

BEHIND THE CURB

A disproportionate share of the city's recent job growth, transit ridership gains and population increases have occurred in the four boroughs outside of Manhattan, but transit service in the boroughs has not kept pace—and the biggest losers have been the city's working poor. New York's bus system could step in and fill the gaps, but not without major improvements

This report was written by David Giles, edited by Jonathan Bowles and Serena Leigh Krombach, and designed by Ahmad Dowla with input from Rosten Woo. Additional research by Tanya Fonseca, Nancy Liu and Radha Patel.

The report was funded by the J.M. Kaplan Fund. General operating support for City Futures has been provided by Bernard F. and Alva B. Gimbel Foundation, Deutsche Bank, Fund for the City of New York, Salesforce Foundation, The Scherman Foundation, Inc., and Unitarian Universalist Veatch Program at Shelter Rock.

The Center for an Urban Future is a New York City-based think tank dedicated to independent, fact-based research about critical issues affecting New York's future, including economic development, workforce development, higher education and the arts. For more information or to sign up for our monthly e-mail bulletin, visit www.nycfuture.org.

City Futures Board of Directors: Andrew Reicher (Chair), Margaret Anadu, Michael Connor, Russell Dubner, Gretchen Dykstra, David Lebenstein, Gifford Miller, Lisette Nieves, Jeffrey Pollock, John Siegal, Stephen Sigmund, and Mark Winston Griffith.

Cover photo: [svenreed/flickr](#)

CONTENTS

INTRODUCTION	3
KEEPING UP WITH THE BOROUGHES	8
Driven by gains in the health care and education sectors, job growth in the Bronx, Brooklyn, Queens and Staten Island outpaced Manhattan over the past decade	
SHIFTING TRANSIT NEEDS	10
More and more New York City residents are traveling to work in job centers outside of Manhattan, but transit service has not kept pace	
TRANSPORTATION CHALLENGES FACING THE WORKING POOR	12
Low-income residents are enduring longer commutes than ever and, in many cases, are cut off from decent paying job opportunities	
THE BENEFITS OF BUS RAPID TRANSIT (BRT)	16
From implementing pre-paid boarding procedures to building elevated platforms at bus stops, relatively low cost improvements could be made to speed up buses	
OBSTACLES TO IMPLEMENTING BRT	20
Even though BRT is by far the cheapest way to bring rapid transit to more neighborhoods outside of Manhattan, a number of challenges exist	
RECOMMENDATIONS	22
ENDNOTES	24
APPENDIX: How NYC Residents Are Getting to Work	25

BEHIND THE CURB

As the country's largest and densest metropolis, New York City has historically offered a level of public transit service that most other cities could only dream about. Commuting to Manhattan's central business districts has been, and still is, a remarkably easy affair for hundreds of thousands of residents, whose travel options include commuter train, subway, ferry and bus. However, the city has changed dramatically since most of these services were introduced, and more and more residents, particularly lower-income workers, are no longer traveling to Manhattan for work.

Over the last two decades, the other four boroughs have been steadily growing their own vibrant job centers, in neighborhoods like Flushing, Queens, and East Flatbush, Brooklyn. Consequently, the number of commuters who travel to work in their own boroughs or to neighboring boroughs or counties has been growing much faster than the number of commuters who make the more traditional trip into Manhattan. For example, in the Bronx, the number of commuters traveling to Queens and Westchester County grew by 38 percent between 1990 and 2008, whereas the number going to Manhattan increased by just 13 percent in the same time period. Similarly lopsided numbers hold for Brooklyn, Queens and Staten Island.

If New York is going to retain a world-class public transportation system and sustain job growth outside of Manhattan, it must invest in solutions that make these less traditional commuter trips easier for passengers. The median travel time to work has been steadily rising in New York for more than two decades. Although long commutes affect every income group, low-income workers suffer the most by far: Of those residents with an hour or longer commute, two thirds earn less than \$35,000 per year.

Fortunately, relatively inexpensive changes to the city's underperforming bus system, if done right, can plug many of the holes in the city's existing transit network and vastly improve the quality of life of many working poor New Yorkers. The Metropolitan Transit Authority (MTA) and the New York City Department of Transportation (DOT) have taken tentative steps to improving bus service, but to make a real mark the city and state must think bigger. Legislators need to settle on a sustainable funding stream for the MTA and commit to supporting both small and large-scale improvements to the city's much-maligned bus system, from elevated platforms and time-arrival technology to divided bus lanes and attractive stations. The MTA and the DOT should create a Bus Rapid Transit (BRT) system for New York that builds off of those emerging in other cities across the U.S. and around the world: a network of buses that look and function more like subways, with routes that travel between boroughs to facilitate nontraditional commutes.

This report takes an in-depth look at transportation challenges facing low-income New Yorkers. It considers how improvements to the city's bus system could improve the lives of the poor and working poor while simultaneously helping to sustain economic growth in areas of the city that are poorly served by transit. The report draws upon extensive economic and demographic analysis and more than 60 interviews with transportation experts, economic development officials, community organizers and business leaders, as well as large and small employers sparking job creation across the city. Because the voices of the poor are notably missing from most policy discussions on transit, we made a point of reaching out to this community and interviewed dozens of advocates for the poor and city residents who live in neighborhoods with little or no public transit access.

People we spoke with were nearly unanimous in saying that transportation posed a big challenge for the working poor in New York, despite the fact that transportation has not traditionally been perceived as a priority issue for this community. Most of the low-income residents we interviewed rely on the bus to get out of their neighborhoods and complain of multiple transfers and long, undependable commutes. At the Andrew Jackson Houses in the Melrose section of the Bronx, for example, tenant association leader Danny Barber estimates that at least 75 percent of residents use the bus every day. The 4 train is about ten blocks, or a little more than a half mile, from the complex. But, according to Barber, most of the residents with jobs travel across the borough or north to points along East Fordham Road; and those bus trips, he says, are much more complicated than the commute to Manhattan.

At the Castleton Park Houses in St. George, Staten Island, almost all residents similarly depend on the bus, says tenant association leader Sharon Valentin. They ride the bus to the Ferry Terminal and either take the ferry to Manhattan or transfer to another bus. If the latter, says Valentin, they're almost certainly in for a frustrating ride. "Getting anywhere on Staten Island is harder than getting to Manhattan if you don't own a car," she says. "We have a new Target on the other side

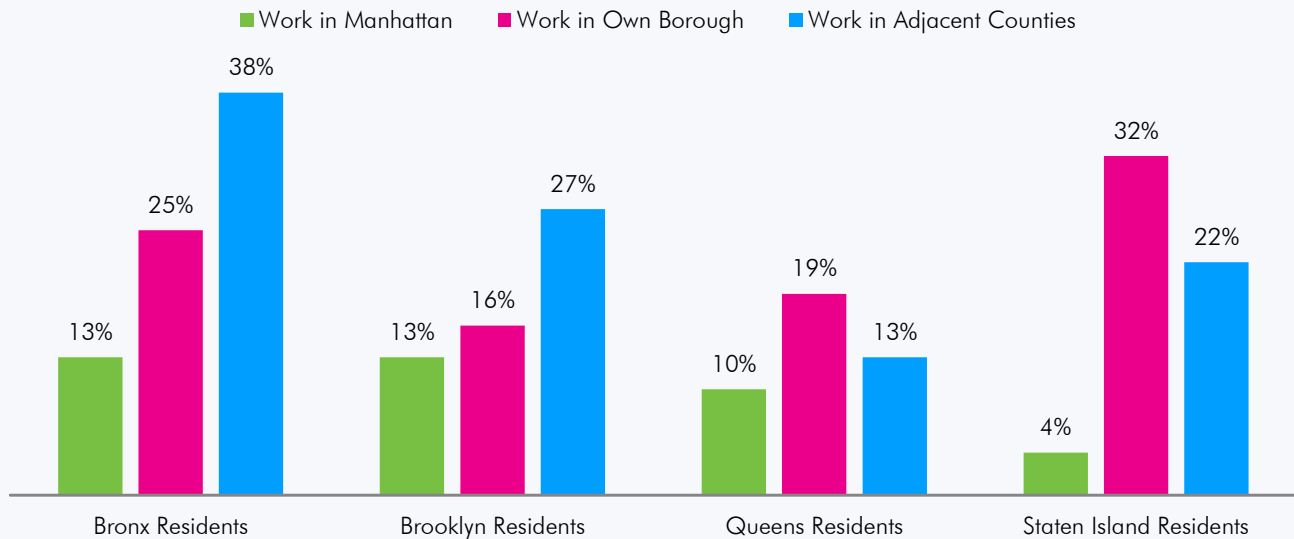
of the island and the bus lets you off a half a mile away. I know a lot of people here who would like to work at that Target, but getting there every day is too hard."

As our research shows, these are not isolated cases. For the past two decades, the number of New York City residents—of all income groups—who travel to work either within their own borough or to a neighboring borough or county has been increasing much faster than the number who make the more traditional trip into Manhattan. Commuters who rely on public transit have had to depend more and more on city buses, and commute times have gotten longer as a result.

As shown in the graph on page 5, a shift in commuter destinations is prevalent in all four boroughs outside of Manhattan, although it is undoubtedly strongest in the Bronx and Staten Island. While a large percentage of outer borough residents still work in Manhattan, between 1990 and 2008 the number of Bronx residents who travel to Queens or Westchester County for work grew by 38 percent and the number who travel inside the borough jumped by 25 percent; in the same period, the number commuting to Manhattan increased by just 13 percent. Similarly, in Staten Island, the number of residents who travel to work in their own borough increased by 32 percent between 1990 and 2008; those going to Brooklyn or New Jersey increased by 22 percent; while the number traveling to Manhattan barely changed at all—a four percent increase in those 18 years. Brooklyn and Queens both saw significant gains in non-traditional commutes as well. In fact, the number of Brooklyn residents traveling to Queens grew by 32 percent since 1990, compared to a 13 percent increase in commuters going to Manhattan.¹ Today, nearly 160,000 people cross the Brooklyn/Queens border for work every day.

One big reason for this shift in commuter patterns is the city's changing economic landscape. During the economic boom between 2003 and 2008, Brooklyn had a bigger percentage increase in jobs than Manhattan did. During the recession of 2008–2009, the Bronx gained 3,647 jobs—the only borough to add jobs during this period; by

Outer Borough Commuter Growth by Destination: 1990-2008



Transit ridership has spiked across the city over the past two decades. But in each of the four boroughs outside of Manhattan, the growth in the number of residents commuting to work in another outer borough or within their own borough has far outpaced the growth in residents traveling to jobs in Manhattan.

Source: U.S. Census Transportation Planning Package 1990; the U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters for 1990 and 2006-2008.

contrast, Manhattan lost 100,799 jobs in that one year. Driving growth in every borough were gains in health care and education. Between 2000 and 2009, New York City gained nearly 120,000 jobs in those two sectors alone. And although midtown Manhattan has several prominent hospitals and universities, collectively, the hundreds of hospitals, nursing homes, community health clinics, colleges and professional schools in the other four boroughs—from Montefiore Hospital in the Bronx and SUNY Downstate Medical Center in Brooklyn to Queensborough Community College in Bayside—accounted for the lion’s share of jobs in those sectors.

New York City’s transit system wasn’t designed for commuter trips to jobs within and between boroughs outside of Manhattan, and, partly as a result, the city’s median commute times have been climbing for decades. They are now among the highest of any major city in the country. For public transit riders in the boroughs, they range from 52 minutes each way in Brooklyn to 69 minutes each way in Staten Island. “The transit

system is all optimized as if everybody works in midtown Manhattan, south of 59th Street,” says Jonathan Peters, a transit expert at the College of Staten Island. “The MTA seems to be under the impression that all the job growth in the city is still occurring in the Manhattan CBDs [central business districts], but it’s not. In Staten Island’s case, the new commuter trips are all going to New Jersey and Brooklyn.”

