SURVEY OBJECTIVES

1. Track year-over-year changes in travel behavior
2. Understand current views on the state of transportation within the city
3. Measure attitudes toward current transportation issues and topics
4. Perform in-depth sub-group analysis for planning zones and key targeted areas
2019 SURVEY OVERVIEW

SUMMARY
• Survey fielded from May 22, 2019 through June 30, 2019.
• Smartphone participants participated in a 7-day travel diary.
• Online and call center participants participated in 1-day travel diary.
• Same questionnaire was used for smartphone, online, and call center participants.
• Survey was available in English, Chinese, and Spanish.
Target Completes = 3,000
Actual Completes = 3,346
Zone Target = 300

- The overall survey target was exceeded by 346 completes.
- The zone target was met in all zones except for Inner Queens.
- Response rates varied by zone and compensatory oversampling was used to meet targets.
2019 CMS departed from previous iterations of the survey in two primary ways:

1. Sampling methodology changed from random digit dialing to **address-based sampling**.
2. Survey participation through a **smartphone-app** was made available.

**Survey Design**

- **Address-Based Sample**: 118,525 invitations
- **2,496 smartphone participants**: 75%
- **689 online participants**: 20%
- **161 call center participants**: 5%

**Total Complete Participants**: 3,346
SURVEY RECRUITMENT AND ENGAGEMENT

RECRUITMENT

Mailed Invitation Materials

- Address-based sampling was used by drawing a random sample of addresses from all residential addresses in the survey region.
- An invitation letter was sent to sample addresses followed by a reminder postcard.

ENGAGEMENT

Informational Website

- Participate in the survey
- Answers frequently asked questions

Call Center

- Participate in the survey
- Answer questions
- Reminder calls

Survey Email Address

- Answer participant questions
- Send reminder emails
SMARTPHONE APP PARTICIPATION

1. After downloading the rMove app, participants completed a brief recruit survey.
2. Their travel period began the next day and continued for 7 days.
3. rMove passively collected trip data and in-app surveys appeared after each trip.
Participants who visited the survey website were presented with all three survey participation modes and could enter the online survey using the password received in their invitation mailings.

90% of call center participants and 40% of online participants do not own smartphones.
89% of smartphone participants are under age 65, while 83% of call center participants are age 65 and over.

Call center participants were more likely to decline reporting household income in comparison to smartphone and online participants.
# Survey Language

<table>
<thead>
<tr>
<th>Survey Mode</th>
<th>Survey Language</th>
<th>Participants</th>
<th>Percent of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone</td>
<td>English</td>
<td>2,421</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>Simplified Chinese</td>
<td>32</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>43</td>
<td>1%</td>
</tr>
<tr>
<td>Online</td>
<td>English</td>
<td>679</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Simplified Chinese</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Call Center</td>
<td>English</td>
<td>157</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,346</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
## SURVEY RESPONSE

<table>
<thead>
<tr>
<th>CMS ZONE</th>
<th>INVITED</th>
<th>RECRUITED</th>
<th>RECRUIT RATE(^1)</th>
<th>COMPLETED</th>
<th>COMPLETE RATE(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan Core</td>
<td>8,848</td>
<td>401</td>
<td>4.5%</td>
<td>341</td>
<td>3.9%</td>
</tr>
<tr>
<td>Upper Manhattan</td>
<td>10,821</td>
<td>427</td>
<td>3.9%</td>
<td>309</td>
<td>2.9%</td>
</tr>
<tr>
<td>Inner Brooklyn</td>
<td>12,121</td>
<td>399</td>
<td>3.3%</td>
<td>321</td>
<td>2.6%</td>
</tr>
<tr>
<td>Outer Brooklyn</td>
<td>11,051</td>
<td>444</td>
<td>4.0%</td>
<td>311</td>
<td>2.8%</td>
</tr>
<tr>
<td>Inner Queens</td>
<td>8,581</td>
<td>415</td>
<td>4.8%</td>
<td>291</td>
<td>3.4%</td>
</tr>
<tr>
<td>Middle Queens</td>
<td>8,075</td>
<td>414</td>
<td>5.1%</td>
<td>310</td>
<td>3.8%</td>
</tr>
<tr>
<td>Outer Queens</td>
<td>10,688</td>
<td>484</td>
<td>4.5%</td>
<td>346</td>
<td>3.2%</td>
</tr>
<tr>
<td>Southern Bronx</td>
<td>18,826</td>
<td>512</td>
<td>2.7%</td>
<td>343</td>
<td>1.8%</td>
</tr>
<tr>
<td>Northern Bronx</td>
<td>18,826</td>
<td>586</td>
<td>3.1%</td>
<td>408</td>
<td>2.2%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>10,688</td>
<td>508</td>
<td>4.8%</td>
<td>366</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118,525</strong></td>
<td><strong>4,590</strong></td>
<td><strong>3.9%</strong></td>
<td><strong>3,346</strong></td>
<td><strong>2.8%</strong></td>
</tr>
</tbody>
</table>

