerning specific trip times could possibly be relaxed.

A factor that could increase the possible number of City Service slots available on specific trips is the fact that large numbers of residents in the Bronx and in Queens work in their home boroughs and would exit the trains early, thus making room for additional riders.



### **DOWNTOWN FLUSHING BUS MAP**

60,000 riders exit from 20 different bus lines in downtown Flushing on weekdays. Only half of them get on the subway there. There are 52,000 jobs in the three Zip Codes near the Flushing hub according to 2015 Census data. There are even more local jobs in the seven Zip Codes that border the Harlem Division tracks in the Bronx. There are also many riders who are not commuting to jobs. They are going to schools, stores, restaurants and doctors. For whatever reasons, if many riders exit a particular trip early, then the number of slots for that trip could be increased.

## EFFECTS OF DIFFERENT TYPES OF CITY SERVICE RIDERS ON MTA REVENUES AND SAVINGS

A very small percentage of workers in Queens and the Bronx use the commuter rail system to go to work. 2015 US Census data indicate that only 2.2% of Queens workers commuted to their jobs on the LIRR, and only 2.2% of Bronx workers reported using Metro North for their commutes. The situation does not change much in the underserved parts of the Bronx and Queens that lack nearby subway service. Consider the following table of 2015 Census data concerning the “Means of Transportation to Work” for the 178,528 workers living near the LIRR Port Washington Branch in northeast Queens from Flushing east to Little Neck (see map below).

Means of Transportation to Work in Northeast Queens	Two Zip Codes (11354 and 11355) Near to Main St. Subway Station	Nine Zip Codes Far from Main St. Subway Station
Car, Truck or Van	23,982 (39.0%)	72,805 (62.2%)
Railroad (LIRR)	465 (0.8%)	7,025 (6.0%)
Subway	17,186 (27.9%)	16,048 (13.7%)
Bus	8,864 (14.4%)	12,659 (10.8%)
Walked	8583 (13.9%)	3,620 (3.1%)
Total	61,558	116,970

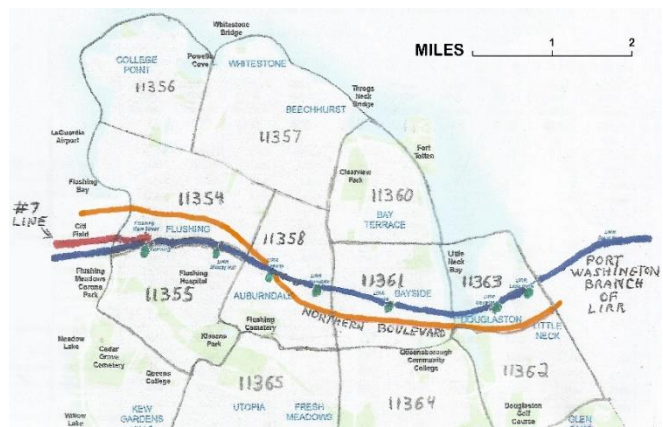
Source: <https://factfinder.census.gov/>

Even in the 9 Zip Codes in the middle class northeastern Queens “transit desert” near the LIRR Port Washington Branch only 6.0% of workers (7,025 out of 116,970) used the LIRR. In the 7 less affluent Zip Codes in the central Bronx bordering the MNR Harlem Division only 3.3% of workers rode on Metro North. If the special new Metro Cards for City Service were widely advertised to drivers, Express bus riders and bus/subway riders as well as to current train riders and if they were distributed fairly in a lottery, then the loss in regular commuter rail ticket revenues would be minimal.

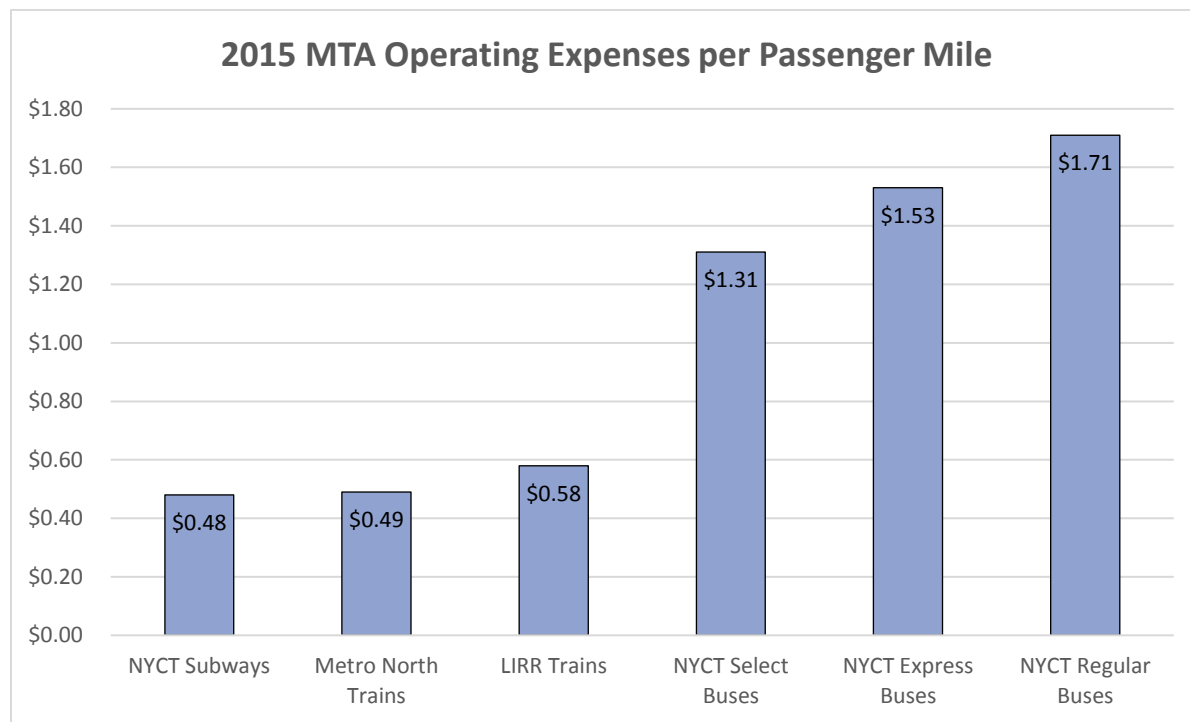
People who commute by car and live in neighborhoods that lack subway service do not currently purchase monthly Metro Cards. It is well documented that New Yorkers who live near subways use them. The MTA notes on its website that 80% of New Yorkers with jobs in the central business district use mass transit for their commutes. The above table shows that only 39% of the 61,558 Flushing workers who live nearer to the subway commute by car, while almost two thirds (62%) of the 116,970 workers who live in adjoining neighborhoods of northeast Queens that are far from a subway commute by car. There are six stations on the LIRR Port Washington Branch that could provide the residents of this “transit desert” very fast, and very inexpensive City Service rail commutes. Many drivers, here and elsewhere, will switch to City Service to save up to an hour a day in commuting time. Other drivers will switch to save money on parking, gas and tolls. Each of these new mass transit commuters will contribute \$1450 per year (over \$5.50 per round trip) in new Metro Card revenues.

### Map of Northeast Queens showing ZIP Codes and Port Washington Line

Running City Service on the LIRR Port Washington Branch would alleviate the congestion from cars and buses on Northern Boulevard (shown in orange). In addition, thousands of nearby Express bus riders, each of them subsidized \$35 a day by the MTA, would switch to the cheaper and faster City Service. The QM3 Express bus on Northern Blvd. could be cancelled entirely.



City Service riders who currently commute, at least in part, by bus or Express bus already purchase Metro Cards. However, the MTA will cut its operating expenses for these people very significantly by switching them from buses to rails. According to MTA data submitted to the National Transit Database (see the appendix) the 2015 operating expenses per passenger mile was about \$1.00 higher for bus trips than for rail trips, as shown in the bar graph below.



**EVERY PASSENGER MILE SWITCHED FROM BUS TRAVEL TO RAIL TRAVEL SAVES THE MTA \$1.00.**

Tens of thousands of residents in outlying areas of the city commute for miles on crowded regular local buses to either the nearest subway station or to jobs in their local hub. Many bus routes (particularly in eastern Queens) pass right by City Service stations or could be modified slightly to do so. Large numbers of riders on these buses would then transfer (for free) from slow buses to fast City Service trains at these stations, thus reducing their total daily bus mileage by about 3 or 4 miles. This would allow the MTA to increase bus efficiency and reduce bus service in three ways. The riders exiting at City Service stations would make room for new passengers, significantly reducing the need for large numbers of buses to head all the way into the congested local hubs such as Flushing or Jamaica. And on some routes, long slow trips to the hubs could be replaced in part by short quick trips just shuttling back and forth to nearby City Service stations. Lastly, by significantly reducing the number of buses entering the local hubs, the congestion in these areas will be cut, allowing the remaining buses in the area to move more quickly. This will save the commuters a lot of time and it will save the MTA \$3 to \$4 per day on average for each regular bus rider switching to City Service.

Express bus riders from underserved neighborhoods of eastern Queens and the northern Bronx could reduce their commuting times tremendously and cut their transportation costs in half by switching from Express buses to City Service trains. Many Express bus trips into Manhattan could be replaced by short local bus trips to nearby City Service stations. Some Express bus routes will experience an immediate and significant decline in ridership. This will allow many trips to be cancelled and even allow a few routes to be dropped completely. Recall that the MTA subsidizes each Express bus trip by \$35 per rider per day.



## **CITY SERVICE OPERATING BUDGET**

Official reports that the LIRR and Metro North submitted to the National Transit Database indicate that the 2015 operating expense per vehicle revenue mile was less than \$20 and the 2015 operating expense per vehicle hour was about \$600.

2015 LIRR & Metro North Operating Expenses		
Operating Expenses	LIRR	Metro North
Per Vehicle Revenue Mile	\$19.11	\$16.27
Per Vehicle Revenue Hour	\$606.00	\$558.30

Source: 2015 National Transit Database (see Appendix for details)

City Service roundtrips are about 30 miles in length and take about one hour. This means that running a ten car City Service train would cost about \$6,000 for each round trip (calculated either by distance or by time). With a total of 2,000 riders per round trip (1,000 passengers on average in each direction), the cost per passenger roundtrip comes out to about \$6.00.

The MTA also reported to the National Transit Database that fare revenues for the LIRR, Metro North and New York City Transit only covered about half of the operating expenses. Note that for City Service riders, however, former drivers will pay \$5.50 per roundtrip in new fare revenues, former local bus riders will save the MTA \$3 to \$4 per roundtrip on average, and former Express bus riders will save the MTA a whopping \$35 per roundtrip. City Service will largely pay for itself if the MTA restricts it to relatively high volume times, if it distributes the new special Metro Cards fairly in a lottery system so that they do not go disproportionately to current commuter rail passengers, if it redesigns the bus schedules to mesh with the City Service schedules, and if it makes bus operations more cost effective by dropping bus trips that have been replaced by the new train service. The combined revenues and savings associated with City Service will depend on the apportionment of the 1,000 passengers on each roundtrip among former drivers, former local bus riders, former Express bus riders and former commuter train riders. The effects of some possible distributions on MTA finances as a whole are worked out in the table below:

**Combined New MTA Revenues and Savings for Various Ridership Distributions  
on a 1000 Passenger City Service Round Trip**

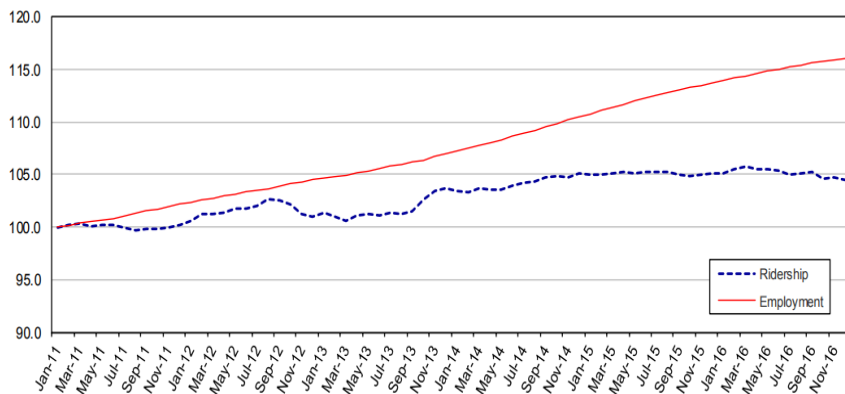
Assumption	Former Drivers		Former Local Bus Riders		Former Express Bus Riders		Former Commuter Train Riders		Total Net Gain	Gain as a Percent of Expense
	Revenue Gain of \$5.50 per Rider		Average Saving of \$3.50 per Rider		Saving of \$35 per Rider		Revenue Loss of \$10 per Rider			
Cases	Number of Drivers	Revenue Gain	Number of Riders	Savings Gain	Number of Riders	Savings Gain	Number of Riders	Revenue Loss		
1	160	\$880	750	\$2625	50	\$1750	40	-\$400	\$4855	80.9%
2	360	\$1980	420	\$1470	80	\$2800	140	-\$1400	\$4850	80.8%
3	520	\$2860	400	\$1400	20	\$700	60	-\$600	\$4360	72.7%
4	370	\$2035	430	\$1505	57	\$1995	143	-\$1430	\$4105	68.4%
5	270	\$1485	700	\$2450	10	\$350	20	-\$200	\$4085	68.1%
6	430	\$2365	480	\$1680	20	\$700	70	-\$700	\$4045	67.4%

The ridership distributions considered in the above chart reflect the actual variety of current commuting patterns along the different City Service routes. Routes through more affluent neighborhoods have more Express bus and commuter train riders than routes through less affluent areas. However, in all the concerned areas, a very large majority of commuters either drive or take a bus (possibly to a subway) on their way to work or school. Note that in all the scenarios considered the combination of new revenues and savings for the MTA as a whole amounted to more than 65% of the operating costs. Looking at the finances from a railroad's point of view is different. If the railroad is given all the revenue from sales of City Service Metro Cards (following the analysis presented in the Freedom Ticket plan), then the railroad gains \$5,500 in revenues per 1,000 riders and loses \$10 for each former rail commuter that switched to City Service. From the railroad's point of view, the worst of the seven scenarios in the chart had 143 former rail commuters and resulted in a loss of \$1,430 from the \$5,500, leaving a net gain of \$4,070, which is 67% of the \$6,000 in operating expenses. In poorer neighborhoods, where almost nobody currently buys train tickets, the net revenues will cover over 90% of the railroad's operating costs.

At \$6,000 a round trip, the annual operating cost associated with adding a single City Service roundtrip to either the LIRR or the Metro North weekday schedules comes out to about \$1,500,000. The immediate introduction of a limited City Service (as described on page 2), involving 20 weekday roundtrips in the morning and 20 more in the evening, would cost \$60 million annually and would carry 20 million riders a year. When East Side Access is completed, City Service could be expanded fourfold to carry 80 million riders a year at a cost of only \$240 million. As noted above, a significant portion of these expenses would be covered by new Metro Card sales to former drivers and by MTA savings on reduced bus schedules. This is a much better situation than with recent MTA mega projects, none of which were designed to attract many new customers, and all of which required many billions of dollars in construction costs and many years of inconvenience and dirty construction.

