

Executive Summary

Introduction

Chapter 1: Study Area Characteristics

Chapter 2: Zoning Requirements and Market Conditions for Off-Street Parking

Chapter 3: The Inner Ring Household Travel Survey

Chapter 4: Built Parking Survey and DMV Registration Analysis

Chapter 5: Parking Requirements and Affordable Housing in the Inner Ring

Chapter 6: Summary of Findings and Policy Goals

Appendix 1: Neighborhood Profiles

Appendix 2: Built Parking and Affordable Housing Technical Appendix

Appendix 3: Household Travel Survey Technical Appendix

INNER RING

Residential Parking Study

NYC Department of City Planning

Introduction

The Inner Ring is comprised of dense, urban, transit rich neighborhoods just beyond the Manhattan Core, including Upper Manhattan and portions of the Bronx, Queens and Brooklyn. The Inner Ring Household Travel Survey was designed to determine the role that off-street parking plays in decision to own and use a car within this study area, and to describe travel patterns of households with and without cars. Households living within the Inner Ring have a low percentage of car-owning households (35 percent) compared to New York City (46 percent) and the United States (91 percent).¹ This is in part because of dense development patterns and an extensive transportation network within the Inner Ring that makes not owning a car a popular life-style choice. However, some households choose to have a car and, in doing so, make decisions on when and where to drive it, and where to park it when not in use.

The survey consists of forty questions divided into three sections: questions for all households, questions only for households with cars, and questions only for households without cars. All respondents were asked general questions about their households, including the number of licensed drivers, and whether there is off-street parking at their residence. The second section asked car-owning households questions about where they park, how often and for what purpose they use their car, and what they would do if their car were not available for a particular trip. The third section asked non-car-owning households why they do not own a car and how frequently they use a taxi, rental car, or similar option.

Data Sources and Methodology

In coordination with NYC Department of Transportation, the consultant URS Corporation/NuStats created the sampling methodology and collected data for the Inner Ring Household Travel Survey. The survey universe was comprised of approximately 1.1 million households living within the Inner Ring Study Area geography.² URS/NuStats identified the sample of households using a stratified probability sample approach, and conducted telephone interviews with participating households. The telephone interviews occurred between November 2009 and January 2010.

¹ U.S. Census Bureau; American Community Survey, 2005-2009.

² U.S. Census Bureau; Decennial Census, 2000.

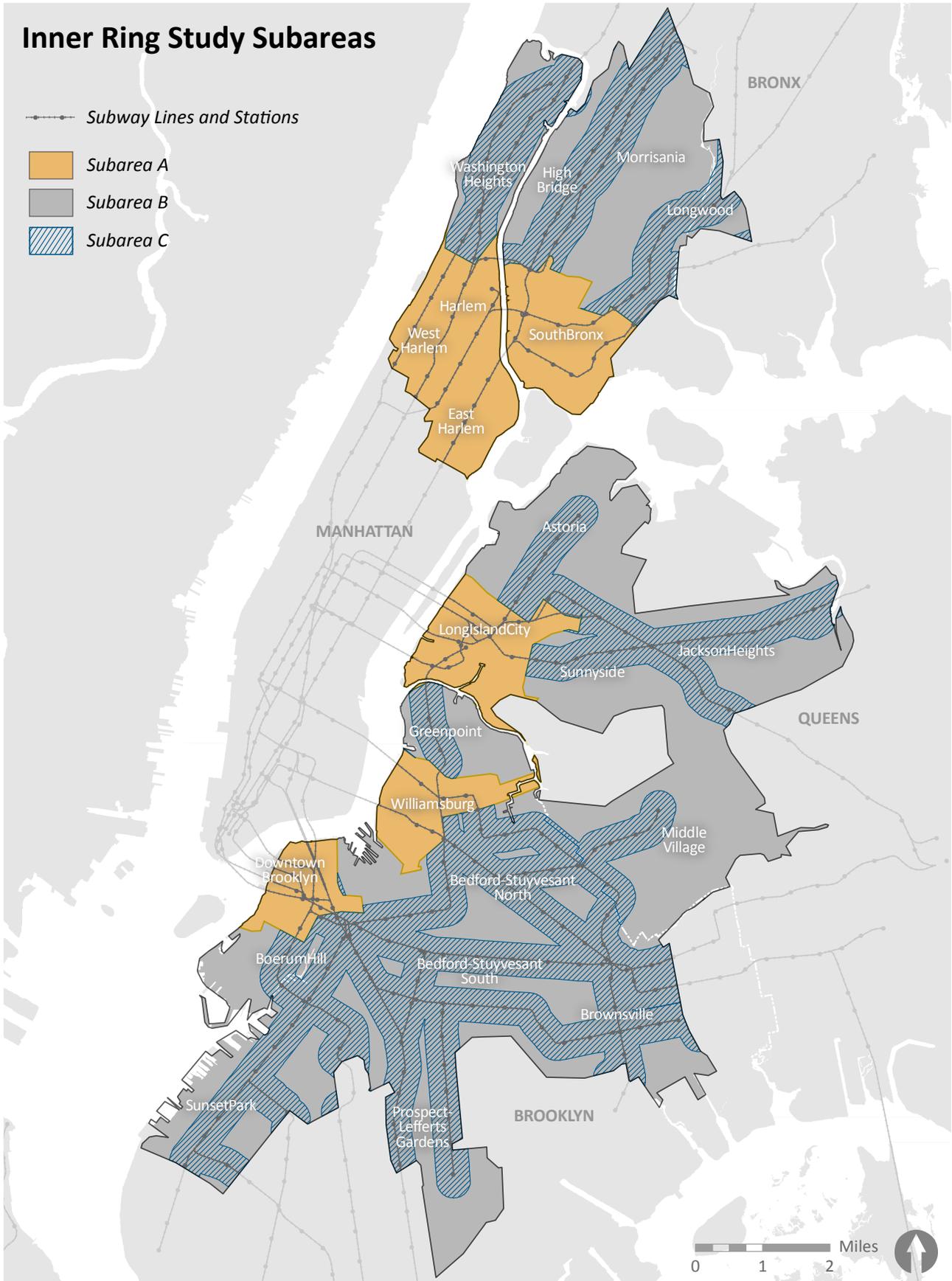
Inner Ring Study Subareas

 Subway Lines and Stations

 Subarea A

 Subarea B

 Subarea C



To develop the stratified sample that represented both vehicle ownership and subarea geography, the Inner Ring Study Area was divided into three Subareas (A, B, and C) based on proximity to transit and other neighborhood characteristics. These Subareas are shown in the preceding map.

- Subarea A is comprised of ZIP codes where the majority of Census Block Groups:
 - are within a quarter mile of more than one subway line
 - have a low modal split of residents who commute by vehicle
 - have a high population density

Access to more than one subway line affords greater mobility and flexibility in public transportation travel. This access also means that a greater number of destinations are just a “one-seat ride” from home.

- Subarea B is comprised of ZIP codes where the majority of Census Block Groups:
 - are within one-half mile of a single subway line
 - have a higher modal split of residents who commute by vehicle and/or have a somewhat lower population density than “A” zones.

Subarea B is served by fewer subway options than Subarea A, and some residents of Subarea B are more distant from the subway. Still, Subarea B is still considered comparatively accessible to public transportation, with few residents living beyond a half-mile from a subway line.

- Subarea C is the geographic area within Subarea B located within one-quarter mile from a single subway line.

Subareas A, B and C were further split into individual study areas by borough, recognizing that there might be additional land use, demographic and other variations among borough geographies.

Based on available resources, a maximum of about 1,300 surveys could be collected, so a stratified random sample was created to ensure that a statistically valid number of surveys (at least 75) were collected from 16 different strata, defined by 8 subareas, each divided into and vehicle-owning and non-vehicle-owning households. In all, 1,307 surveys were collected: 652 from vehicle-owning households and 655 from non-vehicle-owning households. When the survey data was analyzed, a “weight” was applied to each survey within its stratum to reflect the proportion of households for the stratum that made up the Inner Ring. This weighting ensured that when the data was analyzed the survey responses were proportionally representative of location and vehicle ownership characteristics for residents of the Inner Ring. All charts within the reports reflect statistics that are based on weighted surveys. The “n” numbers on the charts, however, reflect the unweighted number of surveys that were collected in order to clarify the statistical validity of the sample.

As an example of the weighting methodology, in Bronx Subarea A, the number of households (38,822) represents about 3.5% of the total number of households within the entire Inner Ring (1,114,320), so the surveys collected in Bronx Subarea A should represent about 3.5% of all collected within the Inner Ring. In actuality, however, 150 surveys were collected in this subarea, represented 11% of all surveys collected within the Inner Ring. Furthermore, within Bronx Subarea A, about half of the 150 surveys collected were from households that did not own vehicles, while census data showed this actual proportion to be 80 percent. To account for these discrepancies, each of the 76 surveys within the stratum “Bronx Subarea A/Non-Vehicle Owner” was assigned a weight of .48, making the weighted total value of surveys for this stratum 36.5. The adjusted weighted 36.5 surveys represented

2.8% of the 1307 surveys collected in the Inner Ring, just as the 31,084 households in this stratum represent 2.8% of the 1,114,320 households in the Inner Ring. Similarly, each of the 74 surveys within the stratum “Bronx Survey A/Vehicle Owner” was assigned a weight of .12, making the weighted total value of surveys for this stratum 9.1. The adjusted 9.1 surveys represented .7% of the 1,307 surveys collected in the Inner Ring, just as the 7,738 households in this stratum represent .7% of the 1,114,320 households in the Inner Ring.