As more and more residents have started to travel to work outside of Manhattan, the city’s bus system has come to play a much more important role in the transit network. According to the MTA, bus ridership has increased by 60 percent since 1990, and transit planners believe that future increases of 30 percent or more per decade are a reasonable, even conservative assumption. Yet because of the increase in ridership as well as increased traffic congestion on city roads, the quality of service on city buses has been declining steadily for years. Between 1996 and 2006, average bus speeds in New York slowed by 11 percent, from 9 mph to 8 mph, one of the slowest aver-

age bus speeds in the country.² Moreover, buses regularly fail to keep a schedule. The same trip can take 30 minutes one day and 50 minutes the next, which makes it difficult for riders to budget their time.

Although long, unpredictable commutes affect every income group, they present an especially big challenge for low-income residents. Higher earners with long commutes can buy a car or relocate to a more convenient neighborhood, but lower income New Yorkers can rarely afford these options. Indeed, skyrocketing real estate prices over the last decade have pushed numerous low- and middle-income residents to more affordable neighborhoods further away from Manhattan, many of which are not on subway lines. Also, for low-income workers, failing to be on time can mean trouble at work, since, unlike many white collar office jobs, most blue collar or low-income service jobs require that employees “time in.” Or it can mean paying extra at the day care center or losing an appointment at the doctor’s office. And for these reasons many of the participants in our interviews complained of long commutes but settled on the unpredictability of buses as an even bigger obstacle. “Buses are not trustworthy,” says Dwayne Clark, who until recently commuted from the Melrose section of the Bronx to Hunts Point, where he worked as a loader for a food distribution company. “They can be ahead of schedule or behind schedule; that’s the biggest inconvenience.”

Providing better bus service is not only an important quality-of-life issue for hundreds of thousands of New Yorkers; it’s a key component of the city’s continuing economic development. If New York is going to sustain the last decade’s incredible job growth in the boroughs outside of Manhattan, it will have to invest in solutions that make these less traditional commuter trips easier for passengers. Many employers we talked to said that a lack of transit access hampers their growth. Because the public transit service in their area couldn’t be depended on, several invested in shuttles or reimbursed workers for livery services. Others felt that a lack of transit access limited their pool of employees. For example, Steve

Chen, the vice president of Crystal Windows and Doors, a manufacturer in northern Queens that has expanded rapidly in recent years, says that a lack of transit access in their area has exacted an undeniable toll on their business. “College Point has been advantageous for Crystal Windows in many ways,” says Chen, “but employee commuting to and from work by mass transit has unfortunately been a challenge. Improved mass transit would allow our expanding business to draw from a larger labor pool, improve our ability to attract and retain new workers and make us a more competitive manufacturer,” he says.

Other big job centers with less-than-adequate public transit service include Hunts Point in the Bronx with over 20,000 employees, JFK Airport in Queens with over 55,000 employees and the Kings County-SUNY Downstate medical campuses in Brooklyn with over 20,000 employees. “There are a number of places in the city where you are having a resurgence in industry and business that are not well served by public transit,” says Carl Hum, president of the Brooklyn Chamber of Commerce. “And we have got to figure that piece out, because if you want to sustain that growth you have got to have the transportation piece figured out.”

However, improving service on city buses presents a number of unique challenges. According to the DOT, New York City buses currently spend half of their running time stopped at red lights or at stations picking up passengers. Because buses operate in mixed traffic, a small delay can quickly snowball into a major one. Low-cost technical improvements like priority signaling at stop lights and prepaid boarding, if implemented correctly, can solve many of these problems, or at least lessen their effects. With prepaid boarding, for example, passengers pay at the bus stop and board through any of the doors, cutting the dwell time at bus stops by 40 percent or more. Similarly, with traffic-signal priority, buses can get extended green lights as they approach signals, reducing the time buses sit at red lights by 30 percent or more. Other improvements include time-arrival technology, which allows passengers to see real-time updates about when the next buses will arrive, dedicated lanes for buses and raised plat-

forms at bus stops. In Curitiba, Brazil; Bogotá, Colombia; and Guangzhou, China, world-class bus systems employ all of these measures—and a few more—to create so-called Bus Rapid Transit (BRT) systems that function just like subways but for a tiny fraction of the cost.

Over the last two years, the MTA and DOT have started to implement several such BRT improvements along Fordham Road in the Bronx and along First and Second Avenues and 34th Street in Manhattan, and so far the results have been overwhelmingly positive. On Fordham Road, prepaid boarding, traffic-signal priority and a dedicated bus lane have reduced running times by 19 percent, while weekday ridership has increased by 11 percent or 5,000 daily passengers. The MTA and DOT are looking to implement similar improvements along two other corridors in Brooklyn and Staten Island and have studied the possibility of creating as many as 27 additional bus routes sometime in the future. Both agencies deserve credit for pursuing these projects in a tough fiscal environment. Nevertheless, transit experts say that to have any real impact on commute times, particularly for the working poor living outside of Manhattan, an even more ambitious effort is needed.

For instance, the MTA and DOT have decided not to build stations with elevated platforms because of the extra money and time required to build the physical infrastructure. This is a big deviation from many of the best BRT systems in other parts of the world, and many of the experts we spoke to thought it was a mistake. Elevated platforms, they argue, are necessary for reducing boarding delays and keeping drivers to a schedule. Transportation experts also think more can be done to connect the proposed BRT routes, facilitating transfers and building a more integrated network; right now, most of the routes exist in isolation from one another.

Similarly, of 32 proposed BRT routes, only a handful travel between the boroughs. Despite being notoriously difficult trips, not a single route will serve the growing number of commuters traveling between Brooklyn and Queens or Queens and the Bronx or Staten Island and New Jersey.

Finally, the MTA and DOT need to look seriously at outfitting every city bus with a Global Positioning System (GPS) in order to allow time arrival technologies to be implemented across the board. This would be a simple and relatively cheap way to help all bus riders better plan their trips, and it could help build good will among skeptical residents and businesses.

Both agencies could undoubtedly do more, but the MTA and DOT don't operate in a vacuum. If New York is going to reform its bus system and make a meaningful difference in the lives of commuters, then political leaders at both the city and state levels will have to step up too. Politicians will have to settle on a sustainable funding stream for the MTA and work to close the budget gap that has led to drastic cuts in service over the last year. They'll also have to do a much better job of articulating the need for a better bus system and selling the advantages of BRT improvements like prepaid boarding and dedicated lanes to constituents.

Lawmakers, transportation planners and transit advocates should also reach out to community leaders and employers in underserved areas of the city to see what they might have to gain from improved bus service. In our interviews, we found a number of employers, including major hospitals, colleges and manufacturers, who could be powerful proponents of BRT if they saw that the proposed improvements were meeting their needs. "If we felt the improvements were working to our benefit, then we could be an advocate," says Ivan Lisnitzer, chief operating officer of SUNY Downstate Medical Center in Brooklyn. "But so far," Lisnitzer says, "nobody has asked for our input."

That needs to change. New York City's transit system was once the envy of the world, and it will be again if legislators take the necessary steps to implement a sufficiently ambitious BRT network. Bringing BRT to New York is not only a cost-efficient way of responding to changes in the city's economy and the different places residents are traveling for work; it will address the needs of working poor residents who are disproportionately affected by current gaps in the transit system.

KEEPING UP WITH THE BOROUGHES

Driven by gains in the health care and education sectors, job growth in the Bronx, Brooklyn, Queens and Staten Island outpaced Manhattan over the past decade

Transit needs outside of Manhattan require more attention from policymakers in large part because this is where so many of the jobs are being created. This is a relatively new trend. Traditionally, New York has always had a dominant concentration of jobs in one relatively small location, Midtown and Downtown Manhattan. When the city's subways and commuter trains were built in the first half of the last century, residents of the city's inner ring were able to move further out to neighborhoods in Queens, Brooklyn and Long Island without sacrificing their ability to get to work every day. Manhattan's population density decreased, but the jobs didn't necessarily follow, at least not at first.

Compared to most other U.S. cities, New York still has a fairly dense economic core: a 2009 Brookings Institution Report, for example, found that 35 percent of the metropolitan region's jobs were located within a three-mile radius of the core, second only to the Virginia Beach metropolitan area.³ Still, over the last decade, there has been a strong trend toward decentralization. For example, from 2000 to 2009, New York City lost a net 41,833 jobs, but that was because of the huge concentration of losses in Manhattan during 2008—every other borough saw a net increase in jobs during that period. As shown in the graph on page 9, Queens saw 2.4 percent growth, Staten Island 4.6 percent growth and the Bronx and Brooklyn 7.7 and 7.9 percent growth, respectively.⁴ That means that over the last decade, every other borough's share of jobs increased significantly with respect to Manhattan, which lost 109,029 jobs during that same 10-year period.

As the financial services industry rebounds, Manhattan will almost certainly return to growth relatively quickly, and for a time it might even

outpace the other boroughs in job growth as the economy returns to full capacity. But the other four boroughs' increase in job share doesn't appear to be an aberration. A 2009 report by the Center for an Urban Future revealed that over the last 50 years, Manhattan has been gradually loosening its grip on the private sector jobs in New York City. In 1958, the borough accounted for 67.6 percent of all non-government jobs in the city. But by 2008 its share had fallen six percentage points to 61.6 percent. The other four boroughs, meanwhile, have experienced a slow but steady increase in their share of jobs.⁵

Even during the economic boom between 2003 and 2006, Brooklyn's growth outpaced Manhattan's, 8.8 percent to 7.3 percent. And of course it's an important indicator of the strength of growth in the boroughs that a vast majority of their gains weren't wiped out by the historic recession of 2008, as they were in Manhattan. The Bronx even saw modest gains during that period.

The biggest reason the boroughs have done so well over the last decade is their strength in two rapidly expanding sectors: health care and education. Overall, between 2000 and 2009, New York City saw 85,648 new jobs in the health care industry and 31,789 jobs in education. A vast majority of the health care jobs are located in the boroughs outside of Manhattan, at hundreds of rapidly growing outpatient clinics, doctor's offices, home health agencies and hospitals. One organization that has seen remarkable growth over the last few years is SUNY Downstate Medical Center in the East Flatbush neighborhood of Brooklyn. According to Chief Operating Officer Ivan Lisnitzer, the hospital recently completed construction on a new biotech center that has already brought an estimated 120 new jobs to the area, and it has

plans for a new dialysis clinic, an infant-and-early childhood learning center, a practice component for rehab services and additional off-site administrative offices. Another rapidly expanding health care organization, New York Hospital in Flushing, Queens, recently completed a new wing for outpatient surgery as a part of a \$210 million modernization program, with new jobs undoubtedly to follow.

