



**Newark Light Rail Origin-Destination and Intermodal Choice Study
FINAL REPORT**

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16. Abstract In this research we examined whether a multi-modal park and ride lot at the Newark Light Rail (NLR) Orange St. station would attract users, given its proximity to a major off-ramp (exit 13) from I-280 for travelers accessing downtown Newark. We collected customer data from NLR customers using an onboard survey and obtained 920 usable responses. This data can be used for Title VI compliance. Summary statistics (based on weighting the data) were calculated. About half of all customers access the NLR via walking; 37% via another transit mode. About 1/3 of trips are work trips and 18% are school trips. The customers are racially and ethnically very diverse, household income is below average and 36% are captive users. Graphical profiles for each station were also developed. We obtained Replica data for those who used the exit 13 off-ramp. Replica provides a synthetic sample generated from Census Block Groups. We filtered this data to examine those individuals with destinations within Census Block Groups near five stations in downtown Newark (Norfolk St., Warren St., Washington St., Military Park, and Newark Penn station, N=3128). The data also identified those traveling via public transit, many of which had destinations in New York City (N=463). Demographic profiles were developed for those alighting at each downtown Newark station. Comparison of these samples indicated that those driving had higher levels of household income, are not of minority ethnic groups, own a car, and are older compared to those using the NLR. Those taking public transit to New York City tended to be from higher income groups and were even less ethnically diverse. Given these differences, our conclusion is that it is unlikely that the population currently driving will use a park and ride lot at Orange St. station.			
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EXECUTIVE SUMMARY

The Newark Light Rail (NLR) Orange St. station is proximate to the Exit 13 off-ramp from I-280. This station could potentially serve as a park and ride location providing customers with access to downtown Newark and Newark Penn station via the NLR. This could alleviate traffic heading to downtown Newark. NJ TRANSIT also requires data on customers using the NLR for:

- Validating and updating regional transportation forecasting models;
- Advancing new projects for NJ TRANSIT Light Rail Operations and other regional capital projects;
- Informing Light Rail fleet planning; and
- Providing updated demographic and trip pattern data for market research and to support FTA Title VI analysis.

The objective of this research was to collect the NLR data and then also analyze whether it is likely that a park and ride lot at Orange St. station would attract customers.

We implemented an onboard survey of NLR customers (between Nov 2022 and Feb 2023). We also obtained Replica synthesized data for all trips using the Exit 13 ramp. We summarized both data sets and provided graphical profiles of those customers boarding each NLR station (and a combined profile for Broad St. line stations). Our approach to determine the feasibility of a park and ride lot was to compare the demographics and other information derived from the Replica data with that of those customers alighting the NLR in downtown Newark stations. We provide detailed summary statistics and compared the data graphically to display similarities and differences between the profiles of each. Our working hypothesis is that if these are similar the likelihood of transferring at the Orange St. station is greater.

Our findings suggest that there are major differences between those currently using the NLR to access downtown Newark stations and those that drive (via Exit 13). The NLR sample we obtained has a lower household income level, less car ownership, more minorities, is younger, and has a greater fraction of male customers. While it is possible that some fraction of drivers would choose to transfer at the Orange St. station, the data we obtained is insufficient to draw a full conclusion. To fully understand the likelihood of drivers using a park and ride lot, we would need to assess data on parking costs (which are often subsidized by employers), relative travel times (between driving directly versus transferring), and any planned changes to the physical environment surrounding the station (to enhance perceptions of security). This would likely require a detailed stated preference study of commuters traveling to downtown Newark.

BACKGROUND

The Newark Light Rail (NLR) serves downtown Newark and provides access to NJ TRANSIT rail lines at both Newark Penn station and Newark Broad St. station. PATH trains also serve Newark Penn station. Prior to the COVID-19 pandemic the NLR served about 19,000 customers on a typical weekday. The Orange St. station is proximate to a major off-ramp (Exit 13) from I-280 and is an access point for downtown Newark. The main problem that this study addresses is whether Orange St. could serve as an intermodal transfer point for drivers exiting I-280 with destinations in downtown Newark or beyond (via rail). We also collected data on NLR customers suitable for:

- Validating and updating regional transportation forecasting models;
- Advancing new projects for NJ TRANSIT Light Rail Operations and other regional capital projects;
- Informing Light Rail fleet planning; and
- Providing updated demographic and trip pattern data for market research and to support FTA Title VI analysis.

OBJECTIVES

The objective of this project is to understand the trip patterns and socio-economics of customers who use the Newark Light Rail (NLR). In addition, we seek to understand the trip patterns and socio-economics of those exiting from I-280 (at Exit 13), near the Orange St. station and determine whether Orange St. could serve as an intermodal transfer site.

Furthermore, we provide an analysis of data collected from NLR customers. This data was weighted to provide a profile for the entire system and for every station on the NLR. Data include a summary of access modes to the stations providing a comparison with automobile drivers and passengers using Exit 13 and their destinations in downtown Newark as well as those transferring to NJ TRANSIT rail lines and PATH for destinations outside of Newark.

The NLR consists of two routes, one terminates at Grove Street Station, the other at the Broad Street Rail Station (for transfers to Hoboken). Both lines run to Newark Penn Station where customers can change to NJ TRANSIT trains (to New York City and other destinations), PATH trains (to Jersey City, Hoboken, and Manhattan), AMTRAK trains traveling the Northeast Corridor, and a number of NJ TRANSIT bus routes.

Exit 13 provides access to Newark from I-280. It is also near the Orange St. NLR station. Orange St. does not currently have a parking garage and the immediate streets surrounding the station may not be attractive for many commuters to park. We observed homeless encampments along the off-ramp and the neighborhood itself consists of light industrial uses and has minimal pedestrian activity, though this may be larger when children are being taken to a new school that opened in 2021. Images of the Exit 13 off-

ramp and a map of its proximity to the Orange St. station and downtown Newark are in Figure 1, Figure 2, and Figure 3.

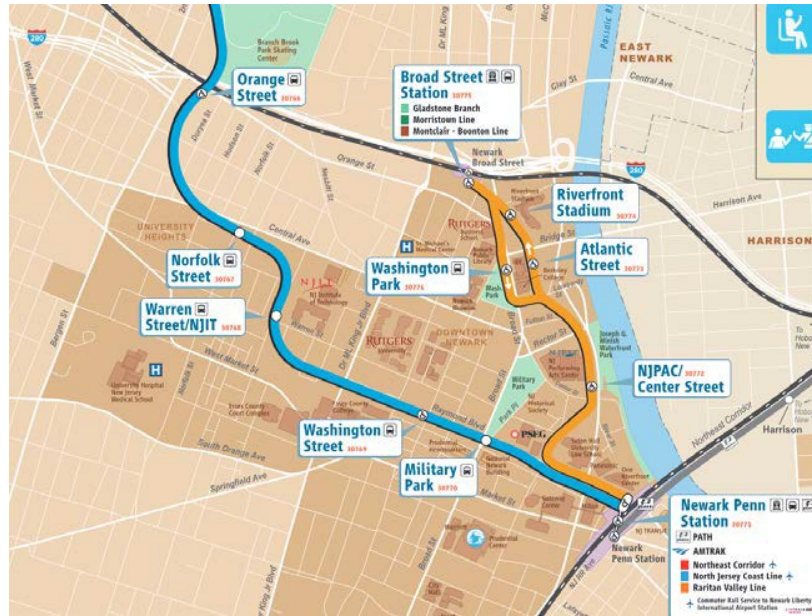


Figure 1. NLR map, showing proximity of exit 13 to Orange St. station and other potential inter-modal connections (source: NJ TRANSIT).



Figure 2. Exit 13 proximity to Orange St. station. (source: Google Maps)



Figure 3. 1st St., by Exit 13 off-ramp. Orange St. is behind U-Haul facility.

To accomplish the objectives of this study we surveyed NLR customers using an on-board survey. Our original plan was to conduct an off-ramp intercept survey of drivers at Exit 13 from I-280. However, this proved to be infeasible and students could not be deployed for this task as it was not allowed by Rutgers risk management. As an alternative, we obtained Replica data provided by NJ TRANSIT.

Our key criteria for success in this project is to collect and analyze data that allows us to understand the travel patterns, socio-economic characteristics, and origins and destinations of NLR customers and those using Exit 13. This report includes station profiles based on our data collection as well as summary statistics for the entire sample collected. We include various cross-tabulations of some key results to further understand socio-economic factors associated with NLR usage. The Replica data was used to characterize those trips ending in downtown Newark and that likely transferred to a bus or rail for destinations in New York City, Hudson County, and elsewhere in Essex County, all of which are candidates for intermodal travel using the NLR. We examine their socio-economics (based on the Replica data) and compare to similar destinations of NLR customers. We conclude with a discussion of whether the Orange St. station is a likely candidate for encouraging more intermodal trips.

ANALYSIS OF NEWARK LIGHT RAIL CUSTOMERS

Survey Development and Deployment

A survey instrument for NLR customers was developed in consultation with NJ TRANSIT. Students were recruited to conduct an on-board intercept survey of NLR customers. All received human subjects training and were certified via the Collaborative Institutional Training Initiative (CITI) as required by Rutgers. We also provided in-person training on how to engage with NLR customers and how to hand out and collect the surveys. Surveyors wore Rutgers aprons making them recognizable to NLR customers.

Student researchers were deployed to the trains starting on October 19, 2022 and continuing to just before the week of Thanksgiving (November 18th). Students worked in teams of two and we generally deployed at least three teams in the morning and an additional three teams in the afternoon, pending the availability of surveyors. Surveys were distributed between 6am and 4pm. Additional teams were sent in early December and we focused on increasing the response rate along the Broad St. line, including stationing some survey takers at stations, rather than on the train.

Following the winter break, we deployed additional teams in late January to increase the response rate. However, fewer surveyors were available to work and we received far fewer completed surveys. All survey collection activity ended in late February 2023.

In total, 1074 surveys were received. Of these, 880 were received as paper copies (only a small proportion of these were sent by mail). The balance of 194 were entered online by respondents.

The online version and paper version both included the same questions, but the ordering and numbering differed slightly. Those who received the survey were able to either fill it out on the train and return it to the survey teams, return it by mail, or fill it out online (via a QR code or a URL). The online versions were available in Spanish and Portuguese. Table 1 and Table 2 display how the surveys were received and the language in which they were filled out. Both the online and paper survey instrument along with return envelopes are included in Appendix A.

Table 1. Method by which surveys were received.

Surveys received	
Collected on Newark Light Rail	671
Mailed back	209
Online	194
Total	1074

Table 2. Languages in which survey was taken (online only)

Languages (Online only)	
English	142
Spanish	50
Portuguese	2
Total online	194

Cleaning and Weighting of Survey Data

While we obtained 1074 surveys after cleaning the dataset, we were left with 920 respondents. Table 3 details how many respondents were removed at each step and the reasons why.

Table 3. Cleaning of dataset

Respondents in Sample after removal of respondents	Respondents Removed	Reason for Removal
1,074	-	-
1051	23	Respondents identified themselves as below 18 years old
962	89	Missing either boarding or alighting stations
941	21	Having the same boarding and alighting stations
920	21	Missing both boarding and alighting stations

We had 23 respondents that indicated they were under 18 years of age. Our human subject protocol did not allow us to analyze data from minors and surveyors were instructed not to distribute to minors. Thus, these were omitted from any analysis. Not all respondents specified a boarding or alighting station making it difficult to specify their direction of travel; 21 respondents reported the same boarding and alighting station; 89 respondents did not report either a boarding or alighting station so for these respondents direction of travel could not be calculated and 21 were missing both the boarding and alighting stations. Those respondents for which no direction of travel could be calculated were not included in the data as the weighting scheme described below requires this information.

The weighting scheme provided by NJ TRANSIT aims to calculate weights for each station and select time periods, as well as direction of travel (inbound vs. outbound). NJ TRANSIT provided data on average daily ridership for March-April 2023 by station, time of day, and direction of travel (inbound or outbound (available in Appendix B). The time periods were defined as: early AM (before 5AM), AM peak (6-10AM), midday (10AM-3PM), PM peak (3PM-7PM), and evening (after 7PM). As our data collection was only between 6AM and ended at 4pm, we do not include early AM or evening in our weighting. We pro-rated the boarding data for PM peak (i.e., $\frac{1}{4}$ of the boardings). Inbound trips are those on the Grove St. line that terminate at Penn Station Newark. On

the Broad St. line, inbound trips terminate at Broad Street Station. Outbound is the opposite direction for each line.

Weights are assigned to each survey respondent and are based on the station, direction of travel and time period. Weights are derived by dividing the boarding counts at a specific station within the time period and travel direction by those respondents stating that they traveled at that time. Specifically, we use this calculation:

$$W_{s,t,d} = \frac{N_{s,t,d}}{n_{s,t,d}}$$

Where:

W = weight

N = boarding population

n = sample

s = station

t = time period (AM peak, midday, evening)

d = direction (inbound/outbound)

For respondents who did not report their time of travel (35 respondents), we rely on the *highest percentage* rule. Specifically, we assign the highest weight by boarding station for observations that do not have a specified travel period (AM Peak, Midday, or PM Peak).

There were three stations, Atlantic St., Riverfront Park, and Washington Park with no boarding data for certain time periods. Two respondents in our sample reported boarding at Atlantic St. during the Midday period when we had no boarding data; one other boarded at Riverfront (Midday), again with no boarding data. For these three respondents we assigned a weight of one.

Summary Statistics

We include a graphic profile of summary statistics from our sample in Appendix C and profiles for each station in Appendix D. A summary of the data is provided in the following tables. In all cases we provide the total frequency for each question, the weighted total and the weighted percent, the latter representing a representative breakdown of the data.

Table 4 displays the number of surveys collected based on the respondents boarding station and their alighting station. Not surprisingly, a large plurality of respondents reported boarding and alighting at Newark Penn Station (284 and 335 respectively). Branch Brook Park also had a relatively large share of respondents, with 143 reporting that they boarded there, followed by Broad St. with 96 respondents. Warren St./NJIT station had 117 respondents alighting there. Three stations along the Broad St. line had very few respondents boarding, Atlantic St., NJPAC/Center St. and Riverfront Stadium; this makes it difficult to assess the profiles for these stations and we provide a combined profile in Appendix C, rather than individual profiles.

Table 4. Distribution of boarding and alighting stations reported by respondents (N=920).

	Boarding			Alighting		
	Total	Weighted Total	Weighted Percentage	Total	Weighted Total	Weighted Percentage
Atlantic St.	4	0.37	0.04	16	4.78	0.52
Bloomfield Ave.	46	56.40	6.13	39	85.74	9.32
Branch Brook Park	143	84.36	9.17	69	78.20	8.5
Broad St. Station	96	18.31	1.99	43	17.39	1.89
Davenport Ave.	25	27.23	2.96	10	9.38	1.02
Grove St.	94	38.09	4.14	34	70.66	7.68
Military Park	30	48.58	5.28	57	64.95	7.06
NJPAC / Center St.	4	2.67	0.29	15	2.94	0.32
Newark Penn Station	284	404.25	43.94	335	253.46	27.55
Norfolk St.	12	33.21	3.61	22	18.77	2.04
Orange St.	32	49.59	5.39	26	75.44	8.2
Park Ave.	30	58.97	6.41	20	14.08	1.53
Riverfront Stadium	2	0.18	0.02	21	6.26	0.68
Silver Lake	55	34.22	3.72	19	17.94	1.95
Warren St. / NJIT	20	27.23	2.96	117	138.74	15.08
Washington Park	22	3.77	0.41	13	10.12	1.1
Washington St.	21	32.48	3.53	64	51.34	5.58
Total	920	919.91	100	920	920.18	100

Travel patterns, destinations, and captive customers

In Table 5 the access and egress mode to and from stations is summarized. Over 50% of respondent's access and egress the NLR on foot. Other transit modes are used for access, including NJ TRANSIT trains, PATH trains, and buses; these are all common egress modes as well. Only about 5% of respondents reported driving themselves as an access mode, and about 2% were driven by someone else. Other modes for access and egress were minor.

Table 5. Access and egress mode to and from stations. (N=918, for access; N=912, for egress)

	Station access mode			Station egress mode		
	Total	Weighted Total	Weighted Percentage	Total	Weighted Total	Weighted Percentage
Walked	510	503.16	54.81	541	535.07	58.67
Bus	91	135.04	14.71	80	86.37	9.47
NJ TRANSIT train	135	101.26	11.03	91	77.98	8.55
PATH train	84	71.97	7.84	140	109.62	12.02
Drove	44	35.62	3.88	8	4.65	0.51
Another Newark Light Rail train	11	25.98	2.83	10	24.90	2.73
Other	10	21.76	2.37	16	49.89	5.47
Another person dropped me off at the station	19	11.57	1.26	11	10.12	1.11
Bicycle	4	4.68	0.51	4	4.38	0.48
Uber/Lyft/Via or other App-based service	7	3.21	0.35	5	4.74	0.52
e-Scooter	2	2.85	0.31	3	1.82	0.2
Taxi	1	0.73	0.08	3	2.28	0.25
Total	918	917.82	100	912	911.82	100

Most of our respondents make their return trip via the NLR (about 85%). This is shown in Table 6. About 8% make a return trip by bus.

Table 6. Travel method for return trip in the opposite direction (N=859).

Travel method for return trip in the opposite direction	Frequency	Weighted Total	Weighted Percentage
Travel the same way in the opposite direction	729	743.04	86.50
Take a bus	74	64.77	7.54
Other	56	51.20	5.96
Total	859	859.00	100

Table 7 displays the frequency of usage of the NLR. About 30% use the NLR five days/week and an additional 20% use it over five days/week. Less frequent and new customers account for less than 10% of users.

Table 7. Frequency of using the Newark Light Rail (N=895).

Frequency of use	Frequency	Weighted Total	Weighted Percentage
1 day/week	42	25.06	2.80
2 days/week	79	80.55	9.00
3 days/week	147	159.31	17.80
4 days/week	113	110.09	12.30
5 days/week	268	260.45	29.10
6 days/week	57	42.07	4.70
7 days/week	107	137.83	15.40
Less than one day/month	21	34.91	3.90
1- 3 days a month	49	40.28	4.50
Less than one day/year	6	3.58	0.40
First time customer	6	1.79	0.20
Total	895	895.90	100.00

The destination of trips taken on the NLR are displayed in Table 8. Trips to work destinations account for about 40% of our respondents, and trips to college or university are about 20% of respondents. Trips home account for about 16%, while other destinations are minor.

Table 8. Trip destinations stated by respondents (N=908).

The place you were going to was ...	Total	Weighted Total	Weighted Percentage
Work	368	316.17	34.82
College/University	180	159.54	17.57
Home	149	155.72	17.15
Other	36	90.53	9.97
Personal Business	72	68.28	7.52
Shopping	33	44.86	4.94
Visit Family/Friends	26	25.24	2.78
Medical/Dental Visit	17	22.79	2.51
Entertainment/Recreational Activity	16	17.07	1.88
School (K-12)	11	7.72	0.85
Total	908	907.91	100

About 1/3 of our sample reports having no other way to travel for their trip (Table 9). Over half of the sample (about 55%) report taking the NLR because it is the best way to

travel for their trip. In Table 10 a cross-tabulation of trip purpose and modal captivity is shown. About 28% of those who use the NLR for work do so because it's the best mode, followed by about 11% for university/college trips and about 9% for trips home. Only 9% of work trips are by captive users, and 11% for university/college trips.

Table 9. Captive users of the Newark Light Rail (N=890).

Captivity	Frequency	Weighted Total	Weighted Percentage
I have no other way to travel, so I use the Newark Light Rail	253	317.73	35.70
I use the Newark Light Rail because it's the best choice for me, even though there are other ways I could make this trip	539	485.05	54.50
I usually use another type of transportation, but I occasionally take the Newark Light Rail	98	88.11	9.90
Total	890	890.89	100

Table 10. Cross-tabulation of captivity vs. trip destination. Weighted percentages (N=885).

	Destination									
	College	Recrea- tional	Home	Medical/ Dental	Other	Personal Business	School (K-12)	Shopping	Visit Family/ Friends	Work
I have no other way to travel, so I use the Newark Light Rail	7.91	0.23	4.52	0.79	1.47	2.03	0.68	0.79	0.68	9.27
I use the Newark Light Rail because it's the best choice for me, even though there are other ways I could make this trip	11.3	1.13	9.27	0.79	1.92	4.18	0.45	2.15	1.58	27.91
I usually use another type of transportation, but I occasionally take the Newark Light Rail	0.68	0.45	2.82	0.23	0.56	1.47	0	0.68	0.56	3.5

About 42% of respondents have no vehicle in their household (see Table 11) and 28% have only one vehicle available. The NLR obviously plays a vital role for these customers.

Table 11. Number of vehicles in household (N=794).

Number of vehicles in household	Frequency	Weighted Total	Weighted Percentage
0	300	333.64	42.02
1	263	224.54	28.28
2	163	193.66	24.39
3	41	28.66	3.61
4	23	12.47	1.57
5	3	0.79	0.1
7	1	0.32	0.04
Total	794	794.08	100

We examined the destinations reported by individuals for those households without and with at least one car. Most of those households with no cars used the NLR for a trip to work (35%) or a trip home (21%). This is only somewhat larger than those households with one vehicle or more, with 32% reporting a work destination, and 18% reporting that their destination was their home.

About two thirds of no-car households reported their destination as work (35%), on their way home (21%), or on their way to college/university (10%) when they were responding to the survey. Other activities, such as medical visits, shopping, personal business, or visiting family, made up around 33% of destinations. College/university trips tended to be a higher percent for those from households with vehicles (26%) compared to those without vehicles (10%). Other trip destinations had smaller weighted percentages in our sample, but generally, no-car households tended to use the NLR more for these trips. See Table 12 for detailed responses on all reported trip destinations.

Table 12. Trip destinations for those from no-car households compared to those from households with at least one car.

Trip Destination	No car households			Households with at least one car		
	Frequency	Weighted total	Weighted percentage	Frequency	Weighted total	Weighted percentage
Work	101	105.75	35.25	215	157.98	31.98
Home	61	63.72	21.24	71	87.93	17.80
College/University	43	29.28	9.76	117	126.91	25.69
Personal Business	29	27.72	9.24	33	32.75	6.63
Medical Visit	10	14.64	4.88	5	5.09	1.03
Shopping	15	14.55	4.85	9	5.43	1.10
Visit Family or Friends	13	11.13	3.71	11	13.68	2.77
Entertainment/ Recreation	6	8.07	2.69	9	5.09	1.03
School (k-12)	4	2.19	0.73	5	4.94	1.00
Other	17	22.23	7.41	17	53.45	10.82
No response	1	0.72	0.24	2	0.74	0.15
Total	300	300	100	494	494	100

Most customers purchase single one-way tickets (about 48%), as shown in Table 13. The FLEXPASS is used by fewer than 2% of the sample. Almost 32% of customers use a monthly pass (either bus, rail, or NLR).

Table 13. Ticket used on trip (N=897).

Type of ticket used for this trip	Frequency	Weighted Total	Weighted Percentage
One-way Ticket	447	430.20	47.96
Monthly Pass (Rail, Light rail, or Bus)	295	283.72	31.63
Other	36	70.59	7.87
Reduced Fares (Seniors/Disabilities)	51	61.35	6.84
Underground fare	37	36.06	4.02
FLEXPASS-20 one way tickets	31	15.16	1.69
Total	897	897.09	100

Socio-economic and demographic background of customers

Socio-economic and demographic data of the respondents in the sample are displayed in Table 14 (for gender), Table 15 (age distribution), and Table 16 (race/ethnicity). The customers on the NLR tend to be younger than average with about 51% being under the age of 35. Only about 10% are 62 or older (qualifying for a senior fare discount). A plurality of about 37% are Black and only about 25% are White; the customer base has a diversity of different racial and ethnic identifications (Table 16).

Table 14. Reported gender of respondents (N=865).

Gender	Frequency	Weighted Total	Weighted Percentage
Female or Woman	398	353.35	40.85
Male or Man	452	498.24	57.6
Non-binary or Gender Fluid	4	1.99	0.23
Prefer not to answer	9	10.29	1.19
Prefer to self-describe	2	1.12	0.13
Total	865	865	100

Table 15. Age distribution of respondents (N=862).

Age Group	Frequency	Weighted Total	Weighted Percentage
18-24 years	228	246.10	28.55
25-34 years	215	198.43	23.02
35-44 years	126	92.58	10.74
45-54 years	110	123.18	14.29
55-61 years	100	110.25	12.79
62-64 years	32	40.69	4.72
65 or over	51	50.77	5.89
Total	862	862.00	100

Table 16. Reported racial and ethnic identification of respondents (N=810).

Race	Frequency	Weighted Total	Weighted Percentage
Black/African American	273	295.81	36.52
White	260	196.51	24.26
Asian/Pacific Islander	130	151.88	18.75
Other	79	105.54	13.03
Mixed Race	53	44.79	5.53
American Indian / Alaska Native	15	15.47	1.91

Total	810	810.00	100
Hispanic (n=713)	212	208.55	29.25

Income Levels and Employment

Table 17 displays the distribution of household income as reported by respondents. About one-quarter of respondents have report household income under \$15,000 and about 15% are between \$15,000 and \$24,999. About 16% report household income over \$100,000.

Table 17. Distribution of reported annual household income (N=756).

Annual household income	Frequency	Weighted Total	Weighted Percentage
Under \$15,000	172	205.78	27.22
\$15,000-\$24,999	90	116.05	15.35
\$25,000-\$34,999	63	57.15	7.56
\$35,000-\$49,999	77	84.67	11.2
\$50,000-\$74,999	120	124.14	16.42
\$75,000-\$99,999	71	40.37	5.34
100,000-\$149,999	76	52.39	6.93
150,000-\$199,999	42	42.56	5.63
\$200,000-\$249,999	19	14.36	1.9
\$250,000 or over	26	18.60	2.46
Total	756	756.08	100

A large proportion of our sample are under the federal poverty level based on guidelines for 2022 specified by the Dept. of Health and Human Services.¹ In Table 18 we specify the income level of each household based on the midpoint of the income ranges specified in Table 17. The poverty guidelines are based on household size and we show the distribution of household sizes and those under the poverty level in Table 18. Among single person households, which is the most common household size in our sample, around 30% fall below the poverty line. With the exception of single-person households, the percentage of people who fall under the poverty line increases with household size as shown in Table 18.

¹ Poverty guidelines for 2022 are available at: <https://aspe.hhs.gov/sites/default/files/documents/4b515876c4674466423975826ac57583/Guidelines-2022.pdf>

Table 18. Respondents under the poverty level based on 2022 guidelines

Household size	Frequency	Poverty guideline (\$, 2022)	Frequency under poverty	Weighted Total Under Poverty	Weighted Percentage
1	199	13,590	50	59.22	29.76
2	180	18,310	29	26.86	14.92
3	142	23,030	44	34.86	24.55
4	135	27,750	39	45.33	33.58
5	91	32,470	33	43.97	48.32
6	33	37,190	13	13.2	40.00
7	13	41,910	5	7.26	55.85

In Table 19 we report a full tabulation of employment status. Some respondents reported both working and attending school with various mixes of full-time and part-time status for each. In Table 20 we aggregate responses to employed (full-time and part-time), student (full-time and part-time), and not working which includes those who are unemployed, choosing not to work, unable to work, and retirees. The percent total exceeds 100% due to double counting the status of some individuals. Overall, about 62% of NLR users are employed, 19% are students, and 24% are not working.

Table 19. Employment status reported by respondents (N=874).

Employment Status	Frequency	Weighted Total	Weighted Percentage
Employed full-time	428	340.34	38.94
Employed full-time, Student full-time	7	5.68	0.65
Employed full-time, Student part-time	2	4.37	0.5
Employed part-time	122	166.50	19.05
Employed part-time, Student full-time	21	15.21	1.74
Employed part-time, Student part-time	10	6.56	0.75
Not employed and NOT looking for work	17	51.65	5.91
Not employed but looking for work	53	69.13	7.91
Retired	40	49.29	5.64
Student full-time	142	126.03	14.42
Student part-time	16	8.74	1
Unable to work	16	30.42	3.48
Total	874	873.91	100

Table 20. Employment status, aggregated. Percents do not add up to 100 due to overlapping categories.

Employment Status – aggregated	Frequency	Weighted Total	Weighted Percentage
Employed, full and part-time	590	570.08	61.63
Student, full and part-time	198	176.31	19.06
Not working	137	221.45	23.94

Difficulties Using the Newark Light Rail: Language Barriers and Disability

Only about 5% of respondents report not speaking English well or at all (Table 21). Of the 37 respondents who reported not speaking English “at all” or “not well”, 27 spoke Spanish at home. Our respondents report a large diversity of languages spoken at home, besides English. A large percent (21%) report speaking Spanish and nearly 5% speak Gujarati. Those spoken by more than 0.10% of our weighted sample are listed in Table 22. Those spoken by less than 0.10% of our weighted sample are listed in Table 23. These were all reported by only one respondent (except Italian which was reported by two respondents). Several languages are from the Indian subcontinent (Gujarati, Telugu, Hindi, Urdu, Marathi, and Tamil).

Table 21. Fluency in speaking English (N=845). Percent with and without weights.

Fluency in Speaking English	Frequency	Weighted Total	Weighted Percentage
Not at all	5	3.55	0.42
Not well	32	41.57	4.92
Well	110	125.23	14.82
Very well	698	674.65	79.84
Total	845	845.00	100

Table 22. Languages spoken at home (Weighted percentage above 0.10)

Language	Frequency	Weighted Total	Weighted Percentage
English	472	433.5	47.12
Spanish	203	196.6	21.37
Language question not answered	92	130.35	14.17
Gujarati	12	42.04	4.57
Speaks other language, but did not specify which	14	28.06	3.05
Telugu	11	16.01	1.74
Portuguese	14	10.86	1.18
Hindi	10	7.18	0.78
Arabic	12	6.35	0.69
Tagalog	8	6.35	0.69
Bengali	5	4.42	0.48
Urdu	6	3.96	0.43
Igbo	2	3.4	0.37
Mandarin	5	2.85	0.31
French	4	2.48	0.27
Persian	4	2.48	0.27
Hindi & Marathi	3	2.3	0.25
Tamil	3	2.3	0.25
Russian	5	2.02	0.22
Arabic & French	3	1.75	0.19
Korean	1	1.56	0.17
Spanish & Portuguese	3	1.56	0.17
German	4	1.38	0.15

Table 23. Other languages reported to be spoken at home (less than 0.10% of weighted sample)

African	Marathi
Cebuano	Patois
Creole	Punjabi
Edo	Slovak
Hebrew	Spanish & Italian
Hindi & Telugu	Spanish & Japanese
Hungarian	Swahili
Italian	Thai
Japanese	Turkish
Kannada	Twi
Lebanese	Yoruba

Only a few respondents reported difficulties using the NLR due to a physical or other condition. And only a small fraction of these reported using a wheelchair, as detailed in Table 24 and Table 25.

Table 24. Difficulty in using Newark Light Rail (physical or other condition (N=829)).

Difficulty in using Newark Light Rail (physical or other condition)	Frequency	Weighted Total	Weighted Percentage
No	806	799.32	96.42
Yes	23	29.68	3.58
Total	829	829.00	100

Table 25. For those reporting difficulty, usage of wheelchairs or other mobility device (N=8).

Usage of wheelchair or other mobility device	Frequency	Weighted Total	Weighted Percentage
Other mobility device	3	1.73	21.60
Wheelchair	4	6.18	77.20
Wheelchair & Other mobility device	1	0.10	1.30
Total	8	8.00	100

COVID-19 Impacts on the Newark Light Rail and Remote Work

The COVID-19 pandemic has had an impact on commuting for work trips. We included a number of questions to examine changes in behavior since the pandemic. Over 50% of respondents use the NLR the same amount as before the pandemic (Table 26). While some report a reduction in use, a slightly larger percent report an increase in use (18% vs. 26%). About 10% of respondents who are employed report working from home 5 days or more per week (Table 27). While about 40% do not work at home, about 25% work at home 3 days a week or more.

The distribution shown in Table 27 suggests that about 30% of work trips have disappeared from the NLR. This is estimated by calculating the weighted days that respondents use the NLR (last column of Table 27). Assuming a typical pre-COVID commute was 5 days per week, the maximum total person-days of commuting (in our sample) is 578 respondents x 5 = 2890, omitting those that commuted six or seven days a week (12 in total). Summing the last column, the total actual commute person-days is 2029, 70% of the pre-COVID maximum and thus a 30% reduction in commuting for work trips on the NLR.

We also queried respondents on whether they were able to do their job at home. About 63% reported that they could not, while 36% indicated that some or all tasks associated with their employment could be done at home (Table 28). Only about 29% of respondents stated that their employer allowed them to work from home (Table 29). We also asked about remote schooling. About 60% of those attending school are still attending some lectures online (Table 30).

Table 26. Usage of Newark Light Rail since Covid-19 pandemic (N=865).

Usage of Newark Light Rail since Covid-19 pandemic	Frequency	Weighted Total	Weighted Percentage
I use the Light Rail about the same amount as before the pandemic	488	485.27	56.10
I use the Light Rail less often than before the pandemic	168	155.70	18.00
I use the Light Rail more often than before the pandemic	209	223.17	25.80
Total	865	864.14	100

Table 27. Days that those who reported being employed worked from home for both full-time and part-time employment (N=590).

Number of days working from home in the past seven days*	Frequency	Weighted Total	Weighted Percentage	Weighted days using Newark Light Rail
0 days	235	249.87	42.35	1249.35
1 day	134	107.20	18.17	428.8
2 days	84	63.72	10.8	191.16
3 days	49	63.07	10.69	126.14
4 days	23	34.04	5.77	34.04
5 days	47	60.06	10.18	0
6 days	6	5.43	0.92	-
7 days	12	6.55	1.11	-
Total	590	589.94	100	2029.49

* The questionnaire omitted a question as to whether respondents worked 0 days a week at home; this estimate is based on those who did not answer the question and were employed. Our data entry procedures would have eliminated any mis-coding and this seems to be the case when the data was checked.

Table 28. Ability to complete job at home if allowed by employer (N=539).

Able to complete job from home, if it was allowed by employer	Frequency	Weighted Total	Weighted Percentage
No	292	340.43	63.16
Yes, some tasks	135	121.98	22.63
Yes, all tasks	112	76.59	14.21
Total	539	539.00	100

Table 29. Allowed to work from home (N=492).

Allowed to work from home by employer	Frequency	Weighted Total	Weighted Percentage
No	309	349.76	71.09
Yes	183	142.24	28.91
Total	492	492	100

Table 30. Frequency of remote schooling (N=244).

Number of days attending school lectures from home in the past several days (students only)	Frequency	Weighted Total	Weighted Percentage
0 days	98	98.16	40.23
1 day	57	47.17	19.33
2 days	19	15.01	6.15
3 days	28	25.77	10.56
4 days	17	20.96	8.59
5 days	22	33.50	13.73
7 days	3	3.42	1.4
Total	244	243.98	100

We also estimated a binomial logit model for those who were able to work from home at least once in the last week versus those who did not (Table 31). Due to missing values and including only those who are employed, we were limited to a sample of 474 respondents. A binomial logit model allows us to determine what factors are associated with the dependent variable, in this case whether they work at home or not. We controlled for income, race, gender, car availability and destination. In Table 31, those variables in bold are statistically significant, that is, they are likely to be factors associated with whether or not someone works at home. We found that those who had a household income of more than \$100,000 and who had at least one car were more likely to work from home. These results show that those who are more likely to work from home tend to be more affluent, even among NLR customers.

Table 31. Binomial logit model of likelihood of working from home

	<i>Dependent variable:</i>	
	Worked from home at least once in the last week	
	(1)	(2)
Gender: Male or Man	0.124 (0.194)	0.083 (0.196)
Race: White	0.283 (0.208)	0.175 (0.214)
Station destination: Newark Penn	0.217 (0.199)	0.165 (0.202)
No car available	-0.580*** (0.206)	-0.408* (0.215)
Income: \$50k-\$100k (Reference: <\$50k)		0.192 (0.229)
Income: >\$100k (Reference: <\$50k)		0.744*** (0.270)
Constant	0.466** (0.191)	0.250 (0.217)
Observations	474	474
Log Likelihood at 0	-313.195	-313.195
Log Likelihood	-306.088	-302.137
Akaike Inf. Crit.	622.175	618.275
Log Likelihood Ratio Test (Chi Sq Pr)	0.007***	0.001***
<i>Note:</i>	*p<0.10; **p<0.05; ***p<0.01	

Analysis by Station

We have also prepared graphic profiles for each station and these are included Appendix D. Three stations, all along the Broad St. line, have insufficient data for complete profiles. These stations are Riverfront Stadium, Atlantic St., and NJPAC/Center St. that in total have 10 boardings (see Table 4). We have aggregated these together on the graphic labeled “Broad St. Line Stations”.

ANALYSIS OF EXIT 13 DATA

As we were unable to collect data via an intercept off-ramp survey of drivers, we originally investigated the possibility of conducting a mail survey of vehicle owners using the off-ramp. We contracted with American Traffic Information (ATI) to obtain license plate images. ATI took images of vehicle license plates in early December 2022 obtaining about 13,000 records. We requested addresses from the NJ Motor Vehicle Commission. After several months of not receiving a response and additional inquiries we were eventually notified that they would not provide addresses of vehicle owners.

After discussion with NJ TRANSIT staff on alternative approaches, we were provided with Replica² data for our analysis. Replica provides synthesized population datasets that includes both sociodemographic information and trip details based on census data and cell-phone location data and consists of a generated synthetic population that is statistically similar to the census population at the Census Block Group (CBG) level. We obtained data for a one-day sample of all vehicles exiting the I-280 exit 13 off-ramp near the Orange St. NLR station. This consisted of a demographically representative sample for 17,522 synthetic individuals. Both the block group origin and destination as well as the mode of travel and socioeconomic information was attached to each individual.

The Replica data that we received included 70 attributes describing the user's demographics, economic and work status, trip mode, distance, and purpose, CBG origin and destination, and home location. We relied on the primary mode of the user to decide which subset of the population would be the best candidate for the potential park and ride. Those included auto drivers, passengers, and public transit users driving to a location near an NLR station. We then excluded any user who was going home by looking at their trip purpose as they would be unlikely to park in a park and ride to reach their home destination from the exit 13 off-ramp. Once our subset was finalized, we analyzed the characteristics of users, including age, race, gender, number of vehicles, home location, employment status, and trip attributes.

Our objective was to determine the destination of these trips and assess whether a transfer to the NLR at the Orange St. station would be viable for their trip. There are four NLR stations between Orange St. and Newark Penn station (see Figure 1). These are Norfolk St., Warren St./NJIT, Washington St., and Military Park stations. We analyzed those trips that ended in a CBG that was within 0.5 miles of the five Light Rail stations ending at Newark Penn. Because the centroid of the CBG was nearly equidistant to Military Park and Newark Penn, we combined those two stations in the Table 33.

Replica data defines the mode used by each synthesized individual. These are shown in Table 32. Over 60% are private auto trips and an additional 29% are auto passengers. About 4% are labeled as public transit; of these we were provided with

² <https://www.replicahq.com/>

additional data that indicated 463 were likely transfers NJ TRANSIT trains and/or PATH trains while the remaining 251 were on a bus that used the Exit 13 off-ramp.

Table 32. Primary mode as defined in Replica data

Primary mode	Frequency	%.
Auto driver	10,646	60.76
Auto passenger	5,008	28.58
Commercial vehicle	906	5.17
Public transit	714	4.07
On demand auto (e.g. taxi/Uber)	248	1.42

Our analysis focuses on those Exit 13 users whose destination was in downtown Newark near a NLR station as well as those whose final destination was New York City, Hudson County or Essex County that was feasible to reach via transit. As previously mentioned, we exclude those whose destination was “home” in downtown Newark; this leaves us with 3128 trips for auto drivers (2169) and passengers (959) ending near one of the NLR stations. And an additional 463 trips destined via transit to other locations for a total of 3591 trips that potentially could use an Orange St. park and ride lot (or 20.5% of the 17,522 users of the Exit 13 off-ramp).

We summarize the results of demographic and trip data for all the “auto” trips in Table 33. We find that there are wide variations depending on the destination. For instance, around 50% of those who had destinations at Washington St., Military Park, and Newark Penn Station had their destination as “work”, compared to just under 30% of those who were near Norfolk St. and Warren St. In terms of racial/ethnic makeup, between 22% and 42% of the population was Black (not Hispanic or Latino) and between 12% and 17% were Hispanic/Latino. The median household income ranged between \$95,000 and \$131,000. The percentage of people who had exactly one vehicle available in their household ranged between 27% and 36%, and around 1% had no vehicle available. Around 66% to 80% of the sample was employed, the majority of whom worked in person. We also analyzed the time of day that the trip took place. A plurality of the sample started their trip between 6AM and 10AM, which we define as AM peak hours.

Table 34 breaks out results for automobile drivers, Table 35 has results for automobile passengers, and Table 36 has results for the individuals labeled as using public transit. We also show the destinations on two maps, one for all the trips by automobile and one for all labeled public transit trips. These are in Figure 4 and Figure 5.

**Table 33: Summary Statistics for Auto Drivers and Passengers (Replica data)
(N=3128)**

Destination	Norfolk St. (N=690)	%	Warren St. (N=1611)	%	Washing ton St. (N=560)	%	Military Park/ Newark Penn Station (N=267)	%
Gender: Male	298	43.2	745	46.2	256	45.7	160	59.9
Median Age	48		38		45		46	
Race: White, not Hispanic or Latino	235	34.1	584	36.3	175	31.3	140	52.4
Race: Black, not Hispanic or Latino	261	37.8	590	36.6	239	42.7	59	22.1
Hispanic or Latino	120	17.4	266	16.5	78	13.9	32	12.0
Employed	455	65.9	1080	67.0	426	76.1	212	79.4
Working in person	313	45.4	643	39.9	313	55.9	166	62.2
Median Household Income	99,471		95,924		98,914		131,830	
Number of vehicles: zero	11	1.6	21	1.3	11	2.0	4	1.5
Number of vehicles: one	213	30.9	557	34.6	200	35.7	72	27.0
Home county: Essex	441	63.9	1039	64.5	428	76.4	142	53.2
Trip Purpose: Work	203	29.4	463	28.7	277	49.5	137	51.3
Trip Purpose: Shop	223	32.3	359	22.3	115	20.5	34	12.7
Trip Purpose: School	16	2.3	321	19.9	52	9.3	7	2.6
Trip Duration in minutes: Median	17		18		18		27	
Early AM (before 6AM)	32	4.6	94	5.8	29	5.2	15	5.6
AM Peak (6AM-10AM)	229	33.2	743	46.1	291	52.0	126	47.2
Midday (10AM-3PM)	198	28.7	374	23.2	112	20.0	49	18.4
PM Peak (3PM-7PM)	175	25.4	308	19.1	106	18.9	62	23.2
Evening (after 7PM)	56	8.1	92	5.7	22	3.9	15	5.6

Table 34: Summary Statistics for Auto Drivers (Replica data) (N=2169)

Destination	Norfolk St.		Warren St.		Washington St.		Military Park/ Newark Penn Station		Total	
	(N=372)	%	(N=1116)	%	(N=477)	%	(N=204)	%	(N=2169)	%
Gender: Male	152	40.86	518	46.42	216	45.28	125	61.27	1011	46.61
Median Age	47		37		45		48		43	
Race: White, not Hispanic or Latino	148	39.78	448	40.14	152	31.87	110	53.92	858	39.56
Race: Black, not Hispanic or Latino	112	30.11	359	32.17	199	41.72	42	20.59	712	32.83
Hispanic or Latino	65	17.47	181	16.22	67	14.05	24	11.76	337	15.54
Employed	264	70.97	760	68.10	363	76.10	165	80.88	1552	71.55
Working in person	199	53.49	435	38.98	268	56.18	131	64.22	1033	47.63
Median Household Income	109,527		100,575		97,414		134,564		103,843	
Income: < \$50,000	76	20.43	260	23.30	105	22.01	31	15.20	472	21.76
Income: \$50,000-\$100,000	84	22.58	292	26.16	142	29.77	50	24.51	568	26.19
Income: > \$100,000	207	55.65	560	50.18	230	48.22	123	60.29	1120	51.64
Number of vehicles: zero	1	0.27	4	0.36	2	0.42	1	0.49	8	0.37
Number of vehicles: one	110	29.57	375	33.60	177	37.11	54	26.47	716	33.01
Home county: Essex	219	58.87	688	61.65	359	75.26	105	51.47	1371	63.21
Trip Purpose: Work	131	35.22	308	27.60	241	50.52	109	53.43	789	36.38
Trip Purpose: Shop	113	30.38	258	23.12	92	19.29	25	12.25	488	22.50
Trip Purpose: School	8	2.15	221	19.80	42	8.81	0	0.00	271	12.49
Trip Duration in minutes: Median	20		19		18		28		20	
Early AM (before 6AM)	18	4.84	67	6.00	25	5.24	10	4.90	120	5.53
AM Peak (6AM-10AM)	132	35.48	513	45.97	247	51.78	97	47.55	989	45.60
Midday (10AM-3PM)	105	28.23	258	23.12	95	19.92	33	16.18	491	22.64
PM Peak (3PM-7PM)	88	23.66	212	19.00	92	19.29	50	24.51	442	20.38
Evening (after 7PM)	29	7.80	66	5.91	18	3.77	14	6.86	127	5.86

Table 35: Summary Statistics for Auto Passengers (Replica data) (N=959)

Destination	Norfolk St.		Warren St.		Washington St.		Military Park/ Newark Penn Station		Total	
	(N=318)	%	(N=495)	%	(N=83)	%	(N=63)	%	(N=959)	%
Gender: Male	146	45.91	227	45.86	40	48.19	35	55.56	448	46.72
Median Age	48		38		41		38		43	
Race: White, not Hispanic or Latino	87	27.36	136	27.47	23	27.71	30	47.62	276	28.78
Race: Black, not Hispanic or Latino	149	46.86	231	46.67	40	48.19	17	26.98	437	45.57
Hispanic or Latino	55	17.30	85	17.17	11	13.25	8	12.70	159	16.58
Employed	191	60.06	320	64.65	63	75.90	47	74.60	621	64.75
Working in person	114	35.85	208	42.02	45	54.22	35	55.56	402	41.92
Median Household Income	90,863		89,674		117,686		120,240		91,622	
Income: < \$50,000	88	27.67	139	28.08	16	19.28	13	20.63	256	26.69
Income: \$50,000-\$100,000	92	28.93	129	26.06	18	21.69	14	22.22	253	26.38
Income: > \$100,000	130	40.88	224	45.25	49	59.04	36	57.14	439	45.78
Number of vehicles: zero	10	3.14	17	3.43	9	10.84	3	4.76	39	4.07
Number of vehicles: one	103	32.39	182	36.77	23	27.71	18	28.57	326	33.99
Home county: Essex	222	69.81	351	70.91	69	83.13	37	58.73	679	70.80
Trip Purpose: Work	72	22.64	155	31.31	36	43.37	28	44.44	291	30.34
Trip Purpose: Shop	110	34.59	101	20.40	23	27.71	9	14.29	243	25.34
Trip Purpose: School	8	2.52	100	20.20	10	12.05	7	11.11	125	13.03
Trip Duration in minutes: Median	15		17		17		22		17	
Early AM (before 6AM)	14	4.40	37	7.47	4	4.82	5	7.94	60	6.26
AM Peak (6AM-10AM)	97	30.50	230	46.46	44	53.01	29	46.03	400	41.71
Midday (10AM-3PM)	93	29.25	116	23.43	17	20.48	16	25.40	242	25.23
PM Peak (3PM-7PM)	87	27.36	96	19.39	14	16.87	12	19.05	209	21.79
Evening (after 7PM)	27	8.49	26	5.25	4	4.82	1	1.59	58	6.05

Table 36: Summary Statistics for Public Transit users (Replica data) (N=463)

Destination	NYC (N=399)	%	Essex (N=9)	%	Hudson(N=18)	%	Other (N=37)	%	Total (N=463)	%
Gender: Male	245	61.40	3	33.33	12	66.67	25	67.57	285	61.56
Median Age	46		46		41.5		50		46	
Race: White, not Hispanic or Latino	198	49.62	1	11.11	7	38.89	14	37.84	220	47.52
Race: Black, not Hispanic or Latino	58	14.54	5	55.56	5	27.78	5	13.51	73	15.77
Race: Asian, not Hispanic or Latino	95	23.81	1	11.11	5	27.78	5	13.51	106	22.89
Hispanic or Latino	37	9.27	2	22.22	1	5.56	13	35.14	53	11.45
Median Household Income	229,549		44,705		159,002		92,204		218,618	
Income: < \$50,000	25	6.27	5	55.56	0	0.00	12	32.43	42	9.07
Income: \$50,000-\$100,000	59	14.79	4	44.44	7	38.89	7	18.92	77	16.63
Income: > \$100,000	315	78.95	0	0.00	11	61.11	18	48.65	344	74.30
Employed	397	99.50	9	100.00	18	100.00	36	97.30	460	99.35
Working in person	397	99.50	9	100.00	18	100.00	36	97.30	460	99.35
Number of vehicles: zero	40	10.03	8	88.89	3	16.67	27	72.97	78	16.85
Number of vehicles: one	103	25.81	0	0.00	3	16.67	1	2.70	107	23.11
Home county: Essex	339	84.96	8	88.89	10	55.56	33	89.19	390	84.23
Trip Purpose: Work	397	99.50	9	100.00	18	100.00	36	97.30	460	99.35
Trip Duration in minutes: Median	81		59		81		92		81	
Early AM (before 6AM)	18	4.51	0	0.00	6	33.33	1	2.70	25	5.40
AM Peak (6AM-10AM)	381	95.49	9	100.00	12	66.67	36	97.30	438	94.60
Midday (10AM-3PM)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
PM Peak (3PM-7PM)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Evening (after 7PM)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

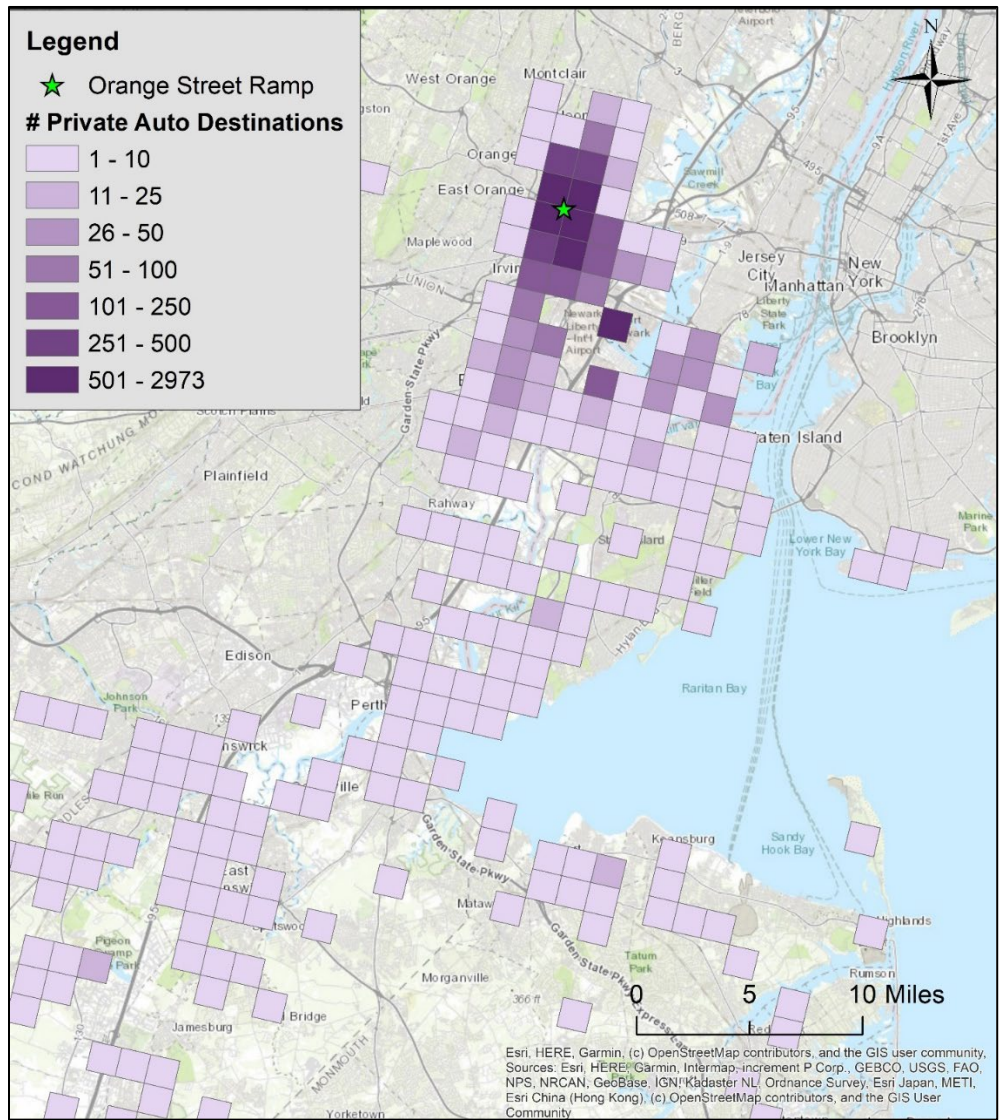


Figure 4: Number of destinations in Census Block Groups per square mile for private auto trips (Replica data)

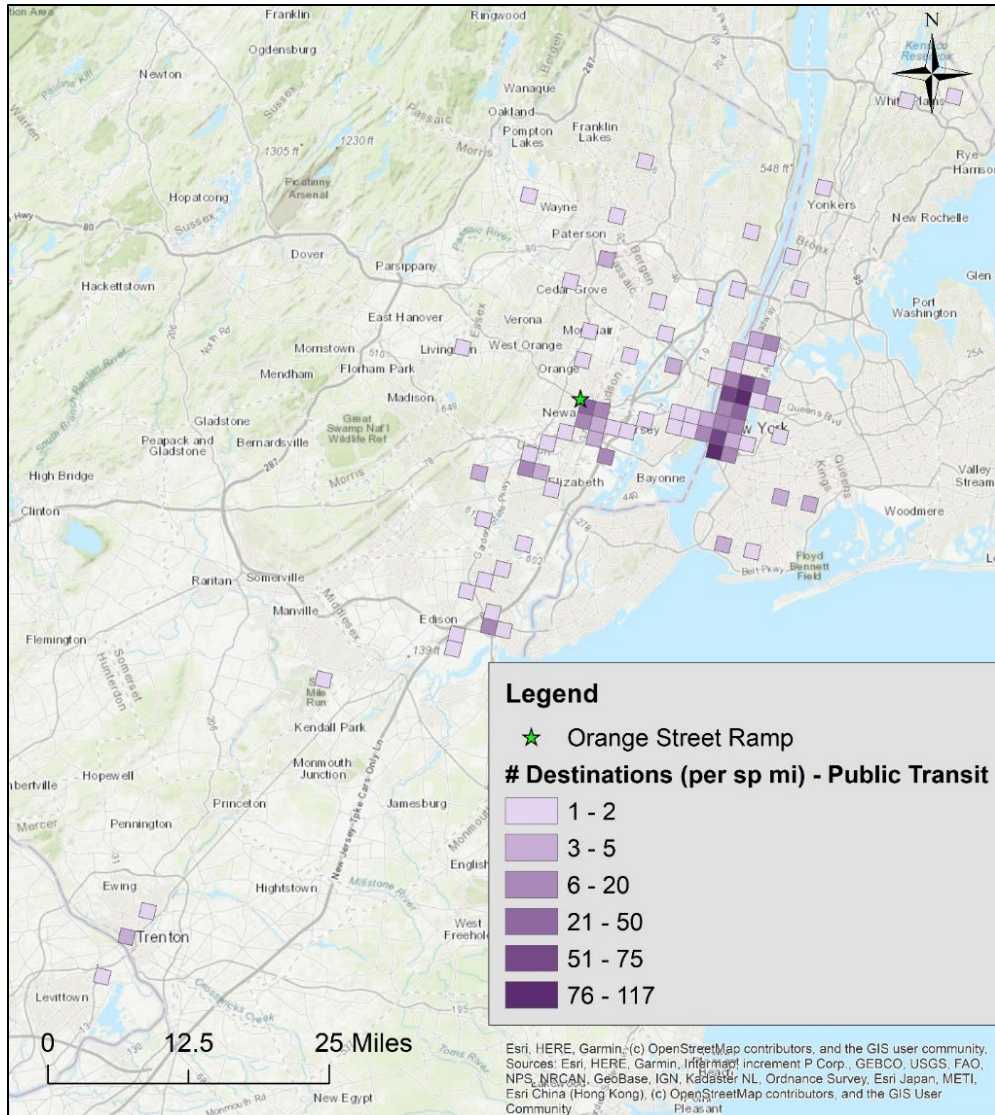


Figure 5: Public transit destinations in Census Block Groups per square mile (Replica data)

Of those labeled as “public transit” 399 or 86% are destined for New York City (see Table 36). Those heading to New York City have the highest median household income of \$229,549 compared to those headed elsewhere. This is higher than the auto drivers and passengers and exceeds the median income of NLR customers. Sixty-two percent are male, 48% are non-Hispanic white, 11% are Hispanic/Latino, 99% are employed (all of whom are working in person), and 17% have no car available. The majority are labeled as work trips, ranging from 97-100% depending on the destination. The median trip duration in minutes is 59 minutes for those ending in Essex County, 81 minutes for those going to Hudson County, 81 minutes for those traveling to New York City, and 92 minutes for those who have other destinations.