In the early 1990's, MTA Chairman E. Virgil Conway extended the free transfer policy between buses to also allow free transfers between buses and subways. This was the only significant fare reduction in the history of the system, but the resulting increase in ridership and the savings from switching bus travel to rail travel turned the system around. The free transfer policy in the 1990's made fare increases unnecessary for the next seven years. City Service could do the same thing. It would add almost 100 miles of track and three dozen stations in the city to the system offering subway priced service and free transfers. With City Service, ridership would soar and the MTA would again save tens of millions of dollars from bus riders switching to trains. It could be "déjà vu, all over again," as Yogi Berra would have said.

MTA-Wide Ridership vs. New York City Employment



Source: <http://web.mta.info/mta/ind-finance/budgetwatch.pdf> June 2017

← THIS IS BAD  
 PEOPLE WANT CHEAPER AND  
 FASTER RIDES  
 GIVE THEM  
 CITY SERVICE

## **BENEFITS FOR PASSENGERS AND THEIR COMMUNITIES**

City Service would cut commuting times significantly for many residents of the Bronx and eastern Queens who live far from subway lines. Many of those switching to City Service from car, Express bus, or bus/subway trips will have their commutes cut by almost an hour per day, saving each of them 4 or 5 hours a week or more than 200 hours a year. The limited introductory City Service (described on page 2) would provide daily roundtrips to 40,000 people and save these riders a total of 8,000,000 hours per year. THAT'S 8 MILLION HOURS A YEAR to hold their babies, to help their children with homework, to cook healthy meals, to make love or to do whatever.

City Service would also cut expenses substantially for many riders. Those customers that had already been buying commuter rail tickets would save about \$2,500 a year on tickets. Car drivers would save on gasoline, tolls and parking fees. Parents of young children, who cut their commuting time by 200 hours a year, could save about \$2,500 a year in child care expenses, in addition to giving them PRICELESS extra time with their kids.

Many people, particularly single parents, who live in neighborhoods that lack nearby subway service are often forced to work locally at relatively low wages or to work shorter hours to get home on time. Many others are unemployed or underemployed. Shorter commuting times will give some of these people a chance to increase their incomes either by finding better paying jobs or by working longer hours. It is also possible that new businesses will be attracted to their neighborhoods by City Service. A May 24, 2017 New York Times article, entitled *Add a Rail Stop and Developers Will Follow* reported: "Office buildings with access to transit are outshining those without, fetching rents that are 80 percent higher."

A car commute from the Bronx or eastern Queens to a job in Manhattan averages about 20 miles a day. For much of their long slow trips, the drivers face terrible congestion and the worst air pollution in the city. Because of the congestion and the length of time involved, there are many thousands of tired and impatient drivers who wish they had a better option. Each driver that switches to City Service would reduce their car mileage by 100 miles a week or 5,000 miles a year, significantly reducing their chances of being in a car accident and their personal exposure to unhealthy air pollution.

Almost every subway station in the city is surrounded by an active community of stores and services that thrives on the large number of local people using that station. This pattern does not hold at most of the local commuter rail stations in the city because the expensive rail tickets result in very low ridership. Many of the MTA commuter tracks – at least the ones not buried under Park Avenue in Manhattan - are a blight on the neighborhoods they cut up. They are intended almost entirely for the riders crossing the neighborhoods, not for the people living in them, and they both lower real estate values and discourage development. For example, the Webster Av/3<sup>rd</sup> Av corridor ("transportation desert #1" on the map on page 1) along the Harlem Division tracks in the central Bronx has numerous sites available for affordable housing and new businesses, but has lacked nearby subway priced rail service since the 3<sup>rd</sup> Avenue El was torn down in 1973.

Vibrant town centers will spring up around City Service stations in the Bronx, Brooklyn and Queens. Many blocks along these tracks and near the stations have relatively inexpensive sites available for new businesses, new stores and new housing. Buses to the stations will bring in shoppers from the surrounding neighborhoods. City Service commuters will have more money in their pockets to spend in local stores and restaurants, and more time to get involved in neighborhood improvement projects such as creating plazas and park areas over portions of the tracks.

## HEALTH & ENVIRONMENTAL BENEFITS

According to the 2017 State of the Air Report by the American Lung Association, the New York Metropolitan area is ranked #9 on the list of the dirtiest cities in America with regard to ozone pollution. Every county in the region (that was graded) received an F grade for ozone levels. We were #22 on the list of dirtiest cities with regard to fine particle or PM2.5 levels. It's no surprise that one out of ten kids in New York City have asthma. The rates are particularly high in the central Bronx along the Harlem Division.

Health professionals and the Environmental Protection Agency long ago identified ozone and fine particulate matter (PM2.5) as two especially hazardous components of air pollution. Ozone is the principal component of smog and is produced by the reaction of sunlight on nitrogen oxides and other contaminants. Fine particulate matter (PM2.5), a result of combustion, consists of extremely small particles (less than 2.5 microns wide or about 30 times smaller than the width of a human hair) that penetrate very deep into the lungs. Motor vehicle exhausts top the EPA's list of sources for both of these hazards. Reducing driving is indicated as a primary method of decreasing the problem.



In 1963 and again in 1966, the city experienced weather patterns known as inversions, where warm air aloft prevents stagnant polluted air at the surface from rising. These inversions caused "killer smogs" that resulted in hundreds of deaths. See the photo at the left from 1963.

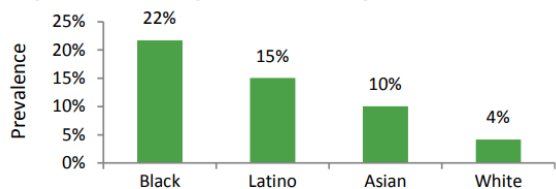


The air is cleaner now, but inversions and unhealthy smog still occur. The image on the left is from a recent 2013 travel blog about vacationing in New York. It carried the following caption: "Wall Street through the smog cloud."

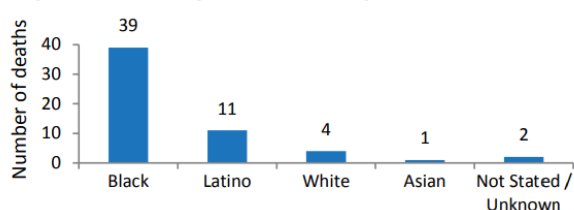
The EPA warns that "people with respiratory diseases are potentially at increased risk of adverse effects from ozone exposure." When ozone levels are high, asthma sufferers tend to experience a decrease in lung function and an increased frequency of attacks. This results in an increased usage of health care services, particularly in poorer neighborhoods. According to a June 2017 NYC Health Department EPI Data Brief (No. 90) copied below, "children of color are disproportionately affected by asthma."

- Black children were five times as likely and Latino children were three times as likely as White children to have been diagnosed with asthma (22% and 15% vs. 4%). Asian children were twice as likely as White children to have been diagnosed with asthma (10% vs. 4%).
- Racial inequities are also evident in asthma-related deaths. In 2010-2014, of the 57 NYC children ages 1 to 14 years who died from asthma-related causes, 50 were Black or Latino.

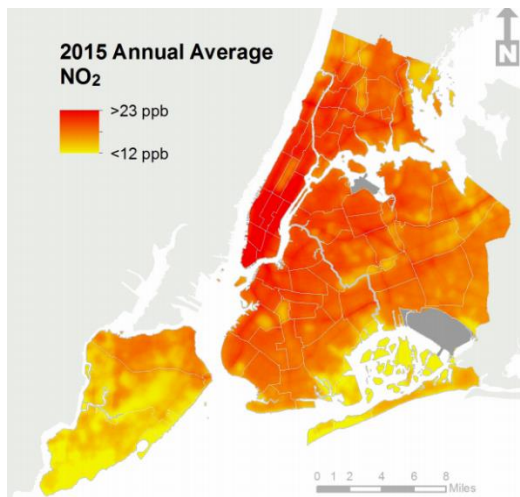
**Prevalence of asthma among children ages 0 to 12 by race/ethnicity, New York City, 2015**



**Asthma-related deaths among children ages 1 to 14 by race/ethnicity, New York City, 2010-2014**



The relationships between ozone, asthma and poverty can be seen if you compare the map below of NO<sub>2</sub> (the main source of ozone) levels across the city to the table next to it of asthma emergency room visits in the five boroughs of New York City.



Total Asthma Emergency Department Visit Rate Per 10,000						
County	2012	2013	2014	Total	Population	Rate
Bronx	36,817	39,808	39,362	115,987	1,421,788	271.9
Kings	37,099	35,199	34,107	106,405	2,593,192	136.8
New York	20,709	19,209	19,559	59,477	1,627,172	121.8
Queens	18,525	17,127	17,089	52,741	2,296,842	76.5
Richmond	4,170	3,665	3,546	11,381	472,209	80.3
NYC Total	117,320	115,008	113,663	345,991	8,411,204	137.1

Source: 2012-2014 SPARCS

Source: April 2017, The New York City Community Air Survey: Neighborhood Air Quality 2008-2015

Note that on the map above, you can actually see the congestion on the Long Island Expressway, the Cross Bronx Expressway, and in the area around the free East River bridges. The Health Department stated that “regional efforts to expand cleaner transit modes and reduce traffic congestion are needed to address the ozone problem in the metro area.”

Asthma actually kills way more adults than children. The table below from a 2013 New York State Department of Health Asthma Surveillance Summary Report reveals that there were almost 500 deaths due to asthma in New York City in just three years.

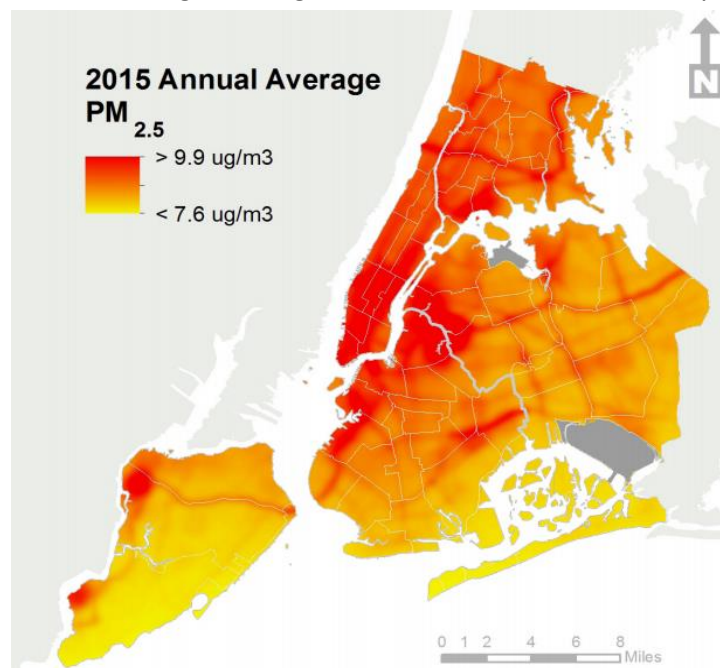
Crude and Age-Adjusted\* Asthma Death Rate Per One Million Residents by Region and County, New York State, 2009-2011

County	Deaths				Average Population 2009-2011	Crude Rate	Adjusted Rate
	2009	2010	2011	Total			
Bronx	58	62	53	173	1,391,466	41.4	43.5
Kings	39	61	49	149	2,534,814	19.6	19.7
New York	24	22	33	79	1,605,625	16.4	15.7
Queens	13	33	32	78	2,261,761	11.5	10.9
Richmond	9	2	5	16	476,976	11.2	9.8
<i>Total</i>	<i>143</i>	<i>180</i>	<i>172</i>	<i>495</i>	<i>8,270,641</i>	<i>20.0</i>	<i>19.6</i>
<i>New York State</i>	<i>235</i>	<i>284</i>	<i>255</i>	<i>774</i>	<i>19,461,584</i>	<i>13.3</i>	<i>12.2</i>

It was also pointed out in the report that, “for 2009-2011, non-Hispanic black (31.7 per one million) and Hispanic (22.1 per one million) New York State residents had much higher age-adjusted death rates compared to non-Hispanic white residents (6.7 per one million).”

The New York City website on clean air admits that “Metro New York has some of the most polluted air in the United States and much of it comes from cars.” While ozone levels are linked to asthma, PM2.5 levels are linked to cardiovascular disease and lung cancer, as well as respiratory diseases. The NYC website says that “hundreds of studies have found associations between particulate matter levels and premature deaths, hospital admissions and emergency room visits.” An April 2017 Community Air Survey on Neighborhood Air Quality, put out by the city Health Department, stated that, “within New York City, emissions of PM2.5 and its precursors from traffic sources in the region contribute to 870 estimated hospitalizations and emergency department visits and 320 premature deaths annually.” A very large study in the June 29, 2017 issue of the New England Journal of Medicine found that about 12,000 American lives could be saved every year if the PM2.5 level could be lowered by just 1 microgram nationwide.

A March 2015 NYU Langone Medical Center report, published in the Journal of the American College of Cardiology, looked at the effect of PM2.5 pollution levels on the health of 300,000 residents of the New York metropolitan area. The study found that carotid artery stenosis, a condition that cuts off oxygen to the brain and that is responsible for one half of the strokes in the country, is connected to air pollution. Study author, Dr. Jonathan Newman of NYU Langone Medical Center, said that “for every 1 microgram increase in air pollution, the risk of carotid artery stenosis goes up by 9%.” In the city’s smoggiest neighborhoods – some of which are wealthier and in lower Manhattan - the risk for this condition was almost 25% higher. Neighborhoods in Queens and Brooklyn near the free bridges are also at risk.



“Stroke is the fourth most common cause of death in Long Island City and Astoria, but the sixth citywide.” The PM2.5 levels in these neighborhoods are .3 micrograms higher than the citywide average and .5 micrograms higher than in the rest of Queens.

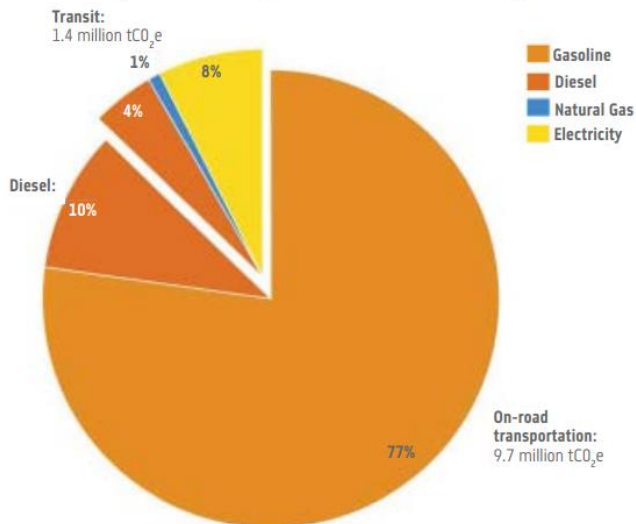
Source: 2015 NYC Health Department Community Health Survey for Long Island City and Astoria

Map Source: April 2017, The New York City Community Air Survey: Neighborhood Air Quality 2008-2015

The air pollution from cars heading into the central business district is terrible. It sends children and adults, rich and poor, with asthma and with cardiovascular problems, to the hospital every day. It kills some of them. But things can be improved – drastically improved – if we decide that the health of our citizens matters. A recent study of California school children (ages 11 – 15) revealed that significant reductions in fine particulate (PM2.5) and nitrogen dioxide levels lead to significant improvements in children’s respiratory function. Over a period of 17 years, five neighborhoods in the Los Angeles area that saw declines of 50% in fine particulates and 35% in nitrogen dioxide levels also saw the percentage of children with “significantly impaired lung function” decline from 8% to 3.5%. In addition, the lung capacity for all the children in the California study increased by about 10%. The children of the New York City metropolitan area deserve to breathe free also.