\(^1\) Recruit Rate = Recruited / Invited  
\(^2\) Complete Rate = Completed / Invited
SURVEY SUMMARY KEY AND OVERVIEW

WEIGHTING KEY:

All figures are weighted to represent the population of New York unless noted otherwise.
Data at the trip and day levels are weighted to represent an average day.

2019 SURVEY SUMMARY OVERVIEW

Sample Profile  Pedestrian Behavior
Trip Diary       Bicycle Behavior
Work & School Travel Behavior New Mobility Services Usage
Transit Services Usage Freight Services Usage
Vehicle Behavior & Ownership Equity Analysis
Sample Profile
Household and Person Demographics
## SAMPLE PROFILE OVERVIEW

<table>
<thead>
<tr>
<th>Demographic Breakdown</th>
<th>Unweighted Sample</th>
<th>Weighted Sample</th>
<th>ACS 5-Year Average (2013-2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 24</td>
<td>8%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>25 – 44</td>
<td>42%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>45 – 64</td>
<td>35%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>65 and older</td>
<td>15%</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Male</td>
<td>44%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Asian</td>
<td>15%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>19%</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>White</td>
<td>52%</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>Two Races or More</td>
<td>4%</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic, Latino, or Spanish Origin</td>
<td>22%</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>Not of Hispanic, Latino, or Spanish Origin</td>
<td>78%</td>
<td>72%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $25,000</td>
<td>18%</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>$25,000-$49,999</td>
<td>18%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>$50,000-$100,000</td>
<td>31%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>$100,000-$199,999</td>
<td>24%</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Borough</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manhattan</td>
<td>19%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>19%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Queens</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Bronx</td>
<td>23%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>11%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>68%</td>
<td>66%</td>
<td>64%</td>
</tr>
<tr>
<td>Not employed</td>
<td>32%</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any disability</td>
<td>12%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Ambulatory – Difficulty walking or climbing stairs</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Vision disability – Blind or have difficulty seeing</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Hearing disability – Deaf or have difficulty hearing</td>
<td>3%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Note: For variables where “Prefer not the answer” was an option, respondents who selected that answer have been excluded from these calculations.*
Manhattan Core has the highest share of:

- 1-person households – 13 percentage points higher than citywide
- 2-person households – 13 percentage points higher than citywide

Manhattan Core also has a significantly smaller share of households with 5 or more members – 14% lower than citywide.
52% of households in the Manhattan Core make $100,000 or more in annual income – the highest proportion of all zones and 20 percentage points higher than citywide.

43% of households in the Southern Bronx make under $25,000 in annual income – the highest proportion of all zones and 20 percentage points higher than citywide.
24% of Manhattan Core participants are age 25-34, 12 percentage points greater than the citywide share.

12% of Northern Bronx participants are age 18-34, 11 percentage points less than the citywide share.
21% of participants are of Hispanic, Latino, or Spanish origin and 23% declined to report their ethnicity. Race was asked as a select all that apply – responses have been aggregated in the figure below for ease of comparison to the census. 29% of participants declined to report their race.

Note: The “Prefer not to answer” option has been included in these figures but was excluded from the earlier sample profile table resulting in different shares.
Smartphone participants have the highest employment rate, while call center participants have the lowest employment rate – which is reasonable given that 83% of call center participants are age 65+.

Manhattan Core and Inner Queens have the highest employment rate of the survey zones.
**PARTICIPANT STUDENT STATUS**

9% of participants are students.