The median trip duration for auto trips was 18 minutes (average 24 minutes) while the median trip duration for public transit trips was 81 minutes (average 86 minutes). The median trip distance is 7.2 miles (average 13.1 miles) for drivers and 19.4 miles (average 21.5 miles) for public transit riders. This amounts to 41,050.2 total auto miles and 9958.7 total public transit miles for the combined 3,591 trips.

While our station profiles in Appendix D provide a snapshot of customers who boarded at each station, in this case we want to understand the profile of customers alighting at the stations between Orange Street and Newark Penn Station. Summary statistics are shown in Table 37 and Table 38 for individual stations and in Table 39 for all downtown Newark stations combined. There were 595 surveyed respondents alighting at these stations the majority at Newark Penn Station (56%). Among the respondents, 57% were male, 66% were Hispanic/Latino, 22% were Black/African American, 42% had a household income of less than \$50,000, 66% were employed, and 29% did not own a car or have one available to them. Among the 392 employed respondents, 38% of them worked from home at least one day the week that they responded to the survey.

Table 37: Summary statistics for customers alighting at Norfolk St., Warren St. and Washington St. stations (NLR survey data)

	Norfolk St. (N=22)			Warren St. (N=117)			Washington St. (N=64)		
	Frequency	Weighted	Weighted Percent	Frequency	Weighted	Weighted Percent	Frequency	Weighted	Weighted Percent
Gender: Male	12	10.49	55.95	68	103.29	74.48	28	25.1	48.88
Gender: Female	7	5.92	31.57	42	31.12	22.44	33	25.06	48.80
Race: White, not Hispanic or Latino	2	1.6	8.53	17	10.06	7.25	10	5.17	10.07
Race: Black, not Hispanic or Latino	5	5.86	31.25	7	5.66	4.08	11	6.41	12.48
Ethnicity: Hispanic or Latino, any race	4	3.6	19.20	25	16.88	12.17	19	17.66	34.39
Employed (part and/or full time)	13	6.22	33.17	41	46.51	33.54	42	38.74	75.44
WFH at least once in the last seven days	0	0	0.00	31	38.76	27.95	27	22.21	43.25
(Percentage of workers working from home)			0.00			83.34			57.33
Household Income: Under \$50,000	13	12.51	66.72	50	37.18	26.81	21	25.24	49.15
Household Income: \$50,000-\$100,000	2	1.81	9.65	28	38.86	28.02	15	11.24	21.89
Household Income: Over \$100,000	2	1.07	5.71	19	31.86	22.97	15	10.1	19.67
Number of vehicles: zero	9	10.71	57.12	37	29.53	21.29	18	18.03	35.11
Number of vehicles: one	2	1.45	7.73	29	22.34	16.11	16	10.44	20.33
Destination: Work	6	4.27	22.77	15	9.46	6.82	24	21.42	41.71
Destination: Shop	3	3.94	21.01	1	0.43	0.31	0	0	0.00
Destination: School	2	0.41	2.19	96	108.03	77.89	29	21.92	42.69
Destination: Home	2	2.89	15.41	3	19.45	14.02	4	1.87	3.64

Table 38. Summary statistics for customers alighting at Military Park and Newark Penn stations (NLR survey data)

	Military Park (N=57)			Newark Penn (N=335)		
	Frequency	Weighted	Weighted Percent	Frequency	Weighted	Weighted Percent
Gender: Male	23	38.04	58.60	166	124.01	48.92
Gender: Female	31	23.61	36.37	143	107.16	42.28
Race: White, not Hispanic or Latino	9	6.56	10.11	64	32.99	13.02
Race: Black, not Hispanic or Latino	21	16.25	25.03	72	55.95	22.07
Ethnicity: Hispanic or Latino, any race	12	28.11	43.31	76	65.88	25.99
Employed (part and/or full time)	35	29.03	44.72	261	189.86	74.90
WFH at least once in the last seven days (Percentage of workers working from home)	17	16.33	25.16	167	122.11	48.18
			56.25			64.32
Household Income: Under \$50,000	35	46.55	71.71	118	110.32	43.52
Household Income: \$50,000- \$100,000	9	6.4	9.86	79	46.91	18.51
Household Income: Over \$100,000	5	3.75	5.78	81	50.53	19.94
Number of vehicles: zero	26	22.93	35.33	82	65.62	25.89
Number of vehicles: one	15	12.73	19.61	108	75.67	29.85
Destination: Work	19	16.65	25.65	196	139.33	54.97
Destination: Shop	3	2.34	3.60	13	6.18	2.44
Destination: School	2	1.87	2.88	23	15.96	6.30
Destination: Home	11	11.35	17.49	40	26.86	10.60

Table 39. Summary statistics for all five downtown Newark stations (NLR survey data)

	All five stations (N=595)		
	Frequency	Weighted	Weighted Percent
Gender: Male	297	300.93	57.08
Gender: Female	256	192.87	36.59
Race: White, not Hispanic or Latino	102	56.38	10.69
Race: Black, not Hispanic or Latino	116	90.13	17.10
Ethnicity: Hispanic or Latino, any race	136	132.13	25.06
Age: 18-24	166	162.87	30.90%
Age: 25-34	141	126.47	23.99%
Age: 35-44	76	60	11.38%
Age: 45-54	70	54.74	10.38%
Age: 55-61	60	43.26	8.21%
Age: 62-64	21	35.72	6.78%
Age: 65 or over	29	15.85	3.01%
Employed (part and/or full time)	392	310.36	58.87
WFH at least once in the last seven days (Percentage of workers working from home)	242	199.41	37.83 64.25
Household Income: Under \$50,000	237	231.80	43.97
Household Income: \$50,000- \$100,000	133	105.22	19.96
Household Income: Over \$100,000	122	97.31	18.46
Number of Vehicles: zero	172	146.82	27.85
Number of Vehicles: one	170	122.63	23.26
Destination: Work	260	191.13	36.26
Destination: Shop	20	12.89	2.45
Destination: School	152	148.19	28.11
Destination: Home	60	62.42	11.84

To understand the likelihood of whether those using Exit 13 would park at Orange St. station, we compare the demographic profiles of those arriving by car with those alighting from the NLR. There are substantial difference in household income levels between the various samples (Figure 6). Those using the NLR tend to have lower incomes than those who are in our Replica samples, which are broken into “auto drivers”, “auto passengers”, and “public transit”. Of note, those in our Replica sample who use public transit have the highest income level; most of them work in New York City and are taking either NJ TRANSIT or PATH from Newark Penn or Harrison stations; the data does not identify at which station they board transit.

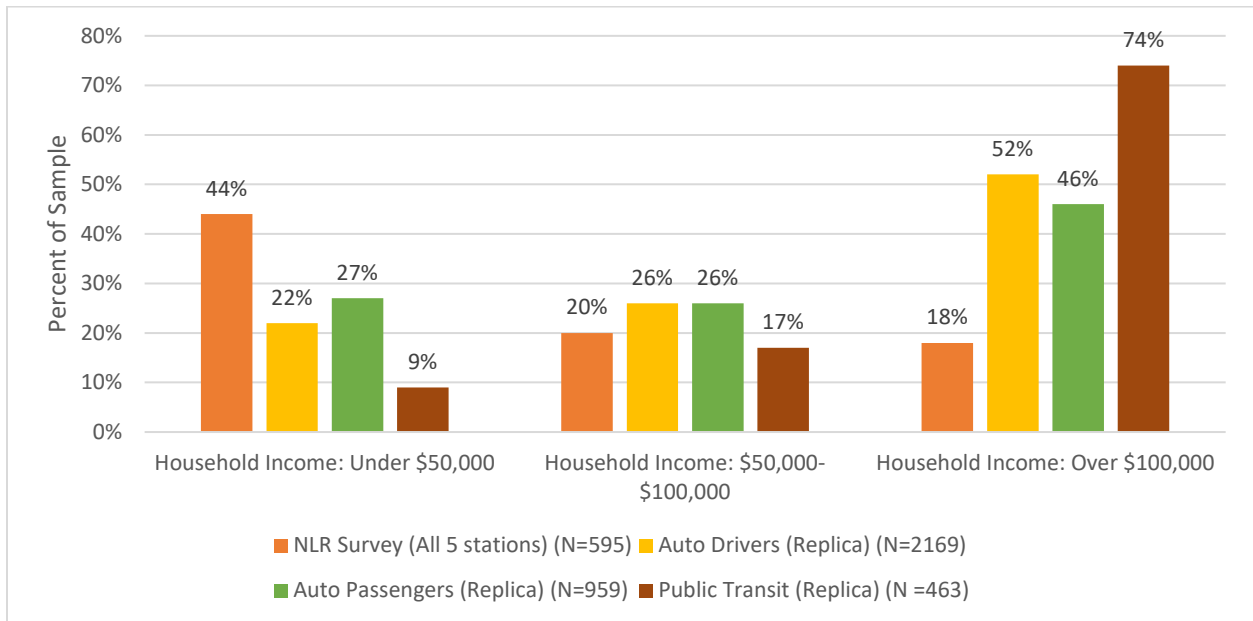


Figure 6. Comparison of NLR survey sample with Replica data by household income, for trips to downtown Newark.

The racial and ethnic composition of our NLR sample also differs from the Replica data. In general, there are more non-white users of the NLR, only about 10% of those alighting in downtown Newark identify as white (Figure 7). Our Replica samples are mainly white, about 45% of those labeled as taking public transit (again, mainly headed to New York City).

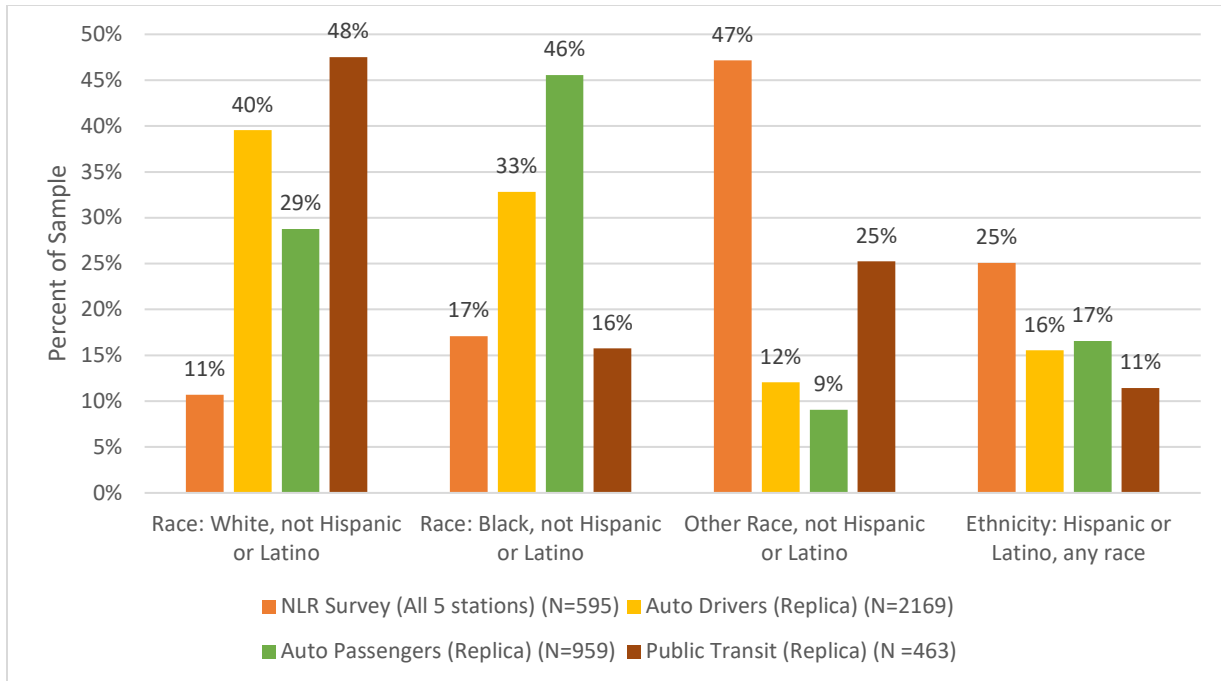


Figure 7. Comparison of NLR survey sample with Replica data by race and ethnicity for trips to downtown Newark.

Vehicle ownership rates also differ between our samples. Nearly 28% of those using the NLR to disembark in downtown Newark are from zero-car households, and an additional 23% are from one-car households (Figure 8). Not surprisingly, those who are labeled “auto drivers” are not from zero-car households. Those labeled as taking public transit have a relatively lower rate of car ownership (17% from zero-car households and 23% from one-car households).

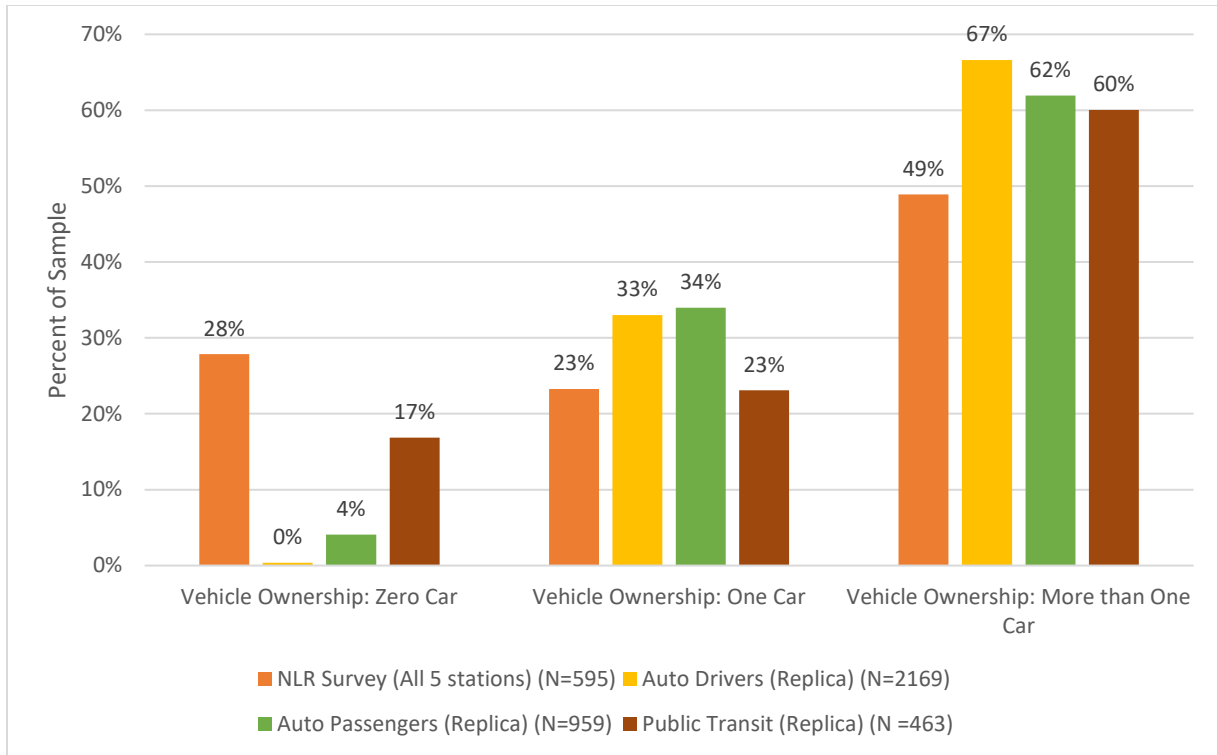


Figure 8. Comparison of NLR survey sample with Replica data by vehicle ownership, for trips to downtown Newark.

Almost all of those in our Replica sample who are labeled as public transit are employed and work in person. This may be a relic of the data as this represents one trip on a given day when they were traveling to their job (Figure 9). About 60% of our NLR sample is employed and auto drivers and passengers have a slightly higher level of employment (72% and 65% respectively). While the Replica data also reports on whether the individual worked at home, this is not comparable to the data we have on NLR customers.

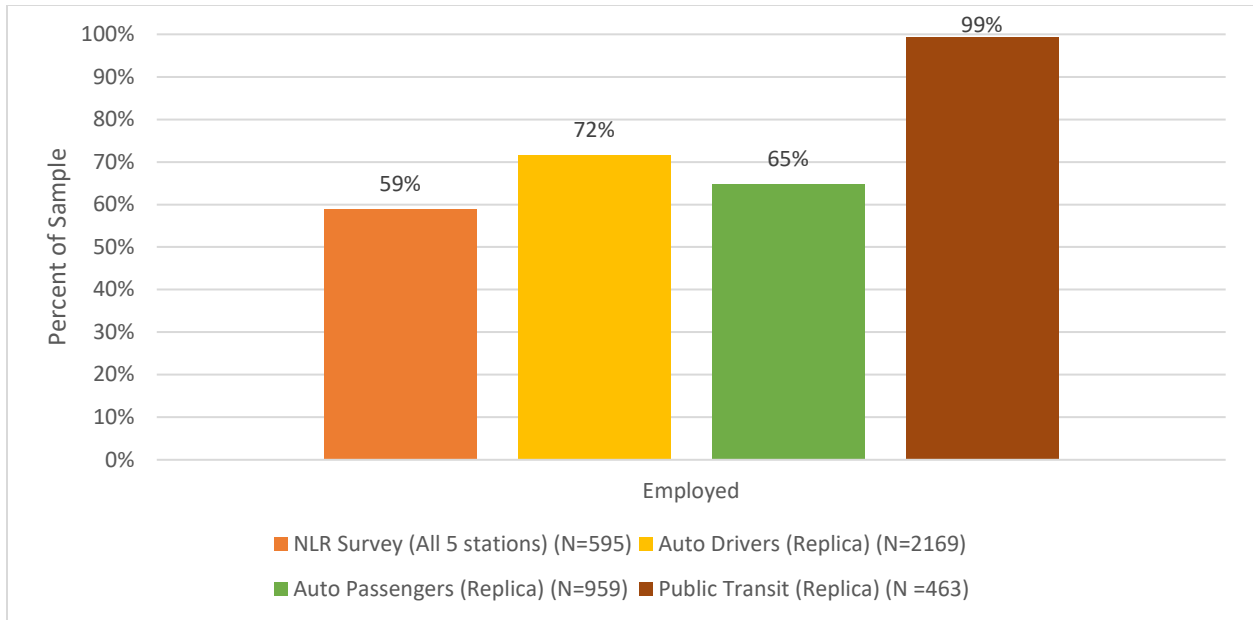


Figure 9. Comparison of NLR survey sample with Replica data by employment status, for trips to downtown Newark.

In Figure 10, we display the gender split between male and female NLR customers and the Replica data. Slightly more customers identify as male than female among NLR customers (57% to 37%, respectively). Those that drive and/or are auto passengers in the Replica data are women (53% vs. 47%), while those labeled as taking public transit are over 60% male.

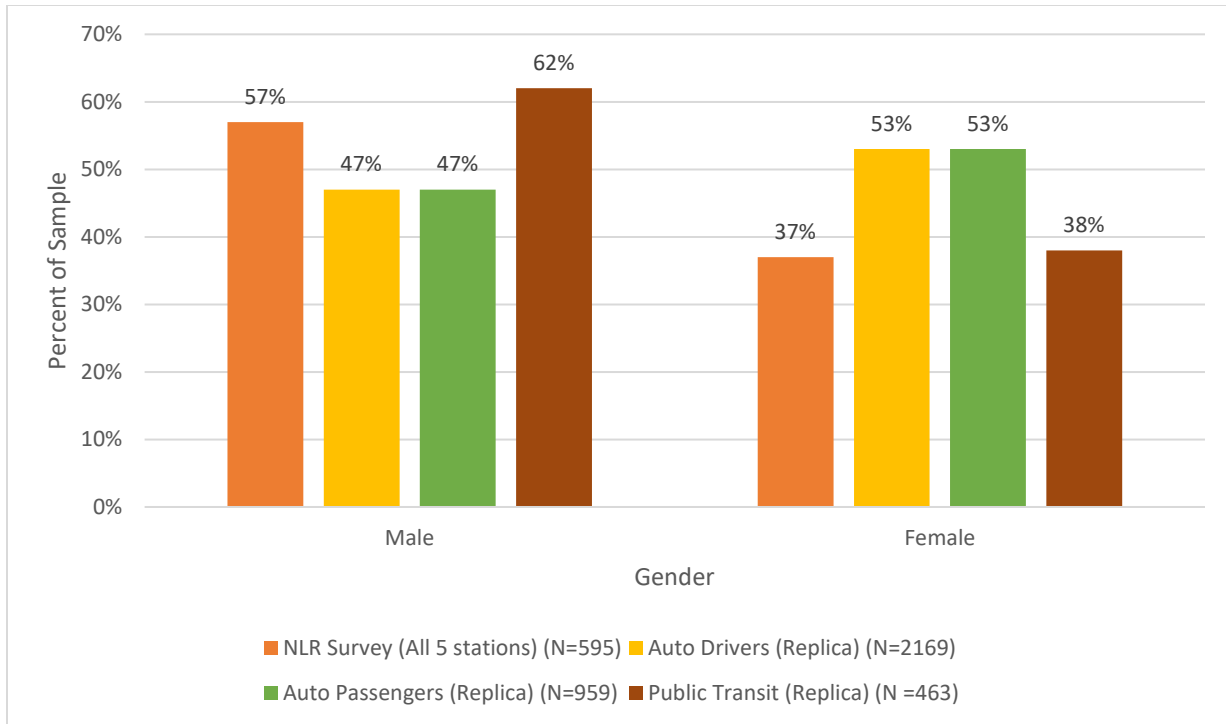


Figure 10. Comparison of NLR survey sample with Replica data by male/female reported gender, for trips to downtown Newark.

Most of the customers on the NLR are below the age of 35 (about 54%) while those in the Replica data are generally older (see Figure 11). This is partly due to the NLR serving two universities in downtown Newark as 19% of our sample consists of students (see Table 20) and 18% reported college/university as their destination (see Table 8 and Figure 12). Those labeled as using public transit are generally older, nearly 50% between 35-54 years old.

Trip destinations show some variance between the samples. While our NLR survey asked about destinations, the Replica data identifies trip purpose, so these may not be strictly comparable. Results for work, shopping, and school trips are shown in Figure 12. The individuals labeled as public transit in the Replica data stand out as only being work trips; work trips are similar for our NLR customers and those driving and being driven (30% to 36%). The fraction of NLR customers going shopping is small and for those driving about 22% to 25%. The NLR served more customers traveling to school, nearly 30% compared to slightly over 10% driving.

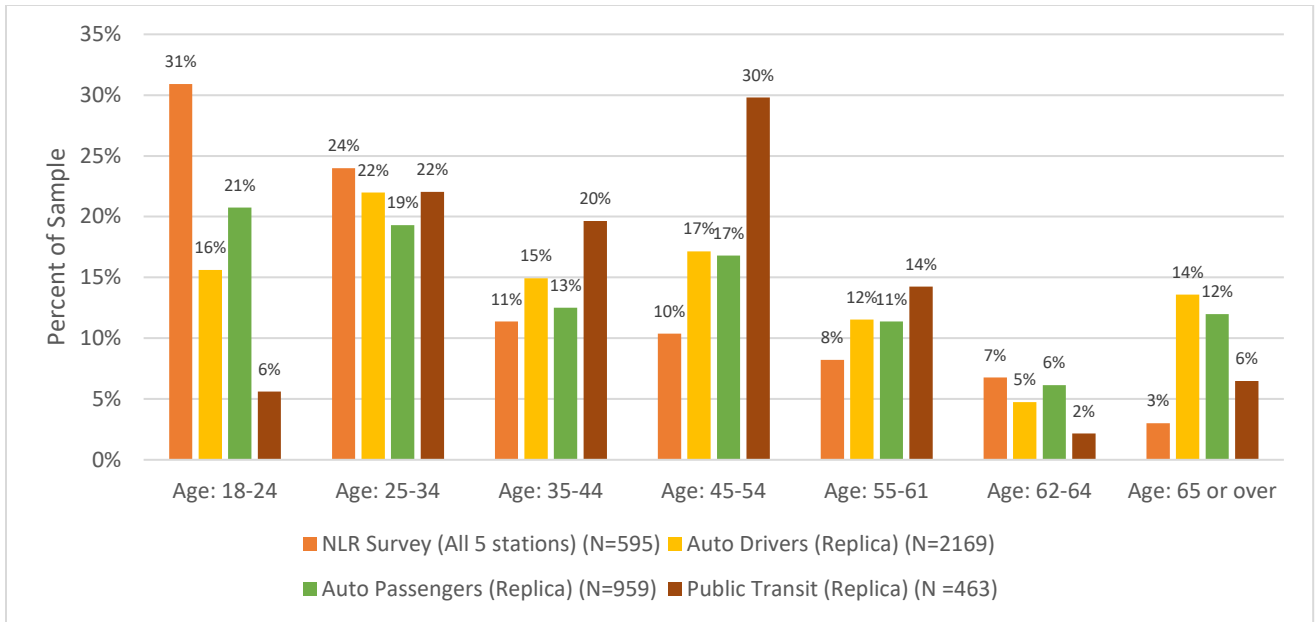


Figure 11. Comparison of NLR survey sample with Replica data by age group, for trips to downtown Newark.

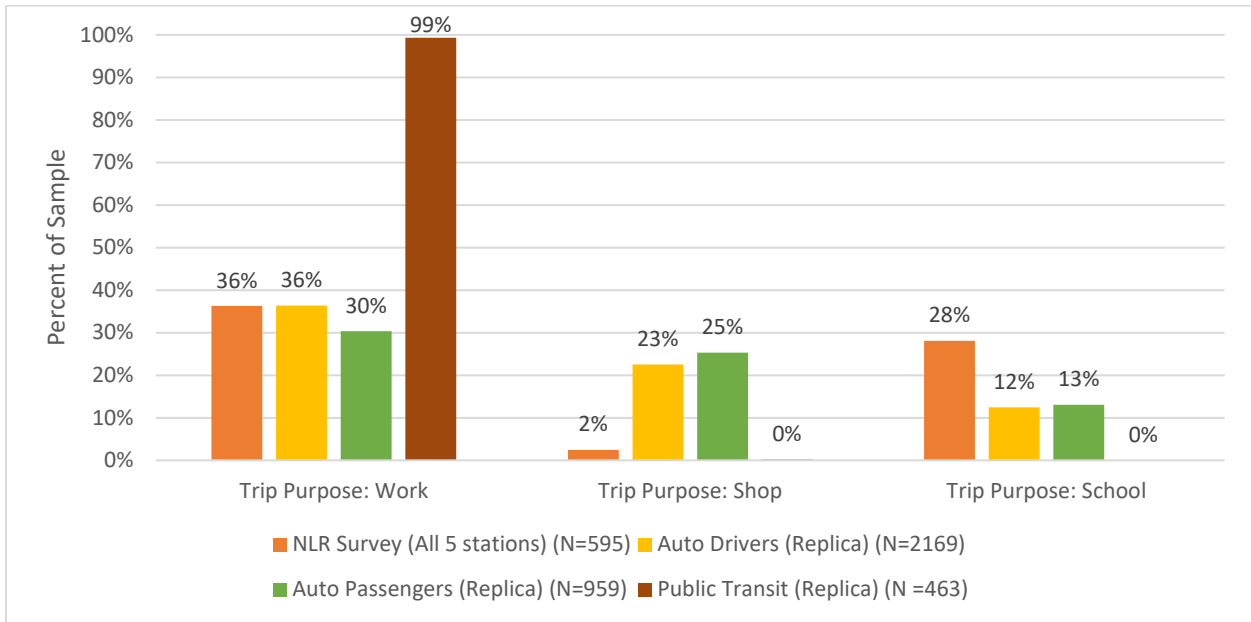


Figure 12. Comparison of NLR survey sample with Replica data by trip destination/purpose, for trips to downtown Newark.

RECOMMENDATIONS

Our analysis provides a statistically representative snapshot of customers using the NLR. We provide detailed summary statistics for every question on our survey and also

provide graphical profiles for each station (except those along the Broad St. line that are aggregated into one profile).

In general, most customers board and/or alight at Newark Penn station. The majority of customers access and egress the NLR by walking, very few drive or are dropped off (less than 5%). About 37% access the NLR via another transit mode and a similar percent transfer to another transit mode to get to their final destination. About 1/3 of trips are work trips and about 18% are college/university trips. The population of users is very diverse; while mostly under the age of 35, about 29% are Hispanic and 36% identify as Black or African-American, 24% identify as White. Very few (about 5%) report not speaking English well; the most common language spoken at home is Spanish followed by Gujarati and a variety of other languages spoken on the Indian sub-continent. The household income level is generally lower than average levels in New Jersey. About 36% have no other way to travel other than the NLR with about 42% of the sample reporting no vehicle available in the home. More detail on all of these metrics are available in Appendix C (for all stations combined) and Appendix D (for each station).

We also examined how the COVID-19 pandemic has affected work trips. We estimated that there are about 30% fewer work trips than before the pandemic, based on the sample of those using the NLR for work trips and the days that they reported working at home. We estimated a binomial logit model to determine demographic factors associated with being more likely to work at home. Results showed that these customers were more affluent than those who commuted more frequently.

Our primary objective was to determine whether a park and ride lot at the Orange St. station would be feasible. This station is near the exit 13 off-ramp from I-280 and can provide a relatively fast trip to downtown Newark locations, as well as Newark Penn station for those transferring to rail lines and PATH. We used Replica data provided by NJ TRANSIT and compared the demographic profiles of those with destinations proximate to the five downtown Newark NLR stations. We compared these with those alighting from those five stations.

Our hypothesis is that if the demographic profiles are similar, there is a greater likelihood that these individuals would park at the Orange St. station and complete their journey via the NLR. In general, the two populations differ substantially. Individuals currently driving to downtown Newark tend to have higher levels of household income, are not of minority ethnic groups, own a car, and are older. More males tend to use the NLR and more females tend to drive. Levels of employment are similar. The Replica data also identified public transit users and our assumption is that these individuals drive to a rail station as most have destinations in New York City; this population tends to have even higher levels of income, is less ethnically diverse, more males, and is older, than other groups. A small fraction (17%) is from zero car households. This latter result suggests they are taking public transit for their entire trip and does suggest a possible issue with the Replica data unless they are on a bus using Exit 13.

In fact, the major limitation of our research is that we were unable to survey drivers using Exit 13. The Replica data is a synthetic sample, and while representative of the Census Block Groups from which individuals travel, could have various anomalies that we are unaware of. Having said this, these types of data are becoming increasingly common for transportation planning.

Given the difference between the two populations it is unlikely that many would utilize a park and ride lot at the Orange St. station. To fully understand how many drivers would transfer to the NRL, we would need to have far more detailed data including information on current parking costs for each driver and relative travel times to their final destination (including walking from their egress station). A stated preference survey of drivers is one method to obtain data. Stated preference surveys provide hypothetical trade-offs to respondents and allow analysts to estimate the relative trade-offs between those options, for example, travel time versus costs, as well as to estimate changes in behavior. This could be done by distributing surveys on vehicle dashboards at parking garages in downtown Newark. Given the increasing difficulty of obtaining sufficient representative samples via surveys, this would be a challenging task.

APPENDIX A: SURVEY INSTRUMENTS

Online version

NJT Light Rail survey 2022

Start of Block: Default Question Block



Q1

You are invited to participate in a research study being conducted by Rutgers University. The research team is seeking to learn more about the travel patterns and experiences of persons using the Newark Light Rail line. Your input will provide the research team and NJ TRANSIT with useful information on your experiences using this service. This survey should take you approximately 5-10 minutes to complete. Your participation in the survey is completely voluntary and there are no risks to participation. You may skip any questions you are not comfortable answering. If at any time you wish to stop participating you are free to do so with no penalty to you. This research is confidential. Confidential means that the research records will include some information about you based on your answers to the survey. However, the research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the full set of data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. If you have any questions at any time about the research or the procedures described above, or if you need assistance in completing the survey, you may contact the study principal investigator Robert Noland, Tel: 848-932-2859, Email: rnoland@rutgers.edu. If you have any questions about your rights as a participant in this study, you may contact the Rutgers IRB or the Rutgers Human Subjects Protection Program via phone at (973) 972-3608 or (732) 235-2866 or (732) 235-9806 OR via email irboffice@research.rutgers.edu, or you can write us at 335 George Street, Liberty Plaza Suite 3200, New Brunswick, NJ 08901. **Please note by completing the survey you can be entered into a drawing for a chance to win a \$100 gift card. To qualify for the drawing, you must complete the contact information section located at the end of the survey.**

1. **YES, I consent to take the survey (1)**
2. **NO, I do not consent to take the survey (2)**

Skip To: End of Survey If You are invited to participate in a research study being conducted by Rutgers University. The r... = NO, I do not consent to take the survey

Page Break

Q2 IMPORTANT MESSAGE BEFORE YOU BEGIN THE SURVEY: Please answer all questions for the trip you were taking when you received this survey.

Page Break



Q3 What time did you board the Newark Light Rail for this trip?

	Hour	Minute	AM or PM?
Please select: (1)	▼ 1 (1 ... 12 (12))	▼ 1 (1 ... 00 (60))	▼ AM (1 ... PM (2))

Page Break



Q4 At which station did you board the Newark Light Rail?

3. Atlantic St. (1)
4. Bloomfield Ave. (2)
5. Branch Brook Park (3)
6. Broad St. Station (4)
7. Davenport Ave. (5)
8. Grove St. (6)
9. Military Park (7)
10. Newark Penn Station (8)
11. NJPAC / Center St. (9)
12. Norfolk St. (10)
13. Orange St. (11)
14. Park Ave. (12)
15. Riverfront Stadium (13)
16. Silver Lake (14)
17. Warren St. / NJIT (15)
18. Washington Park (16)
19. Washington St. (17)

Page Break



Q5 How did you get to the Newark Light Rail station where you boarded? (CHOOSE ONE ONLY)

- 20. Walked (1)
- 21. Drove (2)
- 22. Another person dropped me off at the station (3)
- 23. Bus (please write in which bus route) (4)

- 24. Another Newark Light Rail train (please write in which station you got on the first train) (5)

- 25. PATH train (6)
- 26. NJ TRANSIT train (please write in which station you got on the first train) (7)

- 27. Bicycle (8)
- 28. Uber/Lyft/Via or other App-based service (9)
- 29. Taxi (10)
- 30. e-Scooter (11)
- 31. Other (12) _____

Page Break



Q6 The place you **CAME FROM** is... (**CHOOSE ONE**)

- 32. Home (1)
- 33. Work (2)
- 34. College or University (3)
- 35. School (K-12) (4)
- 36. Shopping (5)
- 37. Personal Business (6)
- 38. Medical or Dental Visit (7)
- 39. Entertainment or Recreational Activity (8)
- 40. Visit Family or Friends (9)
- 41. Other (10) _____

Page Break _____

Q7 What is the address of the place you **CAME FROM**?

42. Address OR Intersection (1)

43. City/Town (2) _____

44. State (3) _____

45. Zip Code (4) _____

Page Break _____



Q8 At what station did you get off this Newark Light Rail? (*This station should be different than the station where you boarded*)

- 46. Atlantic St. (1)
- 47. Bloomfield Ave. (2)
- 48. Branch Brook Park (3)
- 49. Broad St. Station (4)
- 50. Davenport Ave. (5)
- 51. Grove St. (6)
- 52. Military Park (7)
- 53. Newark Penn Station (8)
- 54. NJPAC / Center St. (9)
- 55. Norfolk St. (10)
- 56. Orange St. (11)
- 57. Park Ave. (12)
- 58. Riverfront Stadium (13)
- 59. Silver Lake (14)
- 60. Warren St. / NJIT (15)
- 61. Washington Park (16)
- 62. Washington St. (17)

Page Break



Q9 After getting off the Newark Light Rail train, how did you get to your final destination? **(Please answer for the trip you took when you received this survey - CHOOSE ONLY ONE)**

63. Walked (1)

64. Drove (2)

65. Another person picked me up at the station (3)

66. Bus (please write in which bus route) (4)

67. Another Newark Light Rail train (please write in which station you got off the second train) (5) _____

68. PATH train (6)

69. NJ TRANSIT train (please write in which station you got off the second train) (7)

70. Bicycle (8)

71. Uber/Lyft/Via or other App-based service (9)

72. Taxi (10)

73. e-Scooter (11)

74. Other (12) _____

Page Break



Q10 The place you were **GOING TO** was... **(CHOOSE ONE)**

75. Home (1)

76. Work (2)

77. College or University (3)

78. School (K-12) (4)

79. Shopping (5)

80. Personal Business (6)

81. Medical or Dental Visit (7)

82. Entertainment or Recreational Activity (8)

83. Visit Family or Friends (9)

84. Other (10) _____

Page Break _____

Q11 What is the address of the place you were **GOING TO? YOUR FINAL DESTINATION** (NOT YOUR STARTING ADDRESS)

85. Address OR Intersection (1) _____

86. City/Town (2) _____

87. State (3) _____

88. Zip Code (4) _____

Page Break



Q12 Which of the following statements best applies to you? **(CHOOSE ONLY ONE)**

89. I have no other way to travel, so I use the Newark Light Rail (1)

90. I use the Newark Light Rail because it is the best choice for me, even though there are other ways I could travel (2)

91. I usually use another type of transportation, but I occasionally take the Newark Light Rail (3)

Page Break



Q13 What type of ticket did you use for this trip? **(CHOOSE ONE ONLY)**

- 92. Light Rail Monthly Pass (1)
- 93. Rail Monthly Pass (2)
- 94. Bus Monthly Pass (3)
- 95. FLEXPASS - 20 one way tickets (4)
- 96. One-way Ticket (5)
- 97. Underground fare - (valid only between Warren St, Washington St, Military Park, and Newark Penn Station) (6)
- 98. Reduced Fares for Senior Citizens & Customers with disabilities (7)
- 99. Other (*Please specify*) (8) _____

Page Break



Q14 How often do you use the Newark Light Rail? **(CHOOSE ONE ONLY)**

- 100. 7 days/week (1)
- 101. 6 days/week (2)
- 102. 5 days/week (3)
- 103. 4 days/week (4)
- 104. 3 days/week (5)
- 105. 2 days/week (6)
- 106. 1 day/week (7)
- 107. 1- 3 days a month (8)
- 108. Less than one day/month (9)
- 109. Less than one day/year (10)
- 110. First time customer (11)

Page Break



Q15 For your return trip in the opposite direction, how will/did you travel? (**CHOOSE ONE ONLY**)

111. Travel the same way in the opposite direction (1)

112. Take a bus (which route?) (2)

113. Other (*Please specify*) (3)

Page Break



Q16 Has your use of the Newark Light Rail changed since the start of the COVID-19 pandemic? **(CHOOSE ONE)**

- 114. I use the Light Rail **less often** than before the pandemic (1)
- 115. I use the Light Rail **about the same amount** as before the pandemic (2)
- 116. I use the Light Rail **more often** than before the pandemic (3)

Page Break



Q17 What is your current employment status? **(CHOOSE ALL THAT APPLY)**

- Employed full-time (1)
- Employed part-time (2)
- Retired (3)
- Not employed but looking for work (4)
- Not employed and NOT looking for work (5)
- Student full-time (6)
- Student part-time (7)
- Unable to work (8)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q18 In the past seven days, how many days did you work from home?

- 117. 1 day a week (1)
- 118. 2 days a week (2)
- 119. 3 days a week (3)
- 120. 4 days a week (4)
- 121. 5 days a week (5)
- 122. 6 days a week (6)
- 123. 7 days a week (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Student full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Student part-time



Q19 In the past seven days, how many days did you attend school lectures from home?

- 124. 1 day a week (1)
- 125. 2 days a week (2)
- 126. 3 days a week (3)
- 127. 4 days a week (4)
- 128. 5 days a week (5)
- 129. 6 days a week (6)
- 130. 7 days a week (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q20 Could your current job be done from your home, if it was allowed by your employer? (**CHOOSE ONE**)

- 131. Yes, I could successfully complete **ALL** the duties and responsibilities of my job from home (1)
- 132. Yes, I could successfully complete **SOME** of the duties and responsibilities of my job from home (2)
- 133. No, the duties and responsibilities of my job require me to be at my office/worksite (3)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q21 Does your employer allow you to work from home?

- 134. Yes, I am allowed to work at home at least some of the time (1)
- 135. No, my employer requires me to be in the office or at my worksite (2)

Page Break

Q22 In the following questions we need to know something about you. All answers will be kept completely confidential and only summary data will be analyzed.



Q23 Are you?

- 136. Female or Woman (1)
 - 137. Male or Man (2)
 - 138. Non-binary or Gender Fluid (3)
 - 139. Prefer not to answer (4)
 - 140. Prefer to self-describe (5)
-

Page Break



Q24 What is your age?

- 141. Under 18 years (1)
- 142. 18-24 years (2)
- 143. 25-34 years (3)
- 144. 35-44 years (4)
- 145. 45-54 years (5)
- 146. 55-61 years (6)
- 147. 62-64 years (7)
- 148. 65 or over (8)

Page Break



Q25 Are you of Spanish/Hispanic/Latino origin?

149. Yes (1)

150. No (2)

Page Break



Q26 Are you...? (**CHOOSE ONE ONLY**)

- 151. White (1)
 - 152. Black or African American (2)
 - 153. Asian or Pacific Islander (3)
 - 154. American Indian or Alaska Native (4)
 - 155. Mixed Race (5)
 - 156. Other (*Please specify*) (6)
-

Page Break



Q27 How many people, including yourself, live in your household?



Q28 How many vehicles are available for you to use in your household?

Page Break



Q29 Do you have a physical or other condition that makes it difficult for you to use the Newark Light Rail?

- 157. No (1)
- 158. Yes (2)

Page Break

Display This Question:

If Do you have a physical or other condition that makes it difficult for you to use the Newark Light... = Yes



Q30 Do you use a...?

- Wheelchair (1)
- Other mobility device (2)

Page Break



Q31 What is your Annual Household Income?

- 159. Under \$15,000 (1)
- 160. \$15,000-\$24,999 (2)
- 161. \$25,000-\$34,999 (3)
- 162. \$35,000-\$49,999 (4)
- 163. \$50,000-\$74,999 (5)
- 164. \$75,000-\$99,999 (6)
- 165. \$100,000-\$149,999 (7)
- 166. \$150,000-\$199,999 (8)
- 167. \$200,000-\$249,999 (9)
- 168. \$250,000 or over (10)

Page Break



Q32 How well do you speak English?

- 169. Very well (1)
- 170. Well (2)
- 171. Not well (3)
- 172. Not at all (4)

Page Break



Q33 Do you speak a language other than English at home?

- 173. No, I speak English at home (1)
 - 174. Yes, Spanish (2)
 - 175. Yes, Portuguese (3)
 - 176. Yes, I speak (*please specify*) (4)
-

Page Break

Q34 What is the one thing NJ TRANSIT could do to improve your experience on the Newark Light Rail?

Page Break

Q35 Thank you for completing the survey. Please be assured your responses will be kept confidential. To enter our drawing to **WIN A \$100 GIFT CARD**, please provide your contact information:

- 177. Name (1) _____
- 178. Street Address (2) _____
- 179. City/Town (3) _____
- 180. State (4) _____
- 181. Zip Code (5) _____
- 182. Phone # (6) _____
- 183. Email address (7) _____

End of Block: Default Question Block

Spanish version

NJT Light Rail survey 2022

Start of Block: Default Question Block



Q1 Le invitamos a participar en un estudio de investigación que está llevando a cabo la Universidad de Rutgers. El equipo de investigación quiere saber más sobre las tendencias de viaje y las experiencias de las personas que utilizan la línea Newark Light Rail. Su aportación proporcionará al equipo de investigación y a NJ TRANSIT información útil sobre sus experiencias en el uso de este servicio. Esta encuesta le llevará aproximadamente entre 5 y 10 minutos. Su participación en la encuesta es completamente voluntaria y no existe ningún riesgo de participación. Puede omitir cualquier pregunta que no se sienta cómodo contestando. Si en algún momento desea dejar de participar es libre de hacerlo sin ninguna penalización para usted. Esta investigación es confidencial. Confidencial significa que los registros de la investigación incluirán alguna información sobre usted basada en sus respuestas a la encuesta. Sin embargo, el equipo de investigación y la Junta de Revisión Institucional de la Universidad de Rutgers son las únicas partes que podrán ver el conjunto completo de datos, salvo que lo exija la ley. Si se publica un informe de este estudio o se presentan los resultados en una conferencia profesional, sólo se indicarán los resultados del grupo. Si tiene alguna pregunta en cualquier momento sobre la investigación o los procedimientos descritos anteriormente, o si necesita ayuda para completar la encuesta, puede ponerse en contacto con el investigador principal del estudio, Robert Noland, Tel: 848-932-2859, Email: rmland@rutgers.edu. Si tiene alguna pregunta sobre sus derechos como participante en este estudio, puede ponerse en contacto con el IRB de Rutgers o con el Programa de Protección de Sujetos Humanos de Rutgers por teléfono al (973) 972-3608 o al (732) 235-2866 o al (732) 235-9806 o por correo electrónico irboffice@research.rutgers.edu, o puede escribirnos a 335 George Street, Liberty Plaza Suite 3200, New Brunswick, NJ 08901. **Tenga en cuenta que al completar la encuesta puede participar en un sorteo para tener la oportunidad de ganar una tarjeta de regalo de \$100. Para participar en el sorteo, debe rellenar la sección de información de contacto situada al final de la encuesta.**

184. Sí, doy mi consentimiento para realizar la encuesta (1)
185. NO, no doy mi consentimiento para realizar la encuesta (2)

Skip To: End of Survey If You are invited to participate in a research study being conducted by Rutgers University. The r... = NO, I do not consent to take the survey

Page Break

Q2 MENSAJE IMPORTANTE ANTES DE COMENZAR LA ENCUESTA: Favor de responder a todas las preguntas correspondientes al viaje que estaba realizando cuando recibió esta encuesta.

Page Break



Q3 ¿A qué hora abordó el Newark Light Rail en este viaje?

	Hora	Minuto	AM or PM?
Por favor, seleccione: (1)	▼ 1 (1 ... 12 (12))	▼ 1 (1 ... 0 (60))	▼ AM (1 ... PM (2))

Page Break



Q4 ¿En qué estación abordó el Newark Light Rail?

- 186. Atlantic St. (1)
- 187. Bloomfield Ave. (2)
- 188. Branch Brook Park (3)
- 189. Broad St. Station (4)
- 190. Davenport Ave. (5)
- 191. Grove St. (6)
- 192. Military Park (7)
- 193. Newark Penn Station (8)
- 194. NJPAC / Center St. (9)
- 195. Norfolk St. (10)
- 196. Orange St. (11)
- 197. Park Ave. (12)
- 198. Riverfront Stadium (13)
- 199. Silver Lake (14)
- 200. Warren St. / NJIT (15)
- 201. Washington Park (16)
- 202. Washington St. (17)

Page Break



Q5 ¿Cómo ha llegado a la estación del Newark Light Rail donde abordó? (ELIJA SÓLO UNA)

- 203. Caminé (1)
- 204. Conduje (2)
- 205. Otra persona me dejó en la estación (3)
- 206. Autobús (por favor, escriba en que ruta de autobús) (4)
- _____
- 207. Otro tren del Newark Light Rail (por favor, escriba en qué estación tomó el primer tren) (5) _____
- 208. Tren PATH (6)
- 209. Tren NJ TRANSIT (por favor, escriba en qué estación tomó el primer tren) (7)
- _____
- 210. Bicicleta (8)
- 211. Uber/Lyft/Vía u otro servicio basado en una aplicación (9)
- 212. Taxi (10)
- 213. Patinete electrico (e-Scooter) (11)
- 214. Otro (12) _____

Page Break



Q6 El lugar de **DONDE VIENE**; es... (**ELIJA UNA**)

- 215. Hogar (1)
- 216. Trabajo (2)
- 217. Instituto o Universidad (3)
- 218. Escuela (K-12) (4)
- 219. Compras (5)
- 220. Asuntos Personales (6)
- 221. Visita Médica o Dental (7)
- 222. Entretenimiento o Actividad Recreativa (8)
- 223. Visitar a familiares o amigos (9)
- 224. Otros (10) _____

Page Break _____

Q7 ¿Cuál es la dirección del lugar de **DONDE VIENE**?

225. Dirección O Intersección (1)

226. Ciudad/Pueblo (2) _____

227. Estado (3) _____

228. Código postal (4) _____

Page Break _____



Q8 ¿En qué estación se bajó de este Newark Light Rail? (Esta estación debe ser diferente a la estación en la que abordó)

- 229. Atlantic St. (1)
- 230. Bloomfield Ave. (2)
- 231. Branch Brook Park (3)
- 232. Broad St. Station (4)
- 233. Davenport Ave. (5)
- 234. Grove St. (6)
- 235. Military Park (7)
- 236. Newark Penn Station (8)
- 237. NJPAC / Center St. (9)
- 238. Norfolk St. (10)
- 239. Orange St. (11)
- 240. Park Ave. (12)
- 241. Riverfront Stadium (13)
- 242. Silver Lake (14)
- 243. Warren St. / NJIT (15)
- 244. Washington Park (16)
- 245. Washington St. (17)

Page Break



Q9 Después de bajarse del Newark Light Rail, ¿cómo llegó a su destino final? **(Por favor, responda con respecto al viaje que realizó cuando recibió esta encuesta - ELIJA SÓLO UNA)**

- 246. Caminé (1)
- 247. Conduje (2)
- 248. Otra persona me recogió en la estación (3)
- 249. Autobús (por favor, escriba en que ruta de autobús) (4)

- 250. Otro Newark Light Rail (por favor, escriba en qué estación se bajó del segundo tren) (5) _____
- 251. Tren PATH (6)
- 252. Tren NJ TRANSIT (por favor, escriba en qué estación se bajó del segundo tren) (7) _____
- 253. Bicicleta (8)
- 254. Uber/Lyft/Vía u otro servicio basado en una aplicación (9)
- 255. Taxi (10)
- 256. Patinete eléctrico (e-Scooter) (11)
- 257. Otro (12) _____

Page Break



Q10 El lugar al que **IBA** era... **(ELIJA UNA)**

- 258. Hogar (1)
- 259. Trabajo (2)
- 260. Instituto o Universidad (3)
- 261. Escuela (K-12) (4)
- 262. Compras (5)
- 263. Asuntos Personales (6)
- 264. Visita Médica o Dental (7)
- 265. Entretenimiento o Actividad Recreativa (8)
- 266. Visitar Familiares o Amigos (9)
- 267. Otro (10) _____

Page Break

Q11 ¿Cuál es la dirección del lugar a donde **SE DIRIGÍA? SU DESTINO FINAL** (NO LA DIRECCIÓN DE INICIO)

268. Dirección O Intersección (1)

269. Ciudad/Pueblo (2) _____

270. Estado (3) _____

271. Código postal (4) _____

Page Break _____



Q12 ¿Cuál de las siguientes afirmaciones se aplica mejor a usted? **(ELIJA SÓLO UNA)**

- 272. No tengo otra forma de transporte, así que utilizo el Newark Light Rail (1)
- 273. Utilizo el Newark Light Rail porque es la mejor opción para mí, aunque haya otras formas de transporte (2)
- 274. Suelo utilizar otro tipo de transporte, pero de vez en cuando utilizo el Newark Light Rail (3)

Page Break



Q13 ¿Qué tipo de boleto utilizó para este viaje? **(ELIJA SÓLO UNA)**

- 275. Pase Mensual del Light Rail (1)
 - 276. Pase Mensual de Tren (2)
 - 277. Pase Mensual de Autobús (3)
 - 278. FLEXPASS (Pase Flexible) - 20 boletos (4)
 - 279. Pasaje de Ida (5)
 - 280. Tarifa subterránea (Newark Light Rail solamente) - (válida sólo entre Warren St, Washington St, Military Park y Newark Penn Station) (6)
 - 281. Tarifas reducidas para personas mayores de edad y clientes con discapacidades (7)
 - 282. Otro (*Favor de especificar*) (8)
-

Page Break



Q14 ¿Con qué frecuencia utiliza el Newark Light Rail? **(ELIJA SÓLO UNA)**

- 283. 7 días/semana (1)
- 284. 6 días/semana (2)
- 285. 5 días/semana (3)
- 286. 4 días/semana (4)
- 287. 3 días/semana (5)
- 288. 2 días/semana (6)
- 289. 1 día/semana (7)
- 290. 1- 3 días al mes (8)
- 291. Menos de un día/mes (9)
- 292. Menos de un día/año (10)
- 293. Primera vez como cliente (11)

Page Break



Q15 Para su viaje de regreso en la dirección opuesta, ¿cómo viajará/ha viajado?
(ELIJA SÓLO UNA)

294. Viaje de la misma forma en la dirección opuesta (1)

295. Tomar un autobús (¿qué ruta?) (2)

296. Otra (Por favor, especifique) (3)

Page Break



Q16 ¿Ha cambiado su uso del Newark Light Rail desde que comenzó la pandemia del COVID-19? **(ELIJA UNA)?**

- 297. Yo uso el Light Rail **con menos frecuencia** que antes de la pandemia (1)
- 298. Yo uso el Light Rail **más o menos la misma cantidad** que antes de la pandemia (2)
- 299. Uso el Light Rail con **más frecuencia** que antes de la pandemia (3)

Page Break



Q17 ¿Cuál es su situación de empleo actual? **(ELIJA TODAS LAS QUE SE APLIQUEN)**

- Empleado a tiempo completo (1)
- Empleado a tiempo parcial (2)
- Jubilado (3)
- Sin empleo pero buscando trabajo (4)
- Sin empleo y NO busco trabajo (5)
- Estudiante a tiempo completo (6)
- Estudiante a tiempo parcial (7)
- No puedo trabajar (8)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q18 En los últimos siete días, ¿cuántos días ha trabajado desde casa?

- 300. 1 día a la semana (1)
- 301. 2 días a la semana (2)
- 302. 3 días a la semana (3)
- 303. 4 días a la semana (4)
- 304. 5 días a la semana (5)
- 305. 6 días a la semana (6)
- 306. 7 días a la semana (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Student full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Student part-time



Q19 En los últimos siete días, ¿cuántos días ha asistido a clases desde casa?

- 307. 1 día a la semana (1)
- 308. 2 días a la semana (2)
- 309. 3 días a la semana (3)
- 310. 4 días a la semana (4)
- 311. 5 días a la semana (5)
- 312. 6 días a la semana (6)
- 313. 7 días a la semana (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q20 ¿Podría realizar su trabajo actual desde su casa, si se lo permitiera su empleador?
(ELIJA UNA)

- 314. Sí, yo podría completar con satisfacción **TODAS** las funciones y responsabilidades de mi trabajo desde casa. (1)
- 315. Sí, yo podría completar con satisfacción **ALGUNAS** de las funciones y responsabilidades de mi trabajo desde casa. (2)
- 316. No, las funciones y responsabilidades de mi trabajo requieren que esté en mi oficina/sitio de trabajo (3)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q21 ¿Su empleador le permite trabajar desde casa?

- 317. Sí, se me permite trabajar en casa al menos una parte del tiempo (1)
- 318. No, mi empleador requiere que esté en la oficina o en mi lugar de trabajo (2)

Page Break

Q22 En las siguientes preguntas necesitamos saber algo sobre usted. Todas las respuestas serán completamente confidenciales y sólo se analizarán los datos resumidos.



Q23 ¿Es usted?

- 319. Femenino o Mujer (1)
 - 320. Masculino u Hombre (2)
 - 321. No-binario o Género Fluido (3)
 - 322. Prefiero no contestar (4)
 - 323. Prefiero autodescribirme (5)
-

Page Break



Q24 ¿Cuál es su edad?

- 324. Menor de 18 años (1)
- 325. 18-24 años (2)
- 326. 25-34 años (3)
- 327. 35-44 años (4)
- 328. 45-54 años (5)
- 329. 55-61 años (6)
- 330. 62-64 años (7)
- 331. 65 años o más (8)

Page Break



Q25 ¿Es usted de origen español/hispano/latino?

- 332. Sí (1)
- 333. No (2)

Page Break



Q26 ¿Es usted?...? **(ELIJA SÓLO UNA)**

- 334. Blanco (1)
 - 335. Afroamericano o negro (2)
 - 336. Asiático o Isleño del Pacífico (3)
 - 337. Indoamericano o Nativo de Alaska (4)
 - 338. Raza Mixta (5)
 - 339. Otro (Por favor, especifique) (6)
-

Page Break



Q27 ¿Cuántas personas, incluyéndose usted, viven en su hogar?



Q28 ¿Cuántos vehículos tiene a su disposición para usar en su hogar?

Page Break



Q29 ¿Tiene alguna condición física o de otro tipo que le dificulta usar Newark Light Rail?

340. No (1)

341. Si (2)

Page Break

Display This Question:

If Do you have a physical or other condition that makes it difficult for you to use the Newark Light... = Yes



Q30 ¿Usted utiliza una...?

- Silla de ruedas (1)
- Otro dispositivo de movilidad (2)

Page Break



Q31 ¿Cuál es el Ingreso Anual de su hogar?