This methodology was replicated so that surveys within in each stratum were weighted to reflect the appropriate amount of influence when calculating the survey results. For the Bronx Subarea A example, the weighted total of all surveys collected for the two strata in this Subarea (36.5 + 9.1 = 45.6) represented 3.5% of the 1,307 surveys collected for the entire Inner Ring. Weighting applied not just to geography but also to vehicle ownership. For instance, while 51% of the actual number of surveys collected in this Subarea (76 out of 150) were from non-vehicle owners, 80% of the weighted surveys from Bronx Subarea A were from non-vehicle owners (36.5 out of 45.6), matching the rates of vehicle ownership in the area. If a survey question was analyzed for “Bronx Subarea A,” the “n” number shown on a chart in this report would be would be 150, reflecting the actual number of surveys collected, rather than the weighted number 45.6, which would appear to be an inadequate sample size.

Determining the Weight Value for Surveyed New Residential Buildings, by Stratum

Stratum (study subarea; car ownership status)	Total* Households (universe)	Percent Distribution (universe)	Target Survey Count	Completed Surveys (sample)	Percent Distribution (sample)	Stratum Weight ($\frac{\text{universe distribution}}{\text{sample distribution}}$)	Weighted Cases per Stratum
Manhattan: A & C Non-car owners	156,719	14.1	75	77	5.9	2.39	184
Manhattan: A & C Car owners	36,594	3.3	75	75	5.7	0.57	43
Bronx: A Non-car owners	31,084	2.8	75	76	5.8	0.48	37
Bronx: A Car owners	7,738	0.7	75	74	5.7	0.12	9
Bronx: B & C Non-car owners	133,651	12.0	100	99	7.6	1.58	157
Bronx: B & C Car owners	43,672	3.9	100	101	7.7	0.51	51
Brooklyn: A Non-car owners	34,332	3.1	75	75	5.7	0.54	40
Brooklyn: A Car owners	15,070	1.4	75	75	5.7	0.24	18
Brooklyn: B & C Non-car owners	271,972	24.4	100	101	7.7	3.16	319
Brooklyn: B & C Car owners	136,196	12.2	100	100	7.7	1.60	160
Queens: A Non-car owners	6,787	0.6	75	68	5.2	0.12	8
Queens: A Car owners	3,639	0.3	75	70	5.4	0.06	4
Queens: B Non-car owners	51,184	4.6	75	77	5.9	0.78	60
Queens: B Car owners	62,084	5.6	75	78	6.0	0.93	73
Queens: C Non-car owners	75,725	6.8	75	82	6.3	1.08	89
Queens: C Car owners	47,873	4.3	75	79	6.0	0.71	56
Entire Inner Ring Study Area	1,114,320	100.0	1,300	1,307	100.0		1,307

* Source: U.S. Census Bureau; Decennial Census, 2000.

Brooklyn B & C and Bronx B & C have a confidence interval of 95 percent; all other subareas have a confidence interval of 90 percent.

Survey Design and Data Analysis

The survey is comprised of three primary sections. Questions one through ten were asked of all 1,307 survey participants. Questions 11 through 34 were specifically designed for car-owning households. Questions 36 through 39 were only asked of non-car owning households. In addition, questions 35 and 40 were open-ended questions about neighborhood transportation improvements asked of both car-owning and non-car-owning households. The survey results are listed in the order they were asked on the survey, with a few charts at the end of this document showing additional analysis.

To better understand households' decisions about parking and travel patterns, the survey was designed to ask follow-up questions where appropriate. For example, question seven asks about the presence of off-street parking at the home residence. If the survey respondent said that there was off-street parking at his residence, he was then asked follow-up questions about a waitlist for off-street parking. Questions like these occur throughout the survey, particularly in the section for car-owning households.

The survey instrument, along with a flowchart depicting the skip-stop pattern of questions, can be found at the end of this appendix.

Survey Results

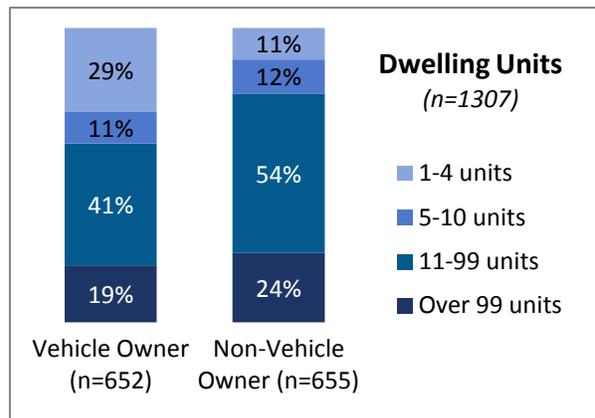
All survey results are displayed by household vehicle ownership status.

Questions for All Households (Q1-Q10):

(1) Confirmation of telephone number at address. (Address used for sampling purposes only.)

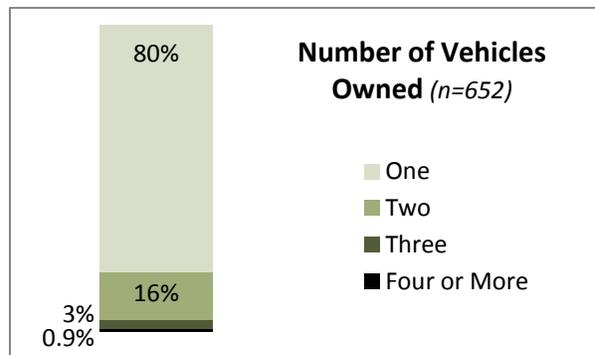
(2) How many residential units are in your building?

The majority of both vehicle and non-vehicle-owning respondents lived in large buildings with 11 or more units (60 and 78 percent, respectively). Vehicle owners were almost three times as likely as non-vehicle owners to live in small buildings with one to four units (29 percent versus 11 percent).



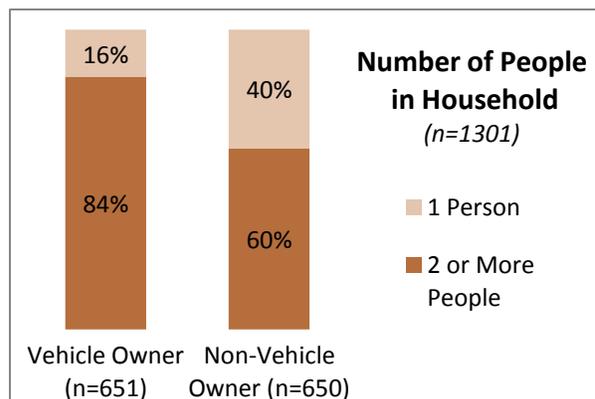
(3) How many personal working vehicles does your household own or lease?

Of the vehicle-owning households surveyed, 80 percent owned one vehicle and 16 percent owned two vehicles.



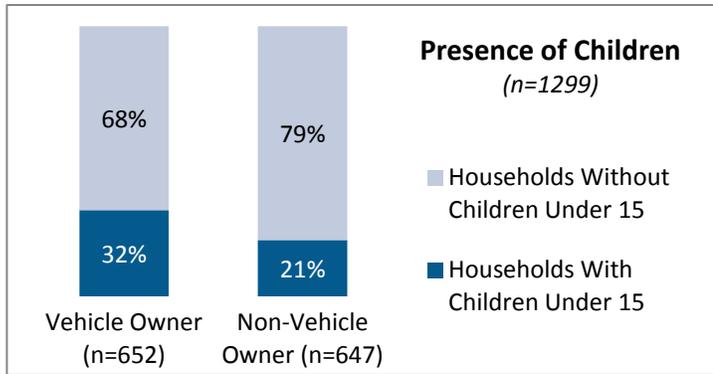
(4) How many people reside in this household?

Over one-third (40 percent) of the non-vehicle owners surveyed lived in single person households, compared to 16 percent of vehicle owners.



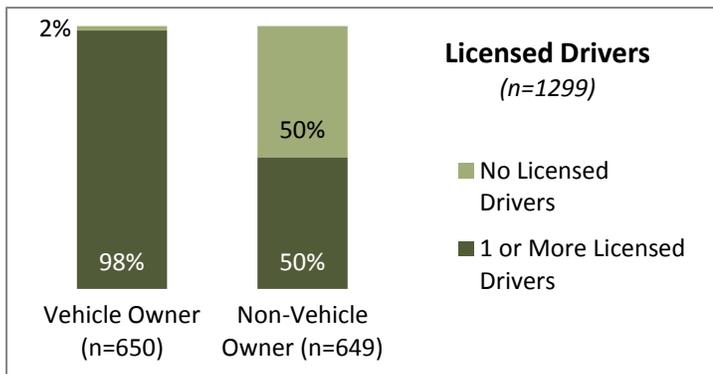
(5) *How many people in this household are age 14 and under?*

Almost one-third (32 percent) of vehicle owners surveyed had children in the household, compared to 21 percent of non-vehicle owners.



