East of Hudson Lines Final Report

Metro-North Origin & Destination Study

Final

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Contents

1. Background and Objectives

This report covers the Metropolitan Transportation Authority (MTA)'s 2014-2017 Metro-North Railroad (MNR) East of Hudson (EoH) Origin and Destination (OD) Survey, conducted by Abt Associates. MNR's EoH territory includes three lines: Hudson, Harlem and New Haven (including the Danbury, Waterbury and New Canaan branches). The study involved two processes. First, it captured train boarding and alighting figures by way of head counts. Second, it provided a more in-depth travel and demographic profile of customers by way of self-reported surveys.

This OD Study was designed to provide a complete, geographically detailed representation of MNR EoH passenger travel patterns. Specifically, it will be used to augment MTA's regional transit ridership forecast models used to support development of New Starts transit projects. It will also satisfy MTA's requirements for ridership data collection to validate the performance of these models. In addition, data collected will be instrumental for compliance with Title VI reporting. Finally, the data obtained will also be used to satisfy a multitude of information needs in the day-to-day operations of MNR's EoH service.

2. Methodology

2.1 Overview

The methodology was designed to meet the objective of capturing the universe of MNR EoH passengers for station boarding/alighting counts per station and self-reported detailed travel behavior. OD data had not been collected comprehensively in the past for EoH service area. This effort was designed to provide data that informed EoH ridership patterns, and maintained consistency with OD data captured for West of Hudson (WoH) service area and other recent MTA OD surveys for commuter rail service.

2.2 Sampling Plan

The sampling plan called for passenger counts to be collected on every EoH train operated by MNR. Every station was included in this study. The fieldwork timeframe encompassed travel on weekdays, Saturdays, and Sundays. In order to obtain the most accurate snapshot of "typical" ridership across all MNR EoH service, weekday fieldwork was conducted on Tuesdays, Wednesdays, and Thursdays only. Mondays and Fridays were excluded from the field schedule to eliminate any biases that might be caused by residual atypical weekend travel.

Similarly, the field period did not include holiday times and summer months, which were deemed as atypical. In addition, there was no field work during severe weather, and schedules were modified when possible to minimize ridership biases that could stem from scheduled track maintenance work.

2.3 General Passenger Count Methodology

Passenger counts were collected onboard the universe of 1606 inbound and outbound EoH trains, including 406 on the Hudson line, 504 on the Harlem line, and 696 on the New Haven lines (490 New Haven main line; 115 New Canaan branch line; 52 Danbury branch line; and 39 Waterbury branch line). Generally, two field interviewers were stationed in each train car– one at each door in each car within each train set.[1] At each station, the interviewers were required to count all boarding ("ons") and alighting ("offs") passengers at their respective doors. Between stations, one of the interviewers would walk through the car and count the total number of passengers seated and standing. Having the on, off, and onboard counts for whole trains provided the most complete picture of the activity within the train runs.

In addition to the head counts, inbound trains (e.g.: toward New York City) included a survey component. While one crew member was assigned to perform head counts of passengers on board between stations, their partner would be responsible for distributing surveys to newly boarded passengers. Each agent was required to return to their post at the train door to prepare for counting as the train approached the next station.

After Harlem line passenger counts were initially collected between April 2015 and April 2016, additional service to Tremont and Melrose was added to the schedule and platform counts for the new service were collected in November 2017. The additional counts collected at Tremont and Melrose

[1] Generally, there were two field interviewers per car; exceptions were very low ridership trains where it was deemed more cost efficient to reduce staff.

were treated as new riders. In order to merge these new boarding and alighting passengers into the existing count a new "on" assignment was imputed at an earlier station for each new alighting passenger, and a new "off" assignment was imputed at a later station for each new boarding passenger. The on and off station assignments were informed by survey data from riders using these two stations. In total 96 ONS and 152 OFFS were counted at Tremont, and 138 ONS and 248 OFFS were counted at Melrose.

2.4 General Travel Behavior Methodology

Concurrent with passenger counting, distribution and collection of surveys took place onboard all MNR trains to all passengers traveling inbound, towards the direction of New York City. Web and mail options were also offered to passengers who wished to fill in the survey at a later time. Each survey had a unique code that respondents had to enter in order to submit the survey responses via web. The survey instrument asked respondents about both legs of their trip when applicable (including the return trip, or corresponding outbound trip.) In addition to door counts at station stops, at least one interviewer in each car was responsible for distribution and collection of paper surveys between stations.

Restricting survey distribution to only the inbound direction was deemed the best method as it allowed for collection of most data for both legs of trip and avoided question redundancy, heavy burden on passengers, and unnecessary costs.

A supplemental effort was made towards the end of the field period to collect a smaller set of key survey information from riders boarding at select Bronx stations[2] during weekday dayparts. This effort aimed to increase the sample size of station and daypart combinations for which lower numbers of completed surveys[3] had been initially obtained. These Bronx stations were relatively close to New York City geographically. Riders from these stations had shorter travel times to the destination station in which to complete the full on-board questionnaire. As such, generally fewer surveys were collected on board trains for these riders comparted to riders from stations that were further away from New York City. These supplemental surveys were completed via in-person interviews on station platforms. The questionnaire was limited to the most critical questions for this effort in order to accommodate the relatively short timeframe riders have while waiting on station platforms. Appendix 8.3.5 Figure 7 (Bronx Stations Supplemental Survey Questionnaire) shows the sixteen questions included in this supplemental survey.

[2] Wakefield, Woodlawn; Williams Bridge; Fordham; Tremont; Melrose; Spuyten Duyvil; Marble Hill; University Heights; Morris Heights.

[3] Completed surveys represented less than 30% of riders or fewer than 15 total completed surveys for the station-daypart combination.

3. Implementation of Data Collection

3.1 Overview

Data collection spanned from December 2014 through June 2017. As mentioned previously, a total of 1606 EoH trains were counted including 802 inbound trains that were surveyed. Over 100 in-house Abt Associates staff were mobilized to count and survey the MNR system over the duration of the study encompassing both WoH and EoH.

Each shift was staffed according to available train information such as consists size and typical ridership, with crew size based on the maximum number of interviewers needed for the largest train on a shift. Each shift was headed by a field supervisor. Shifts were designed to be as efficient as possible, minimizing both the number of deadhead (non-working) trips necessary to field all trains and the downtime between working trains. Deadheads were used to shuttle workers to initiation stations. In rare instances where no MNR service was available, such as the earliest AM Peak inbound trains, staff were shuttled out to their start location via vans.

Field supervisors were responsible for distributing field materials (pencils, surveys, count sheets, and aprons to hold counting/survey materials) to staff and collecting them at the end of the shift. Staff members were also equipped with MNR-issued ID badges, safety vests, and clickers for counting. Onboard trains, their responsibilities included taking detailed notes about train conditions and monitoring staff to ensure established protocols were being followed.

Weekly status meetings were held while field work was in session. During these meetings, Abt Associates would provide updates to the MTA/MNR on the previous week's field work, as well as discuss other items, such as upcoming deliverables or any challenges that had come up during the week. Abt Associates also kept a running train tally that tracked the week-to-week progress of field work. This train tally was provided for MTA and MNR before each weekly meeting. The field schedule was also provided to MTA/MNR for the following week.

More information about training, passenger counts, and the survey questionnaire can be found in sections 8.1 through 8.3 of the appendix.

4. Data Entry, Processing and Weighting

4.1 Count Data

All field materials were returned to Abt Associate's office where they were reviewed for accuracy and clarity. While in-field assurance checks were done by supervisors on site, each field person's count sheet was once again reviewed in detail in the home office to ensure they were consistent with the data input instructions that were outlined during field training and reinforced over time. Once the count sheets passed quality assurance guidelines, they were grouped by train and data entered.

The detailed train information provided in the entered count data was checked for accuracy and the count numbers were compared to the original counts sheets as necessary to confirm that no errors occurred during data entry. On, Off and Onboard counts were compared to and reconciled as needed on a station-by-station basis for each train.

Entered count data were compared to and adjusted as appropriate based on terminal control counts provided by MNR. MTA and MNR then reviewed counts and made suggestions for adjustments based on their knowledge of the EoH system. Once these adjustments were made, the count data were finalized.

4.2 Survey Data

After surveys were collected from the field, they were separated based upon their completion status into three categories:

1. Questionnaires with both origin station and destination station questions answered (regardless of completion status of the rest of the questionnaire)
2. Questionnaires with no responses in either origin station or destination station questions
3. Blank questionnaires

If both the origin station and destination station questions were answered, the survey was counted as a "completed" survey. Any questionnaires that had other information but were missing either origin or destination station were set aside to see if they could be converted into a completed status using other available information to derive the origin or destination station. This was done primarily by referencing the "top serial number" for each station on the inbound count sheet to determine the origin station where the survey was distributed. Additionally, in-house editing staff tried to determine whether the reported trip origin or trip destination was in close proximity to any of the stations on the train run. Any questionnaires for which both the origin station and destination station were not reported or could not be additionally determined, as well as all remaining blank questionnaires, were not included in further data processing. Each completed questionnaire was stamped with a unique ID and unique ID ranges were documented by train. These IDs served as an additional control measure to ensure each survey was matched correctly to the train it was surveyed on.

A web form, which was nearly identical to the web survey for respondents, was designed for data entry. This allowed Abt Associates to track the data entry progress, manage the format of the entered data, and enabled a more seamless merging of the paper responses with the respondent self-administered web responses.

Abt Associates reviewed the entered survey data and performed any necessary cleaning before delivering the survey dataset to MTA/MNR. Adjustments were made as needed based on MTA/MNR review and comments. The survey data was delivered first in unweighted format. A fully weighted aggregate dataset was delivered after survey data expansion was fully completed.

Detailed information on the survey cleaning process can be found in Appendix 8.4.

4.3 Geocoding

The address information collected from the respondents was central to the OD survey and an extensive set of geocoding procedures was developed and implemented to enable mapping of the address data.

Detailed information on the geocoding process can be found in Appendix 8.5.

4.4 Survey Data Expansion

Expansion weights were developed for use with the OD data to allow estimation of the population quantities when using weighted procedures. This step in the survey process adjusted the results of the survey data collected to bring them more in line with what is known about the universe of riders (the count data information). For example, if 50% of the weekday survey data collected is from trips made in the AM Peak, but AM Peak trips actually represent 68.5% of all weekday trips, data expansion or weighting can be used to statistically "increase the value" of each survey record to represent the population.

These weights accounted for the number of passengers boarding and alighting at individual stations or adjacent groups of smaller stations and for the trip daypart. Representation of the weighted estimates for the boarding and alighting was achieved through weight calibration, in which the weights were adjusted in such a way that the total number of surveyed boardings and alightings, in a given daypart, for an individual station or a group of stations, matched the counts of the number of boarding & alighting passengers provided by the field crews, as closely as possible.

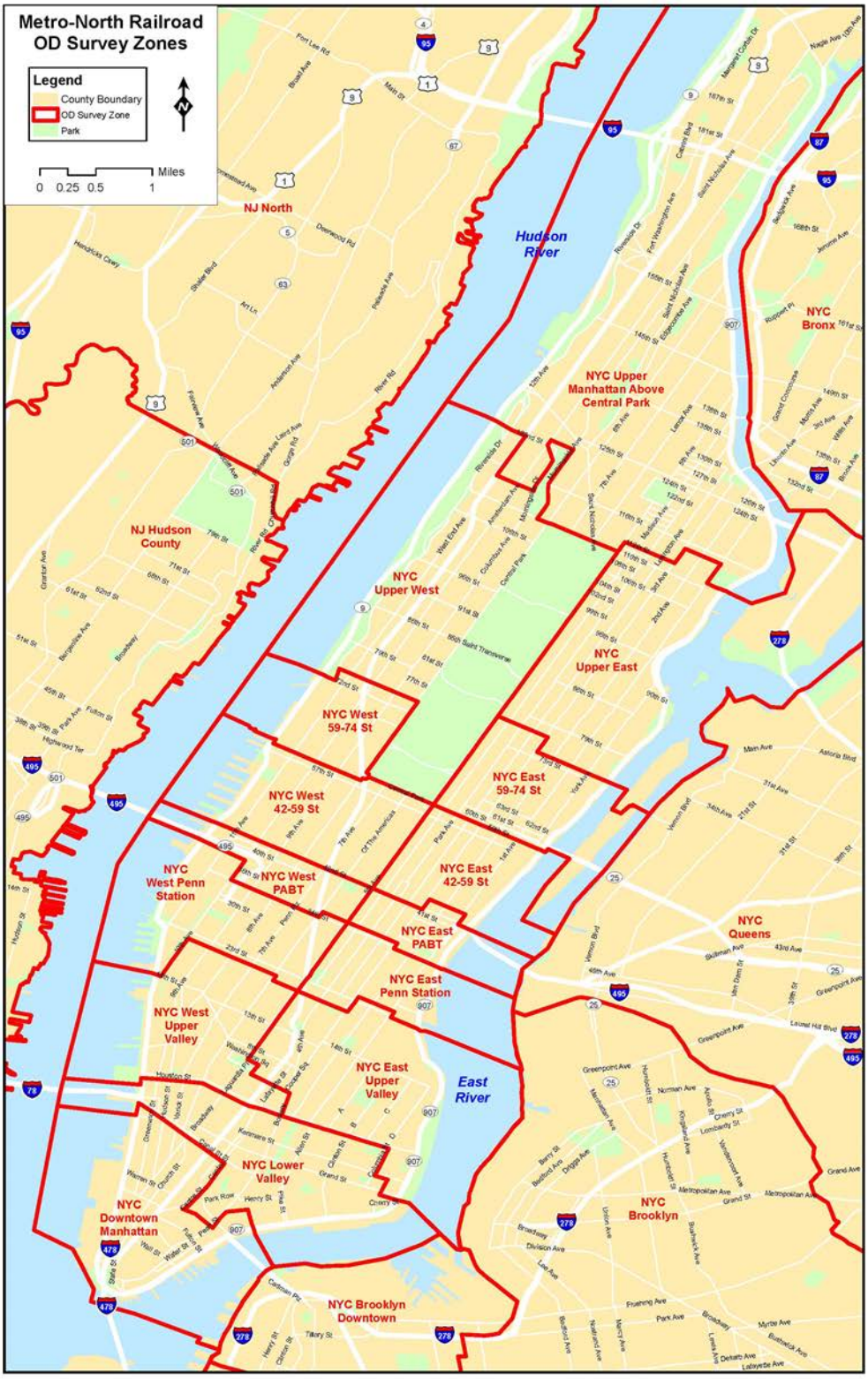
The weighting protocols resulted in two levels of weights (0 and 1) and each had two trip types (unlinked and linked), for a total of four sets of weights. The level 0 weights were applied for surveys that contained both reported origin and destination stations. The level 1 weights further took into account other trip characteristics (i.e., geocoded origin and destination locations, and origin and destination location types) in addition to the criteria for the level 0 weights.

Unlinked and linked weights were then calculated for both level 0 and level 1. Unlinked trips captured each time a person boarded and alighted a train. Linked trips captured the entire journey as one trip, even if there was a transfer along the way. A person making a single journey with a transfer from one train to another would count as two unlinked trips, but only one linked trip. (All tables and analyses further in this report use Level 1 linked weights.)

Detailed information on the survey data expansion process can be found in Appendix 8.6

4.5 Geographic Zones

The zones in this report are defined by Metro-North Railroad. A map of the zones can be seen below:



5. Results – Inbound

5.1 Survey Response Rate

The overall survey response rate was 39%, just shy of the goal of 40%. For surveys collected on weekdays the survey response rate was always the highest for AM Peak riders, and decreased throughout the later weekday dayparts. The weekday response rate was higher than the weekend response rate (43% vs. 34%).

Survey Response Rate by Line	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total	Saturday	Sunday	Weekend Total	Line Total
Hudson Line	54.07%	52.09%	42.57%	25.90%	50.63%	40.14%	36.75%	38.57%	44.73%
Harlem Line	47.98%	43.44%	35.24%	30.39%	44.42%	33.40%	32.05%	32.79%	39.15%
New Haven Main Line + Branch Lines	43.54%	34.37%	31.47%	32.59%	39.56%	33.48%	33.92%	33.68%	36.82%
Total East of Hudson	47.14%	41.01%	34.56%	30.84%	43.31%	34.84%	33.94%	34.44%	39.17%

5.2 Trip Purpose

5.2.1 Weekday Riders - Trip Purpose

The vast majority of AM Peak riders (91%) reported commuting to or from their regular workplace as the purpose for their surveyed trip. Although regular workplace commute was also the most frequently reported response among riders in the other weekday dayparts, it was much less common than in the AM Peak (44% - 74% depending on daypart).

Q1. Trip Purpose	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[4]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	76	38	24	39	177
Total Answering	91,866	21,868	19,235	9,564	142,534
Commuting to / from regular workplace	84,018	9,703	11,682	7,092	112,495
	91.46%	44.37%	60.73%	74.15%	78.93%
For business reasons (not to regular workplace)	3,026	3,224	1,388	510	8,148
	3.29%	14.74%	7.21%	5.34%	5.72%
Personal Business (e.g., medical / visiting)	1,253	3,404	1,813	743	7,213
	1.36%	15.57%	9.43%	7.76%	5.06%
Commuting to / from school	2,507	2,276	1,396	560	6,738
	2.73%	10.41%	7.26%	5.85%	4.73%
Recreation (e.g. dinning / entertainment / vacation)	754	2,517	2,595	520	6,386
	0.82%	11.51%	13.49%	5.43%	4.48%
Shopping	96	398	86	30	611
	0.10%	1.82%	0.45%	0.31%	0.43%
Other	211	345	277	110	943
	0.23%	1.58%	1.44%	1.15%	0.66%
Total	91,866	21,868	19,235	9,564	142,534

[4] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.2.2 Weekend Riders - Trip Purpose

The most frequently mentioned trip purpose among weekend riders was recreation (38%), followed by personal business (23%) and commuting to/from the workplace (23%). Recreation was the top trip purpose reported by Saturday riders (42%), while the second most reported trip purpose was commuting to/from the workplace (24%). Among Sunday riders, about one-third each traveled for recreation (33%), with personal business being a close second (28%). Consistent with regular Monday through Friday work schedules, workplace commutes were far less common trip purposes among weekend riders than weekday riders (23% vs. 79%).

Q1. Trip Purpose	Saturday	Sunday	Weekend Total[5]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	165	169	334
Total Answering	64,360	56,088	120,448
Recreation (e.g. dinning / entertainment / vacation)	27,128	18,145	45,274
	42.15%	32.35%	37.59%
Personal Business (e.g., medical / visiting)	12,429	15,641	28,071
	19.31%	27.89%	23.31%
Commuting to / from regular workplace	15,399	12,533	27,932
	23.93%	22.35%	23.19%
For business reasons (not to regular workplace)	2,478	2,539	5,017
	3.85%	4.53%	4.17%
Commuting to / from school	2,479	1,893	4,373
	3.85%	3.38%	3.63%
Shopping	2,011	1,574	3,585
	3.12%	2.81%	2.98%
Other	2,436	3,760	6,197
	3.79%	6.70%	5.14%
Total	64,360	56,088	120,448

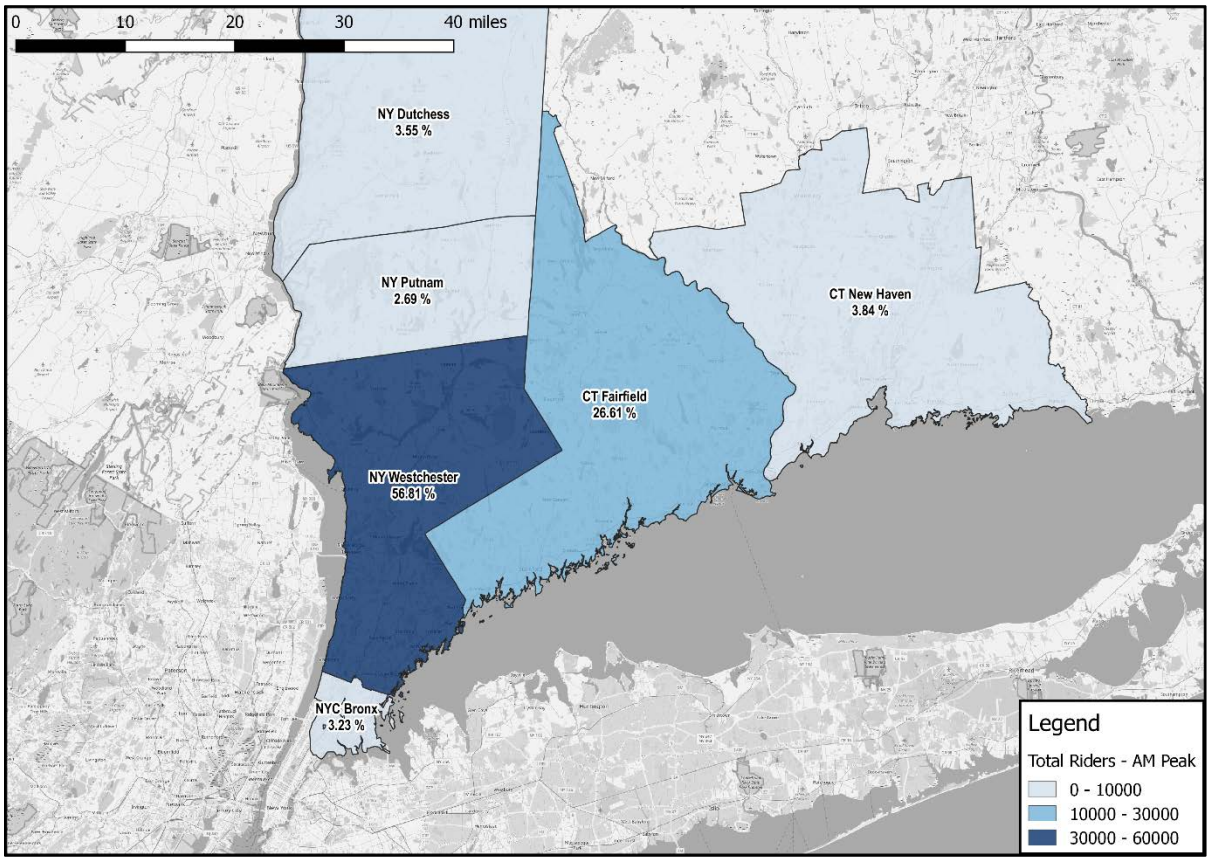
[5] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.3 Trip Origin Location

The following maps show trip origins by geographic region for each daypart. Each geographic boundary reflects the boundaries of zones of interest as defined by MNR. Darker colors represent higher concentrations of origin locations.

5.3.1 AM Peak

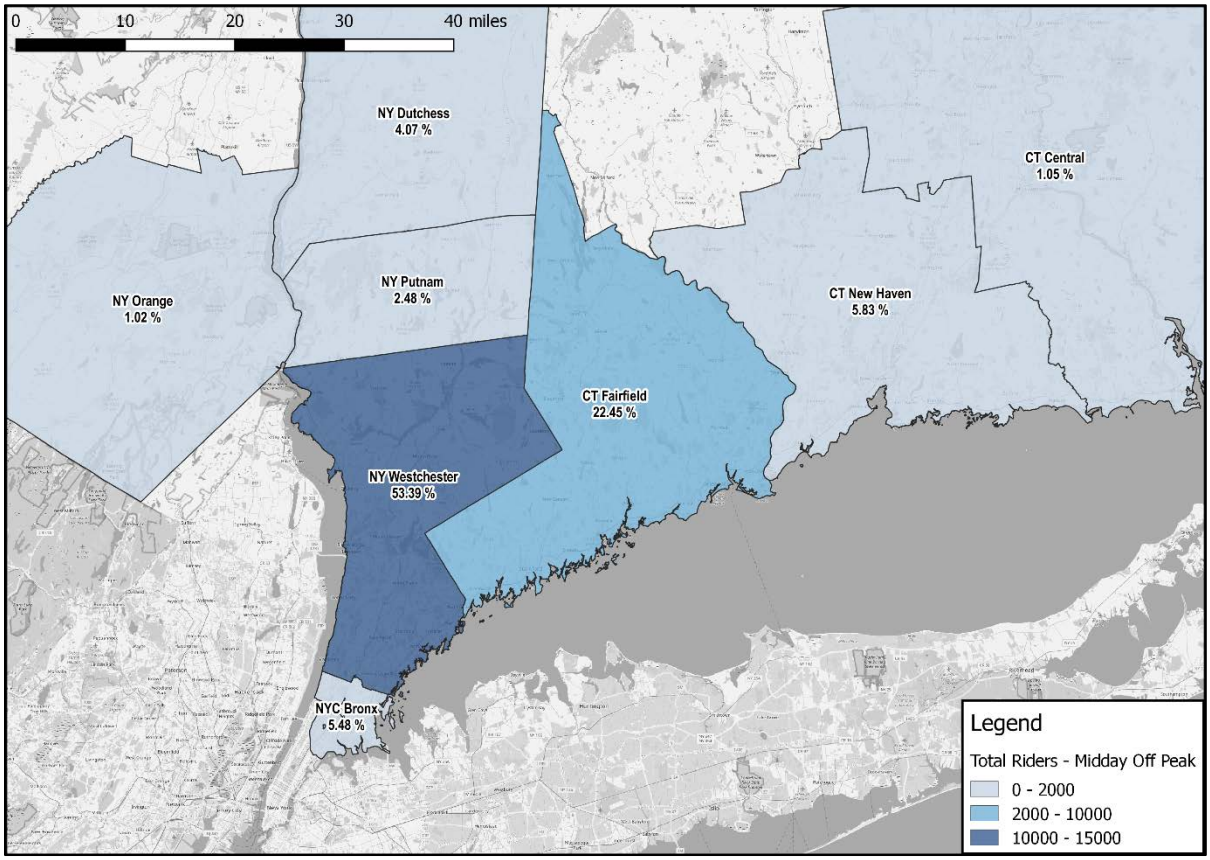
NY Westchester origins were most common among AM Peak riders, making up for more than half of riders (57%). The next most mentioned origin zone was CT Fairfield (27%).



Q2. County of Origin	AM Peak
Unweighted Base	38,878
Weighted Base	91,942
No Answer	3
Total Answering	91,939
NY Westchester	52,233 56.81%
CT Fairfield	24,467 26.61%
CT New Haven	3,535 3.84%
NY Dutchess	3,264 3.55%
NYC Bronx	2,968 3.23%
NY Putnam	2,471 2.69%
Other	3,001 3.26%
Total	91,939

5.3.2 Midday Off Peak

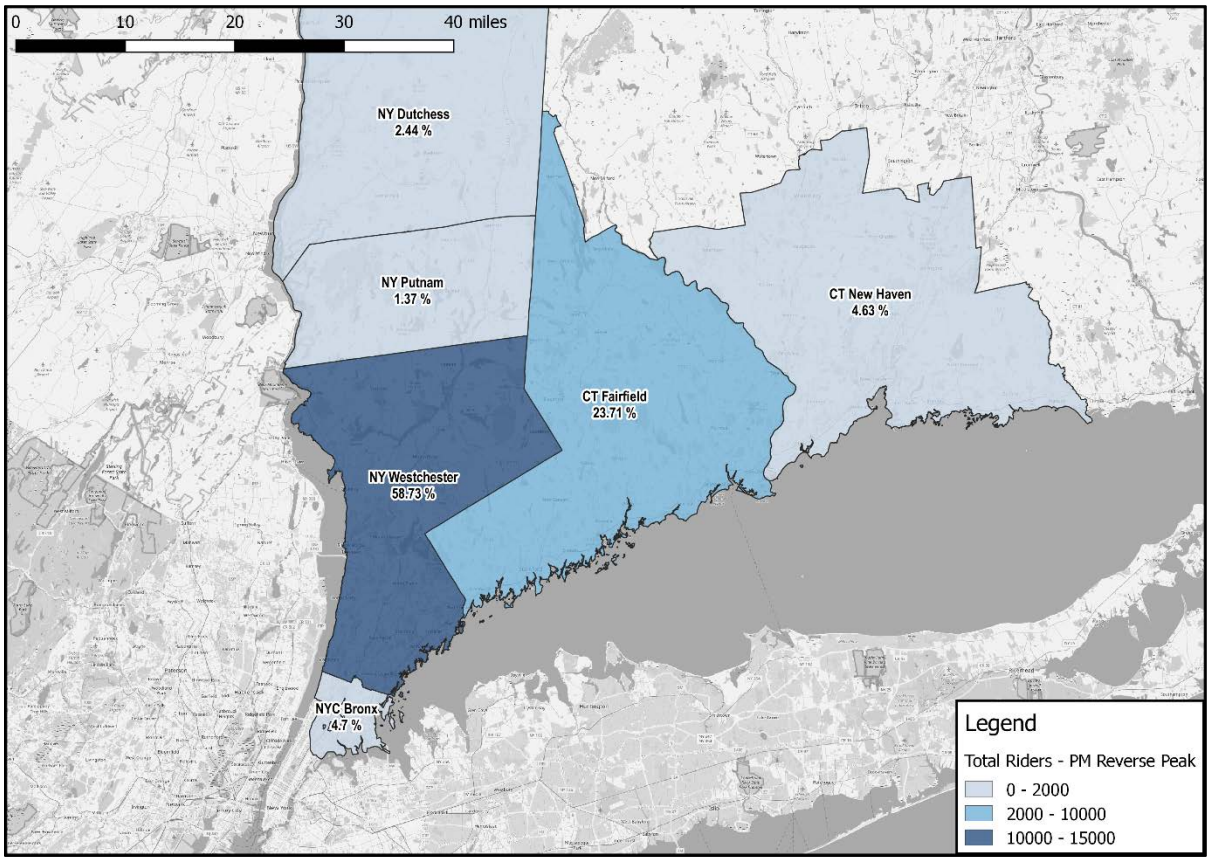
Similar to trip origin locations for AM Peak riders, NY Westchester was the most common origin area for Midday Off Peak riders, and accounted for over half of all origin zones mentioned (53%). Also in line with AM Peak results, CT Fairfield was the next most frequently reported origin area (22%).



Q2. County of Origin	Midday Off Peak
Unweighted Base	7,075
Weighted Base	21,906
No Answer	5
Total Answering	21,901
NY Westchester	11,694 53.39%
CT Fairfield	4,917 22.45%
CT New Haven	1,277 5.83%
NYC Bronx	1,200 5.48%
NY Dutchess	891 4.07%
NY Putnam	542 2.48%
CT Central	231 1.05%
NY Orange	224 1.02%
Other	923 4.21%
Total	21,901

5.3.3 PM Reverse Peak

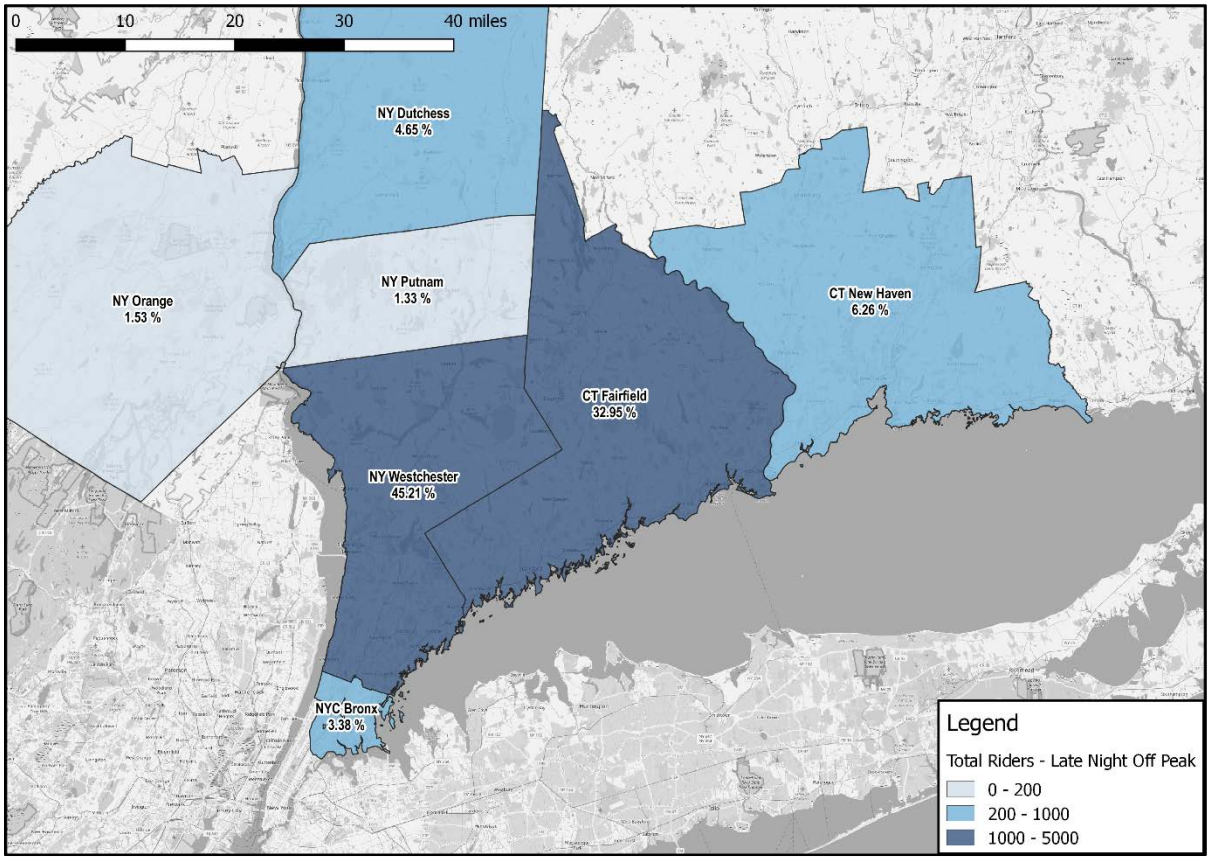
NY Westchester origins were most common among PM Reverse Peak riders, making up for more than half of riders (59%). The next most mentioned zone was CT Fairfield, which was reported by 24% of riders.



Q2. County of Origin	PM Reverse Peak
Unweighted Base	4,732
Weighted Base	19,259
No Answer	-
Total Answering	19,259
NY Westchester	11,310 58.73%
CT Fairfield	4,567 23.71%
NYC Bronx	904 4.70%
CT New Haven	891 4.63%
NY Dutchess	470 2.44%
NY Putnam	264 1.37%
Other	851 4.42%
Total	19,259

5.3.4 Late Night Off Peak

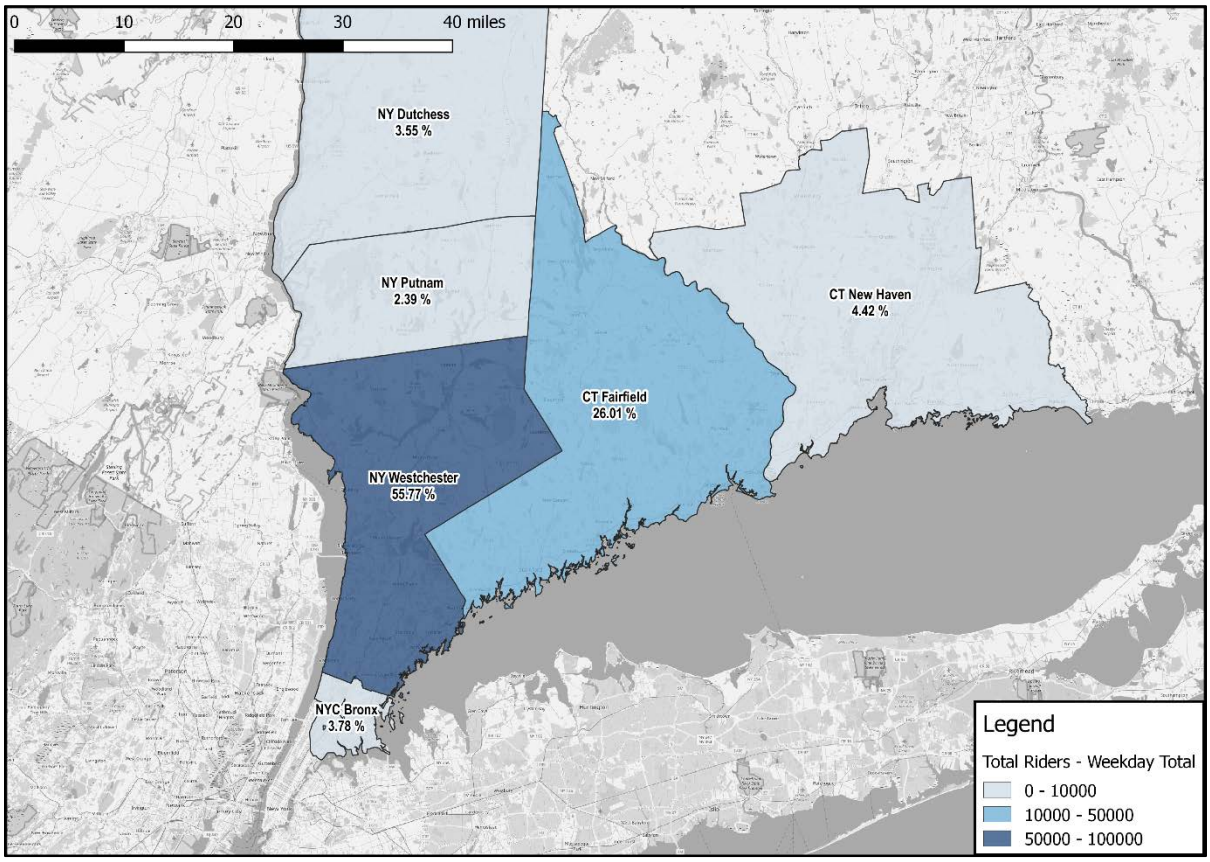
NY Westchester was also the most frequently reported origin zone among Late Night Off Peak riders (45%), though at lower levels than reported by riders from earlier weekday dayparts (53-59%). CT Fairfield was reported by one third of riders (33%), accounting for a larger share of riders than in earlier weekday dayparts (22-27%).



Q2. County of Origin	Late Night Off Peak
Unweighted Base	2,304
Weighted Base	9,603
No Answer	6
Total Answering	9,597
NY Westchester	4,338 45.21%
CT Fairfield	3,162 32.95%
CT New Haven	601 6.26%
NY Dutchess	446 4.65%
NYC Bronx	324 3.38%
NY Orange	146 1.53%
NY Putnam	128 1.33%
Other	452 4.71%
Total	9,597

5.3.5 Weekday Total

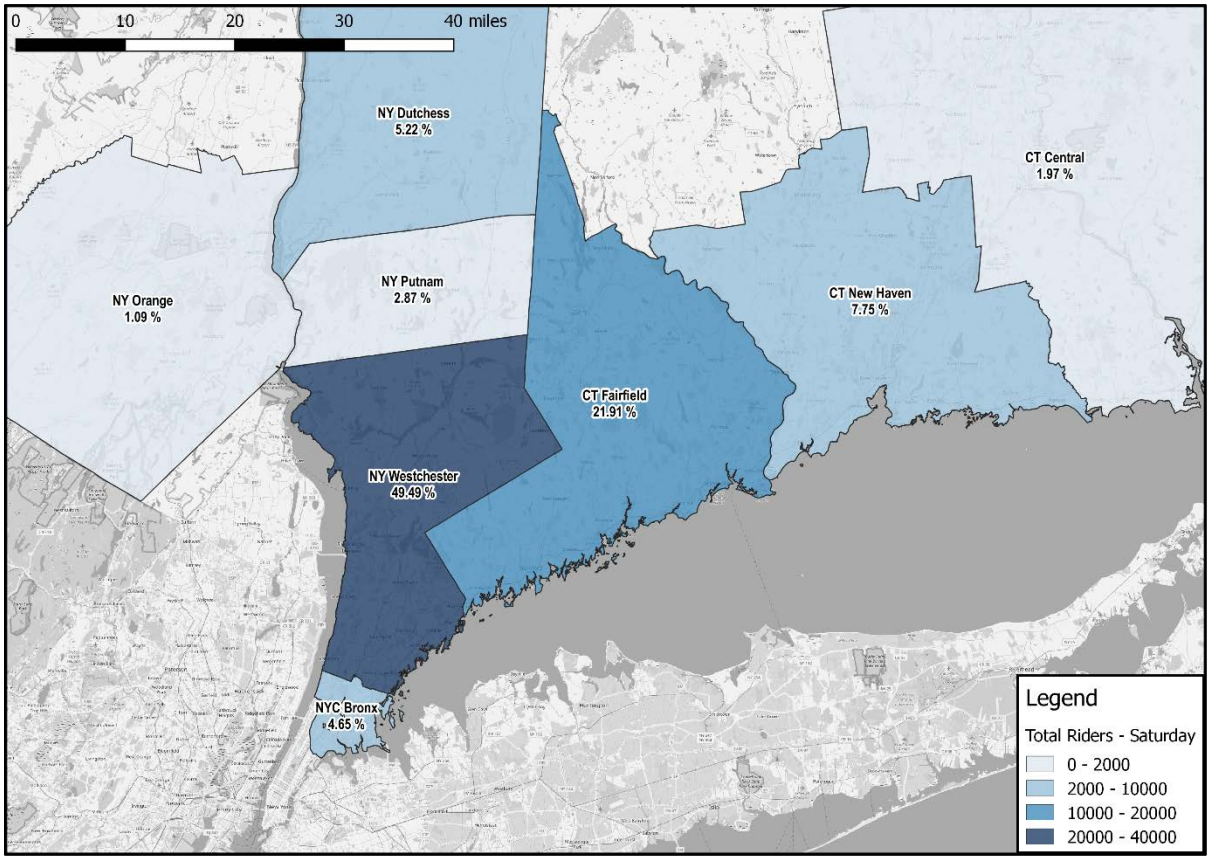
Overall, the total share of weekday origins closely resembled the AM Peak data, since most responses were obtained in that daypart. NY Westchester made up about 56% of the total number of weekday origin zone responses with CT Fairfield following at 26%.