Shifting large numbers of drivers to mass transit would also decrease greenhouse gas emissions significantly. According to a recent report, NYC is home to more than two million vehicles, “the operation of which accounted for 24 percent of the city’s greenhouse gas emissions in 2013.” The chart at the right shows that the electricity used to run mass transit (trains and subways) contributed only 8% of the transportation emissions, while the gasoline and diesel used to power on-road vehicles accounted for 77% of emissions with an additional 4% coming from diesel used to power buses.

**2013 Citywide Transportation Emissions by Source**



Source: NYC Mayor's Office

City Service would entice many drivers to switch to mass transit. As stated earlier, the average driver switching to City Service has a 20-mile daily commute. This works out to 100 miles a week or 5,000 miles a year. According to EPA car emissions data, a 5,000 mile reduction in vehicle miles traveled results in a 2 ton reduction in CO<sub>2</sub> emissions. If City Service starts out with 40 daily roundtrips carrying 1,000 people per roundtrip as proposed earlier and if only a quarter of these 40,000 City Service passengers were former drivers, then these 10,000 former drivers would drive a total of 50,000,000 miles less each year and cut their CO<sub>2</sub> emissions by 20,000 tons. An expanded City Service (after the completion of East Side Access) could easily attract 50,000 former drivers and cut annual CO<sub>2</sub> emissions in the city by over 100,000 tons.

We need to reject medieval ways of life. We need to reduce the congestion and the extremely unhealthy air pollution that sends so many New Yorkers to the hospital and the morgue by significantly reducing unnecessary motor vehicle travel in the city. Residents of some British cities fought for many years for their right to dump sewerage in the streets rather than pay for public sewers. Similarly, some people prefer to dump unhealthy car emissions in the air we all breathe rather than to pay for public transit.

## **CONCLUSION**

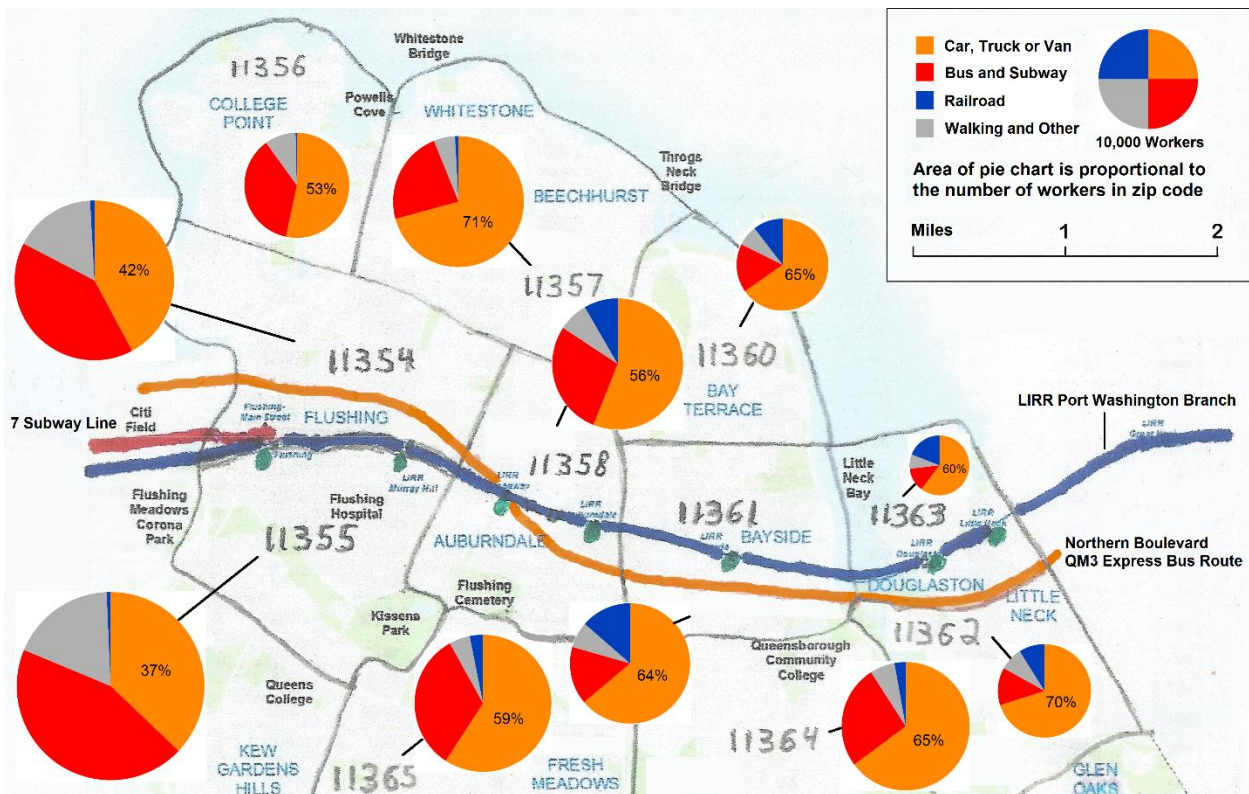
The MTA currently faces a variety of challenges - a very popular, overcrowded and aging system, a huge underfunded capital budget with an enormous debt service, and a lack of support from the public and the political leaders. Everyone is tired of construction projects that take decades to finish and that help relatively few commuters. City Service would immediately provide tens of thousands of New Yorkers in “transit deserts” all over the city with fast inexpensive rail connections to jobs and schools. It would require no construction budget and could be introduced gradually without disrupting the current transit system at all. City Service could immediately provide alternative routes for riders that would alleviate some of the overcrowding that causes delays and give the MTA more freedom to make necessary repairs. Moreover, most of the operating costs would be covered by new revenues and by savings from switching bus riders to trains. After East Side Access is open, City Service could be expanded tremendously to provide hundreds of thousands of daily rides. Most city residents, including motorists, would support tolls on the free bridges if they knew that the money was being spent on projects such as City Service that would immediately benefit them.

## CITY SERVICE ON THE LIRR PORT WASHINGTON BRANCH ACROSS NORTHEAST QUEENS

There are about 400,000 people living in the 11 Zip Codes in northeast Queens shown on the map below. There are no subway tracks in the “transportation desert” east of the Flushing/Main St. terminal of the overcrowded #7 line. The Port Washington Branch of the LIRR, however, has six underused stations in Queens east of its Main St. station. The tracks on this route now carry at most six trains an hour at the peak periods, most of which skip many of the Queens stations. A long history of expensive and infrequent service on this line resulted in low ridership and low revenues, which then led to more service cutbacks and even the closing of stations in Corona (1963) and in Elmhurst (1985). The LIRR recently (2010) cut back midday service from once every half hour to once an hour, resulting in another significant loss in ridership. It should be no surprise that only 7,490 (4.2%) of workers living in the 11 Zip Code areas near this line report using the railroad to go to work. The half hour service was only restored in 2012. Note that the 400,000 residents of northeast Queens outnumber the 230,000 residents of the Upper East Side of Manhattan, for whom the MTA spent \$4.4 billion on the Second Avenue line, and that the #7 line, like the Lexington, is dangerously overcrowded. Running City Service on the ten miles of Port Washington tracks in the city would reduce the #7 line overcrowding and benefit residents all across northern Queens.

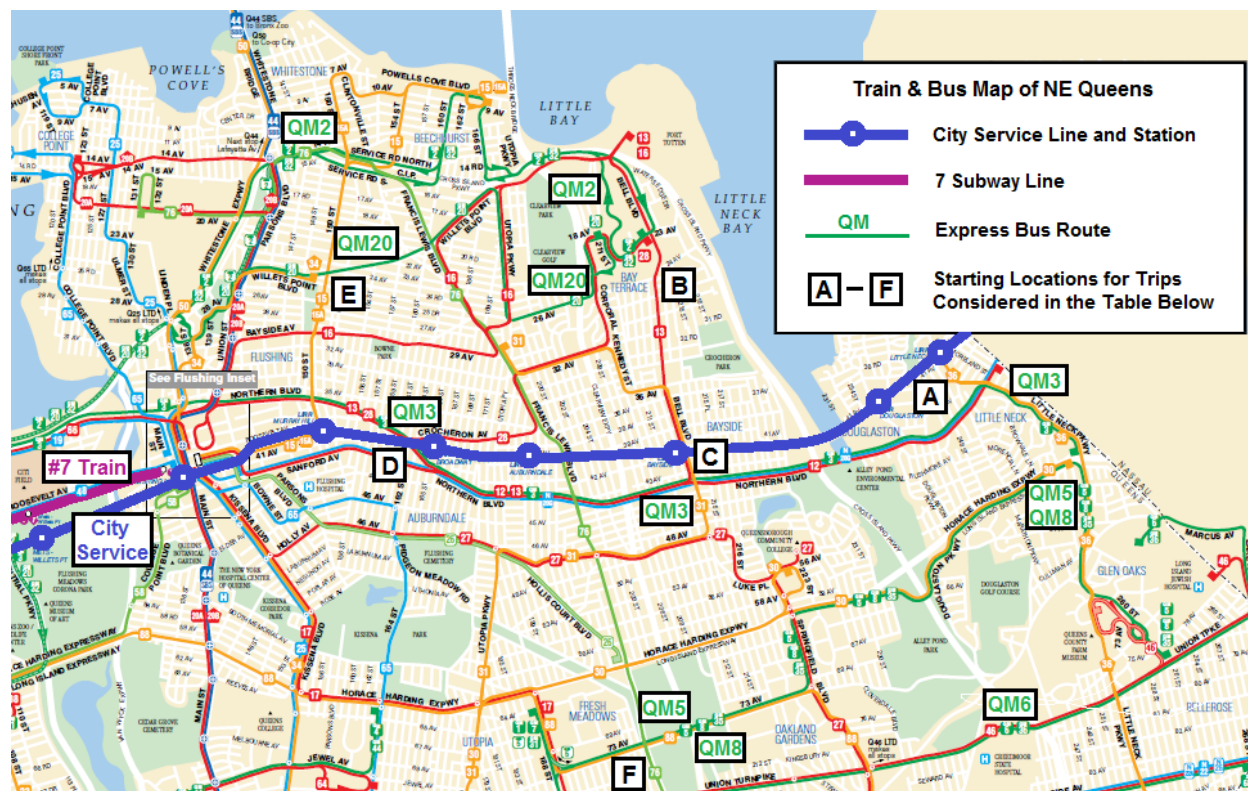
Census data (see chart on page 5) reveals that in the two Zip Codes that border the Flushing/Main St. subway station, only 39% of workers drive to work and 42% ride buses and/or subways. In contrast, 62% of workers in the nine Zip Codes that are not near the subway drive to work and less than 25% of them use buses and/or subways. This is illustrated in more detail on the map below, where the percent of drivers (shown in light orange) increases as the distance from the Main Street subway station increases.

**Means of Transportation to Work in Northeast Queens  
as a Percent of Working Population**





The map also reveals that the percent of subway and bus riders (shown in red) decreases dramatically as you move farther from the Main St. subway station. A 2015 MTA Northeast Queens Bus Study describes how poorly the mass transit system serves this area of the city. Over 60% of northeast Queens commuters by public transit take more than an hour. This compares with only 35% for the whole city. The MTA tries to remedy the situation a little by increasing its bus and Express bus service, as shown in the bus map below, but this does little to shorten the commuting times and costs the MTA a fortune in subsidies. Morning rush hour travel times to both Penn Station and the downtown Flushing hub, using different modes of transportation, are given in the table below the map for six starting locations.



Morning Rush Hour Travel Times to Penn Station & (Downtown Flushing)					
Starting Location	Driving		Bus/Subway	Express Bus Nearby Express Bus Routes	City Service *includes time on local bus to train
	With Toll	With No Toll			
A) Little Neck Station	65 min (25 min)	74 min	83 min (36 min)	67 min QM3, 5 & 8	35 min (17 min)
B) Bay Terrace (Bell Blvd & 23 <sup>rd</sup> Ave.)	68 min (19 min)	74 min	82 min (35 min)	75 min QM2 & 20	41 min* (21 min)
C) Bayside Station (Bell Blvd)	65 min (18 min)	79 min	70 min (25 min)	58 min QM3	31 min (11 min)
D) Broadway Station (165 <sup>th</sup> St.)	57 min (9 min)	73 min	59 min (14 min)	49 min QM3	26 min (6 min)
E) Willets Point Blvd & 150 <sup>th</sup> St.	59 min (18 min)	67 min	61 min (15 min)	62 min QM20	35 min*
F) Francis Lewis Blvd & 73 <sup>rd</sup> Ave.	57 min (19 min)	83 min	65 min (40 min)	51 min QM5, 6 & 8	41 min* (21 min)

Thousands of drivers in northeast Queens will apply for City Service Metro Cards as soon as they are available to take advantage of its much shorter travel times to Manhattan. If the percent of workers who commute by car from the nine Zip Codes that are not near the Main Street subway station fell from 62% to 50.5% - just half the way down to the 39% reported by workers living in the two Zip Codes closer to the subway – then this would result in 13,000 drivers in northeast Queens applying for City Service. This is about twice the number of workers (7,025) in the area that currently commute by railroad.

The Northeast Queens Bus Study reported that the average regular bus trip in the area was 2.9 miles (almost 6 miles per day). With the current bus routes, about 7,000 of the 27,000 riders heading to the #7 line in Flushing already pass quite close by a Port Washington line station on their long slow commutes. With simple rerouting, the MTA could help many more bus riders connect to City Service, while cutting MTA operating expenses by almost \$1 for each rider mile switched from bus travel to rail travel.

The half hour commutes to Manhattan on City Service are so short compared to bus/subway commutes, car commutes, and Express bus commutes that large numbers of these commuters will enter the lottery. The chart on the bottom of page 7 reflects the combined new revenues and savings for various ridership distributions on a 1,000 passenger City Service round trip. While it is impossible to predict with certainty the distribution of applicants for the different City Service metro card lotteries, a good guess for the Port Washington City Service lottery would be 13,000 drivers (out of a total of 73,000), 3,000 Express bus riders (out of 6,000), 15,000 bus and/or subway riders (out of about 30,000), and 5,000 LIRR riders (out of 7,000) just for the nine Zip Codes far from the Main Street subway station. Case number 2 in the table on page 7 reflects these proportions and indicates that new revenues and savings for this very possible distribution would cover 80.8% of the expense of the \$6,000 City Service roundtrip. If you make a more conservative estimate that the number of former Express bus riders falls to only 2,000 in the lottery pool, then 68.4% of the expense is covered by new revenues and savings. This is case number 4 on page 7.