The majority of participants who are students are enrolled in 4-year college/university programs.
The remaining 5% of trips were made to destinations outside of the survey region.
68% of trips citywide were made using sustainable modes.

41% of New Yorker’s trips were walking trips, the highest of any mode.
CITYWIDE TRAVEL PROFILE - SUSTAINABLE MODE SHARE

86% of Manhattan Core residents’ trips were made using sustainable modes – the highest of all survey zones.

<table>
<thead>
<tr>
<th>ZIP Code Zone</th>
<th>Sustainable Mode Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan Core</td>
<td>86%</td>
</tr>
<tr>
<td>Upper Manhattan</td>
<td>82%</td>
</tr>
<tr>
<td>Southern Bronx</td>
<td>74%</td>
</tr>
<tr>
<td>Northern Bronx</td>
<td>53%</td>
</tr>
<tr>
<td>Inner Queens</td>
<td>67%</td>
</tr>
<tr>
<td>Middle Queens</td>
<td>68%</td>
</tr>
<tr>
<td>Outer Queens</td>
<td>51%</td>
</tr>
<tr>
<td>Inner Brooklyn</td>
<td>80%</td>
</tr>
<tr>
<td>Outer Brooklyn</td>
<td>65%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>17%</td>
</tr>
</tbody>
</table>
Most frequent trip purposes:

- 20% of trips were trips home.
- 19% of trips were for the purpose of shopping.
- 15% of trips were to work or were work-related.

Note: Purpose refers to the “purpose for traveling to the trip destination.”
The Citywide average trip rate has increased in comparison to previous iterations of the survey.

More incidental trips have been captured by transitioning to smartphone data collection.
For weekdays, Inner Queens has the highest overall trip rate with residents taking an average 5.1 trips.

For weekends, Inner Brooklyn has the highest overall trip rate with residents taking an average of 4.9 trips.
On an average day, 21% of New Yorkers do not make any trips.
24% of trips ending in the Manhattan Core were work or work-related trips – 9 percentage points higher than citywide.

11% of trips ending in the Manhattan Core were made for the purpose of going home – 9 percentage points lower than citywide.

Note: Trips with destinations outside of New York City are not included in this figure.

Purpose refers to the “purpose for traveling to the trip destination.”
Staten Island has the highest share of vehicle trips and the lowest share of walk trips out of all zones.

- 84% of trips ending in Staten Island are vehicle trips – 56 percentage points higher than citywide
- 5% of trips ending in Staten Island are walk trips – 36 percentage points lower than citywide

Outer Queens, Northern Bronx, and Outer Brooklyn zones also have vehicle trip shares at least 10 percentage points higher than citywide.

*Note: Trips with destinations outside of New York City are not included in this figure.*

---

### TRIP MODE BY DESTINATION SURVEY ZONE

<table>
<thead>
<tr>
<th>Zone</th>
<th>For-Hire Vehicle</th>
<th>App Based For-Hire Vehicle</th>
<th>Commuter Rail</th>
<th>Bus</th>
<th>Ferry</th>
<th>Subway</th>
<th>Vehicle</th>
<th>Bike</th>
<th>Walk</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan Core</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Upper Manhattan</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Southern Bronx</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Northern Bronx</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

UNWEIGHTED N = 64,092, WEIGHTED N = 25,978,307

- Significantly less than Citywide at 95% confidence level
- Significantly greater than Citywide at 95% confidence level
30% of trips to work are made using the subway.

Trips made for work-related reasons, trips home, and trips made for the purpose of escorting someone else to a destination are significantly more likely to be made using a vehicle.

Trips made for shopping, eating, and social/recreation purposes are significantly more likely to be walking trips.

Note: Purpose refers to the “purpose for traveling to the trip destination.”
Trips to Outer Queens and Outer Brooklyn have the longest average duration.

Trips to the Northern Bronx, Inner Queens, and Staten Island have the shortest average duration.
Work and School Travel Behavior
**WORK LOCATION**

58% of employed New Yorkers who regularly commute to a workplace work in the same borough as their residence.