Q2. County of Origin	Weekday Total
Unweighted Base	52,989
Weighted Base	142,711
No Answer	14
Total Answering	142,697
NY Westchester	79,576 55.77%
CT Fairfield	37,113 26.01%
CT New Haven	6,304 4.42%
NYC Bronx	5,397 3.78%
NY Dutchess	5,071 3.55%
NY Putnam	3,406 2.39%
Other	5,833 4.09%
Total	142,697

5.3.6 Saturday

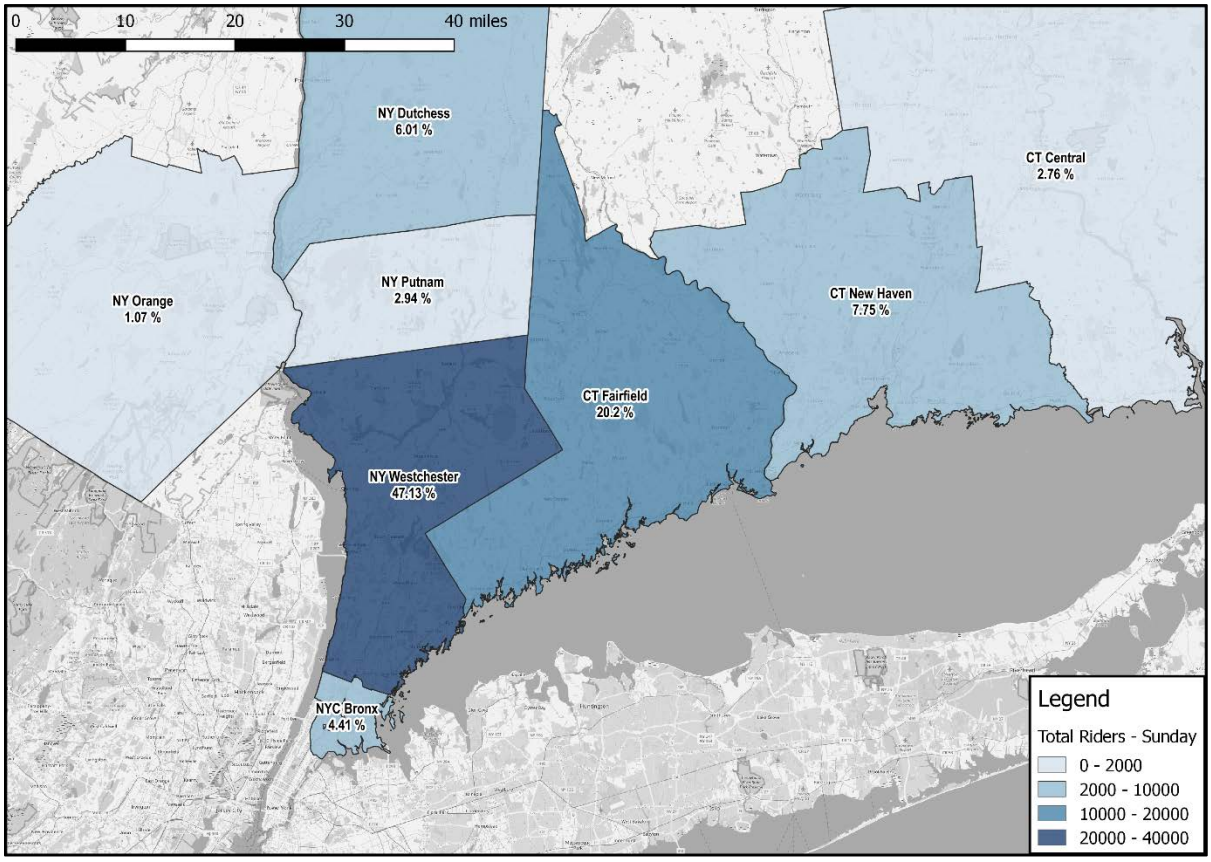
Nearly half of Saturday trips originated in NY Westchester (49%). CT Fairfield was next with 22% of Saturday riders.



Q2. County of Origin	Saturday
Unweighted Base	16,574
Weighted Base	64,525
No Answer	-
Total Answering	64,525
NY Westchester	31,934 49.49%
CT Fairfield	14,140 21.91%
CT New Haven	5,001 7.75%
NY Dutchess	3,367 5.22%
NYC Bronx	2,998 4.65%
NY Putnam	1,853 2.87%
CT Central	1,270 1.97%
NY Orange	700 1.09%
Other	3,261 5.05%
Total	64,525

5.3.7 Sunday

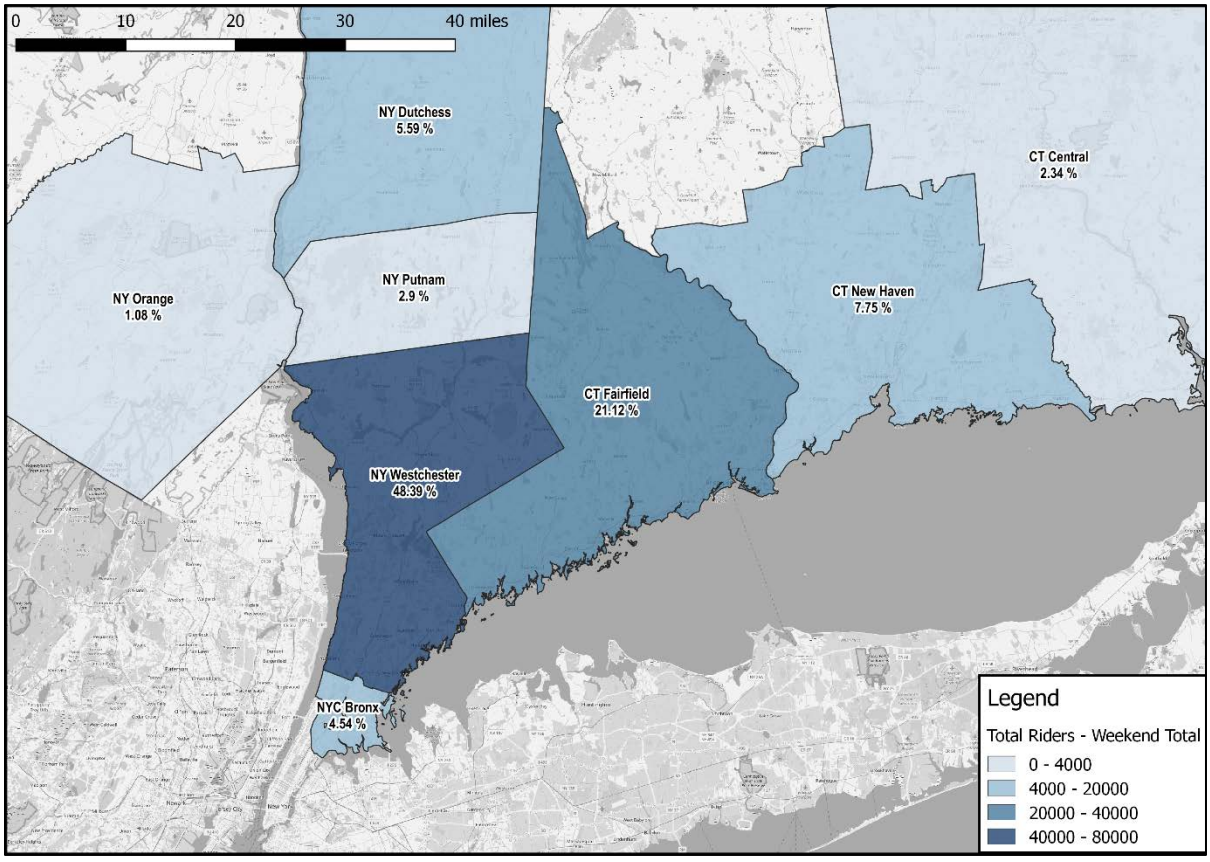
A little under half of all Sunday trips started in the NY Westchester area (47%) and one-fifth originated in CT Fairfield (20%).



Q2. County of Origin	Sunday
Unweighted Base	13,748
Weighted Base	56,256
No Answer	6
Total Answering	56,251
NY Westchester	26,509 47.13%
CT Fairfield	11,365 20.20%
CT New Haven	4,361 7.75%
NY Dutchess	3,378 6.01%
NYC Bronx	2,481 4.41%
NY Putnam	1,654 2.94%
CT Central	1,555 2.76%
NY Orange	601 1.07%
Other	4,349 7.73%
Total	56,251

5.3.8 Weekend Total

Similar to what was reported for weekday trips, the top two most frequently mentioned trip origin areas for weekend riders were NY Westchester (48%) and CT Fairfield (21%).



Q2. County of Origin	Weekend Total
Unweighted Base	30,322
Weighted Base	120,781
No Answer	6
Total Answering	120,776
NY Westchester	58,443 48.39%
CT Fairfield	25,505 21.12%
CT New Haven	9,363 7.75%
NY Dutchess	6,746 5.59%
NYC Bronx	5,480 4.54%
NY Putnam	3,508 2.90%
CT Central	2,825 2.34%
NY Orange	1,301 1.08%
Other	7,607 6.30%
Total	120,776

5.4 Trip Origin Type

5.4.1 Weekday Riders - Trip Origin Type

Home was the most commonly reported trip origin type for riders in all but one weekday daypart. It accounted for nearly all (94%) of the trip origin types in AM Peak and while still the predominant origin type, it was progressively lower in the Midday Off Peak (71%) and Late Night Off Peak (59%) dayparts. The exception was the PM Reverse Peak daypart, where work (49%) overtook home (37%) as the most prevalent origin location type. Nearly a quarter of Late Night Off Peak riders (24%) also reported work as their trip origin location type.

Q3. Origin Type	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[6]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	-	-	-	-	-
Total Answering	91,942	21,906	19,259	9,603	142,711
My Home	86,733	15,542	7,044	5,682	115,000
	94.33%	70.95%	36.57%	59.16%	80.58%
My work	1,922	2,659	9,372	2,257	16,210
	2.09%	12.14%	48.66%	23.50%	11.36%
My school	370	988	861	438	2,657
	0.40%	4.51%	4.47%	4.56%	1.86%
Friend / Family home	1,796	1,492	938	663	4,889
	1.95%	6.81%	4.87%	6.91%	3.43%
Recreation / Tourism / Hotel	209	381	388	247	1,225
	0.23%	1.74%	2.01%	2.57%	0.86%
Other	913	844	656	316	2,729
	0.99%	3.85%	3.41%	3.29%	1.91%
Total	91,942	21,906	19,259	9,603	142,711

[6] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.4.2 Weekend Riders - Trip Origin Type

60% of Saturday trips and 50% of Sunday trips started from home. Although most of the other origin location types had a similar distribution across Saturday and Sunday, friend/family home trip origins were more common on Sundays than on Saturdays (28% vs. 16%).

Q3. Origin Type	Saturday	Sunday	Weekend Total[7]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	-	-	-
Total Answering	64,525	56,256	120,781
My Home	38,862	28,270	67,131
	60.23%	50.25%	55.58%
My work	5,683	4,213	9,896
	8.81%	7.49%	8.19%
My school	2,599	1,283	3,881
	4.03%	2.28%	3.21%
Friend / Family home	10,238	16,005	26,243
	15.87%	28.45%	21.73%
Recreation / Tourism / Hotel	4,928	4,485	9,412
	7.64%	7.97%	7.79%
Other	2,217	2,001	4,218
	3.44%	3.56%	3.49%
Total	64,525	56,256	120,781

[7] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.5 Inbound Origin Station

5.5.1 Weekday Riders - Inbound Origin Station

Respondents reported a diverse set of origin stations on weekdays, with the top six mentions each making up between 3% - 7% of all stations. White Plains was the most reported trip origin station at 7%, followed by Stamford at 5%. New Rochelle, Scarsdale, Larchmont, and New Haven were each reported by about 3% of weekday riders as the origin station. PM Reverse Peak riders heavily reported White Plains as their inbound origin station (16%).

Q5. Origin Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[8]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	-	-	-	-	-
Total Answering	91,942	21,906	19,259	9,603	142,711
White Plains	4,424	1,749	3,047	889	10,109
	4.81%	7.98%	15.82%	9.25%	7.08%
Stamford	3,989	1,209	1,757	632	7,587
	4.34%	5.52%	9.12%	6.58%	5.32%
New Rochelle	2,895	808	829	432	4,964
	3.15%	3.69%	4.30%	4.50%	3.48%
Scarsdale	3,233	616	459	140	4,448
	3.52%	2.81%	2.38%	1.46%	3.12%
Larchmont	2,826	418	428	237	3,909
	3.07%	1.91%	2.22%	2.47%	2.74%
New Haven	1,639	966	599	421	3,625
	1.78%	4.41%	3.11%	4.38%	2.54%
Croton-Harmon	2,636	494	236	56	3,423
	2.87%	2.26%	1.23%	0.59%	2.40%
Bridgeport	2,170	579	244	404	3,398
	2.36%	2.65%	1.27%	4.21%	2.38%
Greenwich	1,726	563	879	207	3,375
	1.88%	2.57%	4.56%	2.16%	2.36%
Bronxville	2,059	586	416	187	3,248
	2.24%	2.68%	2.16%	1.94%	2.28%
Hartsdale	2,461	353	209	96	3,120
	2.68%	1.61%	1.09%	1.00%	2.19%

[8] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q5. Origin Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[8]
Tarrytown	1,893	468	538	183	3,083
	2.06%	2.14%	2.79%	1.91%	2.16%
Port Chester	1,607	456	580	280	2,923
	1.75%	2.08%	3.01%	2.91%	2.05%
Pelham	2,099	306	288	145	2,839
	2.28%	1.40%	1.50%	1.51%	1.99%
Mamaroneck	1,762	332	503	187	2,784
	1.92%	1.52%	2.61%	1.95%	1.95%
Beacon	1,801	475	222	229	2,727
	1.96%	2.17%	1.15%	2.39%	1.91%
Harrison	1,794	326	346	163	2,629
	1.95%	1.49%	1.80%	1.70%	1.84%
Westport	1,563	378	255	360	2,556
	1.70%	1.73%	1.32%	3.74%	1.79%
North White Plains	1,686	350	366	83	2,486
	1.83%	1.60%	1.90%	0.87%	1.74%
Fleetwood	1,716	408	229	41	2,394
	1.87%	1.86%	1.19%	0.43%	1.68%
South Norwalk	1,427	424	260	209	2,320
	1.55%	1.94%	1.35%	2.18%	1.63%
Rye	1,394	340	412	154	2,300
	1.52%	1.55%	2.14%	1.61%	1.61%
Fairfield	1,392	300	164	311	2,167
	1.51%	1.37%	0.85%	3.24%	1.52%
Chappaqua	1,621	304	137	48	2,110
	1.76%	1.39%	0.71%	0.50%	1.48%
Fairfield Metro	1,546	197	94	240	2,077
	1.68%	0.90%	0.49%	2.50%	1.46%
Crestwood	1,501	255	160	33	1,949
	1.63%	1.16%	0.83%	0.34%	1.37%
Poughkeepsie	965	486	290	199	1,940
	1.05%	2.22%	1.51%	2.07%	1.36%
Darien	1,036	259	222	196	1,713
	1.13%	1.18%	1.15%	2.04%	1.20%
Tuckahoe	1,200	251	171	75	1,697
	1.30%	1.15%	0.89%	0.78%	1.19%
Mt Vernon East	955	335	224	138	1,652
	1.04%	1.53%	1.16%	1.44%	1.16%
Stratford	1,097	139	86	229	1,551
	1.19%	0.63%	0.45%	2.39%	1.09%

Q5. Origin Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[8]
Ossining	1,003	235	202	100	1,540
	1.09%	1.07%	1.05%	1.04%	1.08%
Milford	1,044	222	88	111	1,464
	1.14%	1.02%	0.46%	1.15%	1.03%
Yonkers	788	274	308	93	1,463
	0.86%	1.25%	1.60%	0.97%	1.03%
Hastings-On-Hudson	1,023	219	110	69	1,420
	1.11%	1.00%	0.57%	0.71%	1.00%
Dobbs Ferry	965	179	162	86	1,392
	1.05%	0.82%	0.84%	0.90%	0.98%
Peekskill	889	278	124	101	1,392
	0.97%	1.27%	0.65%	1.05%	0.98%
Noroton Heights	1,067	106	19	195	1,387
	1.16%	0.48%	0.10%	2.03%	0.97%
Goldens Bridge	1,096	150	86	13	1,344
	1.19%	0.68%	0.44%	0.14%	0.94%
Mount Kisco	747	270	192	113	1,322
	0.81%	1.23%	1.00%	1.18%	0.93%
Southeast	944	227	101	32	1,303
	1.03%	1.03%	0.52%	0.34%	0.91%
Pleasantville	735	209	254	102	1,299
	0.80%	0.95%	1.32%	1.06%	0.91%
Katonah	864	204	171	47	1,285
	0.94%	0.93%	0.89%	0.49%	0.90%
Brewster	843	265	109	64	1,281
	0.92%	1.21%	0.57%	0.67%	0.90%
Woodlawn	822	252	84	56	1,214
	0.89%	1.15%	0.44%	0.58%	0.85%
New Canaan	879	90	137	56	1,162
	0.96%	0.41%	0.71%	0.58%	0.81%
Irvington	725	156	189	87	1,156
	0.79%	0.71%	0.98%	0.90%	0.81%
Other East of Hudson Stations	17,397	3,440	2,273	1,072	24,180
	18.92%	15.70%	11.80%	11.16%	16.94%
Total	91,942	21,906	19,259	9,603	142,711

5.5.2 Weekend Riders - Inbound Origin Station

Following a similar pattern as for weekday riders, many different origin stations were reported by weekend riders with no one particular station standing out. New Haven and White Plains were the two most common weekend origin stations (both at 7%).

Q5. Origin Station	Saturday	Sunday	Weekend Total[9]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	-	-	-
Total Answering	64,525	56,256	120,781
New Haven	4,275	4,671	8,946
	6.63%	8.30%	7.41%
White Plains	5,001	3,846	8,847
	7.75%	6.84%	7.32%
Stamford	3,419	2,635	6,054
	5.30%	4.68%	5.01%
New Rochelle	2,734	1,910	4,644
	4.24%	3.40%	3.85%
Poughkeepsie	1,809	1,870	3,679
	2.80%	3.32%	3.05%
Beacon	1,743	1,710	3,453
	2.70%	3.04%	2.86%
Tarrytown	1,498	1,858	3,356
	2.32%	3.30%	2.78%
Bridgeport	1,665	1,566	3,231
	2.58%	2.78%	2.68%
Port Chester	1,600	1,173	2,774
	2.48%	2.09%	2.30%
Scarsdale	1,432	1,138	2,571
	2.22%	2.02%	2.13%
Bronxville	1,310	926	2,236
	2.03%	1.65%	1.85%
Greenwich	1,232	974	2,207
	1.91%	1.73%	1.83%
Larchmont	1,267	923	2,191
	1.96%	1.64%	1.81%

[9] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q5. Origin Station	Saturday	Sunday	Weekend Total[10]
Mamaroneck	1,271	869	2,141
	1.97%	1.55%	1.77%
South Norwalk	1,178	912	2,090
	1.83%	1.62%	1.73%
Croton-Harmon	870	1,146	2,017
	1.35%	2.04%	1.67%
Fairfield	1,020	872	1,892
	1.58%	1.55%	1.57%
Westport	1,018	851	1,869
	1.58%	1.51%	1.55%
Pelham	1,049	777	1,825
	1.63%	1.38%	1.51%
Harrison	989	776	1,765
	1.53%	1.38%	1.46%
Southeast	895	834	1,729
	1.39%	1.48%	1.43%
Peekskill	866	846	1,711
	1.34%	1.50%	1.42%
Rye	976	712	1,688
	1.51%	1.26%	1.40%
Mt Vernon East	1,024	626	1,650
	1.59%	1.11%	1.37%
Ossining	756	891	1,647
	1.17%	1.58%	1.36%
Fordham	1,090	492	1,582
	1.69%	0.87%	1.31%
Fairfield Metro	857	636	1,492
	1.33%	1.13%	1.24%
Fleetwood	885	597	1,483
	1.37%	1.06%	1.23%
Mount Kisco	712	757	1,468
	1.10%	1.35%	1.22%
Milford	830	636	1,466
	1.29%	1.13%	1.21%
Brewster	672	755	1,427
	1.04%	1.34%	1.18%

[10] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q5. Origin Station	Saturday	Sunday	Weekend Total[11]
North White Plains	810	596	1,406
	1.26%	1.06%	1.16%
Darien	805	593	1,397
	1.25%	1.05%	1.16%
Yonkers	589	802	1,390
	0.91%	1.42%	1.15%
Hartsdale	779	589	1,368
	1.21%	1.05%	1.13%
Stratford	812	524	1,337
	1.26%	0.93%	1.11%
Pleasantville	631	653	1,284
	0.98%	1.16%	1.06%
Katonah	678	569	1,247
	1.05%	1.01%	1.03%
West Haven	757	484	1,241
	1.17%	0.86%	1.03%
Dobbs Ferry	516	694	1,210
	0.80%	1.23%	1.00%
Woodlawn	693	456	1,150
	1.07%	0.81%	0.95%
Crestwood	728	381	1,109
	1.13%	0.68%	0.92%
Chappaqua	534	479	1,013
	0.83%	0.85%	0.84%
Botanical Garden	478	524	1,002
	0.74%	0.93%	0.83%
New Hamburg	471	520	991
	0.73%	0.92%	0.82%
Tuckahoe	553	423	976
	0.86%	0.75%	0.81%
Other East of Hudson Stations[12]	8,743	8,787	17,532
	13.55%	15.62%	14.52%
Total	64,525	56,256	120,781

[11] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

[12] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

5.6 Number of Minutes to Origin Station

5.6.1 Weekday Riders - Travel Time to Origin Station

The average time it took weekday riders to travel to their inbound origin station was about 11 minutes among AM Peak riders and about 15 minutes for riders in all other weekday dayparts.

Q6. Number of Minutes to Origin Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[13]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	3,125	1,275	1,124	461	5,986
Total Answering	88,817	20,631	18,135	9,142	136,725
1-5 minutes	26,835	5,648	4,973	2,610	40,066
	30.21%	27.38%	27.42%	28.55%	29.30%
6-10 minutes	34,967	7,100	5,336	2,632	50,035
	39.37%	34.41%	29.42%	28.79%	36.60%
11-15 minutes	14,314	3,308	2,947	1,487	22,056
	16.12%	16.03%	16.25%	16.27%	16.13%
16-30 minutes	10,123	3,010	3,384	1,674	18,191
	11.40%	14.59%	18.66%	18.31%	13.30%
31 minutes or above	2,578	1,565	1,495	739	6,377
	2.90%	7.59%	8.24%	8.08%	4.66%
Mean	11.15	14.81	15.15	14.71	12.47
Median	9.19	9.51	9.69	9.62	9.33
Total	88,817	20,631	18,135	9,142	136,725

[13] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.6.2 Weekend Riders - Travel Time to Origin Station

The average travel time to the inbound origin station was higher for Sunday riders (19 minutes) than for Saturday riders (16 minutes).

Q6. Number of Minutes to Origin Station	Saturday	Sunday	Weekend Total[14]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	3,019	2,936	5,955
Total Answering	61,505	53,320	114,826
1-5 minutes	17,131	14,240	31,371
	27.85%	26.71%	27.32%
6-10 minutes	19,472	15,974	35,446
	31.66%	29.96%	30.87%
11-15 minutes	9,102	7,271	16,373
	14.80%	13.64%	14.26%
16-30 minutes	10,106	9,500	19,606
	16.43%	17.82%	17.07%
31 minutes or above	5,694	6,335	12,030
	9.26%	11.88%	10.48%
Mean	16.24	18.59	17.33
Median	9.58	9.69	9.63
Total	61,505	53,320	114,826

[14] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.7 Inbound Access Mode to Station[15]

5.7.1 Weekday Riders - Inbound Access Mode

About 45% of AM Peak riders reported driving alone to the origin station and parking. This access mode became much less prevalent throughout later weekday dayparts, as walking was more prominent among riders in Midday Off Peak, PM Reverse Peak, and Late Night Off Peak (37%, 46%, and 38%, respectively).

Please note: respondents were instructed to select all access modes that applied. As a result the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q7. Access Mode to Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[16]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	391	416	675	224	1,707
Total Answering	91,551	21,490	18,584	9,379	141,004
Drove alone and parked	41,338	6,038	2,240	2,953	52,570
	45.15%	28.10%	12.06%	31.49%	37.28%
Walked	24,874	8,017	8,619	3,545	45,055
	27.17%	37.30%	46.38%	37.80%	31.95%
Dropped off	15,306	4,043	3,045	1,521	23,916
	16.72%	18.81%	16.39%	16.22%	16.96%
Drove or rode with others and parked	5,077	1,289	787	240	7,394
	5.55%	6.00%	4.24%	2.56%	5.24%
Bus	3,547	1,088	1,992	591	7,219
	3.87%	5.06%	10.72%	6.30%	5.12%

[15] Respondents were allowed to report multiple access modes. As a result, the tables in this section can add up to more than 100%.

[16] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q7. Access Mode to Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[16]
Taxi / Car service / Uber	1,526	1,132	1,205	481	4,344
	1.67%	5.27%	6.48%	5.13%	3.08%
Bicycle	1,040	182	167	103	1,491
	1.14%	0.85%	0.90%	1.09%	1.06%
Shore Line East	396	52	17	8	473
	0.43%	0.24%	0.09%	0.09%	0.34%
Ferry	298	15	9	22	343
	0.33%	0.07%	0.05%	0.23%	0.24%
Amtrak	17	40	39	31	128
	0.02%	0.19%	0.21%	0.34%	0.09%
Other	648	290	1,212	151	2,301
	0.71%	1.35%	6.52%	1.61%	1.63%
Total	94,068	22,185	19,333	9,648	145,234

5.7.2 Weekend Riders - Inbound Access Mode

More Saturday riders walked to the train station than Sunday riders (35% vs. 30%). A notable portion of all weekend riders were dropped off or drove (alone or with others) (27%,15% and 14%, respectively) to get to the origin station.

Please note: respondents were instructed to select all access modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q7. Access Mode to Station	Saturday	Sunday	Weekend Total[17]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	889	893	1,782
Total Answering	63,636	55,364	118,999
Walked	21,980	16,600	38,580
	34.54%	29.98%	32.42%
Dropped off	13,588	18,096	31,684
	21.35%	32.69%	26.63%
Drove or rode with others and parked	10,177	7,366	17,543
	15.99%	13.31%	14.74%
Drove alone and parked	9,997	7,040	17,037
	15.71%	12.72%	14.32%
Taxi / Car service / Uber	4,962	3,973	8,935
	7.80%	7.18%	7.51%
Bus	2,686	1,680	4,367
	4.22%	3.04%	3.67%
Bicycle	607	302	909
	0.95%	0.55%	0.76%

[17] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q7. Access Mode to Station	Saturday	Sunday	Weekend Total[17]
Shore Line East	203 0.32%	442 0.80%	644 0.54%
Amtrak	168 0.26%	354 0.64%	522 0.44%
Ferry	49 0.08%	43 0.08%	92 0.08%
Other	848 1.33%	1,038 1.87%	1,886 1.58%
Total	65,264	56,933	122,198

5.8 Inbound Transfer Station

5.8.1 Weekday Riders - Inbound Transfer

Only about 3% of weekday riders reported making a transfer during their inbound trip. Percentage-wise, fewer AM Peak riders made transfers (2%) compared to riders from other weekday dayparts (4-5%).

Q8. Made Inbound Transfer	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[18]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	321	222	282	37	861
Total Answering	91,622	21,684	18,978	9,566	141,850
Yes	1,759	1,094	672	517	4,042
	1.92%	5.04%	3.54%	5.40%	2.85%
No	89,862	20,590	18,306	9,050	137,808
	98.08%	94.96%	96.46%	94.60%	97.15%
Total	91,622	21,684	18,978	9,566	141,850

[18] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.8.2 Weekend Riders - Inbound Transfer

6% of weekend riders reported making a transfer during their inbound trip; this was higher than the weekday transfer rate (3%).

Q8. Made Inbound Transfer	Saturday	Sunday	Weekend Total[19]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	657	641	1,299
Total Answering	63,868	55,615	119,483
Yes	3,522 5.52%	3,321 5.97%	6,843 5.73%
No	60,345 94.48%	52,294 94.03%	112,639 94.27%
Total	63,868	55,615	119,483

[19] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.8.3 Weekday Riders - Transfer Station

Among those who transferred, Stamford was the most frequently reported transfer station for weekday riders across all dayparts (38%). Croton-Harmon was the second most commonly reported transfer station for both AM Peak (18%) and Late Night Off Peak riders (23%) while Southeast was most reported among Midday Off-Peak riders (17%). White Plains was the second most reported transfer station for only the PM Reverse peak (20%), although it was also the second most frequently reported transfer station overall (16%).

Q8. Transfer Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[20]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	90,183	20,812	18,588	9,086	138,669
Total Answering	1,759	1,094	672	517	4,042
Stamford	621	465	244	206	1,536
	35.30%	42.47%	36.26%	39.91%	37.99%
White Plains	294	130	137	95	656
	16.73%	11.88%	20.32%	18.44%	16.24%
Croton-Harmon	321	101	95	118	635
	18.27%	9.27%	14.07%	22.80%	15.71%
Southeast	60	182	52	42	336
	3.42%	16.61%	7.70%	8.13%	8.31%
South Norwalk	102	65	60	26	252
	5.78%	5.93%	8.88%	4.99%	6.24%
Bridgeport	125	67	30	6	227
	7.08%	6.09%	4.45%	1.23%	5.63%
Harlem-125th St.	38	21	23	5	87
	2.17%	1.89%	3.46%	1.05%	2.16%
Crestwood	27	40	-	-	67
	1.55%	3.67%	-	-	1.67%
North White Plains	16	19	17	13	65
	0.93%	1.72%	2.53%	2.51%	1.61%
Mt Vernon West	42	-	-	-	42
	2.37%	-	-	-	1.03%
Other	122	22	21	6	170
	6.89%	1.98%	3.10%	1.16%	4.17%
Total	1,770	1,111	677	518	4,076

[20] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.8.4 Weekend Riders - Transfer Station

Similar to what was reported for weekday riders, Stamford was (among those who transferred) the most frequently used transfer station for weekend riders (39%). The second most frequently mentioned transfer station was White Plains for Saturday riders (16%) and Southeast for Sunday riders (20%). Croton-Harmon was also a well-represented transfer station on the weekend (12%).

Q8. Transfer Station	Saturday	Sunday	Weekend Total[21]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	61,002	52,935	113,938
Total Answering	3,522	3,321	6,843
Stamford	1,492	1,179	2,672
	42.36%	35.51%	39.04%
Southeast	391	664	1,055
	11.09%	20.01%	15.41%
White Plains	552	360	913
	15.68%	10.85%	13.34%
Croton-Harmon	410	442	851
	11.63%	13.30%	12.44%
Bridgeport	300	323	623
	8.52%	9.73%	9.11%
South Norwalk	213	246	460
	6.05%	7.42%	6.72%
Harlem-125Th St.	98	45	143
	2.78%	1.36%	2.09%
North White Plains	58	35	92
	1.64%	1.04%	1.35%
Other	66	74	141
	1.84%	2.20%	2.03%
Total	3,579	3,370	6,948

[21] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.9 Inbound Destination Station

5.9.1 Weekday Riders - Inbound Destination Station

A majority of weekday riders (82%) reported either Grand Central or Harlem-125th St.as their final destination stations (76% and 6%, respectively). Grand Central was, in particular, the most prevalent inbound destination station during AM Peak (85%).

Q9. Destination Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[22]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	-	-	-	-	-
Total Answering	91,942	21,906	19,259	9,603	142,711
Grand Central	78,169	15,726	9,519	5,339	108,753
	85.02%	71.79%	49.42%	55.59%	76.20%
Harlem-125th St.	3,845	1,617	2,213	895	8,570
	4.18%	7.38%	11.49%	9.32%	6.01%
Fordham	1,197	1,088	2,409	901	5,595
	1.30%	4.97%	12.51%	9.38%	3.92%
Stamford	3,087	514	359	309	4,268
	3.36%	2.34%	1.86%	3.22%	2.99%
Mt Vernon East	177	164	523	248	1,111
	0.19%	0.75%	2.72%	2.58%	0.78%
Other	5,469	2,797	4,238	1,914	14,416
	5.95%	12.77%	22.01%	19.93%	10.10%
Total	91,942	21,906	19,259	9,603	142,711

[22] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.9.2 Weekend Riders - Inbound Destination Station

Grand Central and Harlem-125th St. were the two most frequently mentioned inbound destination stations during the weekend (67% and 10%, respectively), but respondents also reported other destination stations, as compared to weekday respondents.

Q9. Destination Station	Saturday	Sunday	Weekend Total[23]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	-	-	-
Total Answering	64,525	56,256	120,781
Grand Central	42,677	38,099	80,777
	66.14%	67.72%	66.88%
Harlem-125th St.	5,763	6,058	11,820
	8.93%	10.77%	9.79%
Fordham	4,291	3,056	7,348
	6.65%	5.43%	6.08%
Stamford	1,484	873	2,357
	2.30%	1.55%	1.95%
Mt Vernon East	795	640	1,435
	1.23%	1.14%	1.19%
White Plains	629	718	1,347
	0.97%	1.28%	1.12%
New Rochelle	829	498	1,328
	1.29%	0.89%	1.10%
Marble Hill	522	502	1,024
	0.81%	0.89%	0.85%
Yonkers	423	556	979
	0.66%	0.99%	0.81%
Other East of Hudson Stations[24]	7,112	5,260	12,367
	11.02%	9.35%	10.24%
Total	64,525	56,256	120,781

[23] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

[24] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

5.10 Inbound Egress Mode to Final Destination

5.10.1 Weekday Riders – Inbound Egress Mode to Final Destination[25]

The two most common egress modes for weekday riders were walking and subway, collectively making up about 94% (59% and 34%, respectively) of total mentions.

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q10. Egress Mode from Final Destination Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[26]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	265	172	132	64	632
Total Answering	91,677	21,734	19,127	9,540	142,079
Walk	59,320	11,636	8,602	4,658	84,215
	64.70%	53.54%	44.97%	48.82%	59.27%
Subway	30,165	7,991	7,265	3,306	48,728
	32.90%	36.77%	37.98%	34.66%	34.30%
Bus	2,725	1,403	2,577	1,139	7,844
	2.97%	6.45%	13.47%	11.94%	5.52%
Taxi / Car service / Uber	2,613	1,800	1,545	999	6,956
	2.85%	8.28%	8.07%	10.47%	4.90%
Picked Up	637	428	836	253	2,154
	0.69%	1.97%	4.37%	2.66%	1.52%
Drive alone	265	166	186	56	672
	0.29%	0.76%	0.97%	0.59%	0.47%

[25] Respondents were allowed to report multiple egress modes. As a result, the tables in this section can add up to more than 100%.

[26] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q10. Egress Mode from Final Destination Station	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[26]
Drive or ride with others	196 0.21%	122 0.56%	149 0.78%	30 0.32%	497 0.35%
Other	1,875 2.05%	293 1.35%	349 1.82%	172 1.81%	2,689 1.89%
Total	97,795	23,838	21,509	10,614	153,756

5.10.2 Weekend Riders – Inbound Egress Mode to Final Destination[27]

Walking and subway were also the most common egress modes on weekends (42% and 41%, respectively), though the percentage using subway was higher on weekends compared to weekdays (41% vs. 34%). The Taxi/Car Service/Uber egress mode was also more prevalent on weekends compared to weekdays (15% vs 5%).

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q10. Egress Mode from Final Destination Station	Saturday	Sunday	Weekend Total[28]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	345	314	659
Total Answering	64,180	55,943	120,122
Walk	28,783	21,651	50,434
	44.85%	38.70%	41.99%
Subway	25,036	24,217	49,253
	39.01%	43.29%	41.00%
Taxi / Car service / Uber	9,380	9,057	18,437
	14.62%	16.19%	15.35%
Bus	4,338	3,982	8,320
	6.76%	7.12%	6.93%
Picked up	1,492	1,334	2,826
	2.32%	2.38%	2.35%
Drive or ride with others	535	472	1,007
	0.83%	0.84%	0.84%

[27] Respondents were allowed to report multiple egress modes. As a result, the tables in this section can add up to more than 100%.

[28] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q10. Egress Mode from Final Destination Station	Saturday	Sunday	Weekend Total[28]
Drive alone	330 0.51%	271 0.48%	601 0.50%
Other	868 1.35%	784 1.40%	1,652 1.37%
Total	70,762	61,768	132,530

5.10.3 Weekday Riders – Inbound Ingress Egress Mode to Final Destination – GCT Users

For the subset of weekday riders who alighted at Grand Central Terminal (GCT), a large majority reported walking or using the subway to get to their final destination (61% and 39%, respectively). Subway was reported more than walk by PM Reverse Peak riders (56% vs 39%) and Late Night Off Peak riders (48% vs 46%).

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q10. Egress Mode from Final Destination Station – GCT Users	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[29]
Unweighted Base	33,696	5,693	2,846	1,579	43,814
Weighted Base	78,169	15,726	9,519	5,339	108,753
No Answer	160	60	10	17	248
Total Answering	78,009	15,666	9,509	5,321	108,505
Walk	51,973	8,423	3,740	2,432	66,568
	66.62%	53.77%	39.33%	45.71%	61.35%
Subway	27,545	6,866	5,368	2,554	42,334
	35.31%	43.83%	56.46%	47.99%	39.02%
Taxi / Car service / Uber	1,498	1,071	728	428	3,725
	1.92%	6.84%	7.65%	8.05%	3.43%
Bus	672	297	392	147	1508
	0.86%	1.90%	4.12%	2.77%	1.39%
Picked up	125	91	92	28	336
	0.16%	0.58%	0.97%	0.53%	0.31%
Drive alone	146	99	36	19	300
	0.19%	0.63%	0.38%	0.35%	0.28%
Drive or ride with others	58	41	29	-	128
	0.07%	0.26%	0.31%	-	0.12%

[29] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q10. Egress Mode from Final Destination Station – GCT Users	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[29]
Other	803 1.03%	154 0.98%	203 2.14%	105 1.97%	1265 1.17%
Total	82,822	17,042	10,589	5,713	116,165

5.10.4 Weekend Riders – Inbound Egress Mode to Final Destination – GCT Users

Subway and walking were the two most commonly used egress modes for the subset of weekend riders who alighted at Grand Central Terminal (52% and 40%, respectively), though subway use was way higher on weekends compared to weekdays (52% vs. 39%).

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q10. Egress Mode from Final Destination Station – GCT Users	Saturday	Sunday	Weekend Total[30]
Unweighted Base	12,737	10,329	23,066
Weighted Base	42,677	38,099	80,777
No Answer	150	113	264
Total Answering	42,527	37,986	80,513
Subway	21,077 49.56%	20,476 53.90%	41,553 51.61%
Walk	18,077 42.51%	13,744 36.18%	31,821 39.52%
Taxi / Car service / Uber	5,792 13.62%	5,338 14.05%	11,130 13.82%
Bus	797 1.87%	899 2.37%	1,696 2.11%
Picked up	293 0.69%	328 0.86%	621 0.77%
Drive or ride with others	233 0.55%	231 0.61%	465 0.58%
Drive alone	146 0.34%	118 0.31%	264 0.33%

[30] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Other	509 1.20%	538 1.42%	1,047 1.30%
Total	46,925	41,672	88,597

5.11 Number of Transportation Modes to Final Destination

5.11.1 Weekday Riders - Number of Modes to Final Destination

A large majority (88%) of inbound weekday riders either used one mode of transportation (29%) or zero modes of transportation (59%) after exiting their last train to reach their final destination on weekdays. (If they only walked to their final destination, then they used zero modes.)

Q11. Number of Transportation Modes to Final Destination	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[31]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	2,279	1,104	1,070	363	4,816
Total Answering	89,663	20,802	18,189	9,240	137,895
0	56,427	11,076	8,568	4,823	80,894
	62.93%	53.24%	47.11%	52.19%	58.66%
1	24,302	6,878	6,256	2,887	40,323
	27.10%	33.07%	34.39%	31.24%	29.24%
2	7,940	2,474	2,894	1,330	14,638
	8.86%	11.89%	15.91%	14.39%	10.62%
3	633	244	307	124	1,308
	0.71%	1.17%	1.69%	1.34%	0.95%
4	126	58	65	36	285
	0.14%	0.28%	0.36%	0.39%	0.21%
5 or more	236	71	99	41	448
	0.26%	0.34%	0.54%	0.45%	0.32%
Total	89,663	20,802	18,189	9,240	137,895

[31] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.11.2 Weekend Riders - Number of Modes to Final Destination

Similar to what was reported for weekday riders, most weekend riders reported using one or zero modes of transportation to reach their final destination after exiting their last train (81% in total; 34% for one mode and 47% for zero modes).