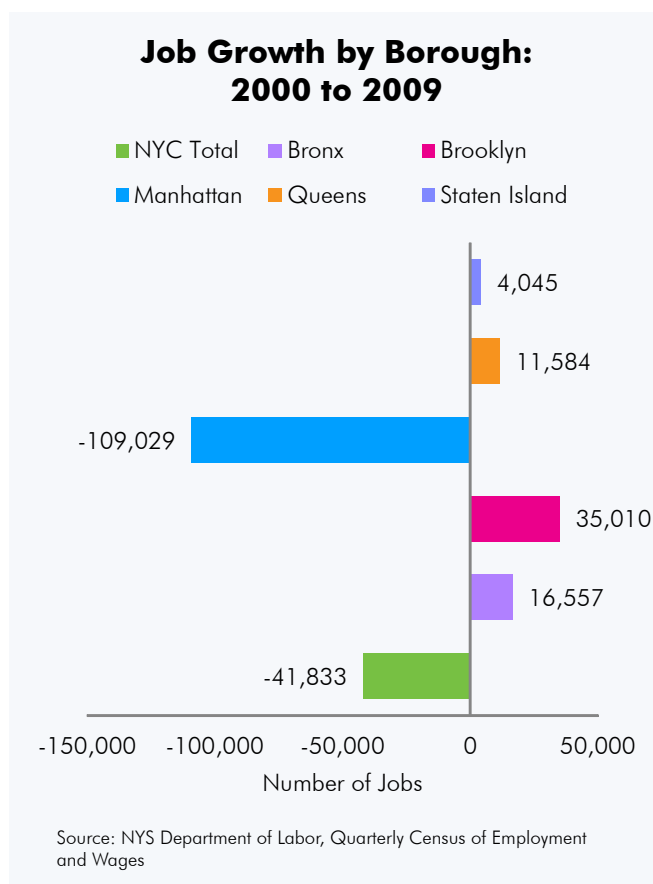
Along with health care facilities, educational institutions have seen significant job growth every year this decade, even during the worst of the recession. Unlike the health care industry though, Manhattan has undoubtedly led the way in this sector, with over 19,000 new education jobs in that borough alone. But, even in Manhattan, not all of the job growth was in the central business districts. Columbia University in Upper Manhattan has seen tremendous growth in the last 10 years; the university's faculty and staff grew by 45 percent—more than 5,000 jobs—in that time, and plans for a new multibillion-dollar science and technology campus north of 125th Street are at an advanced stage.

The other four boroughs have also experienced significant job growth in education, with over 12,000 new jobs. For example, St. John's University in Jamaica, Queens, has seen impressive growth recently, responding to a 10 percent increase in student enrollment by investing more than \$200 million in new facilities.⁶ Yet another source of significant job creation is the City University of New York (CUNY). CUNY's faculty and staff have grown significantly over the last 10 years to keep pace with rapidly growing student enrollment, and major new investments have been made at campuses all over the city, from Queens College in Flushing to Medgar Evers College in central Brooklyn.

Another notable sector for job growth outside of Manhattan is manufacturing. Although New York's manufacturing sector has been declining overall, a vast majority of the city's remaining 81,000 manufacturing jobs are now located in hard-to-reach districts in the boroughs, such as College Point in northeastern Queens and Maspeth on the Brooklyn/Queens border. In fact, as

manufacturing jobs have declined in Manhattan and along the waterfront in Brooklyn and Queens, Maspeth, which is now home to over 300 manufacturers, has seen impressive growth over the last several years, as has the Brooklyn Navy Yard and the Brooklyn Army Terminal, neither of which are well connected to the subway. Ares Printing and Packaging, a Navy Yard manufacturer with 85 employees, has been doing so well that it recently broke ground on a duplicate factory in College Point. Many of the food distributors at Hunts Point in the Bronx are also doing extremely well, including Baldor Foods and the distributors at the Hunts Point Cooperative Market, who are currently in negotiations with the city to build a new \$300 million facility.

Finally, the city's airports have continued to be an important driver of economic growth. For instance, JFK airport, with over 55,000 jobs, is the main base for JetBlue, which has experienced incredible growth over the last decade. From its founding in 1998, it has grown to be JFK's largest airline and a major employer.



SHIFTING TRANSIT NEEDS

More and more New York City residents are traveling to work in job centers outside of Manhattan, but transit service has not kept pace

As the health care and education sectors continue to expand and the city's manufacturers continue to consolidate in outer-borough industrial areas, transportation is becoming an issue that is increasingly hard to ignore.

The number of commuters who cross the Brooklyn/Queens border for work has increased by 15 percent or nearly 20,000 commuters since 1990. Today, nearly 160,000 people make that trip every day, but only 15,000, or 9 percent, use the bus; the vast majority either drive or they take the subway into Manhattan, transfer and then come back out on another train.⁷ In Staten Island, the number of residents who make intraborough trips to work has increased by 32 percent since 1990. Nearly 100,000 Staten Island residents travel to work within their own borough, but a tiny fraction—1,770, according to 2008 Census figures—opt to use the Staten Island Railway, while only 14,500 report using the bus.⁸

Unless a larger share of residents start to use public transit, the city's already traffic-laden streets will become inundated with new car commuters. According to the MTA's own estimates, only 26 percent of Queens residents and 8 percent of Staten Island residents use public transit. If those boroughs' expected population increases come to pass, then by 2030 that will translate into 113,960 new car trips in Queens and 105,800 new car trips in Staten Island.⁹ In both boroughs, local economic development experts are already complaining of the adverse effects of traffic congestion.¹⁰ Imagine what an additional 100,000 cars will do.

Although a larger share of Brooklyn residents rely on public transit (46 percent, according to the Regional Plan Association [RPA]), the number of car trips is definitely up in the bor-

ough, and employers are looking for better public transit options to relieve congestion. Officials at SUNY Downstate Medical Center, for example, say that access has become such a problem that it may slow or even hinder their plans for expansion. The hospital's main campus is located right across the street from Kings County Hospital and a block away from the Kingsbrook Jewish Medical Center. Collectively, over 20,000 employees (and 1,700 students) travel to the medical centers every day. Yet traffic congestion is so bad that the local buses are regularly ranked among the slowest in the city; the 2, 5 subway stop—the only subway located within a half-mile radius of the medical campuses—is inaccessible to most of those commuting in. Officials at SUNY Downstate say that traveling to the area from other parts of Brooklyn, not to mention other parts of the region, is a huge challenge. "I've been here 24 years and I still haven't seen any improvement in mass transit," says COO Ivan Lisnitzer. "[Kings County and SUNY Downstate Hospitals] are the second and fourth largest employers in the borough. But we get ignored. The city never comes to ask, 'How can we help with infrastructure?'"

The Brooklyn Army Terminal and the Brooklyn Navy Yard are just a couple of Brooklyn's resurgent or potentially resurgent areas that have been similarly hampered by their lack of transit access. Without accessible transit, employers have a hard time hanging on to their best employees and attracting qualified new ones, says Brooklyn Chamber of Commerce's Carl Hum. "You have a lot of people who are dependent on cars and because of that you're excluding a lot of employees who don't have access to a car."

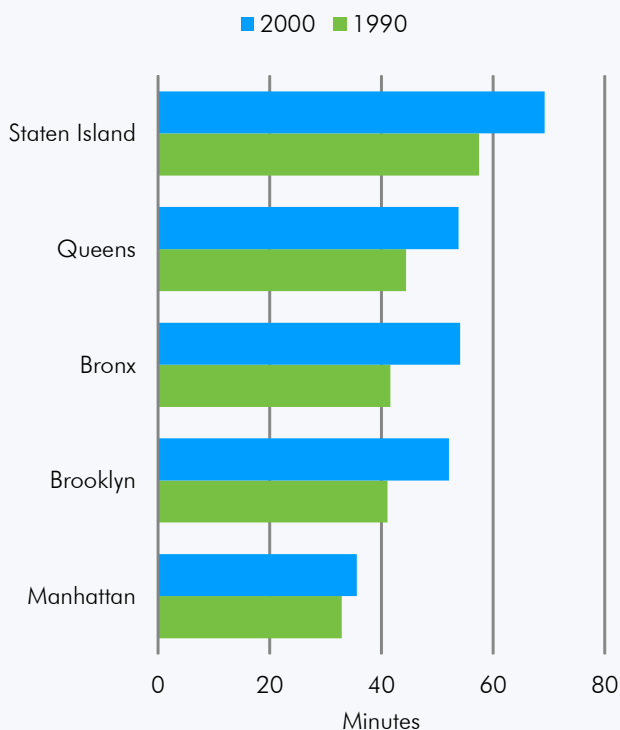
The same can be said for potential growth centers Hunts Point in the Bronx and Maspeth

and College Point in Queens. For example, Crystal Windows and Doors, a rapidly growing window manufacturer in College Point, is almost completely cut off from the subway and relies on a single bus line for all of its public transportation needs. A majority of Crystal Windows's 300 employees live in Queens, but long commutes to work are fairly common, says HR Director Isabella Leung. One employee who lives in nearby Bayside, perhaps four or five miles away, budgets an hour and half to get to work each morning because of several bus transfers. Leung says that she herself had a nearly two-hour commute on the bus from Ozone Park in southeastern Queens (less than nine miles away) before she eventually bought a car and started driving to work.

In response to transit challenges, several of the city's largest employers have begun to implement their own measures to ease employee commutes. For example, many of the city's colleges, including St. John's University in Queens, Kingsborough Community College in Brooklyn and the College of Staten Island, operate shuttles from the subway stop closest to their main campuses. Queens-based New York Hospital runs a similar service from its off-site parking lot to the main building in Flushing, as does JetBlue from its headquarters in Forest Hills to JFK airport. In the Maspeth Industrial Business Zone (IBZ) on the Queens/Brooklyn border, employers will sometimes organize van pickups or reimburse workers for cabs, says Betsy Imershein, a consultant who previously served as director of the Maspeth IBZ. "Getting to Maspeth is incredibly hard," says Imershein. "If the businesses don't provide a service then it limits them on who they can hire."

Another New York-based company that has been plagued by transportation woes is Partners in Care, a rapidly growing home health aide agency with over 8,200 home health workers (up from 5,500 in 2006). Unlike most businesses, Partners in Care sends its employees to locations all over the city. Forty-two percent of its workers live in Brooklyn, according to HR Director Jay Conolly, but clients are scattered across the city in neighborhoods such as Riverdale in the Bronx, College Point in Queens and the south shore of Staten Is-

Mean Commute Time for Public Transportation Riders: 1990 vs. 2000



Source: U.S. Census Bureau

land. Making sure that aides can get to work on time poses a huge challenge for the organization, Conolly says. (See sidebar on page 15) In 2005, Conolly tried to organize a van service but found the costs and logistics to be too prohibitive, so he came up with another idea. He convinced the health care services union to let him create a new position, called a staff aide. Staff aides get paid a little better (\$13 an hour as opposed to \$8 or \$9), but they also have to own a car and purchase car insurance; and instead of seeing one or two patients a day, they have to see three or four.

The staff aide position works better than the vans did," says Conolly, "but finding people who have a car and insurance at that income level is hard in New York City. We do it in Nassau and Westchester, but it's easier out there because it's less expensive. It's asking a lot of someone who makes that kind of money to go out and invest in a car too."

TRANSPORTATION CHALLENGES FACING THE WORKING POOR

Low-income residents are enduring longer commutes than ever and, in many cases, are cut off from decent paying job opportunities

Because they are less likely to own a car, and because they are more likely to live in neighborhoods with few or no subway stops and depend on city buses for the bulk of their travel needs, New York City's low-income residents are much more likely than other demographic groups to have long, unpredictable commutes to work.

For this report, we interviewed working-poor residents across the city as well as dozens of advocates for the poor. Meetings with low-income residents in Western Astoria in Queens, Melrose in the Bronx, and St. George on the north shore of Staten Island were particularly helpful in giving us insight into transit challenges and their consequences for this community. Although these neighborhoods have different levels of subway service, in each one the residents we spoke to identified transportation as a major challenge. In Western Astoria, for example, the closest subway stop to the Astoria Houses, a subsidized housing complex, is 20 blocks away, well out of reach of residents. According to the Reverend Dwayne Jackson, whose ministry is located in the area, the buses are a lifeline for residents. "It's the only way most people can get out of the neighborhood," he says.

In the Melrose neighborhood of the Bronx, the 4 train is much closer to the Andrew Jackson Houses (about a half a mile), but most residents say they depend on the buses anyway, as most travel east to west across the southern end of the borough or north to East Fordham Road—both areas that are well out of reach of the 4 train.

