

@arshare

Parking Pilot Program

Final Report

April 2021



Monday
Thursday
11am - 12:30pm
→

Carshare
Parking
Only

zipcar

OTHERS NO STANDING
Anytime
←

HAMILTON

ONE
←

carshare



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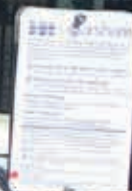
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Executive Summary



In June 2018, DOT launched a carshare parking pilot program mandated by Local Law 47 of 2017, introduced by Council Member Mendez, and Local Law 50 of 2017, introduced by Council Member Levine. The purpose of the pilot was to provide up to 300 on-street parking spaces in 14 pilot zones and up to 300 parking spaces in municipal parking facilities for use by participating carshare companies.

The goals of the carshare pilot were to:

- **Expand access to carshare, including in neighborhoods underserved by carshare services and to low- and moderate-income New Yorkers; and**
- **Analyze the impact of carshare on car ownership, total vehicle miles traveled (VMT), and on-street parking availability.**

Since the First-Year Progress Report's publication in January 2020, New York City has experienced seismic changes in how New Yorkers get around. The COVID-19 pandemic forced many New Yorkers to modify their travel behaviors in the short term, and some of those changes in behavior have continued throughout New York City's phased reopening.

The public health emergency also affected the pilot's participating carshare organizations. In the case of Enterprise CarShare, it indefinitely suspended service across its markets, leaving New York City and the pilot program in May 2020. Zipcar continued to operate through the pandemic with updated cleaning protocols, and the carshare parking pilot spaces became a vital part of its operations as some private garages it used either shut down or had limited hours.

But throughout these changes, the pilot program continued to build upon the positive trends from the first year: trip rates and unique users increased, blocked space reports decreased, and member surveys found that carshare use led to decreases in a member's vehicle miles traveled and greenhouse gas emissions. The demographic profile of carshare users also became more diverse, with more middle-income residents and New Yorkers of color using the service.

Changes from 1 st Year to 2 nd Year	
Trips/Space:	↑ 35%
Users/Space:	↑ 33%
% Blocked Spaces:	↓ 65%

As a result, DOT is moving forward to modify its rules to create a permanent carshare parking program. The permanent program framework will maintain many elements that proved successful during the carshare parking pilot, such as data sharing, equity siting requirements, low-income discounts, and hand control options. The biggest change to the program will be in siting the carshare locations. Rather than pre-identify sites from which a company can select spaces, DOT will shift the site identification process to participating companies. The purpose of this change is twofold: it allows a citywide program to develop without creating undue strain on DOT from a staffing perspective; and it allows carshare companies to proactively identify locations that make the most sense for their business.

DOT will release a Notice of Public Hearing for proposed rules that will go into more detail about the proposed changes to the permanent carshare program. As part of this rulemaking, the agency will hold a public hearing and solicit public feedback to ensure that the permanent program meets the needs of New Yorkers.



Background

In June 2018, DOT launched a carshare parking pilot program mandated by Local Law 47 of 2017, introduced by Council Member Mendez, and Local Law 50 of 2017, introduced by Council Member Levine. The purpose of the pilot was to provide up to 300 on-street parking spaces in 14 pilot zones and up to 300 parking spaces in municipal parking facilities for use by participating carshare companies. Although carsharing services have existed in New York City for decades, the pilot marked the first time that DOT provided dedicated “carshare parking only” spaces at the curb and in its municipal parking facilities through a permit system. The goals of the carshare pilot were to:

- **Expand access to carshare, including in neighborhoods underserved by carshare services and to low- and moderate-income New Yorkers; and**
- **Analyze the impact of carshare on car ownership, total vehicle miles traveled (VMT), and on-street parking availability.**

Carshare is a service that gives members access to a vehicle for short-term use — typically by the hour or minute. Unlike traditional rental cars, which are usually picked up from a retail location, carshare vehicles are unlocked by members through either a tap card or a smartphone app. This format allows members to reserve carshare vehicles 24 hours a day, seven days a week from a variety of locations convenient to their home.

DOT sought to pick sites in a geographically and economically diverse group of neighborhoods. DOT focused on areas that either 1) were likely to have residents who might give up a car or 2) lacked transportation options. This analysis, combined with active feedback from elected officials and community stakeholders, led to the selection of 14 on-street neighborhood pilot zones in northern Manhattan, the Bronx, Queens, and Brooklyn.

Two carshare companies – Enterprise CarShare and Zipcar – participated in the pilot program after applying for a DOT carshare permit. In June 2018, Enterprise launched with 56 spaces in the program and Zipcar had 229 spaces. The participating carshare companies had to follow permit conditions in order to participate in the pilot, including a requirement to regularly provide data to DOT. By analyzing data of overall trips, trips per site, trip durations, spaces that were blocked, number of unique users, membership changes, and cleaning reports, DOT could gauge whether the carshare pilot program met its goals.

For additional background on the program’s implementation process and results from the first year, refer to the [***Carshare Parking Pilot: First-Year Progress Report***](#).

On-Street Pilot Zones

Bronx

1. Parkchester

Manhattan

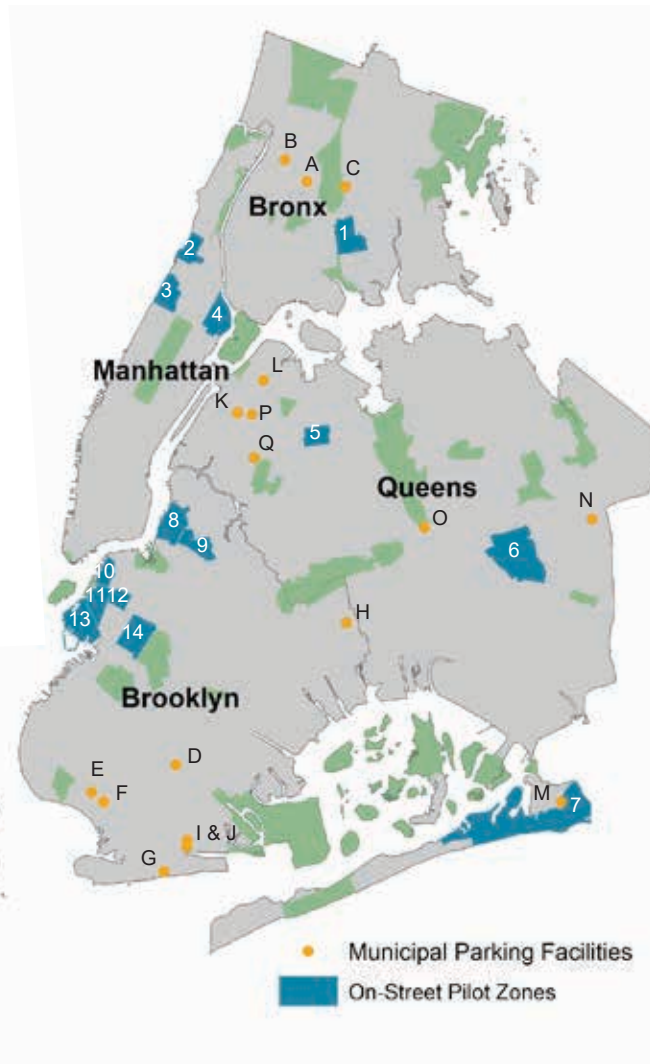
2. Hamilton Heights
3. Morningside Heights
4. East Harlem