Q11. Number of Modes to Final Destination	Saturday	Sunday	Weekend Total[32]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	2,201	1,775	3,976
Total Answering	62,324	54,482	116,806
0	30,747	24,614	55,362
	49.33%	45.18%	47.40%
1	20,765	18,528	39,293
	33.32%	34.01%	33.64%
2	9,347	10,111	19,458
	15.00%	18.56%	16.66%
3	819	824	1,643
	1.31%	1.51%	1.41%
4	192	128	319
	0.31%	0.23%	0.27%
5 or more	454	277	731
	0.73%	0.51%	0.63%
Total	62,324	54,482	116,806

[32] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.12 MetroCard Use

5.12.1 Weekday Riders – MetroCard Use

39% of weekday riders reported using a MetroCard on their way to their final destination, while 61% reported that they did not use a MetroCard. Of the group using MetroCard's, most of them used a Regular Pay-Per- Ride MetroCard (23% of all weekday riders).

Q12. MetroCard Use	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[33]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	3,013	1,234	1,073	495	5,815
Total Answering	88,929	20,672	18,187	9,108	136,896
No	57,624	11,797	9,097	5,120	83,638
	64.80%	57.07%	50.02%	56.22%	61.10%
Yes, I will use a MetroCard	31,304	8,875	9,090	3,989	53,257
	35.20%	42.93%	49.98%	43.80%	38.90%
Regular Pay-Per- Ride MetroCard	19,546	5,651	4,736	1,919	31,853
	21.98%	27.34%	26.04%	21.06%	23.27%
Less than $5.50	1,165	725	636	227	2,752
	1.31%	3.51%	3.49%	2.49%	2.01%
$5.50 or more	15,661	4,099	3,275	1,354	24,389
	17.61%	19.83%	18.01%	14.87%	17.82%
Did not specify	2,721	828	826	338	4,712
	3.06%	4.00%	4.54%	3.71%	3.44%
Unlimited Ride MetroCard	9,814	2,333	3,799	1,810	17,755
	11.04%	11.29%	20.89%	19.87%	12.97%
Other MetroCard	1,944	891	555	260	3,649
	2.19%	4.31%	3.05%	2.85%	2.67%
Total	88,929	20,672	18,187	9,108	136,896

[33] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.12.2 Weekend Riders – MetroCard Use

Slightly less than half of weekend riders (48%) reported using a MetroCard on their way to their final destination. The MetroCard was more commonly used by weekend riders compared to weekday riders (48% vs. 39%, respectively).

Q12. MetroCard Use	Saturday	Sunday	Weekend Total[34]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	2,833	2,388	5,221
Total Answering	61,692	53,869	115,560
No	33,549	26,798	60,347
	54.38%	49.75%	52.22%
Yes, I will use a MetroCard	28,143	27,071	55,214
	45.62%	50.25%	47.78%
Regular Pay-Per- Ride MetroCard	17,761	14,534	32,295
	28.79%	26.98%	27.95%
Less than $5.50	3,270	2,473	5,743
	5.30%	4.59%	4.97%
$5.50 or more	11,718	9,776	21,495
	19.00%	18.15%	18.60%
Did not specify	2,772	2,285	5,057
	4.49%	4.24%	4.38%
Unlimited Ride MetroCard	8,812	10,667	19,479
	14.28%	19.80%	16.86%
Other MetroCard	1,570	1,870	3,440
	2.55%	3.47%	2.98%
Total	61,692	53,869	115,560

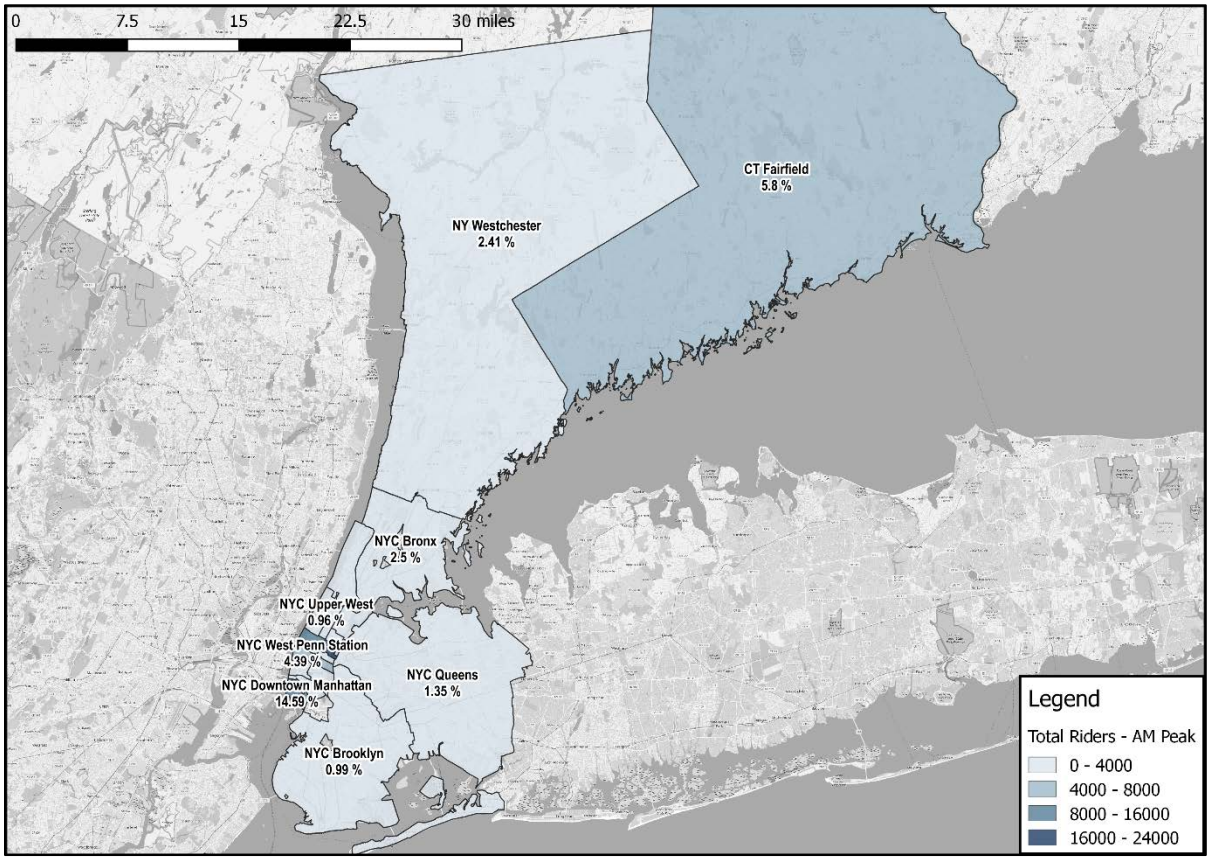
[34] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

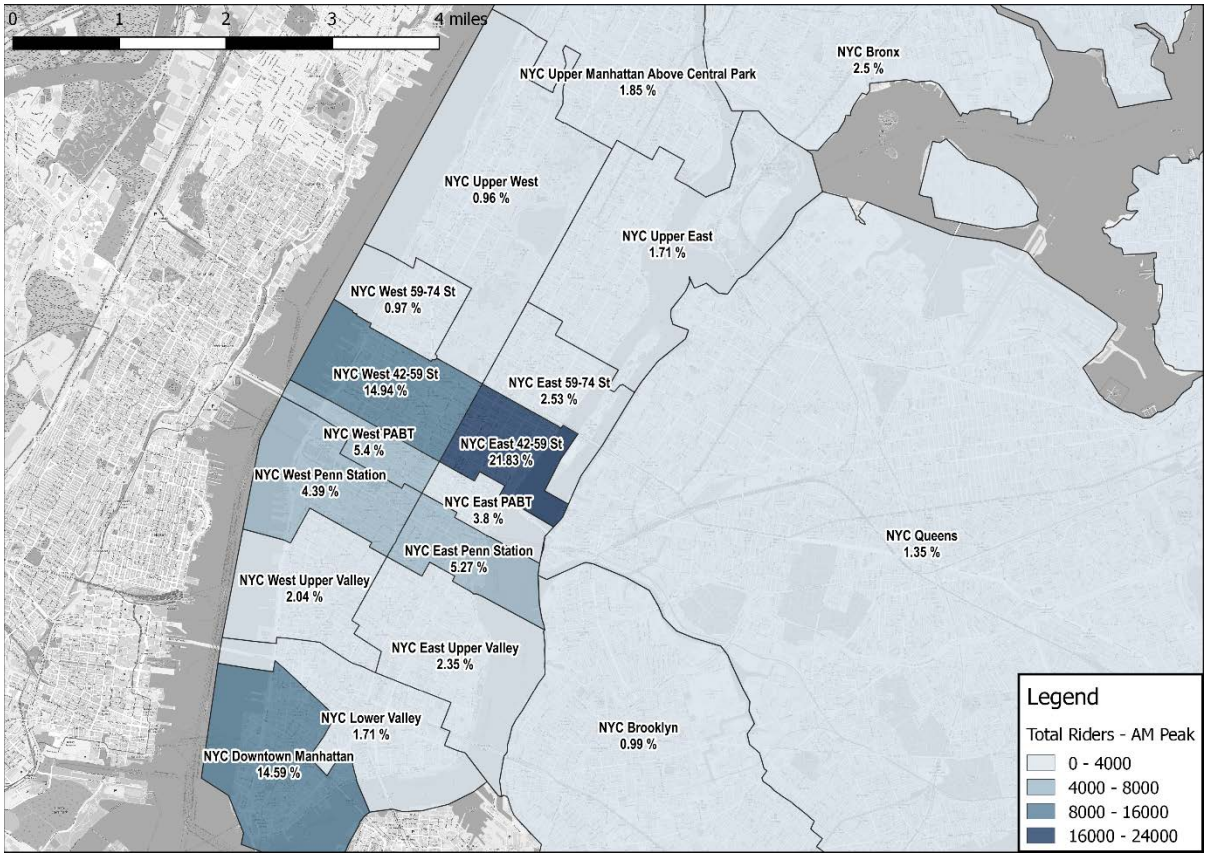
5.13 Inbound Trip Destination Location

The following maps show trip destinations by geographic region. Each geographic boundary reflects the boundaries of zones of interest as defined by MNR. Darker colors represent higher concentrations of destination locations.

5.13.1 AM Peak

More than one-third of AM Peak riders (37%) either traveled to East 42-59 St (22%) or West 42-59 St (15%). Downtown Manhattan was also a commonly reported destination location (15%). A total of 76% of AM Peak riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



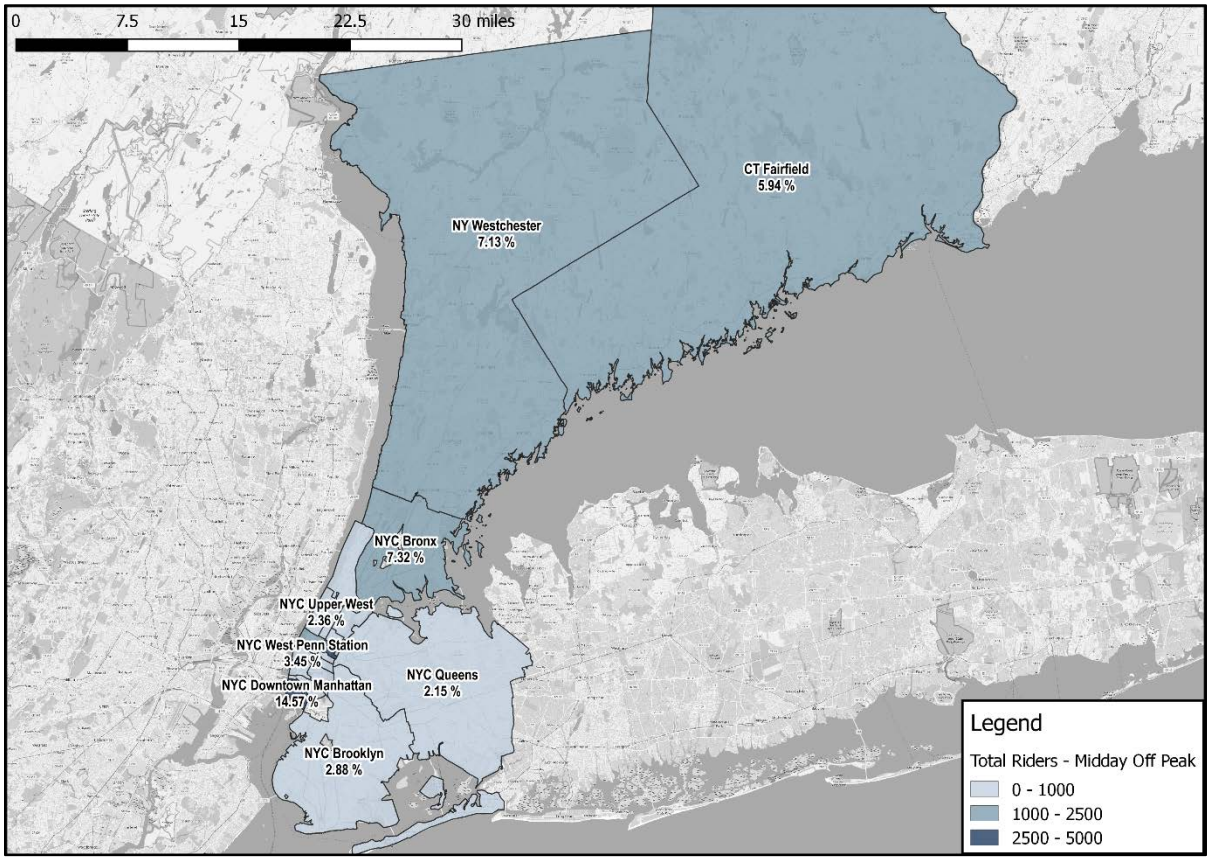

0
1
2
3
4 miles
NYC Upper Manhattan Above Central Park
1.85 %
NYC Bronx
2.5 %
NYC Upper West
0.96 %
NYC Upper East
1.71 %
NYC West 59-74 St
0.97 %
NYC West 42-59 St
14.94 %
NYC East 59-74 St
2.53 %
NYC West PABT
5.4 %
NYC East 42-59 St
21.83 %
NYC West Penn Station
4.39 %
NYC East PABT
3.8 %
NYC Queens
1.35 %
NYC East Penn Station
5.27 %
NYC West Upper Valley
2.04 %
NYC East Upper Valley
2.35 %
NYC Lower Valley
1.71 %
NYC Brooklyn
0.99 %
NYC Downtown Manhattan
14.59 %
Legend
Total Riders - AM Peak
0 - 4000
4000 - 8000
8000 - 16000
16000 - 24000

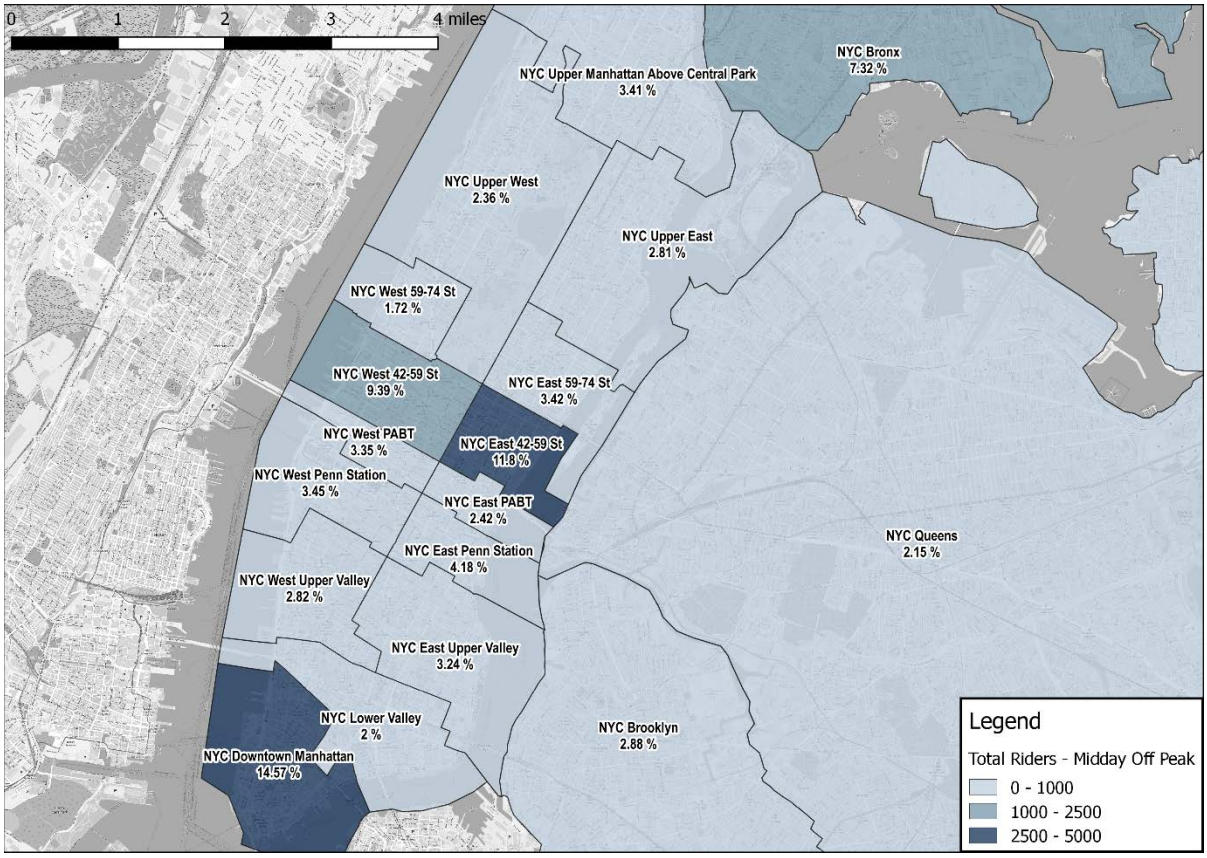
Q13. Destination Location	AM Peak
Unweighted Base	38,878
Weighted Base	91,942
No Answer	5
Total Answering	91,937
NYC East 42-59 St	20,069 21.83%
NYC West 42-59 St	13,733 14.94%
NYC Downtown Manhattan	13,412 14.59%
CT Fairfield	5,331 5.80%
NYC West Pabt	4,964 5.40%
NYC East Penn Station	4,844 5.27%
NYC West Penn Station	4,033 4.39%
NYC East Pabt	3,498 3.80%
NYC East 59-74 St	2,329 2.53%
NYC Bronx	2,295 2.50%
NY Westchester	2,214 2.41%
NYC East Upper Valley	2,162 2.35%

Q13. Destination Location	AM Peak
NYC West Upper Valley	1,876 2.04%
NYC Upper Manhattan Above Central Park	1,700 1.85%
NYC Lower Valley	1,575 1.71%
NYC Upper East	1,568 1.71%
NYC Queens	1,242 1.35%
NYC Brooklyn	915 0.99%
NYC West 59-74 St	889 0.97%
NYC Upper West	879 0.96%
Other	2,408 2.62%
Total	91,937

5.13.2 Midday Off Peak

Midday Off Peak riders reported Downtown Manhattan as their final destination location the most (15%). NYC East 42-59 St (12%) and NYC West 42-59 St (9%) were the next two most mentioned destination areas. A total of 57% of Midday Off Peak riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



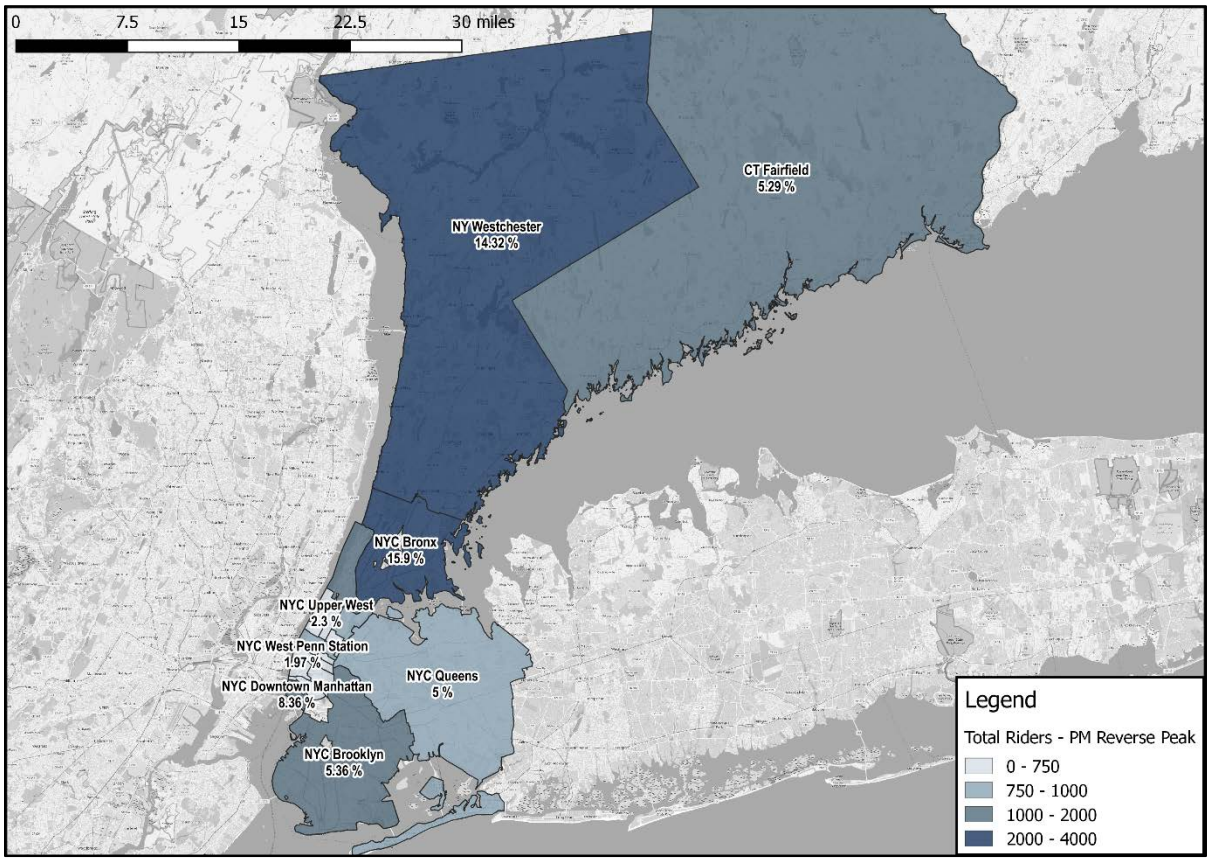

0
1
2
3
4 miles
NYC Bronx
7.32 %
NYC Upper Manhattan Above Central Park
3.41 %
NYC Upper West
2.36 %
NYC Upper East
2.81 %
NYC West 59-74 St
1.72 %
NYC West 42-59 St
9.39 %
NYC East 59-74 St
3.42 %
NYC West PABT
3.35 %
NYC East 42-59 St
11.8 %
NYC West Penn Station
3.45 %
NYC East PABT
2.42 %
NYC Queens
2.15 %
NYC East Penn Station
4.18 %
NYC West Upper Valley
2.82 %
NYC East Upper Valley
3.24 %
NYC Lower Valley
2 %
NYC Brooklyn
2.88 %
NYC Downtown Manhattan
14.57 %
Legend
Total Riders - Midday Off Peak
0 - 1000
1000 - 2500
2500 - 5000

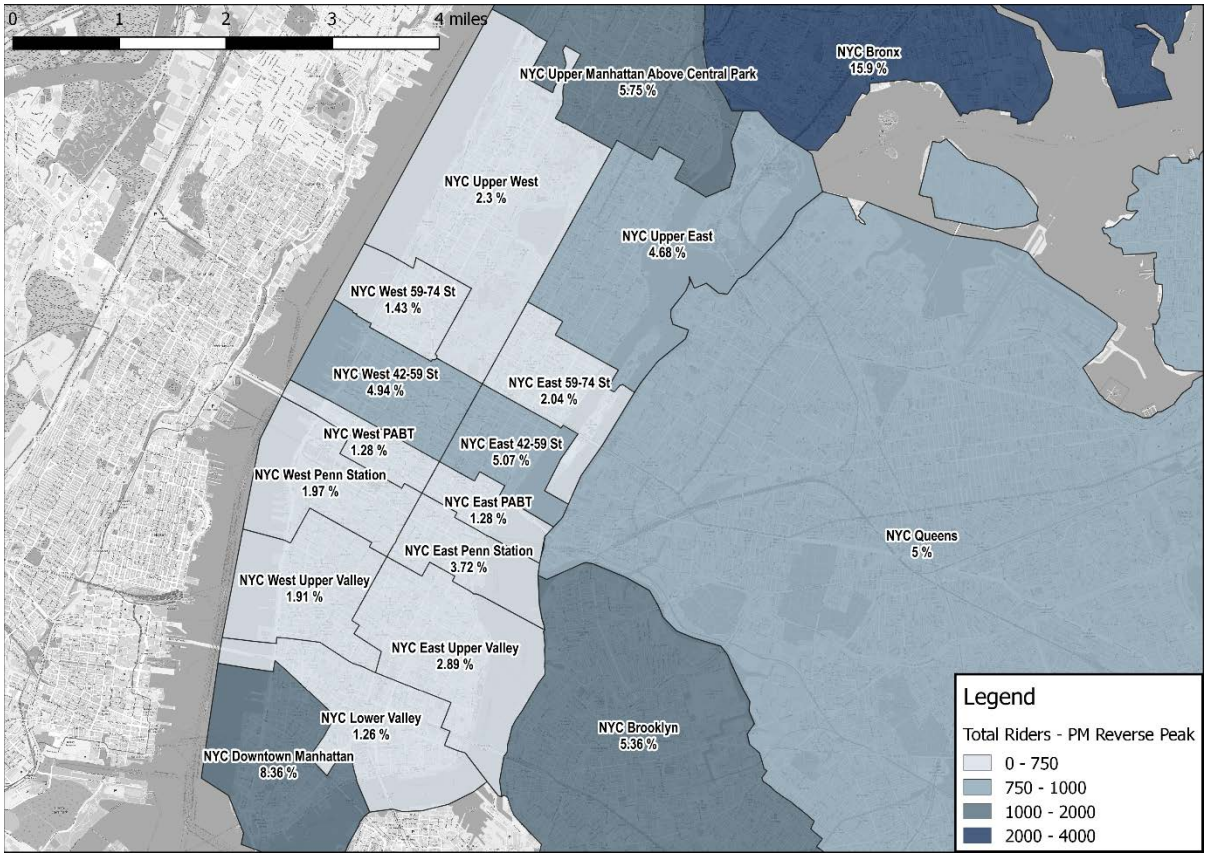
Q13. Destination Location	Midday Off Peak
Unweighted Base	7,075
Weighted Base	21,906
No Answer	-
Total Answering	21,906
NYC Downtown Manhattan	3,191 14.57%
NYC East 42-59 St	2,585 11.80%
NYC West 42-59 St	2,057 9.39%
NYC Bronx	1,603 7.32%
NY Westchester	1,562 7.13%
CT Fairfield	1,302 5.94%
NYC East Penn Station	915 4.18%
NYC West Penn Station	756 3.45%
NYC East 59-74 St	748 3.42%
NYC Upper Manhattan Above Central Park	747 3.41%
NYC West Pabt	733 3.35%
NYC East Upper Valley	709 3.24%

Q13. Destination Location	Midday Off Peak
NYC Brooklyn	631 2.88%
NYC West Upper Valley	618 2.82%
NYC Upper East	615 2.81%
NYC East Pabt	530 2.42%
NYC Upper West	518 2.36%
NYC Queens	471 2.15%
NYC Lower Valley	437 2.00%
NYC West 59-74 St	377 1.72%
Other	798 3.64%
Total	21,906

5.13.3 PM Reverse Peak

Slightly under one-third of final destinations in the PM Reverse Peak were focused in either the NYC Bronx (16%) or NY Westchester (14%) areas. A total of 33% of PM Reverse Peak riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



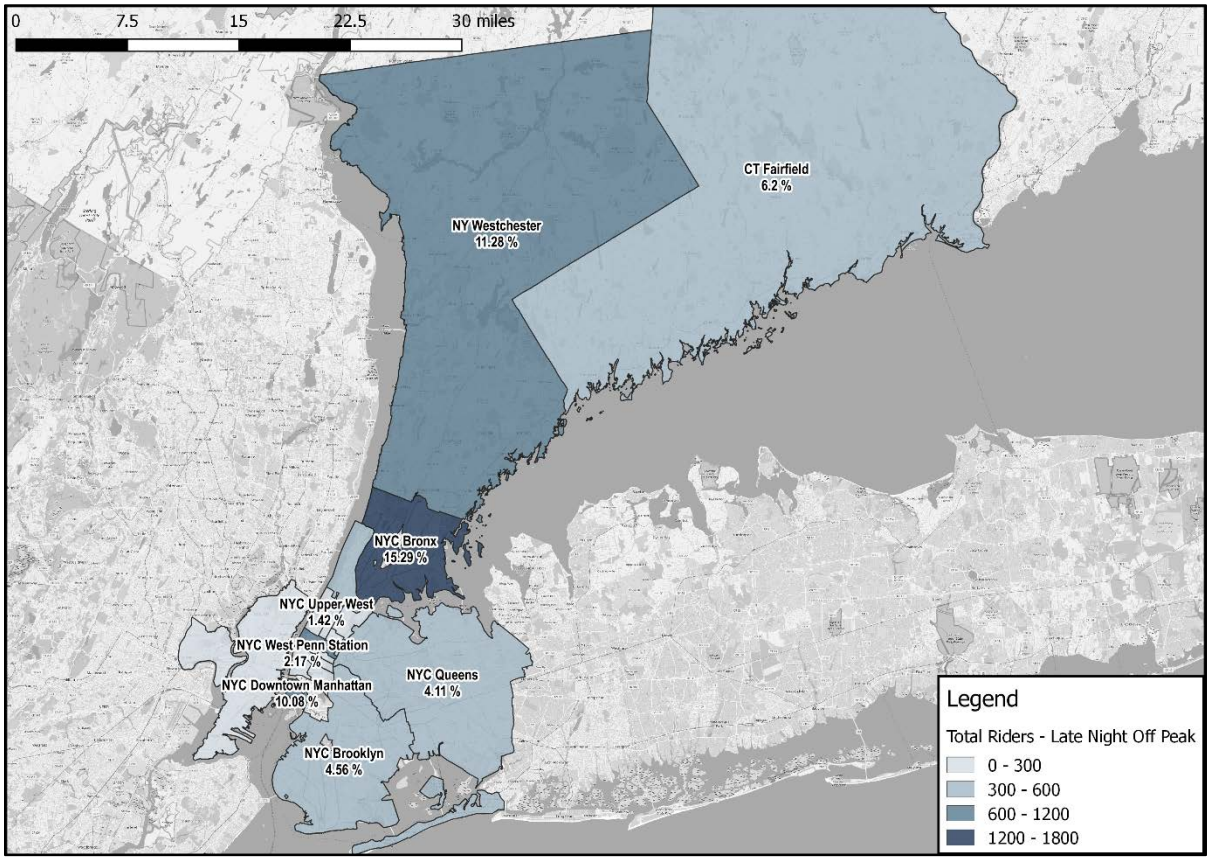

0
1
2
3
4 miles
NYC Bronx
15.9 %
NYC Upper Manhattan Above Central Park
5.75 %
NYC Upper West
2.3 %
NYC Upper East
4.68 %
NYC West 59-74 St
1.43 %
NYC West 42-59 St
4.94 %
NYC East 59-74 St
2.04 %
NYC West PABT
1.28 %
NYC East 42-59 St
5.07 %
NYC West Penn Station
1.97 %
NYC East PABT
1.28 %
NYC East Penn Station
3.72 %
NYC Queens
5 %
NYC West Upper Valley
1.91 %
NYC East Upper Valley
2.89 %
NYC Lower Valley
1.26 %
NYC Brooklyn
5.36 %
NYC Downtown Manhattan
8.36 %
Legend
Total Riders - PM Reverse Peak
0 - 750
750 - 1000
1000 - 2000
2000 - 4000

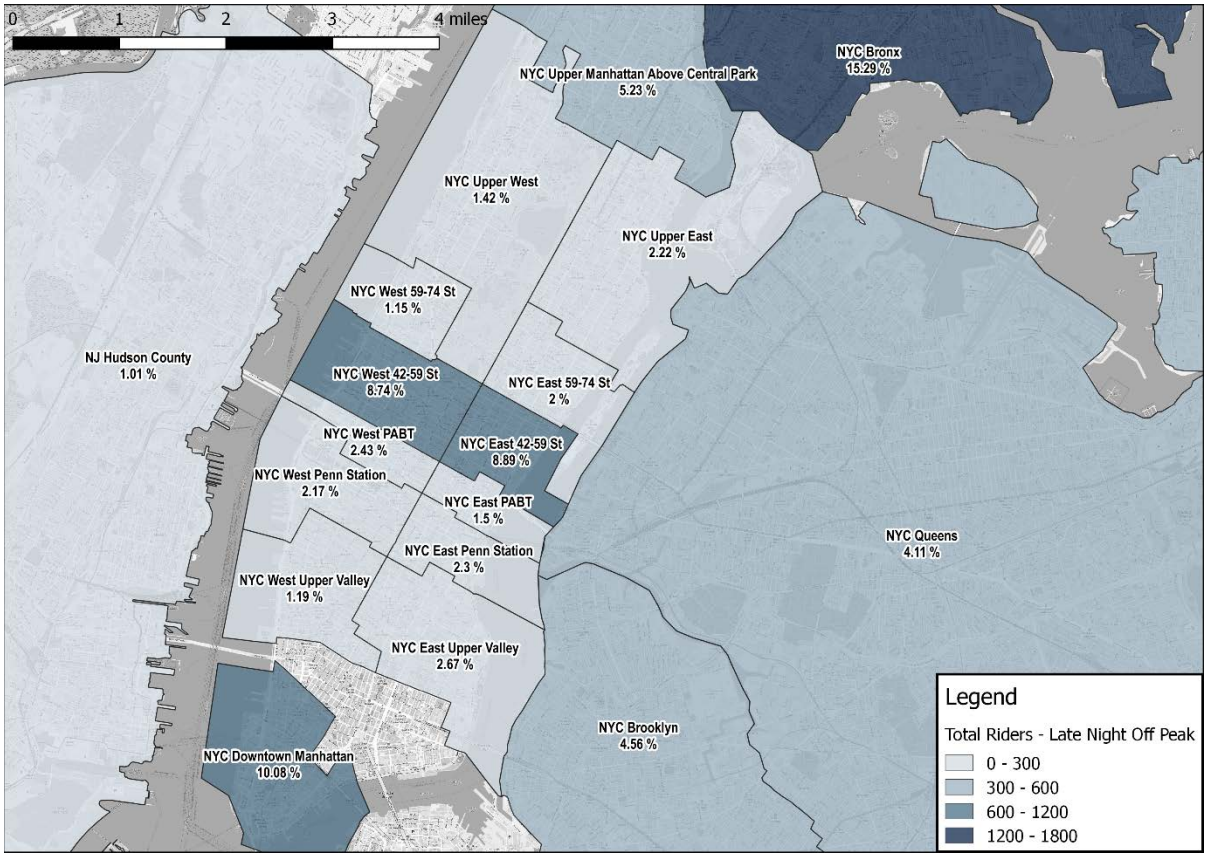
Q13. Destination Location	PM Reverse Peak
Unweighted Base	4,732
Weighted Base	19,259
No Answer	-
Total Answering	19,259
NYC Bronx	3,062 15.90%
NY Westchester	2,759 14.32%
NYC Downtown Manhattan	1,610 8.36%
NYC Upper Manhattan Above Central Park	1,107 5.75%
NYC Brooklyn	1,032 5.36%
CT Fairfield	1,020 5.29%
NYC East 42-59 St	976 5.07%
NYC Queens	964 5.00%
NYC West 42-59 St	951 4.94%
NYC Upper East	902 4.68%
NYC East Penn Station	717 3.72%
NYC East Upper Valley	556 2.89%

Q13. Destination Location	PM Reverse Peak
NYC Upper West	444 2.30%
NYC East 59-74 St	392 2.04%
NYC West Penn Station	379 1.97%
NYC West Upper Valley	369 1.91%
NYC West 59-74 St	275 1.43%
NYC East Pabt	247 1.28%
NYC West Pabt	247 1.28%
NYC Lower Valley	242 1.26%
Other	1,008 5.23%
Total	19,259

5.13.4 Late Night Off Peak

The top three most commonly reported destination locations for Late Night Off Peak riders were NYC Bronx (15%), NY Westchester (11%), and NYC Downtown Manhattan (10%). Also represented were the NYC east and west sides of 42-59 St (9% each). A total of 41% of Late Night Off Peak riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



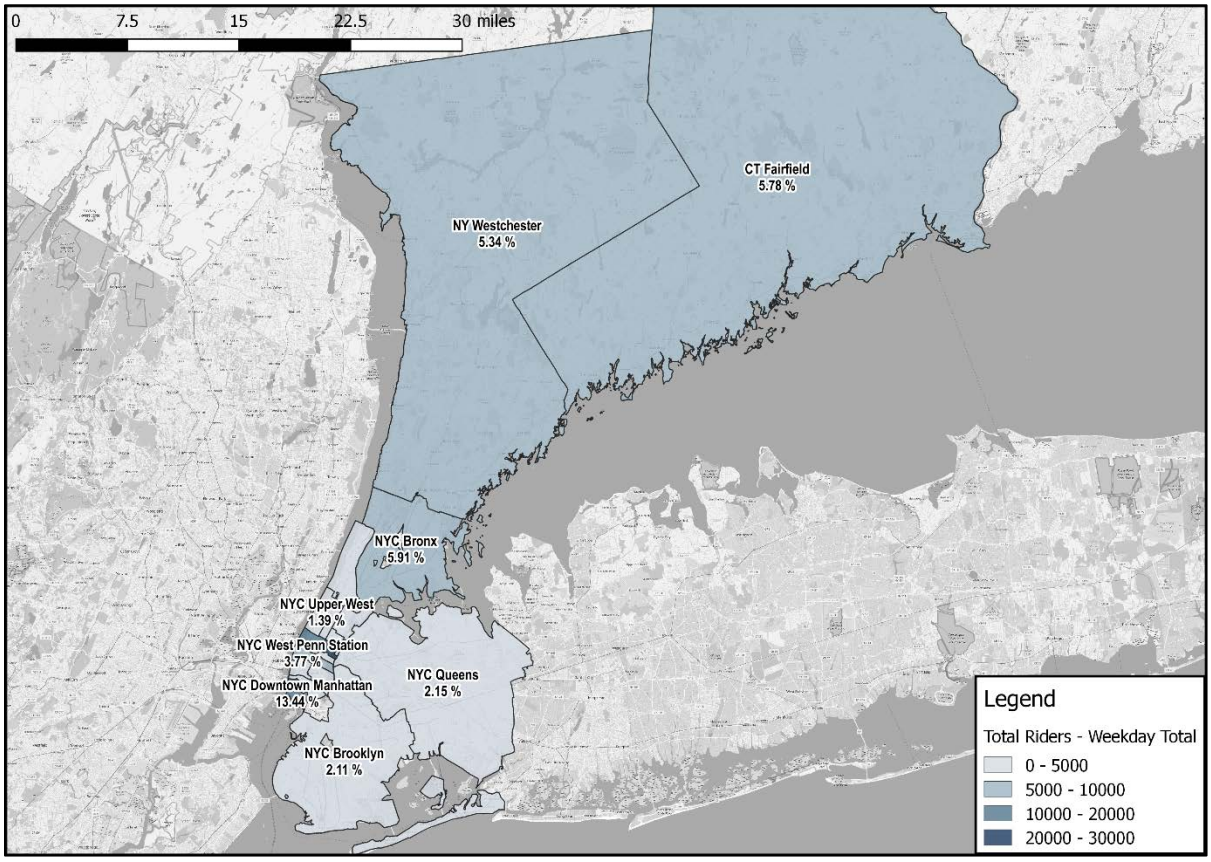

0 1 2 3 4 miles
NYC Bronx
15.29 %
NYC Upper Manhattan Above Central Park
5.23 %
NYC Upper West
1.42 %
NYC Upper East
2.22 %
NYC West 59-74 St
1.15 %
NJ Hudson County
1.01 %
NYC West 42-59 St
8.74 %
NYC East 59-74 St
2 %
NYC West PABT
2.43 %
NYC East 42-59 St
8.89 %
NYC West Penn Station
2.17 %
NYC East PABT
1.5 %
NYC Queens
4.11 %
NYC East Penn Station
2.3 %
NYC West Upper Valley
1.19 %
NYC East Upper Valley
2.67 %
NYC Brooklyn
4.56 %
NYC Downtown Manhattan
10.08 %
Legend
Total Riders - Late Night Off Peak
0 - 300
300 - 600
600 - 1200
1200 - 1800