- 342. Menos de \$15,000 (1)
- 343. \$15,000-\$24,999 (2)
- 344. \$25,000-\$34,999 (3)
- 345. \$35,000-\$49,999 (4)
- 346. \$50,000-\$74,999 (5)
- 347. \$75,000-\$99,999 (6)
- 348. \$100,000-\$149,999 (7)
- 349. \$150,000-\$199,999 (8)
- 350. \$200,000-\$249,999 (9)
- 351. \$250,000 o más (10)

Page Break



Q32 ¿Cuán bien habla usted el inglés?

- 352. Muy bien (1)
- 353. Bien (2)
- 354. No muy bien (3)
- 355. No hablo (4)

Page Break



Q33 ¿Habla otro idioma que no sea inglés en casa?

- 356. No, yo hablo inglés en casa (1)
 - 357. Sí, español (2)
 - 358. Sí, portugués (3)
 - 359. Sí, hablo (*por favor, especifique*) (4)
-

Page Break

Q34 ¿Qué podría hacer NJ TRANSIT para mejorar su experiencia en el Newark Light Rail?

Page Break

Q35 Gracias por completar la encuesta. Tenga la seguridad de que sus respuestas serán confidenciales. Para participar en el sorteo para **GANAR UNA TARJETA DE REGALO DE \$100**, por favor proporcione su información de contacto:

- 360. Nombre (1) _____
- 361. Dirección (2) _____
- 362. Ciudad/Pueblo (3) _____
- 363. Estado (4) _____
- 364. Código postal (5) _____
- 365. Número de teléfono (6) _____

- _____
- 366. Correo electrónico (7) _____
- _____

End of Block: Default Question Block

Portuguese version

NJT Light Rail survey 2022

Start of Block: Default Question Block



Q1 Você é convidado a participar de um estudo de pesquisa que está sendo conduzido pela Universidade de Rutgers. A equipe de pesquisa está buscando aprender mais sobre os padrões de viagem e experiências das pessoas que usam a linha de VLT de Newark. Sua entrada fornecerá à equipe de pesquisa e à NJ TRANSIT informações úteis sobre suas experiências usando este serviço.

Esta pesquisa deve levar aproximadamente 5-10 minutos para ser concluída. Sua participação na pesquisa é completamente voluntária e não há riscos para a participação. Você pode pular quaisquer perguntas que você não está confortável respondendo. Se a qualquer momento você deseja parar de participar você está livre para fazê-lo sem nenhuma penalidade para você. Esta pesquisa é confidencial. Confidencial significa que algumas informações sobre você com base em suas respostas serão guardadas para a pesquisa. No entanto, a equipe de pesquisa e o Conselho de Revisão Institucional da Universidade de Rutgers são as únicas partes que poderão ver o conjunto completo de dados, exceto como pode ser exigido por lei. Se for publicado um relatório deste estudo, ou se os resultados forem apresentados em uma conferência profissional, apenas os resultados do grupo serão indicados.

Se você tiver alguma dúvida a qualquer momento sobre a pesquisa ou os procedimentos descritos acima, ou se precisar de assistência para concluir a pesquisa, você pode entrar em contato com o pesquisador principal do estudo Robert Noland, Tel: 848-932-2859, E-mail: rnoland@rutgers.edu. Se você tiver alguma dúvida sobre seus direitos como participante deste estudo, você pode entrar em contato com o Rutgers IRB ou o Programa de Proteção de Sujeitos Humanos Rutgers através dos telefones (973) 972-3608 ou (732) 235-2866 ou (732) 235-9806 OU via e-mail irboffice@research.rutgers.edu, ou você pode nos escrever em 335 George Street, Liberty Plaza Suite 3200, New Brunswick, NJ 08901.

Completando a pesquisa, você pode participar de um sorteio e ganhar um

cartão de presente de US\$ 100. Para se qualificar para o sorteio, você deve completar a seção de informações de contato no fim da pesquisa.

- 367. **SIM, eu concordo em fazer a pesquisa (1)**
- 368. **NÃO, eu não concordo em fazer a pesquisa (2)**

*Skip To: End of Survey If You are invited to participate in a research study being conducted by Rutgers University.
The r... = NO, I do not consent to take the survey*

Page Break

Q2 MENSAGEM IMPORTANTE ANTES DE COMEÇAR A PESQUISA: Por favor, responda a todas as perguntas da viagem que estava fazendo quando recebeu esta pesquisa.

Page Break



Q3 A que horas você embarcou no VLT (Veículo Leve sobre Trilhos/Light Rail) de Newark para esta viagem?

	Hora	Minuto	AM ou PM?
Por favor, selecione: (1)	▼ 1 (1 ... 12 (12))	▼ 1 (1 ... 0 (60))	▼ AM (1 ... PM (2))

Page Break



Q4 Em que estação você embarcou no VLT de Newark?

- 369. Atlantic St. (1)
- 370. Bloomfield Ave. (2)
- 371. Branch Brook Park (3)
- 372. Broad St. Station (4)
- 373. Davenport Ave. (5)
- 374. Grove St. (6)
- 375. Military Park (7)
- 376. Newark Penn Station (8)
- 377. NJPAC / Center St. (9)
- 378. Norfolk St. (10)
- 379. Orange St. (11)
- 380. Park Ave. (12)
- 381. Riverfront Stadium (13)
- 382. Silver Lake (14)
- 383. Warren St. / NJIT (15)
- 384. Washington Park (16)
- 385. Washington St. (17)

Page Break



Q5 Como você foi até a estação de VLT de Newark onde você embarcou? (ESCOLHA APENAS UMA OPÇÃO)

- 386. Caminhou (1)
 - 387. Dirigiu (2)
 - 388. Outra pessoa me deixou na estação. (3)
 - 389. Ônibus (por favor, escreva a rota de ônibus) (4)
-
- 390. Outro VLT de Newark (por favor, escreva em qual estação você embarcou no primeiro VLT) (5) _____
 - 391. Trem de PATH (6)
 - 392. Trem de NJ TRANSIT (por favor, escreva em qual estação você embarcou no primeiro trem) (7) _____
 - 393. Bicicleta (8)
 - 394. Uber/Lyft/Via ou outro serviço baseado em aplicativos (9)
 - 395. Táxi (10)
 - 396. e-Scooter (11)
 - 397. Outro (12) _____

Page Break



Q6 O lugar de onde você veio é... (ESCOLHA UMA OPÇÃO)

- 398. Casa (1)
- 399. Trabalho (2)
- 400. Universidade (3)
- 401. Escola (K-12) (4)
- 402. Compras (5)
- 403. Negócios Pessoais (6)
- 404. Visita médica ou odontológica (7)
- 405. Entretenimento ou Atividade Recreativa (8)
- 406. Visita a família ou amigos (9)
- 407. Outro (10) _____

Page Break

Q7 Qual é o endereço do lugar **de onde você veio**?

408. Endereço OU Intersecção (1)

409. Cidade (2) _____

410. Estado (3) _____

411. Código Postal (4) _____

Page Break



Q8 Em que estação você saiu deste VLT de Newark? (*Esta estação deve ser diferente da estação onde você embarcou*)

- 412. Atlantic St. (1)
- 413. Bloomfield Ave. (2)
- 414. Branch Brook Park (3)
- 415. Broad St. Station (4)
- 416. Davenport Ave. (5)
- 417. Grove St. (6)
- 418. Military Park (7)
- 419. Newark Penn Station (8)
- 420. NJPAC / Center St. (9)
- 421. Norfolk St. (10)
- 422. Orange St. (11)
- 423. Park Ave. (12)
- 424. Riverfront Stadium (13)
- 425. Silver Lake (14)
- 426. Warren St. / NJIT (15)
- 427. Washington Park (16)
- 428. Washington St. (17)

Page Break



Q9 Depois de descer do trem do VLT de Newark, como você conseguiu chegar ao seu destino final? **(Responda pela viagem que fez quando recebeu esta pesquisa - ESCOLHA APENAS UMA OPÇÃO)**

- 429. Caminhou (1)
 - 430. Dirigiu (2)
 - 431. Outra pessoa me deixou na estação. (3)
 - 432. Ônibus (por favor, escreva a rota de ônibus) (4)
-
- 433. Outro VLT de Newark (por favor, escreva em qual estação você desceu do segundo VLT) (5) _____
 - 434. Trem de PATH (6)
 - 435. Trem de NJ TRANSIT (por favor, escreva em qual estação você desceu do segundo trem) (7) _____
 - 436. Bicicleta (8)
 - 437. Uber/Lyft/Via ou outro serviço baseado em aplicativos (9)
 - 438. Táxi (10)
 - 439. e-Scooter (11)
 - 440. Outro (12) _____

Page Break



Q10 O lugar onde você **ia** era... **(ESCOLHA UM)**

- 441. Casa (1)
- 442. Trabalho (2)
- 443. Universidade (3)
- 444. Escola (K-12) (4)
- 445. Compras (5)
- 446. Negócios Pessoais (6)
- 447. Visita médica ou odontológica (7)
- 448. Entretenimento ou Atividade Recreativa (8)
- 449. Visita a família ou amigos (9)
- 450. Outro (10) _____

Page Break _____

Q11 Qual é o endereço do lugar aonde você **ESTAVA INDO? SEU DESTINO FINAL** (NÃO SEU ENDEREÇO INICIAL)

451. Endereço OU Intersecção (1)

452. Cidade (2) _____

453. Estado (3) _____

454. Código Postal (4) _____

Page Break



Q12 Qual das seguintes declarações se aplica melhor a você? **(ESCOLHA APENAS UMA)**

- 455. Eu não tenho outra maneira de viajar, então eu uso o VLT de Newark (1)
- 456. Eu uso o VLT de Newark porque é a melhor escolha para mim, mesmo que haja outras maneiras que eu poderia viajar (2)
- 457. Eu costumo usar outro tipo de transporte, mas ocasionalmente eu tomo o VLT de Newark (3)

Page Break



Q13 Que tipo de bilhete você usou para esta viagem? **(ESCOLHA APENAS UM)**

- 458. Passe Mensal do VLT (1)
 - 459. Passe Mensal Ferroviário (2)
 - 460. Passe Mensal de Ônibus (3)
 - 461. FLEXPASS - 20 bilhetes de ida (4)
 - 462. Bilhete de ida (5)
 - 463. Tarifa subterrânea - (válida apenas entre Warren St, Washington St, Military Park e Newark Penn Station) (6)
 - 464. Tarifas reduzidas para idosos e clientes com deficiência (7)
 - 465. Outro (*por favor, especifique*) (8)
-

Page Break



Q14 Com que frequência você usa o VLT de Newark? (**ESCOLHA APENAS UMA OPÇÃO**)

- 466. 7 dias/semana (1)
- 467. 6 dias/semana (2)
- 468. 5 dias/semana (3)
- 469. 4 dias/semana (4)
- 470. 3 dias/semana (5)
- 471. 2 dias/semana (6)
- 472. 1 dia/semana (7)
- 473. 1-3 dias por mês (8)
- 474. Menos de um dia/mês (9)
- 475. Menos de um dia/ano (10)
- 476. Cliente da primeira vez (11)

Page Break



Q15 Para sua viagem de volta na direção oposta, como você vai viajar/viajou?
(ESCOLHA APENAS UMA)

477. Viajem da mesma maneira na direção oposta (1)

478. Pegue um ônibus (qual rota?) (2)

479. Outro (*por favor, especifique*) (3)

Page Break



Q16 Seu uso do VLT de Newark mudou desde o início da pandemia COVID-19?
(ESCOLHA UMA)

- 480. Eu uso o VLT com menos frequência do que antes da pandemia (1)
- 481. Eu uso o VLT com a mesma frequência do que antes da pandemia (2)
- 482. Eu uso o VLT mais vezes do que antes da pandemia (3)

Page Break



Q17 Qual é o seu status de emprego atual? **(ESCOLHA TUDO QUE SE APLICA)**

- Empregado em tempo integral (1)
- Empregado em tempo parcial (2)
- Aposentado (3)
- Não empregado, mas procurando trabalho (4)
- Não empregado e NÃO procurando trabalho (5)
- Estudante em tempo integral (6)
- Estudante em tempo parcial (7)
- Incapaz de trabalhar (8)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q18 Nos últimos sete dias, quantos dias você trabalhou em casa?

- 483. 1 dia por semana (1)
- 484. 2 dias por semana (2)
- 485. 3 dias por semana (3)
- 486. 4 dias por semana (4)
- 487. 5 dias por semana (5)
- 488. 6 dias por semana (6)
- 489. 7 dias por semana (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Student full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Student part-time



Q19 Nos últimos sete dias, quantos dias você assistiu às aulas da escola em casa?

- 490. 1 dia por semana (1)
- 491. 2 dias por semana (2)
- 492. 3 dias por semana (3)
- 493. 4 dias por semana (4)
- 494. 5 dias por semana (5)
- 495. 6 dias por semana (6)
- 496. 7 dias por semana (7)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q20 Se fosse permitido pelo seu empregador, seu trabalho atual poderia ser feito a partir de sua casa? **(ESCOLHA UMA)**

- 497. Sim, eu poderia completar com sucesso **TODOS** os deveres e responsabilidades do meu trabalho de casa (1)
- 498. Sim, eu poderia completar com sucesso **ALGUNS** dos deveres e responsabilidades do meu trabalho de casa (2)
- 499. Não, os deveres e responsabilidades do meu trabalho exigem que eu esteja no meu escritório/lugar de trabalho. (3)

Page Break

Display This Question:

If What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed full-time

Or What is your current employment status? (CHOOSE ALL THAT APPLY) = Employed part-time



Q21 Seu empregador permite que você trabalhe de casa?

- 500. Sim, tenho permissão para trabalhar de casa pelo menos algumas vezes. (1)
- 501. Não, meu empregador exige que eu esteja no escritório ou no meu lugar de trabalho. (2)

Page Break

Q22 Nas próximas perguntas precisamos saber algo sobre você. Todas as respostas serão mantidas completamente confidenciais e apenas os dados de resumo serão analisados.



Q23 Você é?

- 502. Feminino ou Mulher (1)
 - 503. Masculino ou Homem (2)
 - 504. Não binário ou de gênero fluido (3)
 - 505. Prefiro não responder (4)
 - 506. Prefiro descrever-me (5)
-

Page Break



Q24 Qual é a sua idade?

- 507. Menos de 18 anos (1)
- 508. 18-24 anos (2)
- 509. 25-34 anos (3)
- 510. 35-44 anos (4)
- 511. 45-54 anos (5)
- 512. 55-61 anos (6)
- 513. 62-64 anos (7)
- 514. 65 ou mais (8)

Page Break



Q25 Você é de origem espanhola/hispânica/latina?

515. Sim (1)

516. Não (2)

Page Break



Q26 Você é...? (ESCOLHA APENAS UMA)

- 517. Branco/a (1)
 - 518. Negro/a ou afro-americano/a (2)
 - 519. Asiático/a ou das Ilhas do Pacífico (3)
 - 520. Índio americano/a ou nativo/a do Alasca (4)
 - 521. Raça Mista (5)
 - 522. Outro/a (*por favor, especifique*) (6)
-

Page Break

*

Q27 Quantas pessoas, incluindo você, vivem em sua casa?

*

Q28 Quantos veículos estão disponíveis em sua casa para você usar?

Page Break



Q29 Você tem uma condição física ou outra que dificulta o uso do VLT de Newark?

523. Não (1)

524. Sim (2)

Page Break

Display This Question:

If Do you have a physical or other condition that makes it difficult for you to use the Newark Light... = Yes



Q30 Você usa...?

- Cadeira de rodas (1)
- Outro dispositivo de mobilidade (2)

Page Break



Q31 Qual é a sua Renda Familiar Anual?

- 525. Menos de \$15.000 (1)
- 526. \$15.000-\$24.999 (2)
- 527. \$25.000-\$34.999 (3)
- 528. \$35.000-\$49.999 (4)
- 529. \$50.000-\$74.999 (5)
- 530. \$75.000-\$99.999 (6)
- 531. \$100.000-\$149.999 (7)
- 532. \$150.000-\$199.999 (8)
- 533. \$200.000-\$249.999 (9)
- 534. \$250.000 ou mais (10)

Page Break



Q32 Quão bem você fala inglês?

- 535. Muito bem (1)
- 536. Bem (2)
- 537. Não muito bem. (3)
- 538. Não falo nada (4)

Page Break



Q33 Você fala um idioma diferente do inglês em casa?

- 539. Não, eu falo inglês em casa. (1)
 - 540. Sim, espanhol (2)
 - 541. Sim, português (3)
 - 542. Sim, eu falo (*por favor, especifique*) (4)
-

Page Break

Q34 Qual é a coisa que a NJ TRANSIT poderia fazer para melhorar sua experiência no VLT de Newark?

Page Break

Q35 Obrigado por completar a pesquisa. Por favor, tenha certeza de que suas respostas serão mantidas confidenciais. Para entrar no sorteio para **GANHAR UM CARTÃO DE PRESENTE de US\$ 100**, por favor, forneça suas informações de contato:

543. Nome (1) _____
544. Endereço (2) _____
545. Cidade (3) _____
546. Estado (4) _____
547. Código Postal (5) _____
548. Número de telefone (6) _____
- _____
549. Endereço eletrônico (7) _____
- _____

End of Block: Default Question Block

Paper version distributed on-board NLR, with return envelope



NJ TRANSIT is conducting this survey to better understand your travel needs. Please help us by filling out & returning your completed survey to the agent onboard the train or at the station, or drop in any US Mailbox (postage-free). You may also complete this survey online at www.newarklrtsurvey.org. Your responses will be kept confidential. To show our appreciation for your help, we will enter your name in a drawing to **WIN A \$100 GIFT CARD. For This Light Rail Trip...**

1. What time did you board the Newark Light Rail for this trip?

: AM PM
Hour Minute

2. At which station did you board the Newark Light Rail?

- | | | |
|---|---|--|
| <input type="radio"/> Atlantic St | <input type="radio"/> Military Park | <input type="radio"/> Riverfront Stadium |
| <input type="radio"/> Bloomfield Ave | <input type="radio"/> Newark Penn Station | <input type="radio"/> Silver Lake |
| <input type="radio"/> Branch Brook Park | <input type="radio"/> NJPAC/Center St | <input type="radio"/> Warren St/NJIT |
| <input type="radio"/> Broad St Station | <input type="radio"/> Norfolk St | <input type="radio"/> Washington Park |
| <input type="radio"/> Davenport Ave | <input type="radio"/> Orange St | <input type="radio"/> Washington St |
| <input type="radio"/> Grove St | <input type="radio"/> Park Ave | |

3. How did you get to the Newark Light Rail station where you boarded? (**CHOOSE ONE ONLY**)

- | | |
|--|--|
| <input type="radio"/> Walked | <input type="radio"/> PATH Train |
| <input type="radio"/> Drove | <input type="radio"/> NJ Transit Train _____
<i>(Please specify Boarding Station)</i> |
| <input type="radio"/> Another person dropped me off | <input type="radio"/> Bicycle |
| <input type="radio"/> Bus _____
<i>(Please specify Route/Carrier)</i> | <input type="radio"/> Uber/Lyft/Via or other App-based service |
| <input type="radio"/> Another Newark Light Rail train | <input type="radio"/> Taxi |
| _____ | <input type="radio"/> e-Scooter |
| <i>(Please specify Boarding Station)</i> | <input type="radio"/> Other _____
<i>(Please specify)</i> |

4. The place you **CAME FROM** is... (**CHOOSE ONE**)

- | | |
|---|--|
| <input type="radio"/> Home | <input type="radio"/> Personal Business |
| <input type="radio"/> Work | <input type="radio"/> Medical or Dental Visit |
| <input type="radio"/> College or University | <input type="radio"/> Entertainment or Recreational Activity |
| <input type="radio"/> School (K-12) | <input type="radio"/> Visit Family or Friends |
| <input type="radio"/> Shopping | <input type="radio"/> Other _____ |

5. What is the address of the place you **CAME FROM**?

Address OR Intersection

City/Town

State

Zip Code

6. At what station did you get off this Newark Light Rail? (*This station should be different than Question 2 the station where you boarded*)

- | | | |
|---|---|--|
| <input type="radio"/> Atlantic St | <input type="radio"/> Military Park | <input type="radio"/> Riverfront Stadium |
| <input type="radio"/> Bloomfield Ave | <input type="radio"/> Newark Penn Station | <input type="radio"/> Silver Lake |
| <input type="radio"/> Branch Brook Park | <input type="radio"/> NJPAC/Center St | <input type="radio"/> Warren St/NJIT |
| <input type="radio"/> Broad St Station | <input type="radio"/> Norfolk St | <input type="radio"/> Washington Park |
| <input type="radio"/> Davenport Ave | <input type="radio"/> Orange St | <input type="radio"/> Washington St |
| <input type="radio"/> Grove St | <input type="radio"/> Park Ave | |

7. After getting off this Newark Light Rail train, how will you get to your final destination? (**CHOOSE ONLY ONE**)

- | | |
|---|---|
| <input type="radio"/> Walking | <input type="radio"/> PATH Train |
| <input type="radio"/> Driving | <input type="radio"/> NJ Transit Train _____ |
| <input type="radio"/> Someone picking me up | <i>(Please write in which station you got off the second train)</i> |
| <input type="radio"/> Bus _____ | <input type="radio"/> Uber/Lyft/Via or other App-based service |
| <i>(Please specify Route/Carrier)</i> | <input type="radio"/> Taxi |
| <input type="radio"/> Bicycle | <input type="radio"/> e-Scooter |
| <input type="radio"/> Another Newark Light Rail train | <input type="radio"/> Other _____ |
| _____ | <i>(Please specify)</i> |
| <i>(Please write in which station you got off the second train)</i> | |

8. The place you are **GOING TO** is... (**CHOOSE ONE**)

- | | |
|---|--|
| <input type="radio"/> Home | <input type="radio"/> Personal Business |
| <input type="radio"/> Work | <input type="radio"/> Medical or Dental Visit |
| <input type="radio"/> College or University | <input type="radio"/> Entertainment or Recreational Activity |
| <input type="radio"/> School (K-12) | <input type="radio"/> Visit Family or Friends |
| <input type="radio"/> Shopping | <input type="radio"/> Other _____ |

9. What is the address of the place you are **GOING TO? YOUR FINAL DESTINATION** (NOT YOUR STARTING ADDRESS)

Address OR Intersection

City/Town

State

Zip Code

10. Which of the following statements best applies to you? (**CHOOSE ONLY ONE**)

- I have no other way to travel, so I use the Newark Light Rail.
- I use the Newark Light Rail because it is the best choice for me, even though there are other ways I could travel.
- I usually use another type of transportation, but I occasionally take the Newark Light Rail.

11. What type of ticket are you using for this trip? (**CHOOSE ONE ONLY**)

- | | | |
|--|---|--|
| <input type="radio"/> Light Rail Monthly Pass | <input type="radio"/> Rail Monthly Pass | <input type="radio"/> Bus Monthly Pass |
| <input type="radio"/> FLEXPASS (20 one-way tickets) | <input type="radio"/> One-way Ticket | |
| <input type="radio"/> Underground fare - (valid only between Warren St, Washington St, Military Park, & Newark Penn Station) | | |
| <input type="radio"/> Reduced Fares for Senior Citizens & Customers with disabilities | | |
| <input type="radio"/> Other _____ <i>(Please specify)</i> | | |

12. How often do you use the Newark Light Rail? (**CHOOSE ONE ONLY**)

- 7 days/week
- 6 days/week
- 5 days/week
- 4 days/week
- 3 days/week
- 2 days/week
- 1 day/week
- 1-3 days/month
- Less than one day/month
- Less than one day/year
- First Time Customer

13. For your return trip in the opposite direction, how will/did you travel? (**CHOOSE ONE ONLY**)

- Travel the same way in the opposite direction
- Take a bus _____ (Please specify Route)
- Other _____ (Please specify)

14. Has your use of the Newark Light Rail changed since the start of the COVID-19 pandemic? (**CHOOSE ONE**)

- I use the Light Rail **less often** than before the pandemic
- I use the Light Rail **about the same amount** as before the pandemic
- I use the Light Rail **more often** than before the pandemic

15. What is your current employment status? (**CHOOSE ALL THAT APPLY**)

- Employed full-time
- Employed Part-time
- Retired
- Not employed but looking for work
- Not employed & NOT looking for work
- Student full-time
- Student part-time
- Unable to work

PLEASE ANSWER THE FOLLOWING THREE QUESTIONS ONLY IF YOU ARE CURRENTLY EMPLOYED FULL OR PART-TIME

16. In the past seven days, how many days did you work from home?

- 1 day a week
- 2 days a week
- 3 days a week
- 4 days a week
- 5 days a week
- 6 days a week
- 7 days a week

17. Could your current job be done from your home, if it was allowed by your employer? (**CHOOSE ONE**)

- Yes, I could successfully complete **ALL** the duties & responsibilities of my job from home
- Yes, I could successfully complete **SOME** of the duties & responsibilities of my job from home
- No, the duties & responsibilities of my job require me to be at my office/ worksite

18. Does your employer allow you to work from home?

- Yes, I am allowed to work at home at least some of the time
- No, my employer requires me to be in the office or at my worksite

PLEASE ANSWER THIS QUESTION ONLY IF YOU ARE CURRENTLY ATTENDING SCHOOL EITHER FULL-TIME OR PART-TIME

19. In the past seven days, how many days did you attend school lectures from home?

- 1 day a week
- 2 days a week
- 3 days a week
- 4 days a week
- 5 days a week
- 6 days a week
- 7 days a week

In the following questions we need to know something about you. All answers will be kept completely confidential & only summary data will be analyzed.

20. Are you?

- Male or Man Female or woman Non-binary or Gender Fluid
 Prefer not to answer Prefer to self-describe _____

21. What is your age?

- Under 18 years 25-34 years 45-54 years 62-64 years
 18-24 years 35-44 years 55-61 years 65 or over

22. Are you of Spanish/Hispanic/Latino origin? Yes No

23. Are you...? (**CHOOSE ONE ONLY**)

- White Asian or Pacific Islander Multi-racial
 Black American Indian Other _____
or African American or Alaska Native *(Please specify)*

24. How many people are living in your household, including yourself? _____

25. How many vehicles are currently available in your household? _____

26. Do you have a physical or other condition that makes it difficult for you to use the Newark Light Rail?

- No Yes → Do you use a...? Wheelchair OR Other mobility device

27. What is your annual household income?

- Under \$15,000 \$50,000-\$74,999 \$150,000-\$199,999
 \$15,000-\$24,999 \$75,000-\$99,999 \$200,000-\$249,999
 \$25,000-\$34,999 \$100,000-\$149,999 \$250,000 or over
 \$35,000-\$49,999

28. How well do you speak English?

- Very Well Well Not Well Not at all

29. Do you speak a language other than English at home?

- No, I speak English at home Yes, Portuguese
 Yes, Spanish Yes, I speak _____ (please specify)

30. What is the one thing NJ TRANSIT could do to improve your experience on the Newark Light Rail?

Thank you for completing the survey. Please be assured your responses will be kept confidential. To enter our drawing to **WIN A \$100 GIFT CARD**, please provide your contact information:

Name _____

Street Address _____

City/Town _____ State _____

Zip Code _____ Phone # _____

Email Address _____

Your comments are important to us. If you have specific comments, please...
Call Customer Service: 1-973-275-5555 or Visit our website: www.njtransit.com



You can also take this survey online!
www.newarklrtsurvey.org



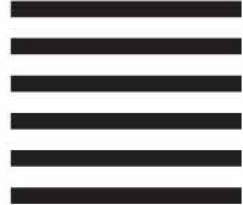
¡También puede realizar esta encuesta en línea!
www.newarklrtsurvey-ES.org



Você também pode responder a esta pesquisa online!
www.newarklrtsurvey-PT.org



NO POSTAGE
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 IF MAILED
 IN THE
 UNITED STATES

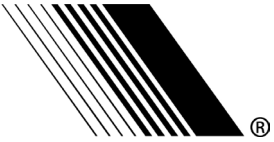


BUSINESS REPLY MAIL
 FIRST-CLASS MAIL PERMIT NO. 251 NEW BRUNSWICK, NJ

POSTAGE WILL BE PAID BY ADDRESSEE

STEPHANIE KOSE
 RUTGERS, THE STATE UNIVERSITY OF NJ
 VORHEES TRANSPORTATION CENTER
 PO BOX 5062
 NEW BRUNSWICK NJ 08903-9893





Complete this survey and enter a drawing to win a \$100 gift card!

Informed Consent for Intercept Survey & Online Survey

You are invited to participate in a research study being conducted by Rutgers University. The research team is seeking to learn more about the travel patterns and experiences of persons using the Newark Light Rail line. Your input will provide the research team and NJ TRANSIT with useful information on your experiences using this service.

This survey should take you approximately 5-10 minutes to complete. Your participation in the survey is completely voluntary and there are no risks to participation. You may skip any questions you are not comfortable answering. If at any time you wish to stop participating you are free to do so with no penalty to you. This research is confidential. Confidential means that the research records will include some information about you based on your answers to the survey. However, the research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the full set of data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated.

If you have any questions at any time about the research or the procedures described above, or if you need assistance in completing the survey, you may contact the study principal investigator Robert Noland, Tel: (848)-932-2859, Email: rnoland@rutgers.edu. If you have any questions about your rights as a participant in this study, you may contact the Rutgers IRB or the Rutgers Human Subjects Protection Program via phone at (973)-972-3608 or (732)-235-2866 or (732)-235-9806 OR via email irboffice@research.rutgers.edu, or you can write us at 335 George Street, Liberty Plaza Suite 3200, New Brunswick, NJ 08901.

Please note by completing the survey you can be entered into a drawing for a chance to win a \$100 gift card. To qualify for the drawing, you must complete the contact information section located at the end of the survey.



Informed consent:

- YES, I consent to take the survey**
- NO, I do not consent to take the survey**

APPENDIX B: NLR BOARDING DATA PROVIDED BY NJ TRANSIT

BOARDING DATA SUPPLIED BY NJ TRANSIT, March – April 2023

Station	Time Period	Updated IN Boardings	Updated OU Boardings
Atlantic Street Sta. TP	Early AM	-	-
Atlantic Street Sta. TP	AM Peak	3	-
Atlantic Street Sta. TP	Midday	-	-
Atlantic Street Sta. TP	PM Peak	1	-
Atlantic Street Sta. TP	Evening	1	-
Bloomfield Av Sta. TP	Early AM	71	3
Bloomfield Av Sta. TP	AM Peak	377	47
Bloomfield Av Sta. TP	Midday	187	50
Bloomfield Av Sta. TP	PM Peak	194	97
Bloomfield Av Sta. TP	Evening	76	18
Branch Brook Park Station TP	Early AM	81	2
Branch Brook Park Station TP	AM Peak	631	49
Branch Brook Park Station TP	Midday	326	34
Branch Brook Park Station TP	PM Peak	308	122
Branch Brook Park Station TP	Evening	112	17
Broad Street Sta. TP	Early AM	-	6
Broad Street Sta. TP	AM Peak	-	137
Broad Street Sta. TP	Midday	-	61

Broad Street Sta. TP	PM Peak	-	75
Broad Street Sta. TP	Evening	-	33
Davenport Avenue Sta. TP	Early AM	49	4
Davenport Avenue Sta. TP	AM Peak	249	26
Davenport Avenue Sta. TP	Midday	109	24
Davenport Avenue Sta. TP	PM Peak	65	19
Davenport Avenue Sta. TP	Evening	18	2
Grove Street Sta. TP	Early AM	29	-
Grove Street Sta. TP	AM Peak	225	-
Grove Street Sta. TP	Midday	142	-
Grove Street Sta. TP	PM Peak	141	-
Grove Street Sta. TP	Evening	53	-
Military Park Sta. TP	Early AM	-	9
Military Park Sta. TP	AM Peak	20	171
Military Park Sta. TP	Midday	29	261
Military Park Sta. TP	PM Peak	79	365
Military Park Sta. TP	Evening	15	149
NJ Performing Arts Center @ Cent TP	Early AM	-	1
NJ Performing Arts Center @ Cent TP	AM Peak	6	18
NJ Performing Arts Center @ Cent TP	Midday	2	9
NJ Performing Arts Center @ Cent TP	PM Peak	6	6
NJ Performing Arts Center @ Cent TP	Evening	-	-

Norfolk And Central Sta. TP	Early AM	18	-
Norfolk And Central Sta. TP	AM Peak	151	36
Norfolk And Central Sta. TP	Midday	119	46
Norfolk And Central Sta. TP	PM Peak	206	174
Norfolk And Central Sta. TP	Evening	37	14
Orange Street Sta. TP	Early AM	29	1
Orange Street Sta. TP	AM Peak	288	81
Orange Street Sta. TP	Midday	169	63
Orange Street Sta. TP	PM Peak	134	91
Orange Street Sta. TP	Evening	42	31
Park Av Station TP	Early AM	75	10
Park Av Station TP	AM Peak	377	84
Park Av Station TP	Midday	210	49
Park Av Station TP	PM Peak	265	121
Park Av Station TP	Evening	49	22
Penn Station Arrival TP	Early AM	-	-
Penn Station Arrival TP	AM Peak	-	-
Penn Station Arrival TP	Midday	-	-
Penn Station Arrival TP	PM Peak	-	-
Penn Station Arrival TP	Evening	-	-
Penn Station Light Rail TP	Early AM	5	69
Penn Station Light Rail TP	AM Peak	125	993

Penn Station Light Rail	TP	Midday	68	809
Penn Station Light Rail	TP	PM Peak	148	1,778
Penn Station Light Rail	TP	Evening	49	792
Riverfront Stadium Sta.	TP	Early AM	-	-
Riverfront Stadium Sta.	TP	AM Peak	-	-
Riverfront Stadium Sta.	TP	Midday	-	-
Riverfront Stadium Sta.	TP	PM Peak	1	-
Riverfront Stadium Sta.	TP	Evening	1	-
Silver Lake Sta.	TP	Early AM	26	-
Silver Lake Sta.	TP	AM Peak	172	6
Silver Lake Sta.	TP	Midday	106	11
Silver Lake Sta.	TP	PM Peak	100	8
Silver Lake Sta.	TP	Evening	39	1
Warren Street Sta.	TP	Early AM	6	-
Warren Street Sta.	TP	AM Peak	96	2
Warren Street Sta.	TP	Midday	163	37
Warren Street Sta.	TP	PM Peak	269	157
Warren Street Sta.	TP	Evening	82	23
Washington Park Sta.	TP	Early AM	-	4
Washington Park Sta.	TP	AM Peak	-	15
Washington Park Sta.	TP	Midday	-	31
Washington Park Sta.	TP	PM Peak	-	58

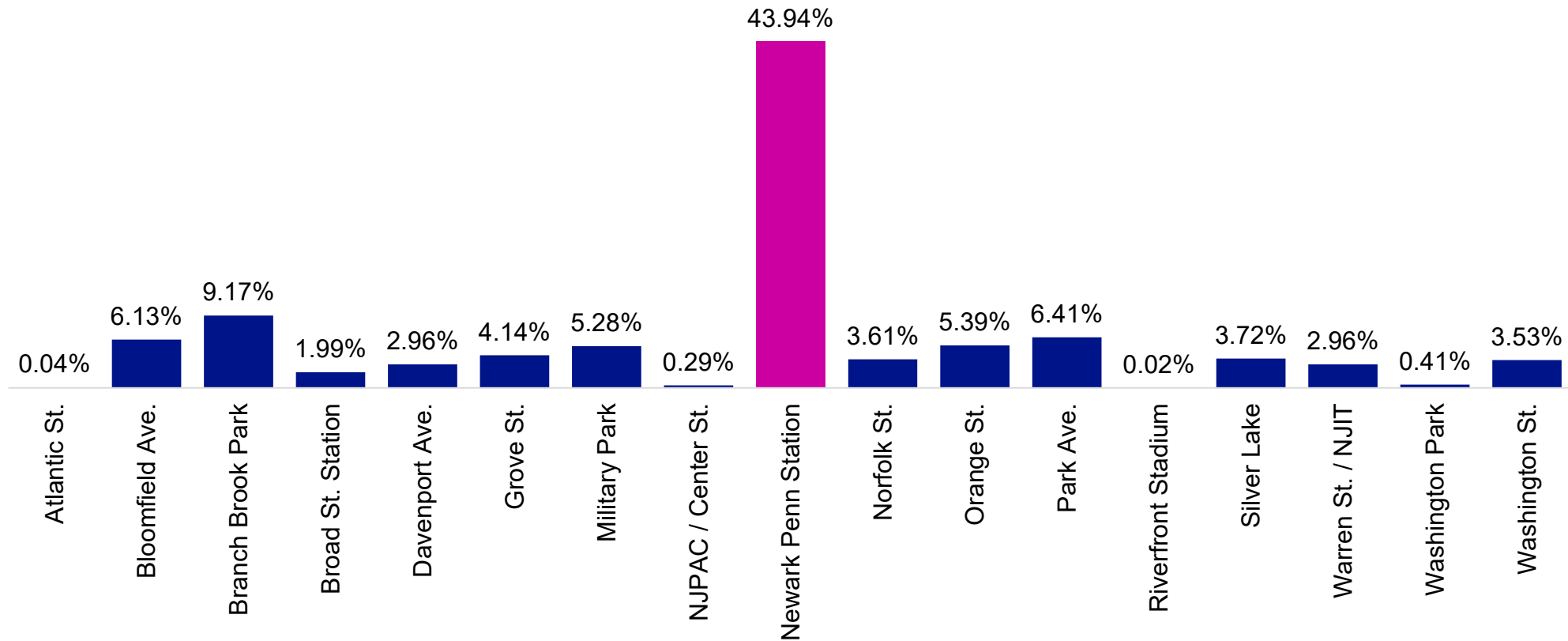
Washington Park Sta. TP	Evening	-	11
Washington Street Sta. TP	Early AM	1	-
Washington Street Sta. TP	AM Peak	28	69
Washington Street Sta. TP	Midday	120	163
Washington Street Sta. TP	PM Peak	156	238
Washington Street Sta. TP	Evening	23	38
Total	Grand Total	7,556	7,952

APPENDIX C: GRAPHIC PROFILE FOR ENTIRE NRL SAMPLE

ALL STATIONS TRAVEL PROFILE



Sample Distribution by Boarding Stations

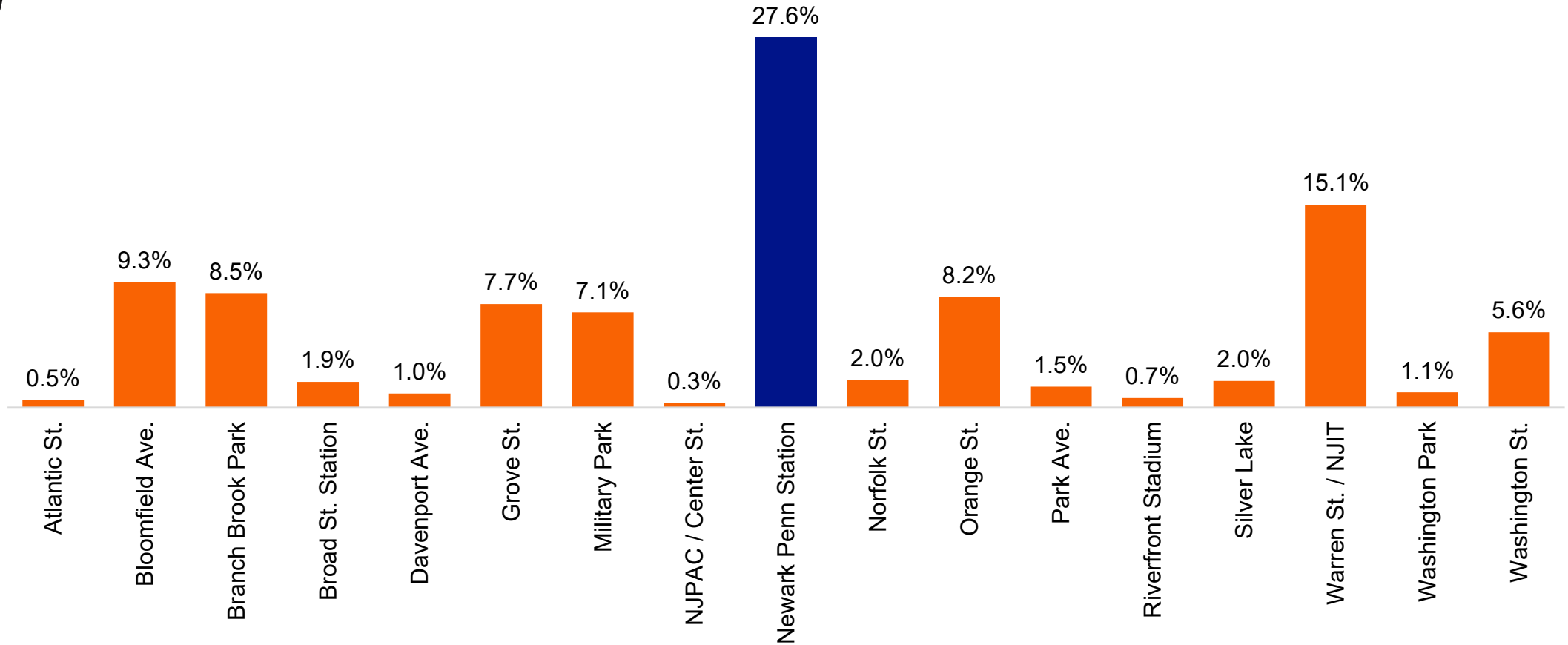




ALL STATIONS TRAVEL PROFILE



Sample Distribution by Alighting Stations

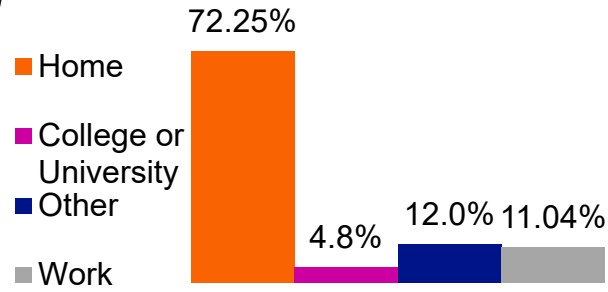




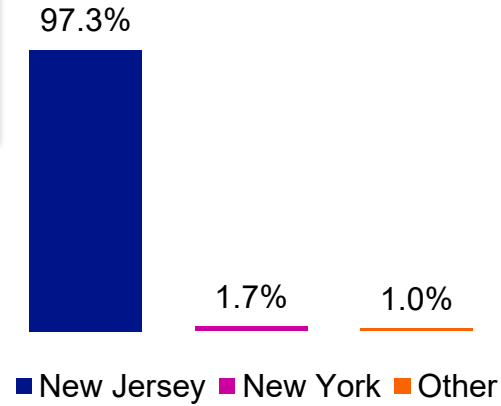
ALL STATIONS TRAVEL PROFILE



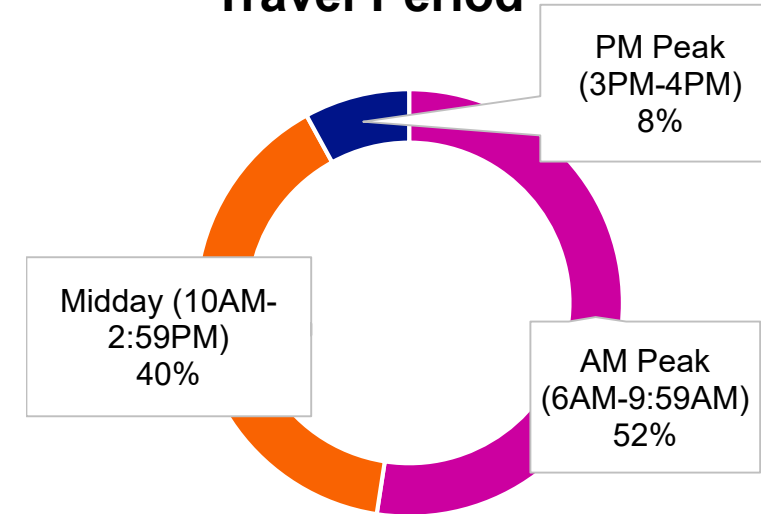
Where Did You Begin This Trip Today?



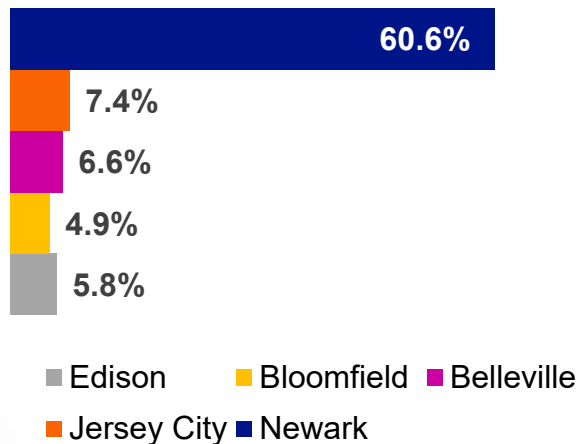
Origin State



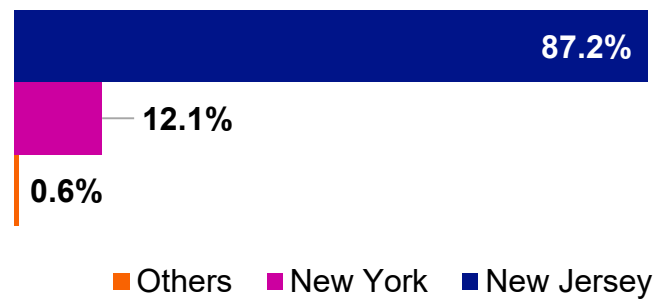
Travel Period



Top Origin Towns



Is Final Destination In NY or NJ?



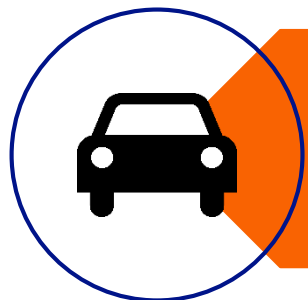
Travel Period: The survey was conducted between 6AM and 4:00PM.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 920 Respondents



ALL STATIONS TRAVEL PROFILE

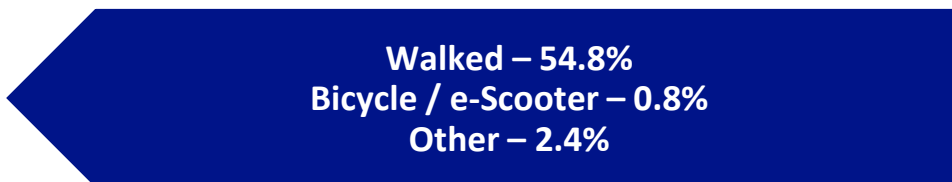
Access Mode to Boarding Stations



Drove Alone and Parked – 2.8%
Another Person Dropped Me Off – 1.3%
Taxi – 0.1%
Uber / Lyft / Other App-based Service – 0.4%

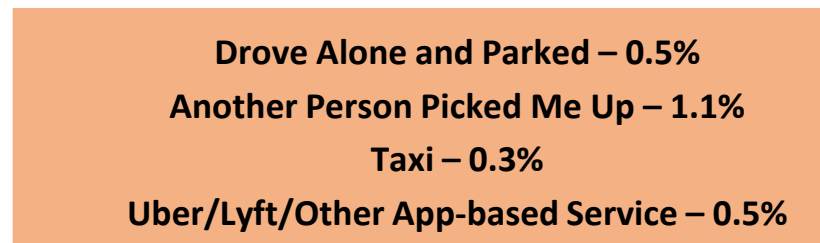


Bus – 14.7%
Another Newark Light Rail Train – 2.8%
NJ Transit Train – 11.0%
PATH Train – 7.8%

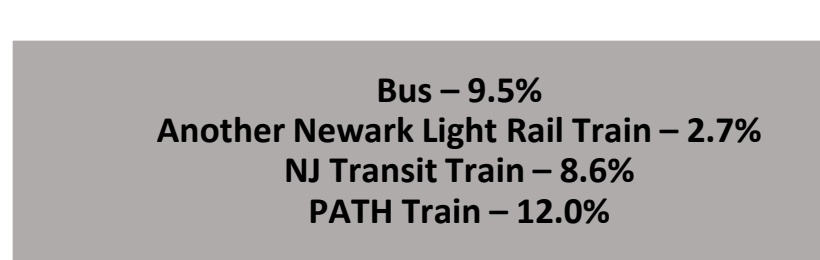


Walked – 54.8%
Bicycle / e-Scooter – 0.8%
Other – 2.4%

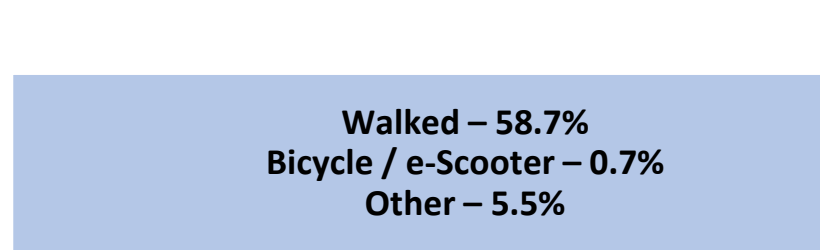
Travel Mode from Alighting Stations to Final Destinations



Drove Alone and Parked – 0.5%
Another Person Picked Me Up – 1.1%
Taxi – 0.3%
Uber/Lyft/Other App-based Service – 0.5%



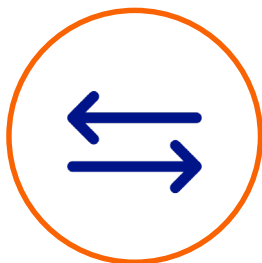
Bus – 9.5%
Another Newark Light Rail Train – 2.7%
NJ Transit Train – 8.6%
PATH Train – 12.0%



Walked – 58.7%
Bicycle / e-Scooter – 0.7%
Other – 5.5%

ALL STATIONS TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 86.5%



Take a bus – 7.5%



Other – 6.0%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 48.0%

Light Rail Monthly Pass 12.2%

Rail Monthly Pass 9.5%

Bus Monthly Pass 9.9%

Reduced Fares for Senior Citizens & Customers with Disabilities 6.8%

FLEXPASS 1.7%

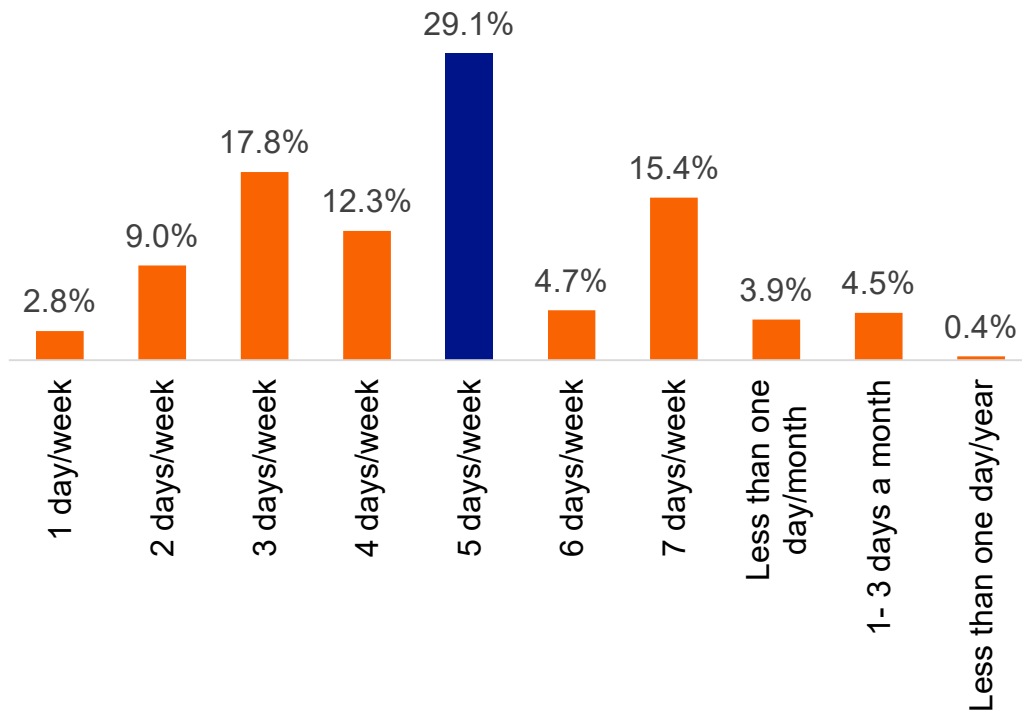
Underground Fare 4.0%

Other 7.9%

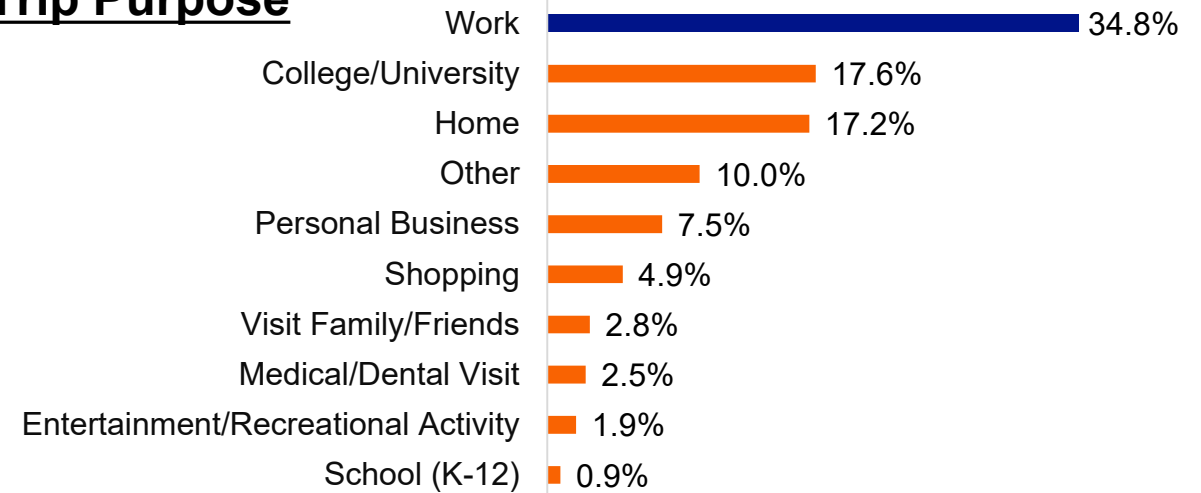


ALL STATIONS TRAVEL PROFILE

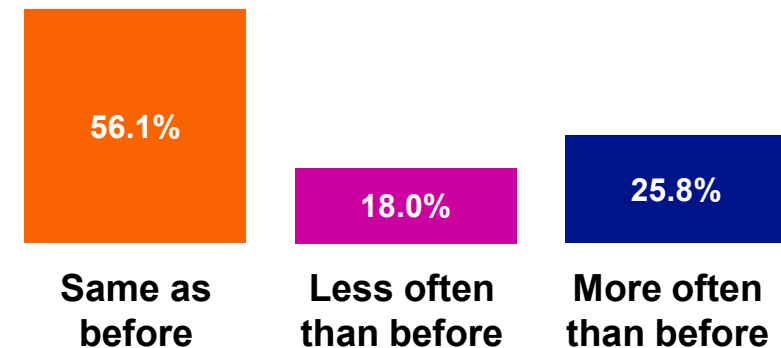
Trip Frequency



Trip Purpose



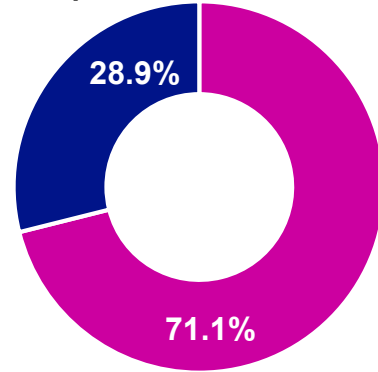
Usage of Newark Light Rail since Covid-19 Pandemic



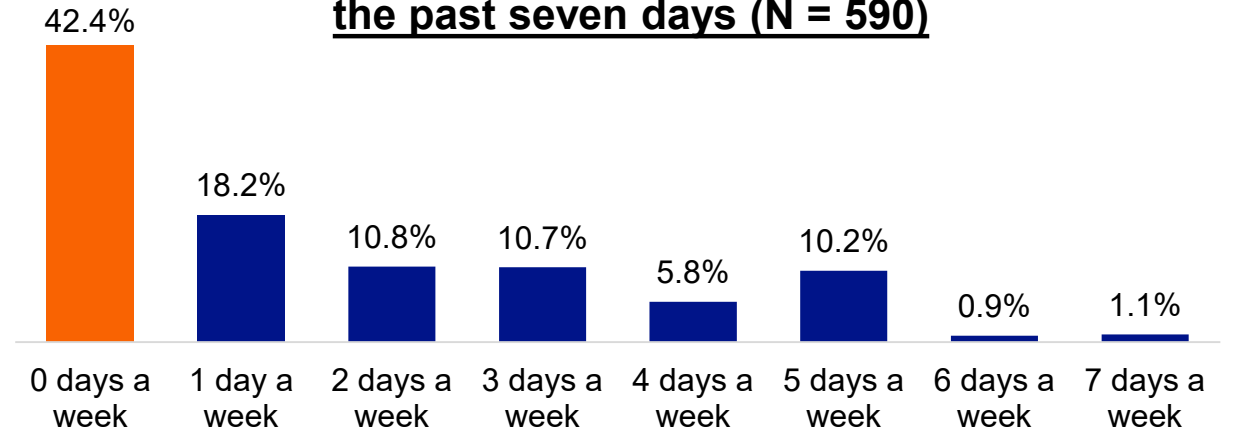
ALL STATIONS TRAVEL PROFILE

Does your employer allow you to work from home? (N = 492)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time