Queens

5. Jackson Heights
6. Jamaica
7. Eastern Rockaways

Brooklyn

8. Williamsburg
9. East Williamsburg
10. Brooklyn Heights
11. Cobble Hill / Carroll Gardens
12. Boerum Hill
13. Red Hook
14. Park Slope



Carshare Municipal Parking Facilities

Bronx

- A. Belmont Ave.
- B. Jerome—190th St.
- C. White Plains Rd.

Brooklyn

- D. Avenue M
- E. Bensonhurst #1
- F. Bensonhurst #2
- G. Brighton Beach
- H. Grant Ave. (W)
- I. Sheepshead Bay #1
- J. Sheepshead Bay #2

Queens

- K. Broadway & 31st
- L. Ditmars #2
- M. Far Rockaway #2
- N. Queens Village
- O. Queens Borough Hall
- P. Steinway #2
- Q. Sunnyside



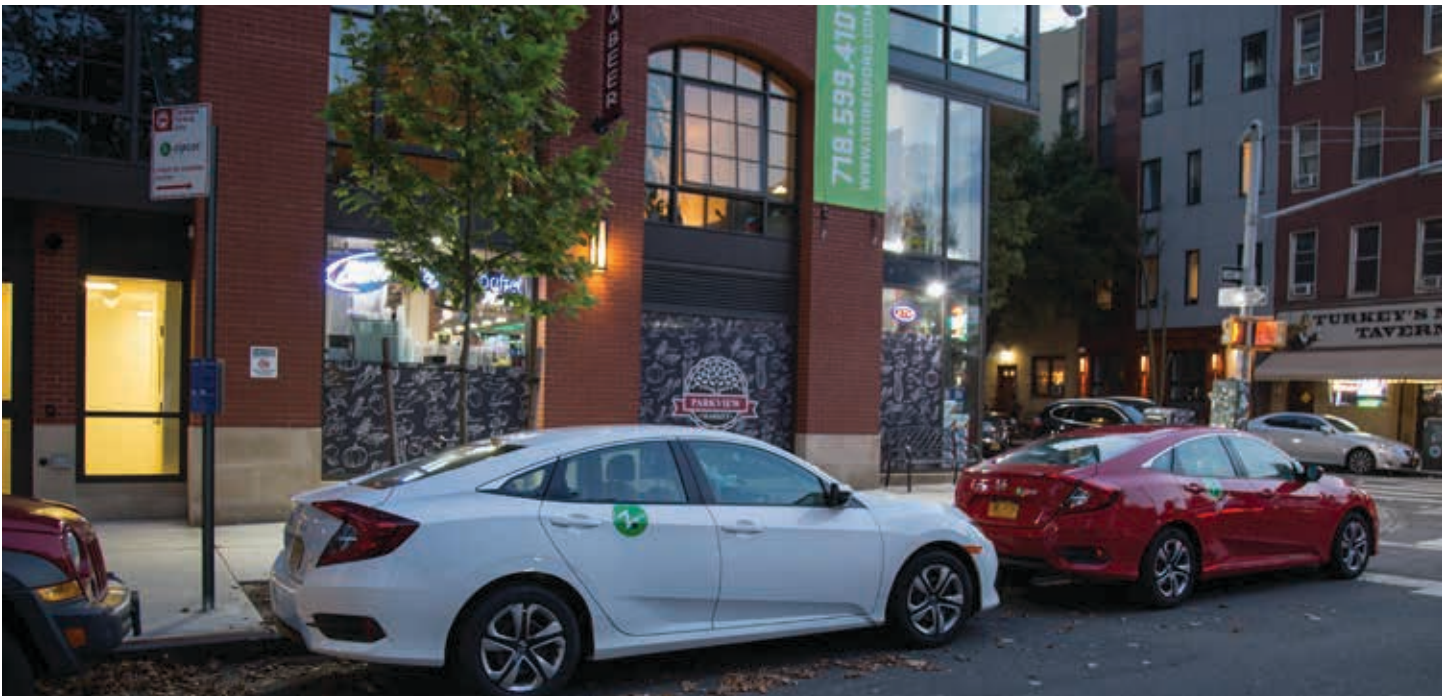
Changes Since the First-Year Progress Report

Since the First-Year Progress Report's publication in January 2020, New York City has experienced seismic changes in how New Yorkers get around. The COVID-19 pandemic (COVID) forced many New Yorkers to modify their travel behaviors in the short term, and some of those changes in behavior have continued throughout New York City's phased reopening. As of April 2020, public transit use is dramatically lower than pre-COVID, while car traffic in the city has rebounded even as many people continue to work from home. Now more than ever, DOT remains committed to using its streets as efficiently as possible by increasing the share of residents who walk, bike, and take transit to their destinations. And as more New Yorkers consider car ownership in response to COVID, carshare fills an important gap by providing the flexibility of a car without the financial burdens of gas, maintenance, insurance, and parking.

The carshare industry also underwent dramatic changes during 2020. Prior to COVID, in February 2020, Share Now (formerly car2go) stopped operating across North America. Although not part of DOT's carshare parking pilot, the departure of Share Now meant that only round-trip carshare services – where members start and end their trip from the same location – currently operate in NYC. The public health emergency then affected the pilot's participating carshare organizations. Enterprise CarShare temporarily suspended service in late March as a result of COVID and eventually decided to indefinitely suspend service across its markets, leaving New York City and the pilot program in May 2020. Zipcar continued to operate through the pandemic with updated cleaning protocols. It also modified its operations to keep up with changing demand, as many of the private garages it partnered with either reduced operating hours or shut down. As a result, the carshare parking pilot spaces became a vital part of its operations.