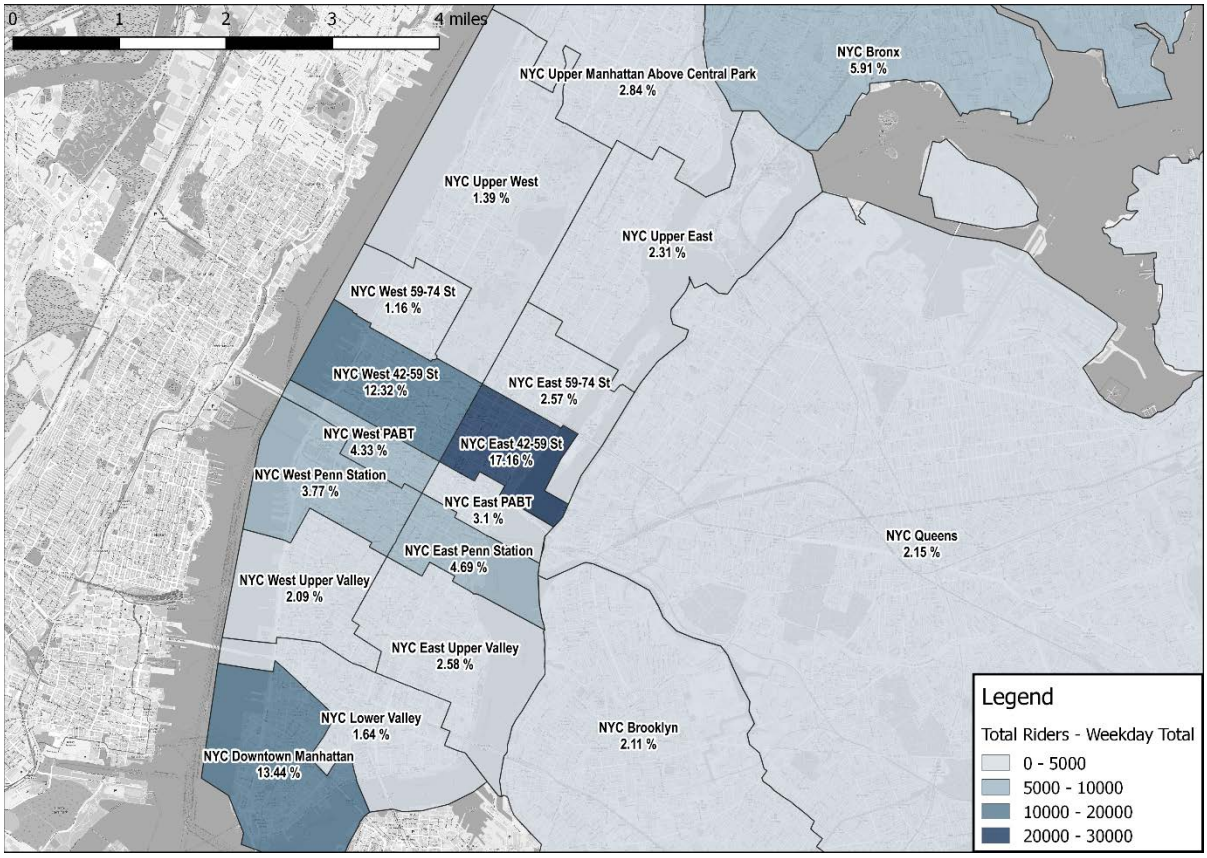
Q13. Destination Location	Late Night Off Peak
Unweighted Base	2,304
Weighted Base	9,603
No Answer	-
Total Answering	9,603
NYC Bronx	1,468 15.29%
NY Westchester	1,083 11.28%
NYC Downtown Manhattan	968 10.08%
NYC East 42-59 St	854 8.89%
NYC West 42-59 St	839 8.74%
CT Fairfield	596 6.20%
NYC Upper Manhattan Above Central Park	502 5.23%
NYC Brooklyn	438 4.56%
NYC Queens	395 4.11%
NYC East Upper Valley	256 2.67%
NYC West Pabt	233 2.43%
NYC East Penn Station	221 2.30%

Q13. Destination Location	Late Night Off Peak
NYC Upper East	213 2.22%
NYC West Penn Station	209 2.17%
NYC East 59-74 St	192 2.00%
NYC East Pabt	144 1.50%
NYC Upper West	137 1.42%
NYC West Upper Valley	114 1.19%
NYC West 59-74 St	110 1.15%
NJ Hudson County	97 1.01%
Other	535 5.57%
Total	9,603

5.13.5 Weekday Total

Overall, NYC East 42-59 St was the most commonly reported destination location among weekday riders (17%), followed by NYC Downtown Manhattan (13%), and NYC West 42-59 St (12%). A total of 65% of weekday riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



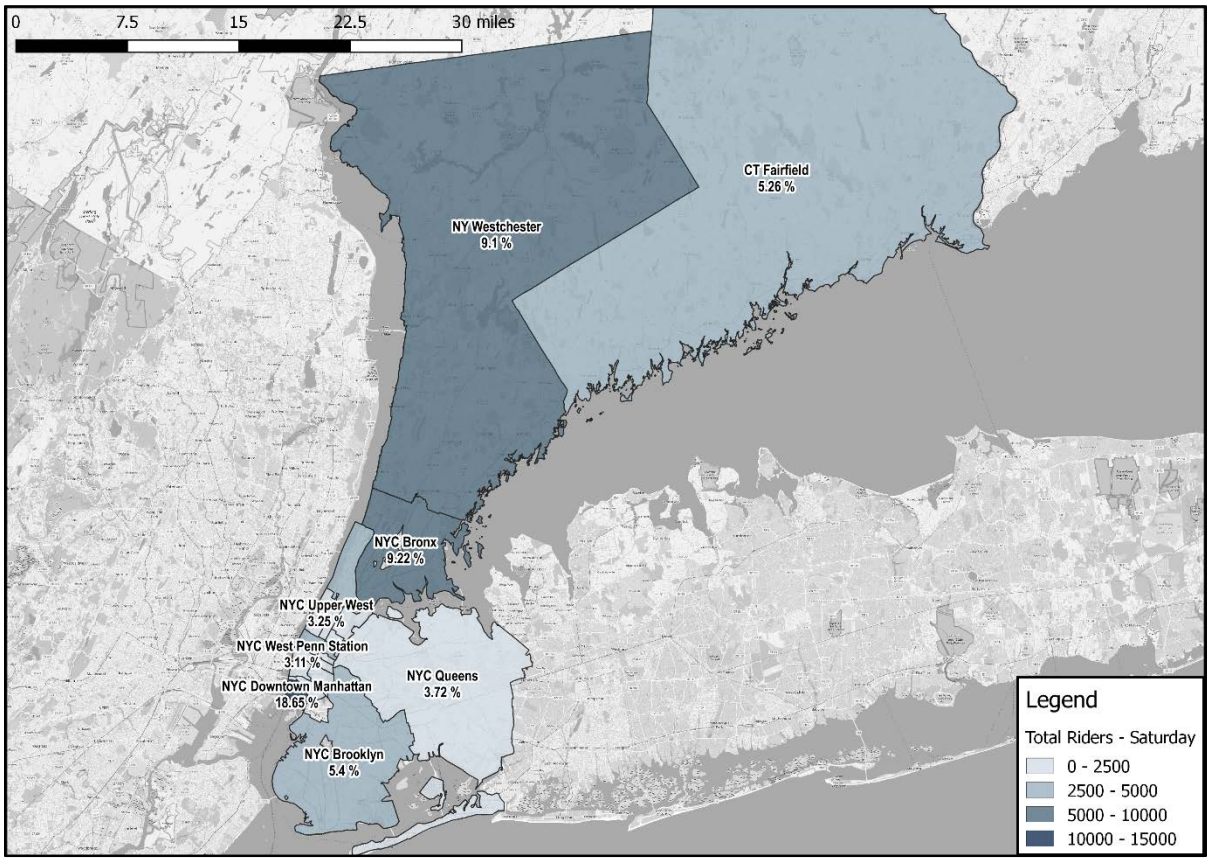

0
1
2
3
4 miles
NYC Bronx
5.91 %
NYC Upper Manhattan Above Central Park
2.84 %
NYC Upper West
1.39 %
NYC Upper East
2.31 %
NYC West 59-74 St
1.16 %
NYC West 42-59 St
12.32 %
NYC East 59-74 St
2.57 %
NYC West PABT
4.33 %
NYC East 42-59 St
17.16 %
NYC West Penn Station
3.77 %
NYC East PABT
3.1 %
NYC Queens
2.15 %
NYC East Penn Station
4.69 %
NYC West Upper Valley
2.09 %
NYC East Upper Valley
2.58 %
NYC Lower Valley
1.64 %
NYC Brooklyn
2.11 %
NYC Downtown Manhattan
13.44 %
Legend
Total Riders - Weekday Total
0 - 5000
5000 - 10000
10000 - 20000
20000 - 30000

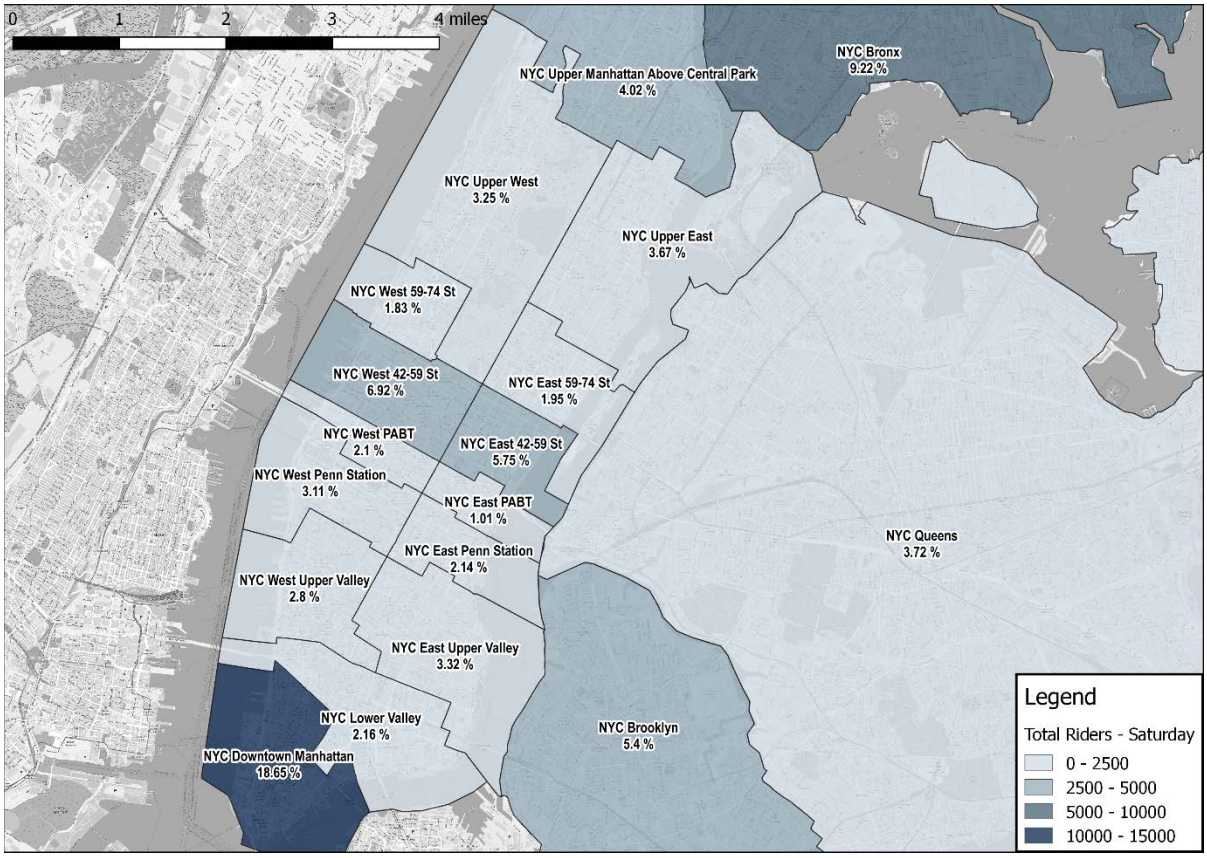
Q13. Destination Location	Weekday Total
Unweighted Base	52,989
Weighted Base	142,711
No Answer	5
Total Answering	142,706
NYC East 42-59 St	24,484 17.16%
NYC Downtown Manhattan	19,182 13.44%
NYC West 42-59 St	17,580 12.32%
NYC Bronx	8,428 5.91%
CT Fairfield	8,248 5.78%
NY Westchester	7,618 5.34%
NYC East Penn Station	6,696 4.69%
NYC West Pabt	6,177 4.33%
NYC West Penn Station	5,377 3.77%
NYC East Pabt	4,419 3.10%
NYC Upper Manhattan Above Central Park	4,055 2.84%
NYC East Upper Valley	3,684 2.58%

Q13. Destination Location	Weekday Total
NYC East 59-74 St	3,662 2.57%
NYC Upper East	3,297 2.31%
NYC Queens	3,071 2.15%
NYC Brooklyn	3,016 2.11%
NYC West Upper Valley	2,977 2.09%
NYC Lower Valley	2,337 1.64%
NYC Upper West	1,977 1.39%
NYC West 59-74 St	1,652 1.16%
Other	4,770 3.34%
Total	142,706

5.13.6 Saturday

Saturday riders traveled to NYC Downtown Manhattan the most (19%) followed by NYC Bronx and NY Westchester (9% each). A total of 48% of Saturday riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



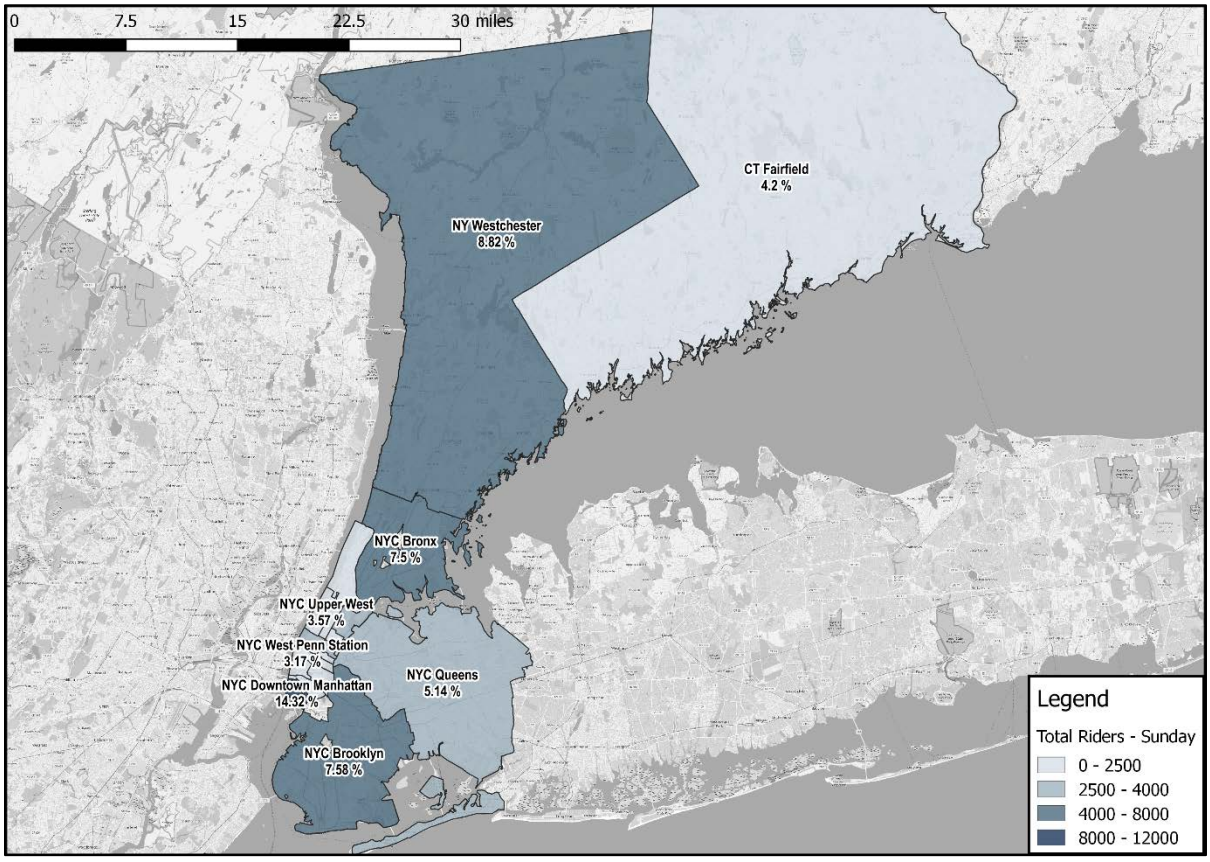

0
1
2
3
4 miles
NYC Bronx
9.22 %
NYC Upper Manhattan Above Central Park
4.02 %
NYC Upper West
3.25 %
NYC Upper East
3.67 %
NYC West 59-74 St
1.83 %
NYC West 42-59 St
6.92 %
NYC East 59-74 St
1.95 %
NYC West PABT
2.1 %
NYC East 42-59 St
5.75 %
NYC West Penn Station
3.11 %
NYC East PABT
1.01 %
NYC East Penn Station
2.14 %
NYC Queens
3.72 %
NYC West Upper Valley
2.8 %
NYC East Upper Valley
3.32 %
NYC Lower Valley
2.16 %
NYC Brooklyn
5.4 %
NYC Downtown Manhattan
18.65 %
Legend
Total Riders - Saturday
0 - 2500
2500 - 5000
5000 - 10000
10000 - 15000

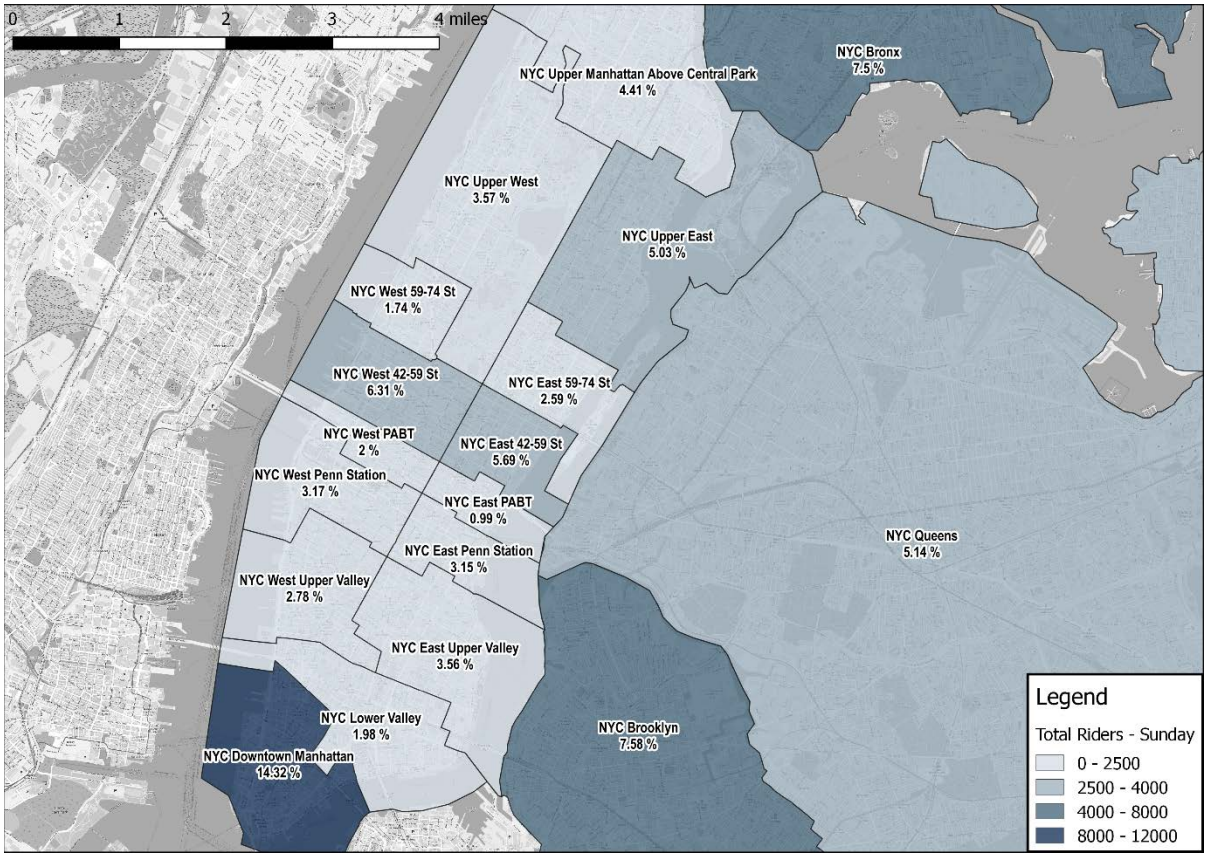
Q13. Destination Location	Saturday
Unweighted Base	16,574
Weighted Base	64,525
No Answer	-
Total Answering	64,525
NYC Downtown Manhattan	12,031 18.65%
NYC Bronx	5,952 9.22%
NY Westchester	5,873 9.10%
NYC West 42-59 St	4,465 6.92%
NYC East 42-59 St	3,708 5.75%
NYC Brooklyn	3,486 5.40%
CT Fairfield	3,395 5.26%
NYC Upper Manhattan Above Central Park	2,593 4.02%
NYC Queens	2,398 3.72%
NYC Upper East	2,367 3.67%
NYC East Upper Valley	2,143 3.32%
NYC Upper West	2,098 3.25%

Q13. Destination Location	Saturday
NYC West Penn Station	2,007 3.11%
NYC West Upper Valley	1,805 2.80%
NYC Lower Valley	1,393 2.16%
NYC East Penn Station	1,383 2.14%
NYC West Pabt	1,355 2.10%
NYC East 59-74 St	1,260 1.95%
NYC West 59-74 St	1,182 1.83%
NYC East Pabt	650 1.01%
Other	2,981 4.62%
Total	64,525

5.13.7 Sunday

Similar to Saturday riders, Sunday riders also indicated NYC Downtown Manhattan as their destination location the most (14%). NY Westchester was the next most common destination (9%). A total of 44% of Sunday riders traveled to a destination in the Manhattan CBD area (south of 60th Street).



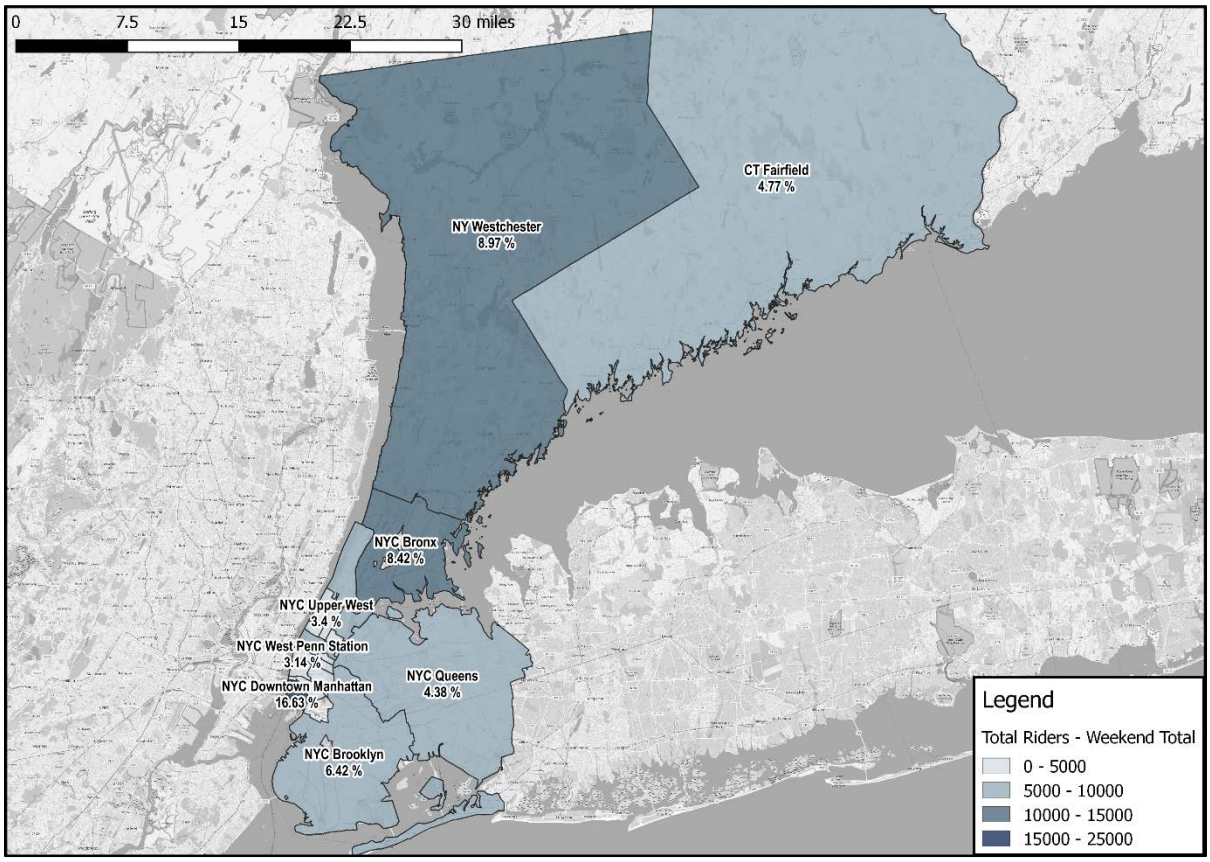

0
1
2
3
4 miles
NYC Upper Manhattan Above Central Park
4.41 %
NYC Bronx
7.5 %
NYC Upper West
3.57 %
NYC Upper East
5.03 %
NYC West 59-74 St
1.74 %
NYC West 42-59 St
6.31 %
NYC East 59-74 St
2.59 %
NYC West PABT
2 %
NYC East 42-59 St
5.69 %
NYC West Penn Station
3.17 %
NYC East PABT
0.99 %
NYC East Penn Station
3.15 %
NYC Queens
5.14 %
NYC West Upper Valley
2.78 %
NYC East Upper Valley
3.56 %
NYC Lower Valley
1.98 %
NYC Brooklyn
7.58 %
NYC Downtown Manhattan
14.32 %
Legend
Total Riders - Sunday
0 - 2500
2500 - 4000
4000 - 8000
8000 - 12000

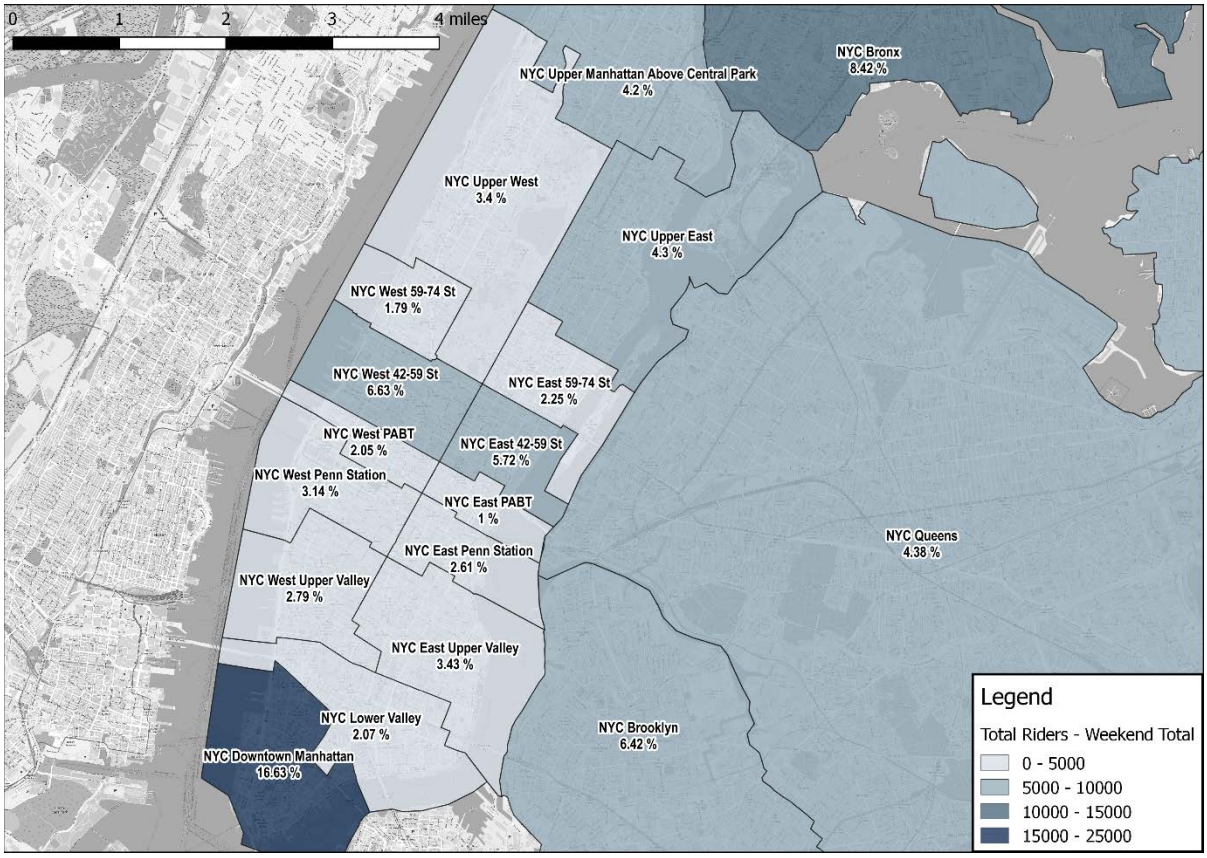
Q13. Destination Location	Sunday
Unweighted Base	13,748
Weighted Base	56,256
No Answer	-
Total Answering	56,256
NYC Downtown Manhattan	8,053 14.32%
NY Westchester	4,964 8.82%
NYC Brooklyn	4,267 7.58%
NYC Bronx	4,218 7.50%
NYC West 42-59 St	3,549 6.31%
NYC East 42-59 St	3,199 5.69%
NYC Queens	2,893 5.14%
NYC Upper East	2,828 5.03%
NYC Upper Manhattan Above Central Park	2,479 4.41%
CT Fairfield	2,361 4.20%
NYC Upper West	2,008 3.57%
NYC East Upper Valley	2,003 3.56%

Q13. Destination Location	Sunday
NYC West Penn Station	1,783 3.17%
NYC East Penn Station	1,773 3.15%
NYC West Upper Valley	1,563 2.78%
NYC East 59-74 St	1,460 2.59%
NYC West Pabt	1,125 2.00%
NYC Lower Valley	1,111 1.98%
NYC West 59-74 St	977 1.74%
NYC East Pabt	557 0.99%
Other	3,083 5.48%
Total	56,256

5.13.8 Weekend Total

Overall, the top three most frequently reported weekend destination locations were NYC Downtown Manhattan (17%), NY Westchester (9%), and NYC Bronx (8%). A total of 46% of weekend riders traveled to a destination in the Manhattan CBD area (south of 60th Street).




0
1
2
3
4 miles
NYC Bronx
8.42 %
NYC Upper Manhattan Above Central Park
4.2 %
NYC Upper West
3.4 %
NYC Upper East
4.3 %
NYC West 59-74 St
1.79 %
NYC West 42-59 St
6.63 %
NYC East 59-74 St
2.25 %
NYC West PABT
2.05 %
NYC East 42-59 St
5.72 %
NYC West Penn Station
3.14 %
NYC East PABT
1 %
NYC East Penn Station
2.61 %
NYC Queens
4.38 %
NYC West Upper Valley
2.79 %
NYC East Upper Valley
3.43 %
NYC Lower Valley
2.07 %
NYC Brooklyn
6.42 %
NYC Downtown Manhattan
16.63 %
Legend
Total Riders - Weekend Total
0 - 5000
5000 - 10000
10000 - 15000
15000 - 25000

Q13. Destination Location	Weekend Total
Unweighted Base	30,322
Weighted Base	120,781
No Answer	-
Total Answering	120,781
NYC Downtown Manhattan	20,085 16.63%
NY Westchester	10,837 8.97%
NYC Bronx	10,170 8.42%
NYC West 42-59 St	8,013 6.63%
NYC Brooklyn	7,753 6.42%
NYC East 42-59 St	6,907 5.72%
CT Fairfield	5,755 4.77%
NYC Queens	5,291 4.38%
NYC Upper East	5,196 4.30%
NYC Upper Manhattan Above Central Park	5,072 4.20%
NYC East Upper Valley	4,146 3.43%
NYC Upper West	4,106 3.40%

Q13. Destination Location	Weekend Total
NYC West Penn Station	3,790 3.14%
NYC West Upper Valley	3,369 2.79%
NYC East Penn Station	3,156 2.61%
NYC East 59-74 St	2,720 2.25%
NYC Lower Valley	2,504 2.07%
NYC West Pabt	2,480 2.05%
NYC West 59-74 St	2,158 1.79%
NYC East Pabt	1,206 1.00%
Other	6,067 5.02%
Total	120,781

5.14 Trip Destination Type

5.14.1 Weekday Riders - Inbound Trip Destination Type

A vast majority of AM Peak riders (91%) reported traveling to their workplace. More PM Reverse Peak riders reported traveling to their home than their workplace (56% vs 15%).

Q14. Destination Type	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[35]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	-	-	-	-	-
Total Answering	91,942	21,906	19,259	9,603	142,711
My Work	83,569	9,428	2,941	4,904	100,841
	90.89%	43.04%	15.27%	51.06%	70.66%
My Home	2,179	3,376	10,696	3,498	19,749
	2.37%	15.41%	55.53%	36.42%	13.84%
Recreation / Tourism / Hotel	938	2,944	2,766	290	6,938
	1.02%	13.44%	14.36%	3.02%	4.86%
My school	2,545	1,705	768	145	5,163
	2.77%	7.79%	3.99%	1.51%	3.62%
Friend / Family home	457	1,373	1,066	604	3,499
	0.50%	6.27%	5.54%	6.28%	2.45%
Other	2,254	3,080	1,023	164	6,520
	2.45%	14.06%	5.31%	1.70%	4.57%
Total	91,942	21,906	19,259	9,603	142,711

[35] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.14.2 Weekend Riders - Inbound Trip Destination Type

Recreational destination locations were more common for Saturday riders when compared to Sunday riders (34% vs 25%). Sunday riders reported their home as the destination location more frequently than Saturday riders (40% vs 22%); these were likely to be weekend travelers returning home.

Q14. Destination Type	Saturday	Sunday	Weekend Total[36]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	-	-	-
Total Answering	64,525	56,256	120,781
My Home	14,420	22,269	36,688
	22.35%	39.58%	30.38%
Recreation / Tourism / Hotel	22,066	13,820	35,886
	34.20%	24.57%	29.71%
My Work	11,601	8,834	20,435
	17.98%	15.70%	16.92%
Friend / Family home	9,778	6,063	15,841
	15.15%	10.78%	13.12%
My school	2,047	1,608	3,655
	3.17%	2.86%	3.03%
Other	4,613	3,663	8,275
	7.15%	6.51%	6.85%
Total	64,525	56,256	120,781

[36] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.15 Number of Minutes to Final Destination

5.15.1 Weekday Riders - Travel Time to Final Destination for Inbound Trips

Over half of all weekday riders (58%) indicated a travel time of 15 min or less to get from their last Metro-North station to their final destination. Among all weekday riders, the average travel time was 21 minutes.

Q15. Number of Minutes to Final Destination	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[37]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	2,800	1,493	1,225	374	5,892
Total Answering	89,142	20,413	18,035	9,230	136,819
1-5 minutes	14,617	2,477	1,737	1,000	19,831
	16.40%	12.13%	9.63%	10.84%	14.49%
6-10 minutes	23,450	4,175	3,310	1,843	32,778
	26.31%	20.45%	18.35%	19.96%	23.96%
11-15 minutes	18,446	3,862	3,349	1,679	27,336
	20.69%	18.92%	18.57%	18.19%	19.98%
16-30 minutes	23,538	6,635	6,038	3,001	39,212
	26.40%	32.50%	33.48%	32.52%	28.66%
31 minutes or above	9,090	3,265	3,600	1,707	17,662
	10.20%	16.00%	19.96%	18.49%	12.91%
Mean	18.69	23.6	25.06	24.87	20.68
Median	14.23	14.91	19.16	17.92	14.5
Total	89,142	20,413	18,035	9,230	136,819

[37] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.15.2 Weekend Riders - Travel Time to Final Destination for Inbound Trips

Compared to weekday riders, weekend riders had longer travel times to their final destinations (only 43% were 15 minutes or less compared to 58% for weekday riders; average of 27 minutes vs. 21 for weekday riders).

Q15. Number of Minutes to Final Destination	Saturday	Sunday	Weekend Total[38]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	4,295	3,157	7,451
Total Answering	60,230	53,100	113,330
1-5 minutes	5,031	3,740	8,771
	8.35%	7.04%	7.74%
6-10 minutes	10,890	8,974	19,864
	18.08%	16.90%	17.53%
11-15 minutes	11,095	9,432	20,527
	18.42%	17.76%	18.11%
16-30 minutes	21,255	18,810	40,065
	35.29%	35.42%	35.35%
31 minutes or above	11,960	12,143	24,103
	19.86%	22.87%	21.27%
Mean	25.88	28.24	26.99
Median	19.24	19.44	19.33
Total	60,230	53,100	113,330

[38] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.16 Ticket Type Used

5.16.1 Weekday Riders - Ticket Type Used for Inbound Trips

Across all dayparts, weekday riders most frequently reported using Monthly tickets (64% among all weekday riders; range of 29% for Midday Off Peak riders to 80% for AM Peak riders). The second most commonly reported ticket type used was the Ten Trip ticket for AM Peak riders (8%), the Round Trip ticket for Midday Off Peak and PM Reverse Peak riders (27% and 20%, respectively), and the One Way ticket for Late Night Off Peak riders (18%).

Q16. Ticket Type Used	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[39]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	898	643	541	256	2,338
Total Answering	91,044	21,263	18,718	9,347	140,373
Monthly	72,615	6,071	7,020	4,476	90,183
	79.76%	28.55%	37.51%	47.89%	64.25%
With Uniticket	9,353	878	1,437	732	12,399
	10.27%	4.13%	7.67%	7.83%	8.83%
Without Uniticket	52,472	4,015	4,196	2,907	63,589
	57.63%	18.88%	22.42%	31.10%	45.30%
Round Trip	4,989	5,734	3,762	1,439	15,923
	5.48%	26.97%	20.10%	15.39%	11.34%
Peak/Intermediate	3,678	1,252	942	452	6,324
	4.04%	5.89%	5.03%	4.84%	4.51%
Off-Peak	812	3,454	2,420	849	7,535
	0.89%	16.25%	12.93%	9.08%	5.37%
Senior/Disabled	308	829	271	41	1,450
	0.34%	3.90%	1.45%	0.44%	1.03%
Ten Trip	7,094	3,973	2,957	959	14,982
	7.79%	18.68%	15.80%	10.26%	10.67%
Peak/Intermediate	5,777	592	574	321	7,264
	6.35%	2.78%	3.07%	3.43%	5.17%

[39] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q16. Ticket Type Used	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[39]
Off-Peak	747	2,536	1,959	580	5,821
	0.82%	11.92%	10.46%	6.21%	4.15%
Senior/Disabled	332	704	330	25	1,392
	0.36%	3.31%	1.76%	0.27%	0.99%
One Way	3,835	4,760	3,639	1,660	13,894
	4.21%	22.38%	19.44%	17.76%	9.90%
Peak/Intermediate	2,833	695	820	429	4,776
	3.11%	3.27%	4.38%	4.59%	3.40%
Off-Peak	683	3,379	2,351	1,063	7,477
	0.75%	15.89%	12.56%	11.37%	5.33%
Senior/Disabled	167	463	278	57	965
	0.18%	2.18%	1.48%	0.61%	0.69%
Weekly	1,832	458	1,124	597	4,011
	2.01%	2.16%	6.01%	6.38%	2.86%
With Uniticket	250	123	177	152	703
	0.28%	0.58%	0.95%	1.63%	0.50%
Without Uniticket	1,200	223	628	273	2,324
	1.32%	1.05%	3.35%	2.92%	1.66%
Other	680	267	217	216	1,381
	0.75%	1.26%	1.16%	2.32%	0.98%
Total	169,656	40,406	35,100	17,229	262,391

5.16.2 Weekend Riders - Ticket Type Used for Inbound Trips

Saturday and Sunday riders most frequently reported using Round Trip tickets (39% and 36%, respectively), with many riders also reporting use of One Way tickets (27% and 34%, respectively) and Monthly tickets (19% and 14%, respectively).

Q16. Ticket Type Used	Saturday	Sunday	Weekend Total[40]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	875	774	1,650
Total Answering	63,650	55,482	119,132
Round Trip	24,920	20,039	44,959
	39.15%	36.12%	37.74%
Peak/Intermediate	2,005	1,844	3,849
	3.15%	3.32%	3.23%
Off-Peak	19,989	15,505	35,493
	31.40%	27.95%	29.79%
Senior/Disabled	1,860	1,880	3,740
	2.92%	3.39%	3.14%
One Way	17,077	18,863	35,940
	26.83%	34.00%	30.17%
Peak/Intermediate	2,006	1,736	3,742
	3.15%	3.13%	3.14%
Off-Peak	13,087	15,190	28,278
	20.56%	27.38%	23.74%
Senior/Disabled	986	1,098	2,084
	1.55%	1.98%	1.75%
Monthly	12,053	7,925	19,978
	18.94%	14.28%	16.77%
With Uniticket	2,361	1,697	4,058
	3.71%	3.06%	3.41%
Without Uniticket	7,142	4,684	11,826
	11.22%	8.44%	9.93%

[40] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

Q16. Ticket Type Used	Saturday	Sunday	Weekend Total[40]
Ten Trip	6,699	6,462	13,161
	10.52%	11.65%	11.05%
Peak/Intermediate	896	772	1,668
	1.41%	1.39%	1.40%
Off-Peak	4,788	4,641	9,429
	7.52%	8.36%	7.92%
Senior/Disabled	792	824	1,616
	1.25%	1.48%	1.36%
Weekly	1,647	1,091	2,738
	2.59%	1.97%	2.30%
With Uniticket	432	292	723
	0.68%	0.53%	0.61%
Without Uniticket	755	484	1,240
	1.19%	0.87%	1.04%
Other	1,254	1,102	2,355
	1.97%	1.99%	1.98%
Total	120,749	106,129	226,878

5.17 Ticket Purchase Location

5.17.1 Weekday Riders - Ticket Purchase Location

Ticket vending machines were by far the most frequently reported ticket purchase location among weekday riders across all dayparts (63% overall; between 58% and 73%, depending on daypart). Mail&Ride purchases were the next most common for AM Peak and Late Night Off Peak riders (24% and 13%, respectively) while the ticket window was the second most frequently reported location for Midday Off Peak and PM Reverse Peak riders (15% and 16%, respectively).