Like Melrose residents, St. George residents can easily get to Manhattan—most of St. George is located within 10 blocks of the Staten Island Ferry

Terminal, with access to the Manhattan ferry as well as the Staten Island Railway. But, according to Sharon Valentin, tenant association leader at a subsidized housing complex called Castleton Park, a steep hill discourages most walkers, leaving the bus as the only available mode of transport. Typically, says Valentin, residents will take a bus to the ferry terminal; and those who aren't going to Manhattan will then take another bus back out to Victory Boulevard or the west shore. Such complicated intra-borough commutes are standard, and they pose obstacles that can be insurmountable. For instance, St. George resident Amanda Johnson worked as an administrative assistant at a company on South Avenue, on the far western shore, but eventually left because the commute was too hard. "I can get to 42nd Street from here in 45 minutes," says Johnson. "Getting to the other side of Staten Island is harder."

According to calculations made by the Pratt Center, low-income New Yorkers are much more likely to have long commutes than any other group in the city. Only six percent of people with long commute times in New York earn more than \$75,000 per year, and two thirds of those with commutes of an hour or more make less than \$35,000 per year. Moreover, immigrants and people of color are much more likely than white New Yorkers to have long commutes. White residents have an average commute time of 36 minutes, whereas Hispanic residents have an average commute of 41 minutes, Asian residents 42 minutes and Black residents 47 minutes.

Michelle de la Uz, president of the Fifth Avenue Committee, a Brooklyn-based community group that works with low-income residents, says

one reason for the disparity in commute times is the high cost of housing in neighborhoods with good transit access. “The high cost of housing is pushing people to the outer reaches of the transit system,” she says. “You have people, entire communities that are completely disconnected.”

Perhaps the most extreme case of a disconnected community is the Rockaway Peninsula in Queens. “The Rockaways have for the last 50 years been the Siberia of the city of New York,” says CB 14 district manager Jonathan Gaska. “Using public transit to get from Rockaway to, say, Jamaica on a good day takes close to two hours,” he says. “You can almost get to Albany by car in the same amount of time.” The lack of mass transit, Gaska surmises, is probably the chief reason unemployment remains among the highest in the city year after year. “At \$6 or \$8 per hour, are you really go-

Downtown Brooklyn, as well as the number of transit connections the subway feeds into. So although most Far Rockaway residents live within a third of a mile of the A train, that subway stop is still too far from a transit hub to be of much service to anyone who doesn’t work close to another A train stop. Downtown Jamaica is much closer geographically than Downtown Brooklyn or Manhattan, but access from the Rockaways—with 138,000 residents—is all but closed off from public transit riders. Gaska says many of the peninsula’s low-income residents rely on dollar vans to get to most other parts of Queens. A lot of them work in Nassau County, he says, but again access is a big problem.

Still, the Rockaway peninsula, like the eastern border of Queens and the southwestern shore of Staten Island, are geographically isolated, and for

“I can get to 42nd Street in 45 minutes,” says one Staten Island resident. “Getting to the other side of Staten Island is harder.”

ing to spend three hours commuting every day? At the end of the day a lot of people make the decision not to work. Even if you got a job over at the Target in Brooklyn, you’re not going to drive at that income level. It’s a series of buses and it’s going to take you an hour and a half to two hours each way.”

As defined by the RPA, a community that is underserved by transit is one that is located at least one third of a mile from a subway stop. Beyond a third of a mile, say transportation planners, ridership numbers drop off dramatically. By that measure 61 percent of Bronx residents, 34 percent of Brooklyn residents, 14 percent of Manhattan residents, 65 percent of Queens residents and 86 percent of Staten Island residents live in areas that are poorly served by public transit.¹¹ But as the Rockaways show, there are plenty of other factors to consider as well, including how far out the community is from job centers such as Midtown Manhattan, Jamaica, Flushing and

that reason alone those areas may present unique challenges for transit planners. However, New York City is full of neighborhoods that are located much closer to the city core and still suffer from a lack of public transit service. The Astoria Houses, for example, are located just across the East River from the Upper East Side and yet are 20 blocks from the closest subway stop. Other neighborhoods with a big need for improved service are Melrose and Hunts Point in the Bronx; Flushing, East Elmhurst, and Jamaica in Queens; East Flatbush, Bushwick, and Sunset Park in Brooklyn; and St. George and Mariner’s Harbor in Staten Island. According to 2000 Census figures, the number of residents who make less than \$35,000 per year and report having an hour or longer commute to work is significantly high in all these neighborhoods.¹²

Higher wage workers can take steps to mitigate the challenges of living in disconnected communities like these; they can invest in a car

or move to a more convenient neighborhood. But low-income New Yorkers can rarely take advantage of either option. According to the New York State Department of Insurance, auto insurance for a single woman in her 20s living in Brooklyn, for example, costs about \$3,200 per year, which is nearly five times the cost of the same policy in many upstate regions.¹³ Housing costs in neighborhoods with good public transit service tend to be much higher than those in underserved neighborhoods. Also, many low-income residents live in subsidized apartments, and transferring out of one subsidized apartment to another can pose a huge challenge.

That leaves the bus. In New York, even the most underserved neighborhoods tend to have at least one or two bus lines at their disposal. But in New York City buses are an extremely inefficient and time-consuming way to travel. For instance,

down by waving her hand. Similarly, Joyce Lane, a home health aid from Rosedale, Queens, said she has three bus transfers to get to Freeport, Long Island, where her client lives, and can't depend on the buses to get her there at the same time every day. She too had to leave a big cushion. On an average day, she leaves her house at 7:00 am and returns home again at 7:00 pm a 12 hour work day when you factor in her commute.

Unlike many higher earners, low-wage workers tend to have very little freedom to create their own schedules. Most of them have to "time in" at work. They have to drop their kids off at day care and pick them back up again before heading home. Some also have night classes or appointments at social service agencies. Making matters worse, low-wage workers are also more likely to be holding down multiple jobs and working at unconventional times of the day, when the city's

Transportation has not traditionally been a top issue with advocates for the poor or labor unions.

according to the HR director at Crystal Windows, a manufacturer in northeastern Queens, a lot of the employees who ride the bus to work every day—nearly a quarter of their workforce, according to an internal survey—have unusually long commutes, despite living in the same borough. One employee who lives in nearby Bayside has a one and a half hour commute each way, she says.

Moreover, unlike subways, the very same bus trips can vary widely in how long they take, particularly if riders have multiple transfers. In fact, many of the riders we interviewed said that this lack of dependability poses an even bigger challenge than overall travel times. Ely Diaz, a social worker in the Bronx, describes her bus commute as one of the most anxiety-ridden parts of her day. She says she has to budget a lot more time than it should take because the buses run behind schedule so often, and she can't afford to be late to work. She says that the bus driver will often pass her by if she does not make eye contact and flag him

buses and subways run much less frequently. Given these conditions, unreliable buses can make keeping a schedule next to impossible.

Nevertheless, in New York, transportation has not traditionally been a top issue with advocates for the poor or labor unions. Leah Gonzalez, communications director for 1199, a health care services union, acknowledges that long commutes are a big problem for members but says that the union's primary focus is on improving labor standards and raising wages. Surveys have repeatedly found that very few low-income or even unemployed people in New York see transportation as their primary challenge. During the mayoral election in 2009, surveyors for the Community Service Society asked respondents to identify the biggest challenge facing New York; only 4 percent of those below 200 percent of the federal poverty line indicated public transportation. When asked (in the same survey) to identify the greatest obstacle to their finding a job, only 12 percent of un-

NO HELP FOR HOME HEALTH AIDES

For patients with chronic illnesses, receiving care at home can be a cheaper and more comfortable alternative than long stays in the hospital or nursing home. But for the health care professionals who visit—particularly the lower paid aides, since they can rarely afford to own a car—getting to clients can be a huge challenge in New York.

“Transportation is a big problem for our lowest wage workers,” says Leah Gonzalez, the communications director at 1199, the city’s largest health care services union. “And home health workers are some of the lowest wage workers in the system. They commonly make minimum wage, sometimes even less since there is so little oversight in home health care. They don’t have benefits a lot of times and many have to travel one to two hours across the city to get to their clients.”

For example, Joyce Layne, 69, has a one-and-a-half to two-hour commute from her home in Rosedale, Queens to Freeport, Long Island, where her client lives. Layne works seven days a week and wakes up at 5:30 A.M. in order to give herself enough time to get to work. “If the buses are running on time and I don’t miss any of my connections, I can usually get to Freeport by 8:26 and get on to the job at 8:45,” says Layne. “But it can take a lot longer so I have to plan for more time.”

Jay Conolly, the HR director at Partners in Care, one of the largest home health agencies in the city, says that such stories are common in New York. Forty-two percent of the agency’s aides live in Brooklyn, he says, the result of word-of-mouth recruiting practices and cheaper housing stock, but they have to travel all over the city to reach their clients—to neighborhoods as far flung as the south shore of Staten Island and Riverdale in the Bronx. “The more affluent neighborhoods are harder to get to for our aides because they don’t live in those areas,” says Conolly. “In Staten Island most of the aides live on the north shore and most of our cases are on the south side, or middle down. They have one subway out there. They have buses, but they’re not very good and, our aides often find themselves walking two and three miles to get to their client’s home.”

Conolly says that Partners in Care has been trying to come up with solutions to help aides get to their jobs, but so far nothing has completely solved the problem. An experiment with vans proved to be too costly and hard to organize, and a slightly higher-paying position for aides with cars has proved to be hard to fill, because owning a car in New York on \$13 per hour is a challenge in its own right. Making matters worse, aides are seeing more patients now than they used to. Most of the aides for Partners in Care see two patients in a day, says Conolly.

Nevertheless, the industry is growing rapidly. Since 2000, the home health care services sector in New York City has grown 114 percent, from approximately 33,000 workers to over 70,000. In the last four years, Partners in Care has grown from 5,500 aides to 8,200, a nearly 50-percent increase. Conolly says that the agency’s client base—primarily the elderly—is expanding rapidly, so the problem of getting aides to their clients will likely get worse before it gets better.

employed respondents below 200 percent of the poverty line pointed to transportation.

Amid draconian service cuts and increased fares for public transit, the Community Service Society’s 2010 survey saw a slight uptick among those who identified transit as the city’s top challenge. But, interestingly, low-income New Yorkers were less likely to focus on transportation (7 percent) than were higher income residents (11 percent).

Although transportation poses a big challenge for the working poor in New York, most of them

clearly have even more pressing challenges to address, such as finding affordable housing and a good job. According to Jeremy Reiss, vice president at the East River Development Alliance, a Queens-based community organization, they may not be seeing the transportation issues hiding in plain sight. Residents won’t necessarily recognize the structural disadvantages that a lack of transit presents, he says; they are cut off from all kinds of jobs and opportunities, but those are often hard to see or imagine in the abstract.

THE BENEFITS OF BUS RAPID TRANSIT (BRT)

From implementing pre-paid boarding procedures to building elevated platforms at bus stops, relatively low cost improvements could be made to speed up buses

Disproportionately for the working poor, but also for all residents, New York City buses have come to play a crucial role in the city's public transit system. In addition to serving dozens of low-income communities that would otherwise be cut off from the transit system entirely, buses take commuters to the increasing number of job centers with few other transit options. But buses are also slower and less efficient than most other modes of transit. Because they operate in mixed traffic and load passengers through a single door at the front, a single obstacle can trigger several others pretty quickly, leading to major delays later on.

According to the MTA, the performance of city buses has gotten significantly worse over the last decade. Due to a 60 percent increase in ridership as well as increased traffic congestion on city roads, average bus speeds have dwindled from an already slow 9.1 mph to 8.1 mph. As the graph on page 17 shows, this is significantly slower than bus speeds in other major U.S. cities.