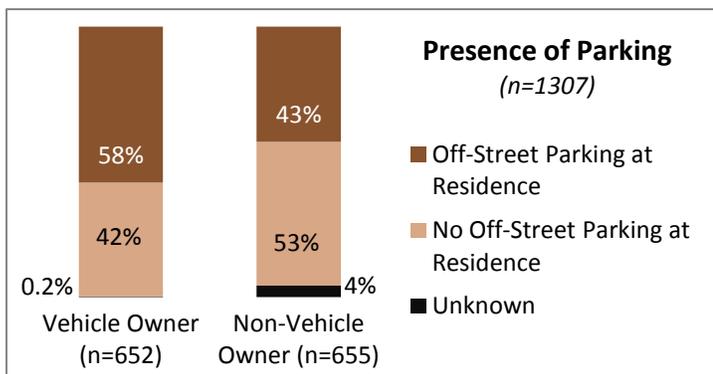
(6) *How many people in this household have a valid driver's license?*

Half of the non-vehicle-owning households surveyed did not have a licensed driver in the household.



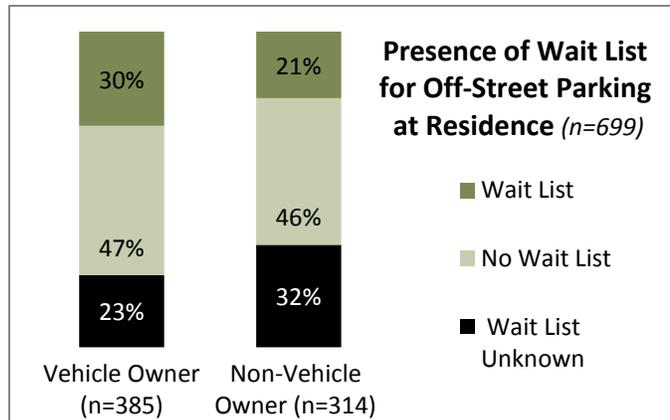
(7) *Is there off-street parking at your residence?*

Over half of the vehicle-owning respondents surveyed (57 percent) said off-street parking existed at their residence, compared to 43 percent of non-vehicle owners.



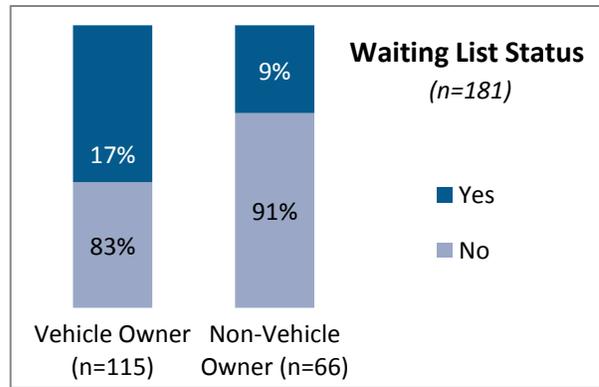
(8) *Is there a waiting list to be able to obtain off-street parking at your residence?* (Question 8 was asked of respondents who reported off-street parking at their residence for question 7.)

Approximately half of vehicle-owning and non-vehicle-owning households reported there was no wait list for off-street parking at their residence.



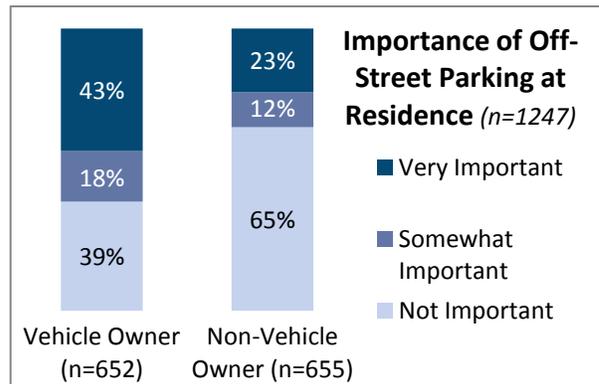
(9) *Are you currently on the waiting list?*
 (Question 9 was asked of respondents who reported that there was a waitlist for off-street parking at their residence for question 8.)

Seventeen percent of vehicle-owning households and nine percent of non-vehicle-owning households were on their building's waiting list for an off-street parking space.



(10) *How important was the availability of off-street parking in your decision to live at your current residence?*

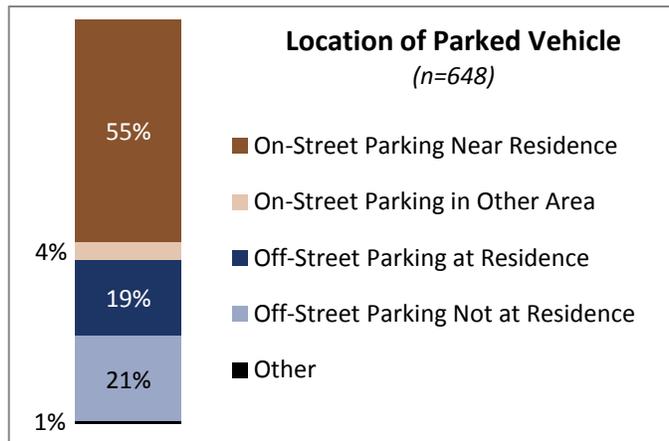
Nearly two-thirds (65 percent) of non-vehicle owners thought parking was not important, while almost the same percentage (61 percent) of vehicle owners thought parking was somewhat or very important.



• **Questions for Vehicle-Owning Households (Q11-Q34):**

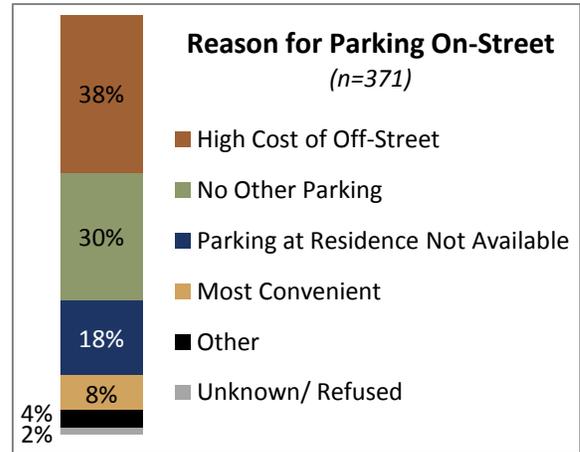
(11) *Where is the vehicle you drive most typically parked at home?*

Of the vehicle-owning households surveyed, over half (55 percent) parked their primary vehicle on the street, near their residence (within five blocks).



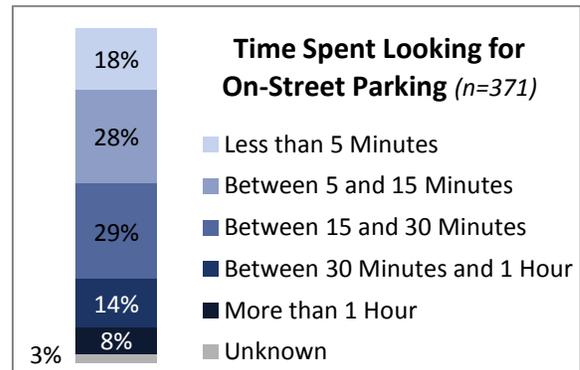
(12) *Why do you park your vehicle on-street (high cost of off-street parking or another reason)?*
 (Question 12 was asked of survey participants who reported they parked their vehicle on-street for question 11.)

Thirty-eight percent of households who parked their vehicle on-street reported the high cost of off-street parking as their primary reason for parking on-street. Approximately 18 percent reported off-street parking at their residence was not available.



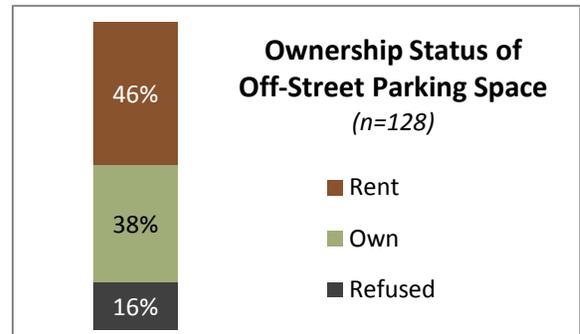
(13) *How long do you typically spend finding on-street parking for your residence?*
 (Question 13 was asked of residents who reported parking on-street for question 11.)

Of the respondents surveyed who parked on-street, 46 percent reported it took them less than 15 minutes to find an on-street parking space for their vehicle.