<table>
<thead>
<tr>
<th>Employed Participants’ Usual Work Location</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Only one work location</td>
<td>63%</td>
</tr>
<tr>
<td>Work location regularly varies (different offices/jobsites)</td>
<td>23%</td>
</tr>
<tr>
<td>Work remotely or from home ONLY (telework, self-employed)</td>
<td>7%</td>
</tr>
<tr>
<td>Drive/bike/travel for work</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
51% of New Yorkers report typically commuting to work by subway service.

71% of New Yorkers report typically commuting to work using sustainable modes.
WORK COMMUTE DISTANCE AND DURATION

AVERAGE WORK COMMUTE DISTANCE BY SURVEY ZONE (MILES)
UNWEIGHTED N = 6,471, WEIGHTED N = 2,416,204

AVERAGE WORK COMMUTE DURATION BY SURVEY ZONE (MINUTES)
UNWEIGHTED N = 6,477, WEIGHTED N = 2,417,788

[Charts showing average commute distance and duration by survey zone]
27% of employed New Yorkers reported that they typically telework at least 1 day a week.

**REMOTE WORKING**

**AVERAGE HOURS SPENT WORKING FROM A REMOTE LOCATION (NOT HOME OR WORK)**

<table>
<thead>
<tr>
<th>Day</th>
<th>Unweighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>4.3</td>
<td></td>
</tr>
</tbody>
</table>

**TELEWORK FREQUENCY**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Unweighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-7 days a week</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>5 days a week</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>4 days a week</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2-3 days a week</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>1 day a week</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>1-3 days a month</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Less than monthly</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>52%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Average hours spent working from a remote location was calculated only for persons who reported working remotely on their travel day.
Most children under age 15 are escorted to school by a parent or guardian. Children predominately walk or take a bus/shuttle to school.

Note: Data shown here for children (age 0-17) is unweighted.
Transit Services Usage
The majority of bus, subway, commuter rail, and ferry trips are made for the purpose of changing modes, going home, and going to work.
71% of transit trips are 5 miles or less with 38% of trips under 2 miles.

85% of transit trips are 60 minutes or less with 51% of trips under 20 minutes.
The majority of New Yorkers walk to and from transit.

<table>
<thead>
<tr>
<th>MODE</th>
<th>CONNECTING TO TRANSIT</th>
<th>CONNECTING FROM TRANSIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Vehicle</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>For-hire vehicle</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

UNWEIGHTED N = 16,649, WEIGHTED N = 6,644,976
INCOME BY TRANSIT USE

INCOME BY BUS, SUBWAY, AND COMMUTER RAIL USE DURING TRAVEL PERIOD
UNWEIGHTED N = 3,346, WEIGHTED N = 6,670,172

- Made a bus, subway, or commuter rail trip during travel period
- Did not make a bus, subway, or commuter rail trip during travel period

- Under $25,000: 22% Made, 24% Did not make
- $25,000-$49,999: 22% Made, 14% Did not make
- $50,000-$74,999: 16% Made, 13% Did not make
- $75,000-$99,999: 11% Made, 9% Did not make
- $100,000-$199,999: 20% Made, 24% Did not make
- $200,000 or more: 6% Made, 12% Did not make
- Prefer not to answer: 4% Made, 3% Did not make
Vehicle Behavior and Ownership
VEHICLE TRIP PROFILE

The largest share of vehicle trips are made for the purpose of shopping or going home.

VEHICLE TRIPS BY DESTINATION PURPOSE
UNWEIGHTED N = 20,669, WEIGHTED N = 7,705,583

- Home: 23%
- Shop: 21%
- Social/Recreation: 10%
- Escort: 8%
- Work-related: 8%
- Meal: 8%
- Errand: 7%
- Work: 7%
- Other: 6%
- School: 1%
- Change mode: 0.4%

VEHICLE TRIP SHARE BY DESTINATION SURVEY ZONE

Map showing the distribution of vehicle trips by destination survey zone.
51% of New Yorkers have at least one vehicle in their household.