However, as other big cities have found, implementing technical improvements like prepaid boarding, time-arrival technology, priority signaling at stop lights and other standard components of Bus Rapid Transit (BRT) systems can speed up buses significantly, while drastically improving their dependability of service. For instance, according to the DOT, New York City buses currently spend half of their running time stopped at red lights or at stations picking up passengers. With prepaid boarding, however, passengers don't have to line up at the front door and pay as they enter; they pay at machines at the bus stop and can board through any of the doors. This can cut the dwell time at bus stops by 40 percent or more. Similarly,

traffic-signal priority gives buses extended green lights as they approach traffic signals, cutting the time buses sit at red lights by 30 percent or more.

Other BRT improvements include time-arrival technology, which allows passengers to see real-time updates about when the next buses will arrive (either at the station or with a cell phone application), dedicated lanes for buses and raised platforms at bus stops. World-class BRT systems employ all of these measures—and a few more—to create surface transit systems that function just like subways. They are much faster and much more reliable than most buses in the U.S.

Although implementing a BRT system in New York presents a number of challenges, the capital costs associated with its physical construction are miniscule relative to other rapid transit projects.¹⁴ “For BRT, we’re talking tens of millions in physical investment, not hundreds of millions or billions,” says Joe Barr, former director of planning and development at the DOT.¹⁵ BRT systems also take much less time to build; mayors can see entirely new rapid transit systems put into place during a single term.

Most of the transit experts and community organizers we spoke to for this report were enthusiastic about the prospect of bringing BRT to New York. “The majority of people we serve are commuting to jobs in the five boroughs and have an hour and half to two hours round trip a day,” says Michelle de la Uz. “You have entire communities that are disconnected and which can be better served if only we had BRT in different parts of the city.”

Ryan Kuonen, an organizer for Neighbors Allied for Good Growth, based in Northern Brook-

lyn, agrees. “Most of the time, to get to other parts of Brooklyn you have to go into the city, and then go back out again, she says “It’s ridiculous, especially within Brooklyn, and when you’re going to places like Queens, forget about it. I think BRT lines can help with that.”

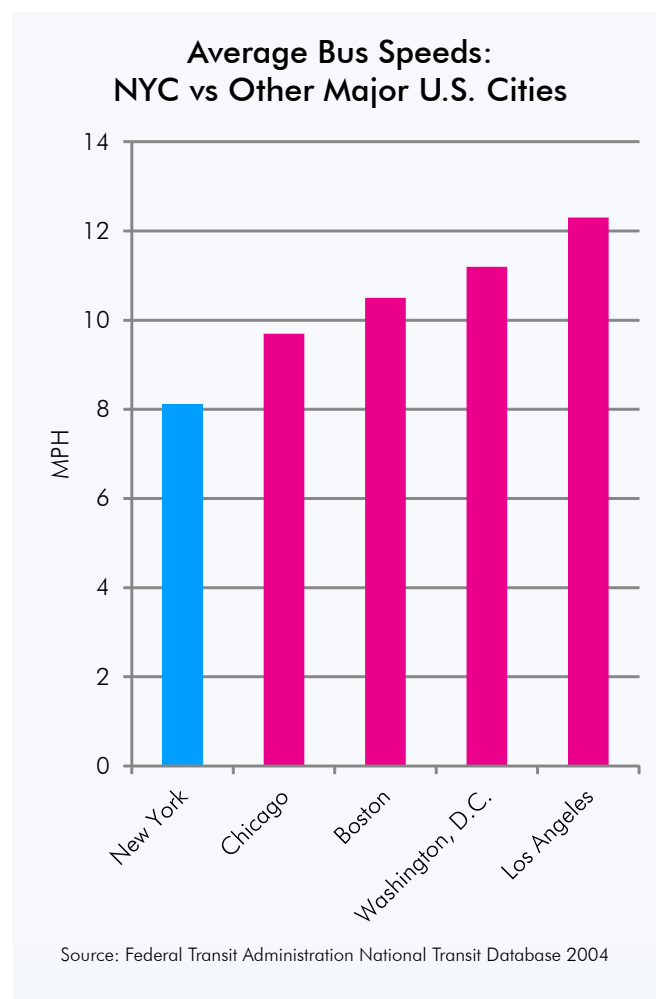
The MTA and DOT have begun to take steps toward BRT. In 2008, they replaced the Bx12 limited service bus along Fordham Road in the Bronx with a new select-service bus that includes dedicated lanes, prepaid boarding and traffic-signal priority. In October 2010, the agencies did the same along part of the M15 route along First and Second Avenues in Manhattan. It’s still too early to gauge the success of the improvements in Manhattan, but along Fordham Road they reduced overall running time by 19 percent and paved the way for an additional 5,000 daily riders. In addition, according to a survey administered by the DOT two months after implementation, passenger satisfaction was extremely high, with 74 percent of respondents saying that their bus trip had improved and only four percent saying that it had gotten worse.

For a “Phase I” plan for BRT improvements, the MTA and DOT have settled on three other high-capacity routes for similar improvements: along Nostrand Avenue in Brooklyn, 34th Street in Manhattan and Hylan Boulevard in Staten Island. According to the DOT’s Joe Barr, only Hylan Boulevard is unfunded. For “Phase II,” the agencies have outlined 27 additional routes in all five boroughs, including four in the Bronx, seven in Brooklyn, four in Manhattan, nine in Queens and three in Staten Island.¹⁶

Without a doubt, the MTA and DOT should be applauded for pursuing these projects at all in such a tough fiscal environment. But they could also be doing more than they are to bring a truly transformative BRT system to New York. For example, the agencies have decided not to build physically divided bus lanes or elevated platforms at bus stops. But without physical barriers to keep out cars and delivery trucks, dedicated lanes are much less efficient at saving time. Along Fordham Road, for instance, the dedicated lane for buses was responsible for only one minute of reduced

time, whereas prepaid boarding reduced time by six minutes and traffic-signal priority by four minutes. Physically divided lanes aren’t appropriate for most BRT routes, but they could be crucial along the city’s highest volume corridors like First and Second Avenues or along roads that service multiple lines—sometimes called “trunks” by transportation planners—such as in Downtown Brooklyn. Elevated boarding platforms are a similarly huge potential source of time savings and overall service dependability, according to Walter Hook, a prominent consultant on international BRT systems.¹⁷ In conjunction with some of the other elements of BRT, elevated boarding platforms cut down on delays such as longer boarding times for disabled riders and in so doing prevent buses from bunching up along the line.

Another shortcoming of the MTA and DOT’s current efforts concerns the routes they’ve pro-



posed. Experts comment that instead of looking more broadly at how to maximize the efficiency of an essentially new BRT system, the agencies are primarily seeking to implement BRT improvements along the city's existing routes. "The MTA needs to look seriously at charting new routes," says Jonathan Peters at the College of Staten Island. "The way things are now the borders between the boroughs are like real political borders, you can't get across them."

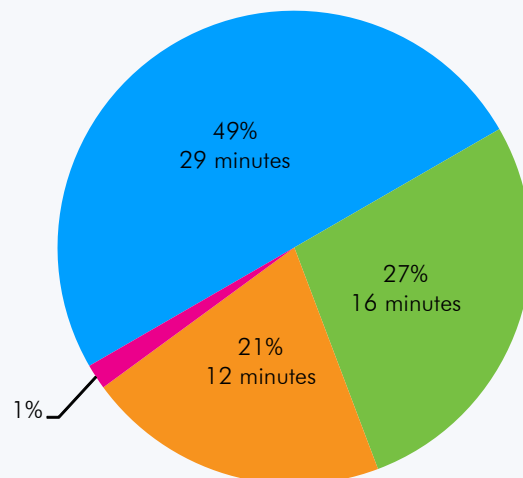
The proposed B46 route, for example, which runs along Utica Avenue and Broadway in Brooklyn, ends where the existing bus route ends, on the Brooklyn side of the bridge; it could instead be extended across the Williamsburg Bridge to connect with the M15 at Allen Street, another BRT line. Similarly, the M15 along First and Second Avenues could be extended up Third Avenue in the Bronx to connect with the Bx12 on Fordham Road.

Total Running Time Before and After BRT Improvements: The Case of Fordham Road's BX12

■ In Motion Time ■ Dwell Time ■ Stop Delays ■ Other Delays

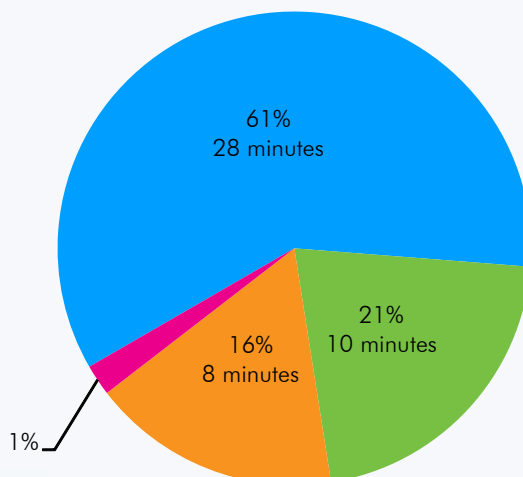
Before

(avg. running time = 58 minutes)



After

(avg. running time = 47 minutes)



Source: MTA New York City Transit

Of the 32 proposed routes in the Phase I and Phase II plans, only a handful connect two boroughs, and only one connects two boroughs outside of Manhattan (the Hylan Boulevard route, which runs between Staten Island and Brooklyn). Not a single proposed route will serve the growing number of commuters traveling between Brooklyn and Queens or Queens and the Bronx or Staten Island and New Jersey, although these are notoriously difficult trips. “We need to move beyond this limited, borough specific system so that the bus system can better tap into the regional network,” says Veronica Vanterpool of the Tri-State Transportation Campaign. “A big component of that is using BRT over the bridges.”

Joe Barr, former director of planning at DOT, says the roadway network is a big obstacle to creating those kinds of routes. “There is a real tension there between what the need might be and what the bus might feasibly be able to do,” he says. “Even though it might seem unfortunate or unnecessary to have to go into Manhattan and back out to make a trip, given some of the characteristics of the roadway network it isn’t clear we could do better with a bus service.” Others, however, think that with enough political will solutions could be found.

Joan Byron, a city planner at the Pratt Center in Brooklyn, has proposed several BRT routes that she says would help break through the parochialism of the existing system and open up opportunities for low-income residents. One route would start at the Brooklyn Army Terminal in Sunset Park and end at JFK airport, passing by the Kings County-SUNY Downstate Medical Campuses in central Brooklyn along the way. The route would connect two of the biggest job centers in Brooklyn and open up access to JFK to residents of central Brooklyn. It would essentially connect two existing bus lines, the B35 running along 39th Street and Church Avenue and the B15 along New Lots Avenue and Conduit Avenue. As a component in a larger future network, the new route would provide a much needed east-west service across Brooklyn and connect the Nostrand Avenue and Utica Avenue corridors.

Another route would start in Upper Manhattan’s Washington Heights neighborhood and head east across the southern end of the Bronx toward Hunts Point; then it would turn south toward Flushing, continue on through downtown Jamaica and, again, end at JFK Airport. This route would connect three boroughs and provide a link between four of the city’s biggest job centers.

However, the MTA could achieve significant improvements in bus service without implementing a full-fledged BRT network. Indeed, some elements of BRT systems could be applied separately to all or most city buses. Number one would be installing Global Positioning Systems or GPS’s on every bus so that real time-arrival information could be broadcast to passengers by way of digital signs at bus stops and cell phones.¹⁸ Time-arrival technology would help passengers better navigate the transit system; it would help countless transit riders plan their trip and cut down on waits for the bus. Even more importantly, says Walter Hook of the Institute for Transportation and Development Policy (ITDP), is the stability time-arrival technology introduces into the system by, for example, allowing bus drivers to better regulate their trips and prevent early departures. Even in the absence of dedicated lanes, this could make buses more dependable for riders.