Additionally, the disproportionate impact of COVID on communities of color and the Black Lives Matter protests against racism and discrimination further emphasized the importance of ensuring equity in transportation services. These factors reinforced the need for city mobility programs to benefit all New Yorkers and for the city to ensure that private companies operate their services equitably. Many shared-use mobility services, some carshare operators included, have historically had membership bases that skewed more white, highly educated, and high income than the general population. As such, an important criterion in evaluating this pilot is its ability to expand access to a more representative group of New York City residents.

Finally, the city's financial position has changed dramatically since the First-Year Progress Report. COVID has resulted in a decline in tax revenues and necessitated significant cuts to core agency programs. As such, any permanent program that results from this pilot must be financially self-sustaining from a staff administration perspective.



Findings



The second year of the carshare parking pilot built upon the positive trends from the first year: trip rates and unique users increased, blocked space reports decreased, and member surveys found that carshare use led to decreases in a member's vehicle miles traveled and greenhouse gas emissions. The demographic profile of carshare users has become more diverse, with more middle-income residents and New Yorkers of color using the service. The section that follows lays out detailed findings about each evaluation category, including:

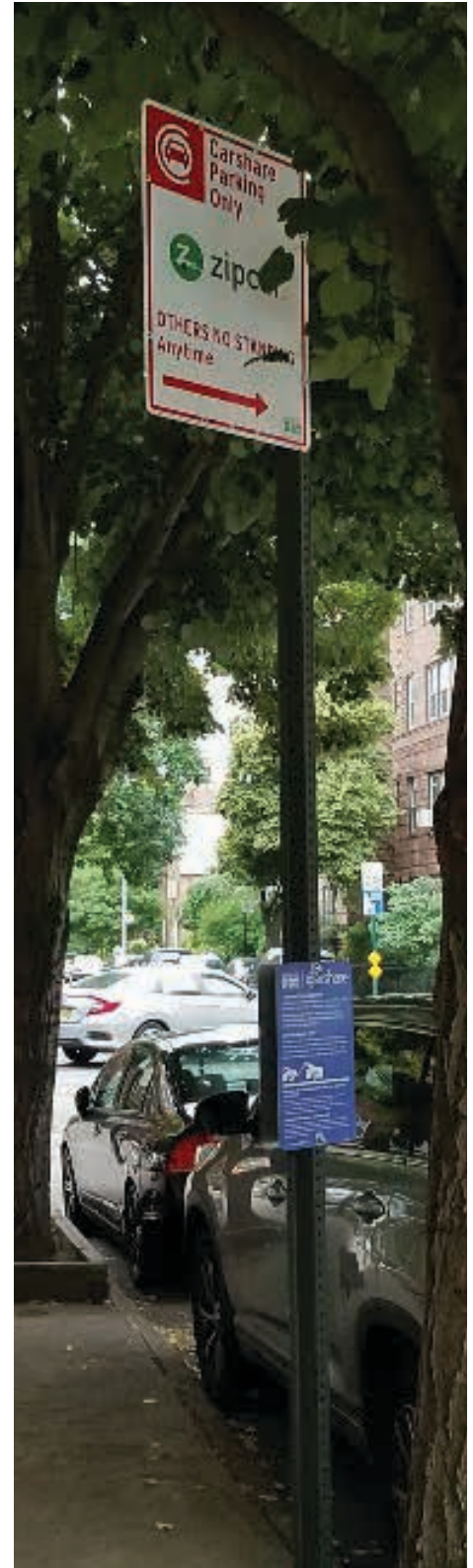
- **Carshare operations and usage,**
- **Equity impacts,**
- **Car ownership impacts,**
- **Changes to vehicle miles traveled and greenhouse gas emissions, and**
- **Community feedback.**

Operations and Usage

A key part of measuring the pilot program's success involves evaluating whether the pilot spaces function as intended. DOT measures that success based on three operational metrics:

- 1. Trip rates.** Analyzing the average number of trips taken from each space per month allows DOT to ensure that the spaces are being well used and to compare space utilization across different neighborhoods.
- 2. Unique users.** Comparing the number of unique users who take trips from a given space to the average number of trips from that space allows DOT to confirm that the spaces are widely used in the community. If a space averages a high number of trips but a low number of unique users, it would indicate that the reserved space might benefit fewer people in the neighborhood.
- 3. Blocked spaces.** Calculating the number of trips that cannot end because the space is illegally blocked allows DOT to evaluate whether the public follows the carshare curb regulations. It is important for carshare parking spaces to remain open for the carshare vehicles so that the service is reliable.

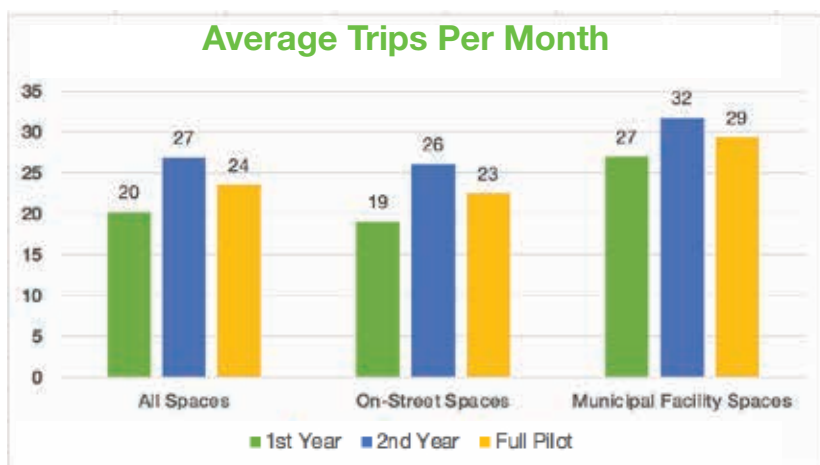
DOT allocated a total of 285 carshare parking spaces to the participating companies at the beginning of the pilot – 230 spaces on-street and 55 spaces in municipal parking facilities. Over the course of the pilot, four on-street spaces were removed due to long-lasting construction conflicts and the one carshare space in the Far Rockaway #2 municipal parking facility was removed when the lot permanently closed to make way for affordable housing. An additional four spaces were relocated due to construction. Because the analysis uses averages per space in operation, the removal



or relocation of these spaces over the course of the pilot does not affect the overall findings. Also, Enterprise CarShare sites are not included in the usage calculations for April and May 2020 because the service was suspended at that time.