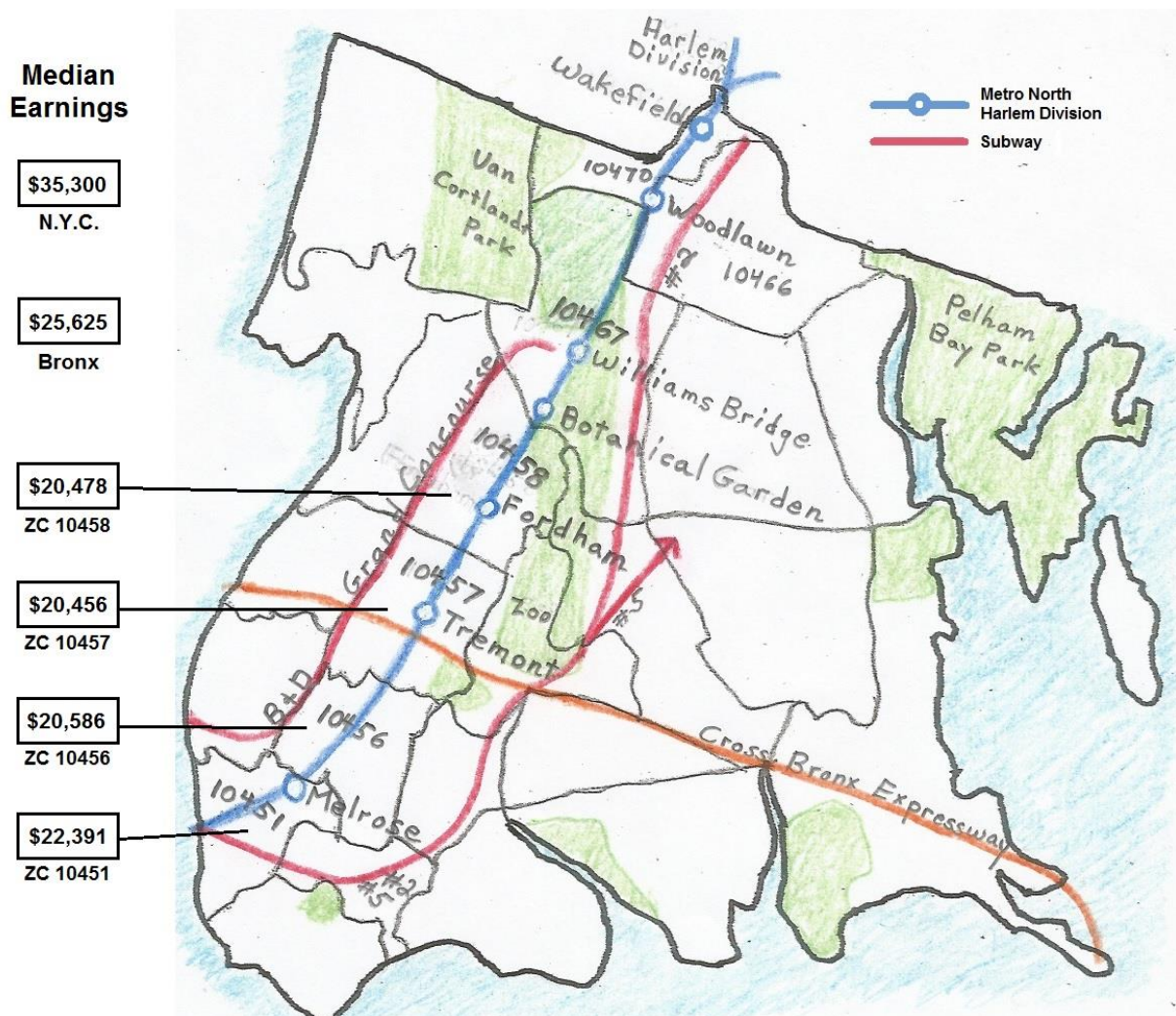
There are more possible new revenues and savings for City Service in northeast Queens. The Census reported that almost half (85,906) of the 178,000 workers in this area had jobs in Queens. There were 52,000 jobs reported in just the three Zip Codes (11354, 11355 & 11358) near the Flushing hub – almost equal to the 55,000 jobs projected for Hudson Yards when it is completed. The three Flushing zip code areas are still growing at a fast pace, with a 28% growth in employment in the five years from 2009 to 2014. According to the 2015 MTA Northeast Queens Bus Study, 58,000 weekday riders get off a bus in Flushing, but only 27,000 of them transfer to the dangerously overcrowded #7 line at Main St (see map of Downtown Flushing on page 4). The fact that over 30,000 riders do not take the subway indicates that there is a real need for fast inexpensive local rail service in the area and that many potential riders on the new City Service trains would exit in Flushing, making room for new passengers there. If this is the case, then additional lottery slots can be offered.

An examination of the bus map and the travel time table on the previous page shows that riders on the QM2, QM3 and QM20 Express bus routes could save considerable time and money by switching to City Service on the Port Washington line. MTA Bus Ridership reports and schedules list 2,800 weekday riders and 150 daily trips on just these three routes (subsidized at \$35 per rider per day). Most, if not all, of these Express bus trips could be dropped from the schedule and replaced by short local bus trips just shuttling passengers back and forth to nearby Port Washington stations. The QM3 route on Northern Boulevard could be totally discontinued. The QM5, QM6 and QM8 routes south of Northern Boulevard carry about 3,000 weekday riders, many of whom could also profit in time and money from riding City Service (see case F in the time table on the previous page). The potential savings in operating expenses for the MTA are enormous. EACH 1,000 EXPRESS BUS RIDERS SWITCHING TO CITY SERVICE SAVES THE MTA OVER \$30,000 PER DAY – ENOUGH TO FUND FIVE CITY SERVICE ROUNDTRIPS!

## CITY SERVICE ON THE METRO NORTH HARLEM DIVISION THROUGH THE CENTRAL BRONX

The Harlem Division of Metro North, drawn in blue on the map below, crosses or touches seven Zip Codes in the Bronx. According to 2015 Census data, there are almost 500,000 people living in these seven Zip Codes – more than double the number living on the Upper East Side of Manhattan (which recently got a second subway line). Tens of thousands of working class residents of this north/south Bronx corridor used to commute quickly to jobs in Manhattan on the Third Avenue El. The Manhattan portion of the El was torn down in 1955, followed by the Bronx section in 1973, effectively cutting off residents from jobs and schools in Manhattan. The Webster Ave./ 3<sup>rd</sup> Ave. Corridor is now #1 on the MTA’s list of “underserved neighborhoods” in the city (see map on page 1). Unemployment and poverty rates are very high in the four Zip Codes along the southern portion of this corridor. The Census reported that in the Tremont Zip Code (10457), only 42.8% of the working age population had full time jobs, while 41.8% did not work at all. The median earnings for workers 16 and older living in this Zip Code was only \$20,456. The median incomes for all four of the Zip Codes in this “transportation desert” are shown on the map. They are all way below the median incomes for the Bronx and for New York City. Running City Service trains along the Metro North Harlem Division tracks could give residents of this corridor an opportunity again to look for better paying jobs in Manhattan.

**Median Earnings for Workers 16 and Over in Four Zip Codes Along the Harlem Division in the Central Bronx**



Metro North cooperated with the Department of City Planning in 2014 on preparing a detailed (225 page) study concerning the future of Metro North in the Bronx, entitled *Sustainable Communities in the Bronx: Leveraging Regional Rail for Access, Growth and Opportunity*. One section of the report contained a history of the Tremont area (see excerpts below). It noted that “Tremont’s growth was built around transit, with the former 3<sup>rd</sup> Avenue elevated rail line running through the heart of the neighborhood.” The section went on to describe how the “larger societal shifts” leading to urban decay in the 1960’s and 1970’s were compounded in the central Bronx by the construction of the Cross Bronx expressway and the demolition of the 3<sup>rd</sup> Avenue El. They noted that many moved away and “remaining residents were disconnected from the means to access job opportunities outside their neighborhood ....” The conclusion of the Tremont section of the report stated that “this history demonstrates the interdependence between a neighborhood and its infrastructure, that the stability and health of a neighborhood is deeply connected to the accessibility and quality of transportation assets. Their fortunes rise and fall together.”

Excerpts from *Sustainable Communities in the Bronx*: **Old View of East Tremont Avenue from 3<sup>rd</sup> Avenue**

The East Tremont neighborhood, generally bounded by East 183rd Street to the north, Crotona Avenue to east, the Cross-Bronx Expressway to the south and Webster Avenue to the west, has a complex history. Tremont’s growth was built around transit, with the former 3rd Avenue elevated rail line running through the heart of the neighborhood. Tremont Avenue was established as a commercial corridor that served the neighborhood early in its development.

In Tremont these larger societal shifts were compounded by two key events: (1) the construction of the Cross Bronx Expressway, and (2) the discontinuation of the 3rd Avenue Elevated Rail service. The Cross Bronx construction would last from 1948 to 1963 and cut through the heart of the neighborhood. Its route would displace thousands of residents and create a difficult divide in the tight knit community. During this same period continuing 3rd Avenue rail service to Manhattan was phased out, with Manhattan access completely ending in 1955, and in 1973 the remaining Bronx service was completely discontinued. These two events directly contributed to further decline in the neighborhood and to Tremont Avenue as many moved away or were displaced during construction associated with the Cross Bronx, and **remaining residents were disconnected from the means to access job opportunities outside their neighborhood when the 3rd Avenue El was demolished**. During this period, the economic vitality of the neighborhood, and the Tremont Avenue retail corridor, suffered greatly.

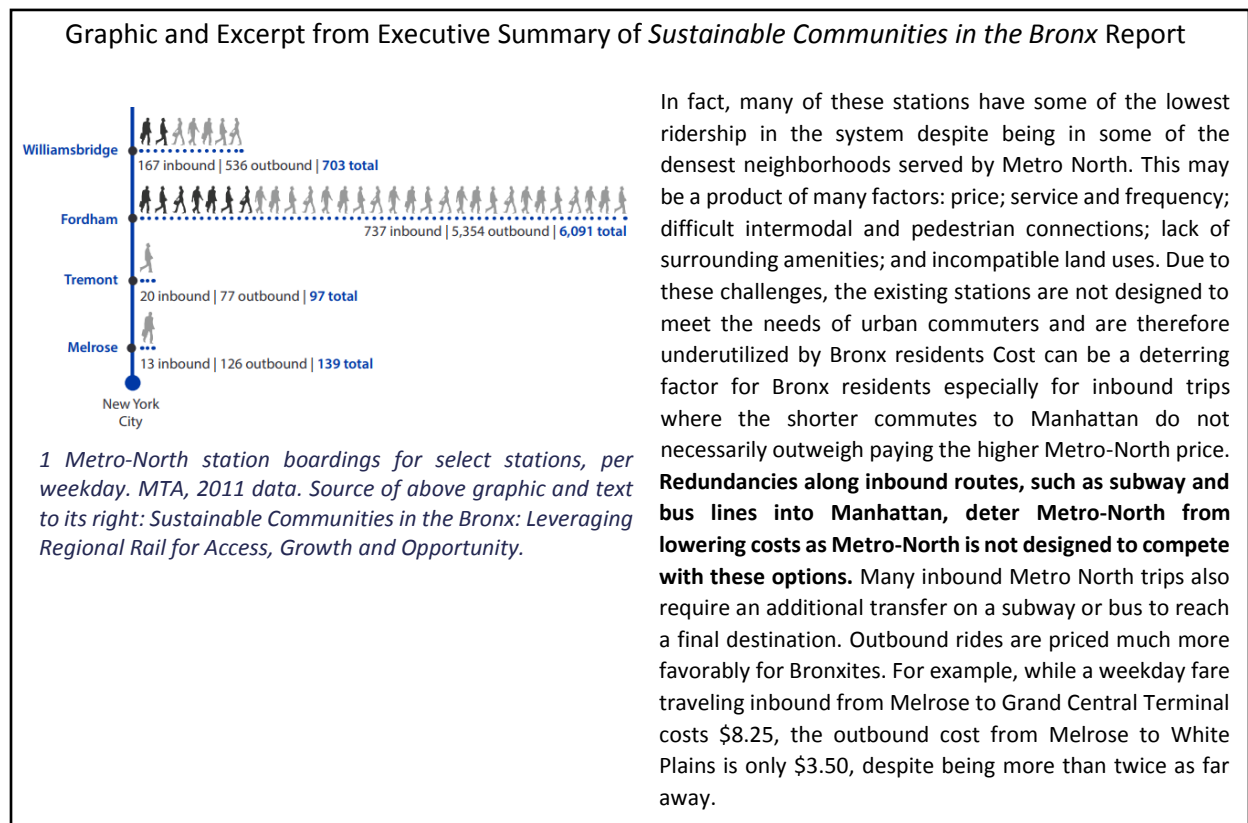
**This history is significant because it demonstrates the interdependence between the neighborhood and its infrastructure, clearly demonstrating that the stability and health of a neighborhood is deeply connected to the accessibility and quality of transportation assets. Their fortunes rise and fall together.** As the community has stabilized in the last decade, the importance of the re-establishing the Tremont Avenue corridor as a means to re-connect to other transit options, other job opportunities and other neighborhoods is paramount to a sustained recovery.



Source: Bronx Historical Society

In 1973, when the EI was torn down, the MTA had tracks running parallel to Third Avenue just two blocks to the west – the Metro North tracks on the Bronx version of Park Avenue. However, no one seems to have thought of operating any trains on these tracks at subway prices as a replacement for the loss of the EI. The MTA Chairman at the time pointed out that the EI was a money loser and he promised a fleet of new buses running at one minute intervals to replace the trains (see the reprinted New York Times article in the appendix). The years went by and there must have been a lot of MTA budget cuts in the Bronx – because the minimum time interval between Bx 15 buses on Third Avenue is now nine minutes.

The executive summary of the 225 page *Sustainable Communities in the Bronx: Leveraging Regional Rail for Access, Growth and Opportunity* study reveals that in 2014 the MTA did not consider using the Harlem Division tracks for subway priced trains. They believed that neighborhood improvements would lead to increased ridership. The report has a graphic illustrating the very small number of riders using the Metro North stations in the Bronx along with an explanation:



Note the above explanation for high ticket prices. “Redundancies along inbound routes, such as subway and bus lines into Manhattan, deter Metro North from lowering costs as Metro North is not designed to compete with these transit options.” What kind of explanation is that? The nearest subway to the west is a half a mile away and the nearest subway to the east is a mile away. The MTA ripped down the competing 3<sup>rd</sup> Avenue EI in 1973. The conclusion of the Tremont section of the report suggests that rezoning and the formation of a business improvement district will lead to new development which, in turn, will “spur increases in transit ridership which will justify investments in additional service ...”. They have it backwards. There will be no significant increase in rail ridership at the Tremont Station, even if there are improvements along East Tremont Avenue. The census data from Northeast Queens makes it very clear that people without access to subways, who can afford it, almost all drive. First provide the people of the central Bronx with fast, affordable transportation and then the neighborhood improvements will follow.