“Real-time arrival information could be expanded to the whole system,” agrees Joe Barr. “It could be made available through PDAs and smart phones, even if there isn’t a sign at every stop. The MTA is trying to move toward that. It’s high on their priority list.”

Outfitting buses with GPS’s is also a prerequisite for implementing traffic signal priority systems, which the DOT has begun to implement independently of their other bus improvements. According to transit experts, signal priority could work in conjunction with real-time arrival and, in some cases, prepaid boarding technology to provide BRT-like improvements to bus routes that—because of narrow rights-of-way or low peak-ridership numbers—may not be suitable for full-fledged BRT lines.

OBSTACLES TO IMPLEMENTING BRT

Even though BRT is by far the cheapest way to bring rapid transit to more neighborhoods outside of Manhattan, a number of challenges exist

The cost of building a BRT network would be extremely low relative to other rapid transit projects. Nevertheless, several big obstacles stand in the way of bringing a truly meaningful BRT system to New York.

First and foremost, the MTA is in dire fiscal straits. In order to close an \$800 million budget shortfall, the agency recently cut 38 bus lines and reduced service on dozens of others. Despite fare increases in January 2011, additional shortfalls are expected in 2012 and 2014. Even with the low-cost of BRT, implementing a truly world-class BRT network will clearly have to await firmer financial footing for the transit authority.

“We need long-term solutions and for that to happen we need a sustainable funding system,” says the Tri-State Transportation Campaign’s Veronica Vanterpool. “The existing capital plan for the MTA, 60 percent of that is going toward maintaining the existing system, which leaves very little money for new innovative ideas to expand it.

State legislators could step in to find a solution, but so far, despite all the steep reductions in service and increased fares for passengers, most legislators have been more willing to take money away from the MTA to further other priorities. In the winter of 2009, state legislators reappropriated over \$118 million originally dedicated to MTA’s operating budget.¹⁹ That would have been more than enough to forestall all of the MTA’s subsequent cuts in service. Still, according to a September 2010 Wall Street Journal poll, the state legislature has so far escaped any blame for the cuts; 60 percent of respondents blamed the MTA, not Albany.²⁰

Similarly, legislators have vigorously defeated proposals to charge drivers a “congestion fee” in Midtown Manhattan during the work day or add

tolls on the East River bridges, and again, for the time being, they seem to have the majority of the public on their side. A 2007 Community Service Society poll, for example, found that congestion pricing was extremely unpopular even among the city’s low-income residents. Sixty-three percent of low-income residents opposed the plan, the poll found, while only 16 percent favored it. That was even more lopsided than the results among higher earners: Fifty-two percent of respondents with incomes over 200 percent of the federal poverty line opposed it, while 32 percent favored it.

Clearly, much more needs to be done to convince both groups, but the lopsided results among low-income New Yorkers, who are much less likely to be driving into Manhattan during the workday, indicates that outreach efforts must more clearly demonstrate that the lack of a stable funding source for the public transit system will lead to future service cuts and fare increases. To garner support, congestion-pricing proponents need to focus less on the environmental benefits of the plan and more on kitchen-table issues.

Another big obstacle to implementing BRT in New York is the high level of interagency cooperation that it requires. Unlike the subway system, the MTA does not control every aspect of the bus network. For BRT to succeed, it needs intense cooperation from traffic planners and the police department. The bus drivers’ unions have to accept proposals that affect driver or passenger safety, including elevated platforms and GPS installation, because these will change the way drivers behave. Further complicating the situation in New York, many of the decisions affecting traffic patterns have to go through a sclerotic state legislature, many of whose members have other priorities.

Meanwhile, given the challenging interagency demands of bus improvements within the same city and state, cooperation across state lines may seem hopeless. For years experts have wanted to see a rapid transit connection between New Jersey and Staten Island. The Hudson-Bergen Light Rail system ends just on the other side of the Bayonne Bridge on the north shore of Staten Island. If reliable public transit service were provided across the bridge, it would open up access to another rapid transit system on the other side for thousands of Staten Island residents. Still, the MTA and other interstate agencies like the Port Authority haven't taken the initiative. "If Staten Island commuters could access that system, which runs very frequently," says Jonathan Peters, "it would provide them with access to all the jobs in Jersey City and Hoboken and even Manhattan through the Path system—it's a no-brainer. But when you get up by the border, it's like it's nobody's problem."

in New York, the reaction can be swift and, if left unchallenged, final. For example, the DOT and MTA had initially planned to implement a BRT line on Merrick Boulevard in Queens as a part of their Phase I BRT program, but as soon as they unveiled the dedicated lane, with a whole lane of parking cut out of the street, local merchants and property owners balked and the proposed route was eliminated. On Fordham Road, DOT worked with merchants to add metered parking on side streets, but in Queens the community was less inclined to see a need for better buses. Making matters worse, bus riders are a hard constituency to mobilize—they typically don't write letters, for example, or show up to community outreach meetings—and other influential groups that traditionally favor better transit service, including large employers and real estate developers, have tended to prefer more expensive and permanent-seeming solutions such as subways and light rail. To some, buses can seem like a cheap or second-

The MTA recently cut 38 bus lines and reduced service on dozens of others.

Yet another big challenge to creating what some transit experts call "true BRT," namely, a network with physically divided lanes for buses, is the dearth of wide thoroughfares in the boroughs. "If we had 200-foot rights-of-way like they have in Bogotá," says Joe Barr, "then building a more ambitious system would be a lot easier." Right now, says Barr, the Brooklyn/Queens border and an east-west line across central Brooklyn are blocked by narrow rights-of-way and heavy traffic congestion, as are Brooklyn's Flatbush Avenue and Staten Island's Victory Boulevard. Solutions could be found, but they might require more costly commitments, such as a new bridge over Newtown Creek.

Finally, influential constituencies such as homeowners and merchants can be extremely distrustful of even minor changes to traffic patterns. When those changes involve a major reallocation of parking space, which is a fairly rare resource

class alternative, something to be considered only when the real thing is financially out of reach. Against this, BRT planners in other cities have tended to stress the importance of sharply distinguishing the BRT network from standard bus systems. In fact, the most ambitious BRT networks typically involve a complete reconceptualization of the streetscape, with better pedestrian access and new, even iconic bus stops. Everyone who partakes in those spaces should feel like they're benefiting from the BRT network, argue planners like Walter Hook at ITDP.

If the MTA and DOT were to put more emphasis on the physical streetscape improvements, perhaps going so far as to contract with architects to design a repertoire of BRT stations, it could go a long way toward changing the predominant perception of buses as a less permanent or worthwhile public transit option.

RECOMMENDATIONS

All across New York residents are finding job opportunities in areas that are not well-served by the city's subway system. For example, instead of commuting to Midtown or Downtown Manhattan, as was traditionally done, more and more workers are travelling from one side of the Bronx to the other, or from Brooklyn to Queens or Staten Island to New Jersey. Without a doubt, the dramatic increase in these sorts of commutes over the last 20 years has contributed to longer commute times and hampered economic development in a variety of outer-borough job centers.

The city's bus system is perfectly placed to respond to these changing commuter patterns and in so doing support future job growth. But the system needs significant upgrades. Up to now, increased ridership numbers on buses and congestion on city roads have conspired to make New York buses some of the slowest in the country. Below are eight recommendations for reversing that trend and transforming the city's underperforming bus system into a world-class rapid transit network.

City and state legislators, including the new governor, must come together to put the MTA on a more sustainable financial footing. Transit service cuts hurt the whole state's economy, and they have an outsized effect on the working poor. Legislators need to create a revenue stream for the MTA that is less susceptible to downturns in the real estate market.²¹ They should revisit Mayor Bloomberg's congestion pricing proposal or consider tolls on the city's East River bridges.

Mount a public-outreach campaign that makes the case for an improved public transit system. More could be done to show that all modes of

transportation, including drivers, share in a single network with limited financial and geographic resources. The city should consider mounting a second campaign in support of congestion pricing, but this time, instead of relying on arguments for a greener, more sustainable city, the campaign should demonstrate how congestion pricing would make an improved transit system possible.

More should be done to chart new bus routes, so that a true BRT network can be created. None of the MTA and DOT's proposed BRT routes currently intersect with one another to create the beginnings of a BRT network. But if the transit authority were more willing to break out of existing routes, solutions could be found. For instance, the proposed line for the B46 bus along Broadway in northern Brooklyn could be extended across the Williamsburg Bridge to connect with the M15 at Allen Street. Or the M15 along First and Second Avenues could be extended up Third Avenue in the Bronx to connect with the Bx12 on Fordham Road. A BRT system with more connections like these would attract more riders and create additional efficiencies.

Develop better transit options for growing job centers outside of Manhattan. Over the last 10 to 15 years, the boroughs outside of Manhattan have been steadily building their own central business districts. These job centers are often underserved by the subway and could benefit from the addition of BRT lines, particularly if they linked two or more of them together. A perfect example is downtown Flushing in northeastern Queens, which has grown rapidly in recent years as an important commercial and retail center. A BRT line running down Main Street could connect College

Point, downtown Flushing, downtown Jamaica and perhaps even JFK Airport, and benefit from the large number of riders traveling to each of those destinations every day.

Work with local merchants and other businesses to create alternative parking solutions and streetscape improvements. Adding better bus service should not be a zero-sum game, with merchants on the losing end if dedicated lanes for buses are added and bus riders on the losing end if they aren't. Dedicated lanes aren't necessary or even desirable on a vast majority of bus routes, and BRT elements could be added to great effect in some cases without them. But when a lane of parking needs to be taken for a dedicated lane, the DOT can work with merchants and property owners to find alternate solutions. They can add metered parking spaces on nearby side streets, for example, and make significant streetscape improvements. Shopping districts can be made more attractive to customers as a result of BRT, not less.

Install GPS devices on all or most city buses. Global Positioning System (GPS) devices are a prerequisite for technologies that broadcast real-time updates for when buses are due to arrive. Time-arrival information can be used to help keep bus drivers on a schedule, but it is also important to waiting passengers. In our research, we found that working-poor commuters