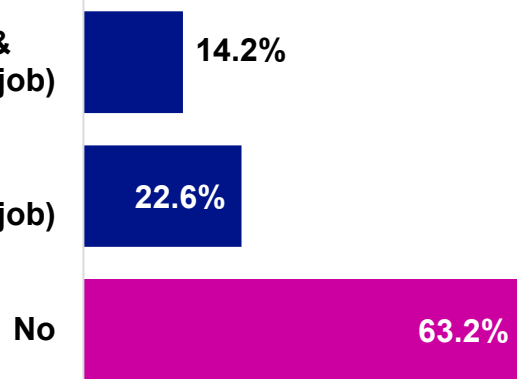


Number of days working from home in the past seven days (N = 590)

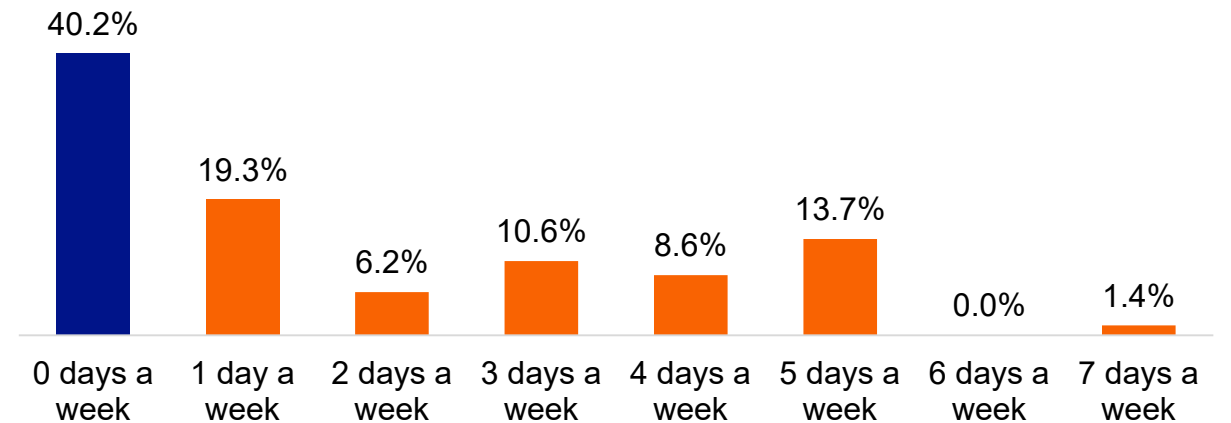


Able to complete job from home, if it was allowed by employer (N = 539)

- Yes (Some duties & responsibilities of my job)
- Yes (All duties & responsibilities of my job)
- No



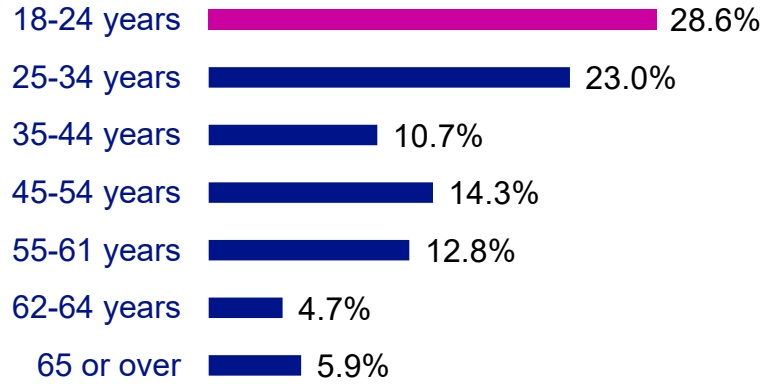
Number of days attending school lectures from home in the past seven days (N = 244)





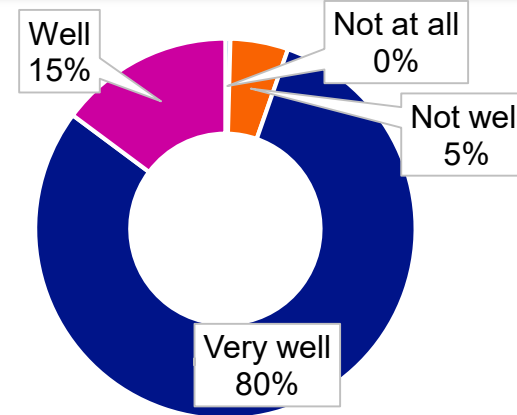
ALL STATIONS TRAVEL PROFILE

Age



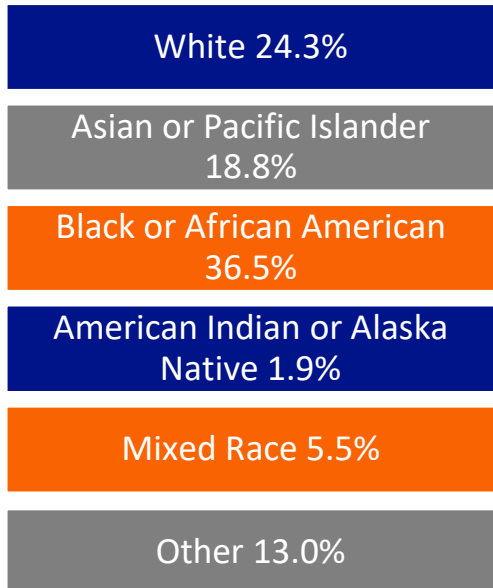
Ethnicity

29.3%
Hispanic

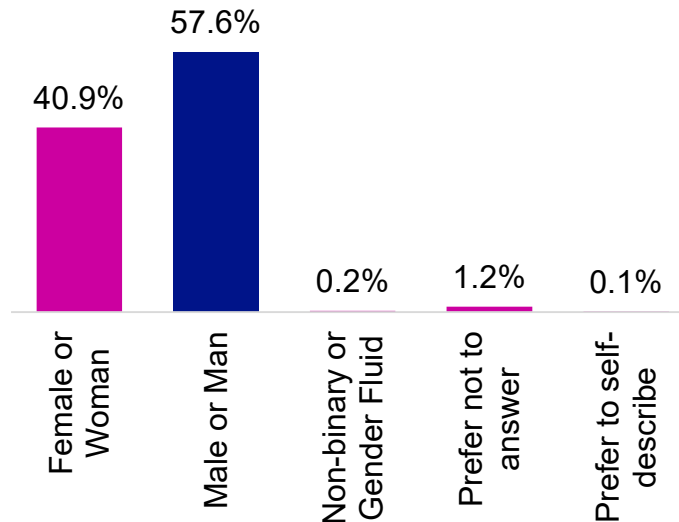


Fluency in Speaking English

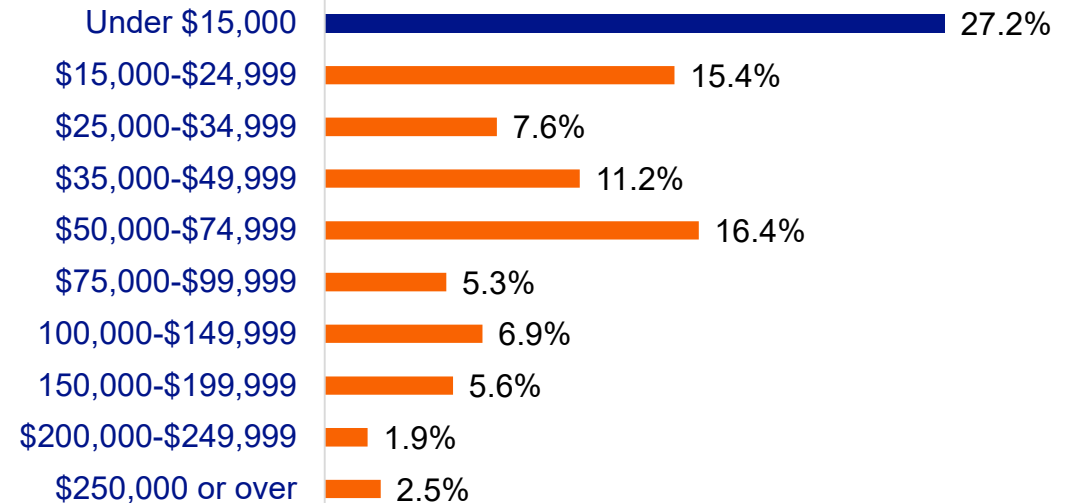
Race



Gender

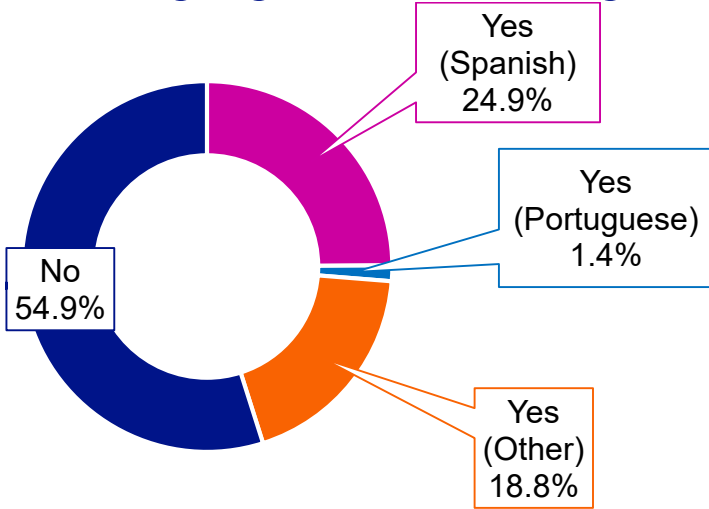


Annual Household Income

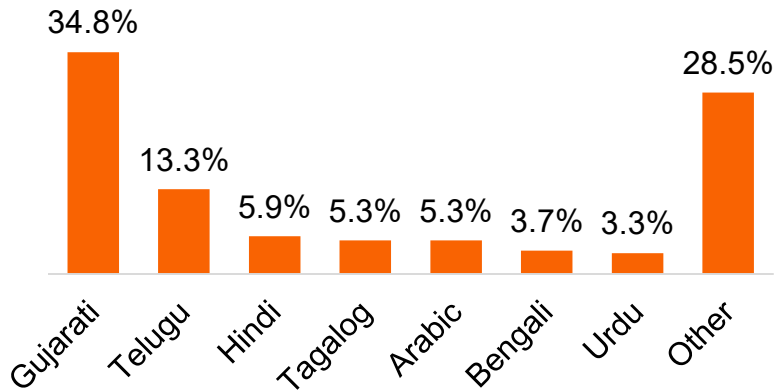


ALL STATIONS TRAVEL PROFILE

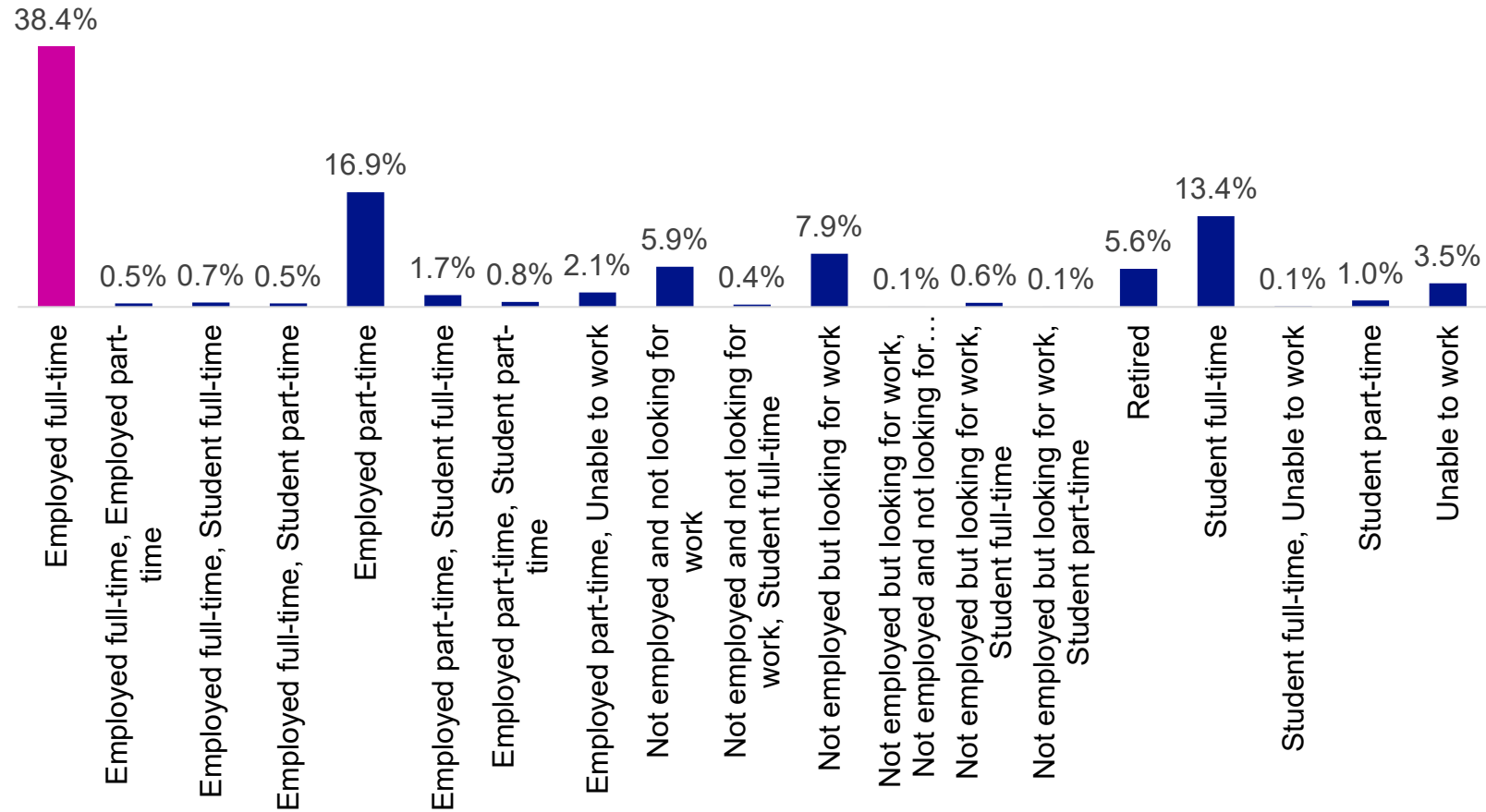
Speak a Language Other than English



Other Top Languages Spoken (N = 125)



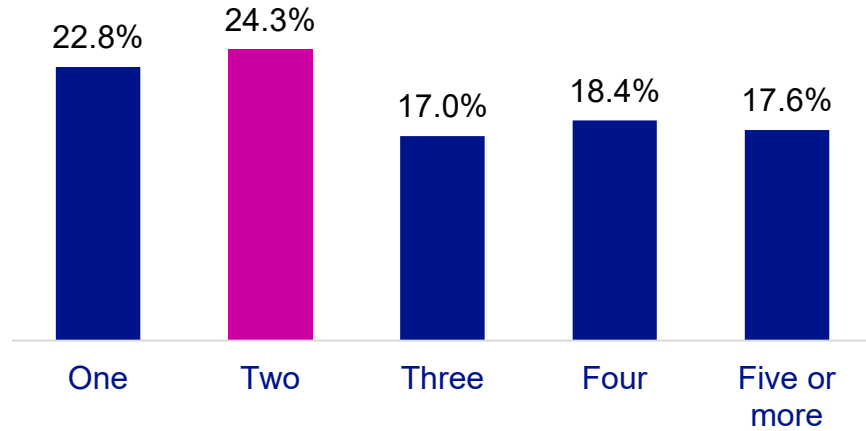
Employment Status (N = 874)



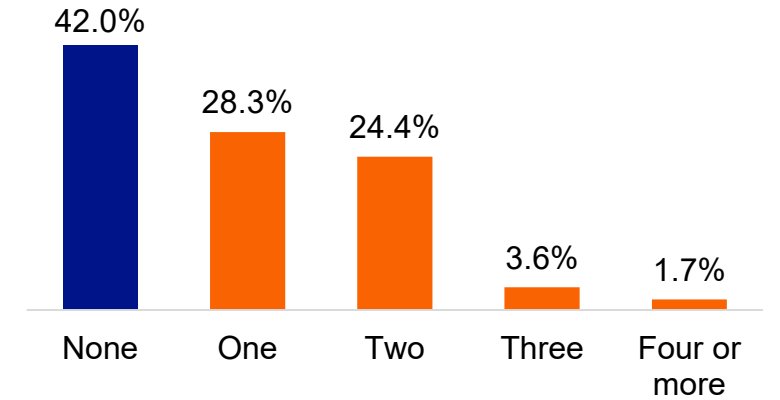


ALL STATIONS TRAVEL PROFILE

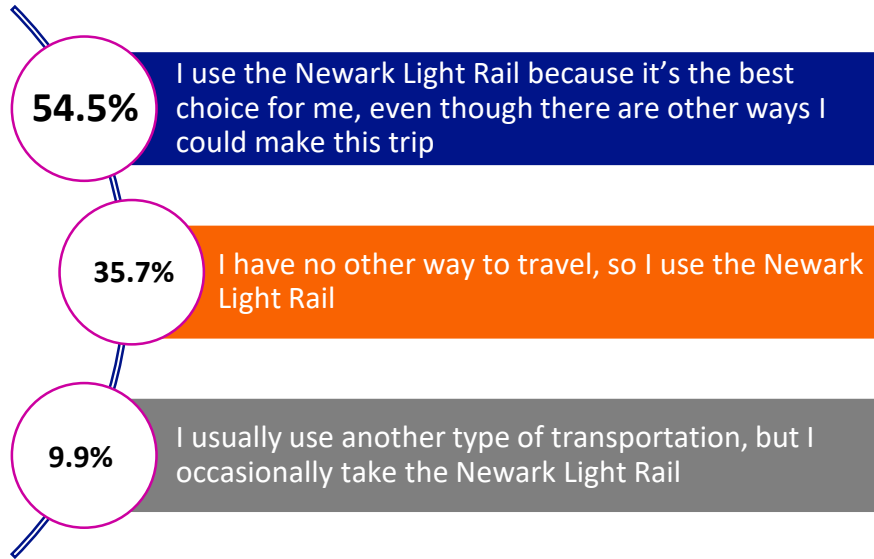
Household Size



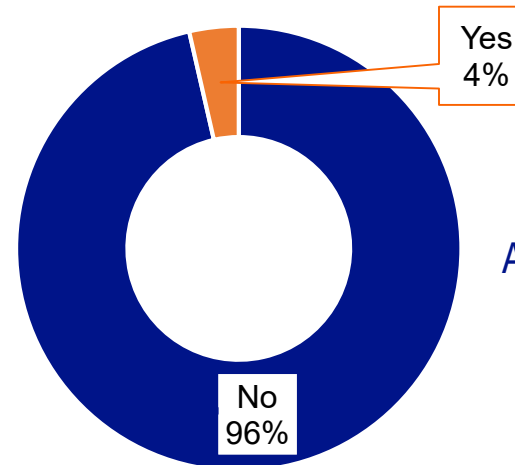
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=8),

21.6% used other mobility device

77.2% used wheelchair

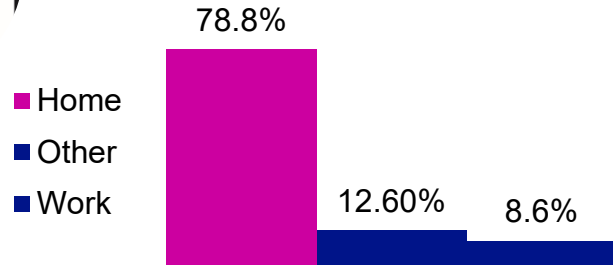
1.3% used wheelchair & other mobility device

APPENDIX D: GRAPHIC PROFILE FOR INDIVIDUAL STATIONS

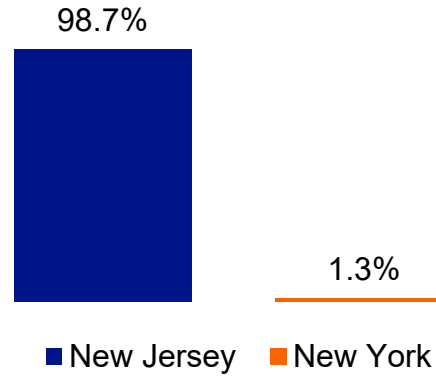
GROVE ST. TRAVEL PROFILE



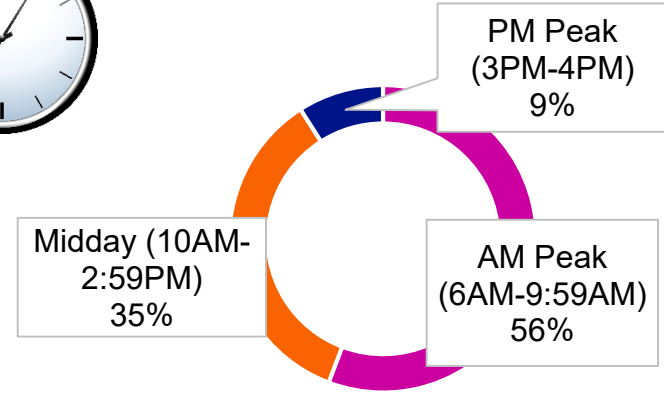
Where Did You Begin This Trip Today?



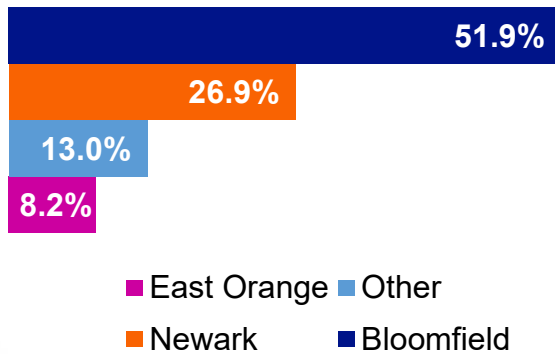
Origin State



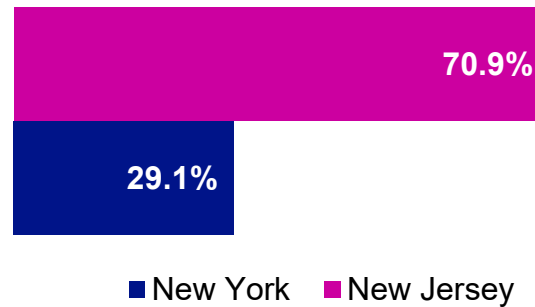
Travel Period



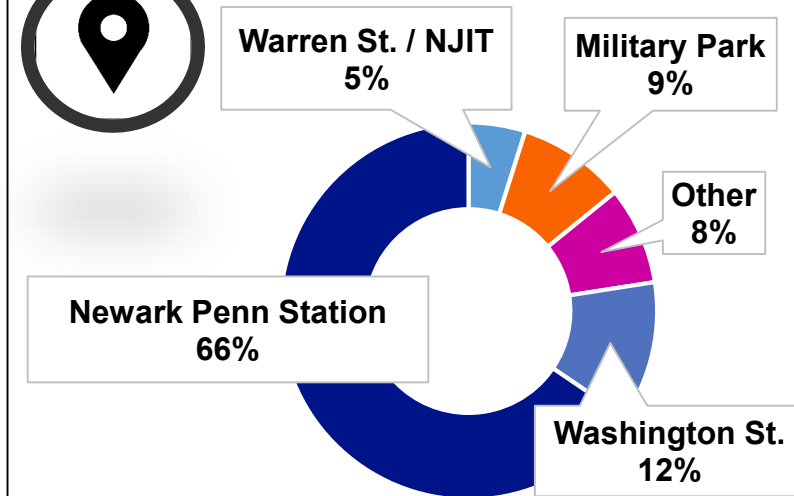
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

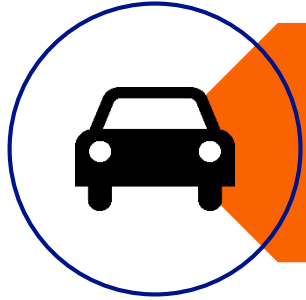


Travel Period: The survey was conducted between 6AM and 4:00PM.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 94 Respondents (Margin of Error $\pm 2.0\%$ at 95% Confidence Level)

GROVE ST. TRAVEL PROFILE

Access Mode to Boarding Station



Drove Alone and Parked – 23.7%
 Another Person Dropped Me Off – 2.4%
 Uber / Lyft / Other App-based Service – 2.6%

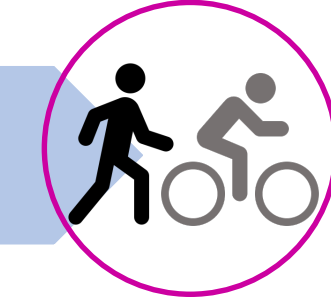
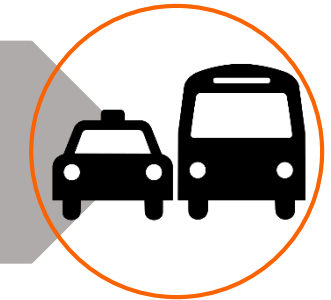
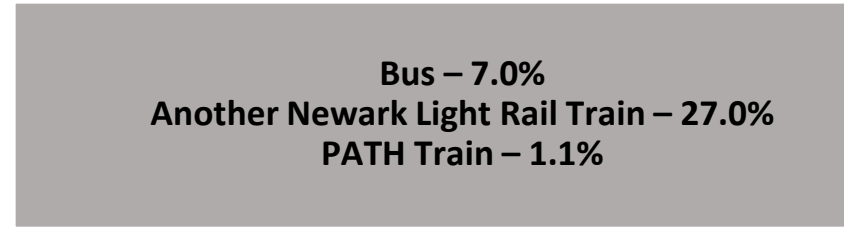
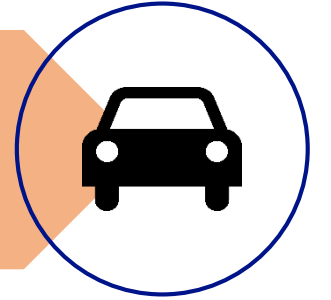


Bus – 3.6%
 Another Newark Light Rail Train – 2.4%
 NJ Transit Train – 0.8%



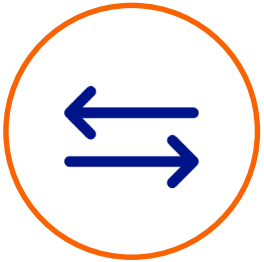
Walked – 63.9%
 Bicycle / e-Scooter – 0.8%

Travel Mode for those Disembarking at Grove St. Station (N=34)



GROVE ST. TRAVEL PROFILE

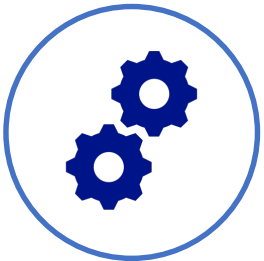
Travel Method for Return Trip



Travel the same way in the opposite direction – 88.3%



Take a bus – 8.5%



Other – 3.2%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 57.2%

Light Rail Monthly Pass 19.7%

Rail Monthly Pass 5.8%

Bus Monthly Pass 7.7%

Reduced Fares for Senior Citizens & Customers with Disabilities 6.2%

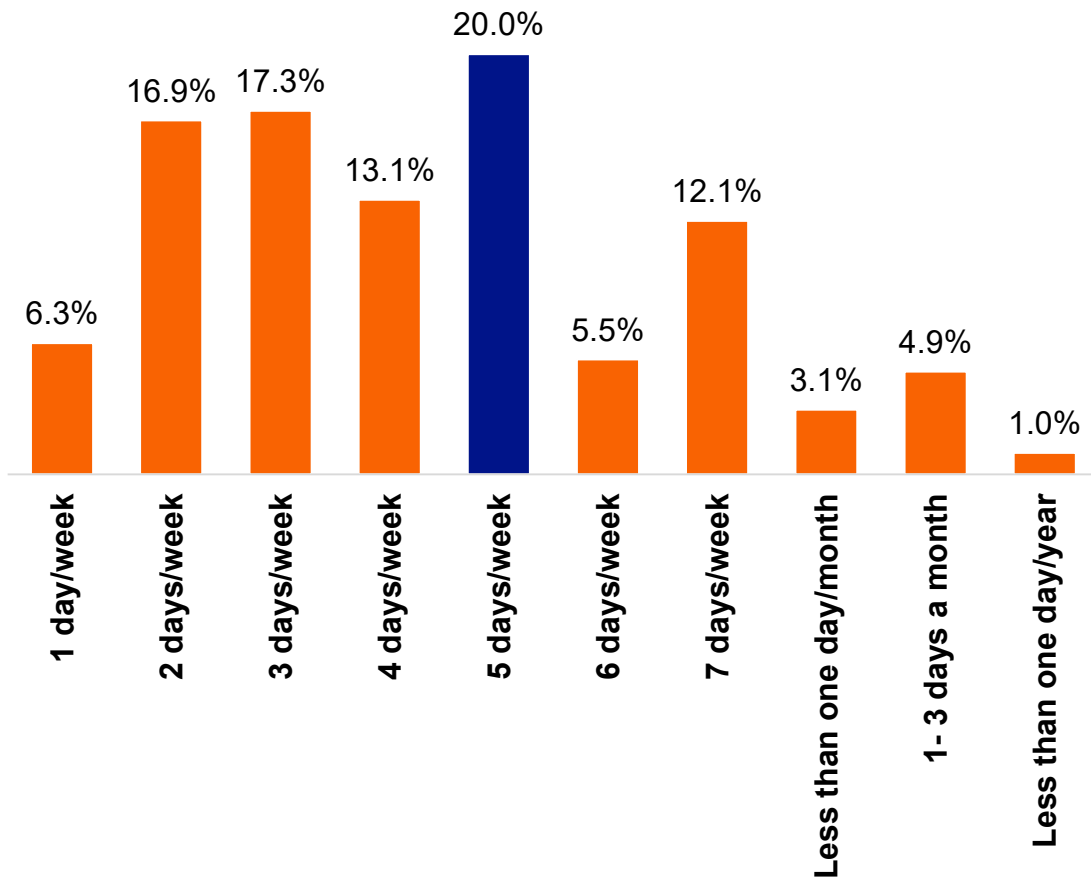
FLEXPASS 2.6%

Underground Fare 0.8%

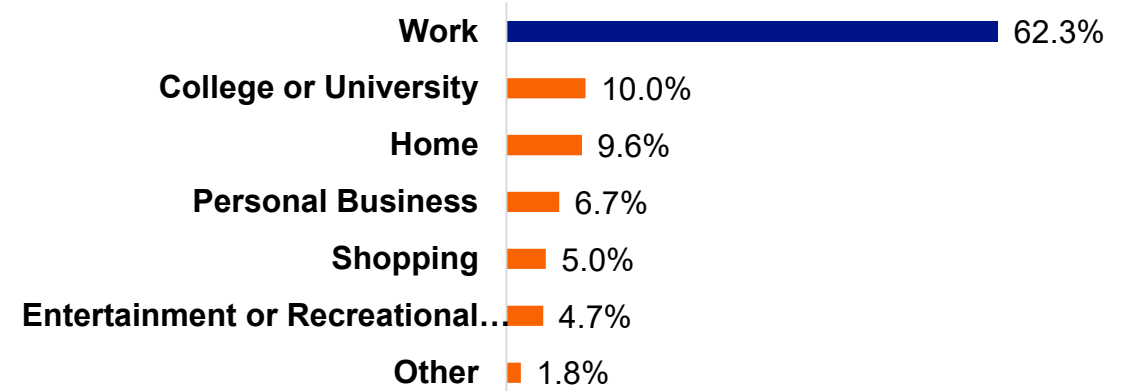


GROVE ST. TRAVEL PROFILE

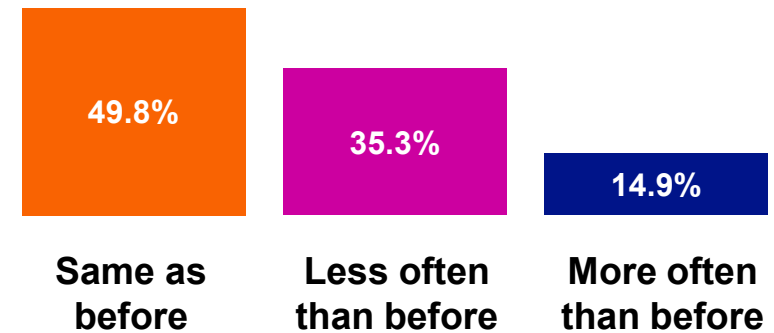
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

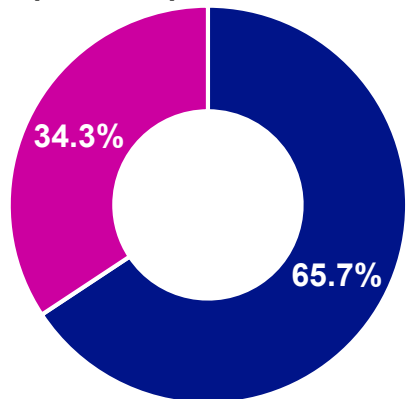




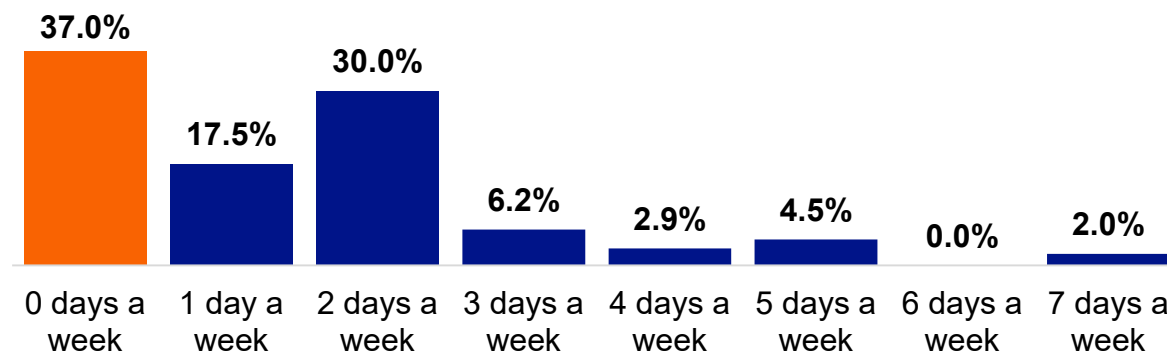
GROVE ST. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 55)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



Number of days working from home in the past seven days (N = 70)



Able to complete job from home, if it was allowed by employer (N = 60)

Yes (Some duties & responsibilities of my job)

18.4%

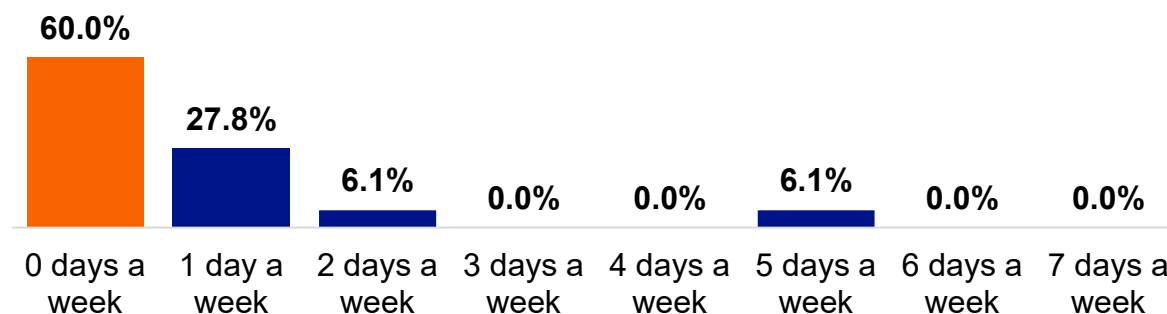
Yes (All duties & responsibilities of my job)

39.9%

No

41.7%

Number of days attending school lectures from home in the past seven days (N = 15)



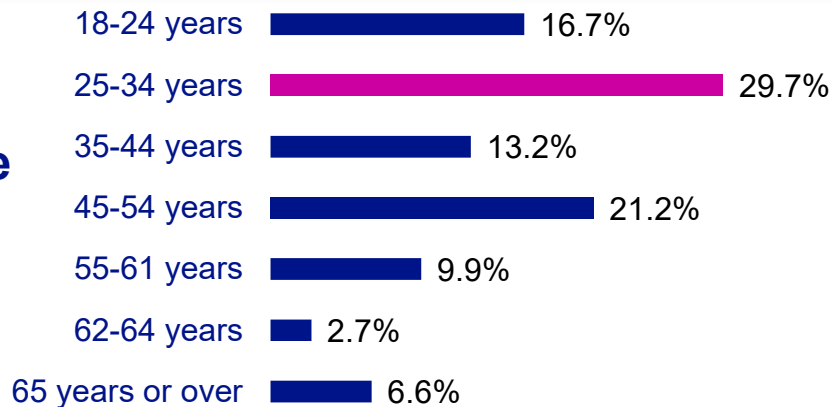
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 94 Respondents (Margin of Error \pm 2.0% at 95% Confidence Level)



GROVE ST. TRAVEL PROFILE

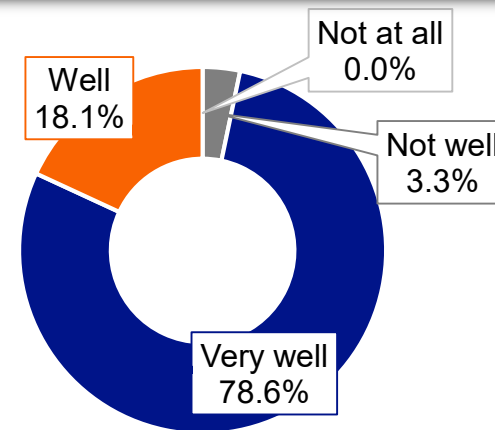
Age



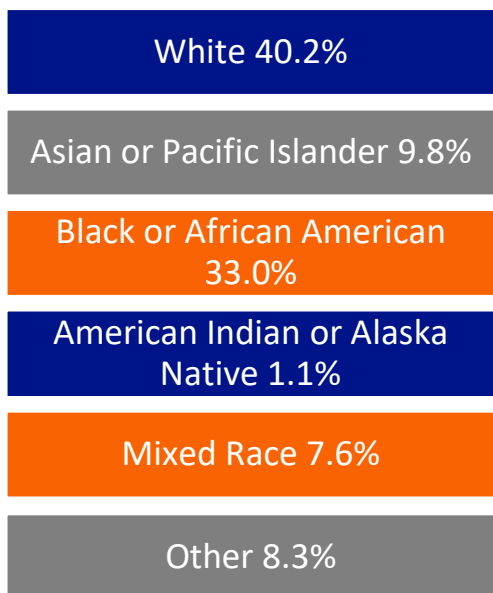
Ethnicity

43.9%
Hispanic

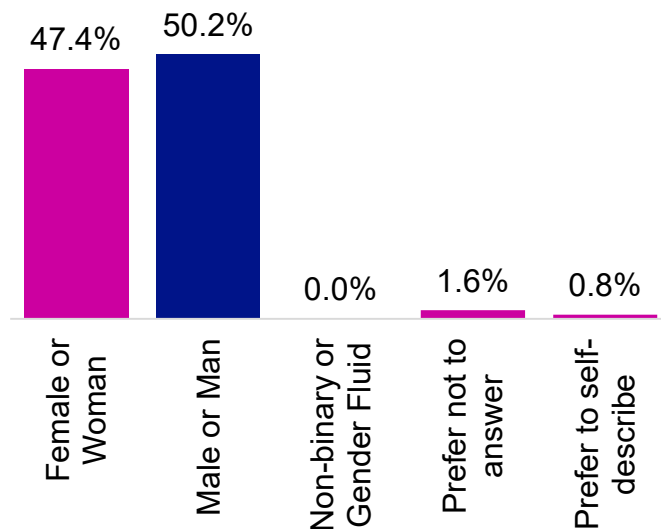
Fluency in Speaking English



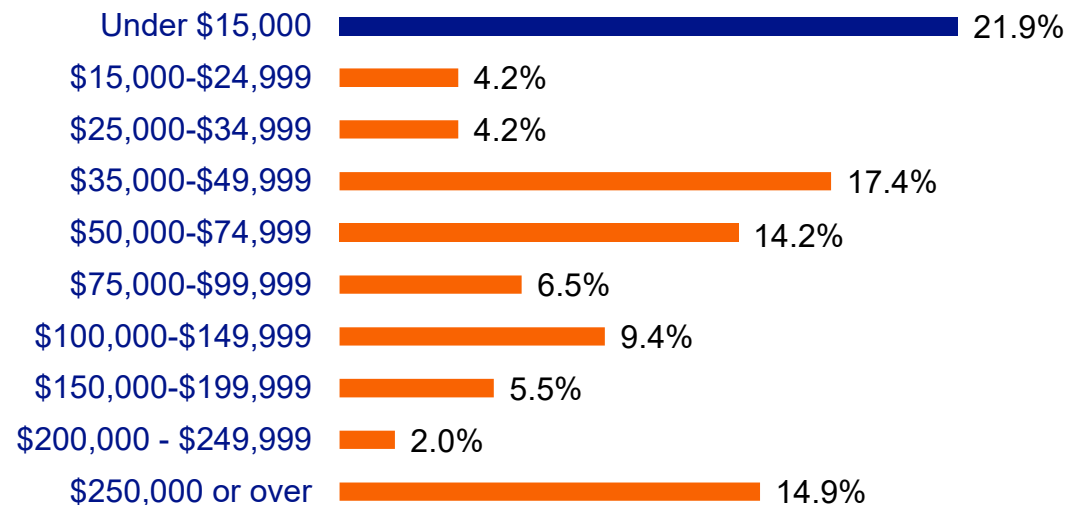
Race



Gender

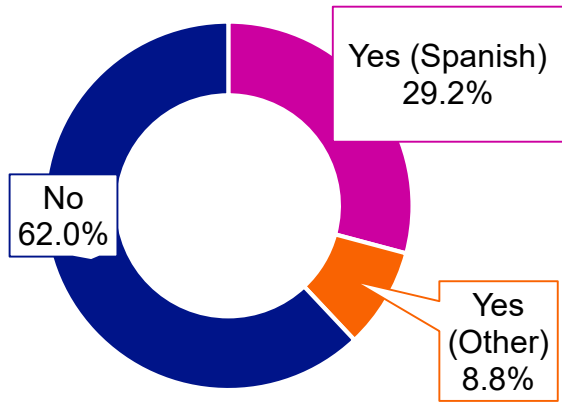


Annual Household Income

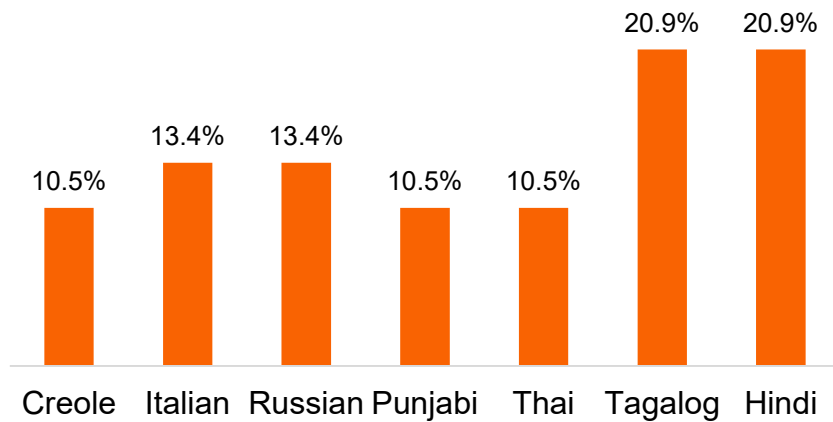


GROVE ST. TRAVEL PROFILE

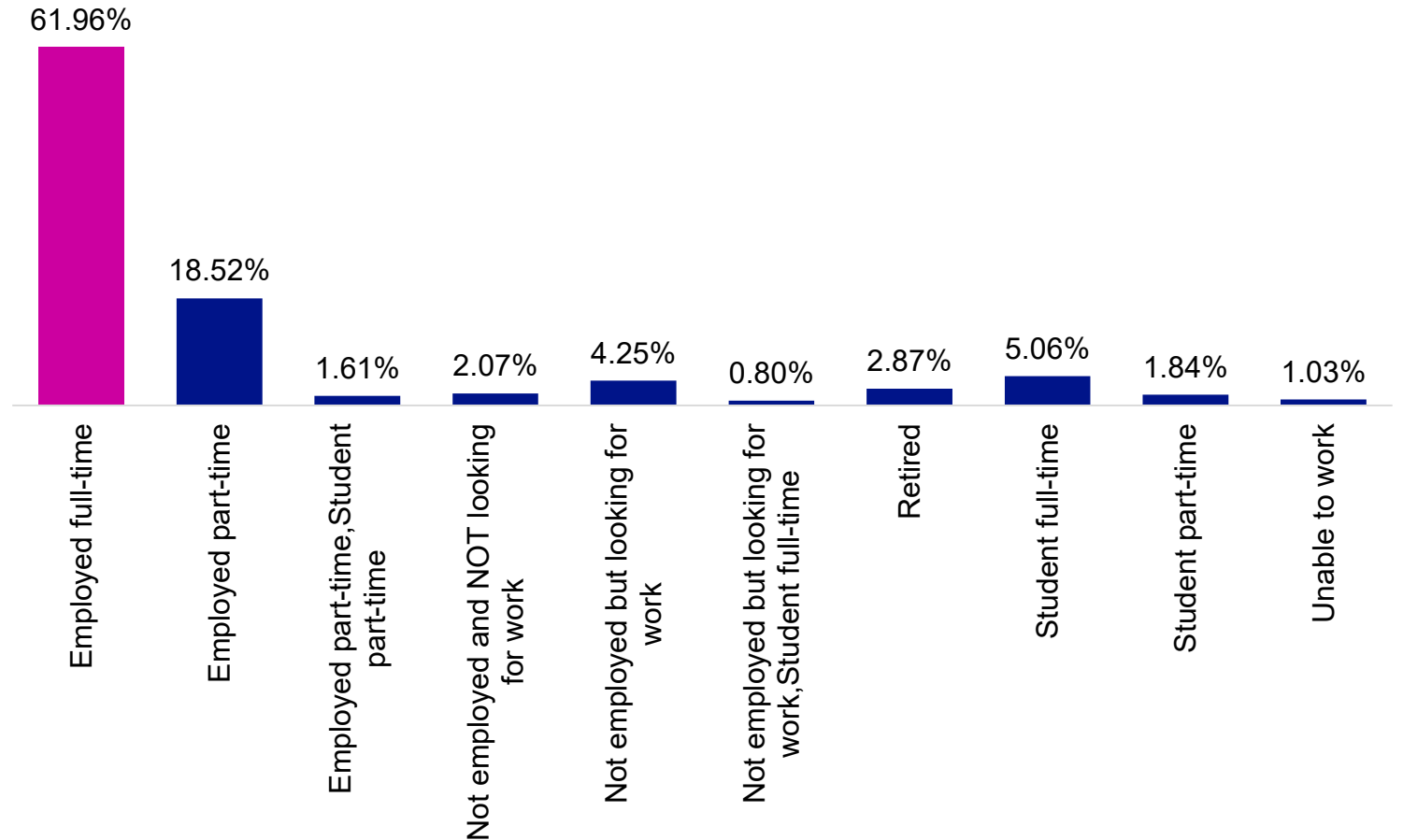
Speak a Language Other than English



Other Languages Spoken (N = 9)



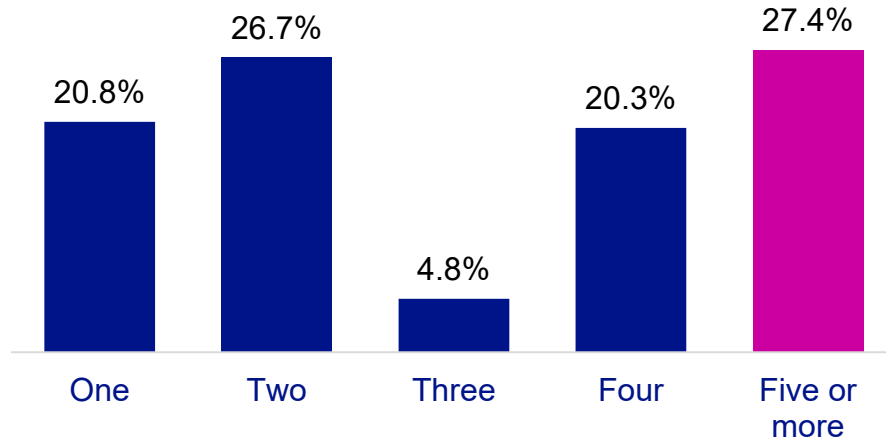
Employment Status (N = 90)



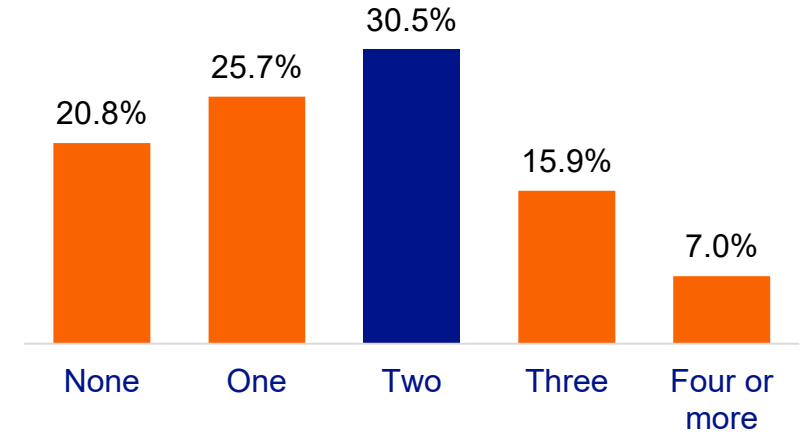


GROVE ST. TRAVEL PROFILE

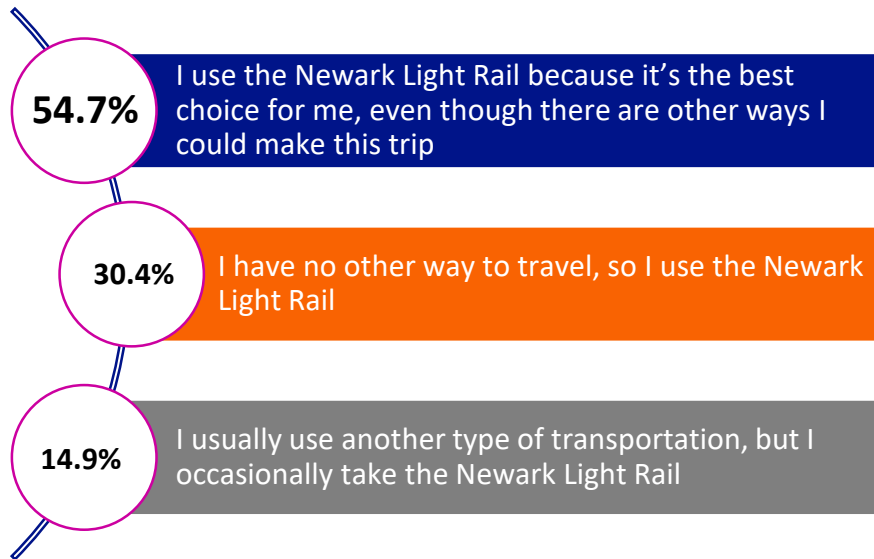
Household Size



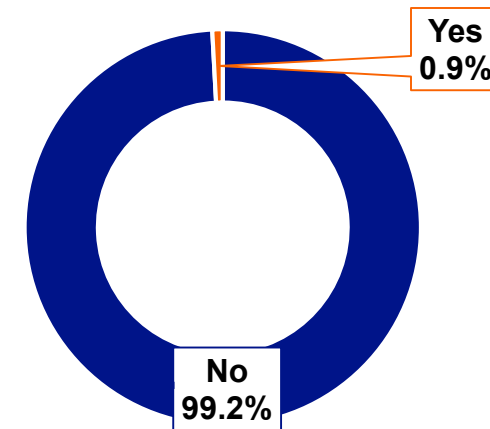
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes, no respondents indicated they used wheelchair and/or other mobility device.



GROVE ST. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- Higher frequency, full service to Grove St.,
- More express trains for rush hours from Grove St to Penn Station
- Expansion of services around Grove St. neighborhood
- Run more trains late at night
- Fewer cancelled trains

Better Communication & Be On Time

- Please be on time and consistent with train schedule
- Better communications with riders
- Send alerts, give notice of disruptions and cancellations
- Have screen panels that update the schedule of the rail
- Friendlier drivers

Attention to Needed Repair Work

- Fix the escalators at Penn. Station, very rarely work has been on-going issue for over 1.5 years. Elevator smells of urine!
- Make sure elevators work in Newark
- Light rail payment machines-NG
- Track work on weekends going on for years
- Fire the rail operation manager, make the repairs

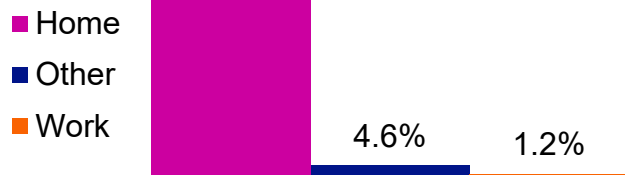
Cleanliness and other concerns

- Cleanliness on the Station
- Clean the trains
- Clean the stop areas
- Stop fellow passengers from smoking and blasting music onboard

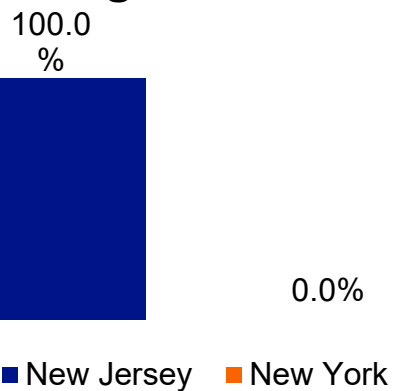
SILVER LAKE TRAVEL PROFILE



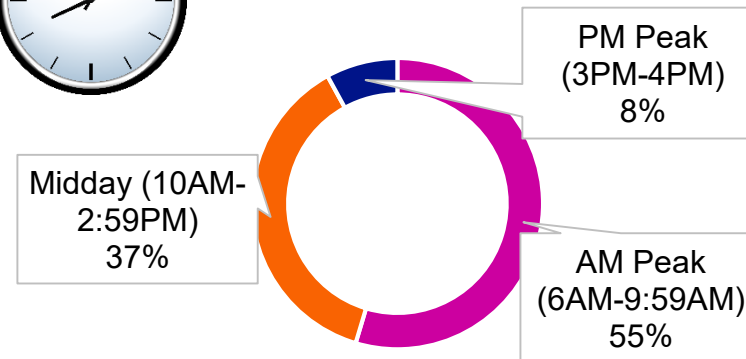
Where Did You Begin This Trip Today?



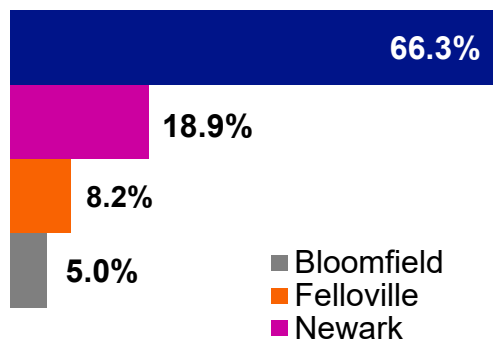
Origin State



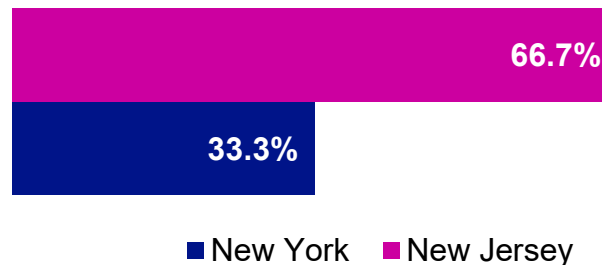
Travel Period



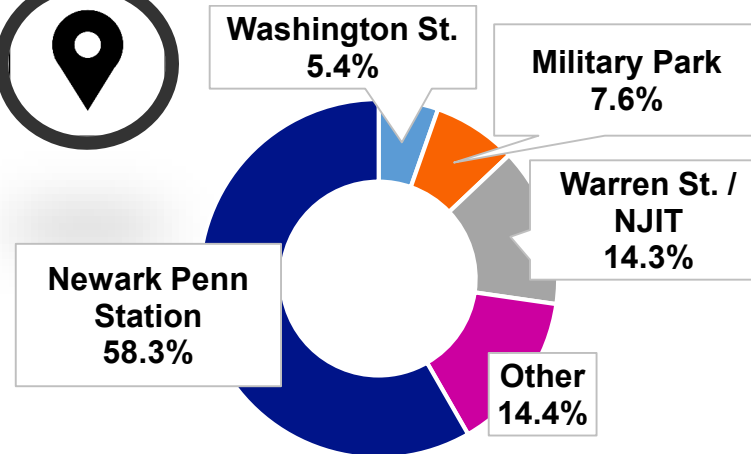
Top Origin Towns



Is Final Destination In NY or NJ?