It is very striking on the graphic on the previous page that there were only about 900 inbound riders and over 6,000 outbound riders at the four stations shown. The Sustainable Communities Study pointed out that over 20,000 residents near the Tremont and Fordham stations take a subway to work even though many of them are a half mile or more away from the subway. The Metro North Harlem Division tracks could connect these people to employment opportunities in the city at subway pricing.

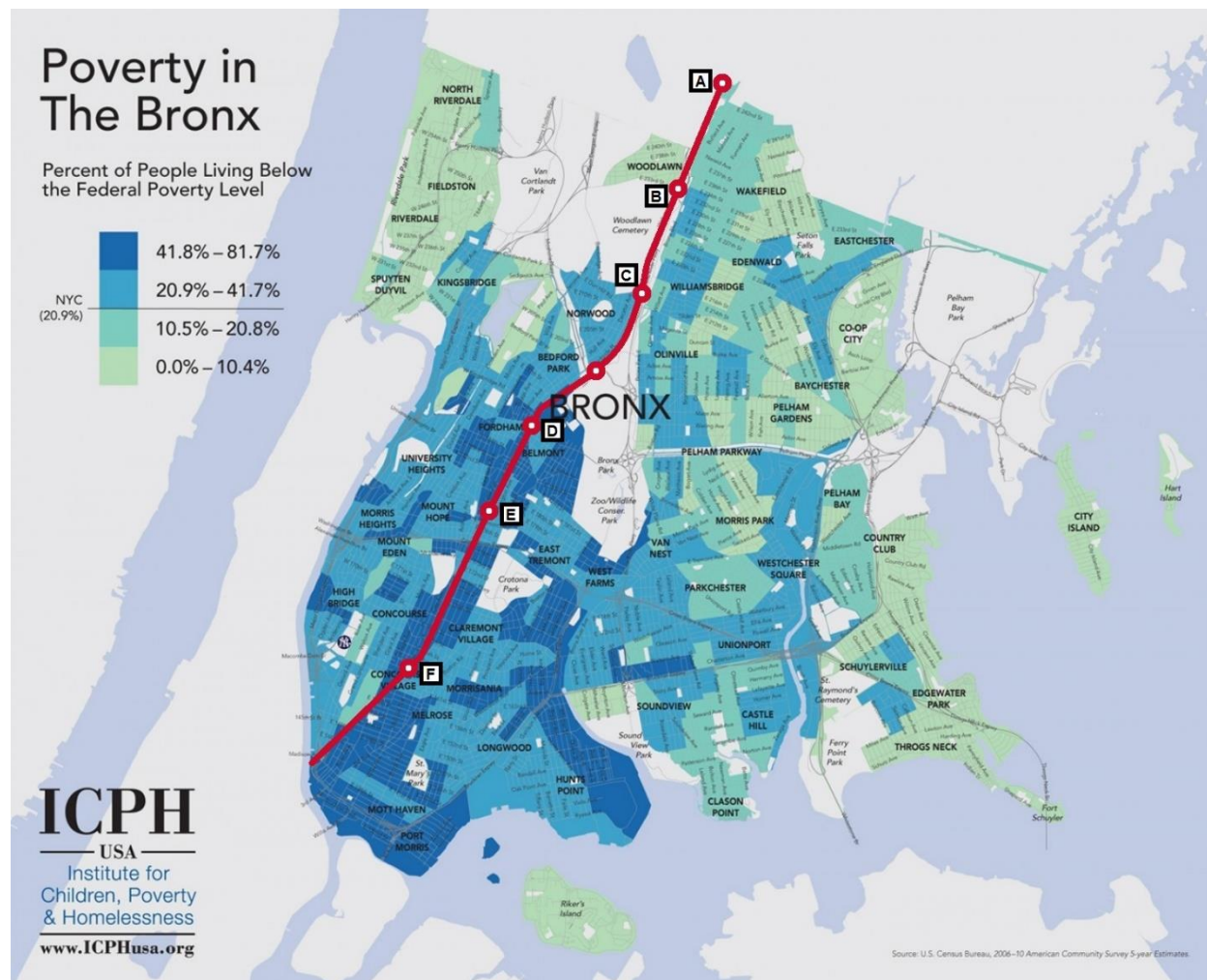
Metro North brags that it has the “largest reverse commute market in the United States” and that it “connects 5,000 Bronx residents to suburban jobs.” The MTA has recently spent over twelve million dollars expanding the outbound platform at the Fordham Road Station. It is true that Metro North is connecting Bronx workers to jobs in the suburbs. It is also true that it is helping suburban employers get cheaper labor by cutting Bronx workers off from better paying jobs in Manhattan. Lastly it should be noted that the most common jobs for residents in the Bronx are in service positions such home health aide and building maintenance. In addition, Metro North neglects to point out that on every weekday over 45 New Haven Division trains stop at Fordham Road to pick up outbound riders, but that no New Haven trains ever pick up inbound passengers at Fordham Road – no matter how empty the train and no matter how bad the weather. The official policy for inbound New Haven trains at Fordham Road (their only Bronx stop) is to discharge only. Passengers at Fordham Road with full price tickets to Manhattan are told to wait for a Harlem Division train. If you ride the train, you can hear the conductors tell the people on the platform, “Do not get on this train. Your train is coming.”

The following table of morning travel times by car, bus/subway, Express bus and City Service reveals that City Service is about 30 minutes quicker than all the other modes of transportation. Almost everyone will apply for the City Service Metro Card lottery. Case 5 in the table of Combined New Revenues and Savings for Various Ridership Distributions (see page 7) reflects Census data regarding current modes of transportation used by workers all along the Harlem Division in the Bronx. It shows that two thirds (68.1%) of the operating costs would be covered by new revenues and savings. The starting locations used in the table are indicated on the map on the next page.

Starting Location	Morning Rush Hour Travel Times to Grand Central Terminal				
	Driving		Bus/Subway	Express Bus	City Service
	Toll	No Toll			
A) Wakefield Station	53 min	61 min	73min	60min BxM11	35 min
B) Woodlawn Station	52 min	60 min	67min	60min BxM11	31 min
C) Williams Bridge Station	51 min	60 min	57min	N/A	30 min
D) Fordham Road Station	51 min	53 min	49min	78min BxM10	25min
E) Tremont Station	45 min	53 min	48min	None	24 min
F) Melrose Station	53 min	53 min	35min	None	17 min

Note that Census and MTA ridership data show that very few workers living in the Bronx use either Express buses or Metro North to travel to jobs in the city. Express buses, commuter trains and tolled bridges are too expensive for them.

The following map of poverty in the Bronx, put out by the Institute for Children, Poverty & Homelessness, reveals the extent of poverty and need along the Harlem Division/3<sup>rd</sup> Avenue corridor. The Harlem Division right of way in the Bronx has been added in red to the map. The 2014 Sustainable Communities study was about “leveraging regional rail for access, growth and opportunity” along this corridor. It should have seriously considered new ways of providing residents with fast and affordable connections to jobs in Manhattan and the rest of the city. City Service will provide these people with fast rail commutes at subway prices without interfering with or overcrowding any current Metro North commuter trains.

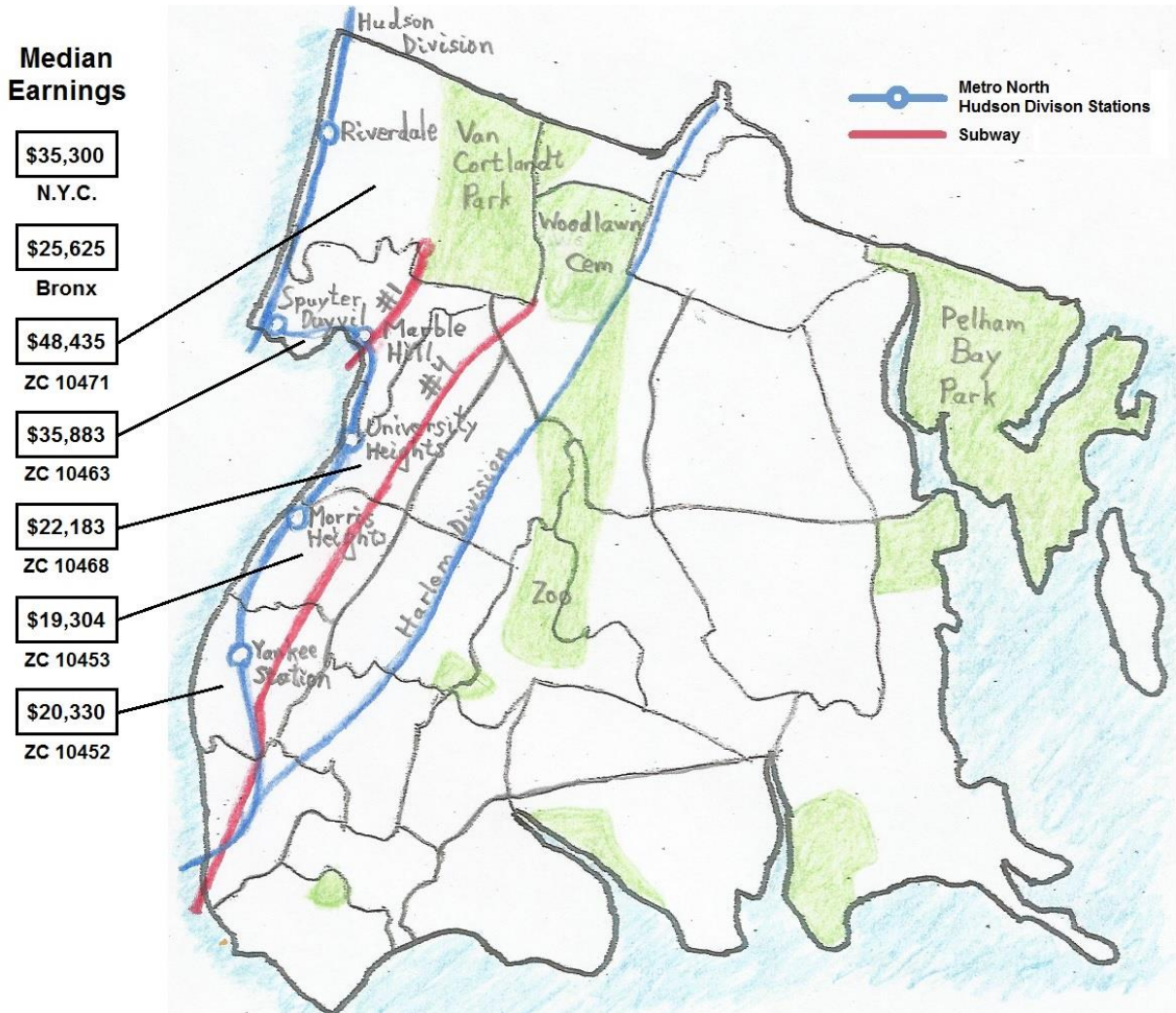


At the top of page 11 in the Health and Environmental Benefits section there is a map of NO<sub>2</sub> levels across the city and an accompanying chart entitled *Total Asthma Emergency Department Visit Rate per 10,000*. The rate of ER visits due to asthma in the Bronx was double the rate in any other borough of N.Y.C. The death rate due to asthma (see blue chart at the bottom of page 11) was also twice as high in the Bronx compared to any other borough. It is obvious from the NO<sub>2</sub> map and from the asthma statistics that everything possible should be done to improve the air quality in the south and central Bronx. Offering City Service along the Harlem Division line in the central Bronx will take motorists off the road and allow the city to run fewer buses. There would be a significant decrease in congestion and an improvement of air quality in the neighborhood.

**CITY SERVICE ON THE METRO NORTH HUDSON DIVISION DOWN THE WEST OF THE BRONX**

The Metro North Hudson Division has six stations along the Hudson and the Harlem Rivers in the Bronx serving about 2,000 inbound passengers each weekday. Almost all of these passengers board the trains at the Riverdale and Spuyten Duyvil stations, which are located in a more affluent region of the Bronx. The remaining four stations, Marble Hill, University Heights, Morris Heights and Yankee Stadium, are in poorer neighborhoods and are virtually unused by inbound riders. None of the stations along the route, with the exception of Marble Hill, are easily accessible. The communities they serve are up very steep hills that are very difficult to walk up.

**Median Earnings for Workers 16 and Over in Five Zip Codes in the West Bronx**







Metro North figured out long ago how to connect the residents of Riverdale with their stations. According to a 2011 MTA press release, “the Hudson Rail Link is a bus service initiated by Metro North in 1991 to improve access to train service in the west Bronx where full-size city buses cannot reach the Hudson Line stations at Spuyten Duyvil and Riverdale due to the steep topography and narrow roads with switchback turns. Currently the fleet of 14 buses serves 8 routes and carries 1,500 passengers each weekday meeting all the trains at both stations from 6 AM to 11:30 PM.” This is very good for the people who can afford the railroad tickets and the Metro Card fare for the link bus. Rail commutes are about an hour a day shorter than bus/subway and Express bus travel. Almost 3,000 residents of these two neighborhoods take Express buses. However, including the neighboring Marble Hill, almost 13,000 drive to work and 16,000 use regular buses and/or subways. Even in this affluent area, few are willing to pay extra for trains or Express buses.

Starting Location	Driving		Bus/Subway	Express Bus	City Service
	Toll	No Toll			
A) Riverdale Avenue & 261 Street	48 min	60 min	75min	77min	45min
B) Spuyten Duyvil Independence Ave. & Kappock St.	48 min	57 min	63min	62min	35min
C) Marble Hill Station	47 min	47 min	45min	57min	30min
D) University Hts - Bronx CC	45 min	45mn	42min	None	25min
E) Morris Heights Station	45 min	45min	45min	None	17min

Many of the people in the working class neighborhoods of University Heights, Morris Heights and the area around Yankee Stadium could also benefit by using City Service to commute to jobs in Manhattan. In these three neighborhoods over 50,000 workers commute by bus and/or subway. The nearest subway, the Jerome Avenue #4 line, is a half mile to the east. The bus/subway and driving times to mid-town Manhattan are about 45 minutes, compared to only 25 minutes on City Service. There are already buses along Fordham Road, Burnside Avenue and Macolms Road going to these two stations. However, new "link" buses, could be started to connect the stations to large neighborhood employers such as the Veterans Medical Center and Bronx Community College. These link buses would also connect the residents up the hill with the parks and stations down the hill along the Harlem River and connect the 3,000 residents of River Park Towers on the river just south of the Morris Heights station with the community at the top of the hill. City Service on the Hudson Division will spur more residential development along the river and further the creation of a Harlem Greenway. The station at Marble Hill, right next to a stop on the #1 line and near an active shopping center, should take some pressure off the overcrowded #1 train. Lastly, the University Heights station is easily accessible to some Inwood residents, which should further alleviate the overcrowding on the #1 train as well as provide additional riders.