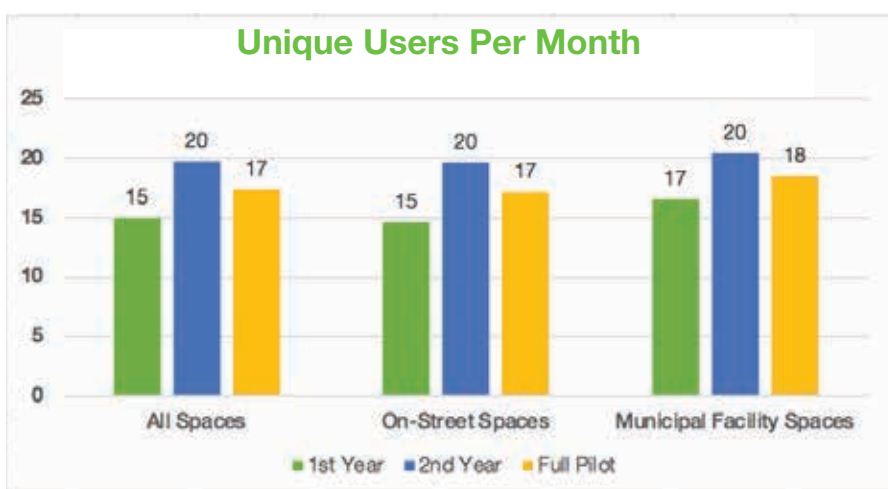
Trip Rates

Overall, the carshare vehicles deployed at on-street spaces and in DOT municipal parking facilities were well used. The total number of carshare trips from the parking pilot spaces increased by about 25% from the first year to the second year of the program, with a total of nearly 160,000 trips during the two-year period. The average carshare trip duration is 10 hours and the average trip distance is about 66 miles. In the first year of the pilot, each space averaged about 20 trips in a month, while in the second year, each space averaged about 27 trips in a month.¹ Municipal parking facilities continued to have somewhat higher trip rates, with municipal parking facilities averaging 29 trips per month over the two-year period compared to 23 trips per month from the on-street spaces. That said, there was a noticeable improvement in trips rates for both on-street spaces and municipal parking facility spaces in the second year, as New Yorkers became more familiar with the spaces and how they worked. In the second year of the pilot, from June 2019 through May 2020, the on-street spaces averaged 26 trips per month and the municipal parking facility spaces averaged 32 trips per month. Among the boroughs, the Bronx continued to record the highest average trip rates in the pilot with locations in Queens a close second.



Unique Users

Carshare vehicles in the program were also used by a substantial number of carshare members rather than just a small group. DOT measures this through a unique users metric, which is the average number of unique households that rent a carshare vehicle from a space in a month. The average number of unique users per space continues to trend in a positive direction. While in the first year of the pilot DOT reported that each space was used by an average of 15 households in a month, in the second year that number jumped to 20 households. This demonstrates that more New Yorkers started to take advantage of these spaces throughout the pilot.

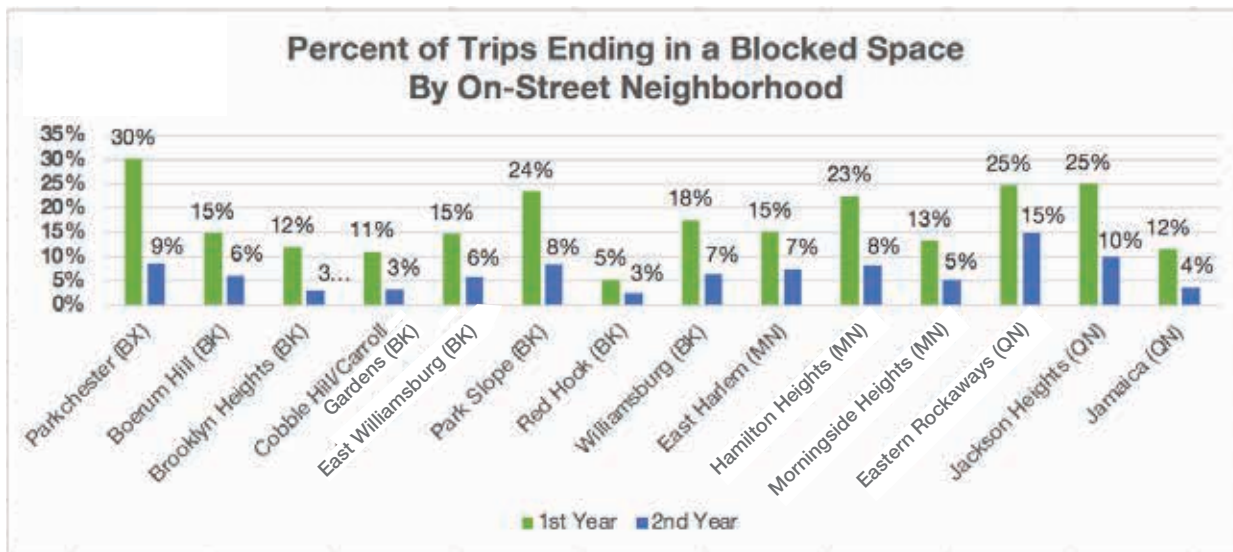


¹ Note: there was an error in the average trip calculation in the First-Year Progress Report. The average number of trips per space is 20, not 24 as stated in that report. The disaggregated averages reported at the neighborhood level are still accurate.

Blocked Spaces

Blocked spaces, which occur when a carshare member is unable to return a vehicle to the dedicated carshare parking space due to an illegally parked vehicle, were the main impediment to the carshare parking pilot in its first year. The problem was particularly acute in on-street carshare parking spaces, where the number of blocked spaces as a percentage of overall trips was 20% in some neighborhoods. Blocked spaces are a major operational issue for the carshare companies because they make the carshare service less reliable for its members, which reduces member satisfaction and the likelihood of using the service again.

As a result, in fall 2019, DOT allowed the carshare companies to install “carshare parking only” pavement markings in their carshare parking pilot spaces. Zipcar completed its pavement markings in November 2019, while Enterprise opted to only mark a handful of problematic spaces over the winter of 2019-2020. It is clear from the blocked spaces data that pavement markings had a positive impact on the rate of blocked spaces. From the first year to the second year of the pilot, the number of blocked spaces as a percentage of total trips dropped 65%.



In contrast to on-street spaces, those in municipal parking facilities did not have as substantial of an issue with blocked spaces. In the first year, approximately 6% of trips originating from a municipal facility ended with a blocked space report. By the second year, this percentage had dropped to 2% of trips.