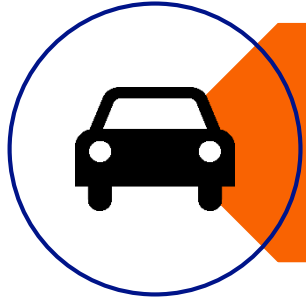
Destination Station





SILVER LAKE TRAVEL PROFILE

Access Mode to Boarding Station



Drove Alone and Parked – 1.2%
Another Person Dropped Me Off – 22.0%

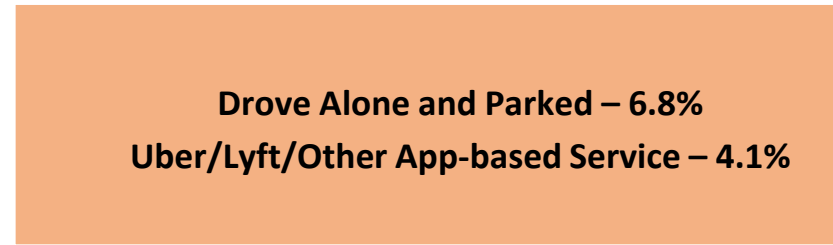


Another Newark Light Rail Train – 6.0%
PATH Train – 1.2%

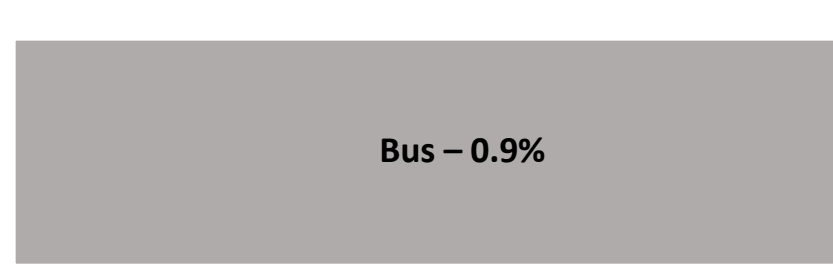


Walked – 90.3%

Travel Mode for those Disembarking at Silver Lake Station (N=19)



Drove Alone and Parked – 6.8%
Uber/Lyft/Other App-based Service – 4.1%



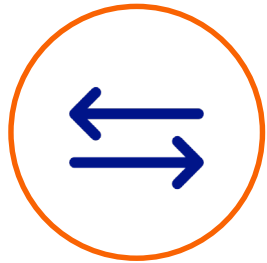
Bus – 0.9%



Walked – 88.2%

SILVER LAKE TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 92.3%



Take a bus – 6.4%



Other – 1.3%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 56.9%

Light Rail Monthly Pass 15.6%

Rail Monthly Pass 6.0%

Bus Monthly Pass 3.5%

Reduced Fares for Senior Citizens & Customers with Disabilities 14.2%

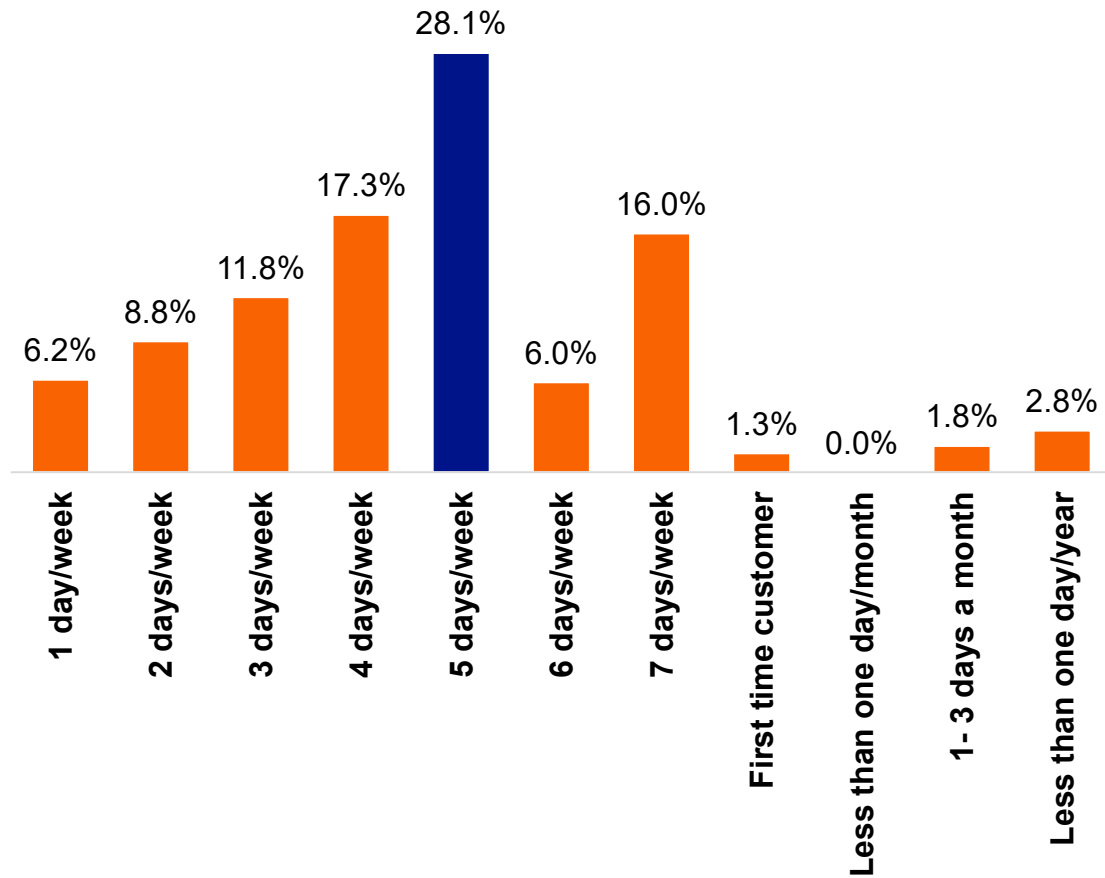
FLEXPASS 2.5%

Other 1.3%

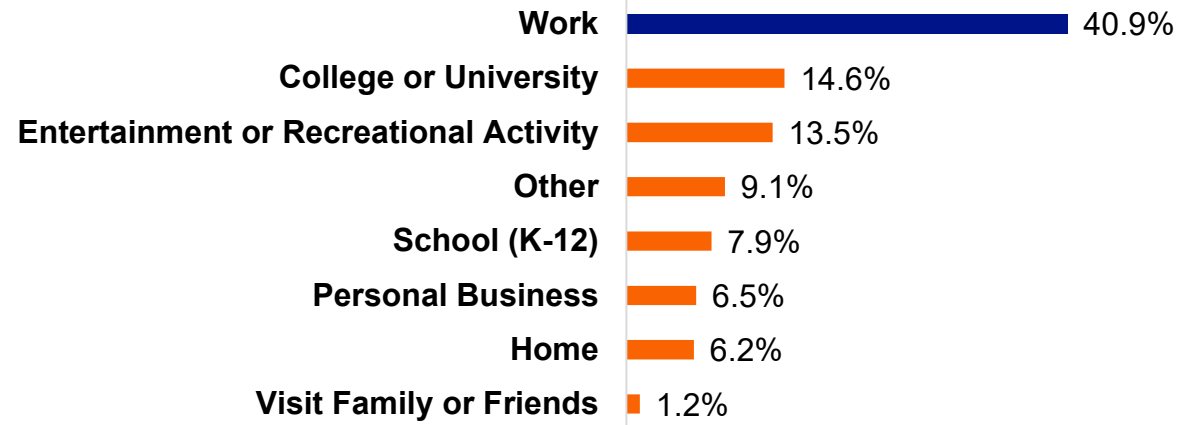


SILVER LAKE TRAVEL PROFILE

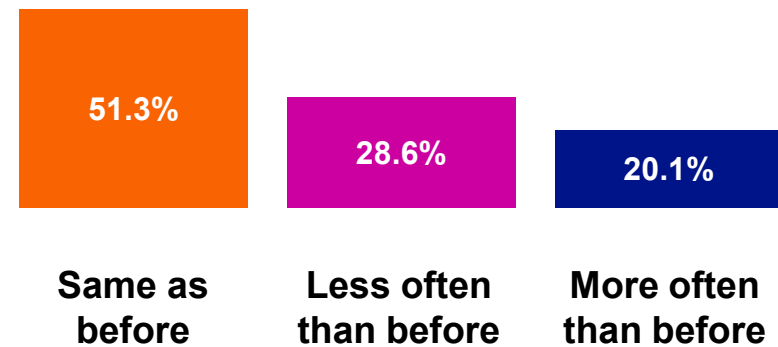
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

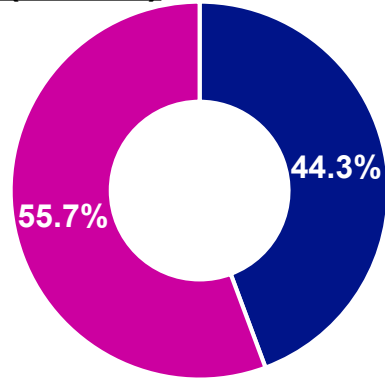




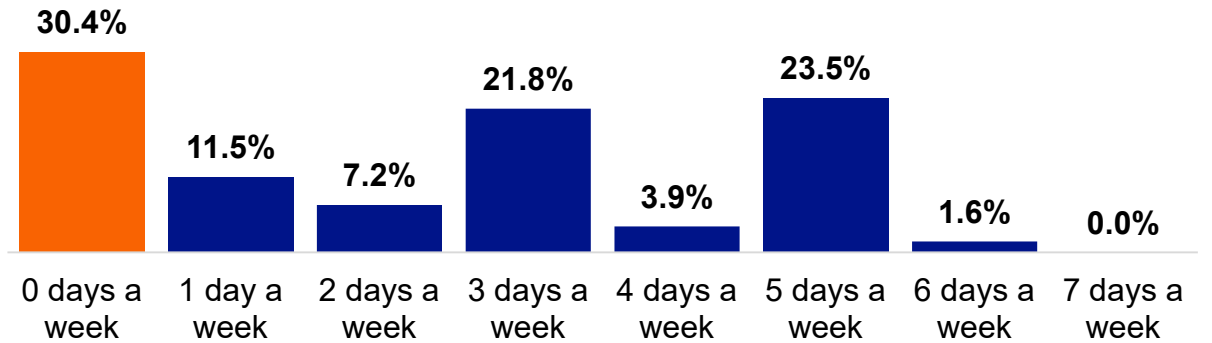
SILVER LAKE TRAVEL PROFILE

Does your employer allow you to work from home? (N = 30)

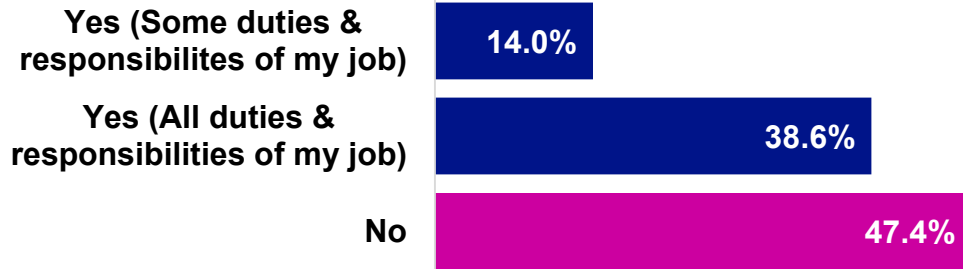
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



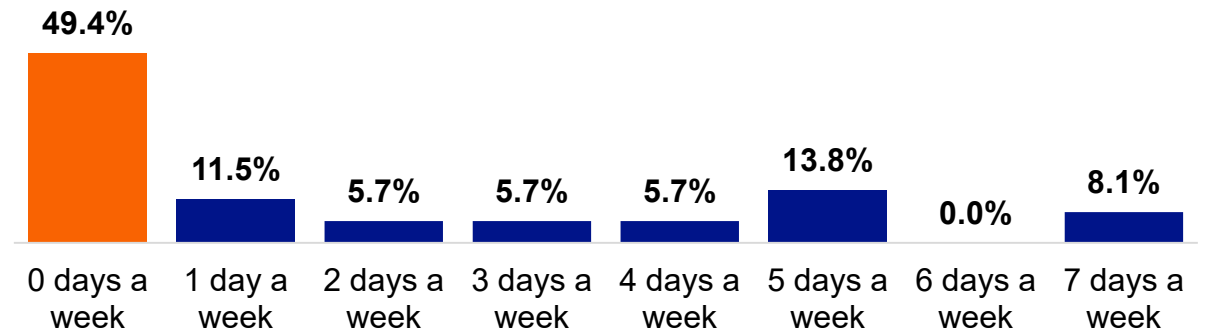
Number of days working from home in the past seven days (N = 38)



Able to complete job from home, if it was allowed by employer (N = 34)



Number of days attending school lectures from home in the past seven days (N = 15)



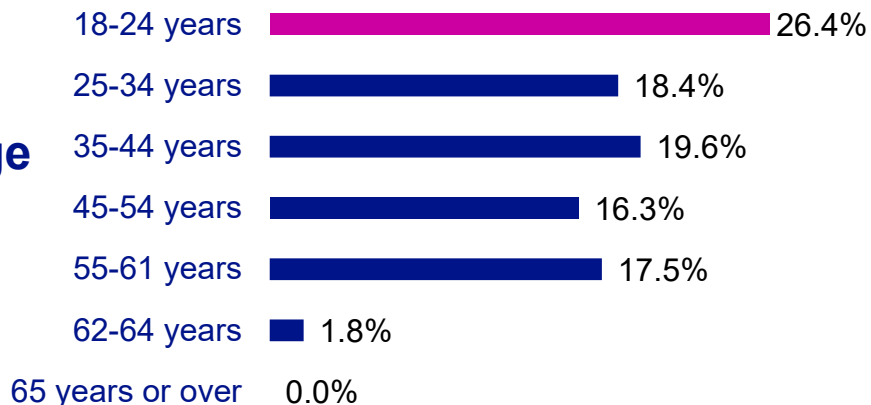
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 55 Respondents (Margin of Error $\pm 1.5\%$ at 95% Confidence Level)



SILVER LAKE TRAVEL PROFILE

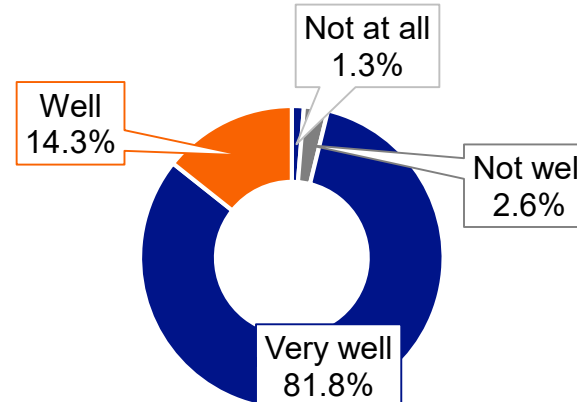
Age



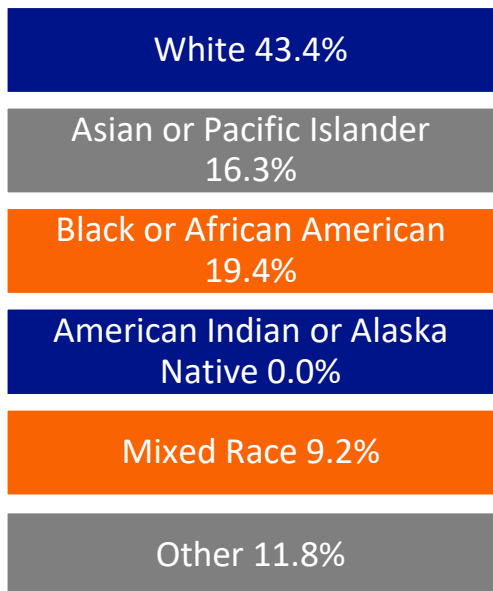
Ethnicity

48.1%
Hispanic

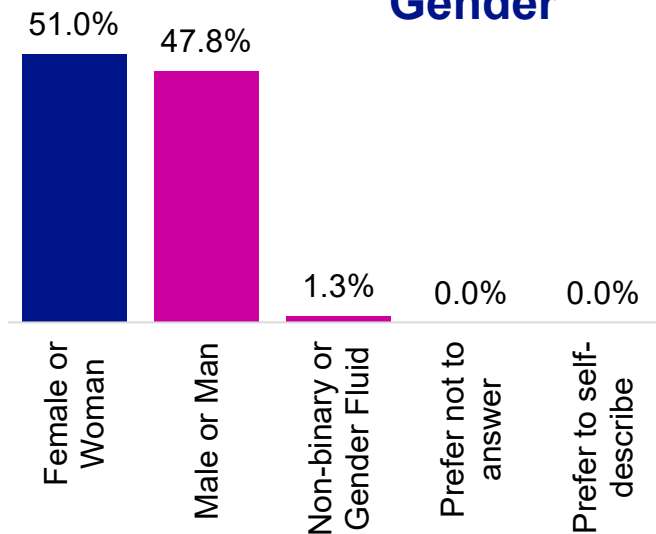
Fluency in Speaking English



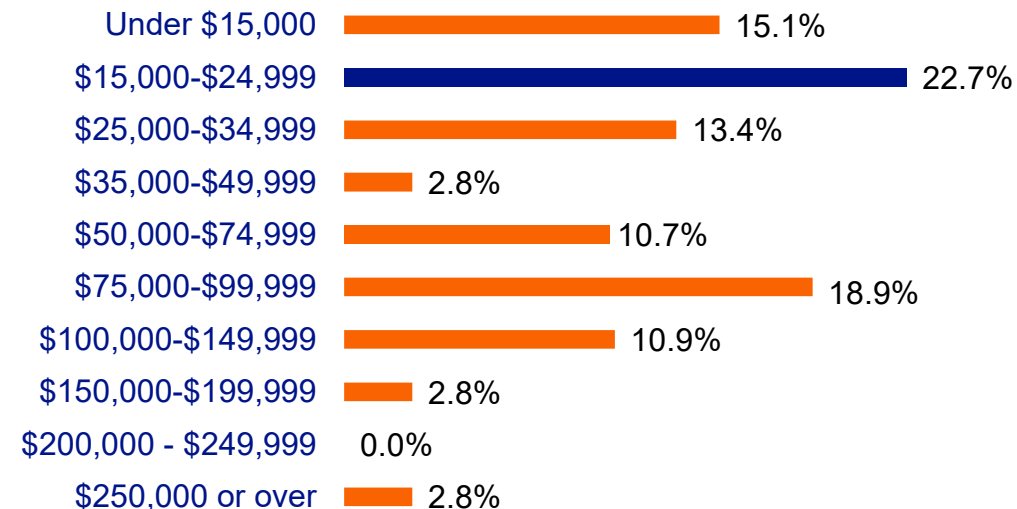
Race



Gender

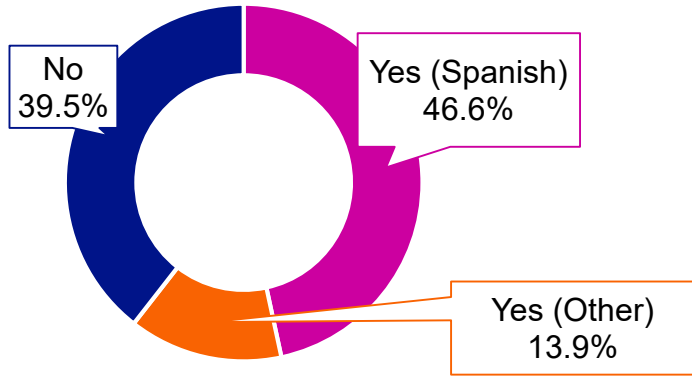


Annual Household Income

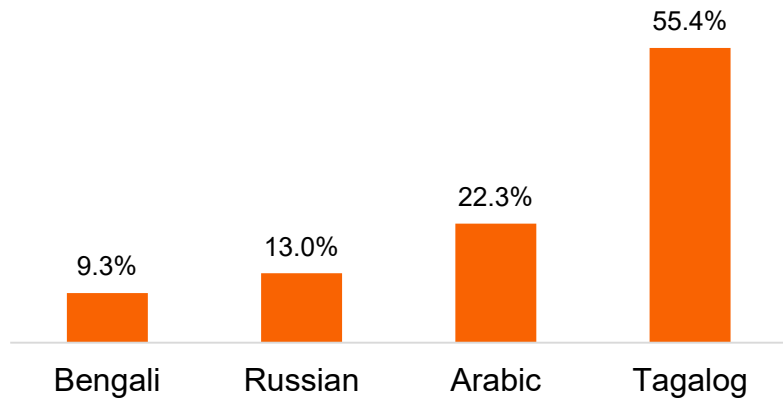


SILVER LAKE TRAVEL PROFILE

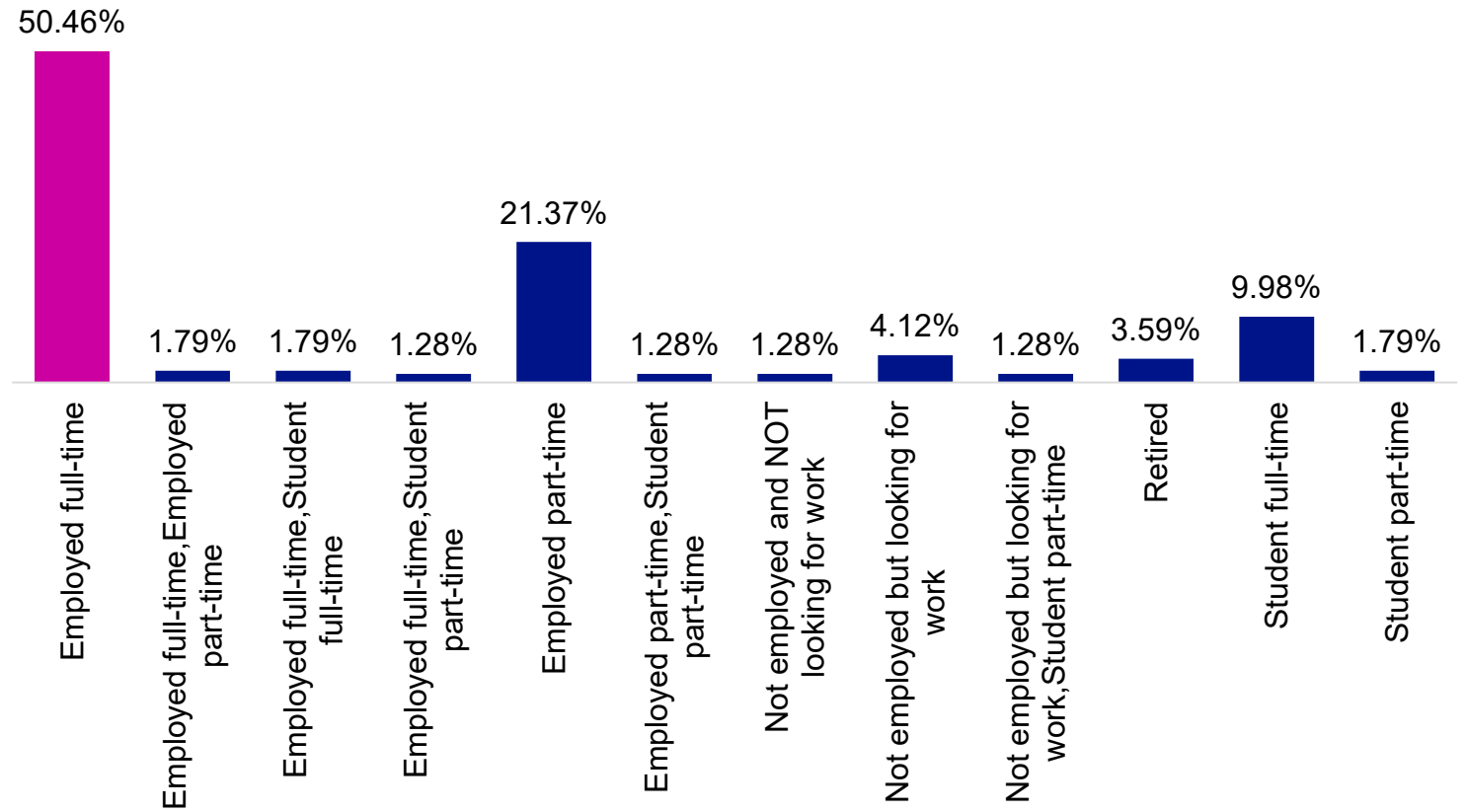
Speak a Language Other than English



Other Languages Spoken (N = 6)



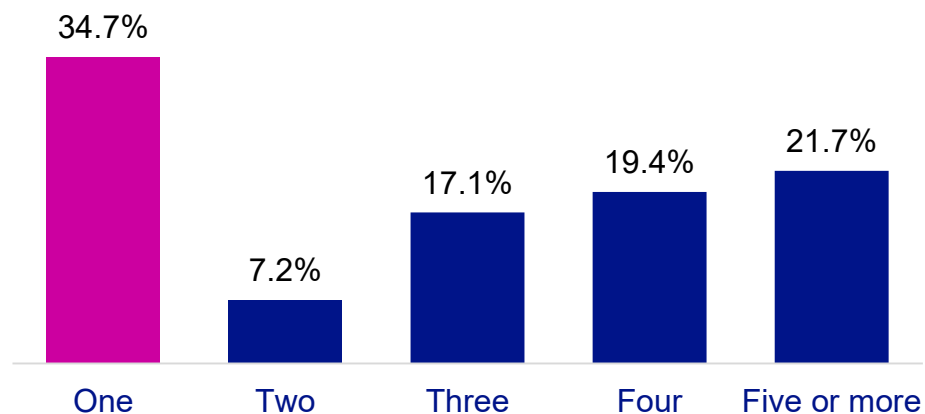
Employment Status (N = 52)



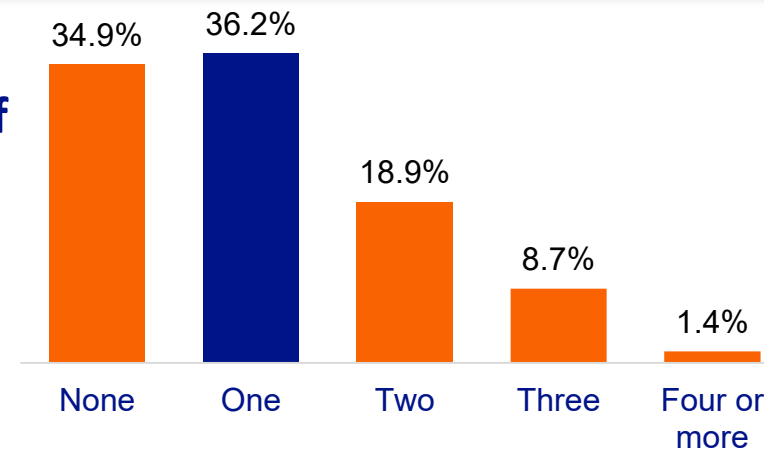


SILVER LAKE TRAVEL PROFILE

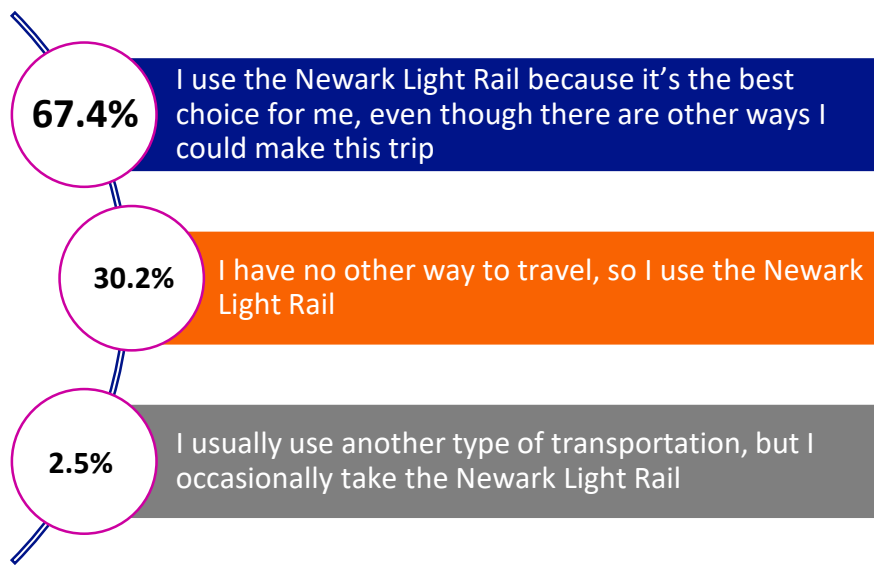
Household Size



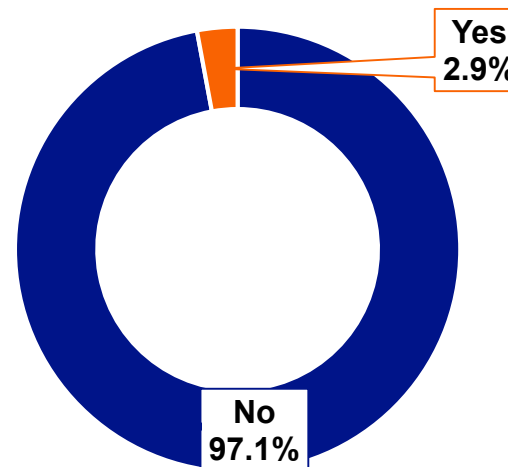
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes, no respondents indicated they used wheelchair and/or other mobility device.



SILVER LAKE TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- Be consistent by showing up on time / not requiring so much service
- Saturday schedule could be better
- Offer another line
- More frequencies
- Stick to their schedule

Better Communication & Be On Time

- Be more organized with delays and cancellation
- Having trains wait a little before leaving
- Volver a pasar cada 5 minutos, asi no me retraso y no me cambia mis horarios
- Timing
- Making sure trains run on schedule
- Connections can be clearer
- Be on time on weekends

Attention to Needed Repair Work

- Fix any tracks etc during the weekend using all 48 hours instead of the week days
- Weekly check the track

Cleanliness and other concerns

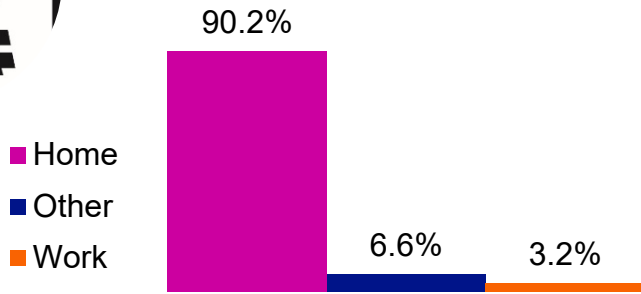
- Keep it clean and neat
- Mejorar la limpieza
- Be cleaner
- Clean more and remove homeless from stations
- Stop the fare evasion
- Keep trains going full length of light rail path instead of stopping at Branch Brook Park and going no further. Around 4:30PM, the trains only go from Newark Penn station to Branch Brook Park, so I have to wait until the trains go to Silver Lake again.
- Trains from Washington St. are crowded in the evening, 4:15PM-4:30PM



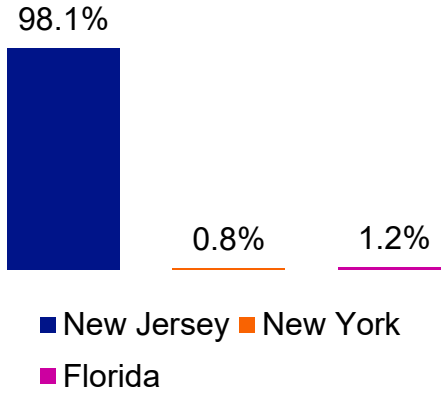
BRANCH BROOK PARK TRAVEL PROFILE



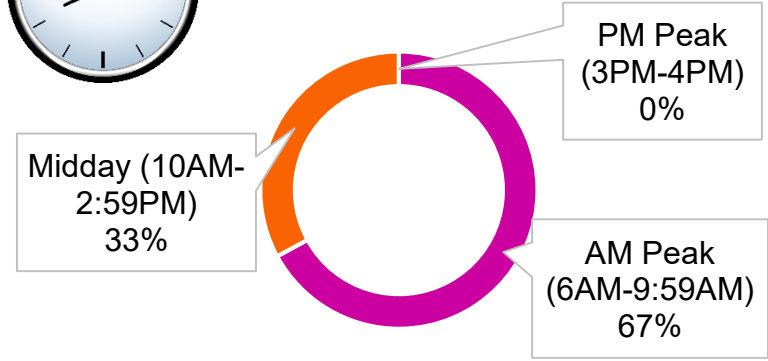
Where Did You Begin This Trip Today?



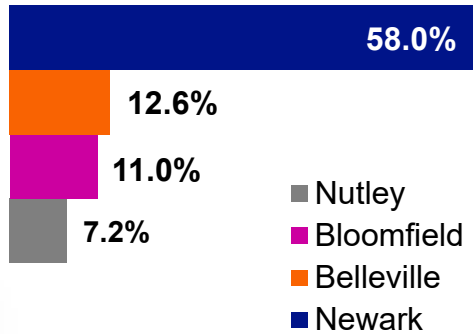
Origin State



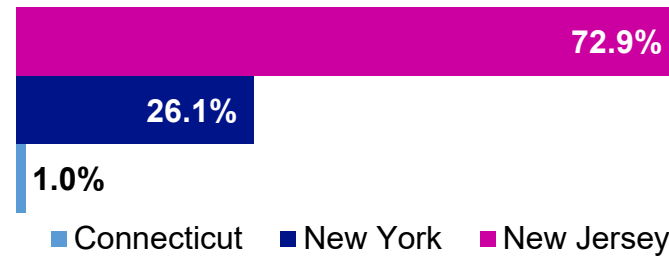
Travel Period



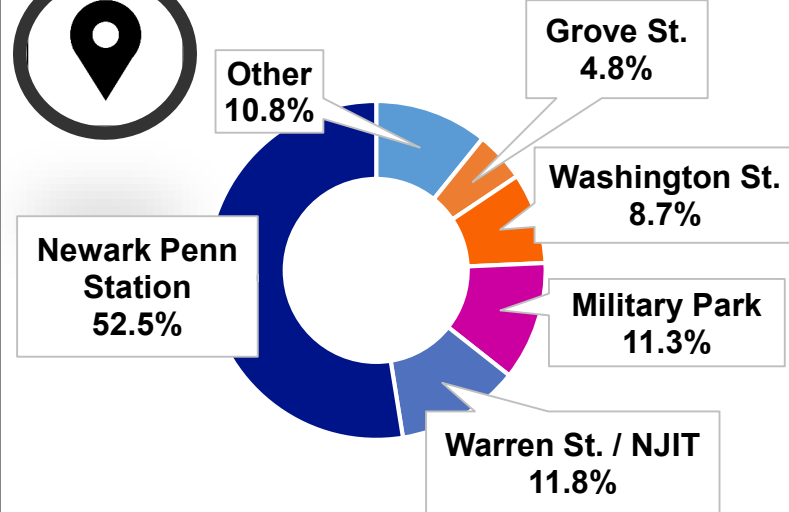
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station



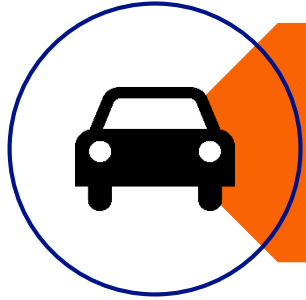
Travel Period: The survey was conducted between 6AM and 4:00PM.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 143 Respondents (Margin of Error $\pm 2.3%$ at 95% Confidence Level)



BRANCH BROOK PARK TRAVEL PROFILE

Access Mode to Boarding Station



Drove Alone and Parked – 6.9%
Another Person Dropped Me Off – 6.9%
Uber/Lyft/Other App-based Service – 0.5%

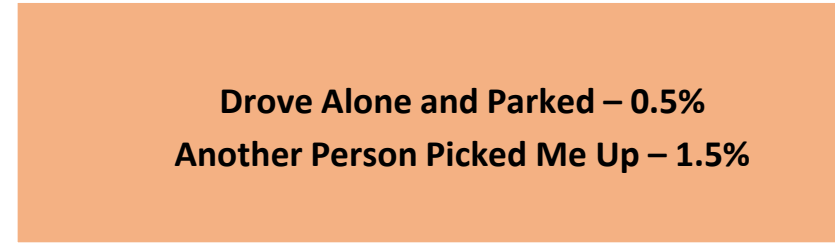


Bus – 24.5%
Another Newark Light Rail Train – 1.3%
NJ Transit Train – 1.6%

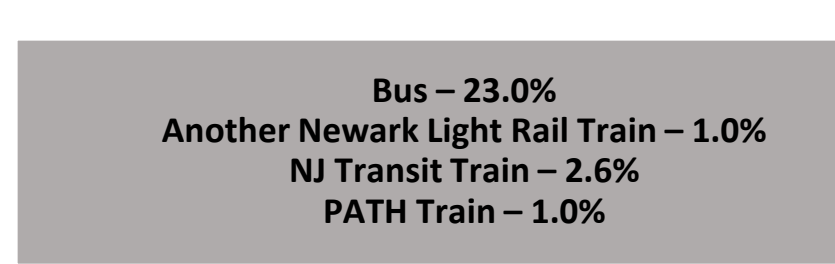


Walked – 57.0%
Bicycle / e-Scooter – 1.3%

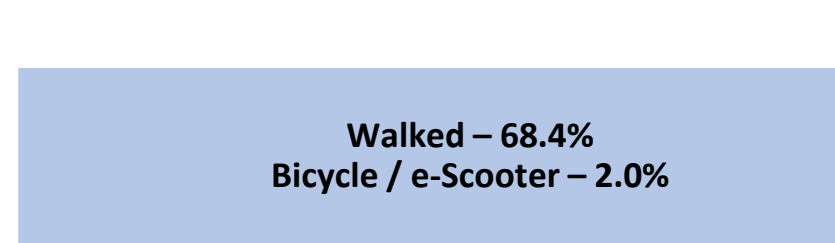
Travel Mode for those Disembarking at Branch Brook Park Station (N=67)



Drove Alone and Parked – 0.5%
Another Person Picked Me Up – 1.5%



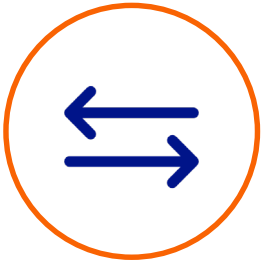
Bus – 23.0%
Another Newark Light Rail Train – 1.0%
NJ Transit Train – 2.6%
PATH Train – 1.0%



Walked – 68.4%
Bicycle / e-Scooter – 2.0%

BRANCH BROOK PARK TRAVEL PROFILE

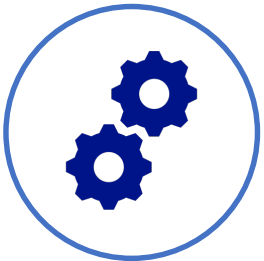
Travel Method for Return Trip



Travel the same way in the opposite direction – 89.3%



Take a bus – 6.8%



Other – 3.9%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 50.6%

Light Rail Monthly Pass 16.2%

Rail Monthly Pass 6.1%

Bus Monthly Pass 17.2%

Reduced Fares for Senior Citizens & Customers with Disabilities 3.4%

FLEXPASS 2.6%

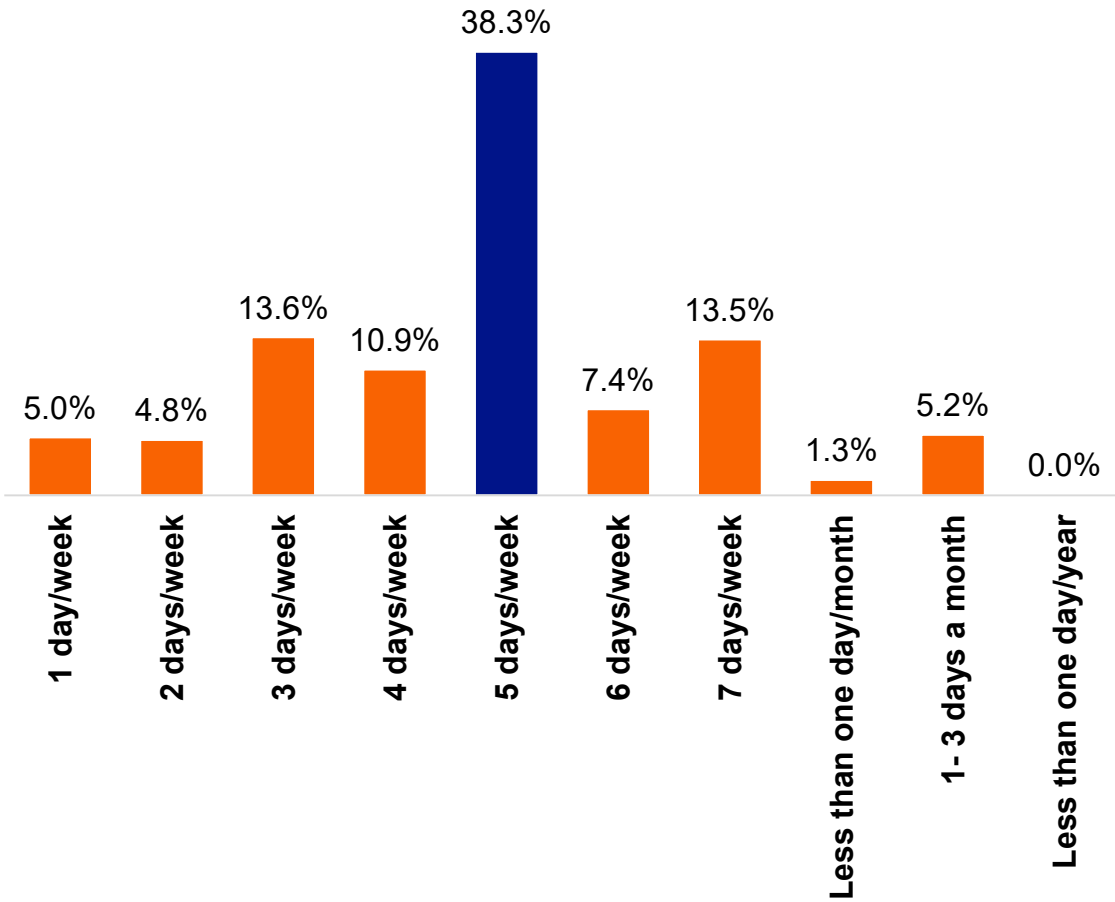
Underground Fare 1.3%

Other 2.6%

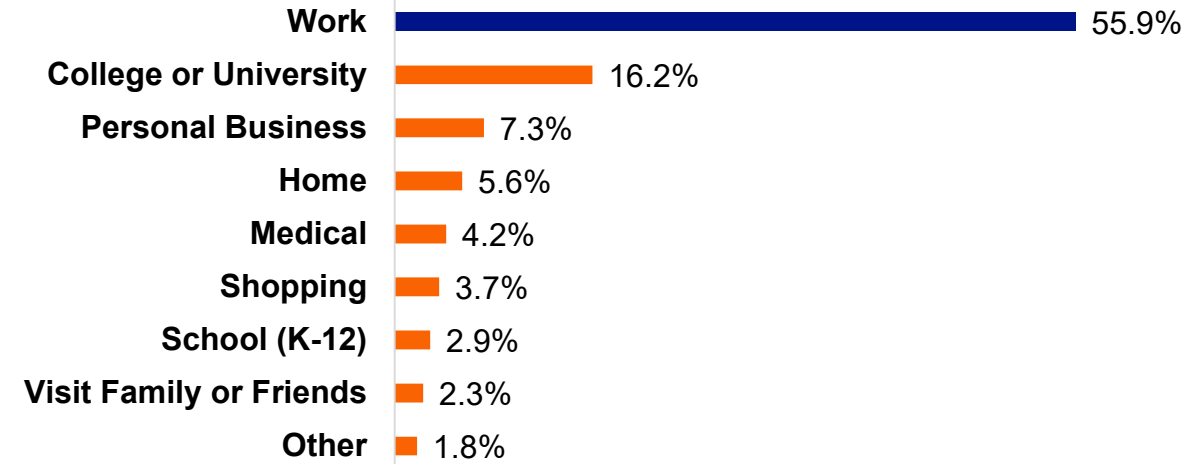


BRANCH BROOK PARK TRAVEL PROFILE

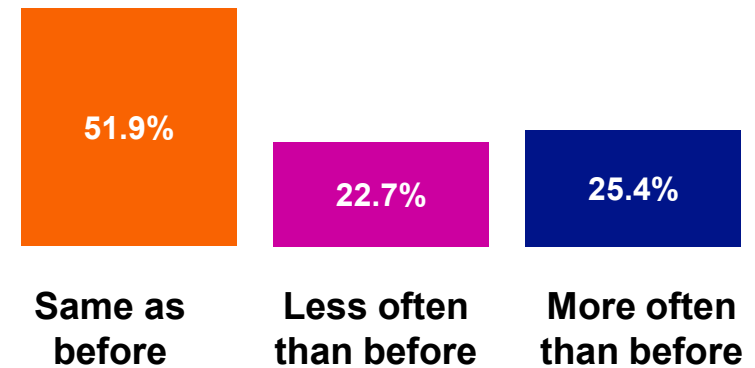
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

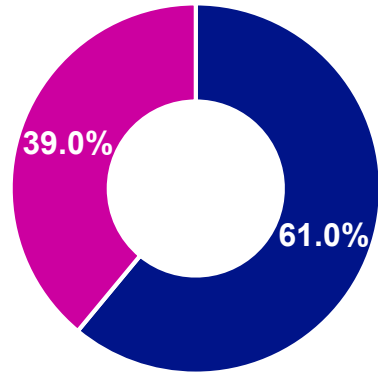




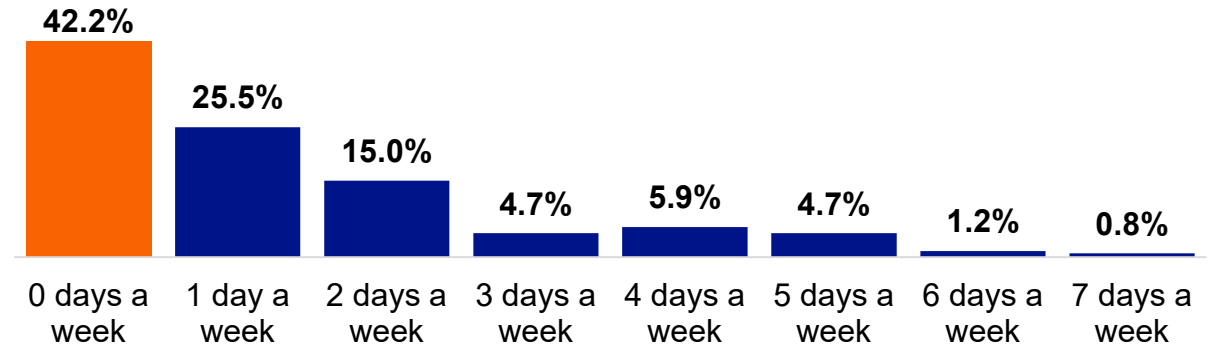
BRANCH BROOK PARK TRAVEL PROFILE

Does your employer allow you to work from home? (N = 90)

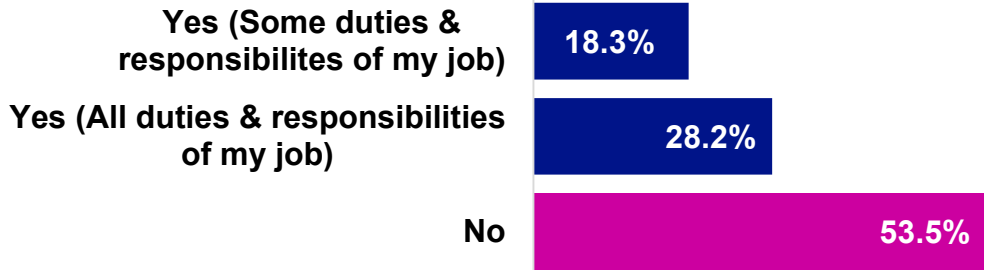
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



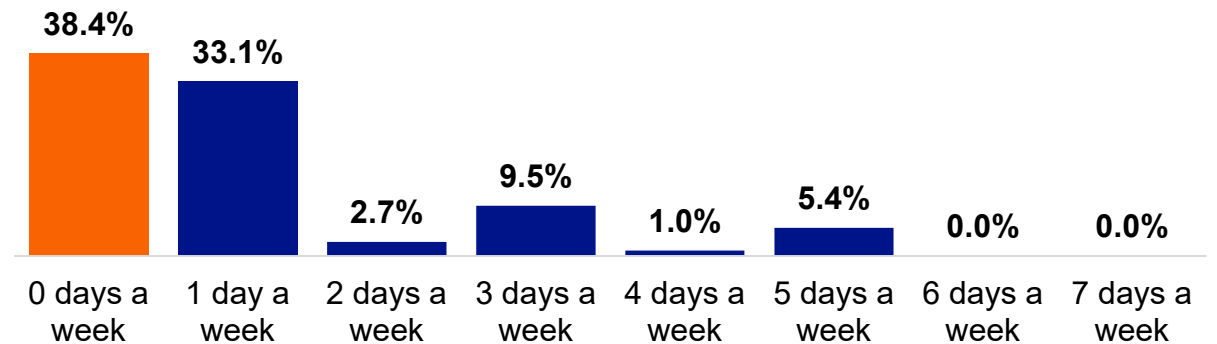
Number of days working from home in the past seven days (N = 98)



Able to complete job from home, if it was allowed by employer (N = 95)



Number of days attending school lectures from home in the past seven days (N = 29)



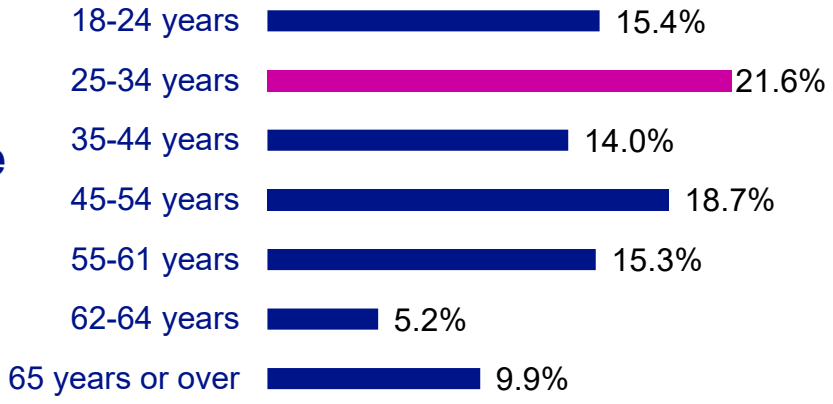
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 143 Respondents (Margin of Error \pm 2.3% at 95% Confidence Level)



BRANCH BROOK PARK TRAVEL PROFILE

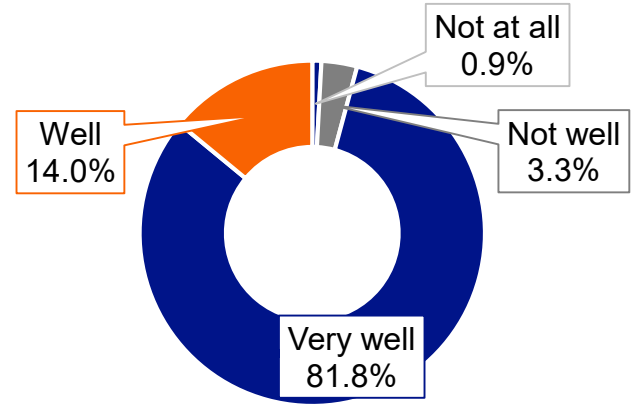
Age



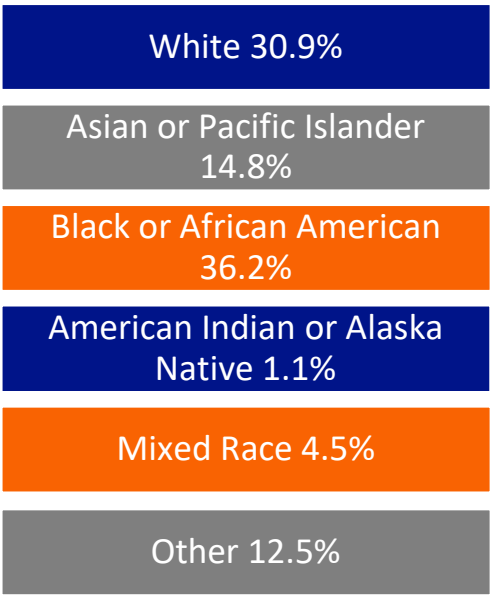
Ethnicity

32.9%
Hispanic

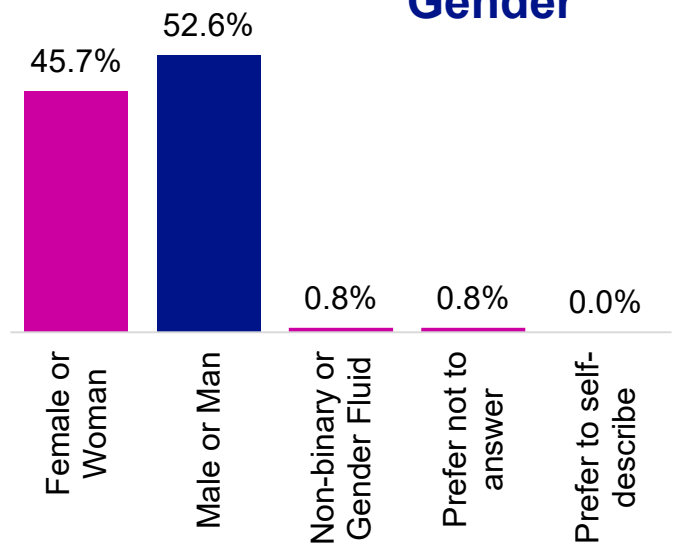
Fluency in Speaking English



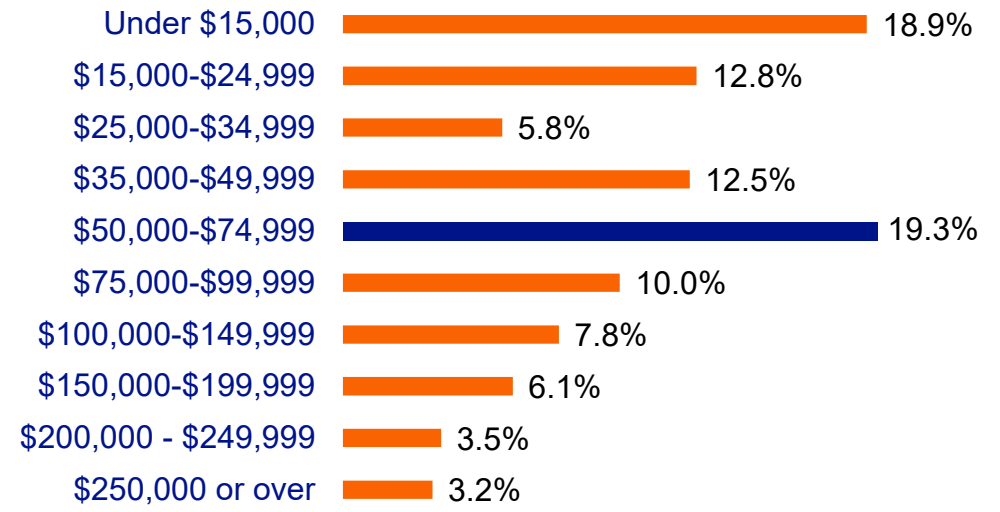
Race



Gender



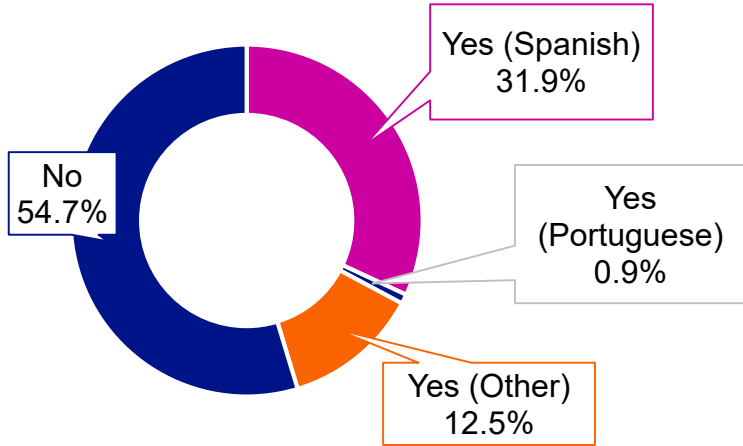
Annual Household Income



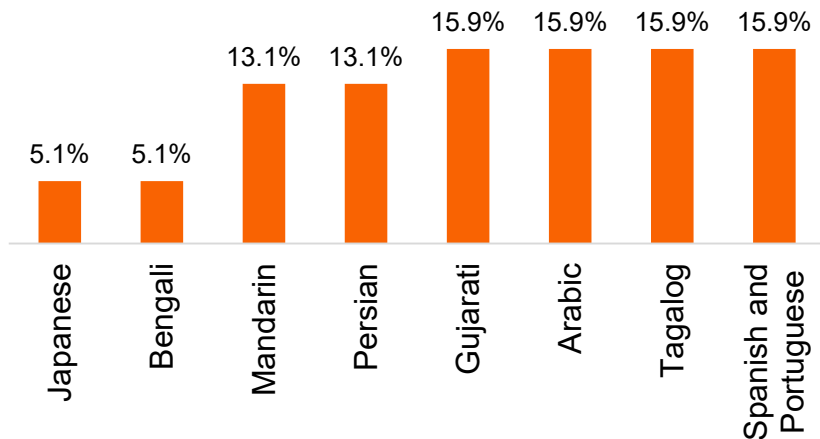


BRANCH BROOK PARK TRAVEL PROFILE

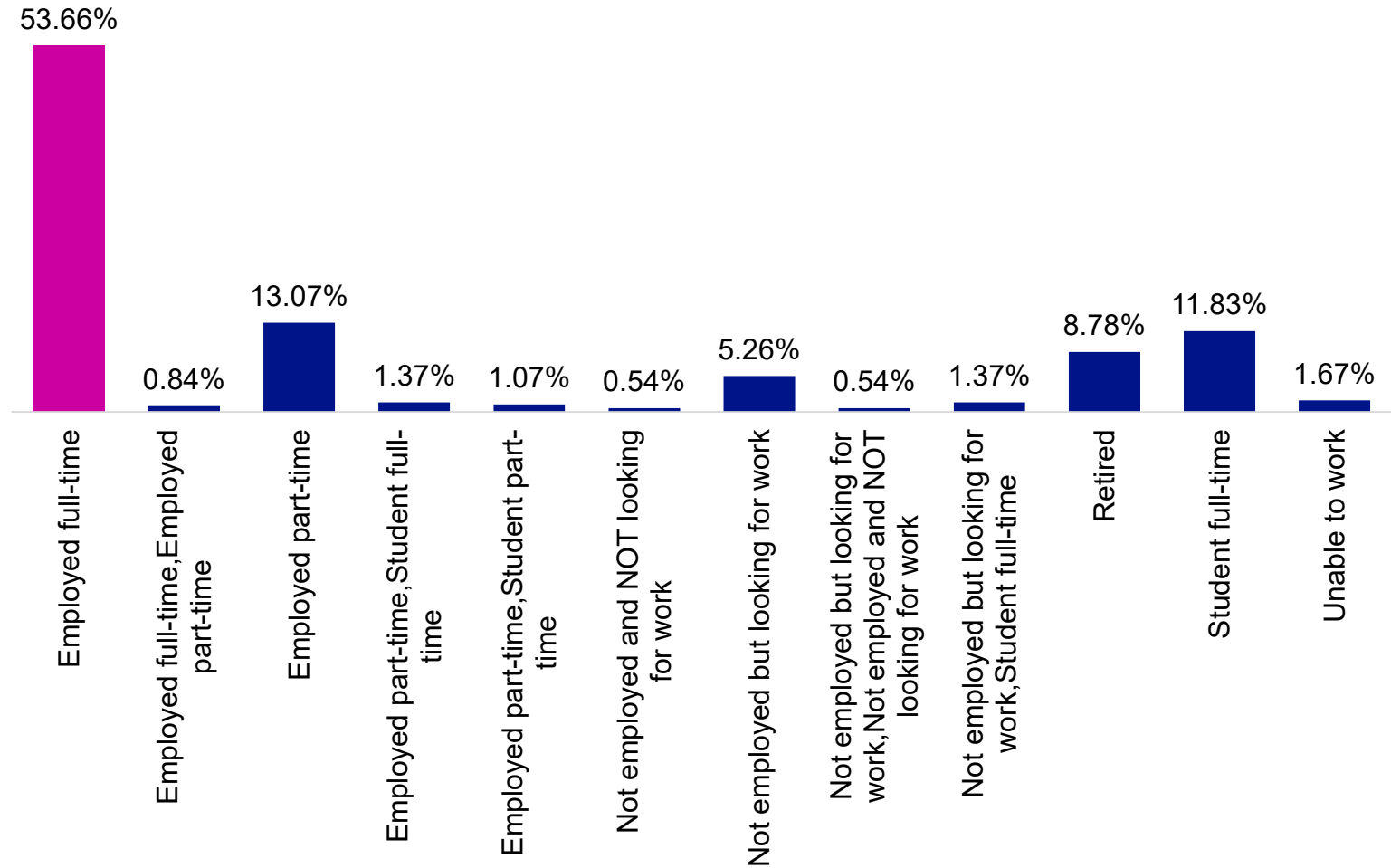
Speak a Language Other than English



Other Languages Spoken (N = 14)