City Service commutes from Riverdale and Spuyten Duyvil are each about 30 minutes shorter than either bus/subway or Express bus commutes. It is safe to assume that almost all bus/subway commuters and all Express bus commuters from these two neighborhoods will apply for the lottery for City Service Metro Cards. Residents near the Marble Hill station will also prefer the City Service train to cut their commute times by 15 minutes and to avoid the crowds on the #1 train. City Service commutes from University Heights, Morris Heights and the Yankee Stadium neighborhoods are each about 20 minutes shorter than bus/subway commutes. Probably only about half of the bus/subway commuters from these three neighborhoods will apply for the lottery because the eastern parts of these neighborhoods are closer to the #4 line. No Express bus serves these poorer neighborhoods and no one rides Metro North downtown. A conservative estimate would be that one third of all commuters in these five Zip Codes who drive to work would apply for the lottery. Using these assumptions and Census data we get Case 1 in the chart on Page 7, which leads to combined new revenues and savings of 80.9% of the operating costs.

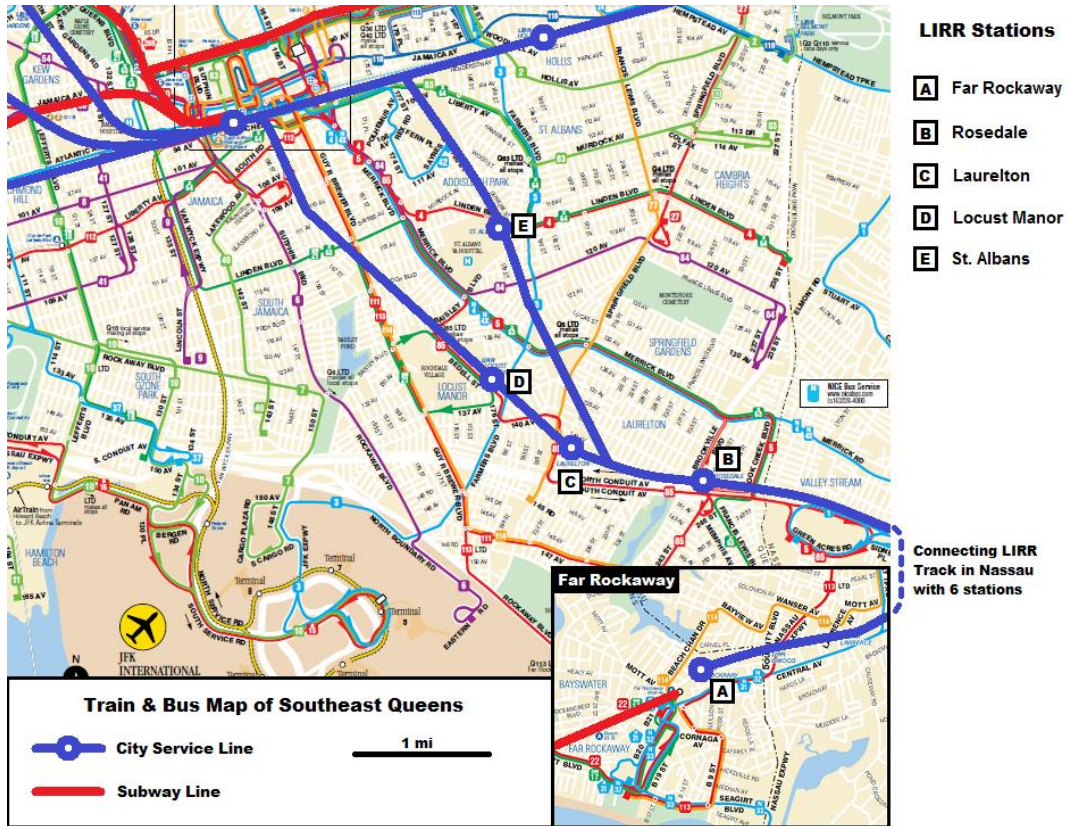
## CITY SERVICE ON THE LONG ISLAND RAIL ROAD IN SOUTHEAST QUEENS

There are more than 100,000 workers living in southeast Queens. Most of them cannot afford to ride the LIRR trains that cross their neighborhoods and have some of the longest commutes on public transit in the city and the country. You can see on the chart below, for example, that the bus/subway commute from Rosedale to Atlantic Terminal is 93 minutes, while the X63 Express bus from Rosedale to Midtown takes 86 minutes. The driving time from Far Rockaway to Midtown is a ridiculous 100 minutes if you are willing to pay a toll and an unbelievable 140 minutes if you are not! About 4,000 residents of southeast Queens have 30- to 45- minute commutes on the LIRR, and a small number use the Express buses. A larger number ride buses to subways in Jamaica, but about half of the people living near the train lines drive to work in spite of the terrible commute times. Many of these drivers crawl around the edge of Brooklyn on the Belt Parkway and enter the extremely congested Gowanus Expressway leading to the free East River bridges. They travel over 35 miles one way and contribute to and breathe in some of the worst air pollution in the city.

<b>Morning Rush Hour Travel Times to Penn Station, &amp; Atlantic Terminal (minutes)</b>					
Starting Location Zip Code	Driving		Bus/Subway	Express Bus Bus Route	City Service
	Toll	No Toll			
A) Far Rockaway 11691	100min	140min	80min	80min QM17	45min 45min
B) Rosedale Station 11422	95min	120min	90min 93min	86min X63	33min 35min
C) Laurelton Station 11413	95min	115min	95min 115min	none	30min 41min
D) Locust Manor 11434	90min	110min	79min 86min	75min QM21	28min 27min
E) St. Albans Station 11412	80min	100min	73min 87min	70min X64	38min 27min

If you look at the chart on the next page, you will see that the only Zip Code where less than 45% of the people drive to work is 11691-Far Rockaway. The Census reports that median earnings for workers 16 and up in this Zip Code is only \$30,000, compared to \$37,000 in Laurelton. It is no surprise that only 2% of the workers living in Far Rockaway can afford the LIRR while over 6% of Laurelton residents ride the train. Express bus prices are too high also; only about 1% of workers in Far Rockaway take the QM17 Express bus to Manhattan. And when the Freedom Ticket plan to lower ticket prices on all LIRR trains in the area to Express bus levels goes into effect, it will not be available at the Far Rockaway station. The Far Rockaway Branch has a half a dozen stops in Nassau County before it heads back into Queens, and it would not be fair to the Nassau commuters paying full fares to have all the seats filled at the first station in Far Rockaway. City Service, however, is run independently from the regular LIRR trains. A City Service train could start in Far Rockaway and express through Nassau to Queens without interfering with Nassau commuters at all. City Service just shares the tracks with the regular commuter trains.

## Southeast Queens Train and Bus Map



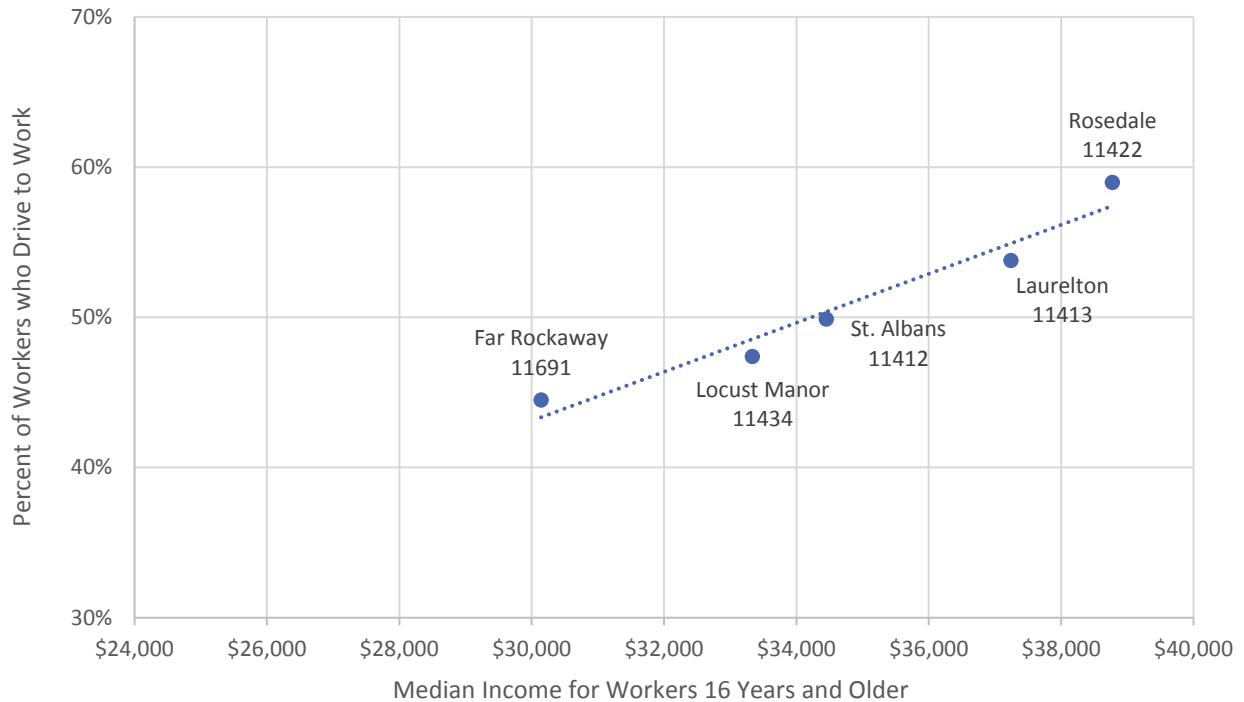
The chart below shows that a larger percentage of workers use the railroad in wealthier neighborhoods such as Laurelton (6.6%) than in poorer neighborhoods, such as Far Rockaway (2.2%). However, the \$2,400 extra to take the railroad seems to be too much for almost all workers earning less than \$40,000 a year. Also, the percent of workers who drive to work steadily increases as the median income increases (see graph on next page). A few people will take the railroad when their income goes up, but most people are more likely to buy a car with the extra money. And once you have a car, it costs very little to drive to work if you have a place to park and can avoid tolls. The fact that so many people in southeast Queens drive to work, even though the driving times are extremely long, shows that people will only leave their cars at home if they are given a much better option. City Service will give them much shorter commuting times at subway prices.

**Means of Transportation to Work and Median Earnings for Workers 16 and Over in Southeast Queens**

Neighborhood	Far Rockaway	Rosedale	Laurelton	Locust Manor	St. Albans
Zip Code	11691	11422	11413	11434	11412
Median Earnings	\$30,142	\$38,773	\$37,241	\$33,333	\$34,451
Number of Workers	24,032	16,617	20,076	28,377	18,350
Car, Truck or Van (Percent)	10,695 (44.5%)	9,800 (59.0%)	10,801 (53.8%)	13,437 (47.4%)	9,159 (49.9%)
LIRR (Percent)	537 (2.2%)	743 (4.5%)	1,315 (6.6%)	921 (3.2%)	385 (2.1%)
Bus and/or Subway* (Percent)	9,012 (37.5%)	5,315 (32.0%)	6,967 (34.7%)	11,940 (42.1%)	7,781 (42.4%)

\* Includes a small number of Express bus riders

## Percent of Workers who Drive to Work vs. Median Income in Southeast Queens ZIP Codes Underserved by Mass Transit



The above graph makes it very clear that in neighborhoods in southeast Queens with commuter trains and no subways, the people with larger incomes drive more. The same pattern holds true in neighborhoods in northeast Queens and in the central Bronx as revealed by an expanded graph in the Appendix.

City Service would shorten commuting times by 40 to 60 minutes for drivers and by at least 35 minutes for bus/subway commuters. Assuming that one third of the drivers and one half of the bus/subway commuters apply for the lottery for City Service Metro Cards and that 3,000 of the current 4,000 LIRR riders and 1,000 Express bus riders also apply, we are led to Case 6 in the table of new revenues and savings on page 7. In this case, the combined new revenues and savings for the MTA is 67.4% of the operating costs. From the LIRR point of view (just looking at new revenues and lost ticket sales), the net gain in revenues is \$4,800 or 80% of the operating expenses.

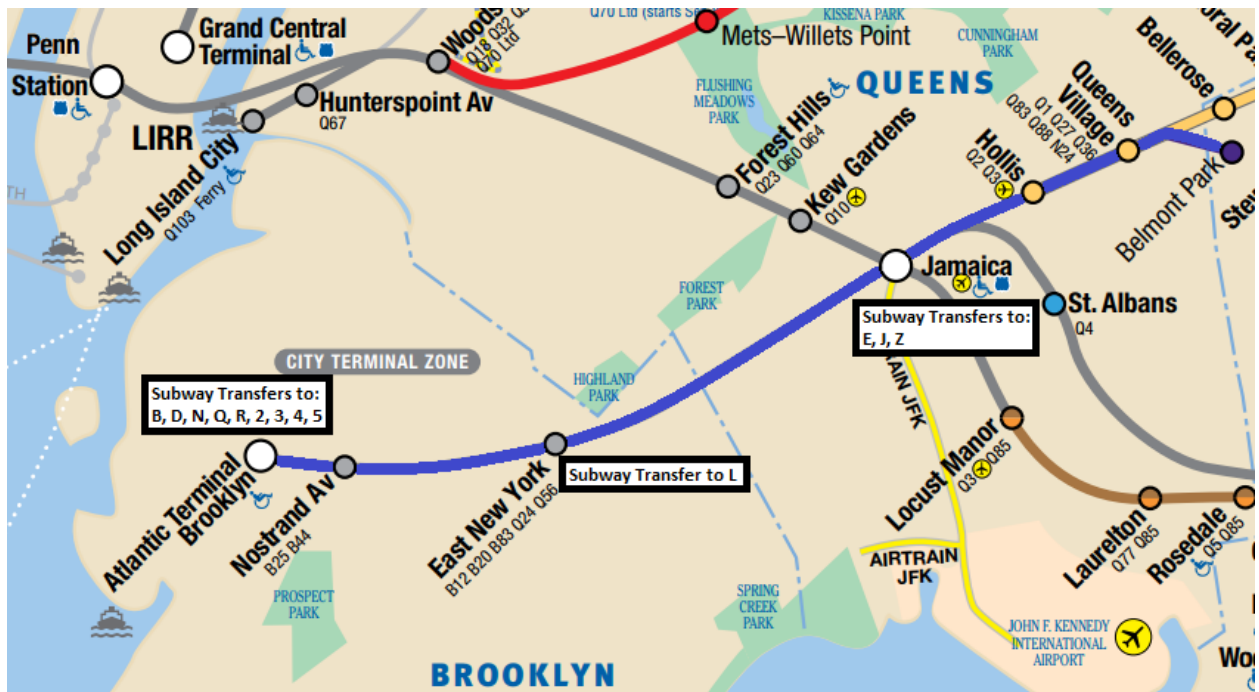
It would be interesting to work out one more case – a case that considers what would happen if tolls were put on the free East River bridges. In that case, probably half of the drivers, or more, would apply to the lottery because it would no longer be cheaper to drive to work than to take a subway or a City Service train there. This scenario yields Case 3 on page 7, where the combined new revenues and savings are 72.7%

**CITY SERVICE ON THE LIRR HEMPSTEAD & MONTAUK BRANCHES THROUGH QUEENS AND BROOKLYN**

The LIRR Hempstead Branch travels in an almost straight line across central Queens and Brooklyn. It takes little more than a half an hour to travel from Queens Village on the border with Nassau County, past stations in Hollis, Jamaica, East New York and Nostrand Avenue to the Atlantic Terminal/Barclay’s Center station in Brooklyn. It also takes only 32 minutes to travel by train on the LIRR from Queens Village to Penn Station in Manhattan. Just like commuters in the other outlying parts of the city, almost all the workers along this line currently either drive to work or commute on regular buses and/or subways even though these commutes take much longer. Driving in rush hour from Hollis to Penn Station takes 90 minutes one way if you avoid the tolls, a whole hour longer than the train. That’s 2 hours a day - 10 hours a week – 500 hours a year - just wasted. And you’re not playing on your device either. It’s not fun. It’s not relaxing. And paying the toll at the Tunnel only cuts the time by 18 minutes. Even the trip from Hollis to downtown Brooklyn is 30 minutes longer by car than by train. That’s only 250 hours a year wasted.