Equity

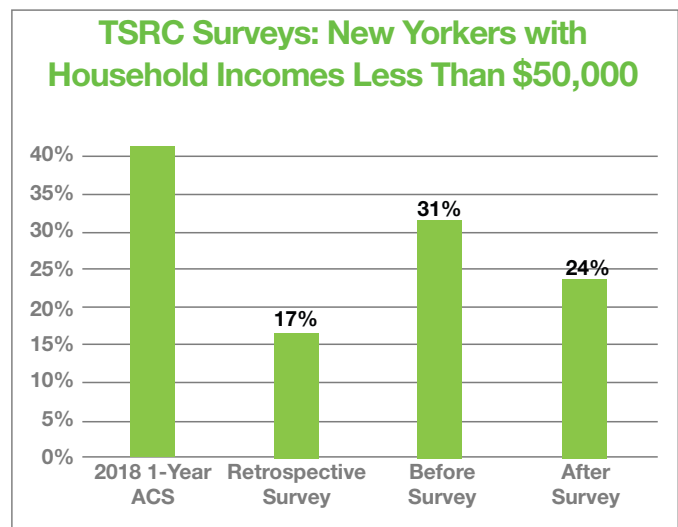
A key goal of the carshare parking pilot was to expand access to mobility, particularly to neighborhoods outside of the Manhattan central business district and inner Brooklyn and Queens. From the beginning of the pilot, carshare companies were required to have 20% of their on-street carshare parking spaces in designated equity sites. These equity sites were defined as being in census tracts with median household incomes below the median household income for New York City. DOT also chose some neighborhoods for its carshare parking pilot that were far from the Manhattan core and often overlooked by shared mobility companies. Additionally, the agency incentivized companies to provide low-income discounts by offering additional sites if they did so. For example, Zipcar offered New York City Housing Authority (NYCHA) residents free membership for a year and a \$20 driving credit, followed by a reduced price membership in succeeding years.

DOT partnered with researchers at the University of California, Berkeley Transportation Sustainability Research Center (TSRC) to conduct three surveys of carshare members that were launched 1) before the pilot began (April 2018), 2) a few months into the pilot (July 2018), and then 3) a year into the pilot (September 2019). These opt-in surveys provide demographic and socioeconomic data that shed light on the program's success at expanding carshare services to a broader group of New Yorkers. The surveys also allow DOT to compare carshare member demographic and socioeconomic data to that of the American Community Survey (ACS) to see how well carshare members represent the entire population of the city. It is important to note that the ACS is a survey of all New Yorkers – including those in households with licensed drivers and without licensed drivers – while carshare membership is only available to households with a licensed driver.

By comparing the first survey's respondent demographics to those of the second and third surveys, DOT can infer whether the pilot expanded the reach of carshare to a wider selection of New Yorkers, since people responding to the second and third surveys (known as the Before and After surveys) represent new carshare members that joined the services during the pilot period. These surveys show that prior to the start of the program white, wealthy New Yorkers were overrepresented among carshare members. However, the results also indicate that the pilot led to incremental improvements in representation of New Yorkers who reported making less than \$50,000 a year and New Yorkers who identify as Black/African American or Hispanic/Latino.

For example, according to the 2018 ACS, approximately 41.3% of New York households had a yearly income less than \$50,000. For the retrospective survey, launched before the pilot started, only 16.6% of respondents had a household income less than \$50,000. In the before survey, which was given to New Yorkers who joined carshare programs during the first year of the pilot period, the percentage of respondents with household incomes less than \$50,000 was much closer to the ACS average at 31.4% of respondents. This indicates that the pilot expanded the carshare membership base to a wider variety of incomes.

The race and ethnicity breakdowns were also closer to the ACS average with the before and after survey respondents compared to the pre-pilot survey respondents. While Black or African American New Yorkers represent about 21.7% of the New York City population, only 8.5% of respondents to the pre-pilot survey (retrospective) identified as such. The percentage of carshare members who identified as Black or African American increased by about four percentage points for the member surveys during the pilot period. The percentage of New Yorkers who identified as Hispanic or Latino doubled from about 8.2% in the retrospective survey to 16.9% in the first pilot-period survey (compared to 29.2% in the overall population).



TSRC Surveys	2018 1-year ACS	Retrospective Survey	Before Survey	After Survey
Race/Ethnicity	N = 8,398,748	N = 2757	N = 969	N = 761
White	31.9%	57.3%	49.4%	51.1%
Black or African American	21.7%	8.5%	12.7%	12.9%
American Indian and Alaska Native	0.2%	0.3%	0.0%	0.1%
Asian	14.1%	9.0%	10.5%	9.9%
Native Hawaiian and Pacific Islander	0.0%	0.1%	0.2%	0.1%
Hispanic or Latino	29.2%	8.2%	16.9%	16.8%
Two or more races	2.2%	15.5%	8.8%	7.9%
Other	0.8%	1.2%	1.4%	1.2%
Prefer not to answer	—	5.3%	6.4%	8.4%
Total % (without prefer not to answer)	100%	100%	100%	100%

Source: University of California, Berkeley TSRC

Although lower-income residents and New Yorkers of color continue to be under-represented, an expansion of the program could help to further narrow the gap. For TSRC’s full analysis of the carshare surveys, please go to <http://nycdotcarshare.info>.

Car Shedding and Suppression

The program was also effective at reducing the number of vehicles in New York City, a core goal of the initiative. Reducing auto ownership leads to lower greenhouse gas emissions, helping the city meet its goal of full carbon neutrality by 2050. The Transportation Sustainability Research Center’s three surveys analyzed carshare members’ travel behaviors and likelihood to either sell a car (shed) or delay purchase of a car (suppress) as a result of carshare. Based on these surveys, the researchers concluded that for every one carshare vehicle in New York City, four personal vehicles were either shed or suppressed. In the case of the pilot program, that would mean the 285 carshare spaces led to about 1,140 cars being shed or suppressed. In the case of New York City, in which more than 80% of surveyed carshare members are part of car-free households, carshare is more likely to lead to car suppression than shedding.

The suppression effect remains an important aspect of providing carshare service in the city. As the city reopens following the COVID-19 pandemic, providing alternatives to personal vehicle ownership is vital to ensuring that the city is not flooded with new private cars, along with attendant congestion and air pollution.