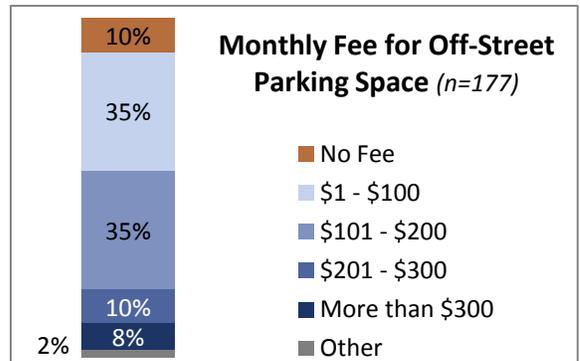
(14) *Do you rent or own your parking space?*
 (Question 14 was asked of vehicle-owning households who reported they park their vehicle off-street at their residence or 'other' parking location for question eleven.)

Almost half (46 percent) of the respondents said they rented their parking space and 38 percent said they owned their parking space.



(15) *How much is the monthly fee per space at your parking location?*
 (Question 15 was asked of respondents who said they rented their off-street parking space for question 14 or parked off-street not at their residence).

Nearly three-fourths (70 percent) of respondents reported paying less than \$200 per month for an off-street parking space either at their residence or at a parking facility elsewhere.



(16) *How much was the cost for purchasing an on-site parking space at your residence?*

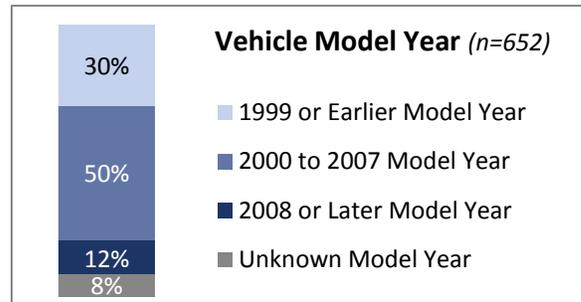
(Question 16 was asked of respondents who reported owning their parking space for question 14.)

Over half (53 percent) of the respondents who reported they owned their parking space said their parking space was free; seven percent reported a purchase price, with \$50,000 being the highest price paid for an off-street parking space.



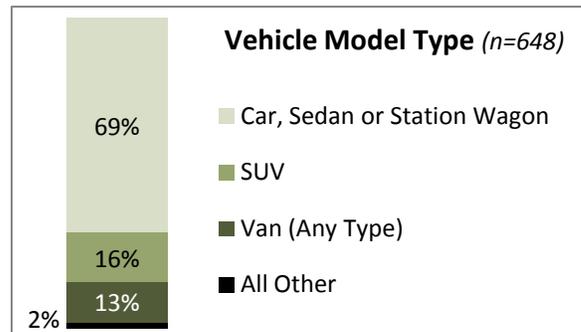
(17) *What is the model year of the vehicle you drive the most?*

Nearly two-thirds of survey respondents (62 percent) had a vehicle less than 10 years old.



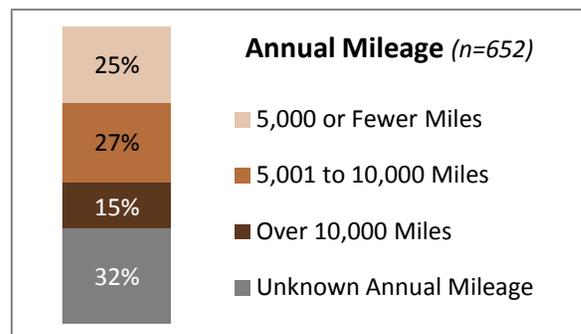
(18) *How would you describe the vehicle you drive most often?*

Over two-thirds of survey respondents (69 percent) drove a car or sedan. Only 16 percent of households surveyed drove an SUV.



(19) *Approximately how many miles is the vehicle driven during a typical year? (n=652)*

About one-quarter (26 percent) of survey respondents reported driving their vehicle fewer than 5,000 miles during a typical year, with close to the same share (27 percent) driving between 5,000 and 10,000 miles.

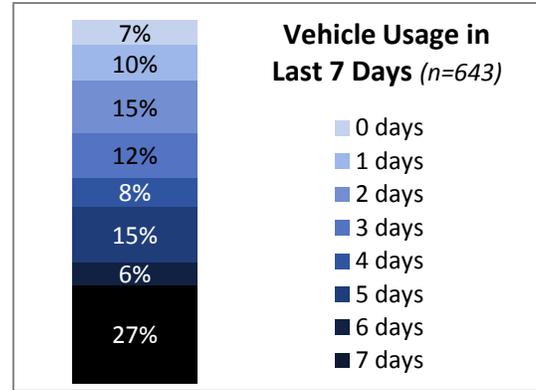


According to a 2010 survey related to electric vehicles, vehicle-owning households in New York City drive less than their counterparts outside of New York City, logging approximately 8,900 Vehicle Miles Traveled (VMT) per year, about 20 percent less than the national average per vehicle.³

³ City of New York, *Exploring Electric Vehicle Adoption in New York City*, January 2010, p. 8.

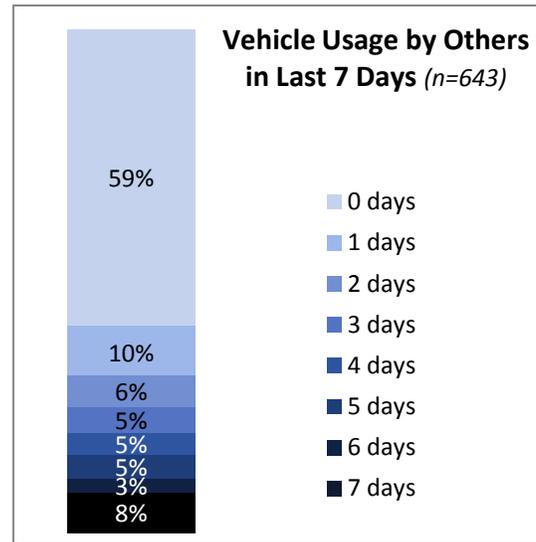
(20) *How many days have you driven your vehicle in the previous seven days?*

Nearly one-third (32 percent) of vehicle-owning households reported driving their vehicle two days or fewer in the past week. Almost half (48 percent) of vehicle-owning households reported driving their vehicle five or more days in the past week.



(21) *How many days did other members of the household drive the vehicle in the previous seven days?*

Approximately 40 percent of survey respondents said their vehicle was driven by another member of the household at least once in the past seven days.



(22) *A-- For the past seven days, did you use your vehicle for any of these types of trips? Check all that apply.*

More survey respondents used their vehicles at least once **in the past week** for shopping and household errands (84 percent), and visiting family and friends (54 percent), than for commuting to work (42 percent).

B-- If so, how many days? (n=604)

Shopping and household errands were the most common trips reported by survey respondents, but over half (53 percent) only used their vehicle one or two days in the past week for these trips. Just over one-quarter of vehicle-owning respondents (28 percent) used the vehicle to commute to work five to seven days in the past week.

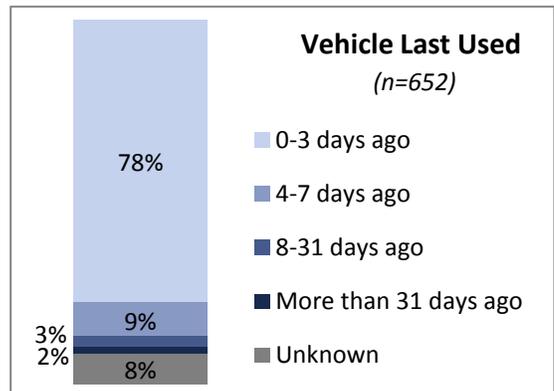
Vehicle Usage for Past Week by Days Used Selected for Trip Purpose

Days Vehicle Use for Trip	Commute to Work (n=256)	Work-Related (n=81)	Shopping & Household Errands (n=495)	Transporting Children (n=144)	Visit Family & Friends (n=325)	Leisure or Entertainment (n=256)	Travelling for Vacation / 2 nd Home (n=64)	Alternate Side Parking (n=231)	Other Purpose (n=32)
1 day	4%	3%	27%	4%	25%	20%	4%	9%	2%
2 days	4%	3%	26%	6%	16%	13%	3%	11%	1%
3 days	3%	2%	15%	3%	7%	4%	1%	6%	1%
4 days	2%	1%	4%	1%	3%	2%	–	5%	1%
5 days	18%	2%	5%	4%	1%	1%	1%	3%	–
6 days	5%	1%	–	–	–	–	–	–	–
7 days	5%	2%	4%	3%	2%	1%	–	4%	–
Total Times Vehicle Used at Least Once in the Past 7 Days	41%	13%	82%	22%	53%	41%	9%	38%	6%

*Percentages in the bottom row may not be the exact same value as the percentages in the chart for question 22 because some survey respondents did not report the number of days they used their primary vehicle in the past seven days.