Q17. Ticket Purchase Location	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total[41]
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	1,213	767	552	289	2,820
Total Answering	90,729	21,139	18,708	9,315	139,890
Ticket Vending Machine	52,319	15,500	13,733	6,466	88,018
	57.67%	73.33%	73.41%	69.42%	62.92%
Mail&Ride	21,901	1,103	806	1,214	25,023
	24.14%	5.22%	4.31%	13.03%	17.89%
Ticket Window	9,514	3,273	3,076	1,055	16,918
	10.49%	15.48%	16.44%	11.32%	12.09%
Webticket (via Internet)	3,599	534	593	290	5,015
	3.97%	2.52%	3.17%	3.11%	3.59%
Mobile Device	2,280	107	90	33	2,510
	2.51%	0.51%	0.48%	0.35%	1.79%
On-board Train	390	400	222	76	1,089
	0.43%	1.89%	1.19%	0.81%	0.78%
Other	725	221	189	182	1,317
	0.80%	1.05%	1.01%	1.95%	0.94%
Total	90,729	21,139	18,708	9,315	139,890

[41] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

5.17.2 Weekend Riders - Ticket Purchase Location

Ticket vending machines were even more commonly reported purchase locations for weekend riders compared to weekday riders (77% vs. 63%). Ticket windows were the next most frequently represented purchase locations for weekend riders (12%).

Q17. Ticket Purchase Location	Saturday	Sunday	Weekend Total[42]
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	899	798	1,697
Total Answering	63,626	55,458	119,084
Ticket Vending Machine	48,673	42,667	91,340
	76.50%	76.94%	76.70%
Ticket Window	8,010	6,708	14,718
	12.59%	12.10%	12.36%
Mail&Ride	1,902	1,250	3,152
	2.99%	2.25%	2.65%
Mobile Device	1,216	1,739	2,956
	1.91%	3.14%	2.48%
Webticket (via Internet)	1,606	1,261	2,867
	2.52%	2.27%	2.41%
On-board Train	1,559	1,302	2,861
	2.45%	2.35%	2.40%
Other	660	530	1,190
	1.04%	0.96%	1.00%
Total	63,626	55,458	119,084

[42] AM Peak (5:30 AM – 10:00 AM), Midday Off Peak (10:01 AM – 3:59 PM), PM Reverse Peak (4:00 PM – 8:00 PM), Late Night Off Peak (8:01 PM – 2:00 AM), Saturday (All day), Sunday (All day)

6. Results – Outbound [43] [44]

6.1 Outbound Trip Date

6.1.1 Weekday Riders - Outbound Trip Date

Almost all AM Peak riders (97%) reported that they have (or will have) completed the other half of their trip on the same day as their inbound trip. Same day outbound travel was also a widespread response among riders from the other weekday dayparts (80%-85%, depending on daypart).

Q18. Outbound Trip Date	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,040	2,607	2,660	1,215	10,522
Total Answering	87,902	19,299	16,599	8,389	132,189
Same Day	85,388	16,387	13,314	6,875	121,963
	97.14%	84.91%	80.21%	81.96%	92.26%
Different Day	1,119	1,711	1,973	1,084	5,888
	1.27%	8.87%	11.89%	12.92%	4.45%
I Will (Did) Not Make an Outbound Trip	1,396	1,201	1,312	430	4,338
	1.59%	6.22%	7.90%	5.12%	3.28%
Total	87,902	19,299	16,599	8,389	132,189

[43] Riders were only surveyed in the inbound direction; they were asked to report about their return or previous trip.

[44] Total Answering for Outbound trips is less than what was reported for inbound trips; some respondents did not make an outbound trip, or did not answer the outbound trip questions.

6.1.2 Weekend Riders - Outbound Trip Date

Outbound trip days for Saturday riders differed slightly from those of Sunday riders. A little over three-quarters (76%) of Saturday riders reported taking their outbound trip on the same day as their inbound trip, compared to 63% of Sunday riders. Conversely, different day outbound travel was reported by a larger share of Sunday riders compared to Saturday riders (27% vs. 17%, respectively).

Q18. Outbound Trip Date	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	9,083	8,121	17,204
Total Answering	55,442	48,136	103,577
Same Day	41,991	30,466	72,456
	75.74%	63.29%	69.95%
Different Day	9,409	12,960	22,370
	16.97%	26.92%	21.60%
I Will (Did) Not Make an Outbound Trip	4,042	4,710	8,751
	7.29%	9.78%	8.45%
Total	55,442	48,136	103,577

6.2 Use of Metro-North for Outbound Trip[45]

6.2.1 Weekday Riders – Use of Metro-North for Outbound Trip

Nearly all weekday riders (97%) reported using Metro-North for their outbound trip. AM Peak riders had the highest share of riders who reported using Metro-North for their outbound trip (98% vs. 94-95% for riders from other weekday dayparts).

Q19. Used Metro-North for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	36,731	5,985	3,850	1,972	48,538
Weighted Base	86,507	18,098	15,287	7,959	127,851
No Answer	2,078	861	765	290	3,994
Total Answering	84,429	17,237	14,522	7,669	123,857
Yes	83,102	16,335	13,769	7,240	120,446
	98.43%	94.77%	94.82%	94.41%	97.25%
No	1,327	902	753	428	3,410
	1.57%	5.23%	5.18%	5.59%	2.75%
Total	84,429	17,237	14,522	7,669	123,857

[45] Only respondents who indicated that they would make an outbound trip qualified for this question.

6.2.2 Weekend Riders - Use of Metro-North for Outbound Trip

Although the percentage was higher for weekday riders, most weekend riders also reported using Metro-North for their outbound trip (92% vs. 97% for weekday riders). Saturday and Sunday riders reported identical percentages for Metro-North outbound usage (both 92%).

Q19. Used Metro-North for Outbound Trip	Saturday	Sunday	Weekend Total
Unweighted Base	13,595	10,905	24,500
Weighted Base	51,400	43,426	94,826
No Answer	3,408	2,634	6,043
Total Answering	47,992	40,792	88,783
Yes	44,349	37,649	81,998
	92.41%	92.30%	92.36%
No	3,643	3,142	6,785
	7.59%	7.70%	7.64%
Total	47,992	40,792	88,783

6.3 Outbound Trip Departure Time[46]

6.3.1 Weekday Riders - Outbound Trip Departure Time on MNR

Consistent with typical workday hours, a majority (69%) of AM Peak riders reported making their corresponding outbound MNR trip between 5 PM and 7 PM. A notable portion of Midday Off Peak and Late Night Off Peak riders (26% and 36%, respectively) also reported outbound MNR travel within that same period. A little half of PM Reverse Peak riders (55%) reported the departure time for their outbound MNR trip occurring between 6 AM and 10 AM, with the 7 AM hour block having the highest percentage (25%).

Q19. Outbound Trip Departure Time	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	35,326	5,455	3,454	1,822	46,057
Weighted Base	83,102	16,335	13,769	7,240	120,446
No Answer	16,070	5,548	3,479	1,725	26,822
Total Answering	67,032	10,787	10,290	5,515	93,624
12:00 AM – 4:59 AM	137	316	210	136	799
	0.20%	2.93%	2.04%	2.47%	0.85%
5:00 AM – 5:59 AM	166	97	166	65	494
	0.25%	0.90%	1.62%	1.18%	0.53%
6:00 AM – 6:59 AM	327	290	909	138	1,664
	0.49%	2.69%	8.83%	2.49%	1.78%
7:00 AM – 7:59 AM	417	306	2,601	339	3,664
	0.62%	2.84%	25.28%	6.15%	3.91%
8:00 AM – 8:59 AM	193	308	1,686	359	2,545
	0.29%	2.85%	16.38%	6.50%	2.72%
9:00 AM – 9:59 AM	84	258	513	128	983
	0.13%	2.39%	4.98%	2.32%	1.05%
10:00 AM – 10:59 AM	74	208	201	127	610
	0.11%	1.93%	1.96%	2.30%	0.65%

[46] Only respondents who indicated that they would use Metro-North for their outbound trip qualified for this question.

Q19. Outbound Trip Departure Time	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
11:00 AM – 11:59 AM	129	171	154	156	610
	0.19%	1.58%	1.50%	2.83%	0.65%
12:00 PM – 12:59 PM	181	208	124	91	603
	0.27%	1.93%	1.21%	1.65%	0.64%
1:00 PM – 1:59 PM	378	318	124	183	1,004
	0.56%	2.95%	1.21%	3.32%	1.07%
2:00 PM – 2:59 PM	861	384	148	272	1,665
	1.28%	3.56%	1.43%	4.93%	1.78%
3:00 PM – 3:59 PM	2,015	584	147	436	3,182
	3.01%	5.41%	1.43%	7.91%	3.40%
4:00 PM – 4:59 PM	6,036	698	307	477	7,517
	9.00%	6.47%	2.98%	8.64%	8.03%
5:00 PM – 5:59 PM	25,148	1,274	581	1,308	28,311
	37.52%	11.81%	5.65%	23.71%	30.24%
6:00 PM – 6:59 PM	21,426	1,601	407	680	24,114
	31.96%	14.84%	3.96%	12.33%	25.76%
7:00 PM – 7:59 PM	6,293	926	229	203	7,650
	9.39%	8.59%	2.22%	3.68%	8.17%
8:00 PM – 8:59 PM	1,888	955	332	149	3,323
	2.82%	8.85%	3.22%	2.70%	3.55%
9:00 PM – 9:59 PM	750	687	496	80	2,014
	1.12%	6.37%	4.82%	1.45%	2.15%
10:00 PM – 10:59 PM	369	653	529	126	1,677
	0.55%	6.06%	5.14%	2.29%	1.79%
11:00 PM – 11:59 PM	160	545	426	63	1,194
	0.24%	5.05%	4.14%	1.14%	1.28%
Total	67,032	10,787	10,290	5,515	93,624

6.3.2 Weekend Riders - Outbound Trip Departure Time on MNR

The time periods for weekend riders' outbound trips on MNR were more diversely spread when compared to those of weekday riders. One-fifth (20%) of weekend riders, however, reported an outbound trip on MNR departing between 5PM and 7PM.

Q19. Outbound Trip Departure Time	Saturday	Sunday	Weekend Total
Unweighted Base	11,867	9,524	21,391
Weighted Base	44,349	37,649	81,998
No Answer	18,647	13,424	32,071
Total Answering	25,702	24,225	49,927
12:00 AM – 4:59 AM	1,749	601	2,350
	6.80%	2.48%	4.71%
5:00 AM – 5:59 AM	181	124	305
	0.70%	0.51%	0.61%
6:00 AM – 6:59 AM	417	333	750
	1.62%	1.37%	1.50%
7:00 AM – 7:59 AM	737	483	1,220
	2.87%	1.99%	2.44%
8:00 AM – 8:59 AM	873	765	1,637
	3.39%	3.16%	3.28%
9:00 AM – 9:59 AM	1,014	1,006	2,020
	3.94%	4.15%	4.05%
10:00 AM – 10:59 AM	996	1,193	2,189
	3.87%	4.93%	4.38%
11:00 AM – 11:59 AM	1,087	1,247	2,333
	4.23%	5.15%	4.67%
12:00 PM – 12:59 PM	996	1,059	2,056
	3.88%	4.37%	4.12%
1:00 PM – 1:59 PM	929	1,089	2,019
	3.62%	4.50%	4.04%
2:00 PM – 2:59 PM	1,224	1,183	2,406
	4.76%	4.88%	4.82%

Q19. Outbound Trip Departure Time	Saturday	Sunday	Weekend Total
3:00 PM – 3:59 PM	1,430	1,738	3,168
	5.56%	7.18%	6.35%
4:00 PM – 4:59 PM	1,653	2,004	3,657
	6.43%	8.27%	7.32%
5:00 PM – 5:59 PM	2,315	2,792	5,107
	9.01%	11.52%	10.23%
6:00 PM – 6:59 PM	2,178	2,591	4,769
	8.47%	10.70%	9.55%
7:00 PM – 7:59 PM	1,518	1,902	3,420
	5.91%	7.85%	6.85%
8:00 PM – 8:59 PM	1,595	1,450	3,045
	6.21%	5.99%	6.10%
9:00 PM – 9:59 PM	1,143	1,078	2,221
	4.45%	4.45%	4.45%
10:00 PM – 10:59 PM	1,702	892	2,594
	6.62%	3.68%	5.20%
11:00 PM – 11:59 PM	1,967	695	2,663
	7.65%	2.87%	5.33%
Total	25,702	24,225	49,927

6.4 Use of Same Stations for Outbound Trip[47]

6.4.1 Weekday Riders - Same Stations for Outbound Trip on MNR

A large majority of weekday riders (97%) reported using the same stations for their outbound trip on MNR as for their inbound trip. Aside from the AM Peak, where 2% of riders reported using a different station for their outbound trip, about 5%-6% of riders across the other weekday dayparts reported using a different station for their outbound MNR trip.

Q20. Same Stations for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	35,326	5,455	3,454	1,822	46,057
Weighted Base	83,102	16,335	13,769	7,240	120,446
No Answer	841	319	296	127	1,583
Total Answering	82,261	16,016	13,473	7,114	118,863
Yes	80,418	15,208	12,687	6,703	115,015
	97.76%	94.95%	94.17%	94.23%	96.76%
No	1,843	808	786	410	3,848
	2.24%	5.05%	5.83%	5.77%	3.24%
Total	82,261	16,016	13,473	7,114	118,863

[47] Only respondents who indicated that they would use Metro-North for their outbound trip qualified for this question.

6.4.2 Weekend Riders - Same Stations for Outbound Trip on MNR

Nearly the same percentage of Saturday riders (94%) reported using the same stations for their outbound MNR trip as for their inbound trip, compared to Sunday riders (93%).

Q20. Same Stations for Outbound Trip	Saturday	Sunday	Weekend Total
Unweighted Base	11,867	9,524	21,391
Weighted Base	44,349	37,649	81,998
No Answer	969	797	1,766
Total Answering	43,380	36,852	80,232
Yes	40,893	34,149	75,042
	94.27%	92.67%	93.53%
No	2,487	2,703	5,190
	5.73%	7.33%	6.47%
Total	43,380	36,852	80,232

6.5 Outbound Origin Station – For Respondents Using Different Stations for Outbound Trip[48]

6.5.1 Weekday Riders - Outbound Origin Station

Roughly 70% of all weekday riders who reported using different stations for their outbound trip on MNR stated that they used Grand Central (59%) or Harlem-125th St. (11%) as the origin station.

Q21. Origin Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	735	252	183	80	1,250
Weighted Base	1,843	808	786	410	3,848
No Answer	421	217	226	93	956
Total Answering	1,423	591	560	317	2,892
Grand Central	928	361	261	150	1,701
	65.23%	61.02%	46.66%	47.37%	58.81%
Harlem-125th St.	143	83	51	53	329
	10.05%	13.98%	9.04%	16.73%	11.39%
Fordham	43	14	52	25	134
	3.01%	2.42%	9.20%	7.87%	4.63%
Marble Hill	28	6	12	16	61
	1.96%	0.93%	2.15%	4.95%	2.11%
Stamford	24	4	7	12	47
	1.67%	0.62%	1.28%	3.82%	1.62%
New Rochelle	15	-	31	-	46
	1.05%	-	5.62%	-	1.60%
Greenwich	18	13	8	-	39
	1.27%	2.27%	1.37%	-	1.35%
White Plains	8	2	18	4	31
	0.53%	0.40%	3.19%	1.11%	1.08%
Williams Bridge	10	3	12	-	26
	0.73%	0.58%	2.17%	-	0.89%

[48] Outbound station information was pulled from Q21 if respondent used different outbound stations than inbound ones. If respondent used the same stations both outbound and inbound, Q9 inbound destination station information was pulled as the equivalent for the outbound origin station information.

Q21. Origin Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Botanical Garden	20	5	-	-	24
	1.38%	0.77%	-	-	0.84%
Melrose	15	-	9	-	24
	1.04%	-	1.62%	-	0.83%
Bridgeport	14	8	-	-	22
	0.96%	1.40%	-	-	0.76%
Tremont	10	-	11	-	21
	0.69%	-	2.00%	-	0.73%
Yankees-E153 St.	9	9	3	-	21
	0.61%	1.54%	0.55%	-	0.72%
Bronxville	6	6	9	-	21
	0.45%	0.97%	1.53%	-	0.72%
Yonkers	9	3	7	-	19
	0.62%	0.57%	1.24%	-	0.66%
Tarrytown	11	-	7	-	18
	0.80%	-	1.24%	-	0.63%
Other East of Hudson Stations[49]	112	74	61	58	306
	7.87%	12.52%	10.89%	18.30%	10.58%
Total	1,423	591	560	317	2,892

[49] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

6.5.2 Weekend Riders - Outbound Origin Station

Similar to weekday riders, Grand Central (59%) and Harlem-125th St. (15%) were the two most commonly mentioned outbound origin station on MNR for weekend riders.

Q21. Origin Station for Outbound Trip	Saturday	Sunday	Weekend Total
Unweighted Base	563	683	1,246
Weighted Base	2,487	2,703	5,190
No Answer	744	700	1,445
Total Answering	1,743	2,002	3,745
Grand Central	1,010	1,206	2,216
	57.94%	60.25%	59.17%
Harlem-125th St.	237	314	551
	13.60%	15.69%	14.72%
Fordham	76	95	171
	4.39%	4.74%	4.57%
White Plains	43	35	79
	2.49%	1.77%	2.11%
Marble Hill	39	37	76
	2.23%	1.86%	2.03%
Yankees-E153 St.	19	37	56
	1.10%	1.84%	1.50%
Bronxville	20	20	39
	1.13%	0.98%	1.05%
Fleetwood	28	4	33
	1.63%	0.21%	0.87%
Stamford	9	19	29
	0.53%	0.97%	0.77%
Botanical Garden	25	-	25
	1.45%	-	0.67%
New Rochelle	19	2	21
	1.08%	0.12%	0.56%
Mamaroneck	12	9	20
	0.66%	0.43%	0.54%

Q21. Origin Station for Outbound Trip	Saturday	Sunday	Weekend Total
Greenwich	11 0.65%	9 0.44%	20 0.54%
Other East of Hudson Stations[50]	200 11.47%	217 10.84%	412 11.00%
Total	1,743	2,002	3,745

[50] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

6.6 Outbound Destination Station - For Respondents Using Different Stations for Outbound Trip[51]

6.6.1 Weekday Riders - Outbound Destination Station

A very assorted set of outbound destination stations were reported by weekday riders who stated that they used a different set of MNR stations for their outbound trip. White Plains made up 8% of all reported destination stations for outbound trips, and after that, no outbound destination station was reported by more than 4% of weekday riders.

Q21. Destination Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	735	252	183	80	1,250
Weighted Base	1,843	808	786	410	3,848
No Answer	610	321	391	165	1,487
Total Answering	1,233	487	395	245	2,360
White Plains	96	25	60	7	188
	7.78%	5.06%	15.20%	2.96%	7.96%
Scarsdale	54	23	14	10	100
	4.41%	4.63%	3.44%	3.98%	4.25%
Bronxville	36	30	-	23	90
	2.96%	6.20%	-	9.35%	3.80%
Tarrytown	35	12	10	15	71
	2.83%	2.42%	2.51%	5.98%	3.02%
Larchmont	50	13	-	-	63
	4.07%	2.60%	-	-	2.66%
Fleetwood	48	4	8	-	60
	3.89%	0.74%	2.10%	-	2.54%
Stamford	27	6	9	15	57
	2.21%	1.24%	2.31%	5.99%	2.42%
Grand Central	20	15	12	10	56
	1.65%	2.99%	2.97%	3.91%	2.38%
New Haven	25	13	11	5	54
	1.99%	2.72%	2.85%	2.02%	2.29%
Mamaroneck	31	17	-	5	53
	2.53%	3.57%	-	1.86%	2.25%

[51] Outbound station information was pulled from Q21 if respondent used different outbound stations than inbound ones. If respondent used the same stations both outbound and inbound, Q9 inbound destination station information was pulled as the equivalent for the outbound origin station information.

Q21. Destination Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
New Rochelle	38	12	-	-	50
	3.12%	2.42%	-	-	2.13%
Yonkers	19	15	5	10	49
	1.51%	3.15%	1.34%	4.04%	2.08%
Rye	22	7	17	-	46
	1.75%	1.45%	4.31%	-	1.93%
Beacon	22	7	4	12	45
	1.78%	1.52%	1.07%	4.72%	1.91%
North White Plains	12	3	15	10	40
	0.96%	0.55%	3.92%	3.90%	1.68%
Tuckahoe	30	9	-	-	39
	2.42%	1.89%	-	-	1.65%
Dobbs Ferry	14	10	8	8	39
	1.11%	2.01%	1.97%	3.08%	1.65%
Hartsdale	34	4	-	-	38
	2.76%	0.86%	-	-	1.62%
Mt Vernon East	10	3	16	9	38
	0.78%	0.70%	4.11%	3.47%	1.60%
Croton-Harmon	26	3	9	-	37
	2.08%	0.55%	2.27%	-	1.58%
Irvington	15	6	6	9	36
	1.23%	1.14%	1.56%	3.79%	1.53%
Poughkeepsie	15	14	6	-	35
	1.23%	2.80%	1.62%	-	1.49%
Crestwood	25	-	3	7	35
	2.05%	-	0.80%	2.68%	1.48%
Pleasantville	7	25	3	-	35
	0.58%	5.15%	0.68%	-	1.48%
Greenwich	8	3	18	5	35
	0.69%	0.63%	4.53%	2.20%	1.48%
Harrison	16	3	10	5	35
	1.33%	0.63%	2.56%	2.08%	1.47%
Peekskill	19	6	10	-	35
	1.51%	1.25%	2.51%	-	1.47%
Cortlandt	13	13	8	-	34
	1.04%	2.66%	1.97%	-	1.42%
Pelham	24	4	4	-	33
	1.99%	0.90%	1.06%	-	1.40%
Harlem-125Th St.	4	2	15	7	29
	0.35%	0.50%	3.82%	2.94%	1.23%

Q21. Destination Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Mount Kisco	13	14	2	-	29
	1.03%	2.88%	0.46%	-	1.21%
Ossining	9	9	4	6	28
	0.71%	1.92%	0.90%	2.62%	1.19%
Bridgeport	16	4	6	2	28
	1.30%	0.76%	1.52%	0.89%	1.18%
Port Chester	14	-	8	4	27
	1.17%	-	2.14%	1.49%	1.13%
Chappaqua	9	10	7	-	26
	0.75%	2.11%	1.68%	-	1.11%
Katonah	22	2	-	1	25
	1.75%	0.50%	-	0.56%	1.08%
Mt Vernon West	10	11	5	-	25
	0.78%	2.22%	1.22%	-	1.07%
Cold Spring	14	9	-	-	23
	1.16%	1.85%	-	-	0.99%
Hastings-On-Hudson	18	-	5	-	23
	1.48%	-	1.28%	-	0.99%
Milford	8	7	5	3	23
	0.67%	1.40%	1.17%	1.15%	0.95%
Goldens Bridge	17	4	-	-	21
	1.35%	0.82%	-	-	0.88%
Fordham	5	-	4	12	20
	0.39%	-	0.94%	4.81%	0.86%
New Canaan	2	4	8	7	20
	0.17%	0.72%	2.03%	2.72%	0.86%
Stratford	15	-	-	5	20
	1.23%	-	-	1.87%	0.84%
Brewster	9	8	3	-	20
	0.72%	1.62%	0.74%	-	0.83%
Hawthorne	12	-	-	7	18
	0.94%	-	-	2.79%	0.78%
Scarborough	4	5	3	6	18
	0.30%	1.01%	0.80%	2.62%	0.77%
Waterbury	9	9	-	-	18
	0.70%	1.93%	-	-	0.76%
Purdy's	4	6	8	-	18
	0.31%	1.17%	2.03%	-	0.74%
Woodlawn	17	-	-	-	17
	1.38%	-	-	-	0.72%

Q21. Destination Station for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Ludlow	2	-	6	9	17
	0.19%	-	1.44%	3.59%	0.71%
Noroton Heights	17	-	-	-	17
	1.34%	-	-	-	0.70%
Croton Falls	12	2	-	2	17
	0.97%	0.42%	-	1.02%	0.70%
South Norwalk	13	-	-	3	16
	1.05%	-	-	1.24%	0.68%
Fairfield Metro	14	1	-	-	16
	1.17%	0.29%	-	-	0.67%
Cos Cob	9	-	4	2	16
	0.76%	-	1.03%	0.84%	0.66%
Fairfield	7	-	8	-	15
	0.58%	-	2.03%	-	0.64%
Garrison	-	7	6	-	14
	-	1.54%	1.61%	-	0.59%
Greystone	10	-	4	-	14
	0.81%	-	0.91%	-	0.57%
Southport	-	13	-	-	13
	-	2.69%	-	-	0.56%
Bedford Hills	8	3	-	2	13
	0.67%	0.61%	-	0.75%	0.55%
Spuyten Duyvil	13	-	-	-	13
	1.05%	-	-	-	0.55%
Valhalla	-	-	13	-	13
	-	-	3.23%	-	0.54%
New Hamburg	10	2	-	-	12
	0.79%	0.45%	-	-	0.50%
Other East of Hudson Stations[52]	93	51	6	5	155
	7.54%	10.47%	1.52%	2.04%	6.57%
Total	1,233	487	395	245	2,360

[52] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

6.6.2 Weekend Riders - Outbound Destination Station

Similar to weekday riders, weekend riders mentioned a variety of different outbound destination stations. White Plains was also the most frequently reported destination station for weekend riders (9%) followed by New Haven (6%).

Q21. Destination Station for Outbound Trip	Saturday	Sunday	Weekend Total
Unweighted Base	563	683	1,246
Weighted Base	2,487	2,703	5,190
No Answer	1,147	1,127	2,274
Total Answering	1,340	1,576	2,916
White Plains	136	114	250
	10.16%	7.22%	8.57%
New Haven	72	98	170
	5.37%	6.23%	5.84%
Southeast	41	50	91
	3.09%	3.16%	3.13%
Grand Central	41	40	82
	3.08%	2.57%	2.81%
Yonkers	18	63	81
	1.32%	4.01%	2.77%
Peekskill	29	50	79
	2.16%	3.18%	2.71%
Poughkeepsie	27	51	78
	2.00%	3.23%	2.66%
Croton-Harmon	37	36	73
	2.74%	2.27%	2.49%
Tarrytown	30	32	62
	2.25%	2.03%	2.13%
South Norwalk	39	21	60
	2.91%	1.33%	2.06%
Beacon	24	36	60
	1.79%	2.28%	2.06%
Mount Kisco	31	23	53
	2.28%	1.45%	1.83%
Stamford	19	34	53
	1.41%	2.16%	1.81%
Harlem-125Th St.	18	34	51
	1.33%	2.14%	1.76%

Q21. Destination Station for Outbound Trip	Saturday	Sunday	Weekend Total
Bronxville	37	13	50
	2.74%	0.81%	1.70%
Ossining	21	25	46
	1.57%	1.60%	1.58%
Fleetwood	42	4	46
	3.15%	0.24%	1.58%
Chappaqua	24	21	45
	1.78%	1.33%	1.54%
Harrison	18	27	45
	1.32%	1.70%	1.53%
Katonah	10	35	44
	0.74%	2.19%	1.52%
Fordham	35	10	44
	2.58%	0.63%	1.52%
Irvington	19	25	44
	1.39%	1.59%	1.50%
Scarsdale	12	31	43
	0.90%	1.98%	1.48%
Dobbs Ferry	19	23	42
	1.40%	1.47%	1.44%
Mamaroneck	14	28	42
	1.02%	1.78%	1.43%
Crestwood	15	27	42
	1.10%	1.70%	1.43%
Cold Spring	28	13	41
	2.07%	0.85%	1.41%
Hastings-On-Hudson	29	12	41
	2.13%	0.79%	1.41%
Purdy's	9	31	40
	0.67%	1.94%	1.36%
New Rochelle	22	17	39
	1.62%	1.10%	1.34%
Pleasantville	20	19	39
	1.52%	1.18%	1.34%
Pelham	33	5	38
	2.46%	0.33%	1.31%
Stratford	10	27	38
	0.78%	1.72%	1.29%
Westport	6	31	37
	563	683	1,246

Q21. Destination Station for Outbound Trip	Saturday	Sunday	Weekend Total
Hartsdale	36	21	15
	1.24%	1.58%	0.94%
Tuckahoe	35	20	16
	1.21%	1.46%	1.00%
Wassaic	35	7	29
	1.21%	0.49%	1.82%
Greenwich	34	4	30
	1.15%	0.28%	1.89%
Larchmont	33	20	13
	1.14%	1.52%	0.82%
Fairfield Metro	31	26	5
	1.08%	1.96%	0.33%
New Hamburg	30	4	26
	1.05%	0.31%	1.67%
Brewster	30	14	16
	1.03%	1.06%	1.01%
Darien	30	15	15
	1.03%	1.09%	0.97%
Garrison	27	15	12
	0.93%	1.15%	0.73%
Milford	26	14	13
	0.90%	1.02%	0.81%
Croton Falls	25	3	22
	0.85%	0.21%	1.39%
New Canaan	25	11	14
	0.84%	0.80%	0.88%
Hm Valley-Wingdale	23	4	19
	0.78%	0.31%	1.18%
Mt Vernon East	22	10	12
	0.75%	0.74%	0.75%
Breakneck Ridge	21	9	11
	0.72%	0.71%	0.73%
North White Plains	20	4	16
	0.68%	0.29%	1.01%
Waterbury	16	11	6
	0.56%	0.80%	0.37%
Bridgeport	16	2	14
	0.55%	0.15%	0.88%
Green's Farms	16	6	9
	0.54%	0.48%	0.59%

Q21. Destination Station for Outbound Trip	Saturday	Sunday	Weekend Total
Philipse Manor	16	10	5
	0.53%	0.77%	0.33%
Fairfield	15	6	9
	0.51%	0.48%	0.55%
Other East of Hudson Stations[53]	121	145	268
	9.03%	9.20%	9.19%
Total	1,340	1,576	2,916

[53] Stations where the response is very low were rolled up into the category "Other East of Hudson Stations" and are not listed individually in the table.

6.7 Outbound Access Mode [54] [55] [56] [57]

6.7.1 Weekday Riders - Outbound Access Mode

Across all weekday dayparts, the most frequently mentioned access modes to get to the outbound trip origin station were walking (60%) and subway (36%).

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q21. Access Mode for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	35,326	5,455	3,454	1,822	46,057
Weighted Base	83,102	16,335	13,769	7,240	120,446
No Answer	1,552	567	597	225	2,940
Total Answering	81,550	15,768	13,173	7,016	117,506
Walk	52,931	8,468	5,802	3,405	70,606
	64.91%	53.70%	44.04%	48.54%	60.09%
Subway	27,506	6,268	5,560	2,720	42,055
	33.73%	39.75%	42.21%	38.77%	35.79%
Bus	2,182	889	1,616	838	5,525
	2.68%	5.64%	12.27%	11.95%	4.70%
Taxi/Car Service/Uber	2,040	1,112	902	573	4,626
	2.50%	7.05%	6.85%	8.16%	3.94%
Picked Up	444	194	460	120	1,218
	0.54%	1.23%	3.49%	1.71%	1.04%

[54] Only respondents who indicated that they would use Metro-North for their outbound trip qualified for this question.

[55] Respondents were allowed to report multiple access modes. As a result, the tables in this section can add up to more than 100%.

[56] Respondents who used different Metro-North stations on the outbound trip were presented with a more limited set of outbound access modes (compared to the list of access modes available for selection for the inbound trip).

[57] Outbound access mode information was pulled from Q21 if respondent used different outbound stations than inbound ones. If respondent used the same stations both outbound and inbound, Q10 inbound egress mode information was pulled as the equivalent for the outbound access mode information.

Q21. Access Mode for Outbound Trip	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Drive alone	226	121	145	38	529
	0.28%	0.76%	1.10%	0.53%	0.45%
Drive or ride with others	145	49	74	19	286
	0.18%	0.31%	0.56%	0.27%	0.24%
Other	1,666	215	289	151	2,321
	2.04%	1.37%	2.19%	2.16%	1.98%
Total	87,139	17,315	14,848	7,863	127,165

6.7.2 Weekend Riders - Outbound Access Mode

The origin station access mode for outbound trips differed slightly between Saturday and Sunday riders. Walking was the most frequently reported origin station access mode by Saturday riders (44%) with subway slightly behind (43%). Sunday riders reported subway more (47%) and walking less (38%).

Please note: respondents were instructed to select all modes that applied. As a result, the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q21. Access Mode for Outbound Trip	Saturday	Sunday	Weekend Total
Unweighted Base	11,867	9,524	21,391
Weighted Base	44,349	37,649	81,998
No Answer	1,848	1,541	3,389
Total Answering	42,501	36,108	78,609
Subway	18,288	16,890	35,178
	43.03%	46.78%	44.75%
Walk	18,829	13,896	32,725
	44.30%	38.48%	41.63%
Taxi / Car Service / Uber	5,621	5,241	10,862
	13.23%	14.51%	13.82%
Bus	2,592	2,266	4,858
	6.10%	6.28%	6.18%
Picked up	594	602	1,196
	1.40%	1.67%	1.52%
Drive or ride with others	263	232	495
	0.62%	0.64%	0.63%
Drive alone	187	141	328
	0.44%	0.39%	0.42%
Other	572	548	1,120
	1.34%	1.52%	1.42%
Total	46,945	39,816	86,761

6.7.3 Weekday Riders - Outbound Access Mode – GCT Users

Among those who used GCT as their outbound boarding station, walking was the most frequently reported access mode for the outbound trip among riders from all weekday dayparts except for PM Reverse Peak riders, who reported using subway the most (58%). Walking was mentioned more by AM Peak riders (67%) compared to riders from other weekday dayparts (40-55%).

Please note: respondents were instructed to select all modes that applied. As a result the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q21. Access Mode for Outbound Trip – GCT Users	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	30,917	4,521	2,116	1,323	38,877
Weighted Base	71,718	12,515	7,140	4,470	95,844
No Answer	244	86	25	10	365
Total Answering	71,474	12,429	7,115	4,460	95,478
Walk	47,578	6,797	2,876	2,158	59,408
	66.57%	54.68%	40.42%	48.38%	62.22%
Subway	25,472	5,508	4,096	2,085	37,160
	35.64%	44.31%	57.57%	46.75%	38.92%
Taxi / Car Service / Uber	1,272	748	457	292	2,769
	1.78%	6.02%	6.42%	6.55%	2.90%
Bus	599	223	274	133	1,229
	0.84%	1.80%	3.85%	2.99%	1.29%
Picked up	110	66	64	18	258
	0.15%	0.53%	0.90%	0.39%	0.27%
Drive alone	132	81	27	11	252
	0.19%	0.65%	0.38%	0.25%	0.26%
Drive or ride with others	40	23	17	-	80
	0.06%	0.18%	0.24%	-	0.08%
Other	753	109	140	96	1,098
	1.05%	0.88%	1.97%	2.15%	1.15%
Total	75,957	13,554	7,951	4,793	102,255

6.7.4 Weekend Riders - Outbound Access Mode – GCT Users

Over half of weekend riders using GCT as the outbound boarding station accessed the station via subway (52%). Walking was a slightly more prominent mode for accessing GCT among Saturday riders compared to Sunday riders (43% vs. 38%).

Please note: respondents were instructed to select all modes that applied. As a result the total number and percentage of "walk" is overstated, as many people may have selected walk along with other modes (e.g. walk to a bus).

Q21. Access Mode for Outbound Trip – GCT Users	Saturday	Sunday	Weekend Total
Unweighted Base	9,373	7,321	16,694
Weighted Base	31,154	26,857	58,010
No Answer	161	158	319
Total Answering	30,993	26,698	57,691
Subway	15,603	14,376	29,978
	50.34%	53.84%	51.96%
Walk	13,373	10,116	23,489
	43.15%	37.89%	40.71%
Taxi / Car Service / Uber	3,916	3,425	7,341
	12.64%	12.83%	12.72%
Bus	604	537	1,141
	1.95%	2.01%	1.98%
Picked up	170	195	366
	0.55%	0.73%	0.63%
Drive or ride with others	177	126	303
	0.57%	0.47%	0.53%
Drive alone	91	92	183
	0.29%	0.34%	0.32%
Other	361	357	718
	1.17%	1.34%	1.25%
Total	34,296	29,223	63,519

7. General Information

7.1 Length of Time using Metro-North

Close to two-thirds of weekday and weekend riders have used MNR for 10 years or less (64% each for weekday and weekend riders). Most respondents have used Metro-North for 1-5 years (34% weekday; 32% weekend) and 6-10 years (20% weekday; 21% weekend).

Q22. Length of time using MNR	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	3,530	8,524	15,575
Total Answering	88,412	134,187	105,207
Less than 1 year	7,837	13,476	11,454
	8.86%	10.04%	10.89%
1-5 years	28,924	45,096	33,773
	32.71%	33.61%	32.10%
6-10 years	18,223	26,836	21,971
	20.61%	20.00%	20.88%
11-15 years	10,782	15,013	10,036
	12.20%	11.19%	9.54%
16-20 years	9,856	14,469	11,687
	11.15%	10.78%	11.11%
21-25 years	5,249	7,404	4,819
	5.94%	5.52%	4.58%
26-30 years	4,358	6,378	5,223
	4.93%	4.75%	4.96%
More than 30 years	3,184	5,516	6,243
	3.60%	4.11%	5.93%
Total	88,412	134,187	105,207

7.2 Work/Non-Work Travel Purpose on Metro-North

7.2.1 Weekday Riders - Work/Non-Work Travel Purpose

The majority (63%) of weekday riders reported using Metro-North for both work and non-work purposes when asked about their overall travel on MNR (not just the inbound trip they were surveyed during). The next most frequently mentioned travel purpose across all weekday dayparts was for work only (31%).

Q23. Travel Purpose on Metro-North	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	2,280	1,511	1,121	547	5,460
Total Answering	89,662	20,395	18,138	9,056	137,251
Both Work Purposes and Non-Work Purposes	58,027	13,544	9,416	5,148	86,135
	64.72%	66.41%	51.91%	56.85%	62.76%
Work Purposes Only	29,585	3,585	6,473	3,087	42,731
	33.00%	17.58%	35.69%	34.09%	31.13%
Non-Work Purposes Only	2,051	3,265	2,249	820	8,385
	2.29%	16.01%	12.40%	9.06%	6.11%
Total	89,662	20,395	18,138	9,056	137,251

7.2.2 Weekend Riders - Work/Non-Work Travel Purpose

Similar to weekday riders, weekend riders also reported using Metro-North the most for both work and non-work purposes (57%). Unlike weekday riders, the second most commonly stated travel purpose was for non-work related reasons (35%).

Q23. Travel Purpose on Metro-North	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	4,090	3,742	7,832
Total Answering	60,435	52,514	112,949
Both Work and Non-Work Purposes	35,125	29,298	64,422
	58.12%	55.79%	57.04%
Non-Work Purposes Only	20,113	19,202	39,315
	33.28%	36.57%	34.81%
Work Purposes Only	5,197	4,015	9,212
	8.60%	7.64%	8.16%
Total	60,435	52,514	112,949

7.3 Inbound Trip Frequency

7.3.1 Weekday Riders - Inbound Trip Frequency

Riders were asked to report how many trips they took in the past 7 days, including the trip where they received their inbound survey. Over half of riders in the AM Peak daypart (55%) reported taking 5 inbound trips in the past 7 days, consistent with regular work commutes. Close to half of the respondents in the Midday Off Peak indicated 1 or 2 inbound trips in the past 7 days (30% and 15%, respectively). In the PM Reverse Peak, 1 inbound trip (25%) and 5 inbound trips (27%) in the past 7 days were the most commonly reported number of trips; Late Night Off Peak riders reported 1 inbound trip (16%) and 5 inbound trips (36%) most frequently as well.

Q24A. Inbound Trip Frequency – Total Trips (past 7 days)	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	2,986	2,250	1,958	836	8,031
Total Answering	88,956	19,656	17,301	8,767	134,680
1 trip	4,720	5,967	4,303	1,409	16,399
	5.31%	30.36%	24.87%	16.07%	12.18%
2 trips	4,535	2,984	2,429	941	10,889
	5.10%	15.18%	14.04%	10.73%	8.09%
3 trips	6,467	1,983	1,760	664	10,874
	7.27%	10.09%	10.18%	7.57%	8.07%
4 trips	10,733	2,090	1,665	994	15,483
	12.07%	10.63%	9.62%	11.34%	11.50%
5 trips	49,293	3,941	4,650	3,140	61,023
	55.41%	20.05%	26.88%	35.81%	45.31%
6 trips	6,475	1,128	822	708	9,133
	7.28%	5.74%	4.75%	8.07%	6.78%
7 trips	3,676	734	653	472	5,535
	4.13%	3.74%	3.77%	5.38%	4.11%
8 trips or more	3,056	828	1,020	440	5,343
	3.44%	4.21%	5.89%	5.02%	3.97%
Total	88,956	19,656	17,301	8,767	134,680

7.3.2 Weekend Riders - Inbound Trip Frequency

Nearly half of weekend riders (47%) stated that they have had only one inbound trip in the past 7 days, highlighting the discretionary trip purposes of weekend riders and that many of the customers did not ride on weekdays.