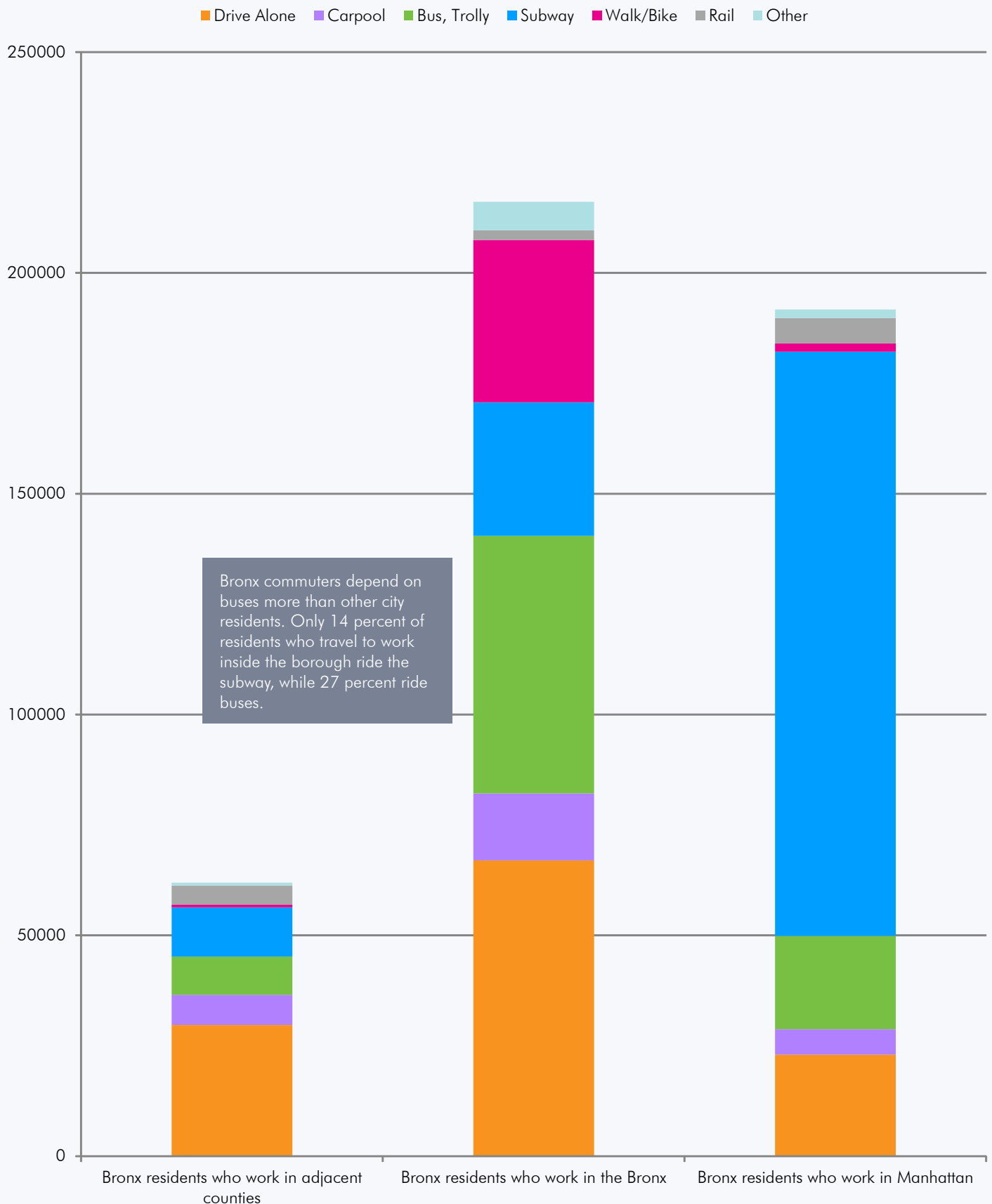
often have less flexible schedules and are more likely to travel at unconventional times of the day. Knowing when the next bus is due to arrive, either by a time-arrival sign at the bus stop or a smart phone application, would be a huge help to many of them.

Build elevated platforms on high-volume corridors. All of the best BRT systems in other parts of the world integrate elevated platforms in order to make boarding easier for disabled riders. Elevated platforms are a boon to the disabled, of course, but they also cut down dramatically on boarding times. On traditional kneeling buses, boarding times can be two or three minutes for riders in a wheelchair, but that relatively short delay can quickly snowball into a major one, as passengers down the line continue to gather at bus stops and boarding times increase as a result.

Invest in architecturally interesting or even iconic bus stops in order to differentiate BRT from traditional buses. Many city residents and businesses have a built-in bias against traditional buses; light rail and subway systems are seen to be more permanent and aesthetically pleasing. But some of that bias can be allayed by efforts to differentiate and brand BRT. BRT buses look different than traditional buses, but the bus stops could and should look different as well.

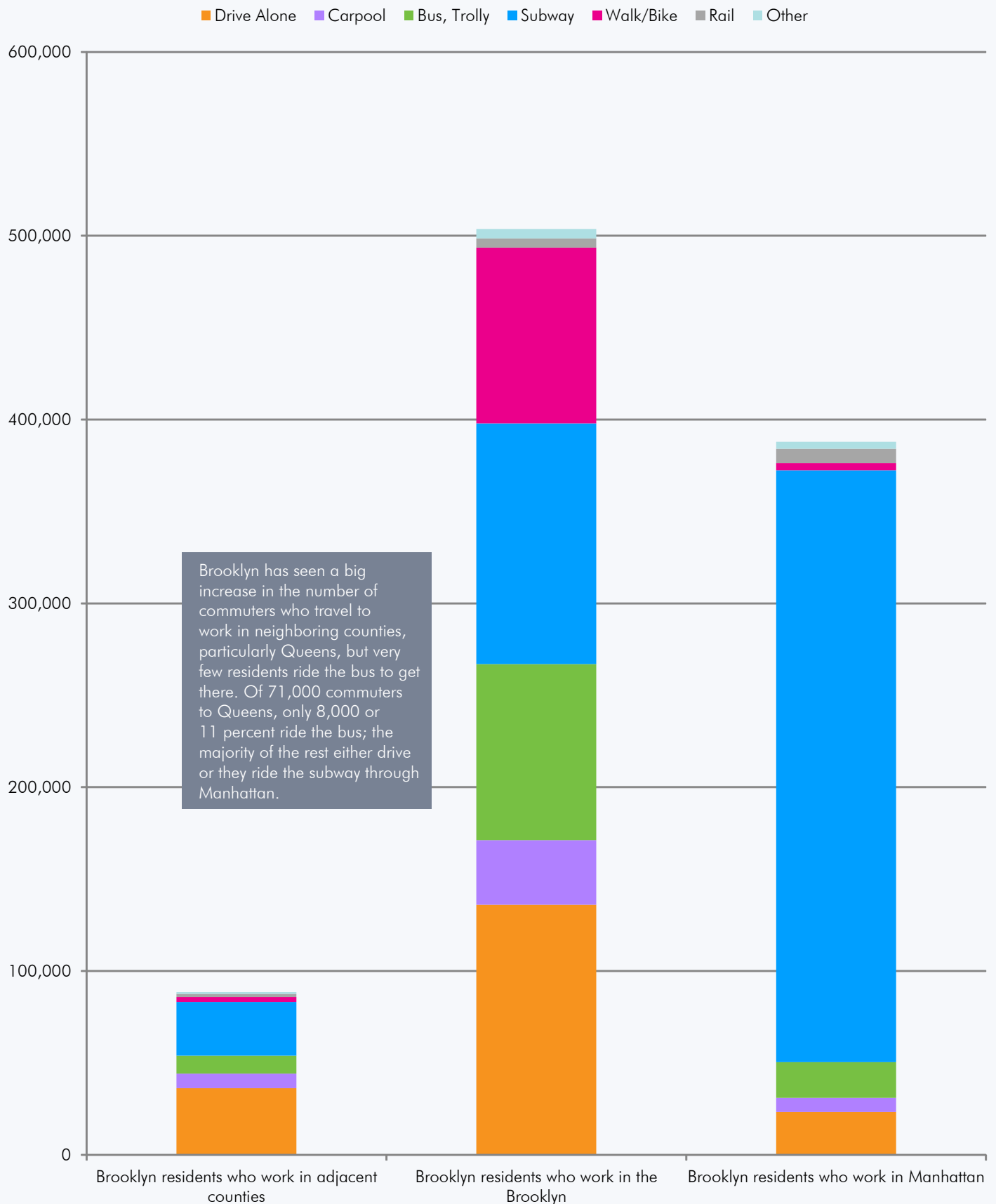
1. Because of the rapid growth of commuters to other areas, the share of Bronx commuters who travel to Manhattan went from 44 percent in 1990 to 41 percent in 2008, a significant shift. In Staten Island, the share of commuters who travel to Manhattan similarly went from 34 percent in 1990 to 29 percent in 2008.
2. New York City Department of Transportation, *Introduction to Bus Rapid Transit Phase II*, p. 5.
3. Elizabeth Kneebone, "Job Sprawl Revisited: The Changing Geography of Metropolitan Employment," Brookings Institution, April 2009.
4. Job growth data is from the New York State Department of Labor's Quarterly Census of Employment and Wages (QCEW).
5. Jonathan Bowles, David Giles and Qianqi Shen, "Manhattan's Declining Share of New York City Jobs," Center for an Urban Future, June 2009.
6. Cara Trager, "Ivory Tower Engines Power New York," *Crain's New York Business*, June 27, 2010.
7. CTPP Transportation Data is based on the 2006–2008 American Community Survey.
8. *Ibid.* For Richmond County to Richmond County commuters, we added the number of rail passengers to the number of subway passengers. The Staten Island Railway, although officially a part of New York City's subway system, is almost never referred to as a "subway" by local residents, so many of them may have identified it as commuter rail instead.
9. Regional Plan Association, *Tomorrow's Transit: New Mobility for the Region's Urban Core*, October 2008, p. 12.
10. For example, some experts on Staten Island have claimed that concerns about traffic and transportation more generally have been one reason the western shore's Teleport office complex has had trouble finding tenants. See Ken Paulson, "Expressway Crisis Demands Answers," *Staten Island Advance*, March 31, 2008; Maureen Donnelly, "Sad Situation at Struggling Teleport," *Staten Island Advance*, June 1, 2008.
11. RPA, *op. cit.*, pp. 16–18.
12. The Pratt Center for Community Development has done extensive research on this subject. For Census data showing the number of commuters earning less than \$35,000 per year with an hour or longer commute, see http://prattcenter.net/sites/default/files/maps/PrattCenter-Long_Commuters_Low_Wages.pdf. The map shows high concentrations in all of the listed neighborhoods.
13. See the New York State Department of Insurance's auto insurance rate calculator. The mentioned price comparison was based on the average premium from 32 different insurance companies. The average premium in 2010 for liability insurance was \$717 a year in Binghamton, NY, and \$3,266 a year in Brooklyn.
14. For information on the average costs of BRT systems as compared to light rail and subway systems, see Walter Hook and Lloyd Wright (eds), *Bus Rapid Transit Planning Guide 2007*, Institute for Transportation and Development Policy, June 2007, p. 55. According to ITDP, BRT systems typically range from US\$500,000 per kilometer to US\$15 million per kilometer, whereas light rail systems typically range from US\$13 million to \$40 million per kilometer and subway systems from US\$45 million to \$350 million per kilometer. New York's Second Avenue subway is projected to cost significantly more than that, at \$1.2 billion per kilometer.
15. Joe Barr was the DOT's planning director when we interviewed him in September 2010.
16. According to the DOT, the main criteria for electing corridors suitable for BRT lines include need of additional transit access, high volumes of existing transit passengers and exceptionally slow bus speeds.
17. Walter Hook and Lloyd Wright, *op. cit.*, pp. 259–261.
18. The MTA has plans to expand time-arrival technology to all the buses on Staten Island by later this year, though they won't be posting the information on signs at bus stops. See MTA, "Making Every Dollar Count: Agenda 2011," January 2011.
19. The funds were taken from the MTA's Metropolitan Mass Transportation Operating Assistance Fund (MMTOA), which consists of taxes collected in the downstate region. See Ben Fried, "Albany Didn't Cut the MTA Budget. They Stole from it," *Streetsblog*, March 9, 2010.
20. Andrew Grossman, "Politicians Duck Blame for Transit Mess," *Wall Street Journal*, September 13, 2010.
21. For more on how a weak real-estate market puts pressure on MTA's finances, see: Jake Mooney, "Progress Derailed: The Cause and Effect of NYC's Transit Funding Crisis," *City Limits*, August 9, 2010.