In 2018, Just over half (53%) of New Yorkers personally own or have access to a car.
CHANGES IN VEHICLE OWNERSHIP

FOR THE 5% WHO INCREASED THEIR VEHICLE COUNT

REASONS FOR INCREASING VEHICLES IN HOUSEHOLD
(select all that apply)
UNWEIGHTED N = 184, WEIGHTED N = 311,330

- I wanted the flexibility and convenience of having a car: 35%
- New driver in household (e.g., grown child or spouse): 32%
- I needed a car to transport a household member (i.e., spouse, relative, or child, other): 28%
- I got a new job that was not easily accessible by transit: 10%
- I found other transportation options were unreliable: 8%
- I moved into an area where I felt I needed a car: 5%
- Other: 4%

FOR THE 15% WHO DECREASED THEIR VEHICLE COUNT

REASONS FOR REDUCING VEHICLES IN HOUSEHOLD
(select all that apply)
UNWEIGHTED N = 369, WEIGHTED N = 986,085

- Parking was difficult or expensive: 47%
- Car ownership was expensive: 43%
- I started using public transit: 38%
- I no longer needed a car on a frequent basis: 28%
- Other: 23%
- I didn't feel comfortable driving in New York City: 15%
- I started using a smartphone-app ride service such as Lyft/Uber: 11%
- I started using a carshare service such as Zipcar or car2go: 3%
Participants in zero-vehicle households make substantially more walk, subway, and bus trips – but fewer vehicle trips – than participants in households with one or more vehicles.
PARKING LOCATION AT HOME

PARKING LOCATION AT HOME BY HOME SURVEY ZONE
UNWEIGHTED N = 1,606, WEIGHTED N = 3,315,944

Unweighted N by survey zone – Manhattan Core, N = 72; Upper Manhattan, N = 63; Southern Bronx, N = 70; Northern Bronx, N = 214; Inner Queens, N = 106; Middle Queens, N = 194; Outer Queens, N = 306; Inner Brooklyn, N = 96; Outer Brooklyn, N = 142; Staten Island, N = 343

STREET PARKING AT HOME BY HOME SURVEY ZONE
UNWEIGHTED N = 1,606, WEIGHTED N = 3,315,944

Significantly less than Citywide at 95% confidence level
Significantly greater than Citywide at 95% confidence level

50
68% of vehicle trips are 5 miles or less with 27% of trips under 1 mile.

91% of vehicle trips are 60 minutes or less with 60% of trips under 20 minutes.
45% of citywide vehicle trips are 2 miles or less.

Outer Queens, Inner Brooklyn, and Outer Brooklyn have the largest share of vehicle trips under two miles of all survey zones.
CONGESTION PRICING ATTITUDES

Participants were shown the following statement and then asked the questions shown below.

New York State recently approved congestion pricing for New York City. Starting in 2021, drivers will pay a toll to enter Manhattan south of 60th Street. The purpose of the system is to raise revenue for mass transit and to reduce traffic congestion.

What is your opinion of congestion pricing?

- Strongly support: 22%
- Somewhat support: 26%
- Somewhat oppose: 13%
- Strongly oppose: 30%
- No opinion: 9%

**48% SUPPORT**

**43% OPPOSE**

REPORTED FREQUENCY OF DRIVING INTO OR WITHIN TOLLING ZONE (INCLUDING ZERO-VEHICLE HOUSEHOLDS)

- 6-7 days a week: 0.3%
- 5 days a week: 2%
- 4 days a week: 0.1%
- 2-3 days a week: 4%
- 1 day a week: 2%
- 1-3 days a month: 8%
- Less than monthly: 20%
- Never: 62%
CONGESTION PRICING ATTITUDES

VEHICLE OWNERS

• Vehicle owners who “never” drive into or within Manhattan below 60th are 4.3 times more likely to support congestion pricing than vehicle owners who drive “weekly” into or within the district.

• Vehicle owners who drive “less than weekly” into or within Manhattan below 60th are 2.2 times more likely to support congestion pricing than vehicle owners who drive “weekly” into or within the district.

CITYWIDE

• People with household incomes greater than $200,000 are 2.8 times more likely to support congestion pricing than people with household incomes under $25,000.

• People with no vehicles in their household are 1.8 times more likely to support congestion pricing than people with 2 or more vehicles in their household.

Note: These statements are based on an ordinal logistic regression model.
52% of vehicle trips into or within the CBD tolling zone are made for work or work-related reasons.