Morning Rush Hour Travel Times to Penn Station & Atlantic Terminal (minutes)					
Starting Location	Driving		Bus/Subway	Express Bus	City Service
	Toll	No Toll			
A) Queens Village	75	100	83	None	32
	65		93		32
B) Hollis	72	90	70	None	30
	60		70		30
C) Jamaica	67	90	41	None	25
	60		41		18
D) East New York	65	70	37	None	37
	25		31		10

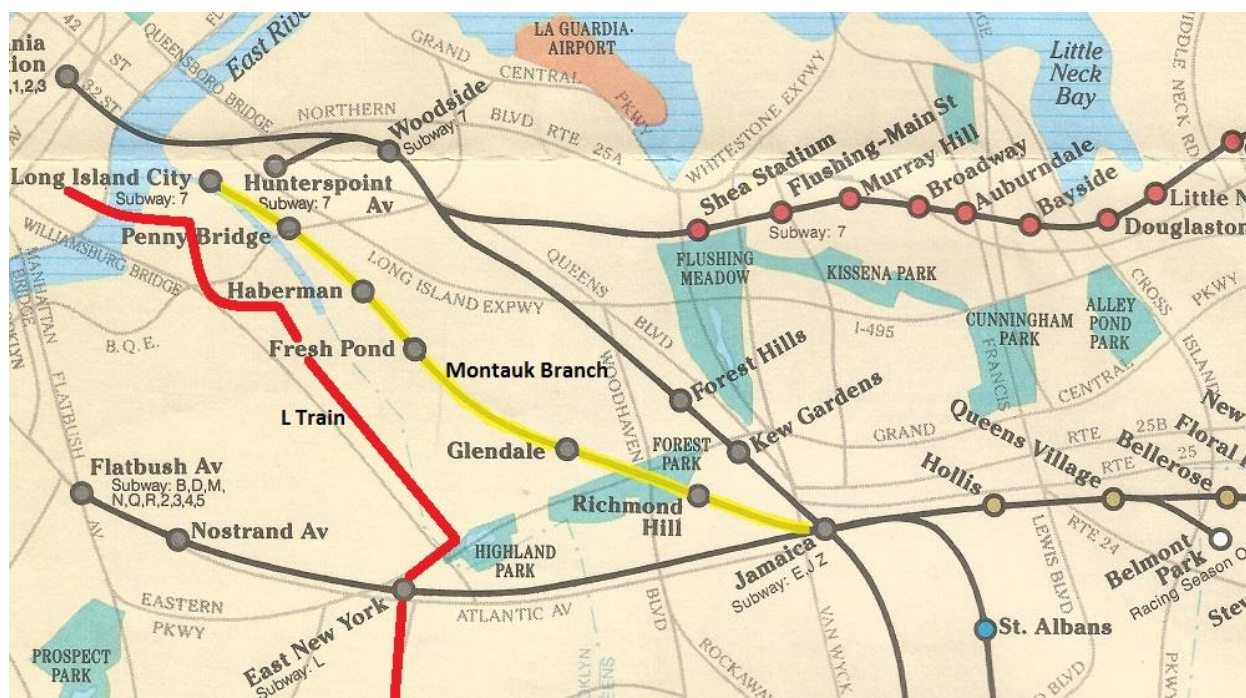
2017 LIRR Train Routes Across Brooklyn and Queens



This LIRR line is totally underutilized now, but it could serve as a vital, heavily used, link between the Jamaica hub in central Queens and the Atlantic Avenue hub in downtown Brooklyn **if City Service trains operated on it at subway fare prices.** There are numerous transfer opportunities at key stations along the line. At the Jamaica Station, there are connections to most of the other LIRR lines, several subways and many buses. At Atlantic Terminal, there are connections to many subway lines to other parts of Brooklyn and to the business districts in Manhattan. The almost totally unused East New York Station in eastern Brooklyn is only 10 minutes away from Atlantic Terminal by train. And there is a transfer at East New York to the L train. If City Service ran on this line, with free transfers to and from the subways, then outlying passengers on the L train in Brooklyn would have the option of transferring at East New York to avoid the extensive detours associated with the scheduled repair work on the L train tunnel to Manhattan. This would take some pressure off the overcrowded shuttle buses planned for this long repair job. City Service will provide increased transportation options all over the city, assisting riders when there are delays caused by any reason.

The passengers of the underutilized LIRR branches discussed above were all lucky compared to those who used to ride the LIRR City Terminal (Montauk) branch (highlighted in yellow on the 1989 LIRR map below.) If you compare the current MTA map shown on the previous page to the 1989 map, you will discover that 9 miles of track and five LIRR stations shown on the old map are missing on the new map. Express trains from Jamaica to the Long Island City station near the #7 train still ran on the tracks as recently as 2012, but the five local stations were “terminated” in 1998 due to a shortage of customers who could afford the high price of the tickets. The tracks are used only for freight now even though they pass through MTA “underserved neighborhood” #4 in western Queens. The five closed stations in this “transportation desert” are not near a subway and many of the residents in the area currently take buses to the L train to get to jobs in Manhattan. But the L train is so overcrowded that the MTA plans to remove seats to increase its capacity. If City Service is adopted and the stations on the Montauk Branch are modernized and reactivated, this line could provide an alternative route for thousands of L train passengers.

**1989 Map of LIRR Routes in Brooklyn and Queens with the Discontinued Montauk Branch**



## **HOW CITY SERVICE RELATES TO THE NEW FREEDOM TICKET**

The thoughtful Freedom Ticket plan proposed by the New York Transit Riders Council would allow riders at rail stations in underserved areas of the outer boroughs to purchase reduced price tickets that let them ride on commuter trains and transfer for free to buses and subways. The MTA will run a pilot program testing this plan in Fall 2017 at three stations in Brooklyn and four stations in Southeast Queens on the LIRR. The Freedom Ticket and City Service plans are both intended to provide commuters who do not live near a subway with faster and cheaper rail commutes on the underutilized commuter rail system. While they differ in some respects, it seems possible to run the two plans together – even on the same tracks.

Fares and Numbers of Riders: The Freedom Ticket would be priced at Express Bus rates (\$215 a month) and City Service would be priced at standard subway/bus rates (\$121 a month.) Freedom Tickets priced at Express Bus levels will attract all the current LIRR riders, some Express Bus riders and a few regular bus/subway riders (because of the speed.) However, only 10,000 riders outside of Staten Island are currently willing to pay the high Express bus fares. The very inexpensive City Service Metro Card prices would attract much larger numbers of drivers, of Express Bus riders and of regular bus/subway riders.

Ticketing: Passengers buying Freedom Tickets would be able to buy monthly, weekly or one way tickets with no restrictions on residence or train times. Most passengers on crowded City Service trips would need a special City Service monthly Metro Card with a photo ID – distributed by lottery to city residents.

Overcrowding: The Freedom Ticket plan is designed primarily to fill empty seats on existing scheduled train runs. There is no mention of possible overcrowding issues or of additional train service. City Service, due to its extremely low fares, will attract many more passengers and will require new dedicated service, separate from the regular commuter service, so as not to overcrowd regular customers on existing trains.

Parking & Congestion: Freedom Ticket has no residence requirements. Riders from Nassau will drive in and park on the local streets near the stations in Southeast Queens. If Freedom Ticket is very successful, then this could become a problem. City Service is restricted to city residents and will not attract drivers from outside the city. In fact, current parking and congestion problems in areas such as the Main Street Flushing shopping hub, should be relieved by drivers and bus riders switching to the new City Service.

Rail Ticket Revenues: With both the Freedom Ticket and City Service, there will be a loss in revenues due to current rail riders switching to a cheaper service. With Freedom Tickets, the loss per rider will be smaller, but it will affect all the current riders as well as additional riders that drive in from Nassau. The very inexpensive City Service Metro Cards will be in high demand, but their distribution by lottery will result in comparatively few current rail commuters getting one. Most of the cards should go to drivers, Express Bus riders and regular bus/subway riders. In both plans, there will be an increase in revenues due to drivers switching to the new rail service. The very low prices on City Service will attract many more drivers, but will produce less revenue per driver than Freedom Tickets.

Operating Expenses and Savings: The Freedom Ticket plan has no added trains and requires no additional operating funds. Each new City Service roundtrip that is added to the schedule would cost about \$1.5 million annually or about \$6.00 per rider per roundtrip. However, the potential operating savings from switching commuters from buses or Express buses to rails is \$1 per passenger mile or about \$7.00 per roundtrip. Express Bus riders (subsidized \$35 per roundtrip) will flock to City Service since it is about half the cost of and much faster than the buses. Regular bus/subway riders will also switch to City Service because of its speed and its inexpensive pricing. City Service should come close to paying for itself.



## **HOW CITY SERVICE RELATES TO OTHER NYC TRANSPORTATION PROJECTS AND PROPOSALS**

East Side Access: The completion of East Side Access will provide enough room and flexibility on the tracks, in the tunnels and at the main Manhattan Terminals to allow for very frequent scheduling of City Service trains - even in the peak rush hour periods. Providing hundreds of thousands of residents in underserved neighborhoods of the outer boroughs with fast, convenient and inexpensive rail access to jobs and schools in the central city will partly justify the \$10 BILLION being spent on this project.

The Move NY Fair Plan: This well thought out plan to impose “fair” tolls on all the city’s bridges and tunnels as well as on driving in the central business district of Manhattan was designed to reduce congestion and unhealthy air pollution and to raise \$1.5 billion annually for the city’s transportation system. Over two thirds of the toll revenues were dedicated to funding capital improvements with an additional quarter going to roads and bridges. This left only 7% of the revenues for subsidizing the MTA operating budget and fares. The plan has not moved significantly forward because of a lack of support from officials that are afraid of offending drivers and mass transit riders. Opposition to tolling is particularly intense in underserved and poorer areas of the outer boroughs. If more of the Move NY Fair Plan revenues went to funding immediate network expansion projects (such as City Service) and fare subsidies (such as Fair Fares), then political opposition to the tolling plan would be cut significantly. Recall that adding one City Service roundtrip to an LIRR or Metro North weekday schedule would cost about \$1.5 million a year. Operating expenses for running City Service all day at half hour intervals from 6:30 AM to 11:30 PM with two dedicated trains on each of the five routes (a total of 165 daily roundtrips) would be about \$250 million annually. Much of this would be offset by new revenues from Metro Card sales and by large savings from switching riders from bus travel to rail travel. Full support for City Service and for Fair Fares would use less than one third of the projected toll revenues. A limited experiment with City Service could lead to a loud and large demand for its expansion and an agreement on a tolling plan that would pay for City Service, Fair Fares and MTA capital projects.

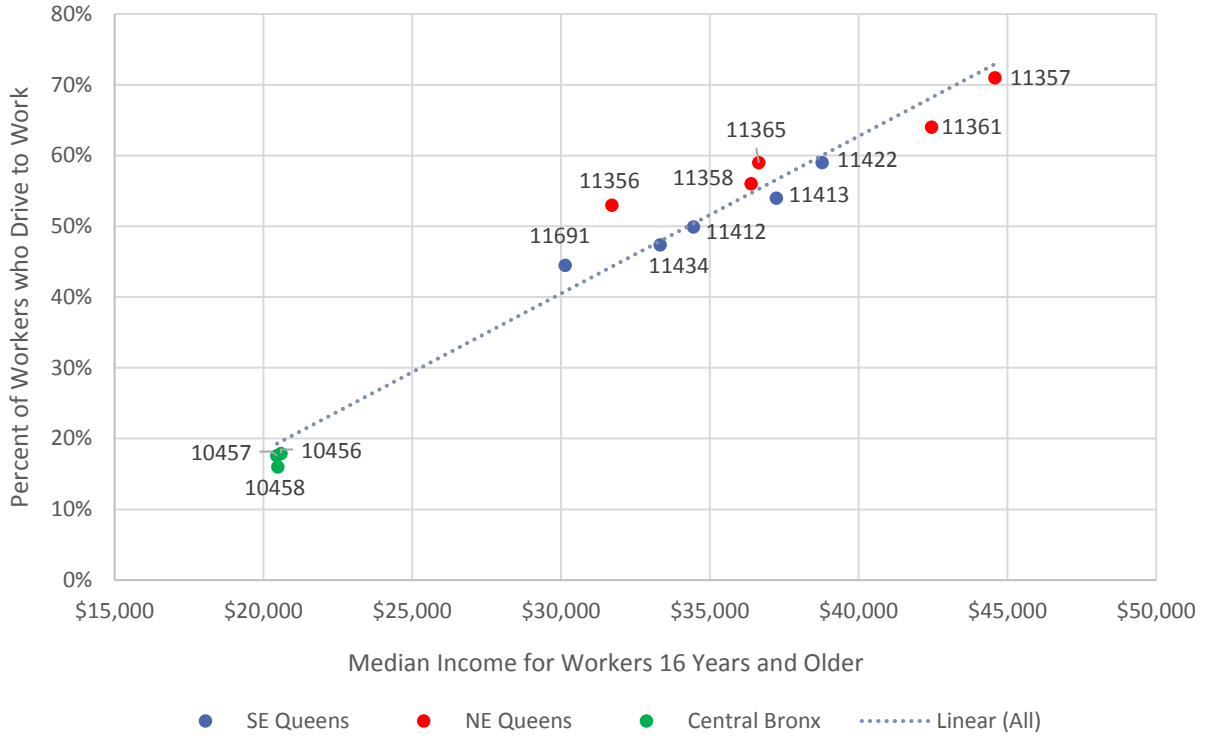
Fair Fares Proposal: This excellent proposal put forth in October of 2016 by the Community Service Society and the Riders Alliance to provide metrocards at half price to poorer residents of the city fits in totally with this City Service proposal and should apply to people using City Service metrocards. City Service routes in the central Bronx and parts of southeastern Queens would have many residents who would benefit from the Fair Fare proposal. Both proposals are aimed at helping to connect poor people to jobs and schools. The Fair Fare plan is estimated to cost about \$200 million annually. If the city cannot fund it, then officials should reopen the discussion about tolling the free East River bridges in order to fund proposals such as Fair Fares.