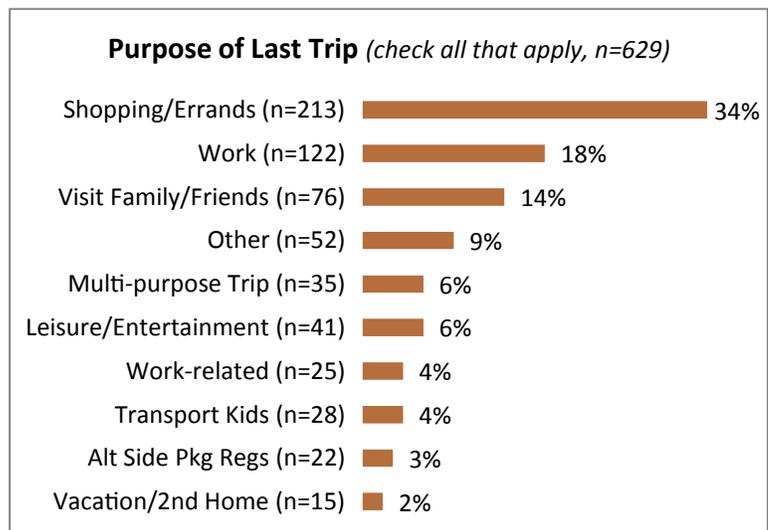
(23) When was the date you last drove your vehicle?

Over three-fourths (78 percent) of vehicle-owning survey respondents reported driving their vehicle in the last three days.



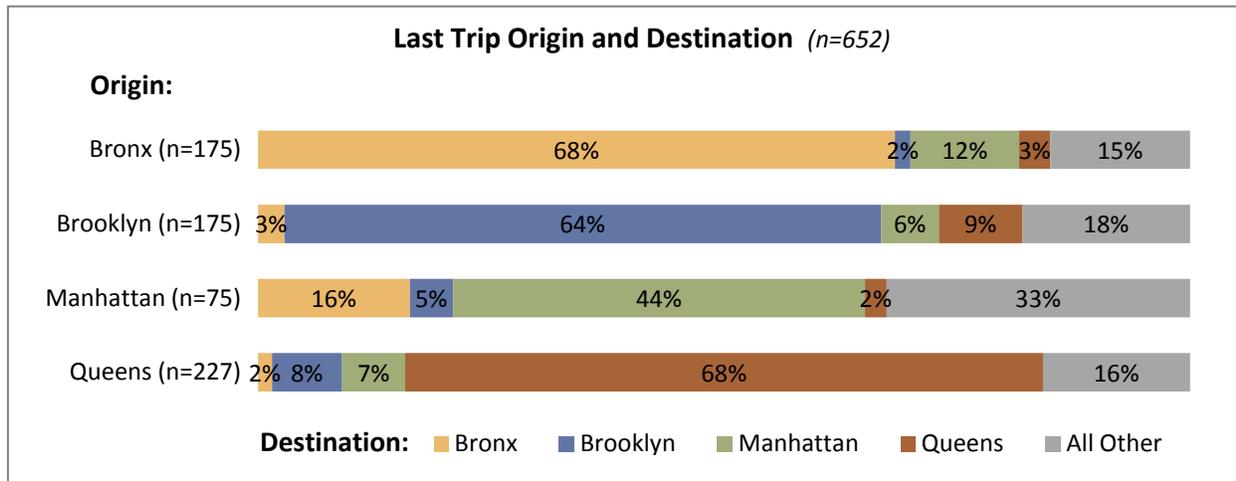
(24) What was the purpose of your last trip? Check all that apply.

Over one-third of respondents (34 percent) reported shopping or errands as being the purpose of their last vehicle trip, and 22 percent reported a commuting or work-related trip. Only 6 percent of respondents reported a multi-purpose trip.



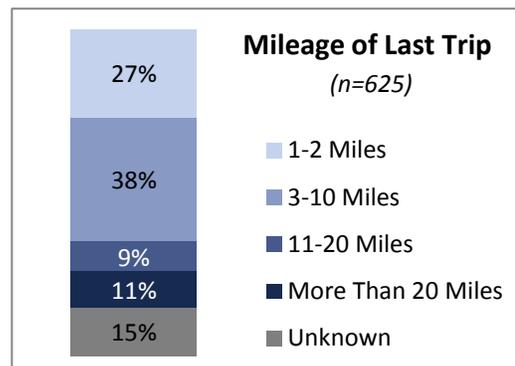
(25) What was the destination of your last trip?

For all boroughs except for Manhattan, about two thirds of trips started and ended within the same borough. For trips that started in Manhattan, the share for trips ending in the same borough was 44 percent.



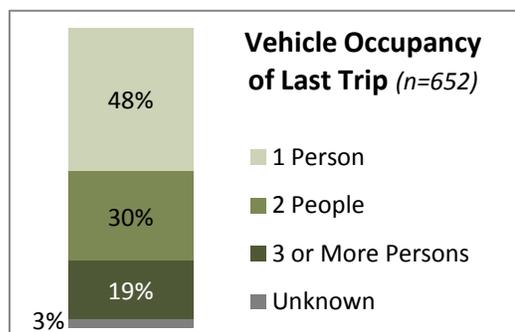
(26) Approximately how many miles was your trip one way?

The majority of **last** trips were short, with slightly over one-quarter (27 percent) ranging from 1-2 miles (one-way), and 38 percent ranging from 3-10 miles (one-way).



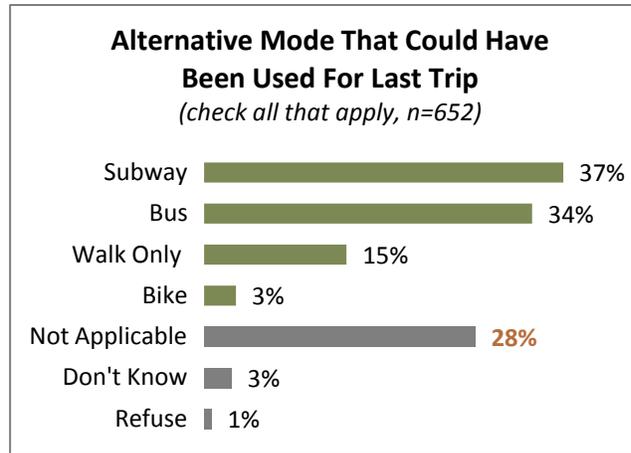
(27) Including yourself, how many people were in the vehicle during the last trip?

Nearly half (48 percent) of vehicle-owning respondents reported driving alone on their last trip.



(28) *If your household vehicle had not been available for your last trip, how could you have reached your destination?*

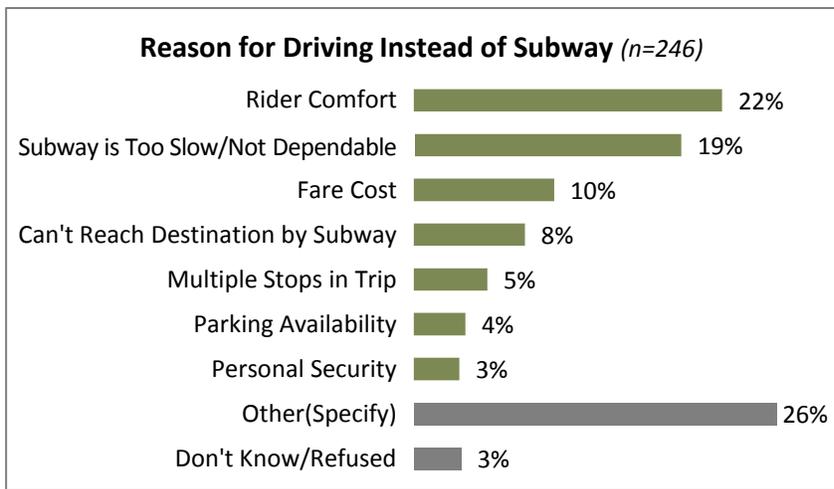
Subway and the bus were the most common alternatives selected if the respondents' vehicle had not been available for their last trip (37 percent and 34 percent respectively). Over one-quarter (28 percent) of respondents only selected 'Not Applicable,' implying the respondent saw no practical alternative to driving.



(29) *What was your primary reason for driving instead of taking the subway for your last trip?*

(Question 29 was asked of respondents who selected subway for question 28).

Rider comfort and subway speed/dependability were among the most common reasons for not using the subway for the last trip (22 percent and 19 percent, respectively).