Average trip distance: 4.4 miles
Average trip duration: 26 minutes
VEHICLE TRIPS ENDING IN CBD TOLLING ZONE

DEMOGRAPHIC PROFILE OF NEW YORKERS WHO MADE VEHICLE TRIPS ENDING IN THE CBD TOLLING ZONE
UNWEIGHTED N = 258, WEIGHTED N = 525,563

- Home Survey Zone
- Age
- Household Income
Pedestrian Behavior
The majority of walking trips are made for the purpose of shopping or going home.
WALK TRIP DISTANCE AND DURATION

87% of walk trips are 1 mile or less.

86% of walk trips are 20 minutes or less with 63% of trips under 10 minutes.
Bicycle Behavior
48% of households in New York own a bicycle – an increase from previous years, 41% in 2017 and 38% in 2018.

The majority of bike trips are social/recreation trips or trips home.
BIKE TRIP DISTANCE AND DURATION

84% of bicycle trips are 5 miles or less with 51% of trips under 2 miles.

88% of bicycle trips are 60 minutes or less with 64% of trips under 20 minutes.
33% of New Yorkers ride a bike at least once a year.

14% of New Yorkers rode a bike within the past seven days with 8% riding a bike at least two days within the past seven days.
ATTITUDES TOWARDS RIDING A BICYCLE

84% of New Yorkers typically make bicycle trips for recreation and exercise.

39% of New Yorkers who never ride a bicycle because they prefer other modes and 32% do not ride a bicycle because they don’t feel safe due to lack of bike lanes.
BIKESHARE SERVICES USAGE

15% of New Yorkers use bikeshare services
14% of New Yorkers use Citi Bike, 1% use Lime, and 0.2% use Jump

FREQUENCY OF CITI BIKE USAGE
UNWEIGHTED N = 429, WEIGHTED N = 871,357

- 6-7 days a week: 10%
- 5 days a week: 4%
- 4 days a week: 1%
- 2-3 days a week: 13%
- 1 day a week: 5%
- 1-3 days a month: 7%
- Less than monthly: 43%
- Never: 17%

REASONS FOR NOT USING BIKESHARE SERVICES
(select all that apply)
UNWEIGHTED N = 2,683, WEIGHTED N = 5,346,147

- Do not feel comfortable biking: 31%
- Not in my neighborhood: 25%
- Prefer to use my personal bicycle: 23%
- Too expensive: 14%
- I do not know what bike share services are: 9%
- Stations are too far from where I want to go: 7%
- Docks are too often full or empty: 1%
New Mobility Services Usage
61% of New Yorkers use app-based for-hire vehicles, a higher share than previous years. 50% reported using app-based for-hire vehicles services in 2018 and 35% in 2017. Among the 39% of New Yorkers that do not use app-based for-hire vehicles, 26% do not own smartphones.
New Yorkers use app-based for-hire vehicles primarily for making trips home followed by going shopping and running errands.

Users previously made these trips using subway, for-hire vehicles, or a household vehicle.
APP-BASED FOR-HIRE VEHICLE DISTANCE AND DURATION

78% of app-based for-hire vehicle trips are 5 miles or less with 39% of trips under 2 miles.

95% of app-based for-hire vehicle trips are 60 minutes or less with 66% of trips under 20 minutes.
13% of New Yorkers use carshare services and 31% of carshare trips are for social and recreation purposes.

The average carshare trip distance is 26 miles.
32% of New Yorkers receive deliveries or have household services performed on an average day.

Direct comparisons cannot be made to previous years due to different scales. However, there appears to be a slight increase in deliveries year-over-year.

In 2018, 28% of New Yorkers received some kind of delivery at least several times a week.
On an average Sunday, 24% of New Yorkers shop online.
EQUITY ANALYSIS OF DAILY TRIP RATES

Daily trip rates differ from the citywide average across key demographic measures.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Citywide</th>
<th>Male</th>
<th>Female</th>
<th>Non-binary</th>
<th>Prefer to self-describe</th>
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<th>$25,000-$49,999</th>
<th>$50,000-$74,999</th>
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<th>$100,000-$199,999</th>
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<th>Household Income</th>
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<td>$200,000 or more</td>
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<td>2.9</td>
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</table>
In the past week, have you seen and/or experienced visual, verbal, or physical harassment/violence when traveling?

### Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Seen harassment/violence when traveling</th>
<th>Experienced harassment/violence when traveling</th>
<th>Both seen and experienced harassment/violence when traveling</th>
<th>Not seen or experienced harassment/violence when traveling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>25%</td>
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<td>6%</td>
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<td>67%</td>
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<td>Total</td>
<td>20%</td>
<td>4%</td>
<td>10%</td>
<td>67%</td>
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### Survey Zone

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<th>Seen harassment/violence when traveling</th>
<th>Experienced harassment/violence when traveling</th>
<th>Both seen and experienced harassment/violence when traveling</th>
<th>Not seen or experienced harassment/violence when traveling</th>
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<td>17%</td>
<td>2%</td>
<td>6%</td>
<td>77%</td>
</tr>
<tr>
<td>Upper Manhattan</td>
<td>24%</td>
<td>2%</td>
<td>12%</td>
<td>74%</td>
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<tr>
<td>Southern Bronx</td>
<td>10%</td>
<td>2%</td>
<td>7%</td>
<td>84%</td>
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<tr>
<td>Northern Bronx</td>
<td>19%</td>
<td>4%</td>
<td>14%</td>
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<td>Inner Queens</td>
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<td>7%</td>
<td>13%</td>
<td>68%</td>
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<td>Outer Brooklyn</td>
<td>23%</td>
<td>1%</td>
<td>10%</td>
<td>67%</td>
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<td>Staten Island</td>
<td>17%</td>
<td>5%</td>
<td>15%</td>
<td>72%</td>
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<tr>
<td>Citywide</td>
<td>20%</td>
<td>4%</td>
<td>10%</td>
<td>67%</td>
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</tbody>
</table>

Significantly less than Citywide at 95% confidence level

Significantly greater than Citywide at 95% confidence level

UNWEIGHTED N = 3,111, WEIGHTED N = 6,174,439
EFFECTS OF STREET HARASSMENT

How have these experiences influenced your behavior when traveling this past week?

**BY SURVEY ZONE**

<table>
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<tr>
<th></th>
<th>UNWEIGHTED N = 919, WEIGHTED N = 2,061,014</th>
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</thead>
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<td>They have affected my decision to make a trip</td>
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<tr>
<td>Manhattan Core</td>
<td>1%</td>
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<tr>
<td>Upper Manhattan</td>
<td>15%</td>
</tr>
<tr>
<td>Southern Bronx</td>
<td>18%</td>
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<tr>
<td>Northern Bronx</td>
<td>16%</td>
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<tr>
<td>Inner Queens</td>
<td>16%</td>
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<td>Middle Queens</td>
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<td>16%</td>
</tr>
<tr>
<td>Upper Brooklyn</td>
<td>16%</td>
</tr>
<tr>
<td>Outer Brooklyn</td>
<td>16%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>16%</td>
</tr>
<tr>
<td>Citywide</td>
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</table>

**BY GENDER**

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>They have affected my decision to make a trip</td>
</tr>
<tr>
<td>Female</td>
<td>15%</td>
</tr>
<tr>
<td>Male</td>
<td>16%</td>
</tr>
<tr>
<td>Non-binary</td>
<td>16%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>16%</td>
</tr>
</tbody>
</table>

Significantly less than Citywide at 95% confidence level

Significantly greater than Citywide at 95% confidence level
Participants who reported a disability make significantly:

- more trips by bus
- fewer trips by vehicle

In comparison to all participants.
EFFECTS OF INCOME ON TRAVEL BEHAVIOR

HOUSEHOLD OWNS 1 OR MORE VEHICLES BY INCOME
UNWEIGHTED N = 3,346, WEIGHTED N = 6,670,172

- Under $25,000: 23%
- $25,000-$49,999: 58%
- $50,000-$74,999: 55%
- $75,000-$99,999: 69%
- $100,000-$199,999: 60%
- $200,000 or more: 63%
- Prefer not to answer: 47%