Vehicles Shed or Suppressed due to Carsharing	
Vehicles Shed per Carsharing Vehicle	0.3
Vehicles Suppressed per Carsharing Vehicle	3.7
Total Vehicles Estimated Removed per Carsharing Vehicle	4.0

DOT also intended to evaluate whether the shedding or suppression of personal vehicles had an impact on parking availability in the on-street pilot zones. Unfortunately, the analysis of parking was scheduled for spring 2020 and had to be cancelled due to COVID. With alternate side parking regulations suspended for much of the spring and summer and dramatic changes to travel patterns as a result of the pandemic, it was not possible to accurately assess how the presence of carshare vehicles of carshare vehicles impacted parking in the neighborhoods.



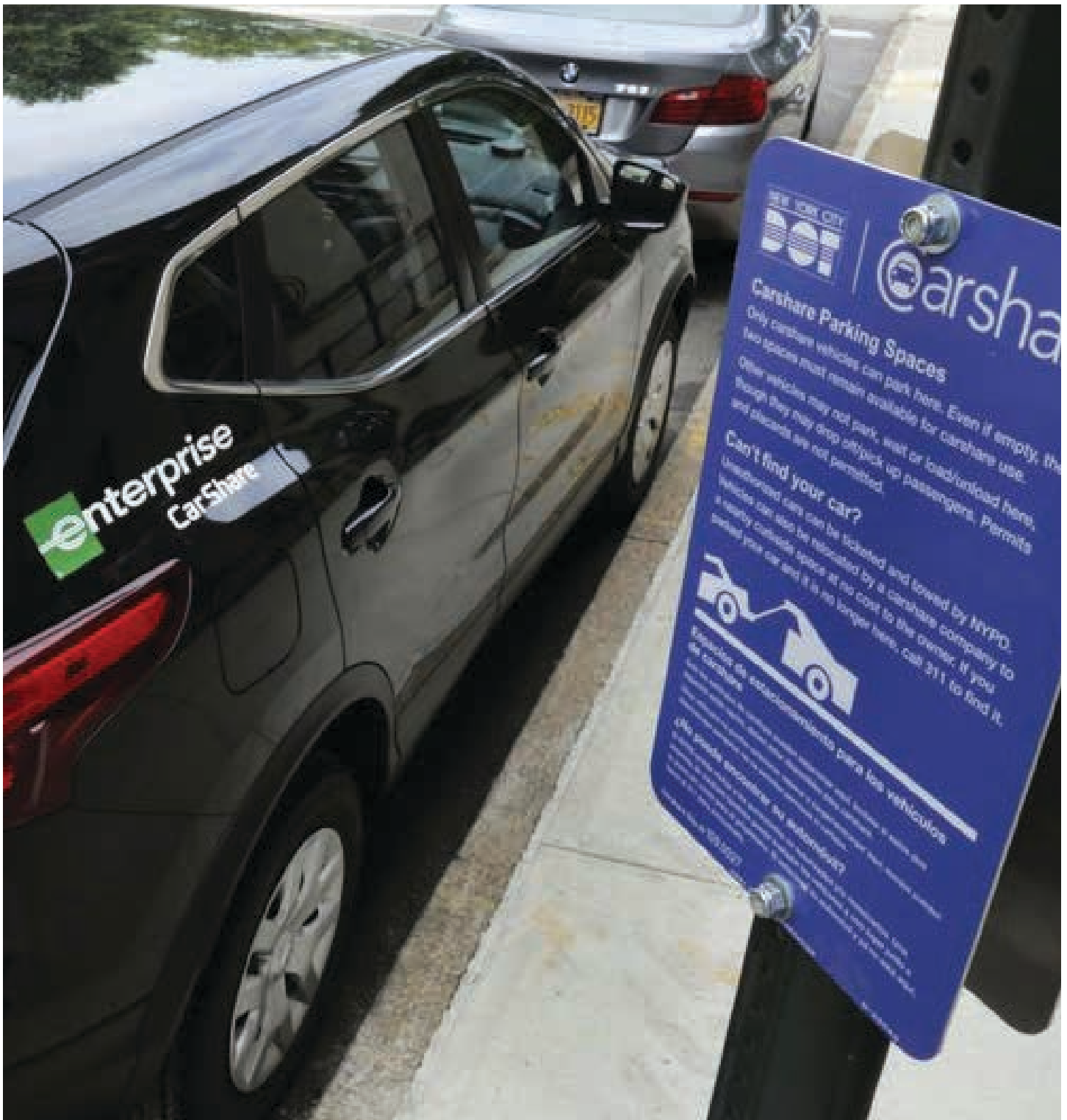
Vehicle Miles Traveled and Greenhouse Gas Emissions

The reduction in auto ownership in turn reduced overall traffic and associated emissions in New York City. When people join carshare, not only do they potentially sell or delay purchasing a car, but they sometimes modify other travel behaviors as a result of having access to a carshare vehicle. For example, because car owners pay for their vehicle and insurance upfront, they are incentivized to use the vehicle as much as possible. Carshare members, in contrast, evaluate each trip they are taking to see whether it is worth the price of the rental or could be taken by another, usually more sustainable, mode. This often leads carshare members to incorporate transit, biking, and walking into their trips more than car owners.

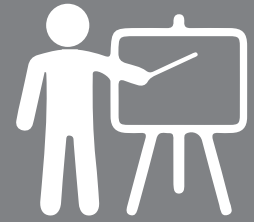
TSRC compared survey results to actual member activity data from Zipcar and Enterprise CarShare to calculate carshare’s impact of vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions. Based on this analysis, TSRC found that carsharing in NYC reduced VMT and GHG emissions among members by 7% and 6%, respectively. The findings suggest that carsharing thus reduced annual VMT by about 38.7 million miles and produced an annual net reduction of about 12,000 metric tons in GHGs per year within the City.

Community Feedback

From June 2018 through August 2020, DOT received just 86 comments through 311 or the agency's website. This is about 3 comments per month or 1 comment per 2,000 trips. Additionally, the bulk of the comments came during the first year of the pilot and then tapered off dramatically during the second year. The types of comments also changed as the pilot progressed. At the beginning, people wrote to ask about the purpose of the spaces and why DOT was providing parking spaces to private companies. After the initial implementation, most comments DOT received were noise complaints related to cleaning the vehicles overnight. When DOT received these types of noise complaints, staff worked with the carshare companies to adjust cleaning schedules as needed.