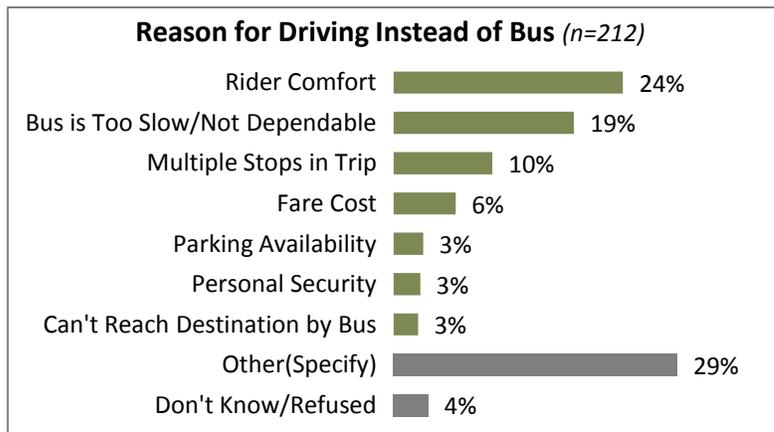


Over one-quarter of respondents (26 percent) reported "Other" reasons which included convenience, traveling with passengers, and carrying packages.

(30) *What was your primary reason for driving instead of taking the bus for your last trip?*

(Question was 30 asked of respondents who selected bus for question 28).

Rider comfort and bus speed/dependability were among the most common reasons for **not taking a bus** for the last trip (24 percent and 19 percent, respectively).

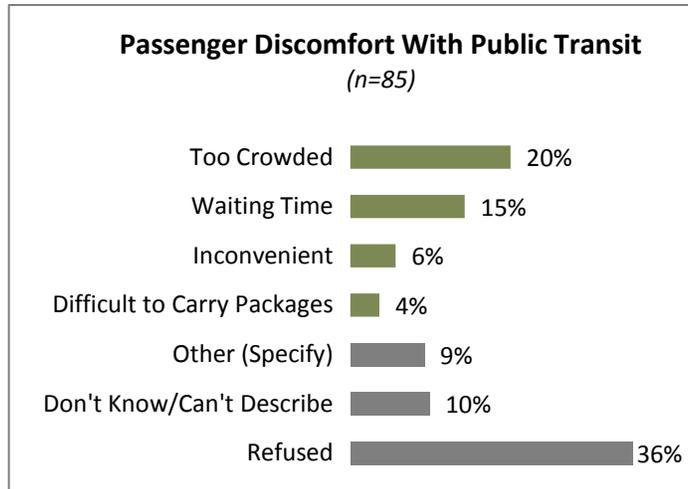


Close to one-third of respondents (29 percent) reported "Other" reasons (including convenience, traveling with passengers, and carrying packages).

(31) *What in particular do you find uncomfortable about public transit?*

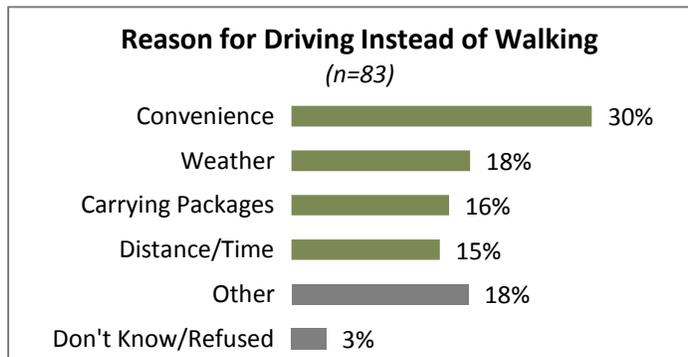
(Question 31 was asked of survey respondents who answered rider comfort for question 29 and question 30).

Over one-third of respondents (36 percent) refused to state a reason why they find public transportation uncomfortable. Twenty percent of respondents said public transit was too crowded.



(32) *What was your reason for driving instead of walking to your destination?*

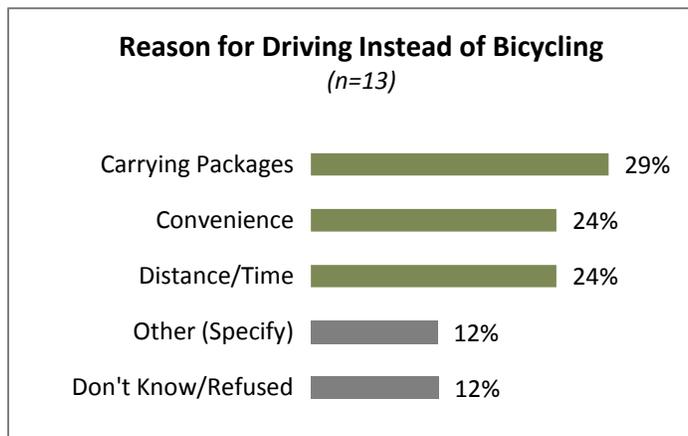
Almost one-third of survey respondents said they could have walked to their last trip destination, but chose not to for convenience.



(33) *What was your reason for driving instead of biking to your destination?*

(Question 33 was asked of respondents who selected bike for question 28).

A small number of survey respondents said they could have bicycled to their last trip destination, but chose not to for reasons listed below. Carrying packages was the main reason cited for not bicycling.

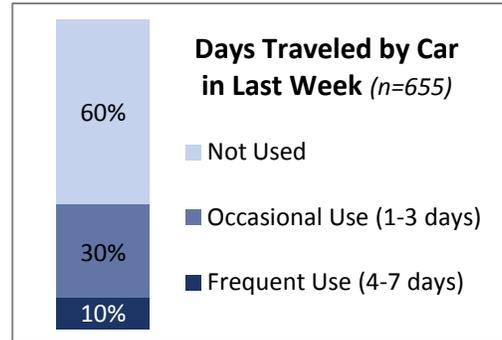


(34) See Question 40

● **Questions for Non-Vehicle-Owning Households (Q35-Q40):**

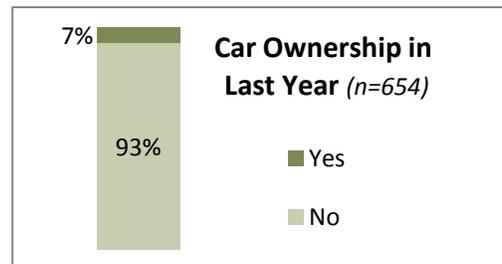
(35) *How many days did you travel by car in the previous 7 days?*

Almost half (40 percent) of respondents that did not own a car reported traveling by car in the last week.



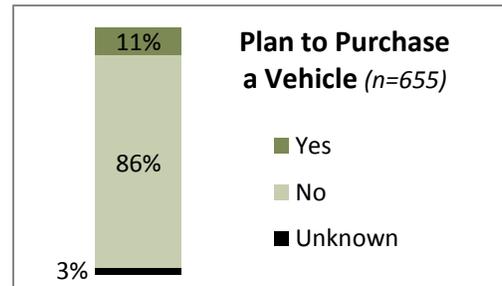
(36) *Have you owned a vehicle within the last year?*

Approximately 7 percent of surveyed non-vehicle-owning households owned a vehicle in the past year.



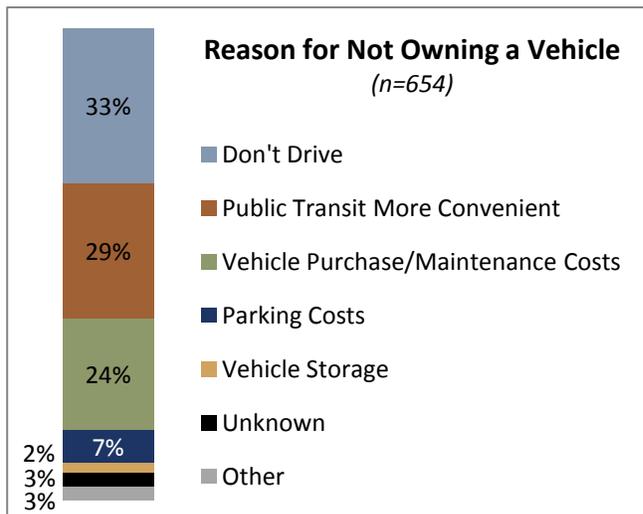
(37) *Are you planning on purchasing a vehicle within the next year?*

Only a small share of non-vehicle-owning respondents (11 percent) plan to purchase a vehicle within the next year.



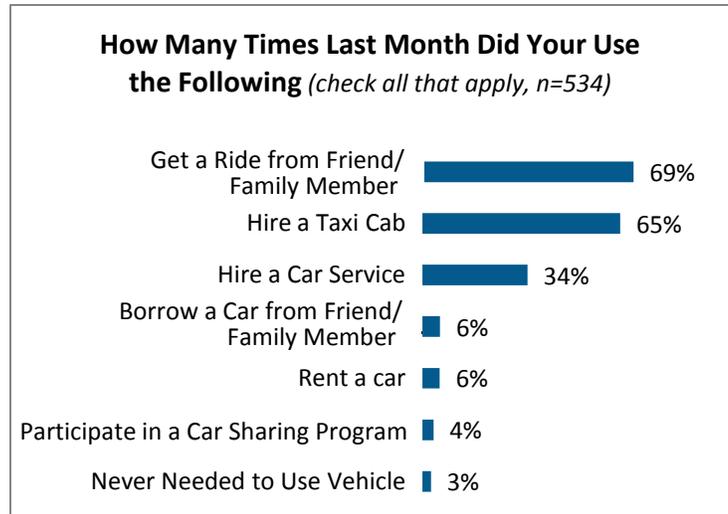
(38) *What is the primary reason that your household does not own a vehicle?*

One-third of survey respondents said they did not own a vehicle because they did not drive. Of non-vehicle-owning household surveyed, 29 percent said public transit was more convenient.