Q24A. Inbound Trip Frequency – Total Trips (past 7 days)	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	6,979	6,355	13,334
Total Answering	57,546	49,902	107,448
1 trip	26,008	24,457	50,465
	45.20%	49.01%	46.97%
2 trips	9,352	8,998	18,350
	16.25%	18.03%	17.08%
3 trips	3,508	2,957	6,465
	6.10%	5.93%	6.02%
4 trips	2,755	2,251	5,007
	4.79%	4.51%	4.66%
5 trips	4,194	3,089	7,283
	7.29%	6.19%	6.78%
6 trips	6,570	3,959	10,529
	11.42%	7.93%	9.80%
7 trips	2,456	2,062	4,518
	4.27%	4.13%	4.21%
8 trips or more	2,702	2,128	4,830
	4.70%	4.26%	4.50%
Total	57,546	49,902	107,448

7.4 Outbound Trip Frequency

7.4.1 Weekday Riders - Outbound Trip Frequency

In line with what was reported for inbound trips, 57% of AM Peak riders mentioned making 5 outbound trips in the past 7 days. In the PM Reverse Peak, 5 outbound trips in the past 7 days was also the most stated frequency (32%); as it was for Late Night Off Peak riders (42%). Midday Off Peak riders most frequently reported 1 outbound trip in the past 7 days (25%).

Q25A. Outbound Trip Frequency – Total Trips (past 7 days)	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	7,167	5,859	5,107	1,975	20,108
Total Answering	84,775	16,047	14,152	7,628	122,602
1 trip	3,880	4,050	2,766	844	11,540
	4.58%	25.24%	19.54%	11.07%	9.41%
2 trips	4,350	2,645	1,885	774	9,654
	5.13%	16.48%	13.32%	10.15%	7.87%
3 trips	6,303	1,720	1,547	538	10,108
	7.44%	10.72%	10.93%	7.05%	8.24%
4 trips	10,611	1,854	1,393	861	14,719
	12.52%	11.55%	9.85%	11.28%	12.01%
5 trips	48,299	3,666	4,564	3,176	59,706
	56.97%	22.84%	32.25%	41.64%	48.70%
6 trips	5,833	952	725	617	8,128
	6.88%	5.93%	5.12%	8.09%	6.63%
7 trips	3,536	648	623	439	5,246
	4.17%	4.04%	4.40%	5.76%	4.28%
8 trips or more	1,962	513	649	378	3,502
	2.31%	3.19%	4.58%	4.96%	2.86%
Total	84,775	16,047	14,152	7,628	122,602

7.4.2 Weekend Riders - Outbound Trip Frequency

One outbound trip in the past 7 days was the most commonly reported trip frequency by Saturday and Sunday riders (40% and 47%, respectively). These answers were in line with the inbound trip frequencies reported by the same riders.

Q25A. Outbound Trip Frequency – Total Trips (past 7 days)	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	20,401	17,316	37,717
Total Answering	44,124	38,941	83,064
1 trip	17,525	18,359	35,884
	39.72%	47.15%	43.20%
2 trips	7,622	7,016	14,639
	17.28%	18.02%	17.62%
3 trips	2,969	2,317	5,286
	6.73%	5.95%	6.36%
4 trips	2,480	1,830	4,310
	5.62%	4.70%	5.19%
5 trips	4,312	2,848	7,160
	9.77%	7.31%	8.62%
6 trips	5,567	3,437	9,004
	12.62%	8.83%	10.84%
7 trips	2,136	1,799	3,935
	4.84%	4.62%	4.74%
8 trips or more	1,512	1,334	2,846
	3.43%	3.43%	3.43%
Total	44,124	38,941	83,064

7.5 Typical Fare Payment Method

7.5.1 Weekday Riders - Typical Fare Payment Method

Three quarters (75%) of all weekday respondents mentioned using a debit or credit card to pay for their fare (between 74% and 79%, depending on daypart). Transit vouchers or commuter benefit accounts were also commonly reported payment methods for AM Peak riders (30%) while cash was common for riders in other weekday dayparts (between 19% and 22%, depending on daypart).

Q26. Typical Fare Payment Method	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,330	2,341	1,970	1,041	9,682
Total Answering	87,612	19,565	17,289	8,562	133,029
Debit / Credit Card	64,398	15,426	13,497	6,398	99,719
	73.50%	78.84%	78.06%	74.72%	74.96%
Transit Voucher / Commuter benefit account	25,974	1,607	1,785	1,334	30,699
	29.65%	8.21%	10.32%	15.58%	23.08%
Cash	5,266	4,059	3,366	1,874	14,565
	6.01%	20.75%	19.47%	21.89%	10.95%
Total	95,638	21,092	18,647	9,606	144,983

7.5.2 Weekend Riders - Typical Fare Payment Method

The vast majority of weekend riders (80%) reported using a debit or credit card to pay for their fare. Cash was the next most frequently stated fare payment method (22%).

Q26. Typical Fare Payment Method	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	7,044	6,076	13,120
Total Answering	57,481	50,181	107,661
Debit / Credit Card	45,483	40,575	86,058
	79.13%	80.86%	79.93%
Cash	12,878	10,813	23,691
	22.40%	21.55%	22.01%
Transit Voucher / Commuter benefit account	3,462	2,543	6,006
	6.02%	5.07%	5.58%
Total	61,823	53,932	115,755

7.6 Technologies Used in Past 30 Days

7.6.1 Weekday Riders - Technologies Used

A variety of technological devices and applications have been used by weekday riders in the past 30 days and can be grouped into 3 categories: higher usage (desktop or laptop computer; smartphone, cell phone or PDA with Internet access; and text message – 85-88%); medium usage (Facebook; a transit app or widget; and tablet/iPad – 50-61%); and lower usage (cell phone without Internet access; and Twitter – 22-28%).

Q27. Technologies Used In Past 30 Days	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	3,649	1,816	1,516	797	7,778
Total Answering	88,293	20,091	17,743	8,807	134,933
Smartphone, cell phone or PDA with Internet access	78,630	17,073	15,062	7,351	118,114
	89.06%	84.98%	84.89%	83.47%	87.54%
Desktop or laptop computer	78,476	16,786	14,783	6,884	116,929
	88.88%	83.55%	83.32%	78.17%	86.66%
Text message (send or received)	76,675	16,439	14,593	6,982	114,689
	86.84%	81.83%	82.25%	79.28%	85.00%
Tablet / iPad	56,252	11,326	9,288	4,873	81,739
	63.71%	56.38%	52.35%	55.33%	60.58%
Facebook	48,036	11,388	10,751	4,634	74,809
	54.40%	56.69%	60.59%	52.62%	55.44%
A transit app or widget	47,023	8,388	8,207	3,922	67,540
	53.26%	41.75%	46.26%	44.53%	50.05%
Cell phone without Internet access	23,384	6,330	5,218	2,626	37,558
	26.48%	31.51%	29.41%	29.82%	27.83%
Twitter	19,065	4,559	4,347	1,768	29,739
	21.59%	22.69%	24.50%	20.07%	22.04%
Total	427,539	92,290	82,249	39,039	641,117

7.6.2 Weekend Riders - Technologies Used

Weekend riders reported similar past 30-day usage patterns of technological devices and applications to those of weekday riders. Facebook usage was slightly higher among weekend riders (62%) compared to weekday riders (55%), while transit apps/widget usage was slightly lower (42% vs. 50%).

Q27. Technologies Used In Past 30 Days	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	4,719	4,146	8,865
Total Answering	59,806	52,111	111,917
Smartphone, cell phone or PDA with Internet access	50,583	44,109	94,692
	84.58%	84.64%	84.61%
Desktop or laptop computer	48,885	43,394	92,279
	81.74%	83.27%	82.45%
Text message (send or received)	48,503	42,714	91,217
	81.10%	81.97%	81.50%
Facebook	36,934	33,002	69,936
	61.76%	63.33%	62.49%
Tablet / iPad	31,420	27,102	58,522
	52.54%	52.01%	52.29%
A transit app or widget	24,399	23,049	47,448
	40.80%	44.23%	42.40%
Cell phone without Internet access	18,279	15,821	34,101
	30.56%	30.36%	30.47%
Twitter	14,699	13,180	27,879
	24.58%	25.29%	24.91%
Total	273,704	242,370	516,074

7.7 Licensed Driver

7.7.1 Weekday Riders - Licensed Driver

The vast majority of AM Peak riders identified themselves as licensed drivers (94%). The percentage of licensed drivers was lower among riders from the other weekday dayparts (76-83%).

Q28. Licensed Driver	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	3,401	1,921	1,494	703	7,519
Total Answering	88,541	19,985	17,765	8,900	135,192
Yes	83,577	16,619	13,548	7,021	120,765
	94.39%	83.16%	76.26%	78.89%	89.33%
No	4,964	3,366	4,218	1,879	14,427
	5.61%	16.84%	23.74%	21.11%	10.67%
Total	88,541	19,985	17,765	8,900	135,192

7.7.2 Weekend Riders - Licensed Driver

The percentage of weekend riders who reported themselves as licensed drivers (80%) was lower than the overall weekday percentage of licensed drivers (89%), and was most similar to that of Late Night Off-Peak riders (79%).

Q28. Platforms Used In Last 30 Days	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	4,730	3,737	8,467
Total Answering	59,795	52,519	112,314
Yes	47,456	42,183	89,639
	79.36%	80.32%	79.81%
No	12,339	10,337	22,676
	20.64%	19.68%	20.19%
Total	59,795	52,519	112,314

7.8 Number of Licensed Drivers in Household

7.8.1 Weekday Riders - Number of Licensed Drivers in Household

The most frequently reported number of licensed drivers in the household was 2, among all weekday riders (54%). From the Midday Off Peak through the Late Night Off Peak, riders also commonly mentioned having 1 licensed driver in the household (between 21%-32%).

Q29. Number of Licensed Drivers in Household	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,430	2,169	2,139	1,099	9,837
Total Answering	87,512	19,737	17,120	8,504	132,873
0	1,017	886	1,246	668	3,817
	1.16%	4.49%	7.28%	7.85%	2.87%
1	11,591	4,094	5,422	1,968	23,074
	13.24%	20.74%	31.67%	23.14%	17.37%
2	51,578	9,292	7,003	3,784	71,657
	58.94%	47.08%	40.90%	44.50%	53.93%
3	12,886	3,065	1,855	1,236	19,042
	14.72%	15.53%	10.84%	14.54%	14.33%
4	7,569	1,711	1,087	588	10,956
	8.65%	8.67%	6.35%	6.92%	8.25%
5 or more	2,872	688	507	260	4,327
	3.28%	3.48%	2.96%	3.06%	3.26%
Mean	2.27	2.16	1.89	2.01	2.19
Median	1.6	1.53	1.27	1.43	1.55
Total	87,512	19,737	17,120	8,504	132,873

7.8.2 Weekend Riders - Number of Licensed Drivers in Household

Similar to what was reported for weekday riders, 2 was the most prevalent number of licensed drivers in weekend riders' households, though at a lower level (40% vs. 54% for weekday riders). The percentage of households with 1 licensed driver was higher for weekend riders (27%) than weekday riders (17%).

Q29. Number of Licensed Drivers in Household	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	6,465	5,698	12,163
Total Answering	58,060	50,559	108,618
0	3,754	3,504	7,258
	6.47%	6.93%	6.68%
1	14,916	14,445	29,360
	25.69%	28.57%	27.03%
2	23,201	19,750	42,951
	39.96%	39.06%	39.54%
3	8,756	6,673	15,429
	15.08%	13.20%	14.20%
4	5,001	4,172	9,173
	8.61%	8.25%	8.44%
5 or more	2,432	2,016	4,447
	4.19%	3.99%	4.09%
Mean	2.09	2.02	2.06
Median	1.45	1.37	1.41
Total	58,060	50,559	108,618

7.9 Number of Operable Vehicles in Household

7.9.1 Weekday Riders - Number of Operable Vehicles in Household

Almost all AM Peak riders (97%) reported having at least 1 operable vehicle in their household, with nearly half (46%) reporting 2 operable vehicles. Midday Off Peak riders reported having 2 operable vehicles most frequently (37%), as did Late Night Off Peak riders (34%). PM Reverse Peak riders indicated having zero operable vehicles (33%) most frequently.

Q30. Number of Operable Vehicles in Household	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,762	2,297	2,418	1,151	10,628
Total Answering	87,181	19,609	16,841	8,452	132,082
0	2,836	2,377	5,589	2,120	12,923
	3.25%	12.12%	33.19%	25.08%	9.78%
1	22,220	5,526	5,054	1,761	34,561
	25.49%	28.18%	30.01%	20.84%	26.17%
2	39,900	7,172	3,850	2,882	53,804
	45.77%	36.57%	22.86%	34.10%	40.74%
3	14,571	2,930	1,412	1,083	19,996
	16.71%	14.94%	8.38%	12.82%	15.14%
4	5,454	1,129	605	411	7,599
	6.26%	5.76%	3.60%	4.86%	5.75%
5 or more	2,199	475	330	194	3,199
	2.52%	2.42%	1.96%	2.30%	2.42%
Mean	2.06	1.83	1.27	1.6	1.9
Median	1.46	1.27	0.56	1.12	1.34
Total	87,181	19,609	16,841	8,452	132,082

7.9.2 Weekend Riders - Number of Operable Vehicles in Household

The distribution of the number of operable vehicles in the household varied more among weekend riders, with about 25% of riders reporting having zero; 27% indicating having 1; 27% stating having 2; and 21% reporting having 3 or more operable vehicles.

Q30. Number of Operable Vehicles in Household	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	7,292	7,049	14,342
Total Answering	57,232	49,207	106,440
0	11,928	14,950	26,878
	20.84%	30.38%	25.25%
1	15,927	12,938	28,864
	27.83%	26.29%	27.12%
2	16,806	12,000	28,806
	29.36%	24.39%	27.06%
3	7,524	5,517	13,041
	13.15%	11.21%	12.25%
4	3,177	2,461	5,638
	5.55%	5.00%	5.30%
5 or more	1,871	1,342	3,212
	3.27%	2.73%	3.02%
Mean	1.67	1.45	1.57
Median	1.05	0.75	0.91
Total	57,233	49,207	106,440

7.10 Vehicle Availability

7.10.1 Weekday Riders - Vehicle Availability

The majority of AM Peak riders (81%) indicated having a vehicle available for their inbound trip. This percentage was lower among riders in the other weekday dayparts (ranging from 38% in the PM Reverse Peak, to 63% in the Midday Off Peak).

Q31. Vehicle Availability	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,131	1,993	1,669	756	8,548
Total Answering	87,811	19,913	17,590	8,848	134,163
Yes	70,765	12,451	6,642	4,507	94,364
	80.59%	62.52%	37.76%	50.93%	70.34%
No	17,046	7,463	10,948	4,341	39,799
	19.41%	37.48%	62.24%	49.07%	29.66%
Total	87,811	19,913	17,590	8,848	134,163

7.10.2 Weekend Riders - Vehicle Availability

Vehicle availability was evenly split for weekend riders, with half reporting having a vehicle available, and the other half not having a vehicle available. A larger share of Saturday riders mentioned having a vehicle available compared to Sunday riders (54% vs 46%, respectively).

Q31. Vehicle Availability	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	5,535	4,406	9,941
Total Answering	58,990	51,850	110,840
Yes	32,025	23,678	55,703
	54.29%	45.67%	50.26%
No	26,965	28,173	55,137
	45.71%	54.33%	49.74%
Total	58,990	51,850	110,840

7.11 Number of Trips made into New York City by Car per Month

7.11.1 Weekday Riders - Number of Trips Made into New York City by Car per Month

The majority of weekday riders (55%) reported making zero car trips, on average, to NYC per month. In the AM Peak and Midday Off Peak, 53% of riders reported zero car trips to NYC per month, while more riders in the PM Reverse Peak (65%) and Late Night Off Peak (62%) reported zero car trips per month to NYC.

Q32. Number of Trips Made Into NYC by Car per Month	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	6,487	2,700	2,919	1,356	13,462
Total Answering	85,456	19,206	16,341	8,247	129,249
0	45,561	10,137	10,687	5,109	71,494
	53.32%	52.78%	65.40%	61.95%	55.32%
1 or More	39,894	9,068	5,654	3,138	57,755
	46.68%	47.22%	34.60%	38.05%	44.68%
1	15,311	2,903	1,764	1,020	20,997
	17.92%	15.11%	10.79%	12.36%	16.25%
2	10,814	2,295	1,266	819	15,193
	12.65%	11.95%	7.75%	9.93%	11.75%
3	4,034	923	633	234	5,824
	4.72%	4.81%	3.87%	2.84%	4.51%
4	3,749	1,022	615	330	5,716
	4.39%	5.32%	3.76%	4.00%	4.42%
5 or more	5,986	1,925	1,377	736	10,024
	7.01%	10.02%	8.43%	8.92%	7.76%
Mean	1.47	1.78	1.49	1.54	1.52
Median	-	-	-	-	-
Total	85,456	19,206	16,341	8,247	129,249

7.11.2 Weekend Riders - Number of Trips Made into New York City by Car per Month

The relatively low percentage of weekend riders who reported making 1 or more trips to NYC by car per month (34%) resembled that of PM Reverse Peak riders (35%).

Q32. Number of Trips Made Into NYC by Car per Month	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	9,076	8,381	17,457
Total Answering	55,449	47,876	103,325
0	36,692	32,007	68,699
	66.17%	66.85%	66.49%
1 or More	18,757	15,869	34,626
	33.83%	33.15%	33.51%
1	6,784	5,996	12,780
	12.23%	12.52%	12.37%
2	4,751	3,790	8,541
	8.57%	7.92%	8.27%
3	1,850	1,601	3,451
	3.34%	3.34%	3.34%
4	1,627	1,478	3,105
	2.93%	3.09%	3.01%
5 or more	3,745	3,003	6,748
	6.75%	6.27%	6.53%
Mean	1.3	1.2	1.25
Median	-	-	-
Total	55,449	47,876	103,325

7.12 Physical Disabilities[58]

Around 3% of both weekday and weekend riders reported having some type of disability. Difficulty climbing stairs was most commonly mentioned among those respondents who reported having a disability for both weekday and weekend travelers.

Q33. Physical Disabilities	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	3,785	8,100	9,542
Total Answering	88,157	134,611	111,239
No disability	86,112	131,040	107,788
	97.68%	97.35%	96.90%
Difficulty with or inability to climb stairs	1,513	2,592	2,370
	1.72%	1.93%	2.13%
Use a wheelchair	10	38	75
	0.01%	0.03%	0.07%
Use a mobility aid (cane, etc.)	206	415	444
	0.23%	0.31%	0.40%
Are legally blind	40	101	176
	0.04%	0.08%	0.16%
Have a hearing impairment	381	659	706
	0.43%	0.49%	0.63%
Total	88,261	134,846	111,558

[58] Respondents were allowed to report multiple disabilities.

7.13 Level of Education

A little over four-fifths of weekday riders reported having a college degree or more (81%). A smaller share of weekend riders (69%) reported having at least a college degree.

Q34. Level of Education	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	3,734	7,859	9,141
Total Answering	88,208	134,852	111,641
High school or less	3,833	9,339	14,117
	4.35%	6.93%	12.65%
Did not graduate high school	1,053	2,289	3,648
	1.19%	1.70%	3.27%
High school graduate	2,780	7,049	10,469
	3.15%	5.23%	9.38%
Technical / vocational business school / some college	7,975	16,757	20,090
	9.04%	12.43%	18.00%
Technical or vocational business school	997	1,964	2,221
	1.13%	1.46%	1.99%
Some college	6,978	14,793	17,869
	7.91%	10.97%	16.01%
College graduate or more	76,399	108,756	77,433
	86.61%	80.65%	69.36%
College graduate	39,767	57,844	43,881
	45.08%	42.89%	39.31%
Post graduate	36,633	50,913	33,552
	41.53%	37.75%	30.05%
Total	88,208	134,852	111,641

7.14 Current Employment Status

7.14.1 Weekday Riders - Current Employment Status

The vast majority of AM Peak riders were employed full-time (90%). The percentage of those employed full-time decreased for Midday Off Peak riders (53%) and increased again for PM Reverse Peak riders (68%) and Late Night Off Peak riders (78%).

Q35. Current Employment Status	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,325	2,091	1,829	752	8,997
Total Answering	87,617	19,815	17,430	8,851	133,714
Employed full-time (35+ hrs/wk)	78,636	10,405	11,916	6,948	107,904
	89.75%	52.51%	68.36%	78.49%	80.70%
Employed part-time (20-35 hrs/wk)	2,413	1,868	1,257	625	6,163
	2.75%	9.43%	7.21%	7.06%	4.61%
Full-time or part-time student	1,900	1,580	1,128	420	5,028
	2.17%	7.98%	6.47%	4.75%	3.76%
Self-employed outside the home	1,910	1,221	699	293	4,124
	2.18%	6.16%	4.01%	3.31%	3.08%
Retired	589	1,487	584	77	2,737
	0.67%	7.50%	3.35%	0.87%	2.05%
Unemployed	715	1,117	615	190	2,638
	0.82%	5.64%	3.53%	2.15%	1.97%
Employed part-time (less than 20 hrs/wk)	768	915	584	221	2,488
	0.88%	4.62%	3.35%	2.49%	1.86%
Self-employed at home	495	873	423	52	1,843
	0.57%	4.41%	2.43%	0.58%	1.38%
Homemaker	190	349	224	26	789
	0.22%	1.76%	1.28%	0.29%	0.59%
Total	87,617	19,815	17,430	8,851	133,714

7.14.2 Weekend Riders - Current Employment Status

The majority of weekend riders reported being employed full-time (63%), although at a much lower rate than weekday riders (81%). More weekend riders reported being full or part time students (9%, vs. 4% on weekdays).

Q35. Current Employment Status	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	5,764	4,746	10,510
Total Answering	58,761	51,510	110,271
Employed full-time (35+ hrs/wk)	36,378	32,713	69,092
	61.91%	63.51%	62.66%
Full-time or part-time student	5,465	4,112	9,577
	9.30%	7.98%	8.68%
Employed part-time (20-35 hrs/wk)	4,931	3,710	8,641
	8.39%	7.20%	7.84%
Retired	2,700	2,569	5,269
	4.60%	4.99%	4.78%
Unemployed	2,730	2,304	5,033
	4.65%	4.47%	4.56%
Self-employed outside the home	2,180	2,135	4,315
	3.71%	4.15%	3.91%
Employed part-time (less than 20 hrs/wk)	2,005	1,663	3,668
	3.41%	3.23%	3.33%
Self-employed at home	1,485	1,565	3,050
	2.53%	3.04%	2.77%
Homemaker	887	739	1,627
	1.51%	1.44%	1.48%
Total	58,761	51,510	110,271

7.15 Type of Job or Occupation[59]

7.15.1 Weekday Riders - Type of Job or Occupation

Most weekday riders reported being employed in either a professional, technical & related field (47%), or an executive, administrative & managerial field (33%). Executive, administrative & managerial fields were more frequently reported in the AM Peak (38%) compared to the other weekday dayparts (between 21% and 23%, depending on daypart).

Q36. Type of Job or Occupation	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	36,476	5,463	3,921	2,060	47,920
Weighted Base	86,123	16,862	16,007	8,558	127,550
No Answer	2,232	1,391	1,252	627	5,502
Total Answering	83,890	15,471	14,755	7,932	122,048
Professional, technical & related	40,198	7,033	7,253	3,176	57,658
	47.92%	45.46%	49.15%	40.04%	47.24%
Executive, administrative & managerial	32,071	3,535	3,044	1,795	40,445
	38.23%	22.85%	20.63%	22.63%	33.14%
Sales	4,396	1,657	1,008	821	7,883
	5.24%	10.71%	6.83%	10.36%	6.46%
Service occupations	2,050	1,539	1,214	760	5,563
	2.44%	9.95%	8.23%	9.58%	4.56%
Administrative support, including clerical	3,373	607	1,078	399	5,456
	4.02%	3.92%	7.31%	5.03%	4.47%
General labor	852	683	797	557	2,889
	1.02%	4.42%	5.40%	7.02%	2.37%
Transportation & material moving	320	208	140	185	853
	0.38%	1.35%	0.95%	2.34%	0.70%
Precision production craft & repair	376	107	113	96	693
	0.45%	0.69%	0.77%	1.20%	0.57%
Machine operators, assemblers & inspectors	255	102	108	143	607
	0.30%	0.66%	0.73%	1.81%	0.50%
Total	83,890	15,471	14,755	7,932	122,048

[59] Only respondents who indicated that they were employed part-time or full-time qualified for this question.

7.15.2 Weekend Riders - Type of Job or Occupation

Similar to weekday riders, a little under half of weekend riders reported working in a professional, technical & related field (46%). Sales and service occupations were more prevalent for weekend riders (10% each vs. 5%-6% for weekday riders) while executive, administrative & managerial positions were less commonly reported (20% vs. 33% in the weekday).

Q36. Type of Job or Occupation	Saturday	Sunday	Weekend Total
Unweighted Base	13,553	11,317	24,870
Weighted Base	52,444	45,898	98,343
No Answer	5,020	3,756	8,777
Total Answering	47,424	42,142	89,566
Professional, technical & related	21,814	19,494	41,308
	46.00%	46.26%	46.12%
Executive, administrative & managerial	9,492	8,828	18,320
	20.01%	20.95%	20.45%
Sales	4,901	4,106	9,007
	10.33%	9.74%	10.06%
Service occupations	4,815	4,190	9,005
	10.15%	9.94%	10.05%
General labor	2,724	2,233	4,958
	5.74%	5.30%	5.54%
Administrative support, including clerical	2,295	1,992	4,286
	4.84%	4.73%	4.79%
Precision production craft & repair	443	480	923
	0.94%	1.14%	1.03%
Transportation & material moving	507	415	922
	1.07%	0.98%	1.03%
Machine operators, assemblers & inspectors	432	403	836
	0.91%	0.96%	0.93%
Total	47,424	42,142	89,566

7.16 Industry[60]

7.16.1 Weekday Riders - Industry

AM Peak (30%), PM Reverse Peak (16%), and Late Night Off Peak (21%) riders most frequently reported working in the financial activities industry. Among Midday Off Peak riders, professional / business services was the most common employment industry reported (21%).

Q37. Industry	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	36,476	5,463	3,921	2,060	47,920
Weighted Base	86,123	16,862	16,007	8,558	127,550
No Answer	2,181	1,161	997	493	4,832
Total Answering	83,942	15,701	15,010	8,065	122,718
Financial activities	25,086	1,755	2,434	1,684	30,959
	29.88%	11.18%	16.22%	20.88%	25.23%
Professional / Business services	18,016	3,294	2,179	755	24,244
	21.46%	20.98%	14.52%	9.36%	19.76%
Health services / Health care	6,803	1,820	2,178	940	11,741
	8.10%	11.59%	14.51%	11.65%	9.57%
Education	4,499	1,786	1,630	631	8,546
	5.36%	11.37%	10.86%	7.83%	6.96%
Information	4,638	1,007	622	175	6,442
	5.53%	6.41%	4.14%	2.17%	5.25%
Retail trade	3,186	1,198	826	729	5,940
	3.80%	7.63%	5.51%	9.04%	4.84%
Leisure and hospitality	2,423	1,661	934	583	5,601
	2.89%	10.58%	6.22%	7.23%	4.56%
Government	3,324	475	630	481	4,910
	3.96%	3.03%	4.20%	5.96%	4.00%
Construction	3,037	492	658	612	4,799
	3.62%	3.14%	4.38%	7.58%	3.91%

[60] Only respondents who indicated that they were employed part-time or full-time qualified for this question.

Q37. Industry	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Manufacturing	1,645	216	468	191	2,519
	1.96%	1.37%	3.12%	2.37%	2.05%
Transportation and utilities	1,274	329	295	314	2,213
	1.52%	2.10%	1.97%	3.90%	1.80%
Wholesale trade	1,388	256	214	126	1,984
	1.65%	1.63%	1.42%	1.56%	1.62%
Natural resources / Mining	171	70	84	32	357
	0.20%	0.45%	0.56%	0.40%	0.29%
Other services	8,452	1,339	1,858	813	12,462
	10.07%	8.53%	12.38%	10.08%	10.15%
Total	83,942	15,701	15,010	8,065	122,718

7.16.2 Weekend Riders - Industry

Professional / business services and health care services (around 15% each) were the two most frequently reported employment industries for weekend riders. Education (13%) and financial activities (11%) were the third and fourth most commonly mentioned industries for weekend riders, respectively.

Q37. Industry	Saturday	Sunday	Weekend Total
Unweighted Base	13,553	11,317	24,870
Weighted Base	52,444	45,898	98,343
No Answer	4,397	2,964	7,362
Total Answering	48,047	42,934	90,981
Professional / Business services	6,862	7,015	13,877
	14.28%	16.34%	15.25%
Health services / Health care	7,445	5,773	13,218
	15.49%	13.45%	14.53%
Education	6,941	5,267	12,208
	14.45%	12.27%	13.42%
Financial activities	4,852	4,916	9,768
	10.10%	11.45%	10.74%
Retail trade	3,995	3,344	7,339
	8.31%	7.79%	8.07%
Leisure and hospitality	3,326	3,101	6,427
	6.92%	7.22%	7.06%
Information	2,010	1,996	4,006
	4.18%	4.65%	4.40%
Construction	2,113	1,670	3,783
	4.40%	3.89%	4.16%
Government	2,038	1,701	3,739
	4.24%	3.96%	4.11%
Manufacturing	981	876	1,857
	2.04%	2.04%	2.04%

Q37. Industry	Saturday	Sunday	Weekend Total
Transportation and utilities	978	749	1,727
	2.04%	1.74%	1.90%
Wholesale trade	616	570	1,186
	1.28%	1.33%	1.30%
Natural resources / Mining	222	209	431
	0.46%	0.49%	0.47%
Other services	5,669	5,747	11,415
	11.80%	13.38%	12.55%
Total	48,047	42,934	90,981

7.17 Telecommuting[61] [62]

7.17.1 Weekday Riders - Telecommuting

Half of weekday riders reported being allowed to telecommute for work. This percentage was higher for AM Peak riders (54%) and lower for riders in other weekday dayparts, from 45% for Midday Off Peak riders down to 35% for Late Night Off Peak riders.

Q38. Telecommuting	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	36,476	5,463	3,921	2,060	47,920
Weighted Base	86,123	16,862	16,007	8,558	127,550
No Answer	2,571	1,726	1,369	529	6,195
Total Answering	83,552	15,136	14,638	8,029	121,355
Allowed to telecommute	45,330	6,729	5,954	2,806	60,820
	54.25%	44.46%	40.68%	34.95%	50.12%
Not allowed to telecommute	38,222	8,407	8,684	5,223	60,535
	45.75%	55.54%	59.32%	65.05%	49.88%
Total	83,552	15,136	14,638	8,029	121,355

[61] Only respondents who indicated that they were employed qualified for this question.

[62] All respondents were asked about telecommuting availability. This section includes responses for all trip purposes, not just respondents who are commuting to/from work.

7.17.2 Weekend Riders - Telecommuting

The majority of riders who were surveyed on weekends (64%) stated that they were not allowed to telecommute for work.

Q38. Telecommuting	Saturday	Sunday	Weekend Total
Unweighted Base	13,553	11,317	24,870
Weighted Base	52,444	45,898	98,343
No Answer	5,309	4,233	9,542
Total Answering	47,135	41,665	88,801
Not allowed to telecommute	30,778	26,378	57,156
	65.30%	63.31%	64.36%
Allowed to telecommute	16,357	15,288	31,645
	34.70%	36.69%	35.64%
Total	47,135	41,665	88,801

7.18 Telecommuting Frequency

7.18.1 Weekday Riders - Telecommuting Frequency

Of those weekday riders who reported being able to telecommute, nearly four-fifths (79%) stated that they did so 1 day per week or less. A smaller portion of AM Peak riders (4%) telecommuted 5 or more days per week compared to riders in the other dayparts (ranging from 9% in the Late Night Off Peak to 19% in the Midday Off Peak).

Q38A. Telecommuting Frequency	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	19,452	2,272	1,532	749	24,005
Weighted Base	45,330	6,729	5,954	2,806	60,820
No Answer	1,599	519	300	86	2,504
Total Answering	43,731	6,210	5,655	2,720	58,316
5 or more days per week	1,563	1,162	783	248	3,755
	3.57%	18.71%	13.85%	9.10%	6.44%
4 days per week	418	205	142	52	816
	0.96%	3.30%	2.51%	1.90%	1.40%
3 days per week	1,357	571	353	130	2,411
	3.10%	9.19%	6.24%	4.78%	4.13%
2 days per week	3,859	786	543	234	5,422
	8.82%	12.66%	9.61%	8.59%	9.30%
1 day per week	9,512	1,039	963	504	12,018
	21.75%	16.73%	17.03%	18.53%	20.61%
Less than 1 day per week but more than 1 day per month	11,704	1,060	1,060	472	14,296
	26.76%	17.07%	18.75%	17.37%	24.52%
1 day per month or less	12,394	825	1,055	665	14,939
	28.34%	13.28%	18.66%	24.44%	25.62%
Never	2,924	562	755	416	4,658
	6.69%	9.05%	13.36%	15.30%	7.99%
Total	43,731	6,210	5,655	2,720	58,316

7.18.2 Weekend Riders - Telecommuting Frequency

Roughly two-thirds of weekend riders that stated they were able to telecommute, reported a telecommuting schedule of 1 day per week or less. A telecommuting schedule of 5 or more days per week was much more prevalent for all weekend riders compared to weekday riders (18% vs. 6%).

Q38A. Telecommuting Frequency	Saturday	Sunday	Weekend Total
Unweighted Base	4,391	3,954	8,345
Weighted Base	16,357	15,288	31,645
No Answer	995	866	1,860
Total Answering	15,363	14,422	29,785
5 or more days per week	2,764 17.99%	2,537 17.59%	5,301 17.80%
4 days per week	443 2.88%	399 2.76%	842 2.83%
3 days per week	924 6.01%	722 5.01%	1,646 5.53%
2 days per week	1,428 9.29%	1,283 8.90%	2,711 9.10%
1 day per week	2,266 14.75%	2,193 15.20%	4,458 14.97%
Less than 1 day per week but more than 1 day per month	2,515 16.37%	2,455 17.02%	4,970 16.69%
1 day per month or less	2,729 17.76%	2,895 20.08%	5,624 18.88%
Never	2,295 14.94%	1,938 13.44%	4,233 14.21%
Total	15,363	14,422	29,785

7.19 Household Size

Two-person households were most frequently reported for both weekday and weekend riders (29% and 32%, respectively). The second most commonly reported household size was a four-person household for weekday riders (24%) and single person household for weekend riders (19%).

Q39. Household Size	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	5,990	11,892	15,233
Total Answering	85,952	130,819	105,548
1	7,534	14,648	20,157
	8.77%	11.20%	19.10%
2	24,445	38,519	34,294
	28.44%	29.44%	32.49%
3	17,599	26,409	19,256
	20.48%	20.19%	18.24%
4	22,653	31,030	17,192
	26.36%	23.72%	16.29%
5 or more	13,721	20,213	14,649
	15.96%	15.45%	13.88%
Total	85,952	130,819	105,548

7.20 Number of Employed People in Household

The majority of weekday riders (51%) reported having two employed people living in their household, while about 42% of weekend riders reported the same. Another 31% of both weekday and weekend riders indicated only one employed person living in the household.

Q40. Number of Employed People in Household	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	7,138	14,778	17,549
Total Answering	84,804	127,933	103,232
0	843	2,722	5,072
	0.99%	2.13%	4.91%
1	26,092	39,694	31,839
	30.77%	31.03%	30.84%
2	45,880	64,883	43,284
	54.10%	50.72%	41.93%
3	8,257	13,768	14,566
	9.74%	10.76%	14.11%
4	2,840	5,137	5,962
	3.35%	4.02%	5.78%
5 or more	891	1,729	2,509
	1.05%	1.35%	2.43%
Total	84,804	127,933	103,232

7.21 Household Income

7.21.1 Weekday Riders - Household Income

Just over two-thirds of weekday riders (68%) reported a household income of $100,000 or more. Riders in the AM Peak more frequently reported household incomes in the $100,000 or more group (78%) than riders from any other weekday daypart (ranging from about 46% to 54%). About 13% of weekday riders reported household incomes of $50,000 or less, with that percentage being highest during PM Reverse Peak and Late Night Off Peak (both at 27%).

Q41. Household Income	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	17,690	5,605	4,351	1,979	29,625
Total Answering	74,252	16,301	14,908	7,625	113,086
Less than $11,500	661	864	765	302	2,592
	0.89%	5.30%	5.13%	3.96%	2.29%
$11,500 - $12,499	154	241	234	93	722
	0.21%	1.48%	1.57%	1.22%	0.64%
$12,500 - $15,799	175	150	124	98	547
	0.24%	0.92%	0.83%	1.28%	0.48%
$15,800 - $19,799	150	163	180	96	589
	0.20%	1.00%	1.21%	1.26%	0.52%
$19,800 - $23,799	233	209	290	132	865
	0.31%	1.28%	1.95%	1.73%	0.76%
$23,800 - $24,999	243	184	252	152	831
	0.33%	1.13%	1.69%	1.99%	0.74%
$25,000 - $27,999	264	227	287	159	938
	0.36%	1.39%	1.93%	2.09%	0.83%
$28,000 - $31,999	285	259	325	265	1,135
	0.38%	1.59%	2.18%	3.47%	1.00%
$32,000- $35,999	388	301	342	155	1,187
	0.52%	1.85%	2.29%	2.04%	1.05%

Q41. Household Income	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
$36,000 - $39,999	572	355	413	149	1,490
	0.77%	2.18%	2.77%	1.95%	1.32%
$40,000 - $49,999	1,515	822	834	461	3,631
	2.04%	5.04%	5.59%	6.04%	3.21%
$50,000 - $74,999	4,988	1,865	2,219	865	9,937
	6.72%	11.44%	14.88%	11.34%	8.79%
$75,000 - $99,999	6,745	1,790	1,853	968	11,356
	9.08%	10.98%	12.43%	12.70%	10.04%
$100,000 - $199,999	23,412	4,384	4,052	1,812	33,660
	31.53%	26.89%	27.18%	23.77%	29.77%
$200,000 - $299,999	13,352	1,845	1,246	712	17,156
	17.98%	11.32%	8.36%	9.34%	15.17%
$300,000 or more	21,114	2,640	1,491	1,206	26,451
	28.44%	16.20%	10.00%	15.81%	23.39%
Total	74,252	16,301	14,908	7,625	113,086

7.21.2 Weekend Riders - Household Income

As with weekdays, weekend riders most commonly indicated having household incomes in the $100,000-$199,999 range (27% for weekend riders and 30% for weekday riders). However, the household incomes for weekend riders were generally lower than that of weekday riders, with over half of weekend riders (54%) reporting household incomes below $100,000 (compared to 32% of weekday riders).

Q41. Household Income	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	16,598	13,428	30,026
Total Answering	47,927	42,828	90,755
Less than $11,500	2,757	2,369	5,126
	5.75%	5.53%	5.65%
$11,500 - $12,499	669	641	1,310
	1.39%	1.50%	1.44%
$12,500 - $15,799	644	541	1,185
	1.34%	1.26%	1.31%
$15,800 - $19,799	712	538	1,250
	1.49%	1.26%	1.38%
$19,800 - $23,799	799	815	1,614
	1.67%	1.90%	1.78%
$23,800 - $24,999	789	586	1,375
	1.65%	1.37%	1.51%
$25,000 - $27,999	809	864	1,674
	1.69%	2.02%	1.84%
$28,000 - $31,999	870	729	1,599
	1.82%	1.70%	1.76%
$32,000- $35,999	1,108	1,035	2,144
	2.31%	2.42%	2.36%
$36,000 - $39,999	1,321	1,166	2,488
	2.76%	2.72%	2.74%

Q41. Household Income	Saturday	Sunday	Weekend Total
$40,000 - $49,999	2,773	2,387	5,160
	5.79%	5.57%	5.69%
$50,000 - $74,999	6,421	6,164	12,585
	13.40%	14.39%	13.87%
$75,000 - $99,999	6,208	5,614	11,822
	12.95%	13.11%	13.03%
$100,000 - $199,999	13,409	11,490	24,900
	27.98%	26.83%	27.44%
$200,000 - $299,999	3,989	3,907	7,896
	8.32%	9.12%	8.70%
$300,000 or more	4,647	3,982	8,629
	9.70%	9.30%	9.51%
Total	47,927	42,828	90,755

7.22 Credit or Debit Card Ownership

7.22.1 Weekday Riders - Credit or Debit Card Ownership

Close to all (97%) weekday riders indicated ownership of a credit or debit card.

Q42. Credit or Debit Card Ownership	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	5,987	2,588	2,266	1,028	11,868
Total Answering	85,955	19,318	16,993	8,575	130,842
Yes	84,485	18,236	15,976	8,176	126,873
	98.29%	94.39%	94.02%	95.34%	96.97%
No	1,470	1,083	1,017	399	3,969
	1.71%	5.61%	5.98%	4.66%	3.03%
Total	85,955	19,318	16,993	8,575	130,842

7.22.2 Weekend Riders - Credit or Debit Card Ownership

Most weekend riders (94%) also indicated owning a credit or debit card.