Next Steps: Creating a Permanent Program



The findings from the carshare parking pilot program show that the program is well used, provides a valuable service to car-free New Yorkers, expands access to carshare to a more diverse set of neighborhoods, and supports the city's efforts to reduce greenhouse gas emissions and improve air quality. As a result, DOT is moving forward to modify its rules to create a permanent carshare parking program. In the meantime, DOT has extended the pilot permits for the existing spaces so that there is no disruption in service prior to the program becoming permanent.

Lessons Learned

As a result of the pilot, DOT confirmed certain assumptions about how to operate the program and learned new lessons to help it run more smoothly.

- **There is untapped demand for carshare in the outer boroughs.** Some of the most popular spaces in the pilot program were far from the Manhattan core, but those areas were not well served by carshare until DOT provided access to sites and required 20% of sites to be located in equity areas as part of the pilot. DOT will continue to provide access to outer borough locations and require participating carshare companies to deploy a portion of their on-street vehicles at designated equity sites to ensure an equitable distribution of service throughout the city.
- **Pavement markings lead to more reliable service from on-street carshare spaces.** In the first year of the pilot, the issue of drivers illegally parking in carshare parking spaces threatened the long-term viability of the program. Compliance dramatically improved after DOT allowed carshare companies to install and maintain pavement markings at their sites. DOT will continue to allow companies to mark their spaces.
- **Pre-selecting all potential carshare spaces is not viable in a permanent program.** Prior to launching the carshare parking pilot, DOT identified the universe of potential spaces that carshare companies could apply for. This process involved significant site analysis for areas that the carshare companies ended up not requesting. DOT seeks to shift the site selection responsibility to the carshare companies and then evaluate each requested site as part of the permit application and renewal process to ensure it meets established carshare parking criteria.



Proposed Framework

The permanent program framework will maintain many elements that proved successful during the carshare parking pilot. For example, DOT will maintain the requirement that carshare companies place 20% of on-street carshare sites in DOT-defined equity areas. This requirement ensures that carshare services are widely available throughout the city. Additionally, DOT will continue to require the installation of hand controls upon request so that New Yorkers with disabilities have access to the service. Lastly, DOT will require participating companies to offer low-income discounts (i.e., reduced membership fees for New York City Housing Authority residents).

The biggest change to the program will be in siting the carshare locations. Rather than pre-identify sites from which a company can select spaces, DOT will shift the site identification process to participating companies. The purpose of this change is twofold: it allows a citywide program to develop without creating undue strain on DOT from a staffing perspective; and it allows carshare companies to proactively identify locations that make the most sense for their business. The new permit application process will follow these steps:

- 1. DOT will have an annual application window during which companies can submit requests for new or renewed one-year carshare site permits. Each site will have two parking spaces.**
- 2. Companies can apply for specific sites anywhere in the city that meet DOT's carshare parking siting criteria. Criteria include, but are not limited to, being an unmetered space, being a parking lane 24/7, and being located next to an intersection. For each site, the carshare company will have the option to specify an alternate location in case the primary location is infeasible.**
- 3. DOT will review each site application to verify that it meets the siting criteria. It will then review each site for upcoming construction conflicts that might make the site infeasible for the permit term.**
- 4. Once the site passes DOT's review process, the company will be required to conduct outreach to the local community.**
- 5. At the end of this process, DOT will issue site permits with a one-year term.**

DOT will continue to require data sharing as a condition of the carshare permit. The agency takes its responsibility for managing the public right-of-way seriously, and it uses the data it receives to ensure that the program functions as intended and meets DOT's mobility and equity goals. DOT will release a Notice of Public Hearing for proposed rules that will go into more detail about the proposed changes to the permanent carshare program. As part of this rulemaking, the agency will hold a public hearing and solicit public feedback to ensure that the permanent program meets the needs of New Yorkers.





Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Borough Snapshots

Bronx

Full Pilot Results	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Bronx Borough	30/30	28	21	16%
On-Street Zones	20/20	26	20	19%
Parkchester	20/20	26	20	19%
Municipal Parking Facilities	10/10	36	23	2%
Belmont	4/4	32	20	2%
Jerome - 190th St.	3/3	37	23	3%
White Plains Rd.	3/3	39	24	2%
Citywide	280/285	24	17	11%
On-Street Zones	226/230	23	17	13%
Municipal Parking Facilities	54/55	29	18	4%

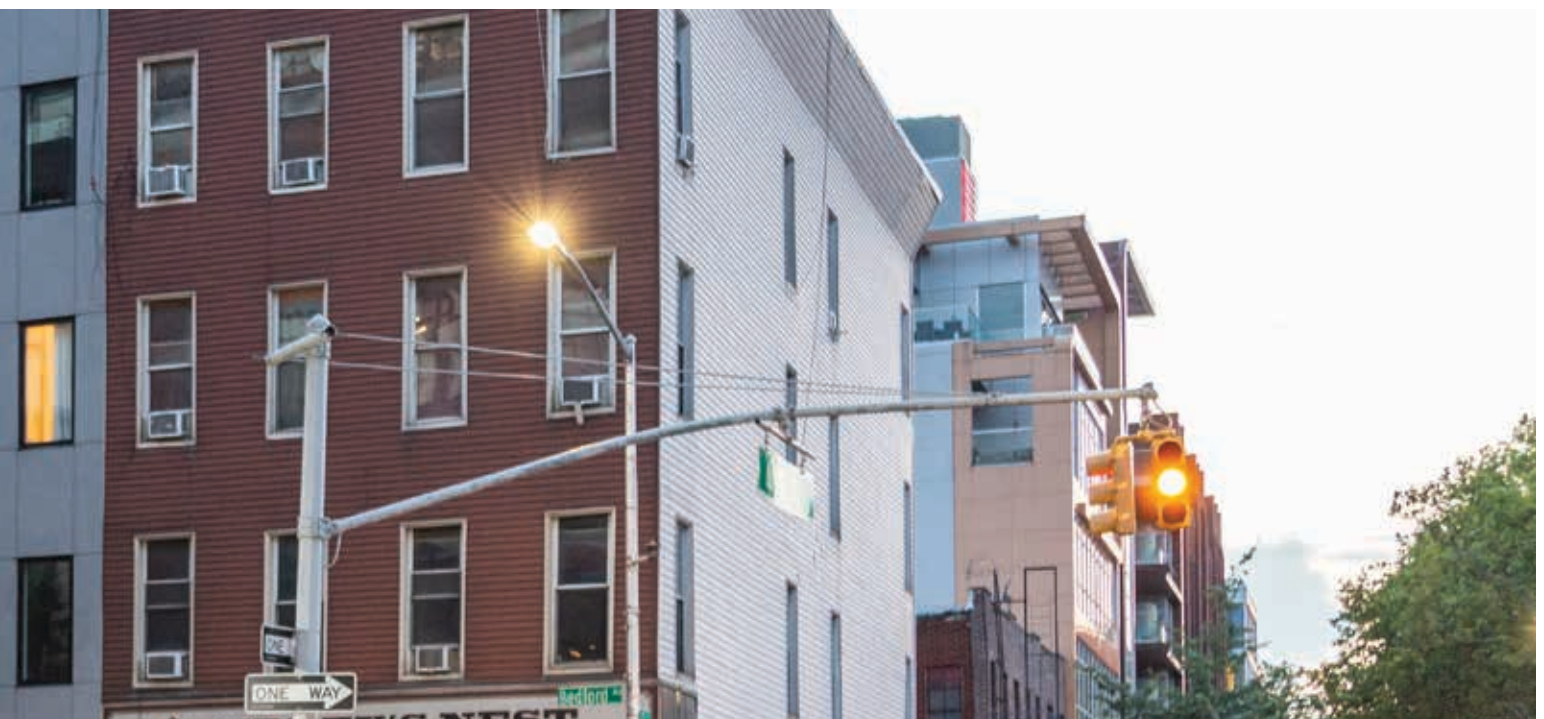
2nd Year Results Only	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Bronx Borough	30/30	30	23	7%
On-Street Zones	20/20	28	22	9%
Parkchester	20/20	28	22	9%
Municipal Parking Facilities	10/10	37	24	2%
Belmont	4/4	36	23	1%
Jerome - 190th St.	3/3	41	26	1%
White Plains Rd.	3/3	36	24	2%
Citywide	280/285	27	20	6%
On-Street Zones	226/230	26	20	7%
Municipal Parking Facilities	54/55	32	20	2%