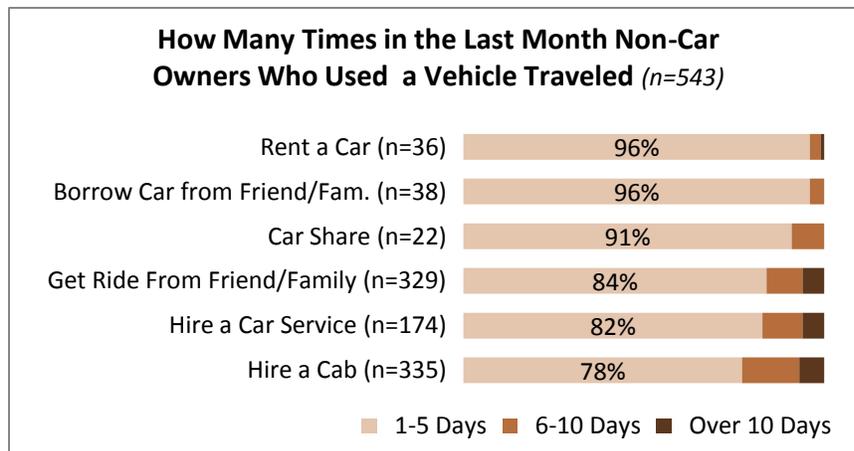
(39) A-- Did you use the following in the last month? Check all that apply.

Hiring a taxi and getting a ride from a friend or family member were the most commonly cited means of traveling by vehicle among non-vehicle-owning survey respondents. Less than 5 percent of respondents used a car share vehicle in the past month. Only 3 percent of respondents said they never needed to use a vehicle.



B-- If so, how many times?

For all vehicle modes, the majority of non-vehicle owners who used a vehicle within the last month did so on between 1 and 5 days.

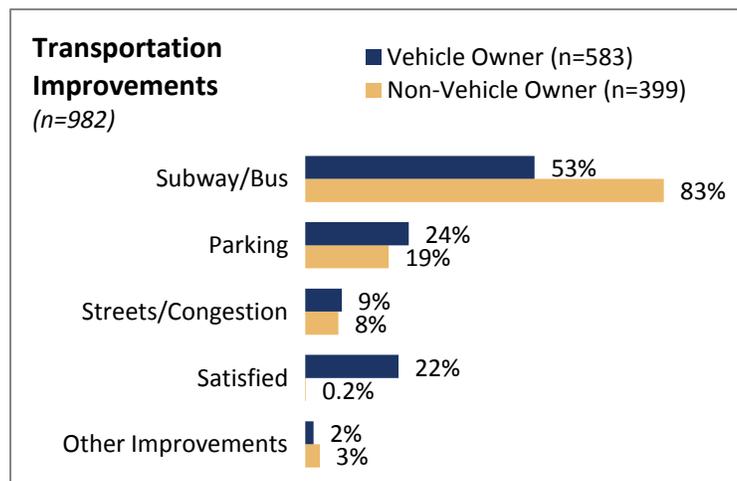


Questions for Vehicle-Owning and Non-Vehicle-Owning Households:

(35) & (40) How could transportation be improved in your neighborhood? Free response.

(Responses to questions 35 and 40 were organized into five general categories.)

A large share of both vehicle and non-vehicle-owning survey respondents (53 and 83 percent, respectively) would like to see improvements to mass transit. The next most common response was that parking could be improved (24 percent of vehicle owners and 19 percent of non-vehicle owners).



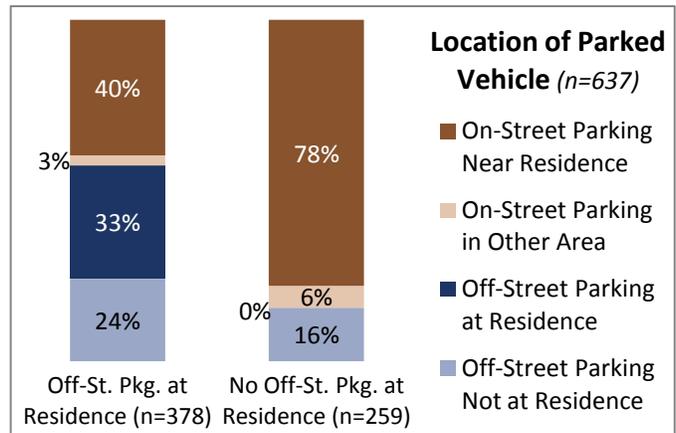
Additional Analysis For Vehicle-Owning Households Pertaining To Location Of Parked Vehicle:

For the following select pairs of survey questions related to residential parking, the survey data was cross tabulated to produce more detailed statistics.

Cross tabulation of Questions (11) and (7)

Location of parked vehicle by presence of off-street parking at residence.

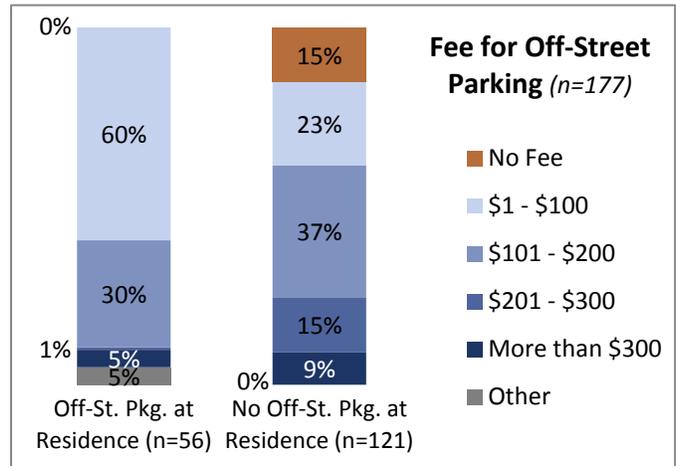
Of the vehicle-owning households surveyed, 39 percent of households with off-street parking at their residence parked their primary vehicle on-street, near their residence (within five blocks). Only one-third of respondents with off-street parking at their residence parked at their residence.



Cross tabulation of Questions (15) and (7)

Monthly fee for off-street parking by presence of off-street parking at residence.

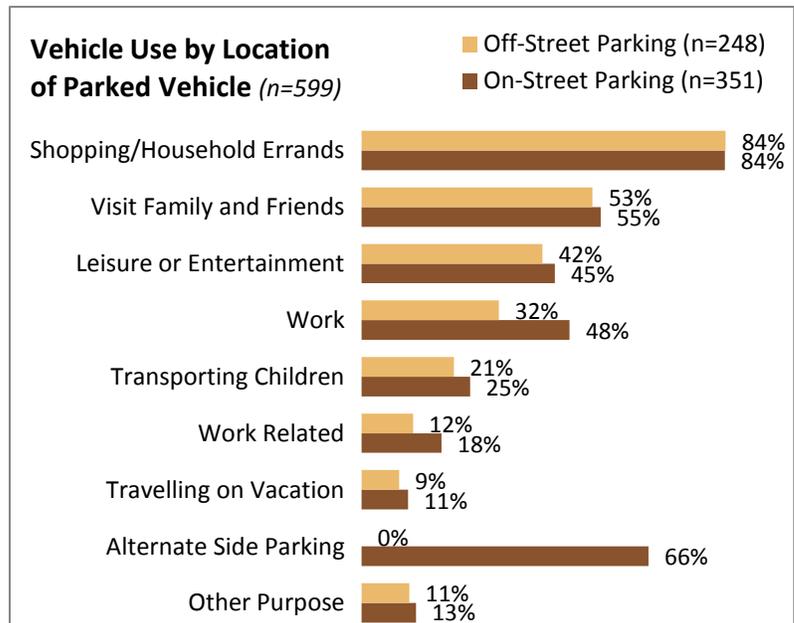
Respondents who park at their residences reported paying less for off-street parking than those who parked at another location: 6 percent of respondents who rented a parking space at their residence compared to 24 percent of those who rented a parking space elsewhere paid a monthly fee of more than \$200 per month.



Cross tabulation of Questions (22) and (11)

Vehicle use for past seven days by location of parked vehicle. Check all that apply.

More survey respondents that parked on-street used their vehicle for commuting and work-related trips in the past seven days than those that parked off-street (66 percent versus 44 percent). Other patterns of usage were similar between on-street and off-street parkers (except for trips to move cars for alternate-side parking).



Inner Ring Household Survey Instrument

Hi, this is _____ calling on behalf of the New York City Department of City Planning. We're conducting a survey to gather information to improve the travel options available to New York City residents like you. May I speak with an adult 18 years of age or older?