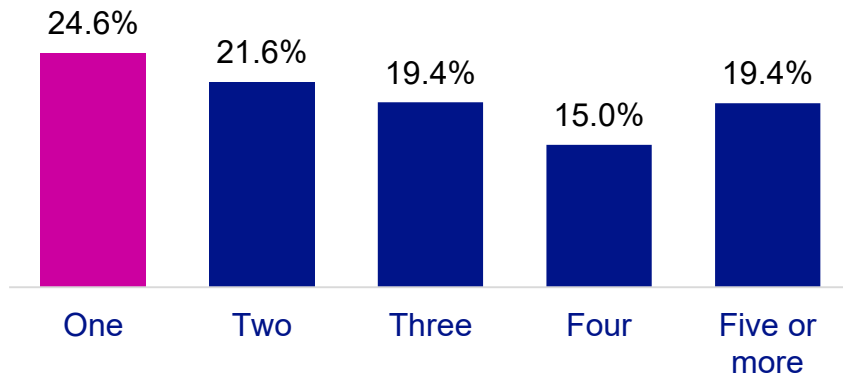
Employment Status (N = 137)



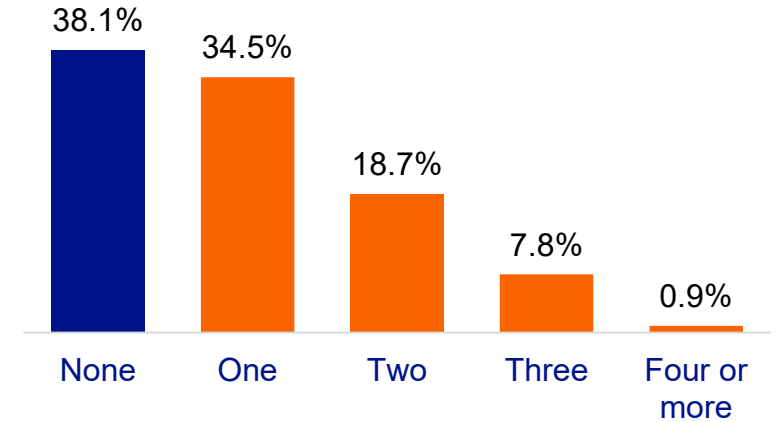


BRANCH BROOK PARK TRAVEL PROFILE

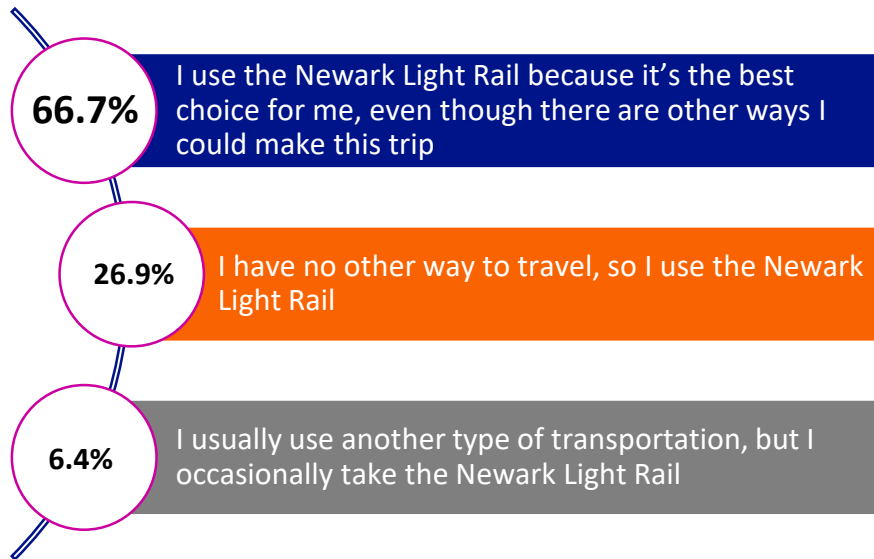
Household Size



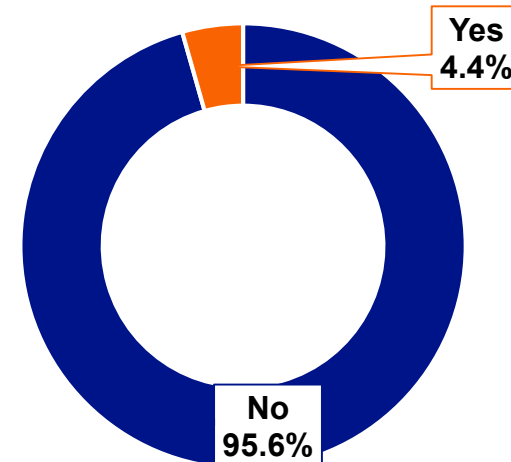
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=5), no respondents indicated that they used wheelchair and/or other mobility device.



BRANCH BROOK PARK TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- More trips during rush hour
- Increase frequency and kick out rowdy passengers
- More service on the weekends

Better Communication & Be On Time

- Having the light rail be on time
- Please make more announcements for delays
- Time until next train info at each station
- Timing, overcrowding on rail
- On time service, frequent trains, today I waited 15 minutes for light rail
- Do not leave 1-2 min. ahead
- When there are delays, operators need to communicate better with passengers. Escalators at NPS need to work all the time.

Cleanliness

- Clean the stations. Police patrol.
- Urine in elevators
- People should sit on the seats and don't put their feet on the seats.
- Clean the light rail seats a little more often. I have seen a lot of garbage and spilled liquids at times
- Stop people from eating and putting their feet on the seats

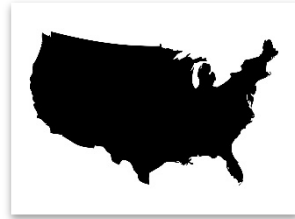
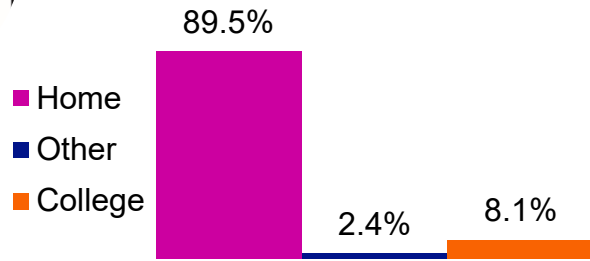
Other concerns

- Access to bathrooms
- Checking ticket should be less sporadic
- Cleanliness and less homeless people. Stations, like Penn, are dark scary uninviting. Would not feel safe if I was a young woman.
- I wish the light rail would go to different towns in NJ
- The homeless in the light rail
- Have more police presence in stations, especially at night

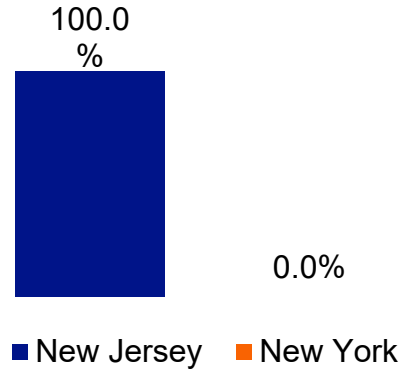
DAVENPORT AVE. TRAVEL PROFILE



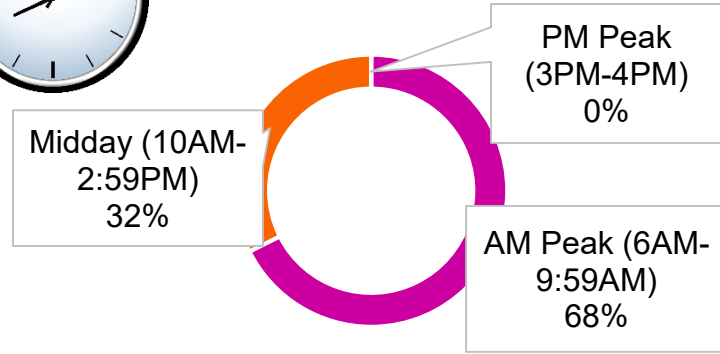
Where Did You Begin This Trip Today?



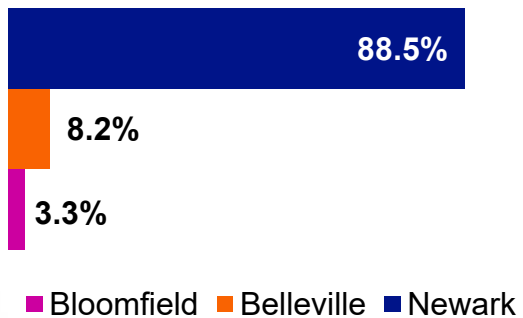
Origin State



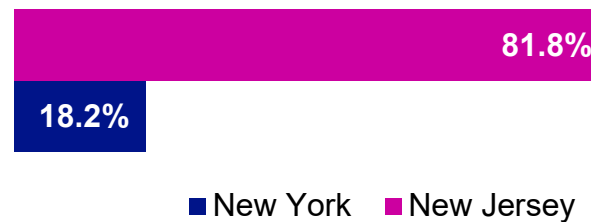
Travel Period



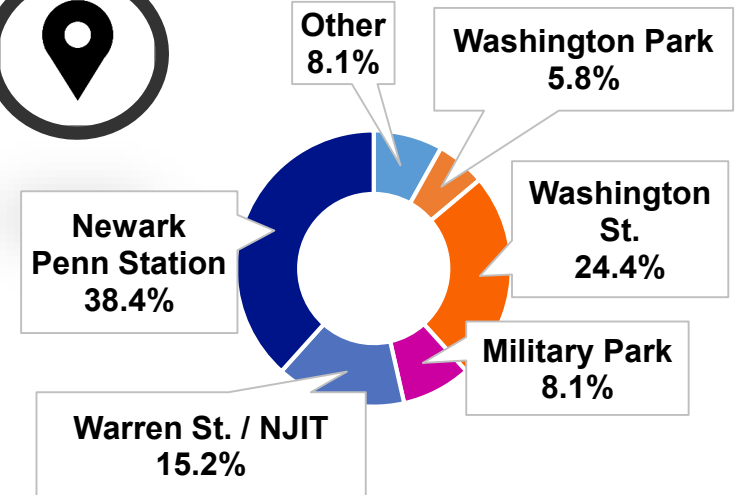
Top Origin Towns



Is Final Destination In NY or NJ?

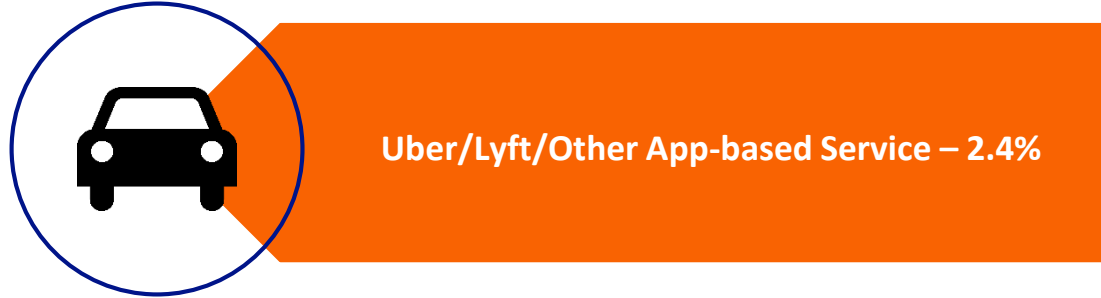


Destination Station

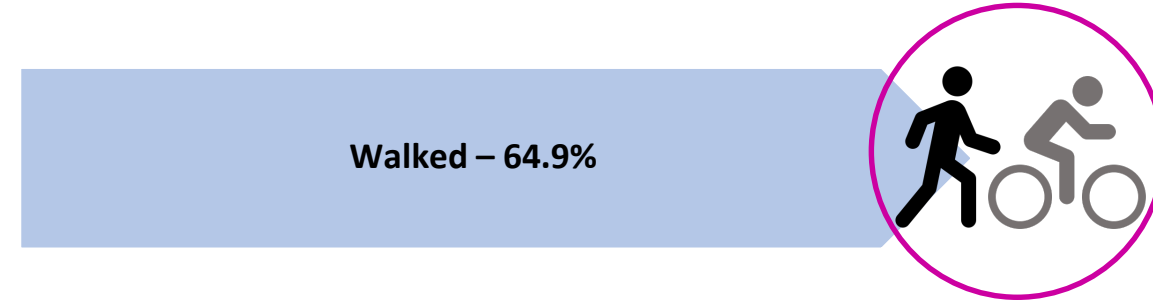
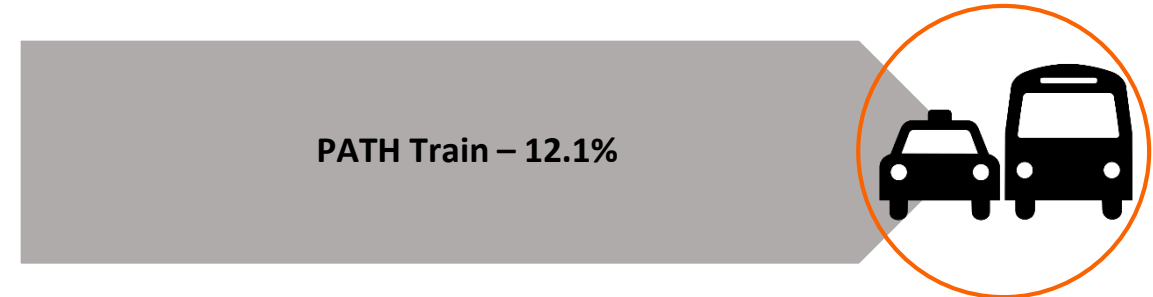
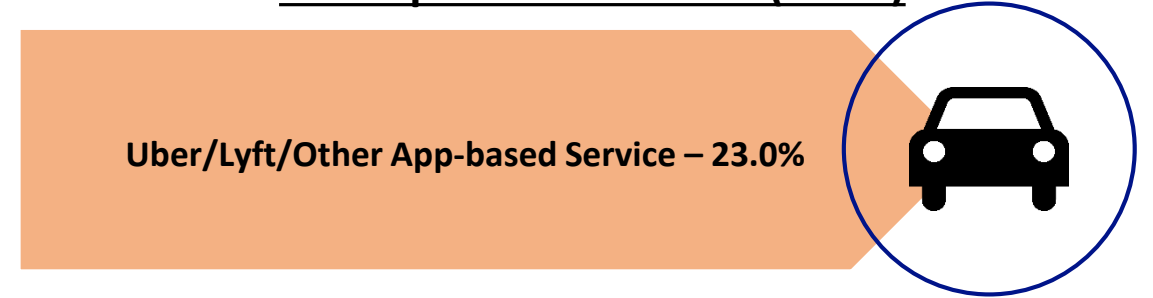


DAVENPORT AVE. TRAVEL PROFILE

Access Mode to Boarding Station

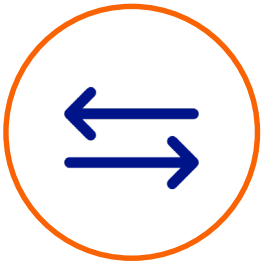


Travel Mode for those Disembarking at Davenport Ave. Station (N=10)



DAVENPORT AVE. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 97.5%



Take a bus – 2.3%



Other – 0%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 55.6%

Light Rail Monthly Pass 17.3%

Rail Monthly Pass 12.3%

Bus Monthly Pass 2.5%

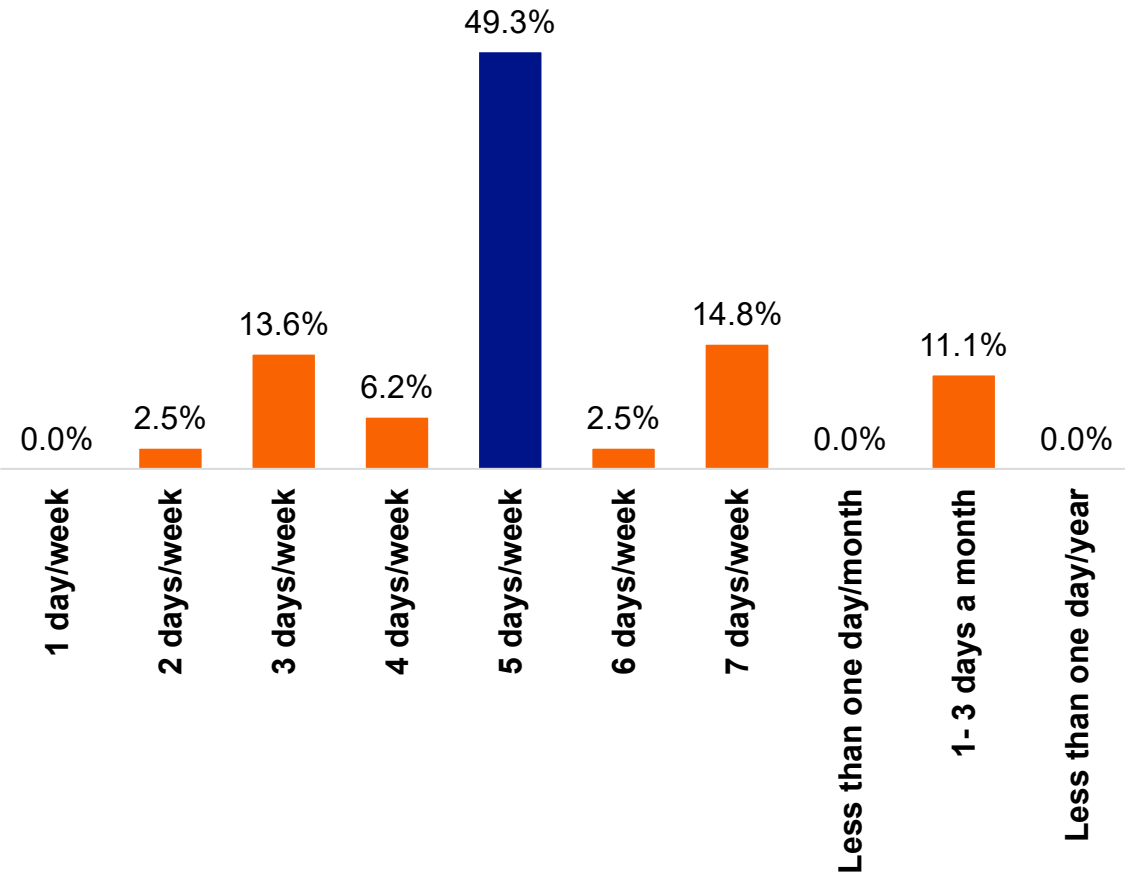
FLEXPASS 6.2%

Underground Fare 6.2%

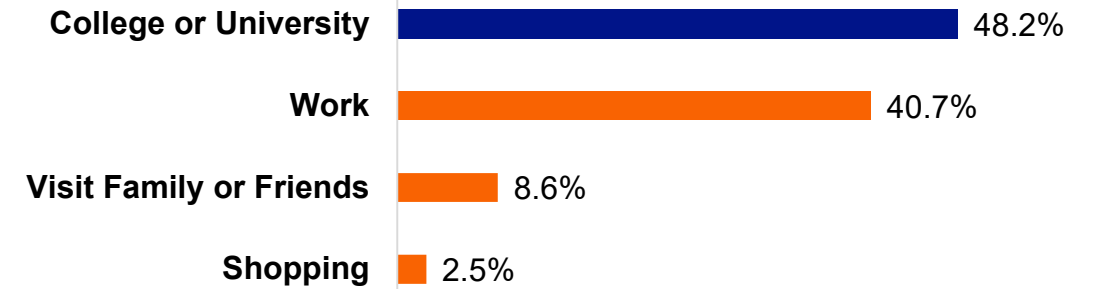


DAVENPORT AVE. TRAVEL PROFILE

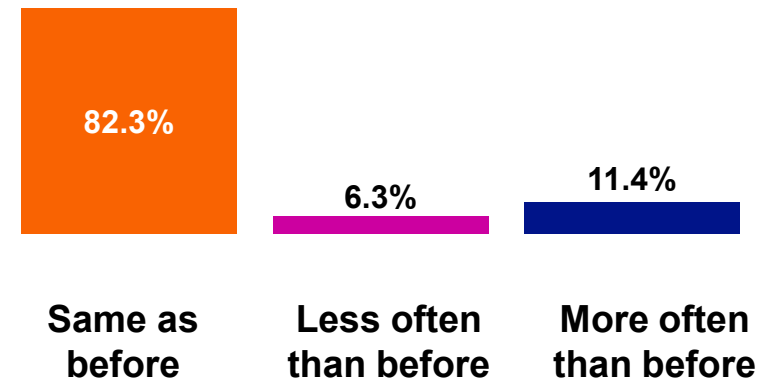
Trip Frequency



Trip Purpose



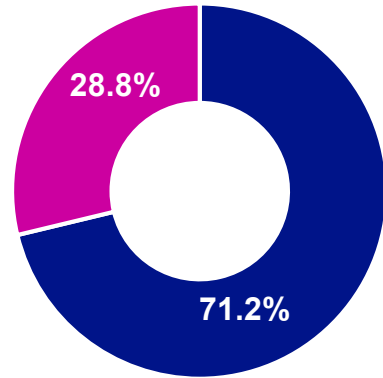
Usage of Newark Light Rail since Covid-19 Pandemic



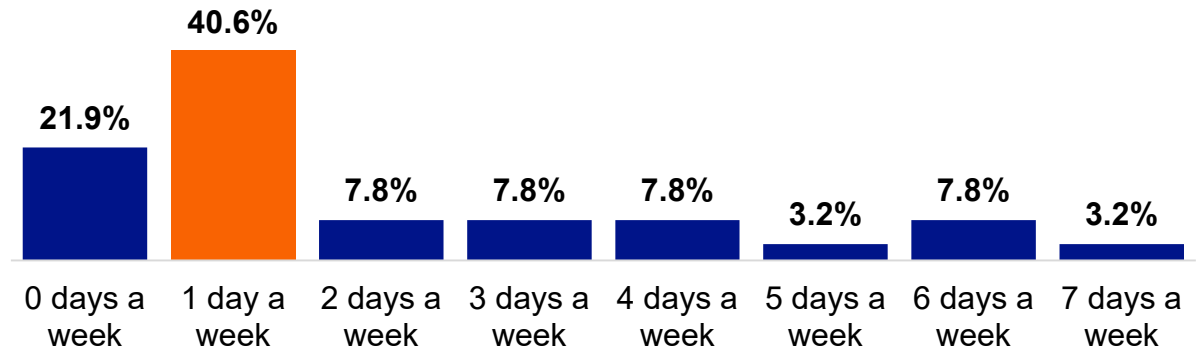
DAVENPORT AVE. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 16)

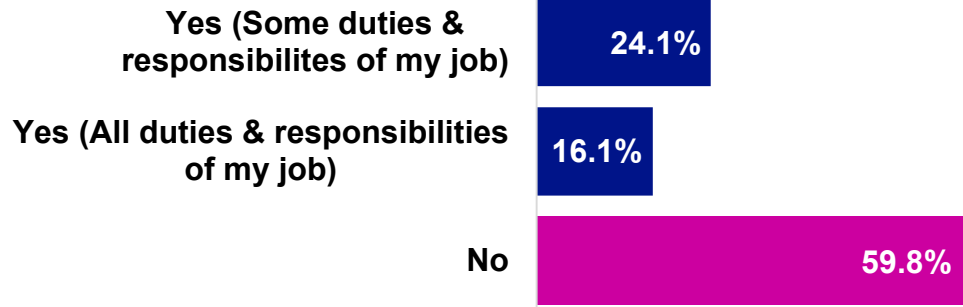
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



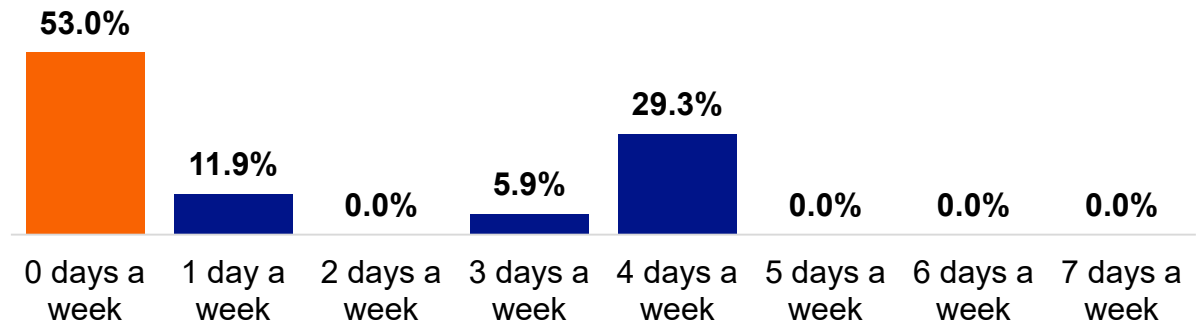
Number of days working from home in the past seven days (N = 17)



Able to complete job from home, if it was allowed by employer (N = 14)



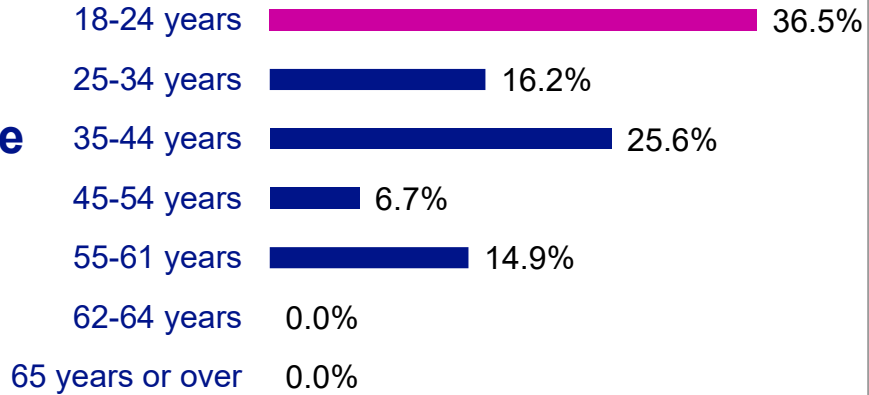
Number of days attending school lectures from home in the past seven days (N = 11)





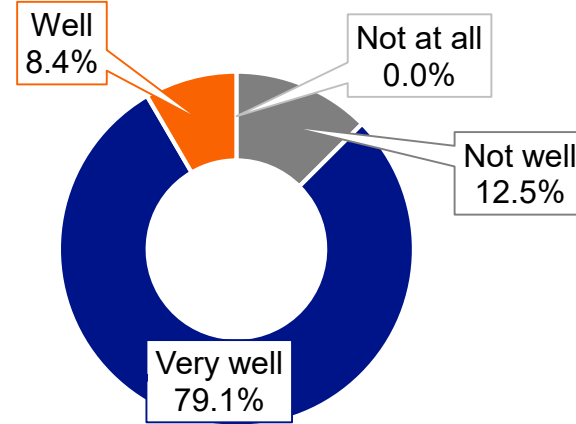
DAVENPORT AVE. TRAVEL PROFILE

Age



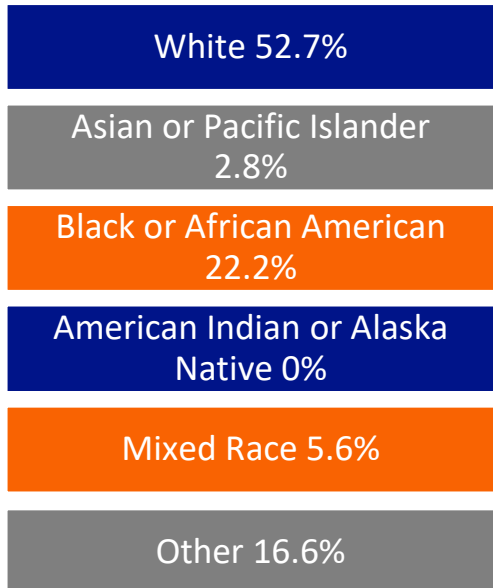
Ethnicity

58.7%
Hispanic

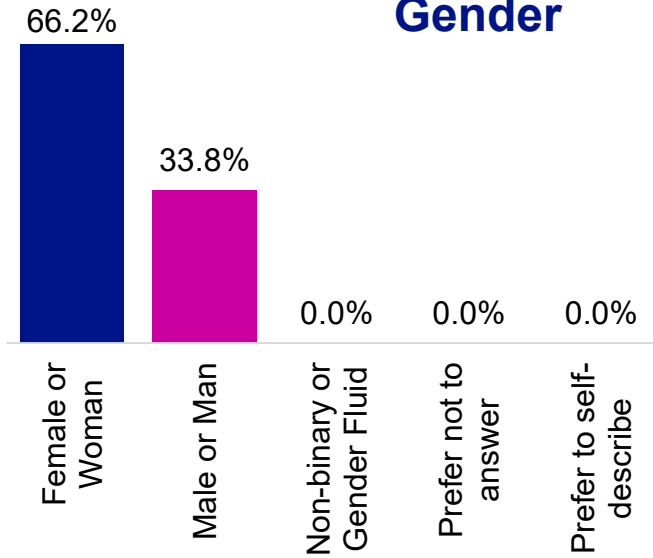


Fluency in Speaking English

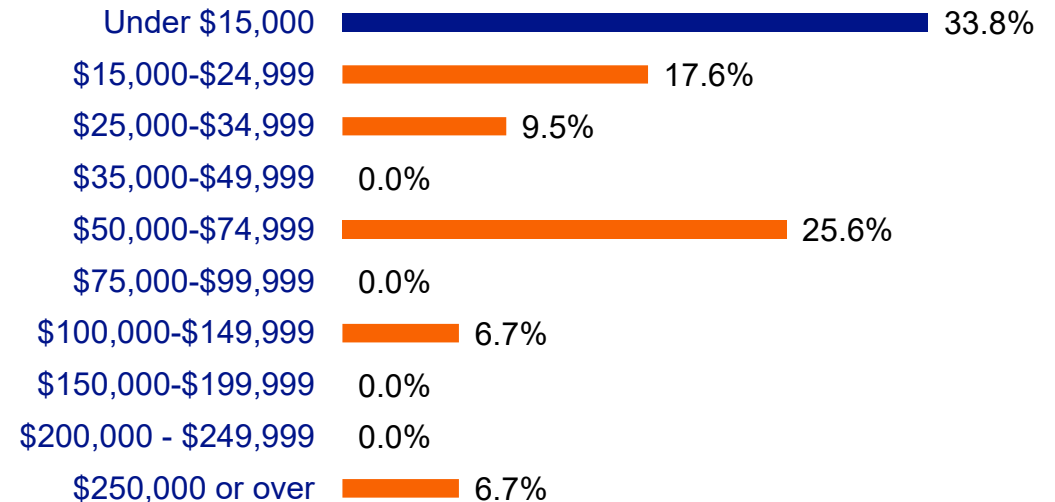
Race



Gender

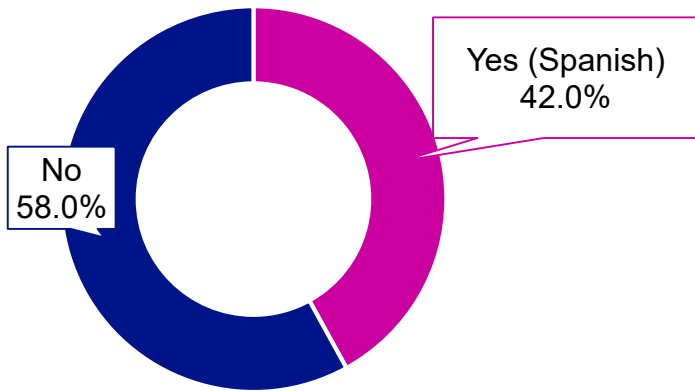


Annual Household Income

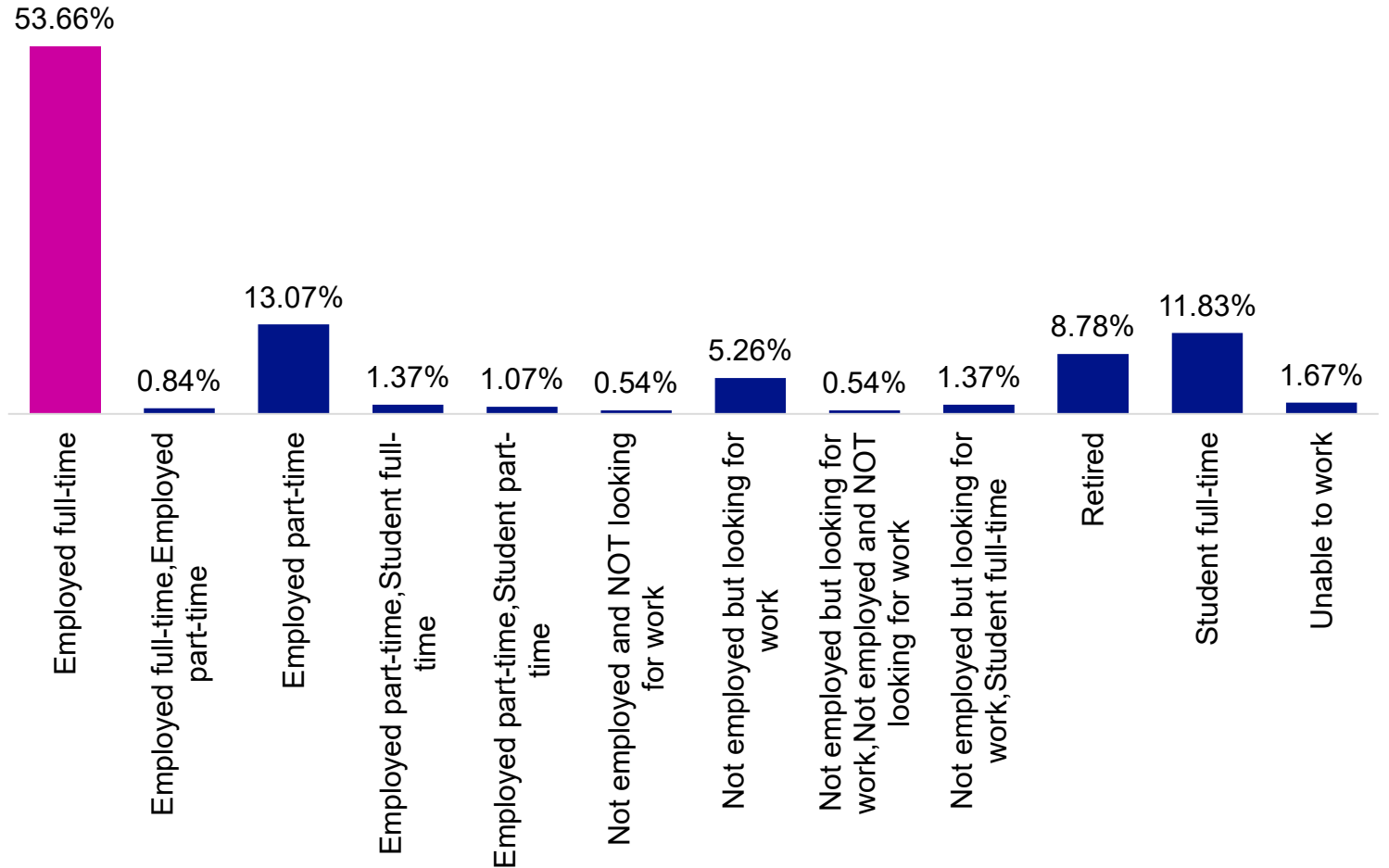


DAVENPORT AVE. TRAVEL PROFILE

Speak a Language Other than English



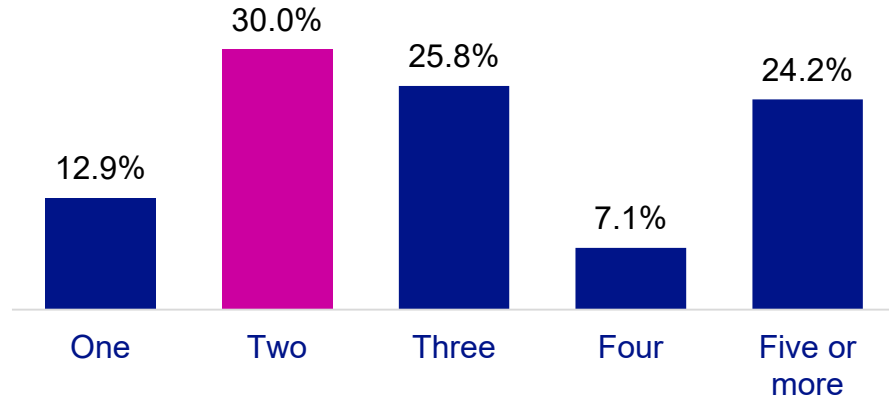
Employment Status (N = 23)



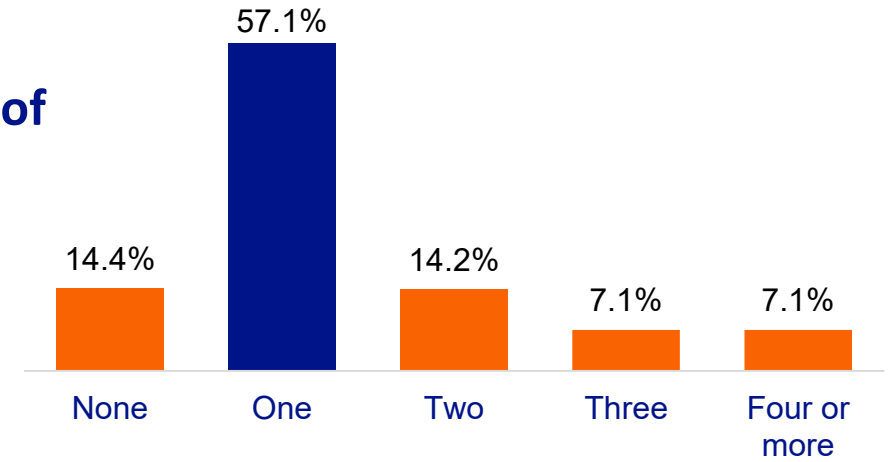


DAVENPORT AVE. TRAVEL PROFILE

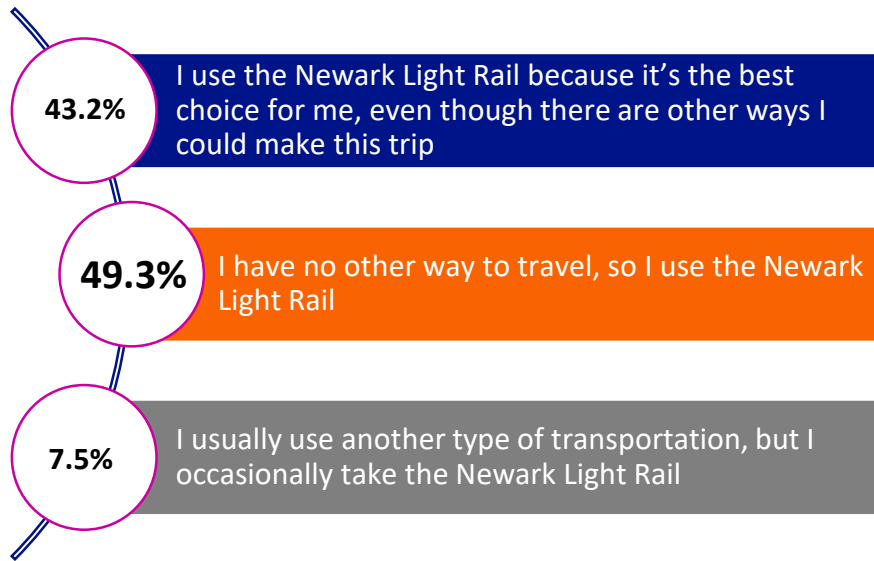
Household Size



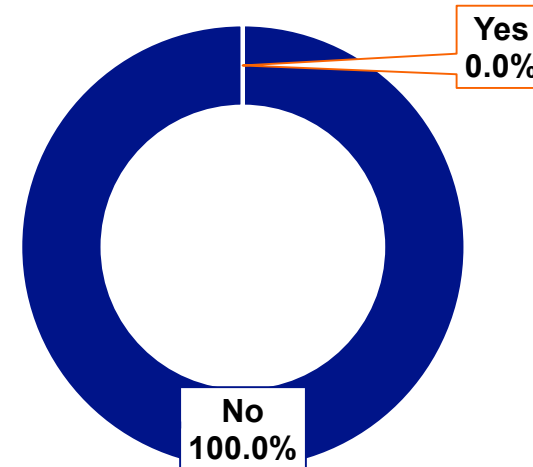
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train





DAVENPORT AVE. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- Either more often or bigger trains in the AM
- More consistent with the schedule
- Increase weekend service

Better Communication & Be On Time

- Mejorar el tiempo de espera
- Not skip scheduled trains; sometimes the scheduled train does not come and I must wait for the next one
- Be on time
- I would like the train to be on time

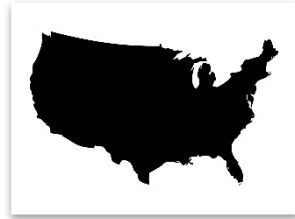
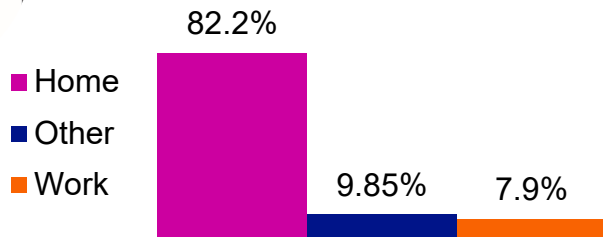
Other concerns

- Fix weekend schedule. I work Sunday
- Student discount
- Security
- Homeless sleeping on platforms is a problem

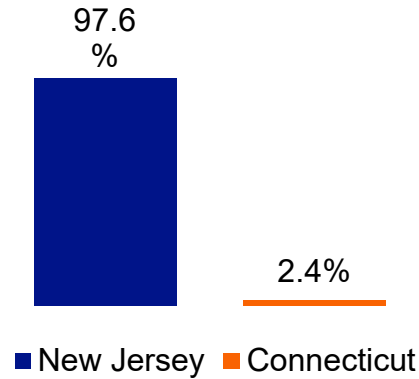
BLOOMFIELD AVE. TRAVEL PROFILE



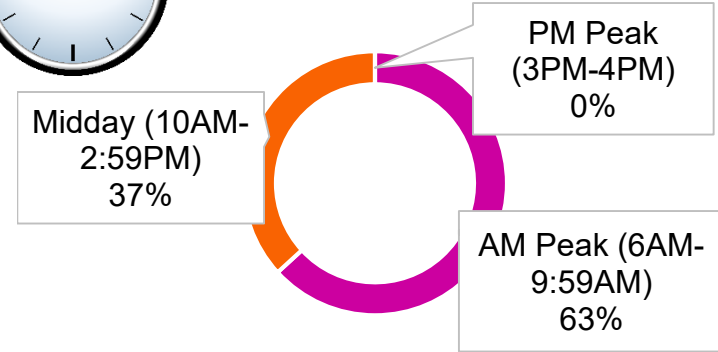
Where Did You Begin This Trip Today?



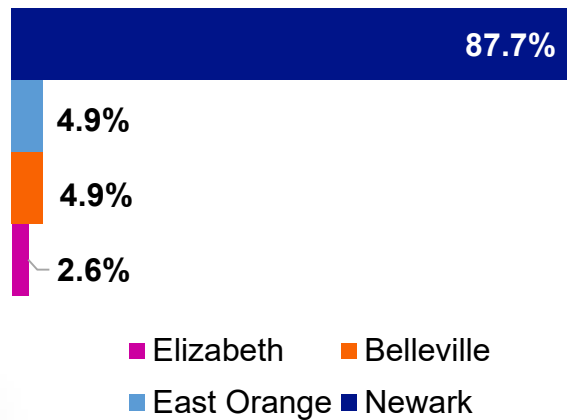
Origin State



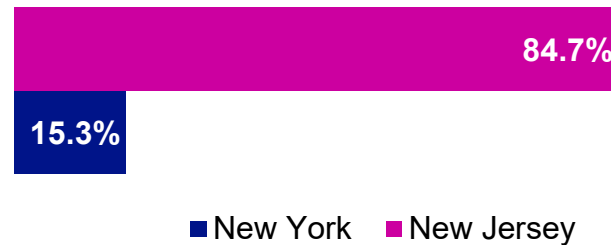
Travel Period



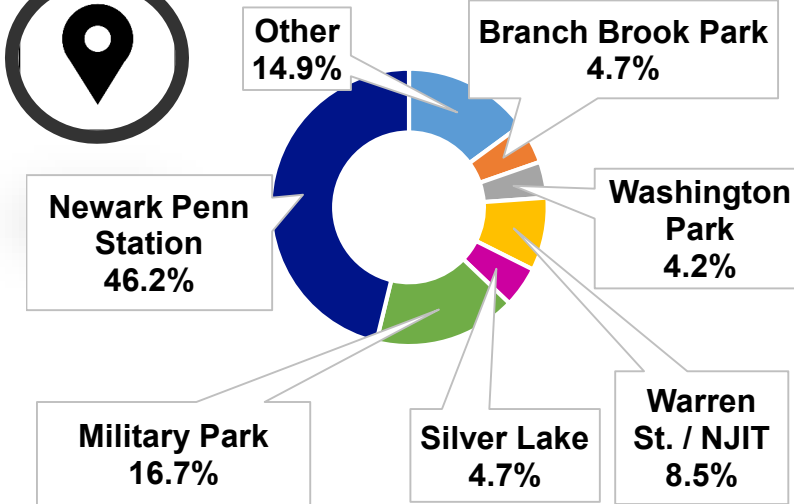
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

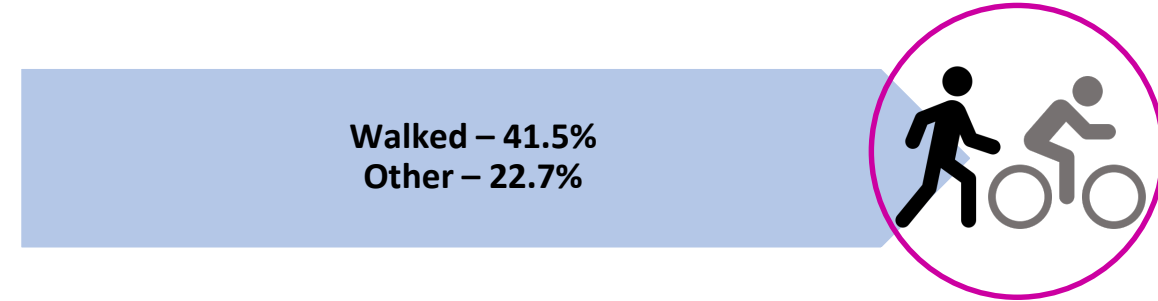
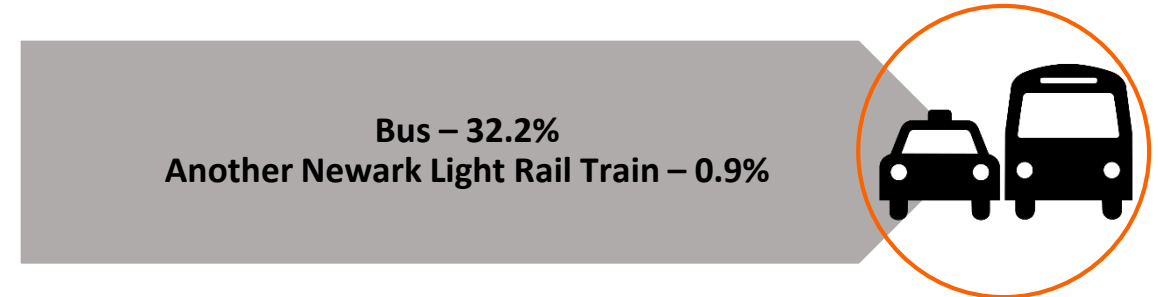
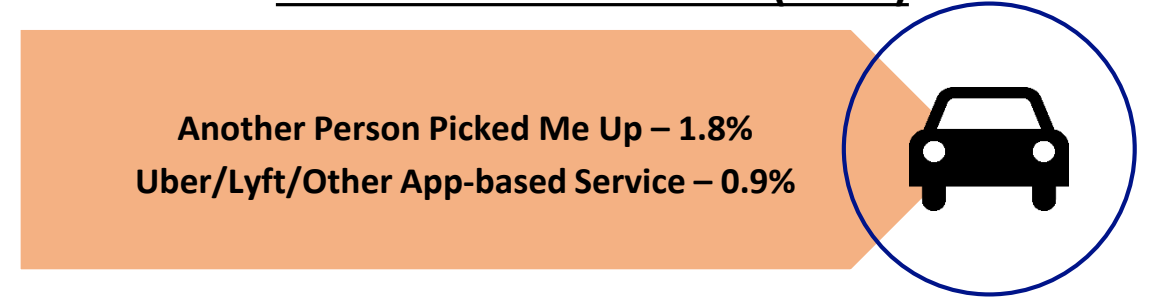


BLOOMFIELD AVE. TRAVEL PROFILE

Access Mode to Boarding Station

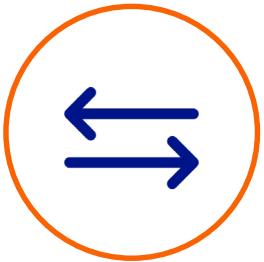


Travel Mode for those Disembarking at Bloomfield Ave. Station (N=39)