Brooklyn

Full Pilot Results	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Brooklyn Borough	128/132	21	16	11%
On-Street Zones	108/112	20	16	11%
Boerum Hill	12/12	20	15	10%
Brooklyn Heights.	4/4	20	15	8%
Cobble Hill / Carroll Gardens	18/18	22	15	7%
East Williamsburg	20/20	19	15	10%
Park Slope	28/30	22	19	16%
Red Hook	4/4	8	5	4%
Williamsburg	22/24	18	14	12%
Municipal Parking Facilities	20/20	27	17	5%
Avenue M	4/4	30	17	3%
Bensonhurst #1	4/4	23	14	7%
Bensonhurst #2	2/2	30	20	12%
Brighton Beach	3/3	24	14	2%
Grant Avenue	2/2	32	21	3%
Sheepshead Bay #1	3/3	24	15	4%
Sheepshead Bay #2	2/2	23	18	6%
Citywide	280/285	24	14	11%
On-Street Zones	226/230	23	17	13%
Municipal Parking Facilities	54/55	29	18	4%



2nd Year Results Only	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Brooklyn Borough	128/132	24	18	6%
On-Street Zones	108/112	24	18	6%
Boerum Hill	12/12	23	17	6%
Brooklyn Heights	4/4	23	18	3%
Cobble Hill / Carroll Gardens	18/18	25	17	3%
East Williamsburg	20/20	23	17	6%
Park Slope	28/30	26	21	8%
Red Hook	4/4	10	6	3%
Williamsburg	22/24	22	17	7%
Municipal Parking Facilities	20/20	29	19	2%
Avenue M	4/4	31	19	2%
Bensonhurst #1	4/4	22	15	2%
Bensonhurst #2	2/2	35	23	6%
Brighton Beach	3/3	27	16	1%
Grant Avenue	2/2	40	26	1%
Sheepshead Bay #1	3/3	25	17	1%
Sheepshead Bay #2	2/2	26	20	3%
Citywide	280/285	27	20	6%
On-Street Zones	226/230	26	20	7%
Municipal Parking Facilities	54/55	32	20	2%



Manhattan

Full Pilot Results	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Manhattan Borough	70/70	25	18	12%
On-Street Zones	108/112	20	16	11%
East Harlem	12/12	20	15	10%
Hamilton Heights	4/4	20	15	8%
Morningside Heights	18/18	22	15	7%
Citywide	280/285	24	14	11%
On-Street Zones	226/230	23	17	13%
Municipal Parking Facilities	54/55	29	18	4%

2nd Year Results Only	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Manhattan Borough	70/70	29	21	7%
On-Street Zones	70/70	29	21	7%
East Harlem	20/20	26	19	7%
Hamilton Heights	20/20	36	26	8%
Morningside Heights	30/30	26	20	5%
Citywide	280/285	27	20	6%
On-Street Zones	226/230	26	20	7%
Municipal Parking Facilities	54/55	32	20	2%

Queens

Full Pilot Results	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Queens Borough	52/53	27	19	8%
On-Street Zones	28/28	25	19	11%
Eastern Rockaways	2/2	23	12	20%
Jackson Heights	8/8	26	21	18%
Jamaica	18/18	25	19	8%
Municipal Parking Facilities	24/25	29	18	3%
Broadway / 31st St	6/6	23	16	2%
Ditmars #2	6/6	23	13	2%
Far Rockaway #2	0/1	45	20	15%
Queens Borough Hall	2/2	32	20	2%
Queens Village	2/2	30	17	3%
Steinway #2	4/4	30	21	1%
Sunnyside	4/4	38	25	2%
Citywide	280/285	24	17	11%
On-Street Zones	226/230	23	17	13%
Municipal Parking Facilities	54/55	29	18	4%

2nd Year Results Only	# of spaces as of May 2020/ Original # of spaces	Trips per Month	Unique Users	% of Trips Ending in Blocked Spaces
Queens Borough	52/53	29	21	4%
On-Street Zones	28/28	28	21	6%
Eastern Rockaways	2/2	26	14	15%
Jackson Heights	8/8	33	26	10%
Jamaica	18/18	26	20	4%
Municipal Parking Facilities	24/25	29	20	1%
Broadway / 31st St	6/6	28	19	1%
Ditmars #2	6/6	24	14	1%
Far Rockaway #2	0/1	53	25	2%
Queens Borough Hall	2/2	33	22	1%
Queens Village	2/2	29	17	2%
Steinway #2	4/4	34	23	1%
Sunnyside	4/4	43	28	2%
Citywide	280/285	27	20	6%
On-Street Zones	226/230	26	20	7%
Municipal Parking Facilities	54/55	32	20	2%