1. First, I'd like to verify that I'm calling <ADDRESS>? Is this the correct address?

- 1. YES
- 2. NO (T&T)
- 3. DK (T&T)
- 99. RF (T&T)

2. How many residential units are in your building?

VERBATIM

- 98. DK
- 99. RF

3. Now, I have some questions about your household. How many working personal vehicles does your household own or lease? This can be a car, truck, or motorcycle? WATCH QUOTAS BY AREA

- 1. ZERO
- 2. ONE
- 3. TWO
- 4. THREE
- 5. FOUR OR MORE
- 99. RF

4. How many people reside in this household?

[Range 1-9]

- 99. RF

5. How many people in this household are age 14 and under?

[Range 1-9]

- 99. RF

6. How many people in this household have a valid driver's license?

[Range 1-9]

- 99. RF

Inner Ring Household Survey Instrument

7. Is there off-street parking at your residence?

- 1. YES
- 2. NO (SKIP TO Q10)
- 98. DK (SKIP TO Q10)
- 99. RF (SKIP TO Q10)

8. Is there a waiting list to be able to obtain off-street parking at your residence?

- 1. YES
- 2. NO (SKIP TO Q10)
- 98. DK (SKIP TO Q10)
- 99. RF (SKIP TO Q10)

9. Are you currently on the waiting list?

- 1. YES
- 2. NO
- 98. DK
- 99. RF

10. How important was the the availability of off-street parking in your decision to live at your current residence? Was it: REVERSE CODE

- 1. Very important
- 2. Somewhat Important
- 3. Not Important
- 98. DK
- 99. RF

IF Q3=1 (ZERO VEHICLES) SKIP TO Q35

Now, I have some questions about parking and driving. [IF Q3>3, add: "These questions pertain to the vehicle you drive the most."]

11. Where is the vehicle you drive most typically parked at home?

- 1. On-street parking near residence (within 5 blocks)
- 2. On-street parking in other area (5 or more blocks from residence)
- 3. Contracted space with garage/lot off-site (SKIP TO Q15)
- 4. On-site parking at residence (SKIP TO Q14)
- 5. Other (Specify): _____ (SKIP TO Q14)
- 98. DK
- 99. RF

Inner Ring Household Survey Instrument

12. Why do you park your vehicle on-street?
1. VERBATIM
 2. HIGH COST OF OFF-STREET (CONTINUE TO 13, BUT CHANGE 'SKIP TO Q17' to 'SKIP TO 15')
 98. DK
 99. RF
13. How long do you typically spend finding on-street parking for your residence?
1. Less than 5 minutes (SKIP TO Q17)
 2. Between 5 and 15 minutes (SKIP TO Q17)
 3. Between 15 and 30 minutes (SKIP TO Q17)
 4. Between 30 minutes and one hour (SKIP TO Q17)
 5. More than one hour (SKIP TO Q17)
 98. DK (SKIP TO Q17)
 99. RF (SKIP TO Q17)
14. Do you rent or own your parking space?
1. RENT
 2. OWN (SKIP TO Q16)
 99. RF (SKIP TO Q17)
15. How much is the monthly fee per-space at your parking location?
1. VERBATIM (SKIP TO Q17)
 98. DK (SKIP TO Q17)
 99. RF (SKIP TO Q17)
16. How much was the cost for purchasing an on-site parking space at your residence?
1. VERBATIM
 98. DK
 99. RF
17. What is the model year of the vehicle you drive the most?
1. [RANGE 1950-2010]
 98. DK
 99. RF

Inner Ring Household Survey Instrument

18. How would you describe the vehicle you drive most often? Is it a

1. Car, sedan or station wagon
2. Van (ANY TYPE)
3. SUV
4. Pickup truck
5. Other kind of truck
6. RV
7. Motorcycle
8. Other (Specify):_____
98. DK
99. RF

19. Approximately how many miles is the vehicle driven during a typical year?

1. VERBATIM
98. DK
99. RF

20. How many days have you driven it during the previous seven days?

1. [RANGE 0-7]
98. DK
99. RF

21. How many days did other members of the household drive the vehicle in the previous seven days?

1. [RANGE 0-7]
98. DK
99. RF

IF (Q20=0 & Q21=0) SKIP TO Q23

22. During the past seven days, did you use your primary vehicle for any of these types of trips?
FOR CHOICES 1-9, IF YES IMMEDIATELY ASK HOW MANY DAYS (RANGE 1-7)

1. Driving to work (commuting)
2. Work-related trips (meeting with clients, deliveries?)
3. Shopping or household errands
4. Transporting children
5. Visiting friends and family
6. Leisure or entertainment
7. Traveling on vacation or to a second home
8. (IF Q11<3)Moving car for alternate-side-of-the-street parking regulations

Inner Ring Household Survey Instrument

- 9. Other (Specify): _____
- 98. DK
- 99. RF

23. The next questions are about the last time you drove your vehicle. When was the date when you last drove the vehicle?

- 1. VERBATIM (GET DATE): _____
- 97. DK (TOO LONG AGO)
- 98. DK (OTHER)
- 99. RF

24. What was the purpose of your last trip? (Check all that apply)

- 1. Driving to work (commuting)
- 2. Work-related trips (meeting with clients, deliveries?)
- 3. Shopping or household errands
- 4. Transporting children
- 5. Visiting friends and family
- 6. Leisure or entertainment
- 7. Traveling on vacation or to a second home
- 8. (IF Q11<3) Moving car for alternate-side-of-the-street parking regulations
- 9. Other (Specify): _____
- 98. DK
- 99. RF

25. What was the destination for your last trip?

- 1. VERBATIM (GET NYC BOROUGH OR CITY & STATE IF OUTSIDE NYC)
- 98. DK (SKIP TO Q27)
- 99. RF (SKIPTO Q27)

26. Approximately how many miles was your trip one way?

- 1. VERBATIM (MUST BE NUMBER)
- 98. DK
- 99. RF

27. Including yourself, how many people were in the vehicle during the last trip?

- 1. [RANGE 1-9]
- 98. DK
- 99. RF

28. If your household vehicle had not been available for your last trip, how could you have reached your destination? (SELECT ALL THAT APPLY)

Inner Ring Household Survey Instrument

1. Subway
2. Bus
3. Walked only
4. Biked
5. Not Applicable
98. DK
99. RF

IF Q28=1: ASK

29. What was your primary reason for driving instead of taking the subway for your last trip?

1. Rider comfort
2. Can't reach destination by subway
3. Fare cost
4. Multiple stops and/or destinations in trip
5. Subway is too slow or not dependable
6. Parking availability
7. Personal security
8. Other (Specify): _____
98. DK
99. RF

IF Q28=2: ASK

30. What was your primary reason for driving instead of taking the bus for your last trip?

1. Rider comfort
2. Can't reach destination by bus
3. Fare cost
4. Multiple stops and/or destinations in trip
5. Bus is too slow or not dependable
6. Parking availability
7. Personal security
8. Other (Specify): _____
98. DK
99. RF

IF Q29=1 or Q30=1: ASK

31. What in particular do you find uncomfortable about public transit?

1. VERBATIM
99. RF

IF Q28=3: ASK

32. What was your reason for driving instead of walking to your destination?

1. VERBATIM
98. DK
99. RF

Inner Ring Household Survey Instrument

IF Q28=4: ASK

33. What was your reason for driving instead of biking to your destination?

- 1. VERBATIM
- 98. DK
- 99. RF

34. How could transportation be improved in your neighborhood?

- 1. VERBATIM (T&T)
- 98. DK (T&T)
- 99. RF (T&T)

T&T Great! It looks like those are all the questions that I have. I'd like to sincerely thank you for taking the time to speak with me today.

SKIPPED FROM Q10: IF Q3=1 (ZERO VEHICLE) CONTINUE:

35. How many times did you travel by car in the previous seven days?

[Range 1-7]

36. Have you owned a vehicle within the last year?

- 1. YES
- 2. NO
- 98. DK
- 99. RF

37. Are you planning on purchasing a vehicle within the next year?

- 1. YES
- 2. NO
- 98. DK
- 99. RF

38. What is the primary reason that your household does not own a vehicle?

- 1. Vehicle purchase/maintenance costs
- 2. Vehicle storage
- 3. Parking costs
- 4. Don't Drive
- 5. Public transit more convenient
- 6. Other (Specify): _____
- 98. DK
- 99. RF

Inner Ring Household Survey Instrument

39. How many times in the last month did you use the following?
FOR CHOICES 1-7, IF YES IMMEDIATELY ASK HOW TIMES

1. Hire a Taxi Cab
2. Hire a car service
3. Rent a car
4. Participate in a car sharing program (ZIPCAR, etc.)
5. Borrow a car from a friend/family member
6. Get a ride from a friend/family member
7. Never need to use a vehicle
98. DK
99. RF

40. How could transportation be improved in your neighborhood?

1. VERBATIM (T&T)
98. DK (T&T)
99. RF (T&T)

T&T Great! It looks like those are all the questions that I have. I'd like to sincerely thank you for taking the time to speak with me today.

SURVEY INSTRUMENT FLOWCHART