Q42. Credit or Debit Card Ownership	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	7,155	5,758	12,913
Total Answering	57,370	50,498	107,869
Yes	53,923 93.99%	47,843 94.74%	101,766 94.34%
No	3,447 6.01%	2,656 5.26%	6,103 5.66%
Total	57,370	50,498	107,869

7.23 Gender

7.23.1 Weekday Riders - Gender

Slightly over half of weekday riders were male (54%).

Q43. Gender	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	4,931	1,903	1,869	850	9,553
Total Answering	87,011	20,003	17,390	8,753	133,158
Male	48,237	9,934	8,275	5,504	71,950
	55.44%	49.66%	47.58%	62.88%	54.03%
Female	38,774	10,068	9,116	3,249	61,207
	44.56%	50.34%	52.42%	37.12%	45.97%
Total	87,011	20,003	17,390	8,753	133,158

7.23.2 Weekend Riders - Gender

Resembling the gender distribution of weekday riders, roughly 55% of weekend riders were male.

Q43. Gender	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	6,693	5,292	11,985
Total Answering	57,832	50,965	108,797
Male	32,079	27,809	59,888
	55.47%	54.57%	55.05%
Female	25,753	23,155	48,909
	44.53%	45.43%	44.95%
Total	57,832	50,965	108,797

7.24 Age

7.24.1 Weekday Riders - Age[63]

The most frequently reported age range for weekday riders was the 35-54 year old group (47%), with 25-34 years old being the second most reported age range (21%). The AM Peak had the lowest percentage of younger riders ages 18-24 (6%), but the highest percentage of riders in the 35-54 age range (52%).

Q44. Age	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	9,874	3,195	2,953	1,162	17,184
Total Answering	82,068	18,711	16,307	8,441	125,526
18-24	5,307	3,216	3,047	1,326	12,896
	6.47%	17.19%	18.68%	15.71%	10.27%
25-34	15,153	3,876	5,420	2,157	26,606
	18.46%	20.71%	33.24%	25.56%	21.20%
35-54	42,894	6,696	5,338	3,565	58,492
	52.27%	35.79%	32.73%	42.23%	46.60%
55-64	14,819	2,833	1,587	1,073	20,313
	18.06%	15.14%	9.73%	12.71%	16.18%
65 and older	3,895	2,090	915	320	7,220
	4.75%	11.17%	5.61%	3.79%	5.75%
Total	82,068	18,711	16,307	8,441	125,526

[63] Riders who appeared to be minors were not offered surveys.

7.24.2 Weekend Riders - Age[64]

Weekend riders' ages were predominantly distributed in the three age ranges below 55 years old: 25-34 was the most frequently reported (31%), 35-54 was the second most reported (29%), and 18-24 the third most reported (22%). The proportion of younger riders (ages 18-24) on the weekend was more than double that of weekday riders (22% vs 10%).

Q44. Age	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	10,442	8,138	18,580
Total Answering	54,083	48,118	102,201
18-24	11,863	10,344	22,207
	21.93%	21.50%	21.73%
25-34	16,616	15,203	31,819
	30.72%	31.60%	31.13%
35-54	16,156	13,784	29,940
	29.87%	28.65%	29.30%
55-64	5,821	5,107	10,928
	10.76%	10.61%	10.69%
65 and older	3,628	3,679	7,306
	6.71%	7.65%	7.15%
Total	54,083	48,118	102,201

[64] Riders who appeared to be minors were not offered surveys.

7.25 Race/Ethnicity

7.25.1 Weekday Riders – Hispanic/Latino/Spanish Origin

Overall, 14% of weekday respondents were of Hispanic/Latino/Spanish origin. The proportion of Hispanic/Latino/Spanish riders increased throughout the weekday dayparts, with 11% among AM Peak riders and 23% among Late Night Off Peak riders.

Q45. Hispanic, Latino or Spanish Origin?	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	10,093	3,149	2,933	1,420	17,594
Total Answering	81,849	18,758	16,327	8,183	125,117
No	72,642	15,574	12,871	6,289	107,375
	88.75%	83.03%	78.83%	76.85%	85.82%
Yes	9,208	3,184	3,456	1,895	17,742
	11.25%	16.97%	21.17%	23.15%	14.18%
Total	81,849	18,758	16,327	8,183	125,117

7.25.2 Weekend Riders - Hispanic/Latino/Spanish Origin

A slightly higher proportion of weekend riders were of Hispanic/Latino/Spanish origin compared to weekday riders (18% vs. 14%).

Q45. Hispanic, Latino or Spanish Origin?	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	10,347	8,469	18,816
Total Answering	54,178	47,788	101,966
No	44,132	39,554	83,686
	81.46%	82.77%	82.07%
Yes	10,046	8,234	18,280
	18.54%	17.23%	17.93%
Total	54,178	47,788	101,966

7.25.3 Weekday Riders - Race

White respondents made up close to three-fourths (74%) of weekday riders across all dayparts. The percentage of black or African American respondents increased throughout the weekday dayparts, from 8% in the AM Peak, to 21% in the Late Night Off Peak.

Q46. Race	AM Peak	Midday Off Peak	PM Reverse Peak	Late Night Off Peak	Weekday Total
Unweighted Base	38,878	7,075	4,732	2,304	52,989
Weighted Base	91,942	21,906	19,259	9,603	142,711
No Answer	10,268	3,578	3,582	1,867	19,295
Total Answering	81,674	18,328	15,678	7,736	123,415
White	64,174	12,972	9,588	4,799	91,532
	78.57%	70.78%	61.15%	62.03%	74.17%
Black or African American	6,171	2,448	2,928	1,662	13,208
	7.56%	13.35%	18.67%	21.48%	10.70%
Asian	6,700	1,206	1,369	493	9,768
	8.20%	6.58%	8.73%	6.38%	7.92%
Racially Mixed	2,453	970	991	378	4,793
	3.00%	5.29%	6.32%	4.88%	3.88%
Native Hawaiian or other Pacific Islander	161	58	110	20	348
	0.20%	0.31%	0.70%	0.25%	0.28%
American Indian or Alaska Native	157	68	41	37	303
	0.19%	0.37%	0.26%	0.47%	0.25%
Other	1,858	606	651	348	3,463
	2.27%	3.31%	4.15%	4.50%	2.81%
Total	81,674	18,328	15,678	7,736	123,415

7.25.4 Weekend Riders - Race

69% of weekend riders reported being white, while black or African American riders accounted for an additional 14% of weekend riders.

Q46. Race	Saturday	Sunday	Weekend Total
Unweighted Base	16,574	13,748	30,322
Weighted Base	64,525	56,256	120,781
No Answer	11,012	9,199	20,210
Total Answering	53,513	47,058	100,571
White	36,063	33,262	69,326
	67.39%	70.68%	68.93%
Black or African American	7,642	6,028	13,670
	14.28%	12.81%	13.59%
Asian	4,298	3,422	7,719
	8.03%	7.27%	7.68%
Racially Mixed	3,137	2,833	5,969
	5.86%	6.02%	5.94%
American Indian or Alaska Native	194	104	298
	0.36%	0.22%	0.30%
Native Hawaiian or other Pacific Islander	183	90	274
	0.34%	0.19%	0.27%
Other	1,996	1,319	3,315
	3.73%	2.80%	3.30%
Total	53,513	47,058	100,571

7.26 English Competency

The vast majority of weekday riders either reported speaking English very well (94%) or well (5%). Weekend riders reported similarly, with 90% indicating speaking English very well and 7% reporting speaking English well.

Q47. English Competency	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	4,935	9,467	11,718
Total Answering	87,007	133,244	109,064
Very well	82,564	124,758	98,695
	94.89%	93.63%	90.49%
Well	3,847	6,942	7,854
	4.42%	5.21%	7.20%
Not well	537	1,318	2,097
	0.62%	0.99%	1.92%
Not at all	60	227	419
	0.07%	0.17%	0.38%
Total	87,007	133,244	109,064

7.27 Primary Language at Home

English was the primary language reported by the vast majority of weekday (90%) and weekend (87%) riders. Spanish was the primary language for a larger proportion of weekend riders (7%) than weekday riders (4%).

Q48. Primary Language at Home	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	5,624	10,509	12,818
Total Answering	86,318	132,202	107,964
English	79,069	118,999	93,533
	91.60%	90.01%	86.63%
Spanish	2,352	5,621	7,208
	2.72%	4.25%	6.68%
Other	4,897	7,582	7,223
	5.67%	5.73%	6.69%
Total	86,318	132,202	107,964

7.28 Birth Country

United States was the most commonly reported birth country for weekday (79%) and weekend riders (78%). A very wide variety of other birth countries were also reported, with no other individual country being over 2% for either weekday or weekend riders.

Q49. Birth Country	AM Peak	Weekday Total	Weekend Total
Unweighted Base	38,878	52,989	30,322
Weighted Base	91,942	142,711	120,781
No Answer	7,056	13,360	14,098
Total Answering	84,886	129,350	106,683
United States	68,072	102,169	82,950
	80.19%	78.99%	77.75%
India	1,437	1,934	1,121
	1.69%	1.49%	1.05%
United Kingdom	1,071	1,550	1,295
	1.26%	1.20%	1.21%
Jamaica	742	1,487	1,273
	0.87%	1.15%	1.19%
Mexico	311	796	1,443
	0.37%	0.62%	1.35%
China	852	1,136	922
	1.00%	0.88%	0.86%
Dominican Republic	352	858	865
	0.41%	0.66%	0.81%
Japan	670	916	646
	0.79%	0.71%	0.61%
Canada	608	882	678
	0.72%	0.68%	0.64%
France	499	749	657
	0.59%	0.58%	0.62%

Q49. Birth Country	AM Peak	Weekday Total	Weekend Total
Germany	473	714	684
	0.56%	0.55%	0.64%
Philippines	410	684	694
	0.48%	0.53%	0.65%
Colombia	320	682	668
	0.38%	0.53%	0.63%
Brazil	358	589	714
	0.42%	0.46%	0.67%
Other	8,710	14,206	12,073
	10.26%	10.98%	11.32%
Total	84,886	129,350	106,683

7.29 Visited Any Businesses within Half Mile of Inbound Boarding Station (New Haven Line Only)[65]

For the New Haven Line only, the survey included a question asking: "Have you visited any business within a half-mile of your inbound boarding station on your way to or from the train the past 30 days?" Nearly half of New Haven Line riders reported visiting any type of business located within a half mile of their inbound boarding station in the past 30 days (46%). The percentage was higher for weekday riders (49%) as compared to weekend riders (42%).

Q27a. Have You Visited Any Businesses Within a Half-Mile of Your Inbound Boarding Station (Towards Manhattan) On Your Way To The Train In The Past 30 Days?	Total Weekday	Total Weekend	Total
Unweighted Base	22916	14141	37057
Weighted Base	67370	56930	124300
No Answer	4207	5985	10192
Total Answering	63162	50945	114107
Yes	30880	21439	52319
	48.89%	42.08%	45.85%
No	32283	29506	61789
	51.11%	57.92%	54.15%
Total	63162	50945	114107

[65] During the survey field effort, MTA-MNR requested several new questions be added to the questionnaire. The focus was on businesses within a half mile of MNR stations, and respondents were asked to state how often they frequented certain establishments, as well as how much money they spent there. The information from these questions will help MTA-MNR assess the economic impacts of local businesses, understand spending patterns around stations, and inform Transit Oriented Development (TOD) planning efforts, and parking policies. Since the survey effort was already in progress, the additional questions were only asked of the New Haven Line riders.

7.30 Business Visited At Least Once in Past 30 Days[66] (New Haven Line Only)

Of the New Haven Line riders who reported visiting a business within a half-mile of their inbound boarding station, fast food/coffee/deli businesses were by far the most visited at least once in the past 30 days (73%) followed by sit down restaurants (43%) and supermarket/convenience stores (35%). Retail and personal services (e.g., dry cleaning, hair and personal care) were the next most reported at 19% and 16%, respectively. Other types of businesses were frequented by fewer riders (each at 5% or lower) in the past 30 days.

Q27b. Times Visited Business/Service at Least Once in Past 30 Days	Total Weekday	Total Weekend	Total
Unweighted Base	8595	3886	12481
Weighted Base	24697	15771	40468
No Answer	-	-	-
Total Answering	24697	15771	40468
Fast Food/Coffee/Deli	18237	11217	29454
	73.84%	71.13%	72.78%
Sit Down Restaurants	9820	7538	17358
	39.76%	47.80%	42.89%
Supermarket/Convenience Store	8614	5656	14270
	34.88%	35.86%	35.26%
Retail	4346	3496	7842
	17.60%	22.17%	19.38%
Personal Services	4086	2403	6489
	16.54%	15.24%	16.04%
Auto Related Repair & Service	1508	694	2201
	6.10%	4.40%	5.44%
Childcare Or Related	505	335	840
	2.05%	2.12%	2.08%
Other Business/Service	1162	777	1939
	4.70%	4.93%	4.79%

[66] Respondents could report multiple businesses visited in past 30 days.

Total	48277	32117	80395

7.31 Times Visited Business and Amount of Money Spent in Past 30 Days (New Haven Line Only)

This section reports on the number of times New Haven Line riders visited each business during the past 30 days and the amount spent at that type of business during the past 30 day timeframe. For each business type, there are two tables presented; one for the number of times visited and a second for amount of money spent. The businesses are presented in order of the percentage of New Haven Line riders visiting at least once (from table in section 7.30 above).

Among New Haven Line riders who frequented that type of business, the average number of visits in the past 30 days was highest for childcare or related services (mean=12) and fast food/coffee/deli businesses (mean=8) and lowest for auto related repair and service establishments (mean=2). All other business types were, on average, in the 4-5 number of times visited range.

For the amount of money spent in the past 30 days, childcare or related businesses had the highest reported spending among New Haven Line riders who used that service ($635 in 30 days) followed by auto repair or related services ($255 in 30 days). Fast food/coffee/deli ($53 in 30 days) and personal services ($95 in 30 days) had some of the lowest reported spending. The past 30-day expenditures for all other businesses/services fell between $133 and $192.

Q27b. Times Visited Business/Service in Past 30 Days - Fast Food/Coffee/Deli	Total Weekday	Total Weekend	Total
Unweighted Base	6403	2785	9188
Weighted Base	18237	11217	29454
No Answer	-	-	-
Total Answering	18237	11217	29454
1	2248	3369	5617
	12.33%	30.03%	19.07%
2	2520	1812	4332
	13.82%	16.15%	14.71%
3	1750	1066	2817
	9.60%	9.51%	9.56%
4	1038	697	1735
	5.69%	6.21%	5.89%
5	2677	1130	3806
	14.68%	10.07%	12.92%
6-10	3015	1417	4432
	16.53%	12.63%	15.05%
11+	4988	1727	6716
	27.35%	15.40%	22.80%
Mean	8.88	6.11	7.83
Total	18237	11217	29454

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Fast Food/Coffee/Deli	Total Weekday	Total Weekend	Total
Unweighted Base	5101	2282	7383
Weighted Base	14529	9167	23696
No Answer	-	-	-
Total Answering	14529	9167	23696
Less Than $10	1867	1607	3474
	12.85%	17.53%	14.66%
$10.00-$19.99	2674	2366	5040
	18.40%	25.81%	21.27%
$20.00-$29.99	2162	1557	3719
	14.88%	16.98%	15.69%
$30.00-$39.99	1452	680	2132
	9.99%	7.42%	9.00%
$40.00-$49.99	935	473	1409
	6.44%	5.16%	5.94%
$50.00-$99.99	2637	1253	3889
	18.15%	13.66%	16.41%
$100.00-$199.99	1888	786	2674
	12.99%	8.58%	11.28%
$200+	915	445	1360
	6.30%	4.85%	5.74%
Mean	$56.35	$48.52	$53.32
Total	14529	9167	23696

Q27b. Times Visited Business/Service in Past 30 Days - Sit Down Restaurants	Total Weekday	Total Weekend	Total
Unweighted Base	3360	1853	5213
Weighted Base	9820	7538	17358
No Answer	-	-	-
Total Answering	9820	7538	17358
1	2104	2462	4566
	21.42%	32.66%	26.30%
2	2205	1526	3732
	22.46%	20.25%	21.50%
3	1314	822	2136
	13.39%	10.90%	12.31%
4	777	541	1317
	7.91%	7.17%	7.59%
5	1322	797	2118
	13.46%	10.57%	12.20%
6-10	1370	868	2239
	13.95%	11.52%	12.90%
11+	728	523	1251
	7.42%	6.93%	7.21%
Mean	5.01	4.54	4.8
Total	9820	7538	17358

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Sit Down Restaurants	Total Weekday	Total Weekend	Total
Unweighted Base	2519	1452	3971
Weighted Base	7375	5878	13254
No Answer	-	-	-
Total Answering	7375	5878	13254
Less Than $10	86	88	174
	1.16%	1.50%	1.31%
$10.00-$19.99	276	449	725
	3.74%	7.64%	5.47%
$20.00-$29.99	474	638	1112
	6.42%	10.86%	8.39%
$30.00-$39.99	387	420	807
	5.25%	7.14%	6.09%
$40.00-$49.99	454	362	816
	6.16%	6.16%	6.16%
$50.00-$99.99	1433	1212	2645
	19.42%	20.62%	19.95%
$100.00-$199.99	1710	1152	2862
	23.18%	19.61%	21.59%
$200+	2557	1556	4112
	34.66%	26.47%	31.03%
Mean	$191.79	$149.84	$173.18
Total	7375	5878	13254

Q27b. Times Visited Business/Service in Past 30 Days - Supermarket/Convenience Store	Total Weekday	Total Weekend	Total
Unweighted Base	2924	1301	4225
Weighted Base	8614	5656	14270
No Answer	-	-	-
Total Answering	8614	5656	14270
1	1679 19.49%	1691 29.89%	3369 23.61%
2	1754 20.36%	1042 18.43%	2796 19.59%
3	981 11.38%	562 9.94%	1543 10.81%
4	920 10.69%	526 9.29%	1446 10.13%
5	1350 15.68%	670 11.85%	2021 14.16%
6-10	1242 14.42%	664 11.74%	1906 13.36%
11+	688 7.99%	501 8.85%	1189 8.33%
Mean	5.25	5.11	5.19
Total	8614	5656	14270

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Supermarket/Convenience Store	Total Weekday	Total Weekend	Total
Unweighted Base	2143	1000	3143
Weighted Base	6327	4314	10641
No Answer	-	-	-
Total Answering	6327	4314	10641
Less Than $10	336 5.31%	374 8.68%	710 6.67%
$10.00-$19.99	754 11.91%	642 14.89%	1396 13.12%
$20.00-$29.99	838 13.24%	484 11.21%	1322 12.42%
$30.00-$39.99	444 7.02%	260 6.02%	704 6.62%
$40.00-$49.99	322 5.09%	177 4.10%	499 4.69%
$50.00-$99.99	877 13.86%	687 15.92%	1564 14.70%
$100.00-$199.99	1071 16.92%	723 16.76%	1794 16.85%
$200+	1686 26.64%	967 22.43%	2653 24.93%
Mean	$137.94	$126.43	$133.27
Total	6327	4314	10641

Q27b. Times Visited Business/Service in Past 30 Days - Retail	Total Weekday	Total Weekend	Total
Unweighted Base	1463	818	2281
Weighted Base	4346	3496	7842
No Answer	-	-	-
Total Answering	4346	3496	7842
1	1265 29.11%	1292 36.97%	2558 32.61%
2	1165 26.81%	878 25.10%	2043 26.05%
3	515 11.85%	388 11.10%	903 11.52%
4	299 6.87%	232 6.64%	531 6.77%
5	510 11.73%	270 7.71%	780 9.94%
6-10	385 8.85%	273 7.82%	658 8.39%
11+	207 4.77%	163 4.65%	370 4.72%
Mean	4.01	3.71	3.88
Total	4346	3496	7842

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Retail	Total Weekday	Total Weekend	Total
Unweighted Base	971	583	1554
Weighted Base	2915	2502	5417
No Answer	-	-	-
Total Answering	2915	2502	5417
Less Than $10	50	45	96
	1.72%	1.82%	1.77%
$10.00-$19.99	107	115	222
	3.67%	4.58%	4.09%
$20.00-$29.99	200	144	344
	6.88%	5.75%	6.36%
$30.00-$39.99	164	158	321
	5.61%	6.30%	5.93%
$40.00-$49.99	106	75	181
	3.64%	3.01%	3.35%
$50.00-$99.99	578	477	1055
	19.83%	19.08%	19.48%
$100.00-$199.99	743	621	1364
	25.49%	24.81%	25.17%
$200+	966	867	1833
	33.16%	34.65%	33.85%
Mean	$183.33	$202.8	$192.32
Total	2915	2502	5417

Q27b. Times Visited Business/Service in Past 30 Days - Personal Services	Total Weekday	Total Weekend	Total
Unweighted Base	1404	543	1947
Weighted Base	4086	2403	6489
No Answer	-	-	-
Total Answering	4086	2403	6489
1	1396 34.17%	1074 44.69%	2470 38.07%
2	1131 27.69%	514 21.38%	1645 25.35%
3	414 10.13%	176 7.33%	590 9.09%
4	452 11.05%	222 9.22%	673 10.38%
5	362 8.85%	175 7.27%	536 8.26%
6-10	240 5.88%	131 5.45%	371 5.72%
11+	91 2.23%	112 4.66%	203 3.13%
Mean	3.31	3.9	3.53
Total	4086	2403	6489

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Personal Services	Total Weekday	Total Weekend	Total
Unweighted Base	988	404	1392
Weighted Base	2846	1806	4652
No Answer	-	-	-
Total Answering	2846	1806	4652
Less Than $10	51 1.78%	47 2.58%	97 2.09%
$10.00-$19.99	212 7.45%	148 8.18%	360 7.73%
$20.00-$29.99	446 15.68%	296 16.41%	742 15.96%
$30.00-$39.99	295 10.36%	135 7.47%	430 9.24%
$40.00-$49.99	254 8.94%	143 7.91%	397 8.54%
$50.00-$99.99	625 21.95%	443 24.51%	1067 22.94%
$100.00-$199.99	580 20.38%	363 20.08%	942 20.26%
$200+	383 13.46%	232 12.87%	615 13.23%
Mean	$90.51	$101.7	$94.86
Total	2846	1806	4652

Q27b. Times Visited Business/Service in Past 30 Days - Auto Related Repair & Service	Total Weekday	Total Weekend	Total
Unweighted Base	540	168	708
Weighted Base	1508	694	2201
No Answer	-	-	-
Total Answering	1508	694	2201
1	999 66.25%	484 69.84%	1483 67.38%
2	289 19.14%	138 19.88%	426 19.37%
3	71 4.72%	24 3.50%	95 4.34%
4	41 2.71%	11 1.59%	52 2.36%
5	47 3.13%	21 3.08%	69 3.11%
6-10	35 2.34%	11 1.60%	46 2.10%
11+	26 1.71%	4 0.52%	29 1.34%
Mean	2.47	1.64	2.21
Total	1508	694	2201

Q27b. Amount of Money Spent in Business/Service In Past 30 Days - Auto Related Repair And Service	Total Weekday	Total Weekend	Total
Unweighted Base	369	107	476
Weighted Base	1025	425	1450
No Answer	-	-	-
Total Answering	1025	425	1450
Less Than $10	12 1.14%	12 2.78%	23 1.62%
$10.00-$19.99	35 3.40%	17 4.03%	52 3.59%
$20.00-$29.99	42 4.11%	42 10.00%	85 5.84%
$30.00-$39.99	77 7.55%	21 4.91%	98 6.78%
$40.00-$49.99	61 5.97%	23 5.47%	84 5.82%
$50.00-$99.99	211 20.56%	110 25.92%	321 22.13%
$100.00-$199.99	199 19.42%	82 19.27%	281 19.37%
$200+	388 37.84%	117 27.63%	505 34.85%
Mean	$284.45	$184.3	$255.1
Total	1025	425	1450

Q27b. Times Visited Business/Service in Past 30 Days - Childcare Or Related	Total Weekday	Total Weekend	Total
Unweighted Base	177	68	245
Weighted Base	505	335	840
No Answer	-	-	-
Total Answering	505	335	840
1	68	79	147
	13.40%	23.68%	17.50%
2	37	33	70
	7.31%	9.84%	8.32%
3	49	24	73
	9.79%	7.17%	8.74%
4	36	23	58
	7.07%	6.78%	6.95%
5	38	22	60
	7.50%	6.62%	7.15%
6-10	40	52	92
	7.85%	15.61%	10.94%
11+	238	101	339
	47.09%	30.29%	40.40%
Mean	12.97	10.45	11.96
Total	505	335	840

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Childcare Or Related	Total Weekday	Total Weekend	Total
Unweighted Base	102	44	146
Weighted Base	295	223	518
No Answer	-	-	-
Total Answering	295	223	518
Less Than $10	-	17	17
	-	7.83%	3.37%
$10.00-$19.99	-	6	6
	-	2.74%	1.18%
$20.00-$29.99	9	10	19
	3.07%	4.65%	3.75%
$30.00-$39.99	2	2	5
	0.84%	1.07%	0.94%
$40.00-$49.99	13	5	18
	4.57%	2.15%	3.53%
$50.00-$99.99	15	45	60
	5.00%	20.32%	11.60%
$100.00-$199.99	34	10	44
	11.49%	4.47%	8.47%
$200+	221	127	348
	75.02%	56.77%	67.16%
Mean	$863.09	$334.28	$635.49
Total	295	223	518

Q27b. Times Visited Business/Service in Past 30 Days - Other Business/Service	Total Weekday	Total Weekend	Total
Unweighted Base	407	187	594
Weighted Base	1162	777	1939
No Answer	-	-	-
Total Answering	1162	777	1939
1	317 27.30%	318 40.92%	635 32.76%
2	198 17.06%	192 24.73%	390 20.13%
3	112 9.66%	73 9.44%	186 9.57%
4	120 10.29%	42 5.42%	162 8.34%
5	135 11.65%	14 1.79%	149 7.70%
6-10	130 11.20%	54 6.89%	184 9.47%
11+	149 12.84%	84 10.81%	233 12.03%
Mean	5.68	4.33	5.14
Total	1162	777	1939

Q27b. Amount of Money Spent in Business/Service in Past 30 Days - Other Business/Service	Total Weekday	Total Weekend	Total
Unweighted Base	261	135	396
Weighted Base	731	552	1283
No Answer	-	-	-
Total Answering	731	552	1283
Less Than $10	48 6.57%	44 7.95%	92 7.16%
$10.00-$19.99	46 6.30%	53 9.63%	99 7.73%
$20.00-$29.99	93 12.74%	45 8.21%	138 10.79%
$30.00-$39.99	73 10.02%	45 8.23%	119 9.25%
$40.00-$49.99	45 6.10%	30 5.41%	74 5.80%
$50.00-$99.99	172 23.47%	79 14.24%	250 19.50%
$100.00-$199.99	107 14.61%	120 21.84%	227 17.72%
$200+	148 20.20%	135 24.49%	283 22.04%
Mean	$153.64	$133.39	$144.93
Total	731	552	1283

7.32 Business/Service Most Important to Have Near Inbound Boarding Station (Top 2) (New Haven Line Only)

When asked to select the two types of businesses/services New Haven Line riders considered most important to have near their inbound boarding station, a majority indicated fast food/coffee/deli establishments (77%). Supermarket/convenience store was the second most important business for weekday riders (40%), while sit down restaurants was the second most important business for weekend riders (42%).

27c. Two Types Of Business/Service Most Important To Have Near Inbound Boarding Station	Total Weekday	Total Weekend	Total
Unweighted Base	9734	4749	14483
Weighted Base	28185	19320	47505
No Answer	-	-	-
Total Answering	28185	19320	47505
Fast Food/Coffee/Deli	22088	14660	36748
	78.37%	75.88%	77.36%
Supermarket/Convenience Store	11290	7805	19095
	40.06%	40.40%	40.20%
Sit Down Restaurants	9121	8137	17258
	32.36%	42.12%	36.33%
Personal Services (E.G. Dry Cleaning, Hair And Personal Care)	4693	2273	6965
	16.65%	11.76%	14.66%
Retail (E.G. Clothing, Home Furnishings, Gifts)	3097	2914	6011
	10.99%	15.08%	12.65%
Auto Related Repair And Service	1558	526	2084
	5.53%	2.72%	4.39%
Childcare Or Related	850	511	1361
	3.02%	2.64%	2.86%
Other	1417	983	2400
	5.03%	5.09%	5.05%
Total	54115	37808	91923

8. Appendix

8.1 Training

Training sessions were integral to proper preparation for fieldwork and were held regularly at Abt Associates' office. All new staff members were required to complete training for the study before being eligible for field work. In addition, Abt Associates re-trained all staff after any long period of downtime, particularly after the summer months.

The training was comprehensive and covered the following general topic areas:

- Overview of the study
- Dress code
- Role division onboard trains (surveying and counting)
- Directions on how to use clickers
- How to complete the count forms
- Proper behavior
- What to do in the event of service disruptions
- What to do at the end of a shift

In addition to formal training sessions, field supervisors reinforced established protocols on a regular basis during fieldwork.

8.2 Passenger Counts

Passengers were counted on all inbound and outbound trains in the system. Field staff were stationed at each train door and were responsible for counting the boarding and alighting passengers at each station. At the initial station for a train run, onboard counts were collected in lieu of "ons". Between stations, one agent in each car would be responsible for obtaining a total onboard head count of people within the car. In cases of extremely low ridership, some trains would only be staffed with one survey agent per car.

Field staff recorded counts on a custom count forms that were pre-populated to specify the train number and the scheduled station stops (See Figure 1) for each train. At the end of each round trip, field staff would submit all count sheets to the field supervisor, who would review each sheet for completeness. A counting clicker (see Figure 2) was used to keep record how many customers were getting off and boarding.

8.2.1 Figure 1 – Sample Outbound Count Sheet

2014 MNR Origin & Destination Study 30116 Date: 05/28/2015

Outbound Weather: Clear/Cloudy □ Rain □ Snow □

Staff Name: □ Seat Counter □ Extra

Partner Name: Car No: Train No: 343 Crew No: 5045-A

Supervisor Name: Supervisor Cell No.:

Harlem		No. of Passengers											Door Closed	Remarks
		ONs			OFFs			SUM			On-Board			
001	Grand Central													
004	Harlem-125th St.													
622	Yankees-E153 St.													
054	Melrose													
055	Tremont													
056	Fordham													
057	Botanical Garden													
058	Williams Bridge													
059	Woodlawn													
061	Wakefield													
062	Mt Vernon West													
064	Fleetwood													
065	Bronxville													
066	Tuckahoe													
068	Crestwood													
071	Scarsdale													
072	Hartsdale													
074	White Plains													
076	North White Plains													

8.2.2 Figure 2 – Counting Clicker

8.3 Survey Questionnaire

The OD survey questionnaire was offered to passengers on all inbound trains. Questionnaire distribution took place concurrently with the onboard counts.

Survey packages were carefully prepared for each car in a train. Each package was packed generously, at approximately 125% of expected ridership, to eliminate the risk that a field interviewer would run out of questionnaires to distribute. As an extra precaution, the supervisor also carried extra surveys to distribute if needed.

As an added level of quality control, each survey had a unique PIN number on the cover page and the PIN number on successive surveys in each bag would be in sequential order. The inbound count forms included a field where the interviewer had to enter their top serial number at each station (see Figure 3 below). The sequential ordering of PIN numbers helped Abt Associates track the survey range for each train and each station within a train run. As the PIN ranges were used for control, once a train has been fielded, no questionnaires from the corresponding range were repurposed for other fieldwork.

8.3.1 Figure 3 – Sample Inbound Count Sheet

2014 MNR Origin & Destination Study 30116 Date: 03/08/2015

Inbound Weather: Clear/Cloudy □ Rain □ Snow □

Staff Name: □ Surveyor □ Seat Counter □ Extra

Partner Name: Car No: Train No: 8776 Crew No: 6441-B

Supervisor Name: Supe Cell No.:

Hudson		Top Serial No.	No. of Passengers				Door Closed	Remarks
			ONs	OFFs	SUM	On-Board		
033	Croton-Harmon							
031	Ossining							
030	Scarborough							
029	Philipse Manor							
027	Tarrytown							
025	Irvington							
024	Ardsley-on-Hudson							
023	Dobbs Ferry							
022	Hastings-on-Hudson							
020	Greystone							
019	Glenwood							
018	Yonkers							
017	Ludlow							
016	Riverdale							
014	Spuyten Duyvil							
011	Marble Hill							
010	University Heights							
009	Morris Heights							
622	Yankees-E153 St.							
004	Harlem-125th St.							
001	Grand Central							

Surveys Per Bag: 14 Total No. of Surveys Collected:

The survey questionnaire was distributed in a paper survey format to any customers willing to take it onboard all inbound trains. It was designed with the assumption that the primary response mode would be administration and collection onboard trains. However, respondents were also given additional options to return their surveys via postage-paid Business Reply Mail or by completing a corresponding web survey. In addition, the paper questionnaire was printed in English on one side and Spanish on the other, and both languages were available on the online survey. A supplemental effort was also made towards the end of the survey period to collect additional surveys from riders from Bronx stations to increase the sample size of completed surveys.

In total, 108,242 completed surveys were obtained from 276,322 total EoH riders, just shy of the 40% goal at 39.2%. The vast majority of surveys were collected onboard trains (105,398 or 97.4%) were collected onboard trains, very few respondents mailed back their surveys (1449 or 1.3%), or completed it online (1395 or 1.3%). An additional 783 supplemental surveys were distributed and collected on platforms at targeted Bronx stations due to lower response rates at those stations for certain times of day. A total of 4,502 surveys (4.2%) were completed in Spanish, with nearly all collected onboard trains (4,476 or 99.4%) and significantly less than 1% completing as mail-in's or web surveys (20 and 6 surveys, respectively).

The front panel of the questionnaire included an appeal to customers to help MNR improve its service by participating in the survey, information about the cash drawing to further incentivize participation, and information about how to access the survey online. Each questionnaire cover (see Figure 4 below) also contained a unique PIN number (Password) that served 3 purposes for the study:

- Unique identifier – each PIN was only printed once, so there were no duplicates in the study. This identifier was consistent across both paper and web surveys.

- Web survey access – each PIN served as a password for access to the web survey for respondents who wished to complete it online. Once a survey had been completed, that PIN was locked out from the web survey, ensuring that each PIN number would only be used once.

- Train association – When preparing materials for field work, Abt Associates kept a record of which PIN ranges were packed for each train. Since the PIN numbers were unique and consecutive, it was possible to track exactly which surveys corresponded to any given train. This was important and could be used to confirm the train associated with each survey, as well as fill in missing boarding station information from surveys as needed.

8.3.2 Figure 4 – Sample Questionnaire Cover

Metro-North Railroad

TRAVEL SURVEY

Dear MTA Metro-North Customer,

Please take a few minutes to complete this survey and be entered for a chance to win $250!

We would like to know more about how you travel and use our rail system to help us improve the service we provide. All information is important to us and will be kept confidential. **If you have already filled out this questionnaire on a previous trip, please complete it again.** Thanks for your time!

Returning this survey is easy – you can:

1) **Give it back to survey personnel on board your train**
2) **Mail it back postage-free**
3) **Answer online at www.srbsurvey.com/MNRSurvey by entering the password printed on this page.**

Complete this survey for a chance to win one of ten $250 cash prizes.

See www.srbsurvey.com/MNRSurvey/rules.html for more details.

Thank you very much for your cooperation.

Approximately every two months, a random drawing will be held to select the winner of a $250 cash prize. To be eligible, you must complete the survey, and provide contact information: or, you may submit a postcard to "Abt SRBI, MNR Travel Survey, 275 7th Avenue, Suite 2700, New York, NY 10001" that includes: your name, home address, and telephone number and "for MTA Random Drawing." Each drawing will be from entries received since the last drawing. The last drawing will be conducted after May 15, 2016. See the complete rules at www.srbsurvey.com/MNRSurvey/rules.html. No purchase is necessary. Void where prohibited. If you are under 18 years of age, an employee of SRBI, the MTA or any of MTA's agencies, you should complete the survey but will not be eligible for the drawing. An entrant's chances of winning will depend on the number of entries.

Your Password / Su Contraseña:

Estimado cliente de MTA Metro-North,

Le pedimos dedicar unos minutos para completar esta encuesta y tener la oportunidad de ganar $250.

Quisiéramos saber más sobre la manera en que usted viaja y utiliza el sistema ferroviario para ayudarnos a mejorar el servicio que ofrecemos. Toda la información es importante para nosotros y se mantendrá confidencial. **Si usted ya ha llenado este cuestionario en un viaje anterior, pedimos que lo llene nuevamente.** ¡Gracias por su tiempo!

Es fácil entregar esta encuesta, puede:

1) **Regresarla al personal de encuestas a bordo del tren**
2) **Enviarla por correo sin costo alguno**
3) **Conteste a través del Internet en www.srbsurvey.com/MNRSurvey usando la contraseña que aparece en esta página.**

Complete esta encuesta para una oportunidad de ganar uno de diez premios de $250 en efectivo.

Vaya a www.srbsurvey.com/MNRSurvey/rules.html para más detalles.

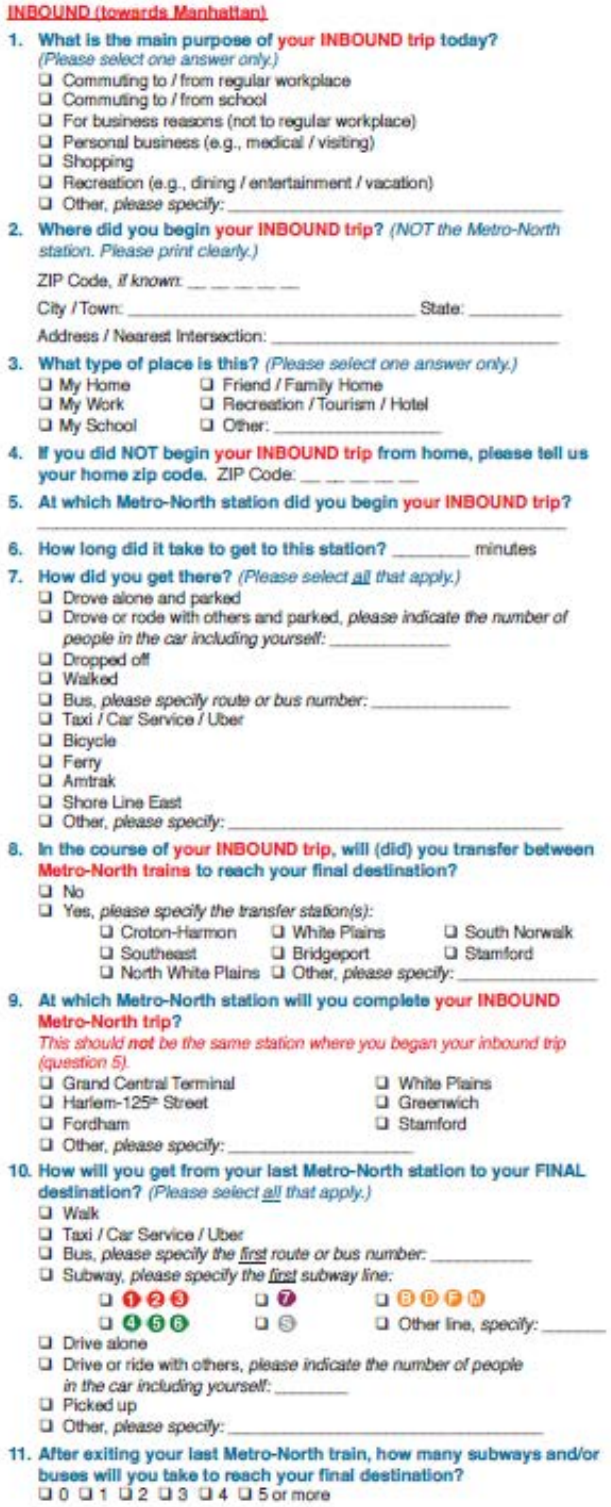
Gracias por su cooperación.

Aproximadamente cada dos meses, se organizará un sorteo aleatorio para seleccionar al ganador del premio de $250 en efectivo. Para ser elegible, debe realizar la encuesta y proporcionar información de contacto o puede enviar una tarjeta postal a "Abt SRBI, MNR Travel Survey, 275 7th Avenue, Suite 2700, Nueva York, NY 10001" que incluya: su nombre, dirección del domicilio, número de teléfono y "Para sorteo al azar de MTA". Cada sorteo proviene de las encuestas que recibidas a partir del último sorteo. El último sorteo se efectuará después del 15 de mayo de 2016. Consulte todas las reglas en www.srbsurvey.com/MNRSurvey/rules.html. No es necesario realizar ninguna compra. Nulo donde esté prohibido. Si es menor de 18 años, un empleado de SRBI, MTA o de alguna de las agencias de MTA, deberá completar la encuesta pero no podrá ser elegible para el sorteo. La oportunidad que tienen los participantes de ganar dependerá del número de encuestas que recibamos.

Please complete this important survey for a chance to win $250!

¡Complete esta encuesta importante para tener una oportunidad de ganar $250!