MODE SPLIT BY INCOME
UNWEIGHTED N = 68,823, WEIGHTED N = 27,422,903

- For-Hire Vehicle
  - Under $25,000: 1%
  - $25,000-$49,999: 2%
  - $50,000-$74,999: 1%
  - $75,000-$99,999: 0.5%
  - $100,000-$199,999: 0.5%
  - $200,000 or more: 2%
- App-Based For-Hire Vehicle
  - Under $25,000: 1%
  - $25,000-$49,999: 0.2%
  - $50,000-$74,999: 0.1%
  - $75,000-$99,999: 0.1%
  - $100,000-$199,999: 0.1%
  - $200,000 or more: 0.1%
- Commuter Rail
  - Under $25,000: 1%
  - $25,000-$49,999: 12%
  - $50,000-$74,999: 10%
  - $75,000-$99,999: 10%
  - $100,000-$199,999: 10%
  - $200,000 or more: 10%
- Bus
  - Under $25,000: 10%
  - $25,000-$49,999: 12%
  - $50,000-$74,999: 10%
  - $75,000-$99,999: 10%
  - $100,000-$199,999: 10%
  - $200,000 or more: 10%
- Ferry
  - Under $25,000: 0.1%
  - $25,000-$49,999: 0.1%
  - $50,000-$74,999: 0.1%
  - $75,000-$99,999: 0.1%
  - $100,000-$199,999: 0.1%
  - $200,000 or more: 0.1%
- Subway Vehicle
  - Under $25,000: 18%
  - $25,000-$49,999: 18%
  - $50,000-$74,999: 18%
  - $75,000-$99,999: 18%
  - $100,000-$199,999: 18%
  - $200,000 or more: 18%
- Walk
  - Under $25,000: 49%
  - $25,000-$49,999: 49%
  - $50,000-$74,999: 49%
  - $75,000-$99,999: 49%
  - $100,000-$199,999: 49%
  - $200,000 or more: 49%
- Other
  - Under $25,000: 6%
  - $25,000-$49,999: 6%
  - $50,000-$74,999: 6%
  - $75,000-$99,999: 6%
  - $100,000-$199,999: 6%
  - $200,000 or more: 6%

Significantly greater than Citywide at 95% confidence level
Significantly less than Citywide at 95% confidence level
TRIP DISTANCE AND DURATION BY INCOME

TRIP DURATION BY INCOME
UNWEIGHTED N = 68,823, WEIGHTED N = 27,422,903

- **Under $25,000**: Less than 10 minutes 49%, 10 to 20 minutes 24%, 20 minutes to 1 hour 19%, 1 hour or more 7%.
- **$25,000-$49,999**: Less than 10 minutes 45%, 10 to 20 minutes 27%, 20 minutes to 1 hour 22%, 1 hour or more 10%.
- **$50,000-$74,999**: Less than 10 minutes 41%, 10 to 20 minutes 22%, 20 minutes to 1 hour 10%, 1 hour or more 8%.

TRIP DISTANCE BY INCOME
UNWEIGHTED N = 68,736, WEIGHTED N = 27,149,883

- **Under $25,000**: Less than 1 mile 50%, 1 to 2 miles 14%, 2 to 5 miles 14%, 5 to 10 miles 9%, 10 miles or more 9%.
- **$25,000-$49,999**: Less than 1 mile 56%, 1 to 2 miles 12%, 2 to 5 miles 17%, 5 to 10 miles 16%, 10 miles or more 14%.
- **$50,000-$74,999**: Less than 1 mile 44%, 1 to 2 miles 17%, 2 to 5 miles 17%, 5 to 10 miles 14%, 10 miles or more 9%.

Significantly **less** than Citywide at 95% confidence level
Significantly **greater** than Citywide at 95% confidence level
NEW MOBILITY SERVICES USERS BY INCOME

PERCENT OF APP-BASED FOR-HIRE VEHICLE SERVICE
USERS BY INCOME
UNWEIGHTED N = 3,254, WEIGHTED N = 6,375,373

- Under $25,000: 52%
- $25,000-$49,999: 55%
- $50,000-$74,999: 56%
- $75,000-$99,999: 65%
- $100,000-$199,999: 67%
- $200,000 or more: 81%
- Prefer not to answer: 54%

PERCENT OF BIKESHARE SERVICE
USERS BY INCOME
UNWEIGHTED N = 3,161, WEIGHTED N = 6,261,200

- Under $25,000: 13%
- $25,000-$49,999: 8%
- $50,000-$74,999: 7%
- $75,000-$99,999: 24%
- $100,000-$199,999: 18%
- $200,000 or more: 19%
- Prefer not to answer: 20%