Commuters from the Bronx



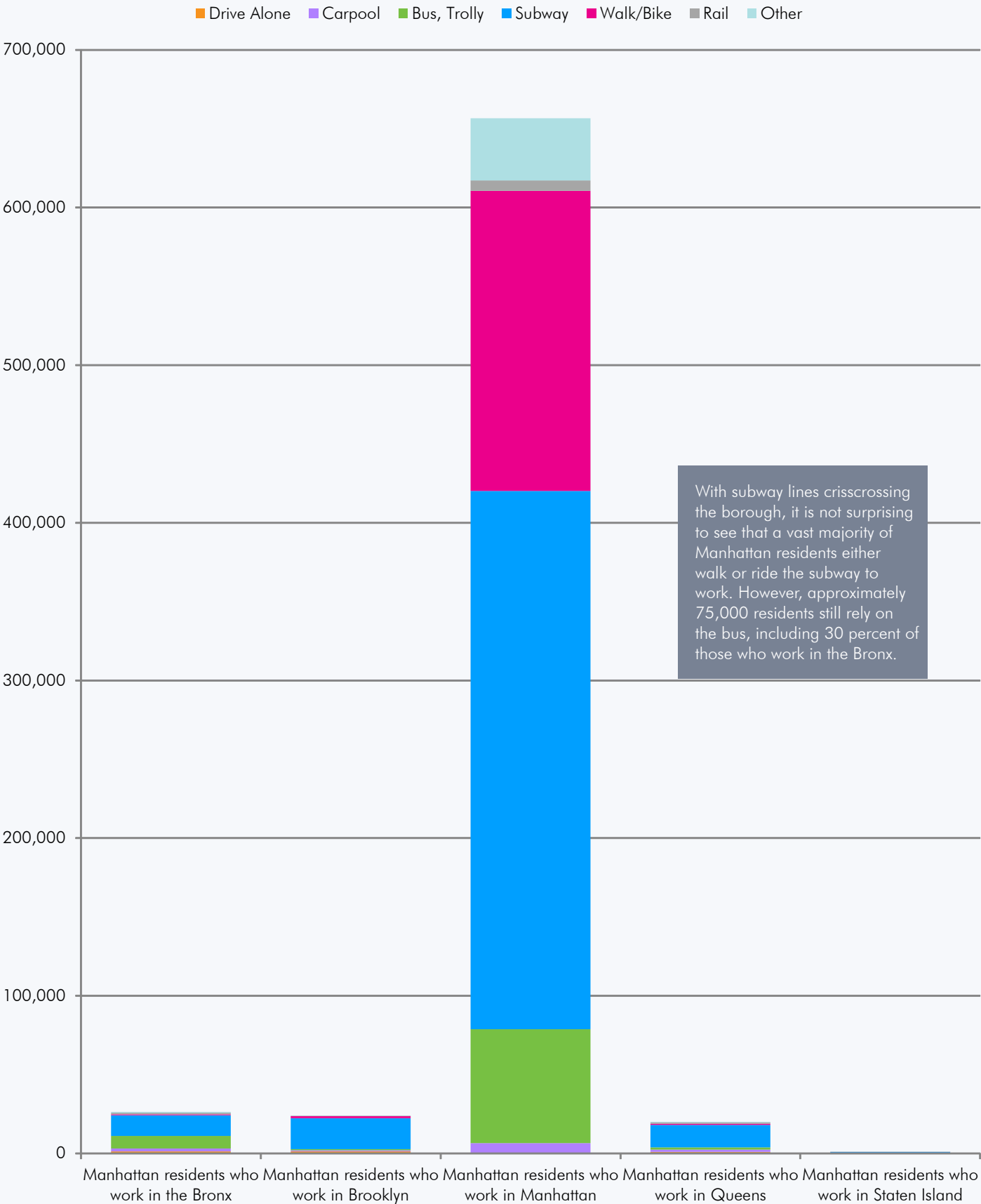
Source: The U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters. Other includes streetcar, ferryboat, taxi and motorcycle. Adjacent counties include: Queens, Westchester.

Commuters from Brooklyn



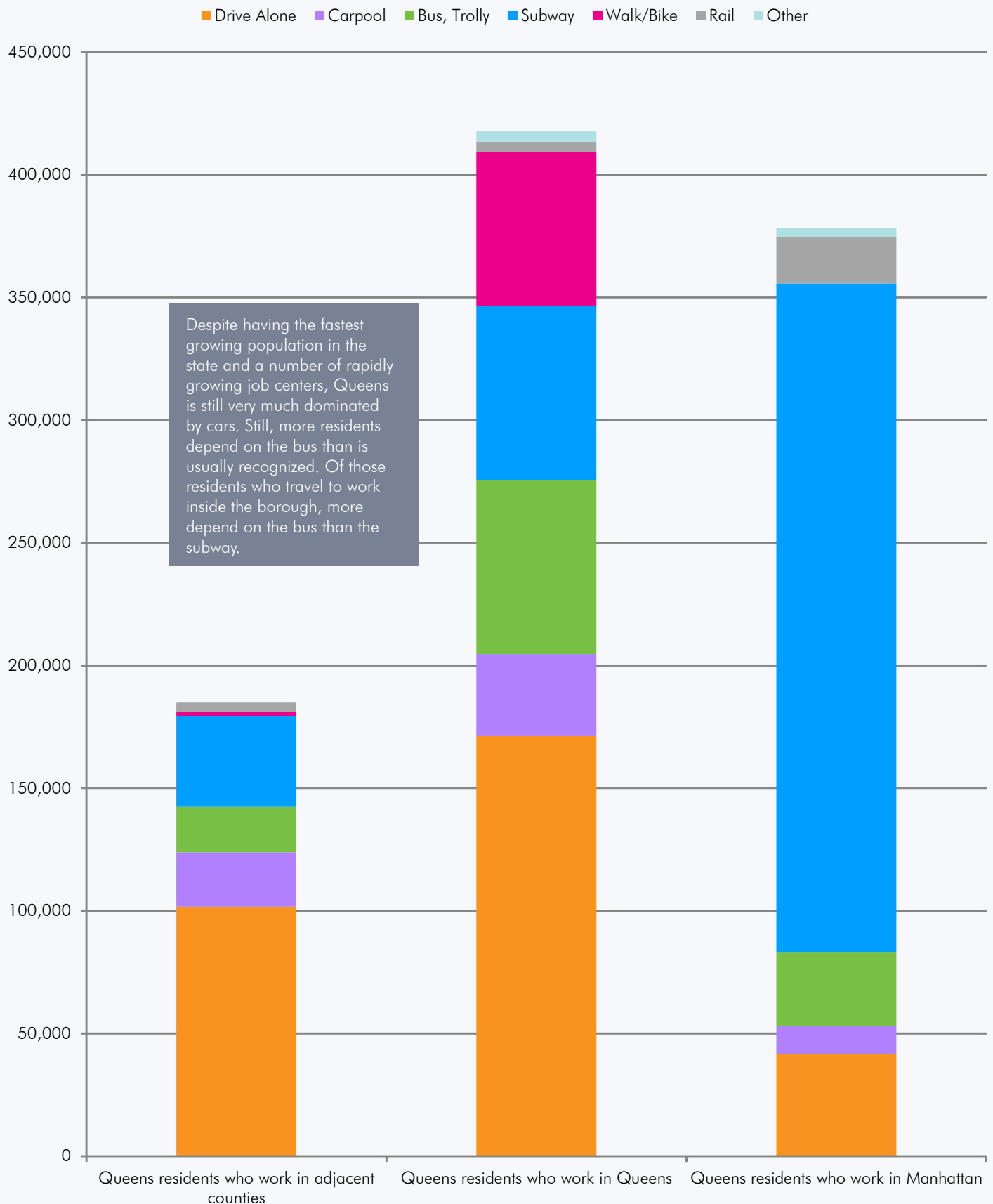
Source: The U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters. Other includes streetcar, ferryboat, taxi and motorcycle. Adjacent counties include: Nassau, Queens, Richmond.

Commuters from Manhattan



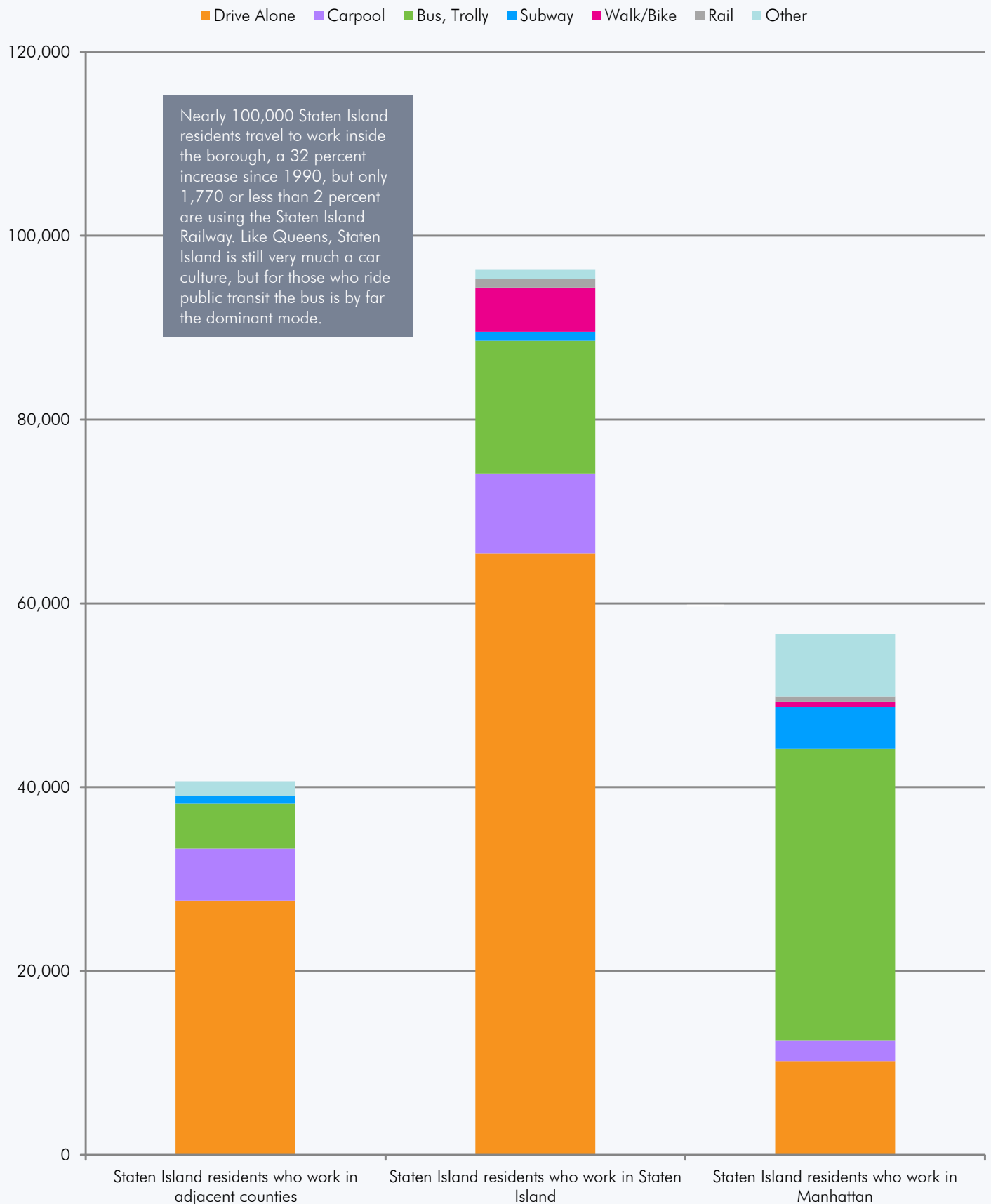
Source: The U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters. Other includes streetcar, ferryboat, taxi and motorcycle.

Commuters from Queens



Source: The U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters. Other includes streetcar, ferryboat, taxi and motorcycle. Adjacent counties include: Kings, Nassau, Bronx.

Commuters from Staten Island



Source: The U.S. Census Transportation Planning Package using data collected from the American Community Survey, 2006-2008. The worked-at-home population was subtracted from own borough commuters. Other includes streetcar, ferryboat, taxi and motorcycle. Adjacent counties include: Kings, Middlesex, Hudson, Union.

Center *for an*
Urban
Future
120 Wall Street, Floor 20
New York, NY 10005

This report and all other publications issued by the Center for an Urban Future can be viewed at www.nycfuture.org. Please subscribe to our monthly e-mail bulletin by contacting us at cuf@nycfuture.org or (212) 479-3344.

Non-Profit
U.S. Postage
PAID
New York, NY
PERMIT #3372