Penn Access: Running City Service trains at Metrocard prices on the planned expansion of New Haven service on the Amtrak route through poor neighborhoods of the south and east Bronx also makes sense. Very few of the current residents of these neighborhoods would be able to afford New Haven ticket prices. Running Metro North trains down the Westside under Riverside Park to Penn Station also makes more sense if the Bronx and Manhattan residents can also ride at subway prices.

The Triboro & Other Freight Line Ideas: The proposed Triboro line connecting low income neighborhoods in the Bronx, Queens and Brooklyn makes much more sense if it is run at City Service prices. And other routes along the north shore of Staten Island and through Middle Village and Maspeth in Queens should also be reactivated at City Service prices.

#7 Line Extension to Hudson Yards: This extension will add many more riders to this overcrowded line. City Service trains on the parallel Port Washington line will relieve this pressure significantly.

## Percent of Workers who Drive to Work vs. Median Income in ZIP Codes Underserved by Mass Transit



Southeast Queens		Northeast Queens		Central Bronx	
Far Rockaway	11691	College Point	11356	Morrisania	10456
Rosedale	11422	Whitestone	11357	Tremont	10457
Laurelton	11413	Fresh Meadows	11365	Fordham	10458
Locust Manor	11434	Auburndale	11358		
St. Albans	11412	Bayside	11361		

The above graph reveals that as incomes increase in neighborhoods that lack subways, but have commuter trains, the percent of workers who drive steadily increases.

# 2015 National Transit Profiles: Top 50 Reporting Agencies — 15

MTA New York City Transit  
2015 Annual Agency Profile

Senior Director Mr. Michael Mantel  
646-252-6593

<http://www.mta.info>  
2 Broadway  
New York, NY 10004

General Information		Database Information	
Urbanized Area Statistics - 2010 Census	Service Consumption	MTAOC: 2008	Reporter Type: Full Reporter
1 New York-Newark, NY-NJ-CT	12,679,232,336 Annual Passenger Miles (PMT)		
3,465,544,725 Annual Unlinked Trips (UPT)	3,445,544,725 Average Weekday Unlinked Trips		
18,351,255 Population	6,407,373 Average Saturday Unlinked Trips		
1 Pop. Rank out of 498 UZAs	5,112,720 Average Sunday Unlinked Trips		
Service Area Statistics	Service Supplied	Sources of Operating Funds Expended	
321 Square Miles	498,162,746 Annual Vehicle Revenue Miles (VRM)	Fare Revenues	45.1%
8,550,405 Population	36,694,081 Annual Vehicle Revenue Hours (VRH)	Local Funds	19.9%
	11,000 Vehicles Operated in Maximum Service (VOMS)	State Funds	32.2%
	11,676 Vehicles Available for Maximum Service (VAMS)	Federal Assistance	0.0%
		Other Funds	2.7%
		Total Operating Funds Expended	100.0%
		\$3,369,967,853	
		Sources of Capital Funds Expended	
		Fare Revenues	0.0%
		Local Funds	50.6%
		State Funds	0.0%
		Federal Assistance	40.6%
		Other Funds	8.8%
		Total Capital Funds Expended	100.0%
		\$2,372,675,795	

Fare revenues only account for 45.1% of operating funds expended.

Modal Overview		Vehicles Operated in Maximum Service		Uses of Capital Funds	
Mode	Directly Operated	Purchased Transportation	Revenue Vehicles	Systems and Guideways	Facilities and Stations
Bus	3,314	-	\$251,802,743	\$0	\$51,629,047
Bus Rapid Transit	108	-	\$0	\$0	\$0
Commuter Bus	456	-	\$95,877,221	\$0	\$8,590,679
Demand Response	-	1,840	\$3,869,002	\$0	\$0
Heavy Rail	5,282	-	\$114,621,030	\$1,366,667	\$0
Total	9,160	1,840	\$456,169,996	\$1,223,445,450	\$992,471,389
				\$1,054,057,782	\$239,002,568
				\$2,372,675,795	\$2,372,675,795

Operation Characteristics		Summary of Operating Expenses (OE)	
Mode	Operating Expenses	Salary, Wages, Benefits	\$7,111,993,660
Bus	\$2,662,592,742	Materials and Supplies	\$514,348,741
Bus Rapid Transit	\$48,051,662	Purchased Transportation	\$311,033,262
Commuter Bus	\$237,310,361	Other Operating Expenses	\$972,516,996
Demand Response	\$461,280,015	Total Operating Expenses	\$8,609,894,659
Heavy Rail	\$5,200,211,879	Reconciling OE Cash Expenditures	\$998,972,874
Total	\$8,609,894,659	Purchased Transportation (Reported Separately)	\$0

Performance Measures		Service Efficiency		Service Effectiveness	
Mode	Operating Expense per Vehicle Revenue Mile	Operating Expense per Passenger Mile	Operating Expense per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Bus	\$30.38	\$1.71	\$3.58	8.5	60.2
Bus Rapid Transit	\$26.42	\$1.31	\$2.39	11.0	67.6
Commuter Bus	\$25.63	\$1.53	\$16.79	1.4	22.3
Demand Response	\$8.54	\$5.04	\$9.62	0.1	14.4
Heavy Rail	\$19.96	\$4.95	\$14.55	1.1	140.6
Total	\$17.28	\$4.58	\$2.50	6.9	58.4

The operating expenses per passenger mile are about \$1.50 for regular buses and commuter buses and less than \$0.50 for heavy rail (subways). The operating expenses per passenger mile on Metro North and LIRR trains is also close to \$0.50 (see MNR & LIRR info). The MTA can reduce operating expenses by \$1 per passenger mile by getting riders to switch from bus to rail.

# 2015 National Transit Profiles: Top 50 Reporting Agencies — 17

## Metro-North Commuter Railroad Company, dba: MTA Metro-North Railroad

Controller: Mr. James McGovern  
212-340-3423

<http://www.mta.info>  
420 Lexington Avenue  
2nd Floor  
New York, NY 10170

General Information		Database Information	
Urbanized Area Statistics - 2010 Census	Service Consumption	MTAID: 20078	Reporter Type: Full Reporter
1 New York-Norfolk, NY-NJ-CT	2,340,179,817 Annual Passenger Miles (APM)		
3,760 Square Miles	86,299,452 Annual Unlinked Trips (UT)		
18,351,255 Population	29,342 Average Weekly Unlinked Trips		
Other UZAs Served	130,503 Average Saturday Unlinked Trips		
See Below	100,293 Average Sunday Unlinked Trips		
Service Area Statistics	Service Supplied	Sources of Operating Funds Expended	
527 Square Miles	65,969,843 Annual Vehicle Revenue Miles (VRM)	Fare Revenues	56.8%
6,503,854 Population	2,064,663 Annual Vehicle Revenue Hours (VRH)	Fare Funds	6.6%
	1,199 Vehicles Operated in Maximum Service (VOMS)	State Funds	31.4%
	1,244 Vehicles Available for Maximum Service (VAMS)	Federal Assistance	0.0%
		Other Funds	5.2%
		Other Operating Funds Expended	100.0%
		Total Operating Funds Expended	\$1,194,932,693
		Sources of Capital Funds Expended	
		Fare Revenues	0.0%
		Local Funds	66.5%
		State Funds	0.0%
		Federal Assistance	31.5%
		Other Funds	0.0%
		Total Capital Funds Expended	\$272,830,386

### Financial Information



Fare revenues only account for 56.8% of operating funds expended.

Summary of Operating Expenses (OE)	
Salary, Wages, Benefits	\$983,769,120
Materials and Supplies	\$104,465,423
Purchased Transportation	\$5,452,050
Other Operating Expenses	\$136,817,054
Total Operating Expenses	\$1,140,503,687
Reconciling OE Cash Expenditures	\$54,089,207
Purchased Transportation (Reported Separately)	\$0

Modal Overview	Vehicles Operated in Maximum Service		Uses of Capital Funds		Total
	Directly Operated	Purchased Transportation	Systems and Guidelines	Other	
Mode					
Bus	-	9	\$0	\$75,531	\$75,531
Commuter Rail	1,188	-	\$26,882,332	\$30,406,959	\$272,755,455
Ferryboat	-	2	\$0	\$0	\$0
Total	1,188	11	\$26,882,332	\$48,772,571	\$272,830,386

Operation Characteristics		Uses of Operating Expenses (OE)		Fixed Guideway		Service Effectiveness	
Mode	Operating Expenses	Fare Revenues	Capital Funds	Directional Routes Miles	Vehicles Available for Maximum Service	Operating Expenses per Passenger Mile	Unlinked Trips per Vehicle Revenue Mile
Bus	\$2,222,424	\$521,971	\$521,971	0.0	14	\$14.95	1.9
Commuter Rail	\$1,134,654,446	\$677,556,009	\$272,755,455	545.7	1,188	\$941.39	42.2
Ferryboat	\$3,616,617	\$206,884	\$0	13.2	2	\$22.56	41.7
Total	\$1,140,503,687	\$678,284,864	\$272,830,386	558.9	1,244	\$943.00	41.8

The operating expense of running a ten car City Service train for a one hour, 30 mile roundtrip is less than \$6,000 (calculated by distance or by time).

About \$1 less than on buses run by NYCT in the city

These numbers indicate some available train cars even at the peak times. There are many more available outside of the peak times.

# 20 — 2015 National Transit Profiles: Top 50 Reporting Agencies

MTA Long Island Rail Road  
2015 Annual Agency Profile

President: Mr. Patrick Nowakowski  
718-589-8252

## General Information

Urbanized Area Statistics - 2010 Census		Service Consumption		Database Information	
1 New York-Newark, NY-NJ-CT	2,220,654,590	Annual Passenger Miles (PMT)	98,699,512	Annual Unlinked Trips (UPT)	334,650
3,450 Square Miles	18,351,295	Average Weekday Unlinked Trips	141,336	Average Saturday Unlinked Trips	107,600
1 Pop. Rank out of 498 UZAs		Average Sunday Unlinked Trips			

Service Area Statistics		Service Supplied	
2,967 Square Miles	67,522,769	Annual Vehicle Revenue Miles (VRM)	2,193,638
11,413,342 Population	1,019	Annual Vehicle Revenue Hours (VRH)	1,185
		Vehicles Operated in Maximum Service (VOMS)	1,185
		Vehicles Available for Maximum Service (VAMS)	

## Modal Characteristics

Modal Overview	Vehicles Operated in Maximum Service		Uses of Capital Funds		Total
	Directly Operated	Transportation	Systems and Guideways	Facilities and Stations	
Mode					
Commuter Rail	1,019	-	\$22,654,250	\$56,785,184	\$79,439,434
Total	1,019	-	\$22,654,250	\$56,785,184	\$79,439,434

## Operation Characteristics

Mode	Operating Expenses		Uses of Capital Funds		Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
	Operating Expenses	Capital Funds	Systems and Guideways	Facilities and Stations		
Commuter Rail	\$1,290,583,961	\$700,684,859	\$428,282,337	\$56,785,184	67,522,769	2,125,688
Total	\$1,290,583,961	\$700,684,859	\$428,282,337	\$56,785,184	67,522,769	2,125,688

## Performance Measures

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour	Operating Expenses per Passenger Mile	Operating Expenses per Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Rail	\$19.11	\$606.00	\$0.58	\$13.08	1.5	46.3
Total	\$19.11	\$606.00	\$0.58	\$13.08	1.5	46.3

The operating expense of running a ten car City Service train for a one hour, 30 mile roundtrip is about \$6,000 (calculated by distance or by time).

About \$1 less than bus travel (see NYCT info)

These numbers indicate some available train cars even at the peak times. There are many more available outside the peak times.

## Financial Information

Sources of Operating Funds Expended		Sources of Capital Funds Expended	
Fare Revenues	\$700,684,859	Fare Revenues	\$0
Local Funds	\$136,226,419	Local Funds	\$172,166,622
State Funds	\$468,076,196	State Funds	\$585,645
Federal Assistance	\$0	Federal Assistance	\$265,630,070
Other Funds	\$50,060,328	Other Funds	\$0
Total Operating Funds Expended	\$1,355,051,802	Total Capital Funds Expended	\$428,282,337

Summary of Operating Expenses (OE)	
Salary, Wages, Benefits	\$978,609,788
Materials and Supplies	\$135,942,354
Purchased Transportation	\$0
Other Operating Expenses	\$176,031,819
Total Operating Expenses	\$1,290,583,961
Reconciling OE Cash Expenditures	\$64,467,841
Purchased Transportation (Reported Separately)	\$0

## Fixed Guideway

Directional Routes Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years*
638.2	1,185	1,019	14.0%	13.7
638.2	1,185	1,019	14.0%	14.0%

## Service Effectiveness

Operating Expenses per Passenger Trip	Unlinked Trips per Vehicle Revenue Mile
\$13.08	1.5
\$13.08	1.5

Lastly, in the 1973 New York Times article below, describing the end of the Third Avenue El, the chairman of the MTA said that replacing the El with buses would save the MTA over \$1.25 million a year in operating costs. That's equal to over \$7 million in 2017 dollars. And the MTA was saving that money each year since 1973. The people of the central Bronx have paid for City Service many times over.

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The New York Times <https://nyti.ms/1HiNDYw>

## Third Ave. El Reaches the End of Its Long, Noisy, Blighted, Nostalgic Line (Abridged)

By PAULL L. MONTGOMERY APRIL 29, 1973

The last remnant of the Third Avenue El, which in its prime blighted neighborhoods and sped passengers from South Ferry to the Westchester County line, joined the past yesterday.

The final train on the five-and-a-half-mile stretch of track between 149th Street and Gun Hill Road in the Bronx made its last run at midnight, ending 85 years of convenience and fresh air for riders and an equal period of gloom and squealing wheels for residents along the right-of-way.

Service along the line is to be taken over by a fleet of 60 air-conditioned buses, which will stop near the old stations. Demolition of the tracks is to begin this summer.

"The Third Avenue El has done its job well," said Dr. William J. Ronan, chairman of the Metropolitan Transportation Authority, in a statement. "It has outlived its usefulness, however. It must give way to modern public transportation service and permit urgently needed modernization of the Third Avenue corridor for the benefit of residents and businessmen in the community."

### Deficit to Be Cut

Dr. Ronan said the elevated service cost \$3.7-million a year to operate, and brought in \$2-million in revenue, leaving deficit of \$1.7-million. The bus service, he said will cut the deficit to \$445,000. The line carried about 5,300 passengers an hour at rush-hour peaks.

News of the closing has generally brought delight to merchants and residents along the way. They envision demolition of the overshadowing elevated structure as the first step away from the decay of the area.

Riders on the last day yesterday were not nearly as exchanted. "There's quite a number of people will be put out by this," said Edward Riddick, who uses the El regularly. He said he would have to switch to the new bus service, or to the D train, which runs under the Grand Concourse, twelve blocks west.

Dr. Ronan's statement said the buses would provide "significantly improved travel time" for riders. He said there was five minutes between trains in rush hours, 12 minutes at other times during the day and on Saturday, and 20 minutes at night and on Sundays.

"The buses, on the other hand, will offer one-minute, three-minute and five-