8.3.3 Figure 5 – Hudson/Harlem Questionnaire



INBOUND (towards Manhattan)

1. **What is the main purpose of your INBOUND trip today?** *(Please select one answer only.)*
   - ❑ Commuting to / from regular workplace
   - ❑ Commuting to / from school
   - ❑ For business reasons (not to regular workplace)
   - ❑ Personal business (e.g., medical / visiting)
   - ❑ Shopping
   - ❑ Recreation (e.g., dining / entertainment / vacation)
   - ❑ Other, *please specify:* _____

2. **Where did you begin your INBOUND trip?** *(NOT the Metro-North station. Please print clearly.)*

   ZIP Code, *if known:* __ __ __ __ __

   City / Town: _____ State: _____

   Address / Nearest Intersection: _____

3. **What type of place is this?** *(Please select one answer only.)*
   - ❑ My Home
   - ❑ My Work
   - ❑ My School
   - ❑ Friend / Family Home
   - ❑ Recreation / Tourism / Hotel
   - ❑ Other: _____

4. **If you did NOT begin your INBOUND trip from home, please tell us your home zip code.** ZIP Code: __ __ __ __ __

5. **At which Metro-North station did you begin your INBOUND trip?**

   _____

6. **How long did it take to get to this station?** _____ minutes

7. **How did you get there?** *(Please select all that apply.)*
   - ❑ Drove alone and parked
   - ❑ Drove or rode with others and parked, *please indicate the number of people in the car including yourself:* _____
   - ❑ Dropped off
   - ❑ Walked
   - ❑ Bus, *please specify route or bus number:* _____
   - ❑ Taxi / Car Service / Uber
   - ❑ Bicycle
   - ❑ Ferry
   - ❑ Amtrak
   - ❑ Shore Line East
   - ❑ Other, *please specify:* _____

8. **In the course of your INBOUND trip, will (did) you transfer between Metro-North trains to reach your final destination?**
   - ❑ No
   - ❑ Yes, *please specify the transfer station(s):*
     - ❑ Croton-Harmon
     - ❑ White Plains
     - ❑ South Norwalk
     - ❑ Southeast
     - ❑ Bridgeport
     - ❑ Stamford
     - ❑ North White Plains
     - ❑ Other, *please specify:* _____

9. **At which Metro-North station will you complete your INBOUND Metro-North trip?**
   This should not be the same station where you began your inbound trip (question 5).
   - ❑ Grand Central Terminal
   - ❑ Harlem-125th Street
   - ❑ Fordham
   - ❑ White Plains
   - ❑ Greenwich
   - ❑ Stamford
   - ❑ Other, *please specify:* _____

10. **How will you get from your last Metro-North station to your FINAL destination?** *(Please select all that apply.)*
    - ❑ Walk
    - ❑ Taxi / Car Service / Uber
    - ❑ Bus, *please specify the first route or bus number:* _____
    - ❑ Subway, *please specify the first subway line:*
      - ❑ 1 2 3
      - ❑ 4 5 6
      - ❑ 7
      - ❑ S
      - ❑ B D F M
      - ❑ Other line, *specify:* _____
    - ❑ Drive alone
    - ❑ Drive or ride with others, *please indicate the number of people in the car including yourself:* _____
    - ❑ Picked up
    - ❑ Other, *please specify:* _____

11. **After exiting your last Metro-North train, how many subways and/or buses will you take to reach your final destination?**
    ❑ 0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 or more

12. Will you use a MetroCard on your way to your final destination?

- ❑ No
- ❑ Yes, *please specify the type of card you will use:*
  - ❑ Unlimited Ride MetroCard
  - ❑ Regular Pay-Per-Ride MetroCard, *please specify value:*
    - ❑ Less than $5 ❑ $5 or more to receive a bonus
  - ❑ Other type, *please specify:* _____

13. What is the final destination for your INBOUND trip? (Not the Metro-North train station, subway station, or bus stop) *(Please print clearly.)*
*This should **not** be the same as your answer to question 2.*

ZIP Code, *if known:* __ __ __ __ __

City / Town: _____ State: _____

Address / Nearest Intersection: _____

14. What type of place is this? *(Please select one answer only.)*

- ❑ My Home ❑ Friend / Family Home
- ❑ My Work ❑ Recreation / Tourism / Hotel
- ❑ My School ❑ Other: _____

15. How long will it take to get from your last Metro-North station to your final destination? _____ minutes

16. What type of train ticket did you use for this INBOUND trip?
*(Please select one **black** ticket type and one corresponding **orange** item.)*

❑ Monthly ❑ *With UniTicket* ❑ *Without UniTicket*	❑ Weekly ❑ *With UniTicket* ❑ *Without UniTicket*
❑ One Way ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*	❑ Round Trip ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*
❑ Ten-Trip ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*	❑ Other _____ *(please specify)*

17. Where did you purchase your ticket for your INBOUND trip today?

- ❑ Ticket Vending Machine
- ❑ Ticket Window
- ❑ WebTicket (via Internet)
- ❑ Mobile device
- ❑ Mail&Ride
- ❑ On-board Train
- ❑ Other, *please specify:* _____

OUTBOUND (away from Manhattan)

18. When will (did) you make the other half of your trip going OUTBOUND (away from Manhattan)? *(Please select one answer only.)*

- ❑ Same day
- ❑ Different day, *please indicate date (mm/dd/yyyy):* _____
- ❑ I will (did) not make an outbound trip *(go to question 22)*

19. Will (did) you use Metro-North for your outbound trip?

- ❑ Yes, *scheduled train departure time:* ___:___ ❑ AM ❑ PM *(check one)*
- ❑ No, *please describe how you will make (made) this trip:*

_____
(If no, go to question 22)

20. Will (did) you use the SAME Metro-North stations for your OUTBOUND trip?

❑ Yes *(go to question 22)* ❑ No

21. What Metro-North stations will (did) you use for your outbound trip?

First Metro-North station going outbound:

_____

How will (did) you get to your first Metro-North station?
(Please select all that apply.)

- ❑ Bus, *please specify the first route or bus number:* _____
- ❑ Subway, *please specify the first subway line:*
  - ❑ 1 2 3 ❑ 7 ❑ B D F M
  - ❑ 4 5 6 ❑ S ❑ Other line, *specify:* _____
- ❑ Other method, *please specify:* _____

Last Metro-North station where you will get off (got off):

_____

TELL US MORE ABOUT HOW YOU TRAVEL

22. How long have you been using Metro-North?
____ years ____ months

23. Do you travel on Metro-North for:
- ❑ Work purposes ONLY
- ❑ Non-work purposes ONLY
- ❑ Both

24a. *In the past seven days (including today)*, how many INBOUND trips towards Manhattan did you make on Metro-North?

(Please indicate total number): _____ **trips**

24b. How many of those INBOUND trips were taken at each of the following periods? *(If none, please write "0" in the boxes.)*

Weekday *Time you arrived at final MNR station*	
5:30 AM – 10:00 AM	
10:01 AM – 3:59 PM	
4:00 PM – 8:00 PM	
8:01 PM – 2:00 AM	

Weekend	
Saturday (All day)	
Sunday (All day)	

25a. *In the past seven days (including today)*, how many OUTBOUND trips away from Manhattan did (will) you make on Metro-North?

(Please indicate total number): _____ **trips**

25b. How many of those OUTBOUND trips were (will be) taken at each of the following periods? *(If none, please write "0" in the boxes.)*

Weekday *Time you departed from first MNR station*	
5:30 AM – 9:00 AM	
9:01 AM – 3:59 PM	
4:00 PM – 8:00 PM	
8:01 PM – 2:00 AM	

Weekend	
Saturday (All day)	
Sunday (All day)	

26. How do you typically pay for your Metro-North fare?
(Please select all that apply.)
- ❑ Cash
- ❑ Debit / Credit card
- ❑ Transit voucher / Commuter benefit account

ABOUT YOU

This information is strictly confidential and used to better communicate with and understand our customers and their needs.

27. Which of the following have you used in the last 30 days?
(Please select all that apply.)
- ❑ Desktop or laptop computer
- ❑ Tablet / iPad
- ❑ Cell phone without internet access
- ❑ Smartphone, cell phone, or PDA with internet access
- ❑ Text message (sent or received)
- ❑ A transit app or widget
- ❑ Facebook
- ❑ Twitter

28. Are you a licensed driver? ❑ Yes ❑ No

29. How many licensed drivers *(including yourself)* are in your household? _____

30. How many operable motor vehicles (cars, motorcycles, pickup trucks, SUVs, or vans) are in your household? _____

31. Did you have a vehicle available for your INBOUND trip?
- ❑ Yes ❑ No

32. On average, how many trips do you make into Manhattan BY CAR per month? _____

33. Do you have any physical disabilities? *(Please select all that apply.)*
- ❑ No, I do not
- ❑ Difficulty with or inability to climb stairs
- ❑ Use a wheelchair
- ❑ Use a mobility aid (cane, etc.)
- ❑ Are legally blind
- ❑ Have a hearing impairment

34. What is the last grade of school you completed?
- ❑ Did not graduate high school
- ❑ High school graduate
- ❑ Technical or vocational business school
- ❑ Some college
- ❑ College graduate
- ❑ Post graduate

35. What is your current employment status?

- ❑ Employed full-time (35+ hrs/wk)
- ❑ Employed part-time (20-35 hrs/wk)
- ❑ Employed part-time (<20 hrs/wk)
- ❑ Self-employed outside the home
- ❑ Self-employed at home
- ❑ Full-time or part-time student
- ❑ Unemployed *(go to question 39)*
- ❑ Homemaker *(go to question 39)*
- ❑ Retired *(go to question 39)*

36. Which answer below best describes your type of job or occupation?

(Please select one answer only.)

- ❑ Professional, Technical & Related
- ❑ Executive, Administrative & Managerial
- ❑ Service Occupations
- ❑ Administrative Support, Including Clerical
- ❑ Transportation & Material Moving
- ❑ Machine Operators, Assemblers & Inspectors
- ❑ Precision Production Craft & Repair
- ❑ Sales
- ❑ General Labor

37. In which of the following industries are you employed?

(Please select one answer only.)

- ❑ Construction
- ❑ Natural Resources / Mining
- ❑ Education
- ❑ Health Services / Health Care
- ❑ Financial Activities
- ❑ Government
- ❑ Wholesale Trade
- ❑ Information
- ❑ Leisure and Hospitality
- ❑ Manufacturing
- ❑ Professional / Business Services
- ❑ Transportation and Utilities
- ❑ Retail Trade
- ❑ Other services, *please specify:* _____

38. Does your employer allow you to telecommute or work from home?

- ❑ No
- ❑ Yes, *please specify how often you telecommute:*
  - ❑ 5 or more days per week
  - ❑ 4 days per week
  - ❑ 3 days per week
  - ❑ 2 days per week
  - ❑ 1 day per week
  - ❑ Less than 1 day per week but more than 1 day per month
  - ❑ 1 day per month or less
  - ❑ Never

39. How many people *(including yourself)* live in your household? _____

40. How many people *(including yourself)* in your household are employed? _____

41. What is your household income before taxes and other deductions?

(Please select one answer only.)

- ❑ Less than $11,500
- ❑ $11,500 - $12,499
- ❑ $12,500 - $15,799
- ❑ $15,800 - $19,799
- ❑ $19,800 - $23,799
- ❑ $23,800 - $24,999
- ❑ $25,000 - $27,999
- ❑ $28,000 - $31,999
- ❑ $32,000 - $35,999
- ❑ $36,000 - $39,999
- ❑ $40,000 - $49,999
- ❑ $50,000 - $74,999
- ❑ $75,000 - $99,999
- ❑ $100,000 - $199,999
- ❑ $200,000 - $299,999
- ❑ $300,000 or more

42. Do you own a credit or debit card? ❑ Yes ❑ No

43. Are you...? ❑ Male ❑ Female

44. What is your age? _____ years

45. Are you of Hispanic, Latino, or Spanish origin? ❑ Yes ❑ No

46. Are you...?

- ❑ White
- ❑ Asian
- ❑ Native Hawaiian or Other Pacific Islander
- ❑ Other, *please specify:* _____
- ❑ Black or African American
- ❑ American Indian or Alaska Native
- ❑ Racially mixed

47. How well do you speak English?

❑ Very well ❑ Well ❑ Not well ❑ Not at all

48. What is the primary language spoken in your home?

- ❑ English
- ❑ Spanish
- ❑ Other, *please specify:* _____

49. In what country were you born?

❑ United States ❑ Other, *please specify:* _____

To be eligible for the $250 cash prize, please fill in your contact information.

Name: _____

Street: _____

City / Town: _____ State: _____ Zip: _____

Telephone: _____

Email: _____

May we contact you to participate in future MTA research? ❑ Yes ❑ No

8.3.4 Figure 6 – New Haven Questionnaire

Metro-North Railroad

TRAVEL SURVEY

Dear MTA Metro-North Customer,

Please take a few minutes to complete this survey and be entered for a chance to win **$250!**

We would like to know more about how you travel and use our rail system to help us improve the service we provide. All information is important to us and will be kept confidential. **If you have already filled out this questionnaire on a previous trip, please complete it again.** Thanks for your time!

Returning this survey is easy – you can:

1) **Give it back to survey personnel on board your train**
2) **Mail it back postage-free**
3) **Answer online at www.srbsurvey.com/MNRSurvey by entering the password printed on this page.**

Complete this survey for a chance to win one of ten $250 cash prizes.

See www.srbsurvey.com/MNRSurvey/rules.html for more details.

Thank you very much for your cooperation.

Approximately every two months, a random drawing will be held to select the winner of a $250 cash prize. To be eligible, you must complete the survey, and provide contact information; or, you may submit a postcard to "Abt SRBI, MNR Travel Survey, 275 7th Avenue, Suite 2700, New York, NY 10001" that includes: your name, home address, and telephone number and "for MTA Random Drawing." Each drawing will be from entries received since the last drawing. The last drawing will be conducted after May 15, 2016. See the complete rules at www.srbsurvey.com/MNRSurvey/rules.html No purchase is necessary. Void where prohibited. If you are under 18 years of age, an employee of SRBI, the MTA or any of MTA's agencies, you should complete the survey but will not be eligible for the drawing. An entrant's chances of winning will depend on the number of entries.

Your Password / Su Contraseña:

Estimado cliente de MTA Metro-North,

Le pedimos dedicar unos minutos para completar esta encuesta y tener la oportunidad de ganar **$250.**

Quisiéramos saber más sobre la manera en que usted viaja y utiliza el sistema ferroviario para ayudarnos a mejorar el servicio que ofrecemos. Toda la información es importante para nosotros y se mantendrá confidencial. **Si usted ya ha llenado este cuestionario en un viaje anterior, pedimos que lo llene nuevamente.** ¡Gracias por su tiempo!

Es fácil entregar esta encuesta, puede:

1) **Regresarla al personal de encuestas a bordo del tren**
2) **Enviarla por correo sin costo alguno**
3) **Conteste a través del Internet en www.srbsurvey.com/MNRSurvey usando la contraseña que aparece en esta página.**

Complete esta encuesta para una oportunidad de ganar uno de diez premios de $250 en efectivo.

Vaya a www.srbsurvey.com/MNRSurvey/rules.html para más detalles.

Gracias por su cooperación.

Aproximadamente cada dos meses, se organizará un sorteo aleatorio para seleccionar al ganador del premio de $250 en efectivo. Para ser elegible, debe realizar la encuesta y proporcionar información de contacto o puede enviar una tarjeta postal a "Abt SRBI, MNR Travel Survey, 275 7th Avenue, Suite 2700, Nueva York, NY 10001" que incluya: su nombre, dirección del domicilio, número de teléfono y "Para sorteo al azar de MTA". Cada sorteo proviene de las encuestas que recibidas a partir del último sorteo. El último sorteo se efectuará después del 15 de mayo de 2016. Consulte todas las reglas en www.srbsurvey.com/MNRSurvey/rules.html. No es necesario realizar ninguna compra. Nulo donde esté prohibido. Si es menor de 18 años, un empleado de SRBI, MTA o de alguna de las agencias de MTA, debería completar la encuesta pero no podrá ser elegible para el sorteo. La oportunidad que tienen los participantes de ganar dependerá del número de encuestas que recibimos.

Please complete this important survey for a chance to win $250!

¡Complete esta encuesta importante para tener una oportunidad de ganar $250!

INBOUND (towards Manhattan)

1. **What is the main purpose of your INBOUND trip today?** *(Please select one answer only.)*
   - ❑ Commuting to / from regular workplace
   - ❑ Commuting to / from school
   - ❑ For business reasons (not to regular workplace)
   - ❑ Personal business (e.g., medical / visiting)
   - ❑ Shopping
   - ❑ Recreation (e.g., dining / entertainment / vacation)
   - ❑ Other, *please specify:* _____

2. **Where did you begin your INBOUND trip?** *(NOT the Metro-North station. Please print clearly.)*

   ZIP Code, *if known*: __ __ __ __ __

   City / Town: _____ State: _____

   Address / Nearest Intersection: _____

3. **What type of place is this?** *(Please select one answer only.)*
   - ❑ My Home
   - ❑ My Work
   - ❑ My School
   - ❑ Friend / Family Home
   - ❑ Recreation / Tourism / Hotel
   - ❑ Other: _____

4. **If you did NOT begin your INBOUND trip from home, please tell us your home zip code.** ZIP Code: __ __ __ __ __

5. **At which Metro-North station did you begin your INBOUND trip?**

   _____

6. **How long did it take to get to this station?** _____ minutes

7. **How did you get there?** *(Please select all that apply.)*
   - ❑ Drove alone and parked
   - ❑ Drove or rode with others and parked, *please indicate the number of people in the car including yourself:* _____
   - ❑ Dropped off
   - ❑ Walked
   - ❑ Bus, *please specify route or bus number:* _____
   - ❑ Taxi / Car Service / Uber
   - ❑ Bicycle
   - ❑ Ferry
   - ❑ Amtrak
   - ❑ Shore Line East
   - ❑ Other, *please specify:* _____

8. **In the course of your INBOUND trip, will (did) you transfer between Metro-North trains to reach your final destination?**
   - ❑ No
   - ❑ Yes, *please specify the transfer station(s):*
     - ❑ Croton-Harmon
     - ❑ White Plains
     - ❑ South Norwalk
     - ❑ Southeast
     - ❑ Bridgeport
     - ❑ Stamford
     - ❑ North White Plains
     - ❑ Other, *please specify:* _____

9. **At which Metro-North station will you complete your INBOUND Metro-North trip?**
   *This should **not** be the same station where you began your inbound trip (question 5).*
   - ❑ Grand Central Terminal
   - ❑ Harlem-125th Street
   - ❑ Fordham
   - ❑ White Plains
   - ❑ Greenwich
   - ❑ Stamford
   - ❑ Other, *please specify:* _____

10. **How will you get from your last Metro-North station to your FINAL destination?** *(Please select all that apply.)*
    - ❑ Walk
    - ❑ Taxi / Car Service / Uber
    - ❑ Bus, *please specify the first route or bus number:* _____
    - ❑ Subway, *please specify the first subway line:*
      - ❑ 1 2 3
      - ❑ 7
      - ❑ B D F M
      - ❑ 4 5 6
      - ❑ S
      - ❑ Other line, *specify:* _____
    - ❑ Drive alone
    - ❑ Drive or ride with others, *please indicate the number of people in the car including yourself:* _____
    - ❑ Picked up
    - ❑ Other, *please specify:* _____

11. After exiting your last Metro-North train, how many subways and/or buses will you take to reach your final destination?

❑ 0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 or more

12. Will you use a MetroCard on your way to your final destination?

❑ No
❑ Yes, *please specify the type of card you will use:*
  ❑ Unlimited Ride MetroCard
  ❑ Regular Pay-Per-Ride MetroCard, *please specify value:*
    ❑ Less than $5 ❑ $5 or more to receive a bonus
  ❑ Other type, *please specify:* _____

13. What is the final destination for your INBOUND trip? (Not the Metro-North train station, subway station, or bus stop) *(Please print clearly.)*
*This should **not** be the same as your answer to question 2.*

ZIP Code, *if known*: __ __ __ __ __

City / Town: _____ State: _____

Address / Nearest Intersection: _____

14. What type of place is this? *(Please select one answer only.)*

❑ My Home ❑ Friend / Family Home
❑ My Work ❑ Recreation / Tourism / Hotel
❑ My School ❑ Other: _____

15. How long will it take to get from your last Metro-North station to your final destination? _____ minutes

16. What type of train ticket did you use for this INBOUND trip?
*(Please select one **black** ticket type and one corresponding **orange** item.)*

❑ Monthly ❑ *With UniTicket* ❑ *Without UniTicket*	❑ Weekly ❑ *With UniTicket* ❑ *Without UniTicket*
❑ One Way ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*	❑ Round Trip ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*
❑ Ten-Trip ❑ *Peak / Intermediate* ❑ *Off-Peak* ❑ *Senior / Disabled*	❑ Other _____ *(please specify)*

17. Where did you purchase your ticket for your INBOUND trip today?

❑ Ticket Vending Machine ❑ Mail&Ride
❑ Ticket Window ❑ On-board Train
❑ WebTicket (via Internet) ❑ Other, *please specify:*
❑ Mobile device _____

OUTBOUND (away from Manhattan)

18. When will (did) you make the other half of your trip going OUTBOUND (away from Manhattan)? *(Please select one answer only.)*

❑ Same day
❑ Different day, *please indicate date (mm/dd/yyyy):* _____
❑ I will (did) not make an outbound trip *(go to question 22)*

19. Will (did) you use Metro-North for your outbound trip?

❑ Yes, *scheduled train departure time:* ___:___ ❑ AM ❑ PM *(check one)*
❑ No, *please describe how you will make (made) this trip:*

_____
(If no, go to question 22)

20. Will (did) you use the SAME Metro-North stations for your OUTBOUND trip?

❑ Yes (go to question 22) ❑ No

21. What Metro-North stations will (did) you use for your outbound trip?

First Metro-North station going outbound:

_____

How will (did) you get to your first Metro-North station?
(Please select all that apply.)

- ❑ Bus, *please specify the first route or bus number:* _____
- ❑ Subway, *please specify the first subway line:*
  - ❑ 1 2 3 ❑ 7 ❑ B D F M
  - ❑ 4 5 6 ❑ S ❑ Other line, *specify:* _____
- ❑ Other method, *please specify:* _____

Last Metro-North station where you will get off (got off):

_____

TELL US MORE ABOUT HOW YOU TRAVEL

22. How long have you been using Metro-North?

____ years ____ months

23. Do you travel on Metro-North for:

- ❑ Work purposes ONLY
- ❑ Non-work purposes ONLY
- ❑ Both

24a. *In the past seven days (including today)*, how many INBOUND trips towards Manhattan did you make on Metro-North?

(Please indicate total number): _____ **trips**

24b. How many of those INBOUND trips were taken at each of the following periods? *(If none, please write "0" in the boxes.)*

Weekday *Time you arrived at final MNR station*		Weekend	
5:30 AM – 10:00 AM		Saturday (All day)	
10:01 AM – 3:59 PM			
4:00 PM – 8:00 PM		Sunday (All day)	
8:01 PM – 2:00 AM			

25a. *In the past seven days (including today)*, how many OUTBOUND trips away from Manhattan did (will) you make on Metro-North?

(Please indicate total number): _____ **trips**

25b. How many of those OUTBOUND trips were (will be) taken at each of the following periods? *(If none, please write "0" in the boxes.)*

Weekday *Time you departed from first MNR station*		Weekend	
5:30 AM – 9:00 AM		Saturday (All day)	
9:01 AM – 3:59 PM			
4:00 PM – 8:00 PM		Sunday (All day)	
8:01 PM – 2:00 AM			

26. How do you typically pay for your Metro-North fare?
(Please select all that apply.)

- ❑ Cash
- ❑ Debit / Credit card
- ❑ Transit voucher / Commuter benefit account

ABOUT YOU

This information is strictly confidential and used to better communicate with and understand our customers and their needs.

27. Which of the following have you used in the last 30 days?
(Please select all that apply.)

- ❑ Desktop or laptop computer
- ❑ Tablet / iPad
- ❑ Cell phone without internet access
- ❑ Smartphone, cell phone, or PDA with internet access
- ❑ Text message (sent or received)
- ❑ A transit app or widget
- ❑ Facebook
- ❑ Twitter

27a. Have you visited any businesses within a half-mile of your INBOUND boarding station (towards Manhattan) on your way TO or FROM the train in the past 30 days?

❑ Yes ❑ No *(go to question 28)*

27b. Please estimate how often you visit and the amount ($) you spend at the following types of businesses on your way TO or FROM your INBOUND boarding station (towards Manhattan).

Business Type	Times Visited (past 30 days)	Amount ($) Spent (past 30 days)
Sit down restaurants		
Fast Food / Coffee / Deli		
Supermarket / Convenience Store		
Personal services (e.g., dry cleaning, hair and personal care)		
Retail (e.g., clothing, home furnishings, gifts)		
Auto related repair and service		
Childcare or related		
Other, please specify: _____		

27c. From the list below, please select the TWO types of businesses or services that are *most important* to have near your INBOUND boarding station (towards Manhattan).

❑ Sit down restaurants
❑ Fast food/coffee/deli
❑ Supermarket/convenience store
❑ Personal services (e.g., dry cleaning, hair and personal care)
❑ Retail (e.g., clothing, home furnishings, gifts)
❑ Auto related repair and service
❑ Childcare or related
❑ Other, *please specify:* _____

28. Are you a licensed driver? ❑ Yes ❑ No

29. How many licensed drivers *(including yourself)* are in your household? _____

30. How many operable motor vehicles (cars, motorcycles, pickup trucks, SUVs, or vans) are in your household? _____

31. Did you have a vehicle available for your INBOUND trip?

❑ Yes ❑ No

32. On average, how many trips do you make into Manhattan BY CAR per month? _____

33. Do you have any physical disabilities? *(Please select all that apply.)*

❑ No, I do not
❑ Difficulty with or inability to climb stairs
❑ Use a wheelchair
❑ Use a mobility aid (cane, etc.)
❑ Are legally blind
❑ Have a hearing impairment

34. What is the last grade of school you completed?

❑ Did not graduate high school
❑ High school graduate
❑ Technical or vocational business school
❑ Some college
❑ College graduate
❑ Post graduate

35. What is your current employment status?

❑ Employed full-time (35+ hrs/wk)
❑ Employed part-time (20-35 hrs/wk)
❑ Employed part-time (<20 hrs/wk)
❑ Self-employed outside the home
❑ Self-employed at home
❑ Full-time or part-time student
❑ Unemployed *(go to question 39)*
❑ Homemaker *(go to question 39)*
❑ Retired *(go to question 39)*

36. Which answer below best describes your type of job or occupation?
(Please select one answer only.)

- ❑ Professional, Technical & Related
- ❑ Executive, Administrative & Managerial
- ❑ Service Occupations
- ❑ Administrative Support, Including Clerical
- ❑ Transportation & Material Moving
- ❑ Machine Operators, Assemblers & Inspectors
- ❑ Precision Production Craft & Repair
- ❑ Sales
- ❑ General Labor

37. In which of the following industries are you employed?
(Please select one answer only.)

- ❑ Construction
- ❑ Natural Resources / Mining
- ❑ Education
- ❑ Health Services / Health Care
- ❑ Financial Activities
- ❑ Government
- ❑ Wholesale Trade
- ❑ Information
- ❑ Leisure and Hospitality
- ❑ Manufacturing
- ❑ Professional / Business Services
- ❑ Transportation and Utilities
- ❑ Retail Trade
- ❑ Other services, *please specify:* _____

38. Does your employer allow you to telecommute or work from home?

- ❑ No
- ❑ Yes, *please specify how often you telecommute:*
  - ❑ 5 or more days per week
  - ❑ 4 days per week
  - ❑ 3 days per week
  - ❑ 2 days per week
  - ❑ 1 day per week
  - ❑ Less than 1 day per week but more than 1 day per month
  - ❑ 1 day per month or less
  - ❑ Never

39. How many people *(including yourself)* live in your household? _____

40. How many people *(including yourself)* in your household are employed? _____

41. What is your household income before taxes and other deductions?
(Please select one answer only.)

- ❑ Less than $11,500
- ❑ $11,500 - $12,499
- ❑ $12,500 - $15,799
- ❑ $15,800 - $19,799
- ❑ $19,800 - $23,799
- ❑ $23,800 - $24,999
- ❑ $25,000 - $27,999
- ❑ $28,000 - $31,999
- ❑ $32,000 - $35,999
- ❑ $36,000 - $39,999
- ❑ $40,000 - $49,999
- ❑ $50,000 - $74,999
- ❑ $75,000 - $99,999
- ❑ $100,000 - $149,999
- ❑ $150,000 - $199,999
- ❑ $200,000 - $299,999
- ❑ $300,000 or more

42. Do you own a credit or debit card? ❑ Yes ❑ No

43. Are you...? ❑ Male ❑ Female

44. What is your age? _____ years

45. Are you of Hispanic, Latino, or Spanish origin? ❑ Yes ❑ No

46. Are you...?

- ❑ White
- ❑ Asian
- ❑ Native Hawaiian or Other Pacific Islander
- ❑ Other, *please specify:* _____
- ❑ Black or African American
- ❑ American Indian or Alaska Native
- ❑ Racially mixed

47. How well do you speak English?
❑ Very well ❑ Well ❑ Not well ❑ Not at all

48. What is the primary language spoken in your home?

- ❑ English
- ❑ Spanish
- ❑ Other, *please specify:* _____

49. In what country were you born?
❑ United States ❑ Other, *please specify:* _____

To be eligible for the $250 cash prize, please fill in your contact information.

Name: _____

Street: _____

City / Town: _____ State: _____ Zip: _____

Telephone: _____

Email: _____

May we contact you to participate in future MTA research? ❑ Yes ❑ No

8.3.5 Figure 7 – Bronx Stations Supplemental Survey Questionnaire

As mentioned in section 2.4 (General Travel Behavior Methodology), a supplemental in-person survey was also conducted on platforms among riders boarding at select Bronx stations during select dayparts. This questionnaire encompassed the 16 most critical survey questions and collected information on: trip purpose; trip origin location and location type; home zip code (if origin was not home); origin station access mode(s); destination station; egress mode(s) from destination station to final destination location; destination location and location type; number of inbound trips in past 7 days; number of people in the household; household income; age; primary language spoken at home; and race and ethnicity. In addition to questions directly asked of respondents, interviewers also noted and recorded the origin station and respondent's gender and English proficiency. The supplemental survey questionnaire is shown on the following page.

Station: Melrose	G: ☐ M ☐ F
Survey Date: 11/9/2017 Survey Time:	EP: ☐ Very well ☐ Well ☐ Not well ☐ Not at all

1. What is the main purpose of your INBOUND trip today?
(Please select one answer only.)
_ Commuting to / from regular workplace
¯ Commuting to / from school
_ For business reasons (not to regular workplace)
¯ Personal business (e.g., medical / visiting)
Shopping
¯ Recreation (e.g., dining / entertainment / vacation)
Other, *please specify:*

_____

2. Where did you begin your INBOUND trip? *(NOT the Metro-North station.)*

ZIP Code, *if known:* __ __ __ __ __

City / Town: _____

State: _____

Address / Nearest Intersection: _____

3. What type of place is this? *(Please select one answer only.)*
_ My Home
¯ My Work
_ My School
_ Friend / Family Home
¯ Recreation / Tourism / Hotel
_ Other:

_____

4. If you did NOT begin your INBOUND trip from home, please tell us your home zip code.

ZIP Code: __ __ __ __ __

5. How did you get here? *(Please select all that apply.)*
_ Drove alone and parked
¯ Drove or rode with others and parked, *please indicate the number of people in the car including yourself:* _____
¯ Dropped off
Walked
¯ Bus, *please specify route or bus number:* _____
Taxi / Car Service / Uber
_ Bicycle
Other, *please specify:* _____

6. At which Metro-North station will you complete your INBOUND Metro-North trip?

¯ Grand Central Terminal
_ Harlem-125th Street
¯ Other, *please specify:* _____

7. How will you get from your last Metro-North station to your FINAL destination? *(Please select all that apply.)*
Walk
_ Taxi / Car Service / Uber
¯ Bus, *please specify the first route or bus number:* _____
_ Subway, *please specify the first subway line:*
¯ 1,2,3 ¯ 7 ¯ B,D,F,M
4,5,6 S Other line, *specify:*_____
¯ Drive alone
Drive or ride with others, *please indicate the number of people in the car including yourself:* _____
Picked up
_ Other, *please specify:* _____

8. What is the final destination for your INBOUND trip? (Not the Metro-North train station, subway station, or bus stop)
This should not be the same as your answer to question 2.

ZIP Code, *if known:* __ __ __ __ __

City / Town: _____

State: _____

Address / Nearest Intersection: _____

9. What type of place is this? *(Please select one answer only.)*
My Home
_ My Work
My School
Friend / Family Home
_ Recreation / Tourism / Hotel
Other:

_____

10. *In the past seven days* (*including today*), how many INBOUND trips towards Manhattan did you make on Metro-North?

(Please indicate total number): ____ **trips**

11. How many people (*including yourself*) live in your household?

_____

12. What is your household income before taxes and other deductions? *(Please select one answer only.)*

¯ Less than $11,500	☐ $25,000 - $27,999	¯ $75,000 - $99,999
¯ $11,500- $12,499	☐ $28,000 - $31,999	¯ $100,000 - $149,999
$12,500- $15,799	☐ $32,000 - $35,999	$150,000 - $199,999
¯ $15,800- $19,799	☐ $36,000 - $39,999	¯ $200,000 - $299,999
$19,800- $23,799	☐ $40,000 - $49,999	$300,000 or more
¯ $23,800 - $24,999	☐ $50,000 - $74,999	

13. What is your age? _____years

14. Are you of Hispanic, Latino, or Spanish origin?
_ Yes _ No

15. What is the primary language spoken in your home?
English ☐ Spanish
¯ Other, *please specify:*

_____

16. Are you…?
¯ White
_ Black or African American
¯ Asian
American Indian or Alaska Native
¯ Native Hawaiian or Other Pacific Islander
Racially mixed
_ Other, *please specify:* _____

8.4 Survey Cleaning

In order to qualify as a completed survey, a record had to contain both an origin and destination station. These two data points were required for data expansion. If the origin station was missing, a reviewer would refer to the count forms of the corresponding train. Inbound count forms contained fields to indicate the topmost survey PIN number for each station. This information would enable a reviewer to identify which station the survey's PIN number was associated with.

Other questions in the survey were carefully reviewed for consistency as well. In any instance where a sub-question was filled out but the parent question was not, the parent question was filled in by a review. For example:

- If a respondent specified a subway line for their egress mode, but did not fill out the parent question indicating that the subway was used, the subway option was be filled in.

- If a respondent wrote a response in an Other-Specify field, the reviewer would make sure the "Other" option in the parent question was also selected.

In addition to this type of cleaning, Abt Associates reviewed the aggregate survey data after it was data entered to determine whether any "code-ups" into existing response categories were necessary. For example, a code-up to the existing category "Recreation" was made if a respondent indicated "have a meal" or "see a play" in the Other-Specify response for the trip purpose question since those are considered recreational purposes.

8.5 Geocoding

The agreed upon geocoding procedures included the following steps:

Step 1 – Survey data were geocoded by Line with address questions consolidated for geocoding.

a. Consolidation – Survey questions with address data requiring geocoding were Question 2 – Trip origin location (Q2), Question 4 – Home ZIP code if trip did not begin at home (Q4), and Question 13 – Destination location (Q13).

   Each of these had distinct address fields such as:
   "Q2_ADDR" (address)
   "Q2_CITY" (city/town)
   "Q2_STATE" (state)
   "Q2_ZIP" (ZIP code)

   For geocoding purposes, the three questions containing address information were temporarily consolidated (with unique identifiers based on Respondent ID and question number) in order to make geocoding more streamlined and uniform. This process aided consistency in geocoding by ensuring duplicate address information was coded identically among the three questions After geocoding was completed, the original Q2, Q4, and Q13 fields were populated back to their original question structure via the unique identifier.

Step 2 – Consolidated address data were cleaned and standardized using both manual review and an automated process.

a. The data in the City field were cleaned and standardized using manual review.
b. The data in the Address field were standardized using an automated process which identified syntax patterns and made the appropriate changes ("&" to "and", "Ave" to "Avenue", etc.)

Step 3 – Standardized address data were then categorized according to the input data quality in Q_ADDR, Q_CITY and Q_ZIP.

The address data was parsed and categorized by the following levels of completeness via an automated process.

a. Complete location (data provided in Q_ADDR, Q_CITY, and Q_ZIP)
b. Address only (data provided only in Q_ADDR, not in Q_CITY and not in Q_ZIP)
c. ZIP code (data provided in Q_ZIP, not in Q_ADDR, but possibly in Q_CITY)
d. City (data provided only in Q_CITY, not in Q_ADDR, not in Q_ZIP)
e. Null (no valid address data provided in Q_ADDR, Q_CITY, and Q_ZIP)

Step 4 – Categorized address data were matched to geocoding tables and geocoded through table merges.

Categorized address data were matched to internal geocoding tables or lists provided by MNR. Addresses were compared to the following lists:

a. US ZIP Centroids List
b. NY ZIP Buildings List
c. One ZIP Area List
d. Hamlet List
e. MNR Station Locations List
f. Places of Interest/Neighborhoods List

The address data were matched to corresponding address fields in the lists (e.g. Q_ZIP was compared to the ZIP Codes in the US ZIP Centroids List, Q_CITY was compared to the Hamlet List, etc.) and if a match was found the GIS data from the list were joined to the address data list via a table join. Addresses which could not be matched were processed through the batch geocoders.

Step 5 – Remaining address data were geocoded using a batch geocoder which utilized both Google Maps API and Bing Maps API.

a. Address records were run through both Google Maps API and Bing Maps API using a batch geocoder.
b. Outputs were compared and if both Google and Bing returned the same result the output was accepted.
c. If Google and Bing returned different results the outputs were manually reviewed and the more accurate output was selected.
d. If both results were determined to be unsatisfactory then the record was flagged as ungeocodable.

Step 6 – The geocoded address records were assigned a precision level.

The geocoding output included a "precision" field used to populate QACCU as output geocoding accuracy (i.e., what precision the coordinates represent). This variable can be used to guide use of geocoded address data depending on the type and intent of analysis being used.

a. QACCU = 0 = Ungeocoded
b. QACCU = 1a = House number, street, city, state, and ZIP code
c. QACCU = 1b = Street intersection, city, state, and ZIP code
d. QACCU = 1c = MNR Station Location
e. QACCU = 2a = Street, city, and ZIP code (no house number)
f. QACCU = 2b = Street and city (no house number, no ZIP code)
g. QACCU = 3a = ZIP code
h. QACCU = 3b = Place of Interest/Neighborhood
i. QACCU = 4 = City/Municipality

Step 7 – After geocoding and manual review were done final data quality checks were run.

a. The address data fields were examined for data integrity (i.e., numeric ZIP codes only in Q_ZIPGIS and 2 digit state codes in QSTATEGIS, etc.)
b. QACCU was filtered to make sure each precision level had the appropriate address fields.
c. Final coordinates in QX and QY were mapped and reviewed.

Step 8 – After data quality checks were completed, geocoded coordinates were assigned to zones.

All final QX (Longitude) and QY (Latitude) geocoded coordinates were assigned zones through a "spatial join" process which matched the coordinates with the zone data from shape files provided by MNR and MTA. The address data were assigned two separate zones, one using the MNR zone definitions (QZONE) and one using MTA zone definitions (QZONE2). Geocoded coordinates outside of the region were populated to QZONE as 99 "Out of Region".

Step 9 – Address data was merged back into the survey data set.

Upon completion of all steps the consolidated address data were populated back accordingly to original questions of Q2, Q4, and Q13 data fields, from question number and temporary unique ID.

8.6 Survey Data Expansion

The base-level trip weights (level 0) were created using the following steps.

1. Variables holding origin and destination stations were created.

2. The records with origin and destination stations were checked (programmatically) for logical consistency. Inconsistent records were omitted from weighting, such as those with:
    a. the same origin and destination station,
    b. destination station to the north/outbound of the origin station,

3. Since each of the inbound trains was surveyed exactly once, and all passengers boarding the surveyed trains were offered an opportunity to complete the questionnaire, the base probability of selection for the valid cases was set to 1.

4. To prepare the data for weight calibration procedures (raking), some records were grouped together to provide adequate sample sizes for stable calibration, relying generally on a commonly used criterion that every calibration cell should ideally have a sample size of at least 50. The collapsing process relied on the following rules of admissible collapsing, in the given order of priority.
    a. Within a given line, stations with the lowest counts of boardings/alightings were collapsed together, from the smallest count up.
    b. Within a given line, stations were collapsed together according to adjacent geography, i.e., the order in which a train passes these stations. MNR staff provided lists of acceptable station groupings (with prioritized order of groupings) that served as guidance and limits for the collapsing of adjacent stations.
    c. If collapsing according to the above rules still did not provide sufficient sample sizes, the dayparts could also have been collapsed together: Saturday + Sunday into the weekend travel; similar weekday dayparts collapsed together; all of the weekday dayparts collapsed together; and all of the dayparts across the weekday and the weekend collapsed together.

5. The above rules were generally applied to the survey data to find the minimal combinations of stations that had a cell size of generally 50 or more. The resulting categories of the calibration variables represented the interactions of daypart with individual stations, groups of stations within a line, and in some cases, combinations of dayparts for groups of small stations.

6. These rules were programmatically stored and applied to the calibration targets (the passenger counts).

7. A raking algorithm was used to calibrate the weights. In raking, weights were iteratively rescaled using each calibration variable one at a time, so that the weights were first rescaled to agree with the boardings within the daypart, then rescaled to agree with alightings by daypart, then rescaled to agree with boardings by station, then with alightings by station. Since after this cycle the weighted totals for boardings within the daypart likely had shifted away from the targets, the process looped back to adjust the weights to agree with the first variable. This process was repeated until the most optimal combination of weights that was possible was obtained, given the data and within the collapsing rules. Throughout the process, the weights were restricted to be at least 1, so that: each case represented itself, if its weight was 1; and may have represented other non-responding cases, if its weight was greater than 1.