BLOOMFIELD AVE. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 81.8%



Take a bus – 13.1%



Other – 5.2%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 60.8%

Light Rail Monthly Pass 13.3%

Rail Monthly Pass 9.3%

Bus Monthly Pass 8.9%

Reduced Fares for Senior Citizens & Customers with Disabilities 3.1%

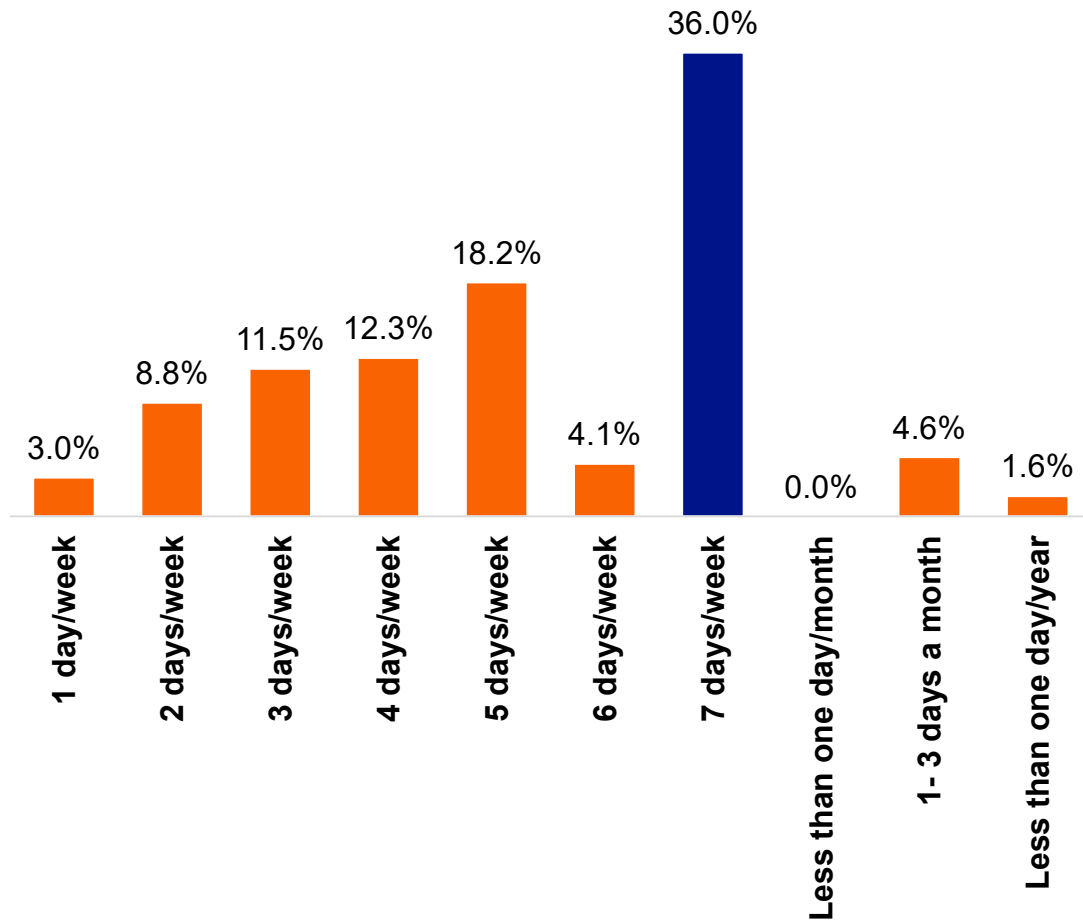
Underground Fare 1.6%

Other 3.1%

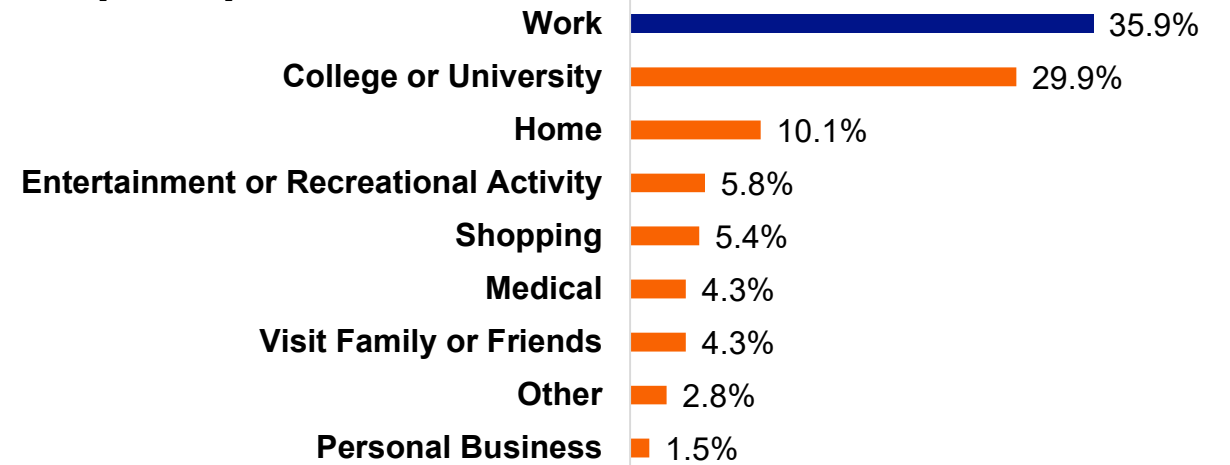


BLOOMFIELD AVE. TRAVEL PROFILE

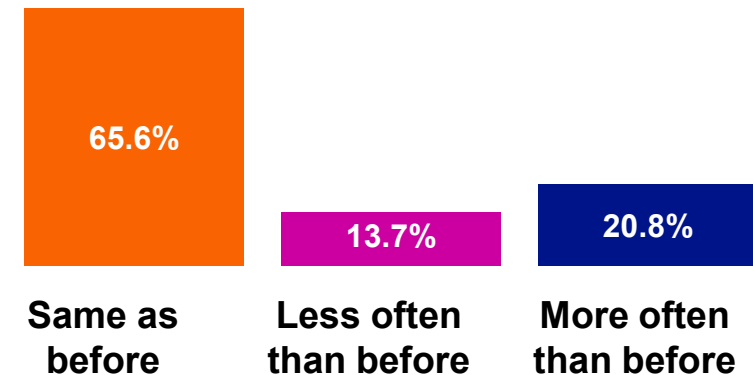
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

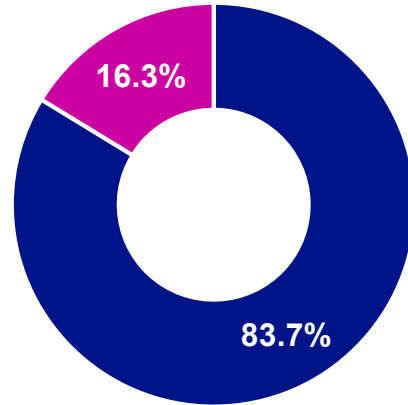




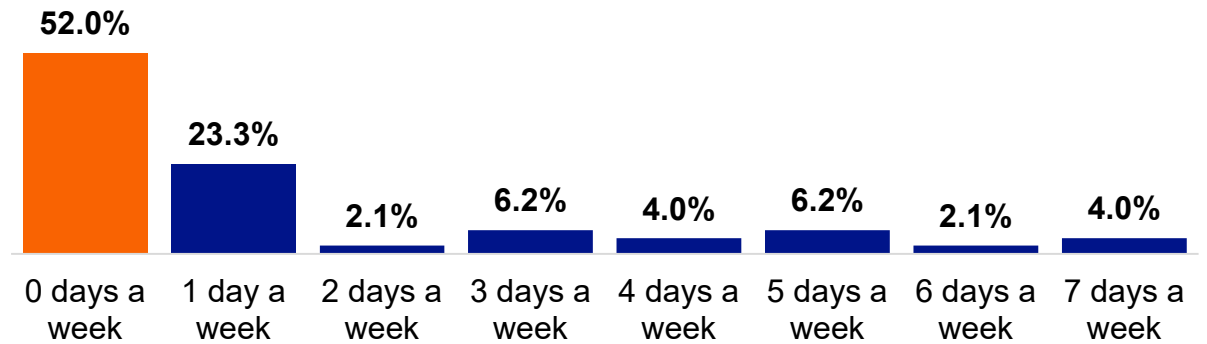
BLOOMFIELD AVE. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 26)

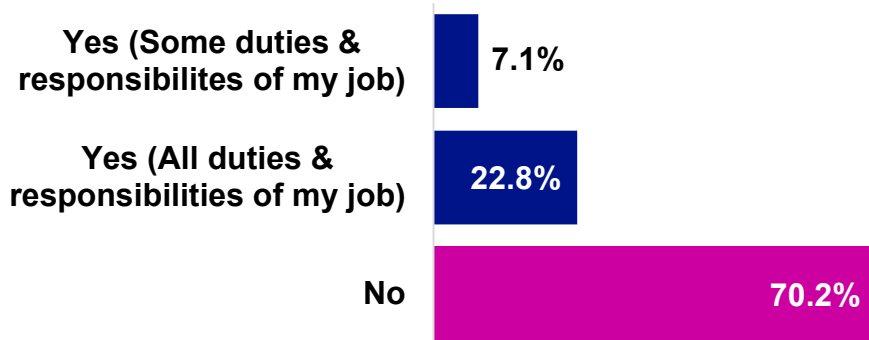
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



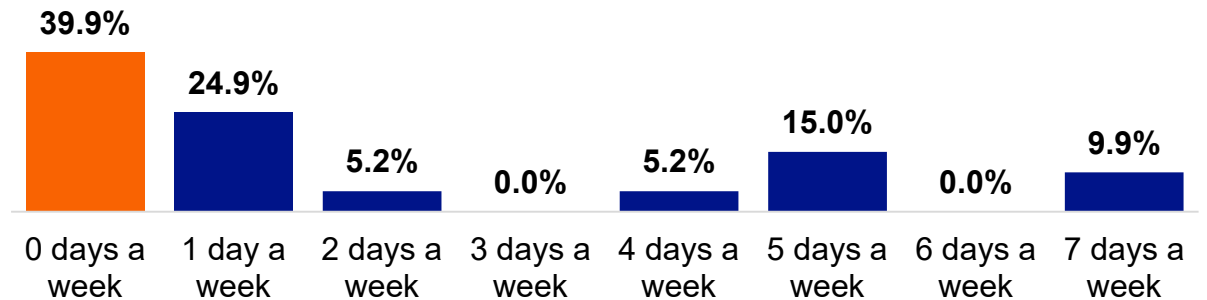
Number of days working from home in the past seven days (N = 31)



Able to complete job from home, if it was allowed by employer (N = 27)



Number of days attending school lectures from home in the past seven days (N = 13)



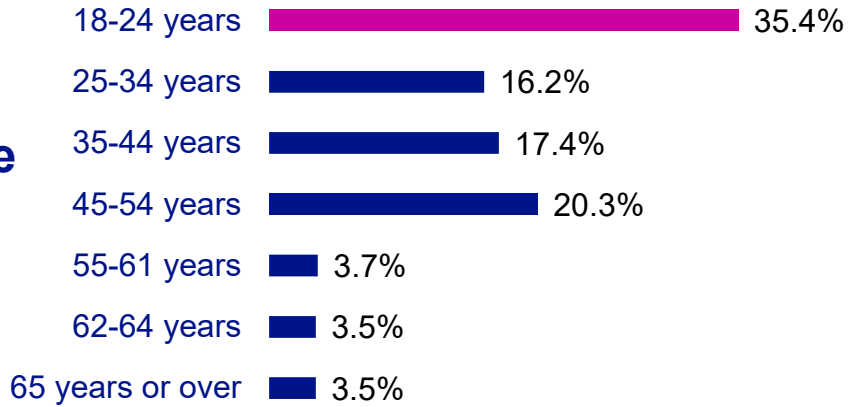
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 46 Respondents (Margin of Error $\pm 1.4\%$ at 95% Confidence Level)



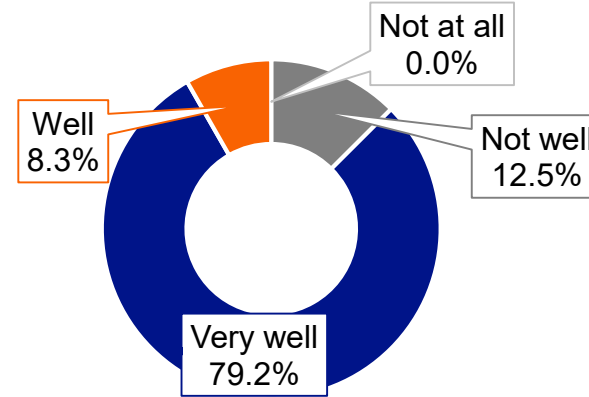
BLOOMFIELD AVE. TRAVEL PROFILE

Age



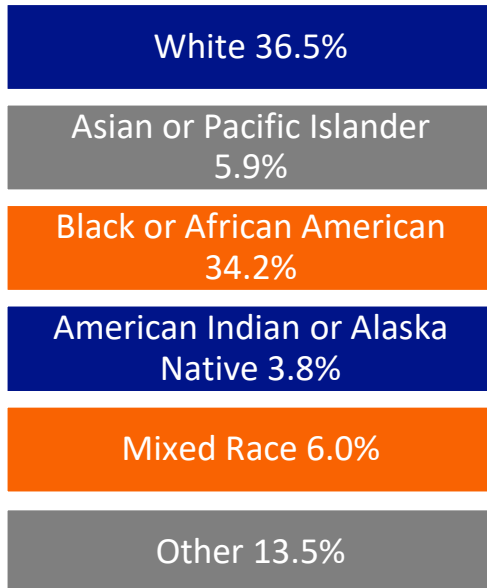
Ethnicity

53.4%
Hispanic

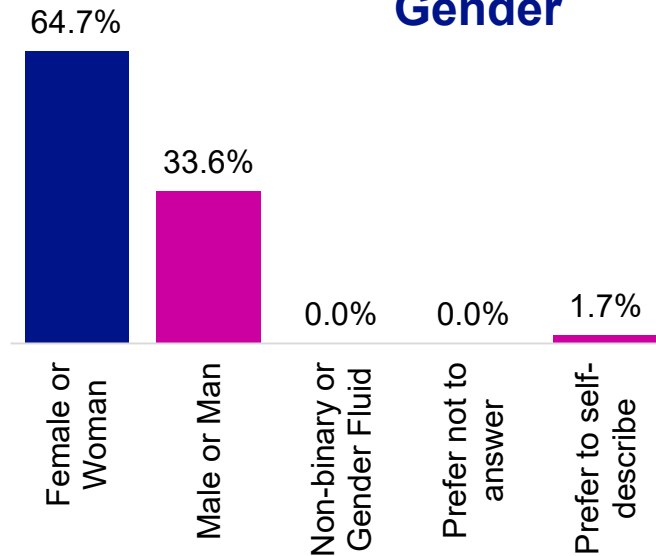


Fluency in Speaking English

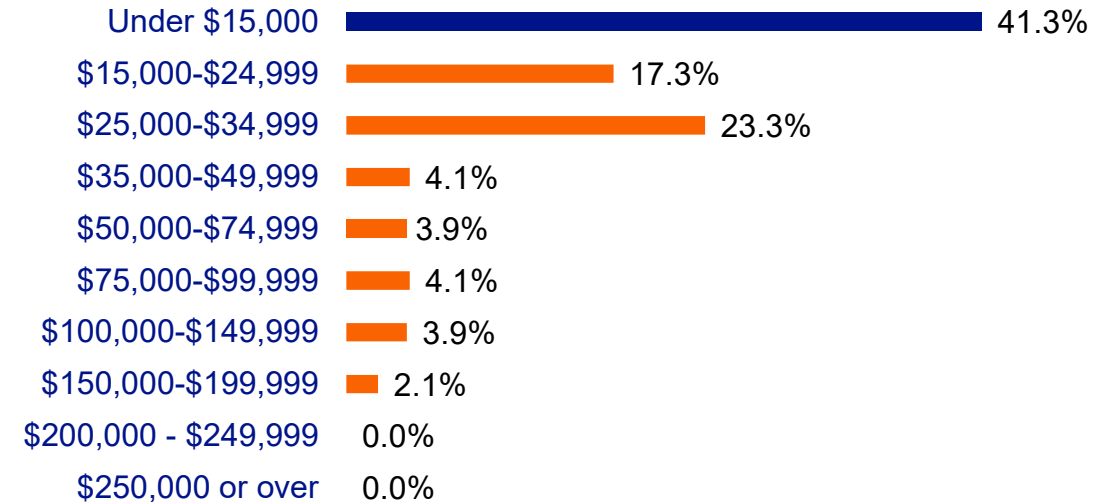
Race



Gender

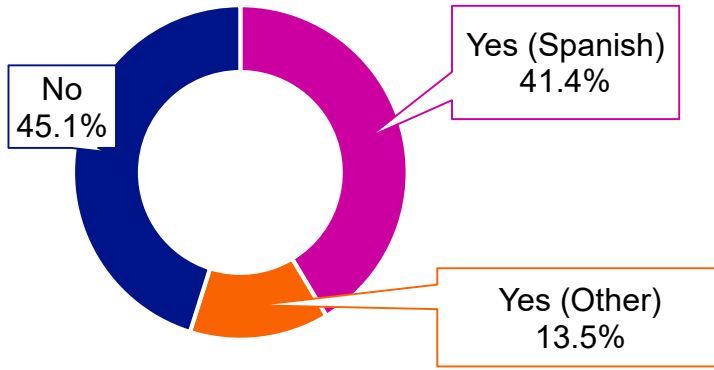


Annual Household Income

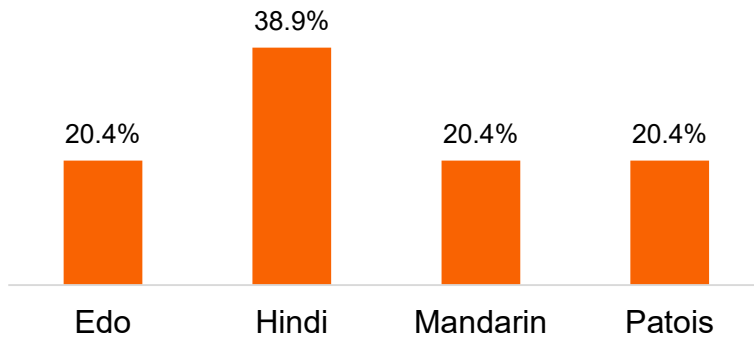


BLOOMFIELD AVE. TRAVEL PROFILE

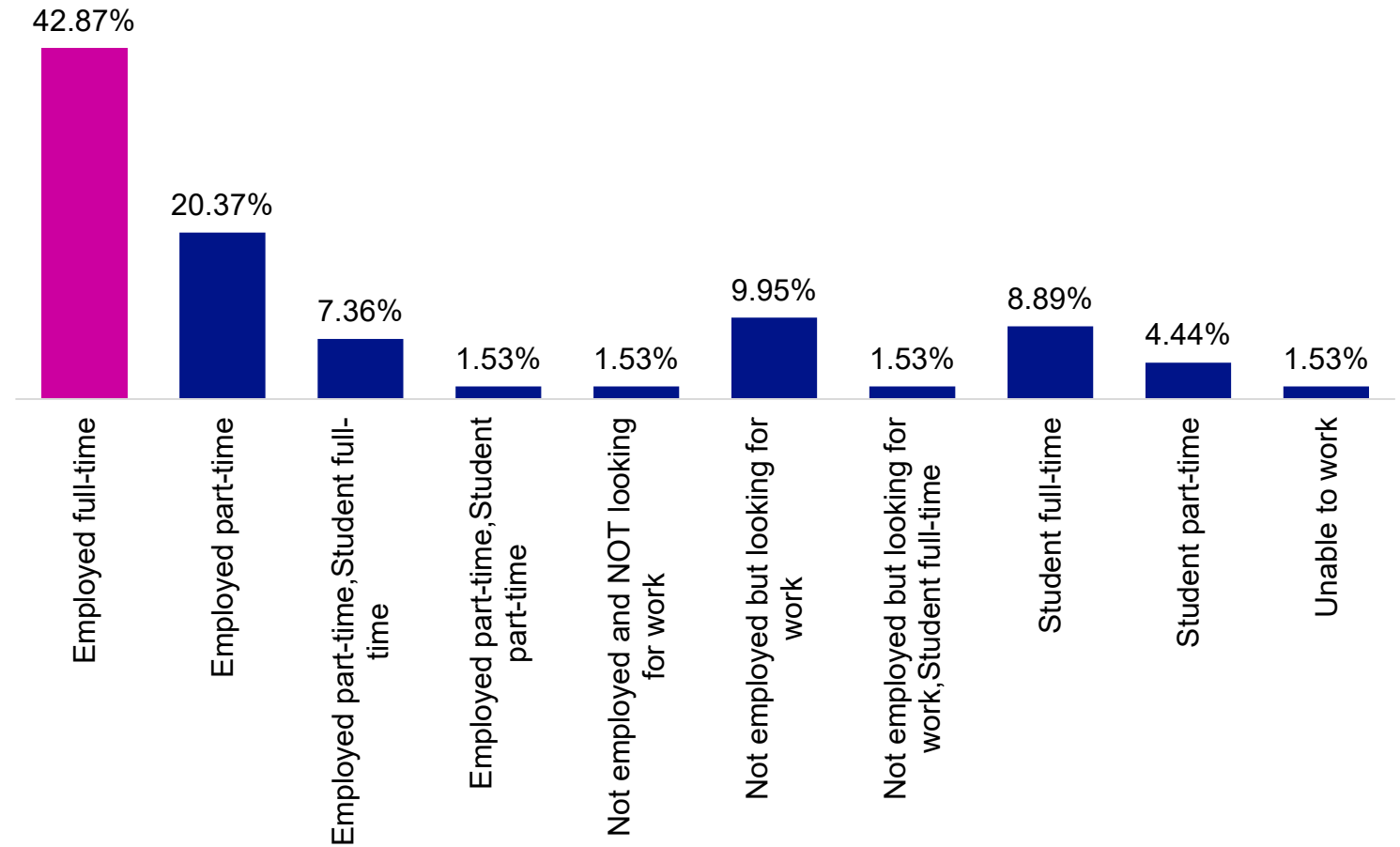
Speak a Language Other than English



Other Languages Spoken (N = 4)



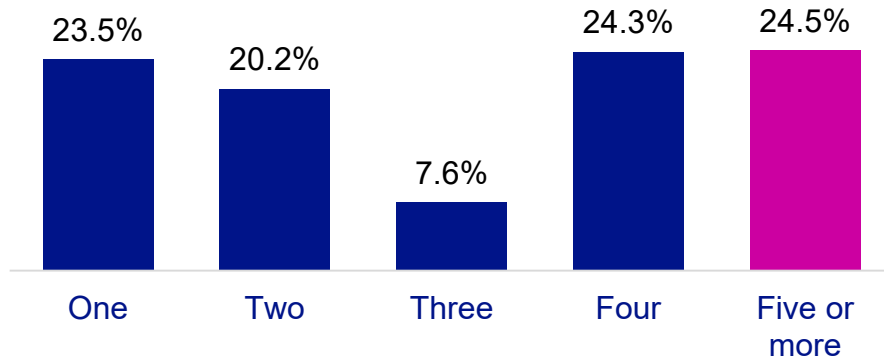
Employment Status (N = 44)



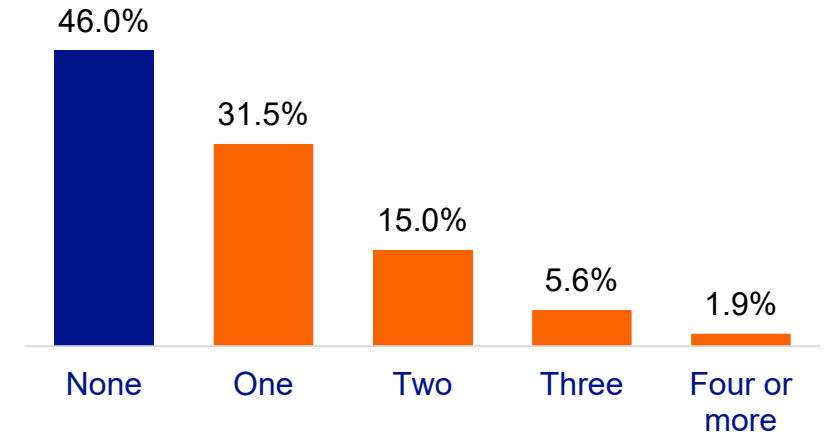


BLOOMFIELD AVE. TRAVEL PROFILE

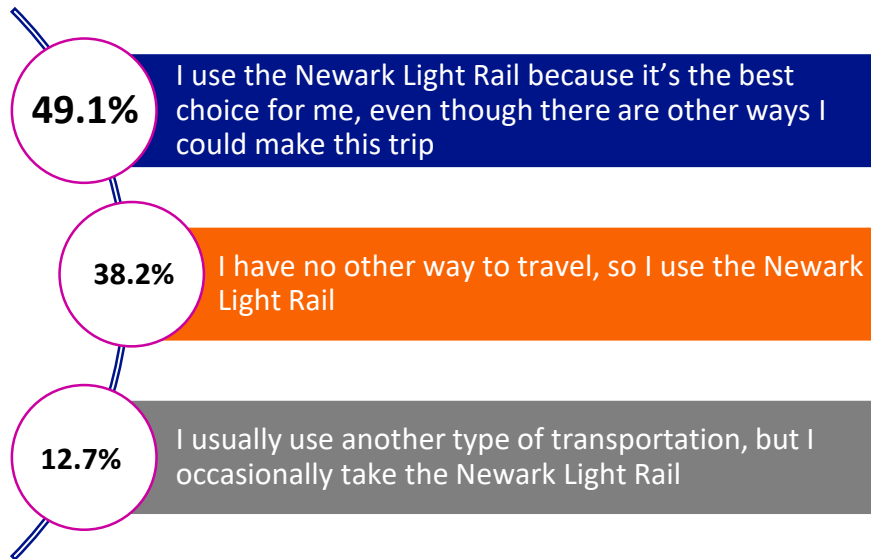
Household Size



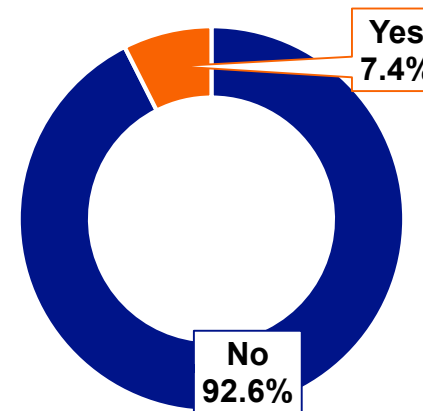
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=2),

50% used wheelchair
50% used other mobility device



BLOOMFIELD AVE. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Light Rail Schedule

- Making sure the times are good and be on time
- Make the late-night train operators stick to schedule – not leave early

Security and Cleanliness Matters

- Stop the homeless from lying in the stop
- More security and cleanliness
- Mas seguridad
- En las paradas mejorar el aseo
- Sanitation
- Clean the trains
- Staff presence in station. Sanitation?

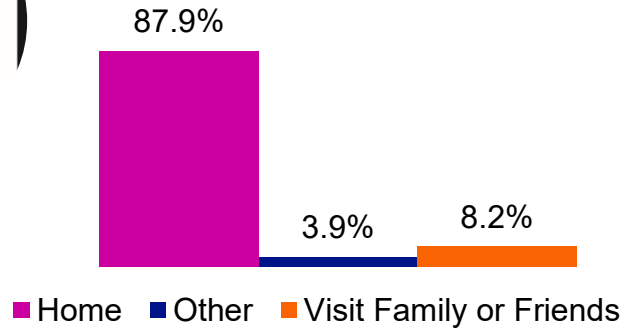
Infrastructure Matters

- More elevators and keep them working
- More stations
- Escalators and elevators function better
- Extenderse mas por la ciudad
- Have better ways to fix the coin slot

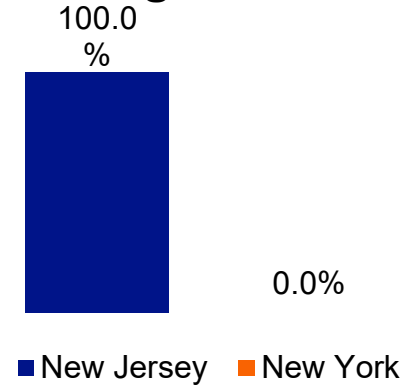
PARK AVE. TRAVEL PROFILE



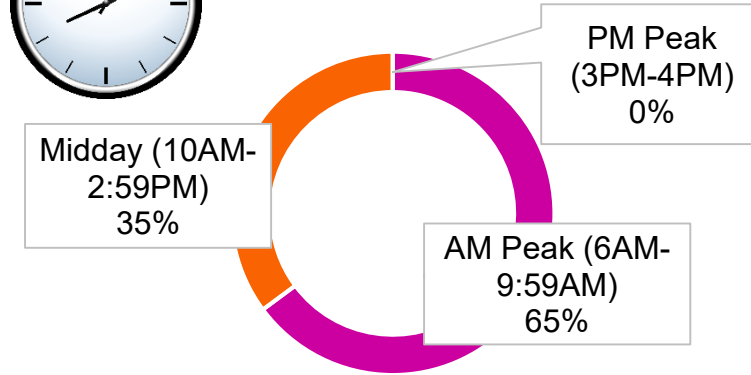
Where Did You Begin This Trip Today?



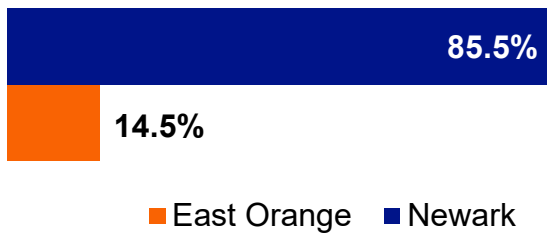
Origin State



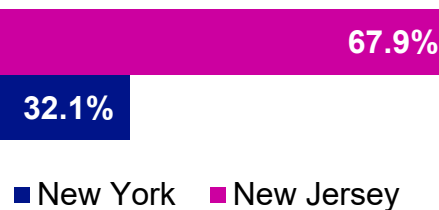
Travel Period



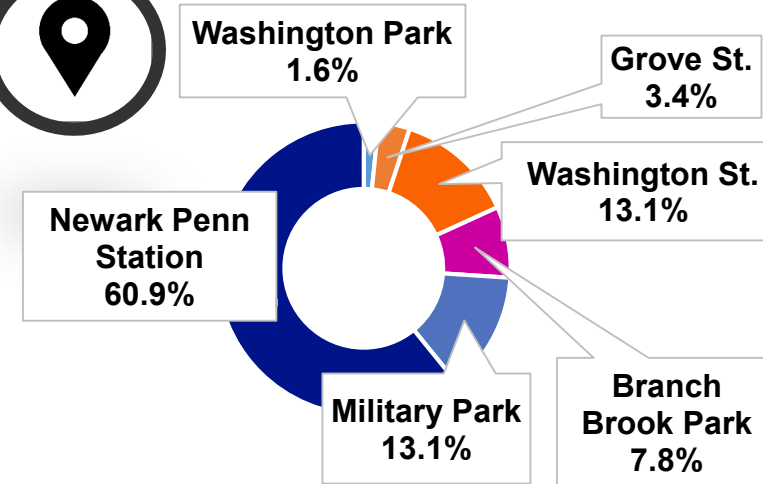
Top Origin Towns



Is Final Destination In NY or NJ?

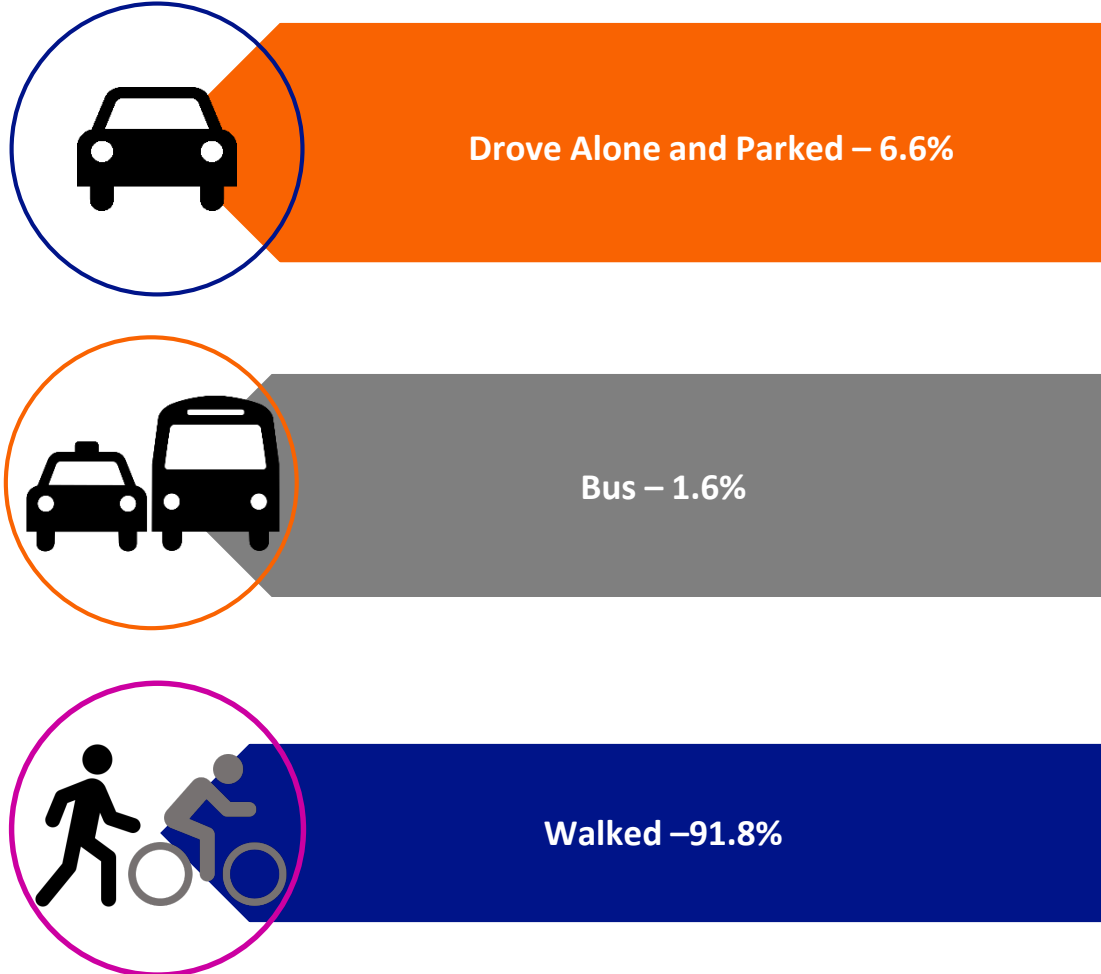


Destination Station

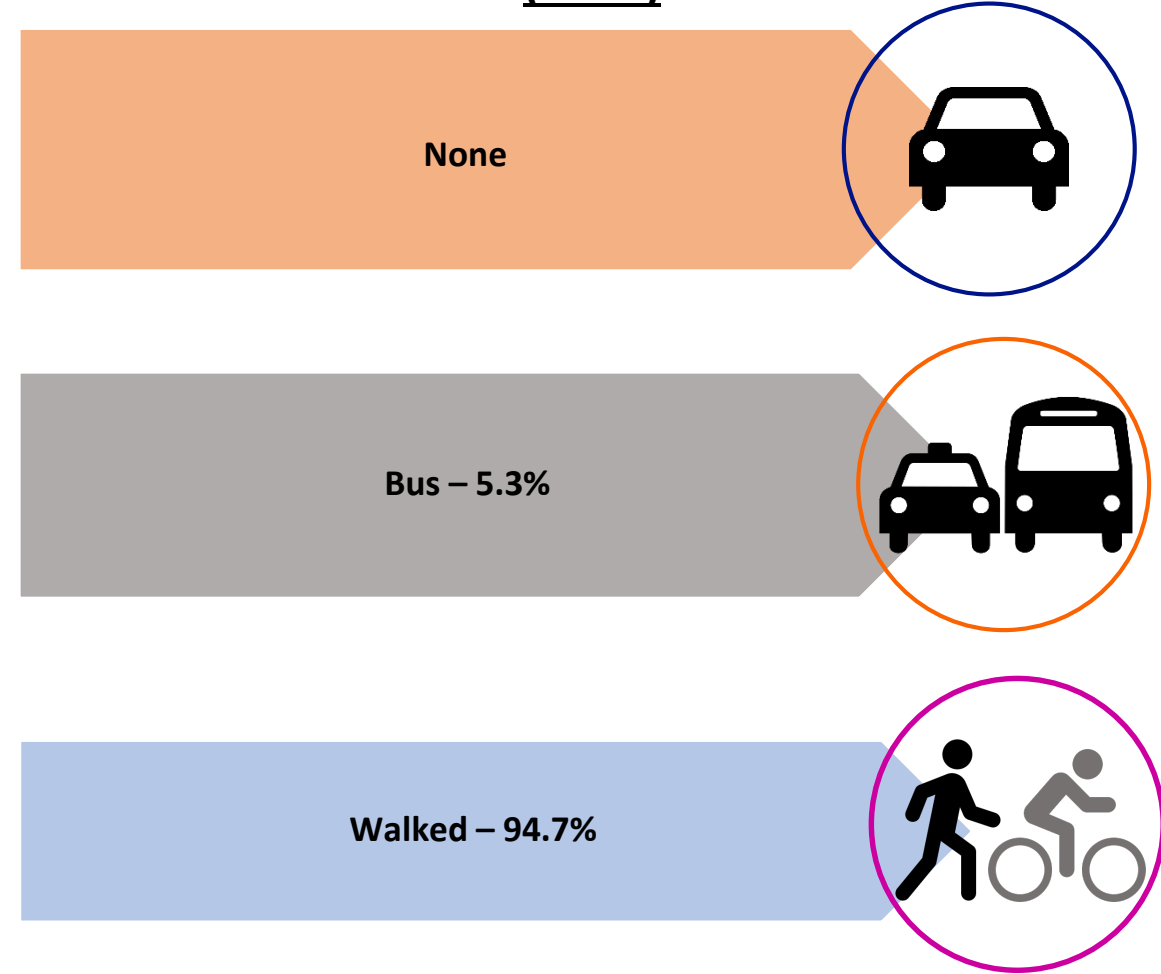


PARK AVE. TRAVEL PROFILE

Access Mode to Boarding Station

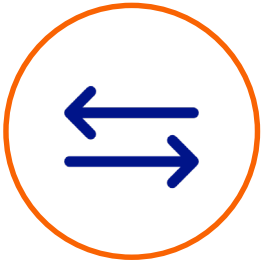


Travel Mode for those Disembarking at Park Ave. Station (N=19)



PARK AVE. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 92.9%



Take a bus – 7.1%



Other – 3.9%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 41.2%

Light Rail Monthly Pass 31.9%

Bus Monthly Pass 3.3%

Reduced Fares for Senior Citizens & Customers with Disabilities 12.1%

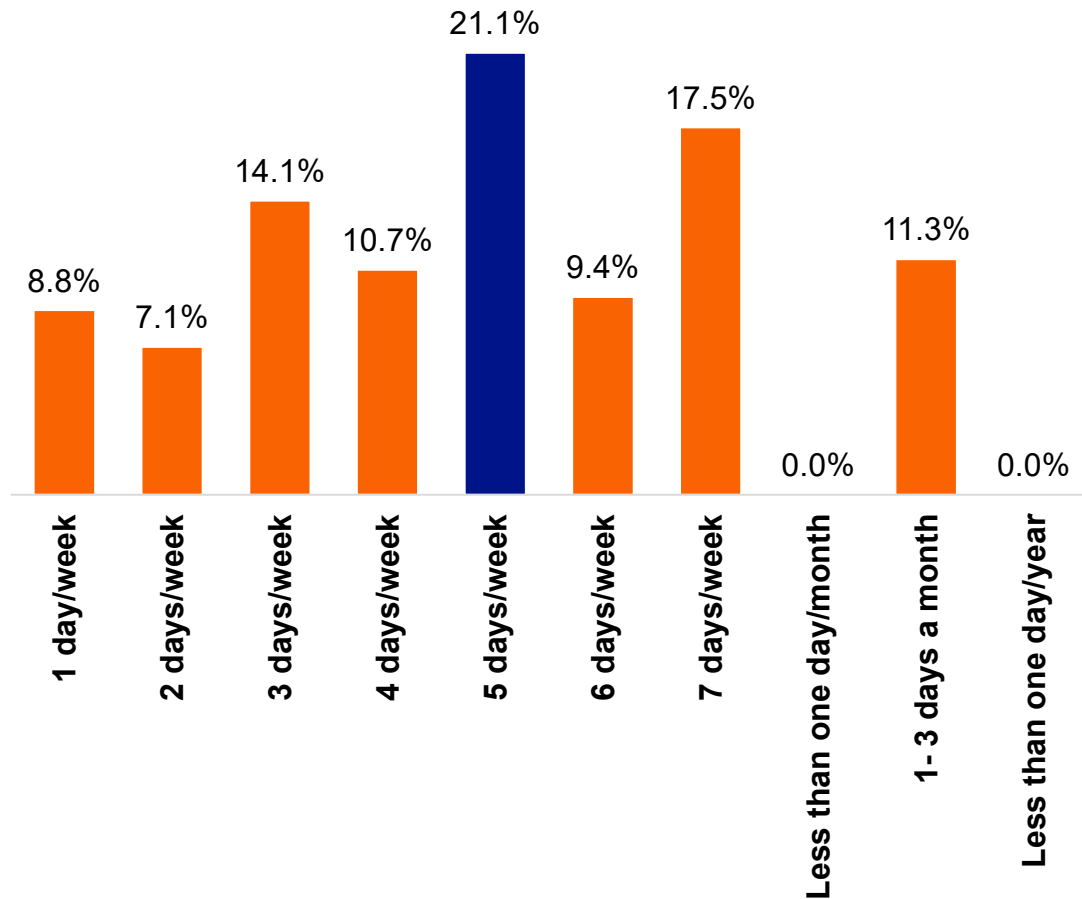
Underground Fare 8.2%

Other 3.3%

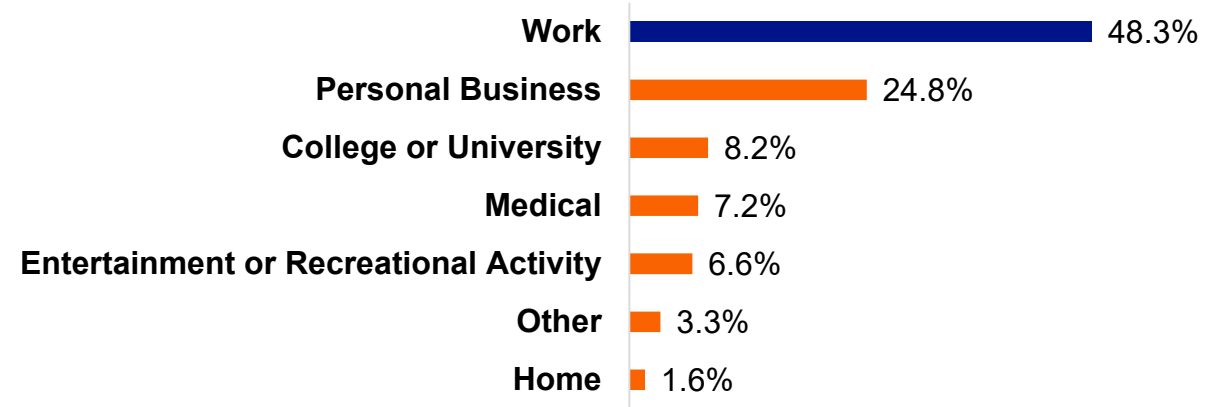


PARK AVE. TRAVEL PROFILE

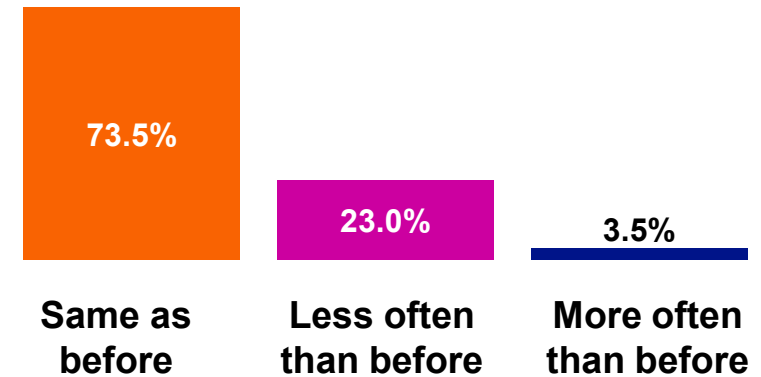
Trip Frequency



Trip Purpose



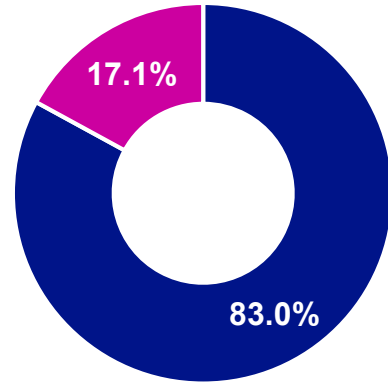
Usage of Newark Light Rail since Covid-19 Pandemic



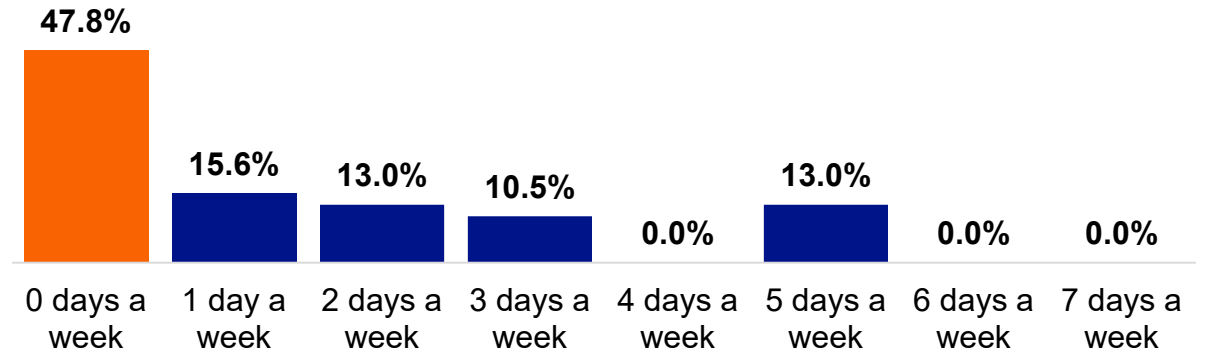
PARK AVE. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 16)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time

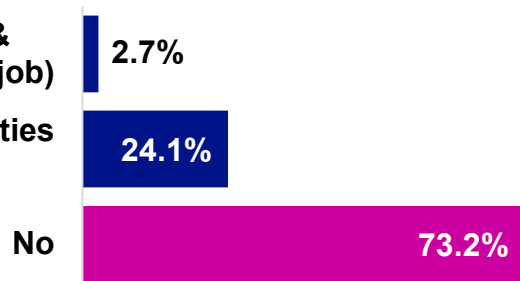


Number of days working from home in the past seven days (N = 19)

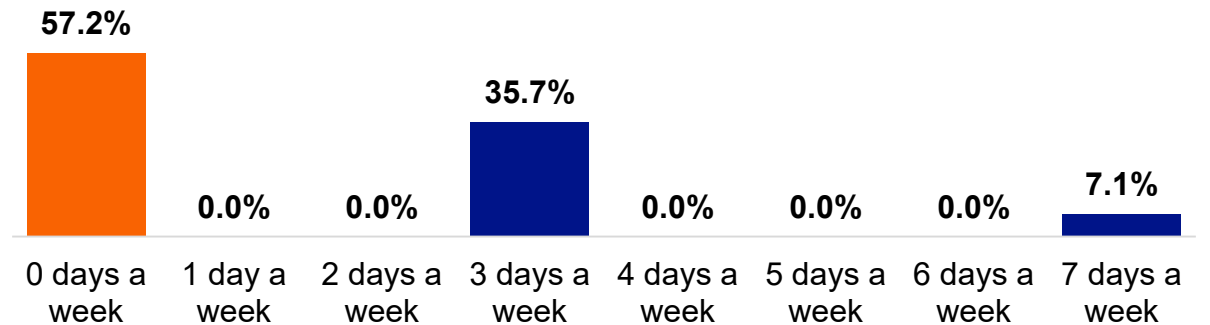


Able to complete job from home, if it was allowed by employer (N = 18)

- Yes (Some duties & responsibilities of my job)
- Yes (All duties & responsibilities of my job)
- No



Number of days attending school lectures from home in the past seven days (N = 5)

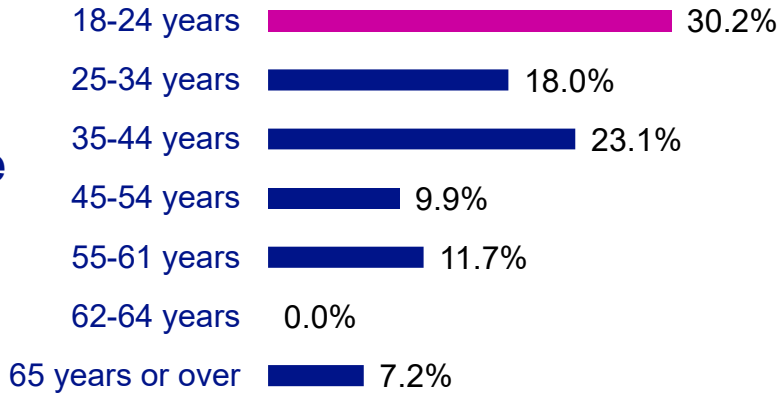


Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.



PARK AVE. TRAVEL PROFILE

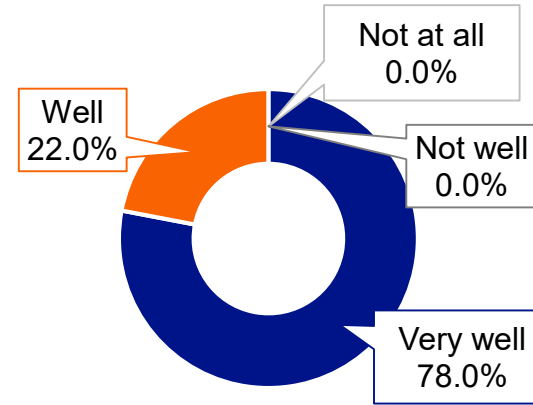
Age



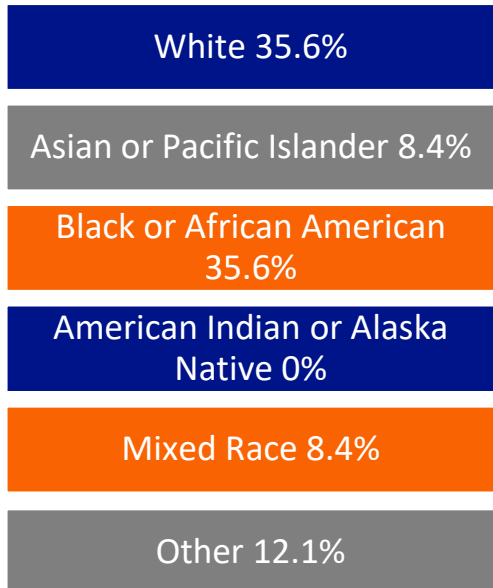
Ethnicity

59.1%
Hispanic

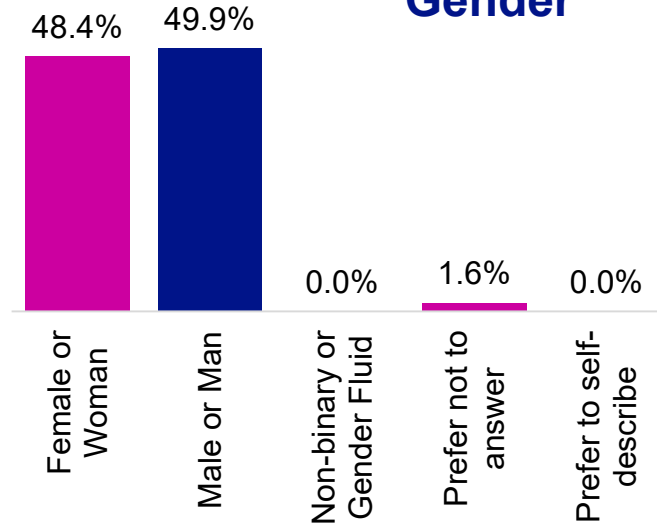
Fluency in Speaking English



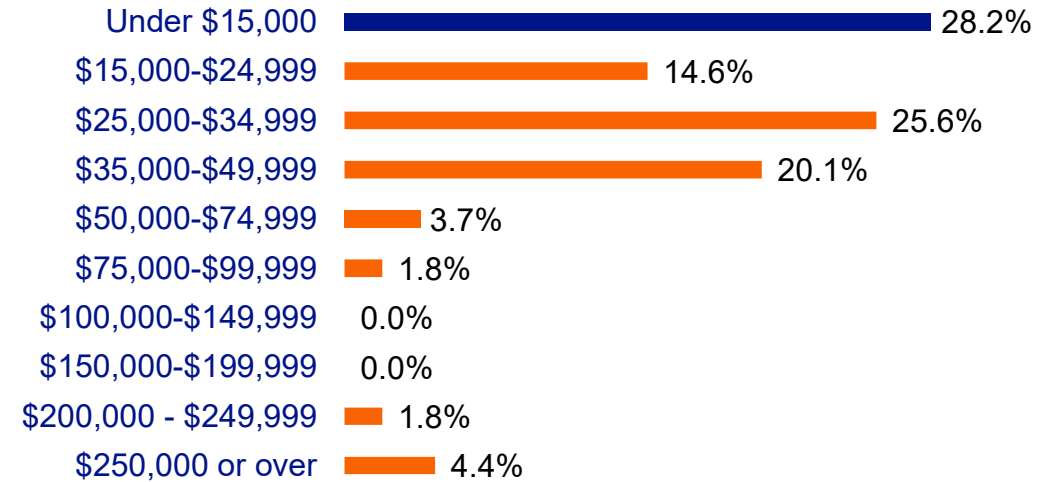
Race



Gender

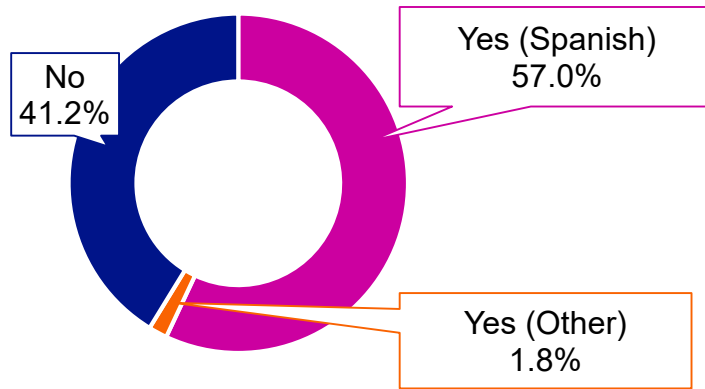


Annual Household Income



PARK AVE. TRAVEL PROFILE

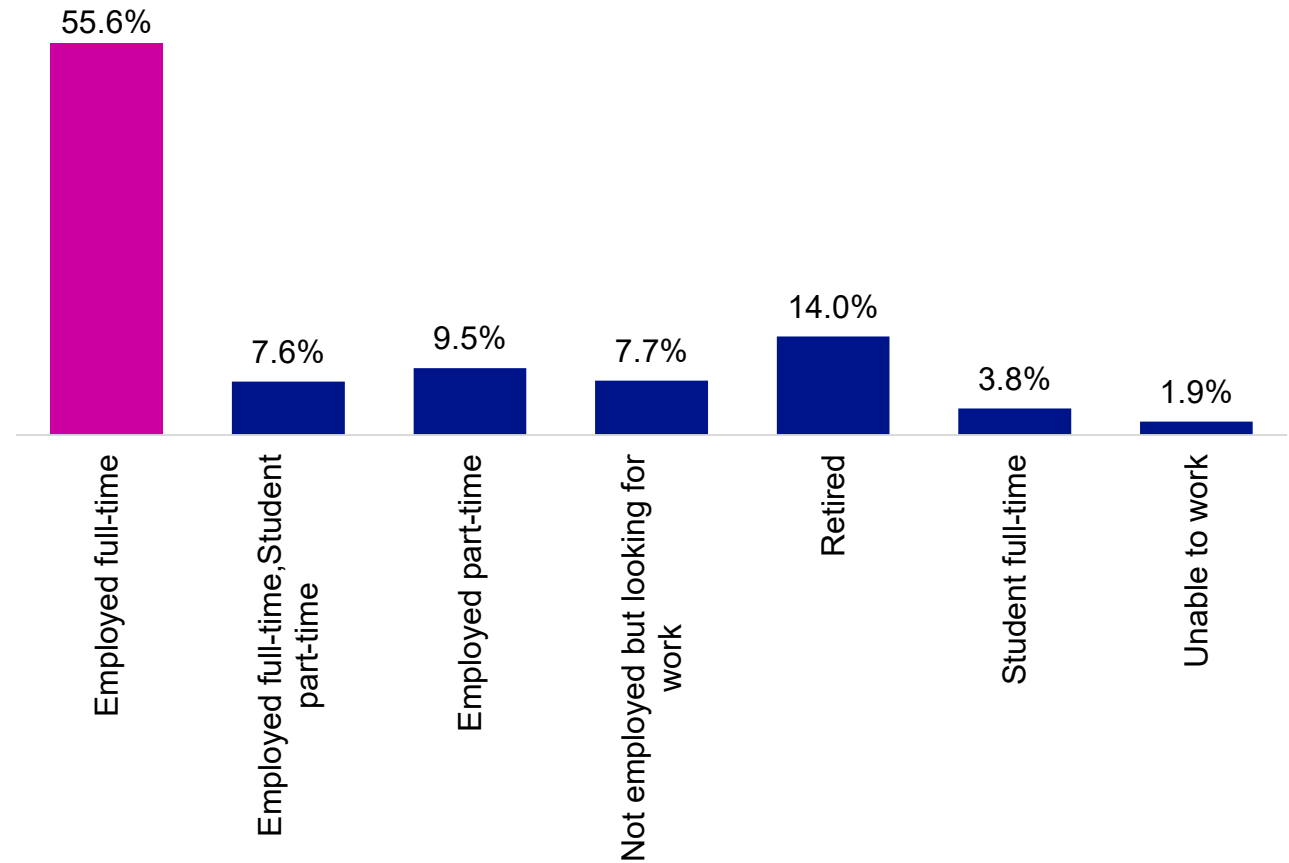
Speak a Language Other than English



Other Languages Spoken (N = 1):

For respondents who speak a language other than English, they did not specify the language

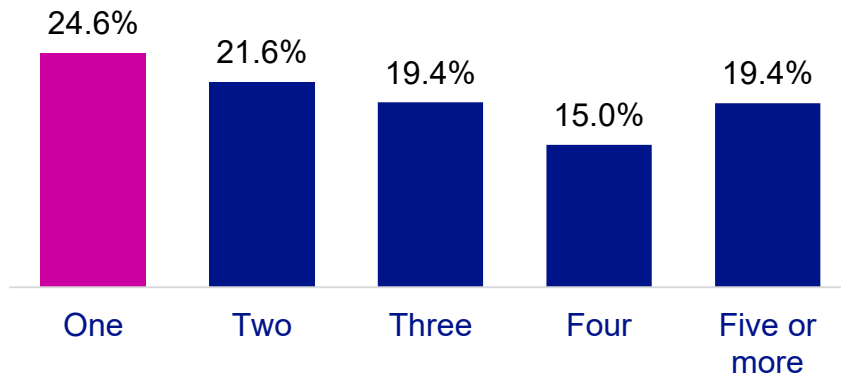
Employment Status (N = 137)



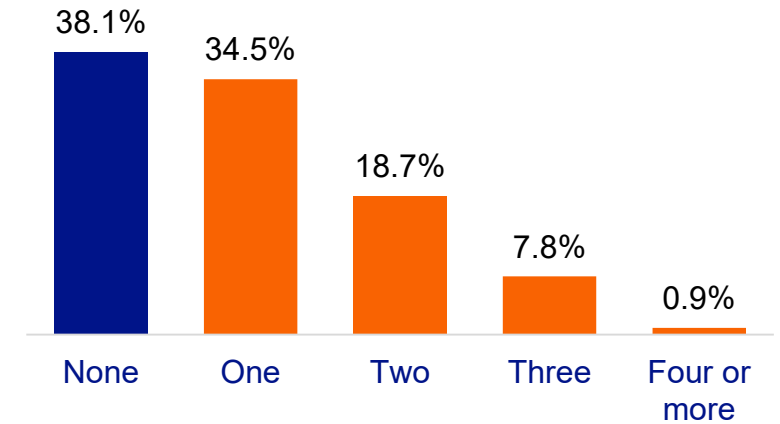


PARK AVE. TRAVEL PROFILE

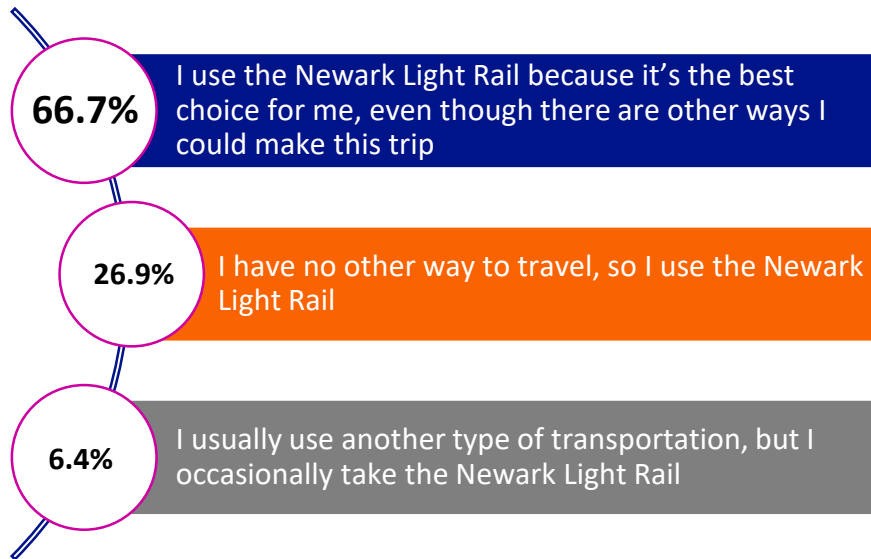
Household Size



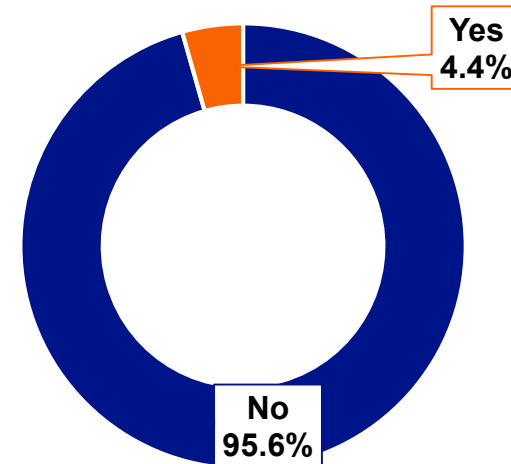
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes, no respondents indicated they used wheelchair and/or other mobility device.



PARK AVE. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- Better schedule on weekends
- Frequent trips
- Same schedule for 7 days. No weekend change
- Stop using 2 trains during rush hour
- More trains on schedule, bigger train.
- Add another cart to the train

Better Communication & Be On Time

- Be on time
- Let passengers be aware of anything on board
- Live Light Rail schedule updates
- Improve the service and time

Cleanliness

- Increase cleanliness of the stations
- No grafitti
- Signs for people to keep feet off seats
- Maintenance

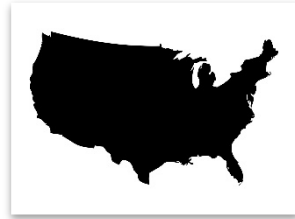
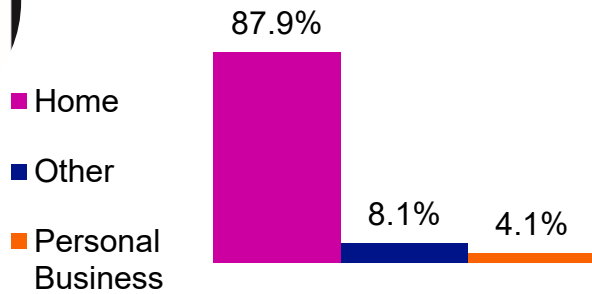
Ramp Concerns

- Ramps for strollers and disabled people at Park Ave. Station
- Most if not all Light Rail stops have no ramps for wheelchairs

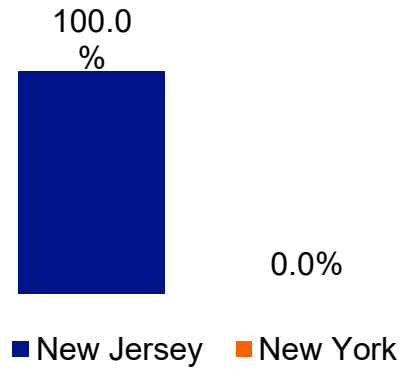
ORANGE ST. TRAVEL PROFILE



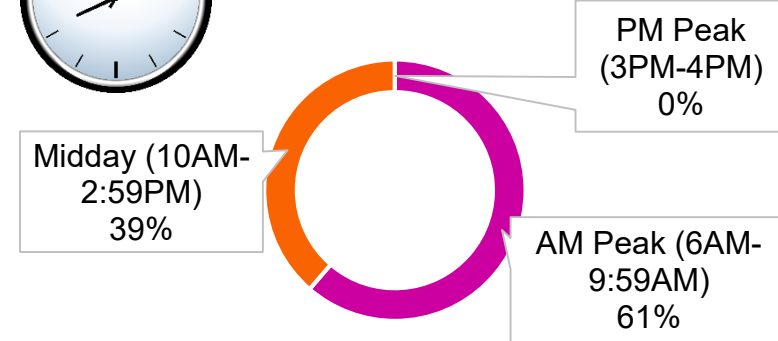
Where Did You Begin This Trip Today?



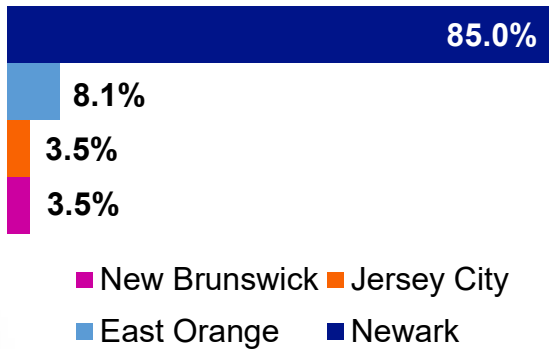
Origin State



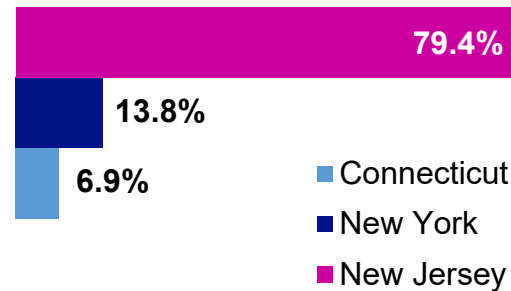
Travel Period



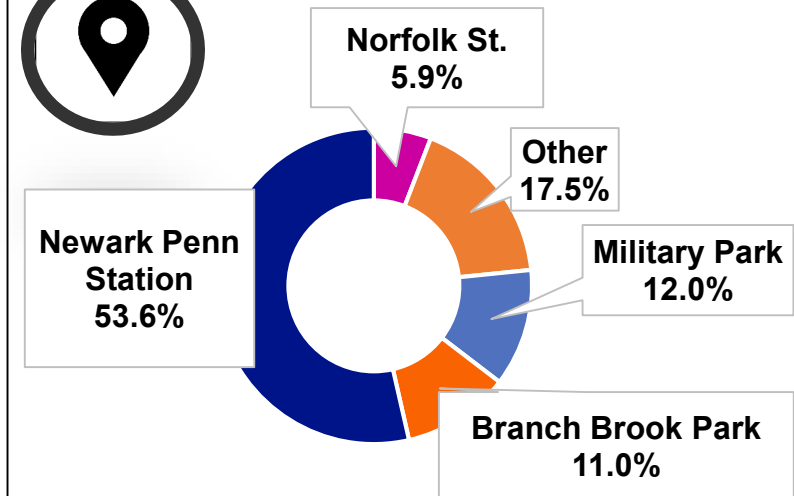
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

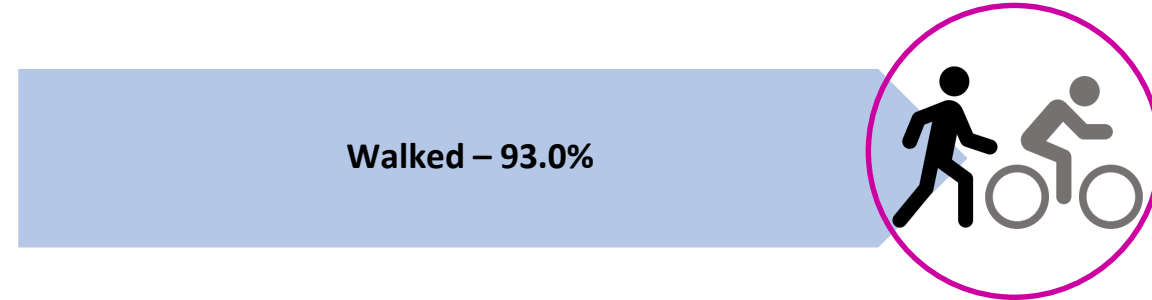
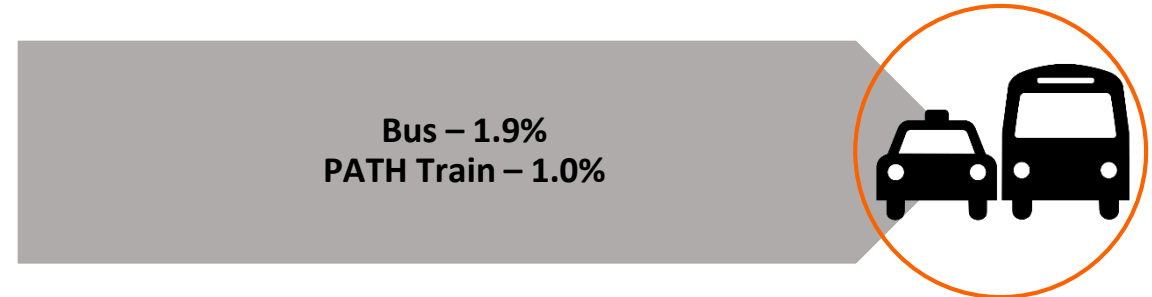
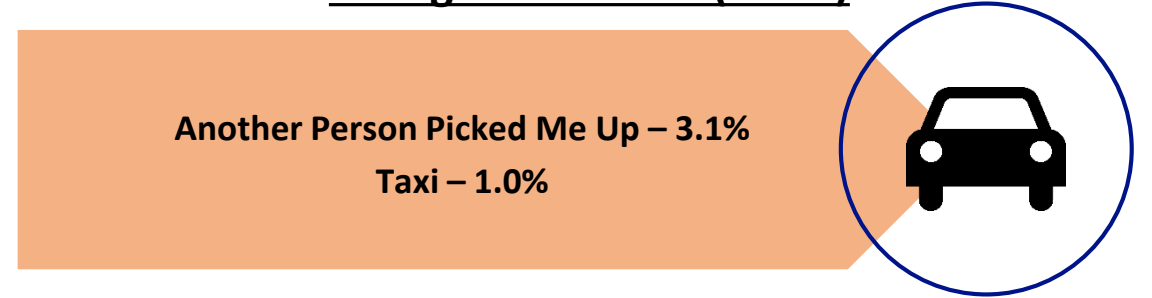


ORANGE ST. TRAVEL PROFILE

Access Mode to Boarding Station

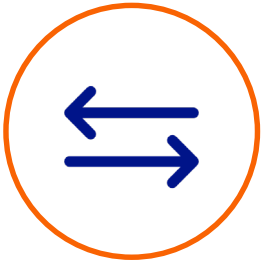


Travel Mode for those Disembarking at Orange St. Station (N=25)



ORANGE ST. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 78.7%



Take a bus – 10.3%



Other – 11.0%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 59.8%

Light Rail Monthly Pass 13.4%

Bus Monthly Pass 16.5%

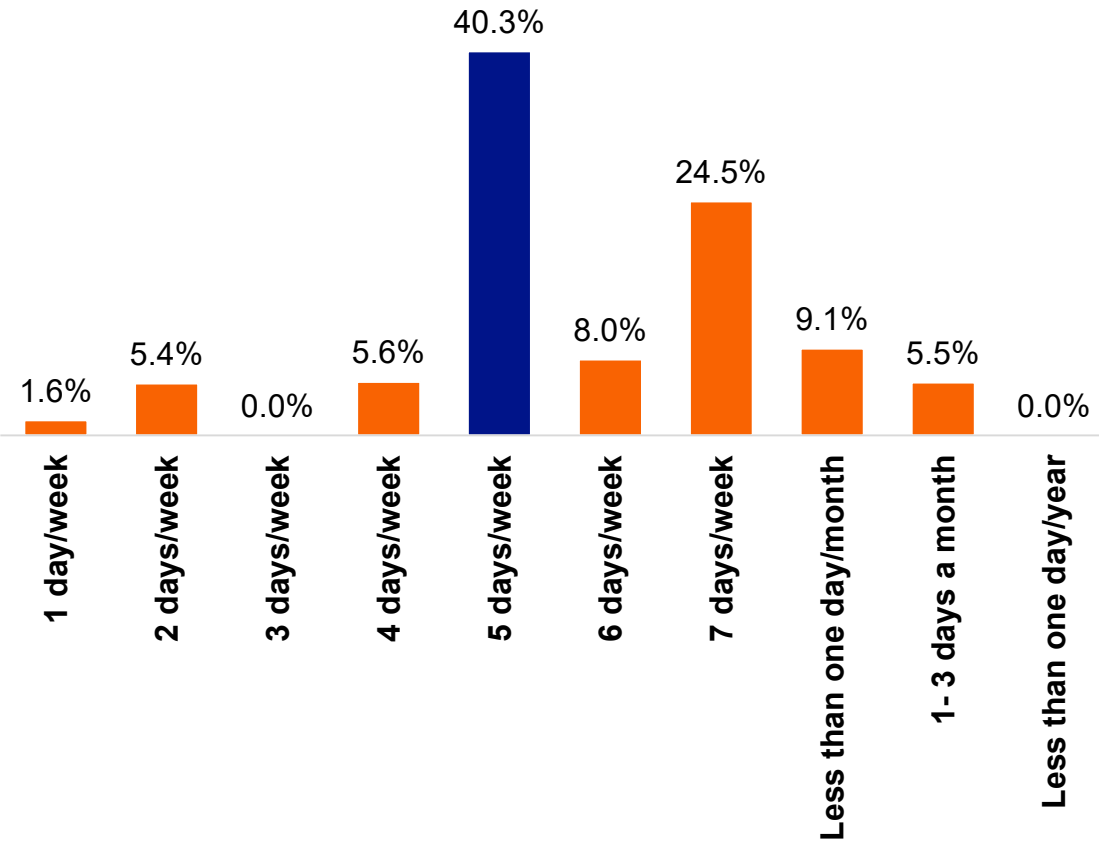
Reduced Fares for Senior Citizens & Customers with Disabilities 7.7%

Underground Fare 2.6%

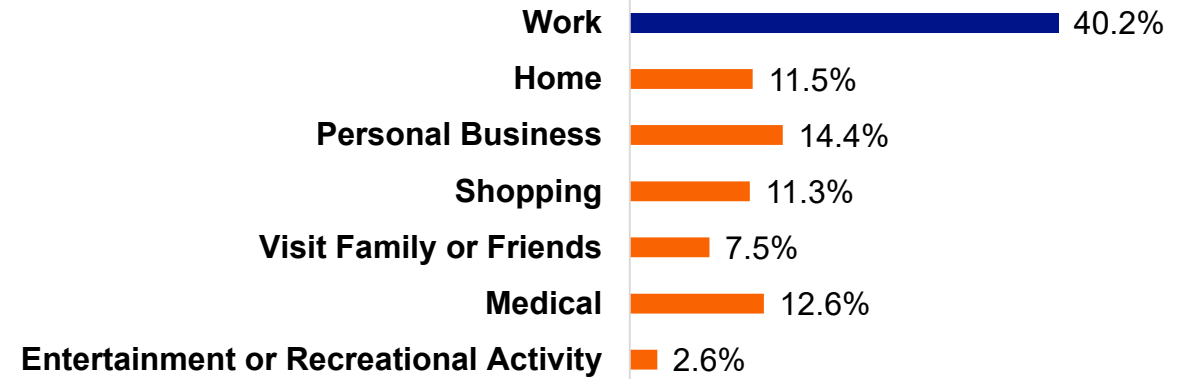


ORANGE ST. TRAVEL PROFILE

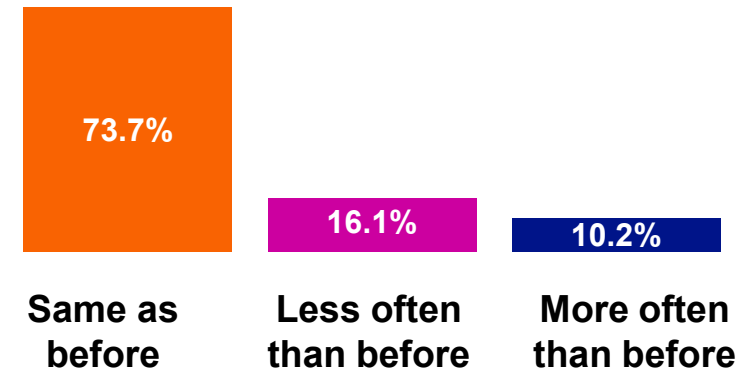
Trip Frequency



Trip Purpose



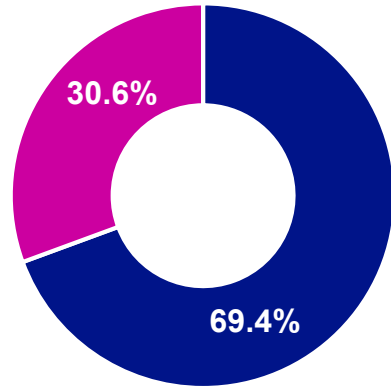
Usage of Newark Light Rail since Covid-19 Pandemic



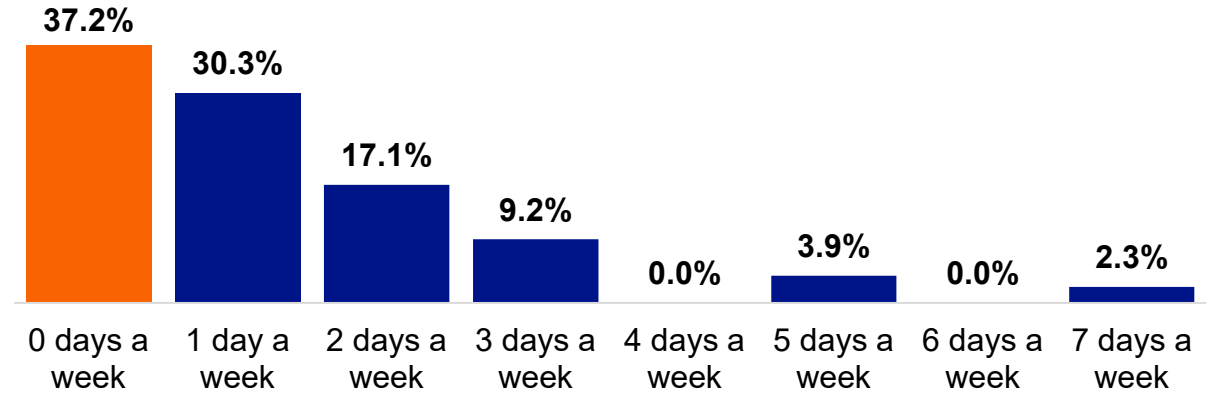
ORANGE ST. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 16)

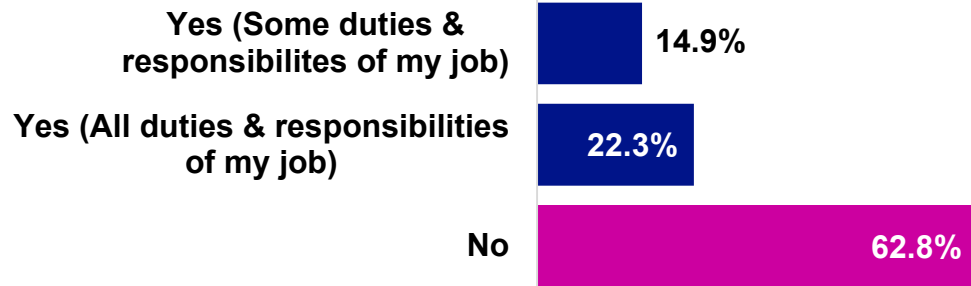
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



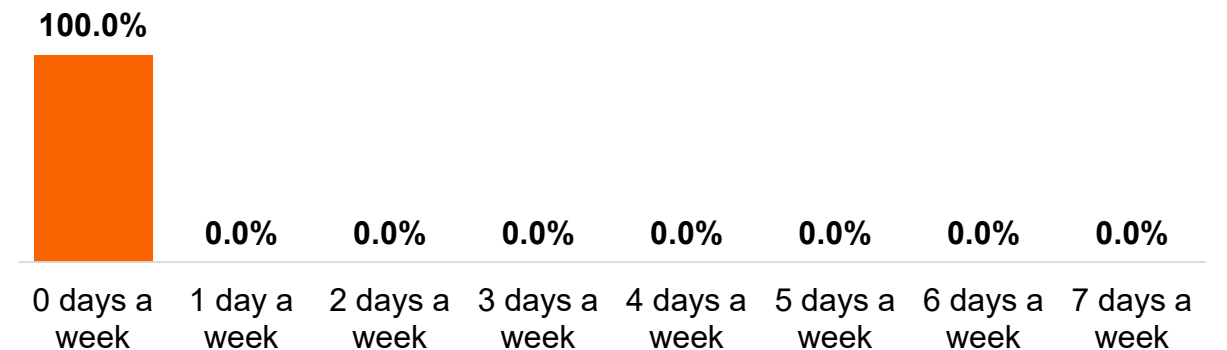
Number of days working from home in the past seven days (N = 19)



Able to complete job from home, if it was allowed by employer (N = 15)



Number of days attending school lectures from home in the past seven days (N = 2)

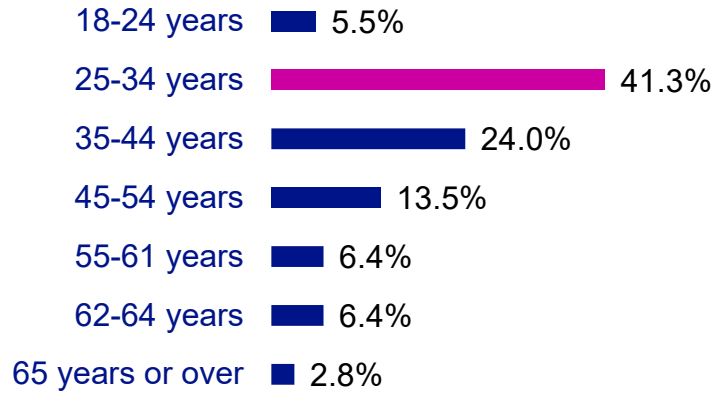


Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.



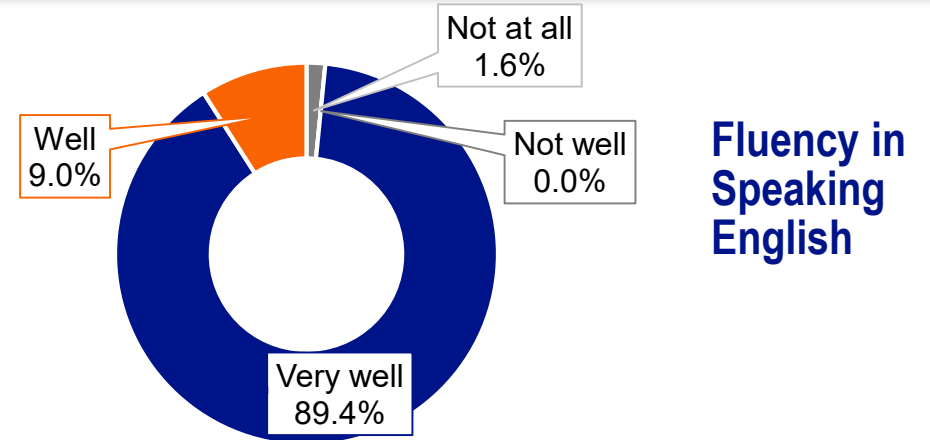
ORANGE ST. TRAVEL PROFILE

Age

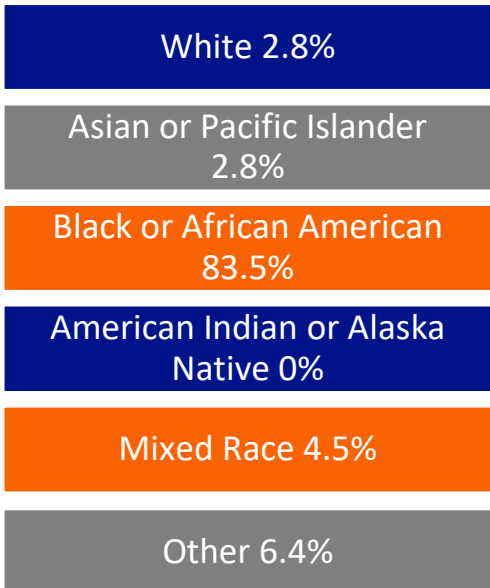


Ethnicity

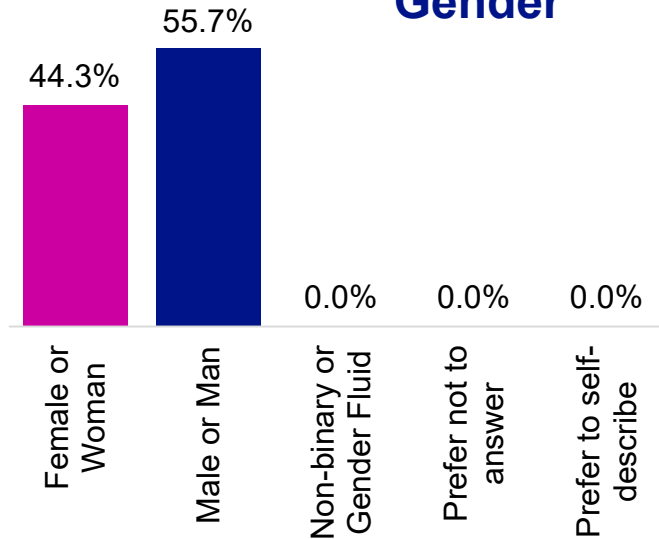
21.2%
Hispanic



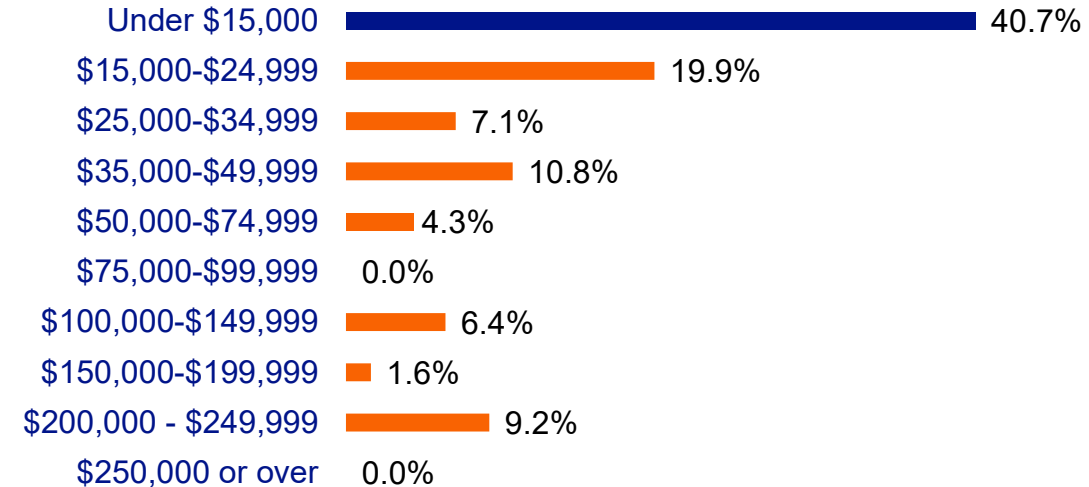
Race



Gender

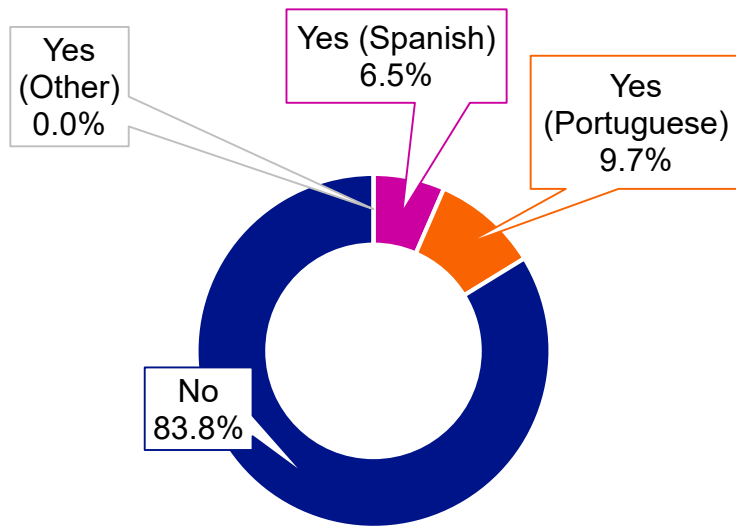


Annual Household Income

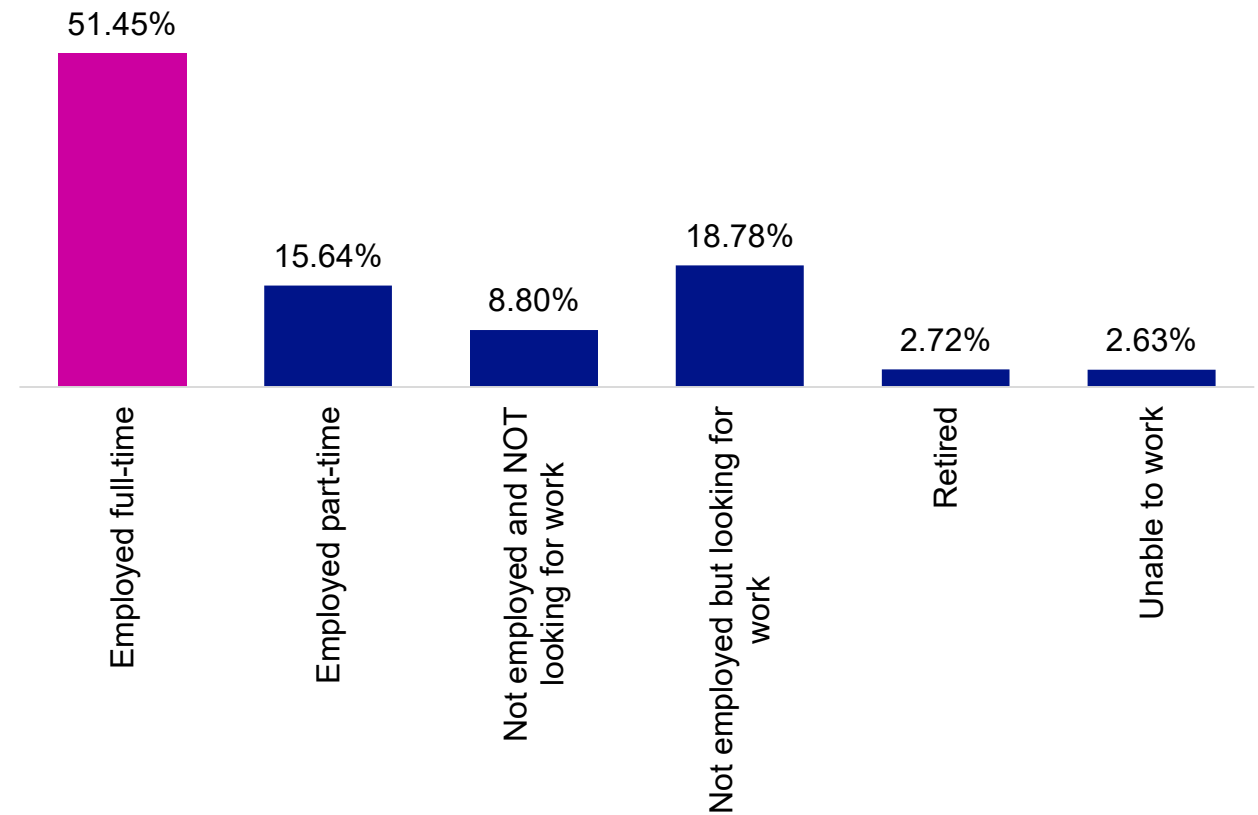


ORANGE ST. TRAVEL PROFILE

Speak a Language Other than English



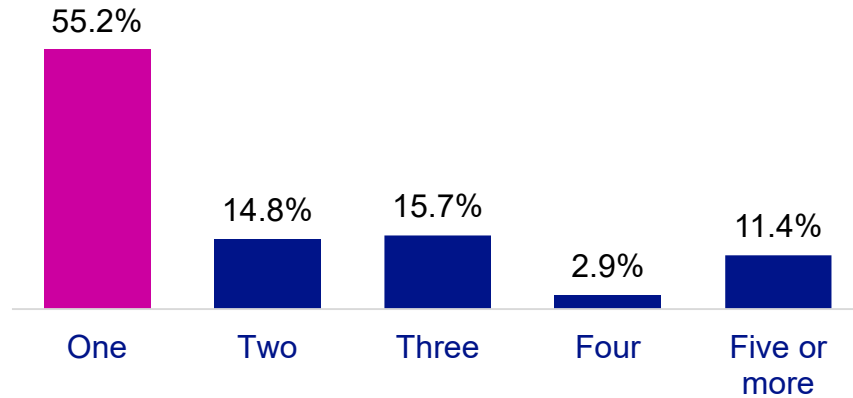
Employment Status (N = 30)



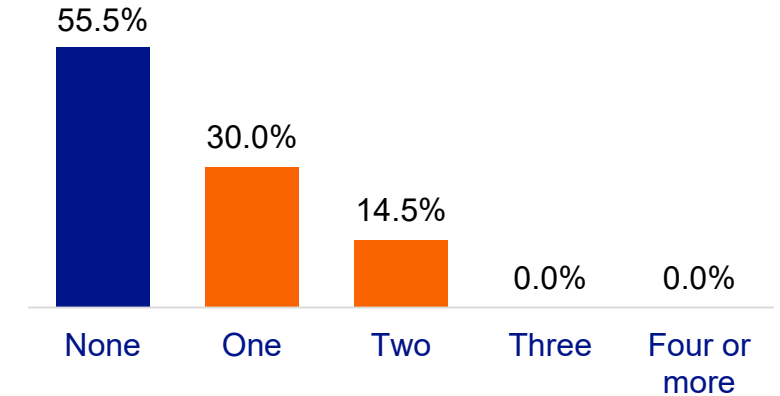


ORANGE ST. TRAVEL PROFILE

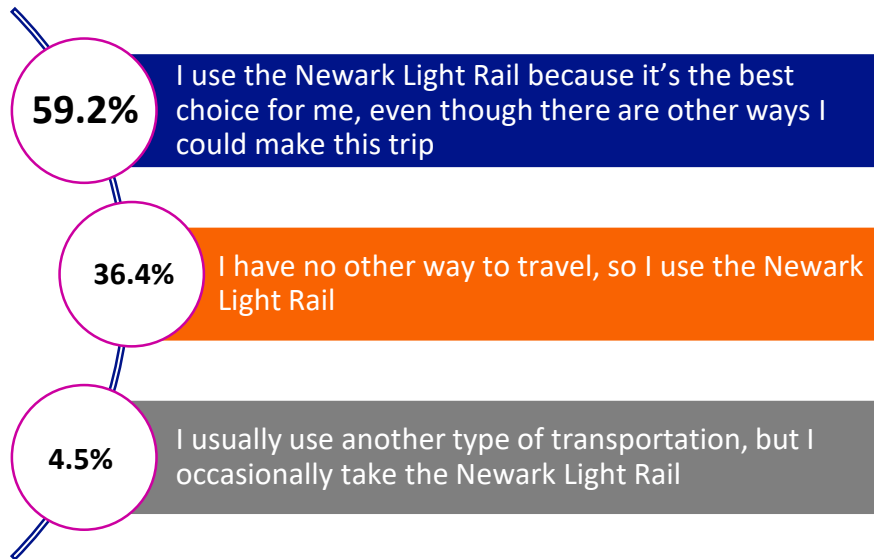
Household Size



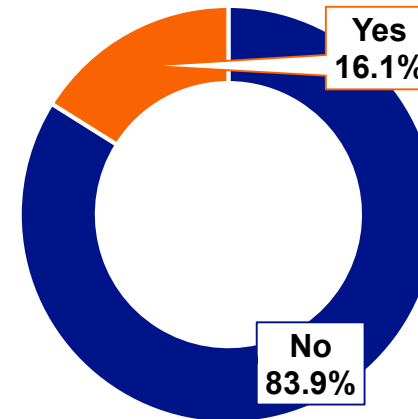
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=1),
100% used wheelchair



ORANGE ST. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- Coming faster

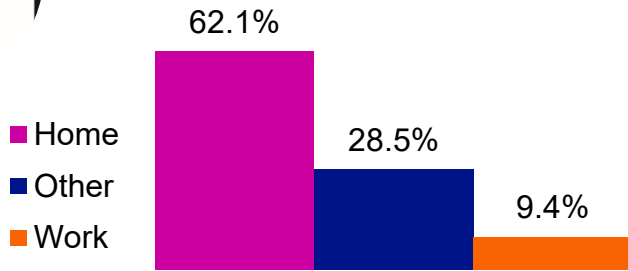
Other

- No more random ticket checks, either have NJT police at stations the whole time to check tickets or have a machine that checks tickets at every station

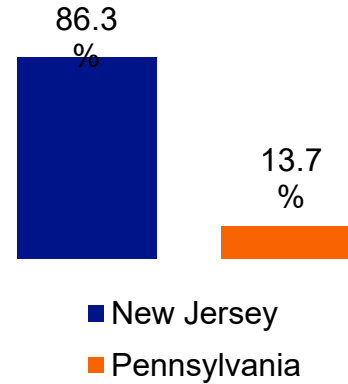
NORFOLK ST. TRAVEL PROFILE



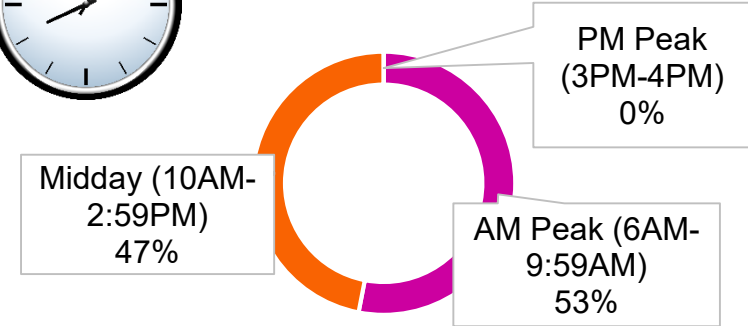
Where Did You Begin This Trip Today?



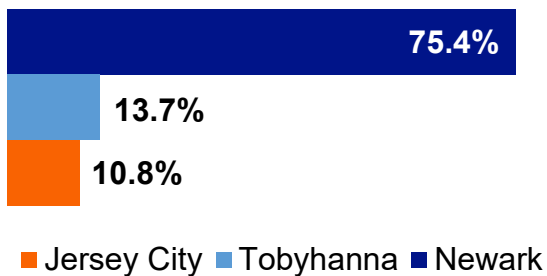
Origin State



Travel Period



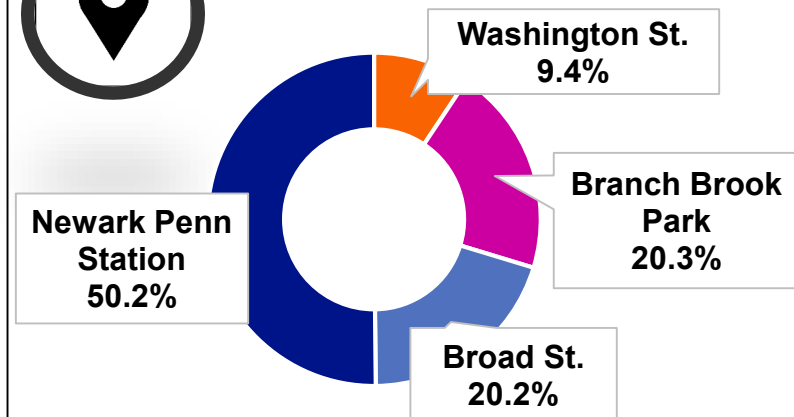
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

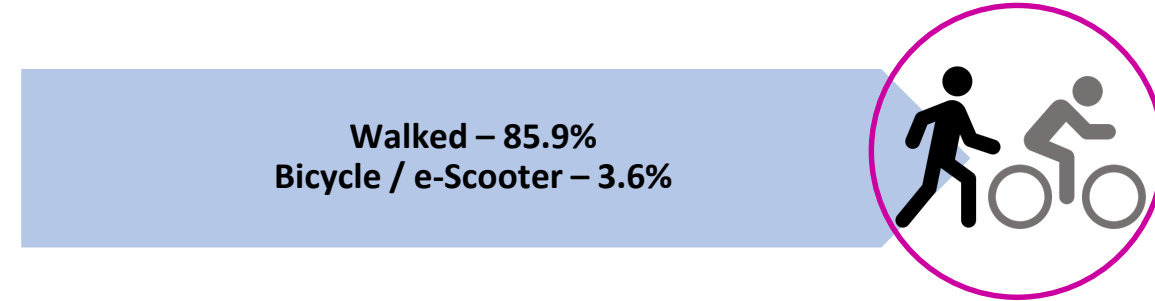
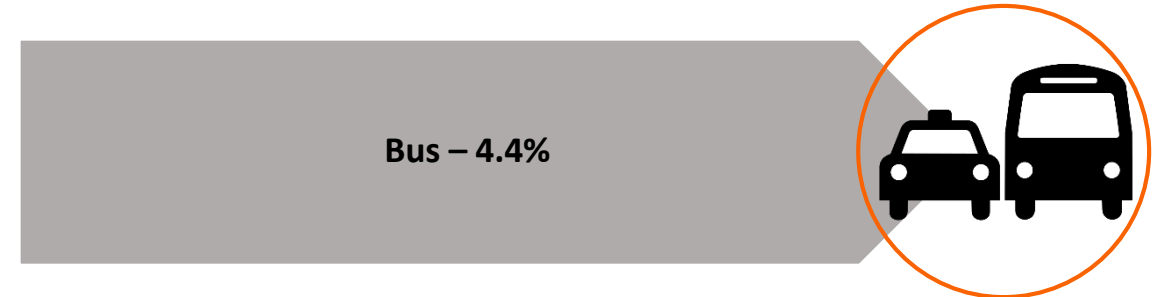
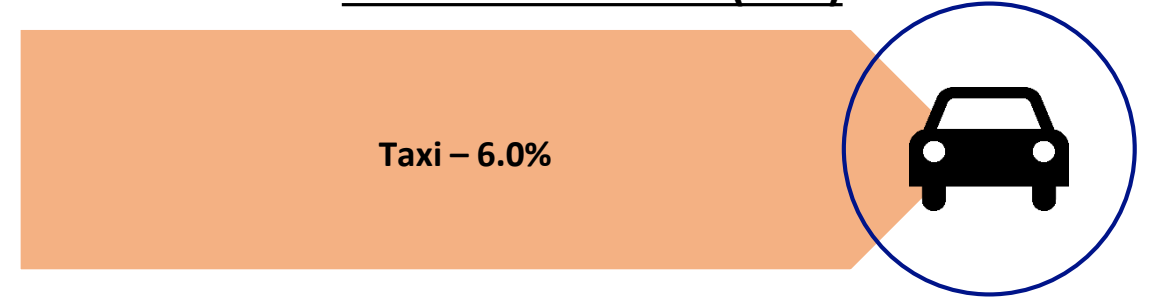


NORFOLK ST. TRAVEL PROFILE

Access Mode to Boarding Station

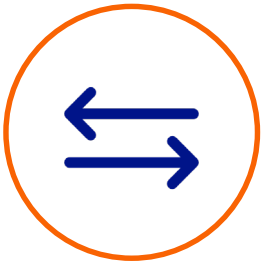


Travel Mode for those Disembarking at Norfolk St. Station (N=8)



NORFOLK ST. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 79.8%



Take a bus – 20.2%



Other – 0%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 44.2%

Light Rail Monthly Pass 4.8%

Rail Monthly Pass 8.0%

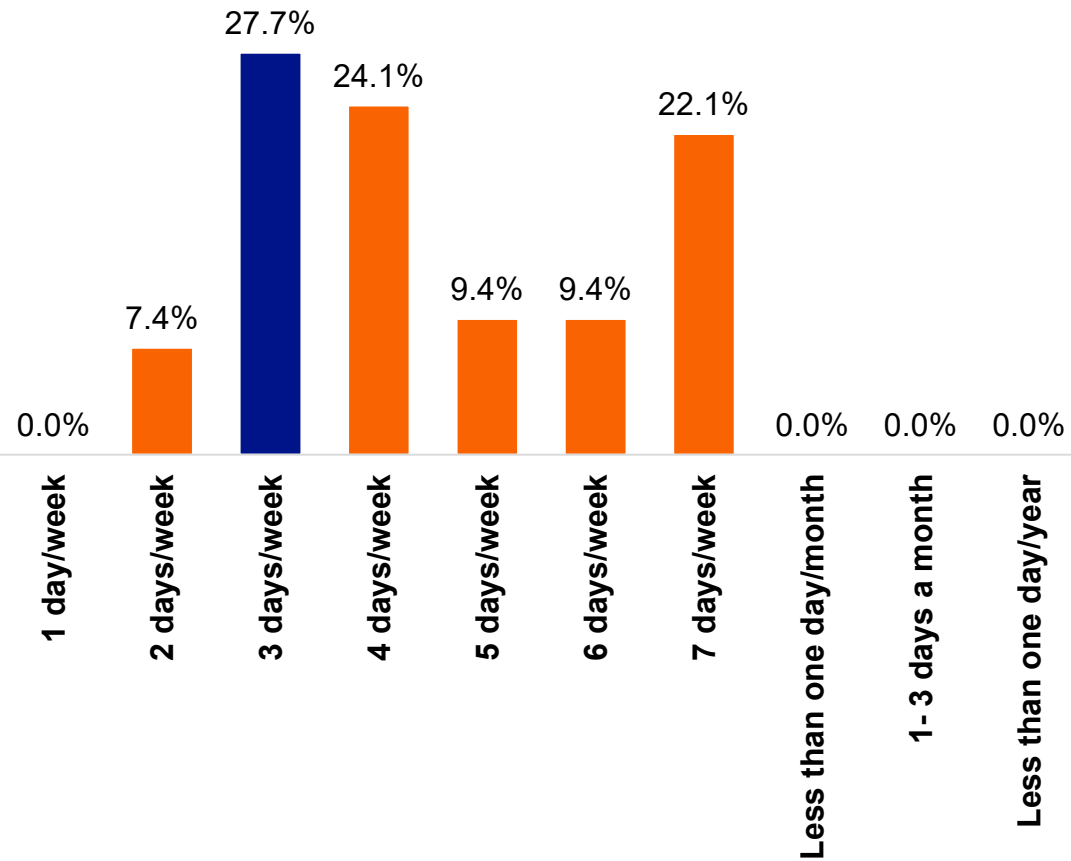
Bus Monthly Pass 10.1%

Reduced Fares for Senior Citizens & Customers with Disabilities 32.9%

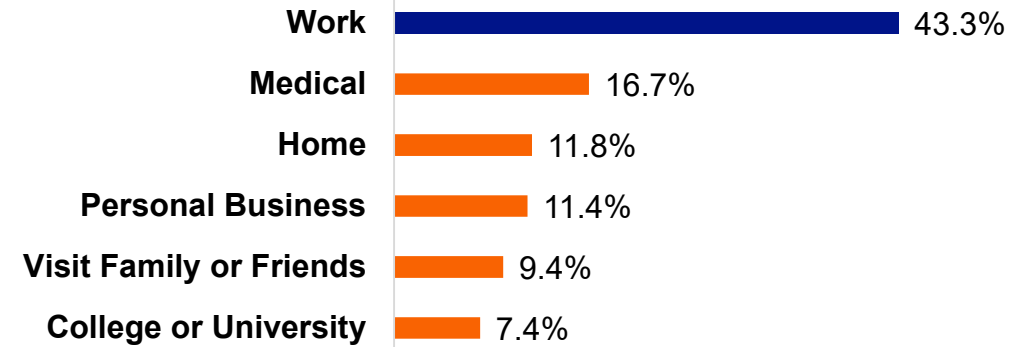


NORFOLK ST. TRAVEL PROFILE

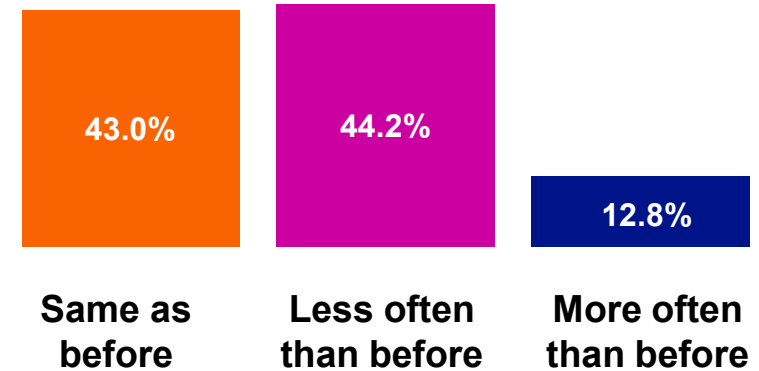
Trip Frequency



Trip Purpose



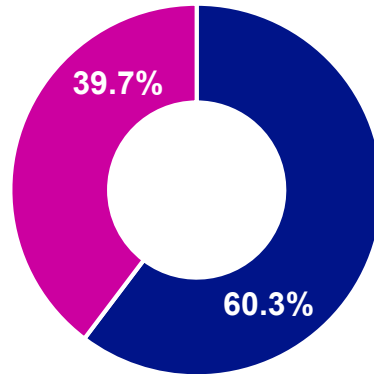
Usage of Newark Light Rail since Covid-19 Pandemic



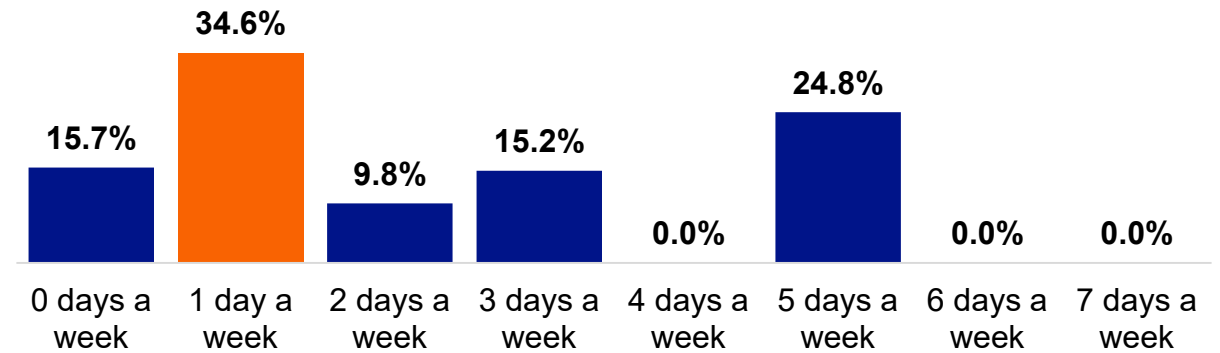
NORFOLK ST. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 8)

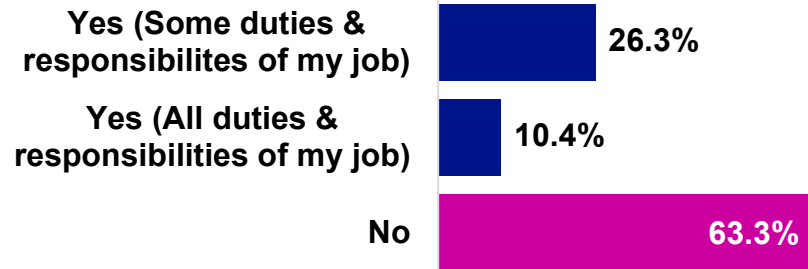
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



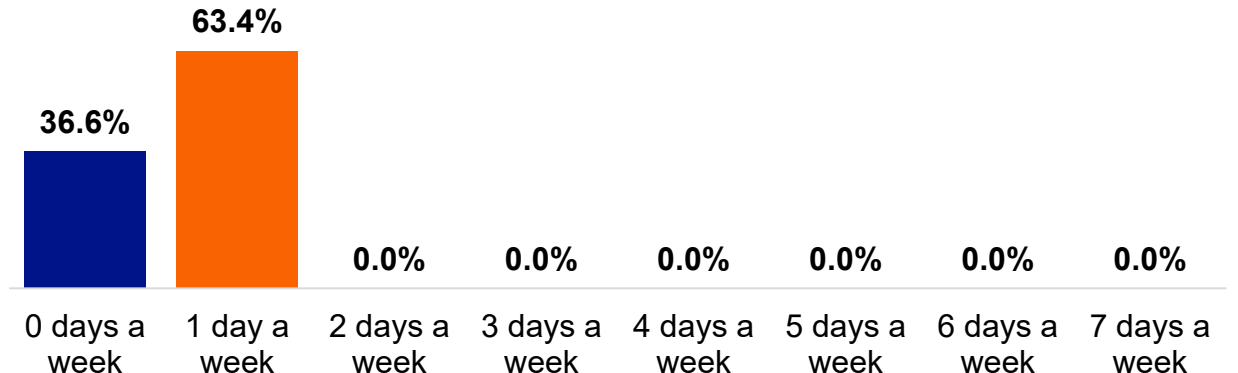
Number of days working from home in the past seven days (N = 9)



Able to complete job from home, if it was allowed by employer (N = 8)



Number of days attending school lectures from home in the past seven days (N = 2)



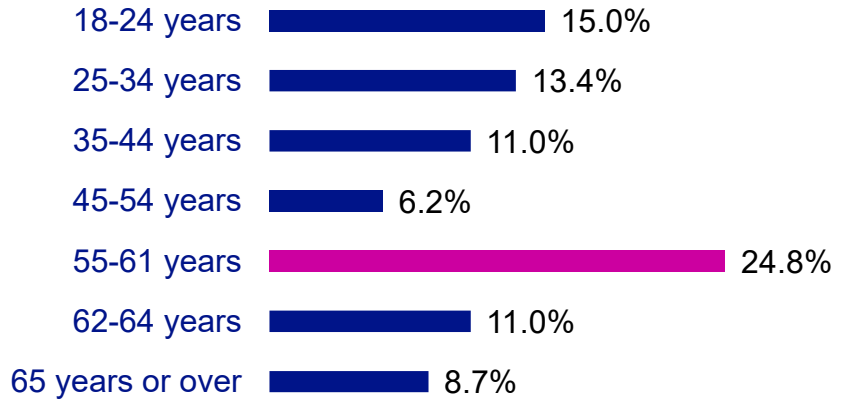
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 12 Respondents (Margin of Error $\pm 0.7\%$ at 95% Confidence Level)



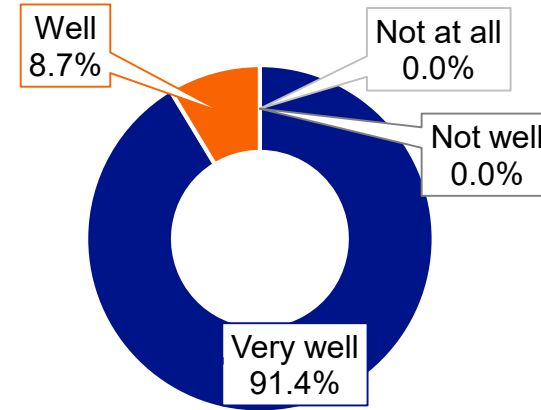
NORFOLK ST. TRAVEL PROFILE

Age



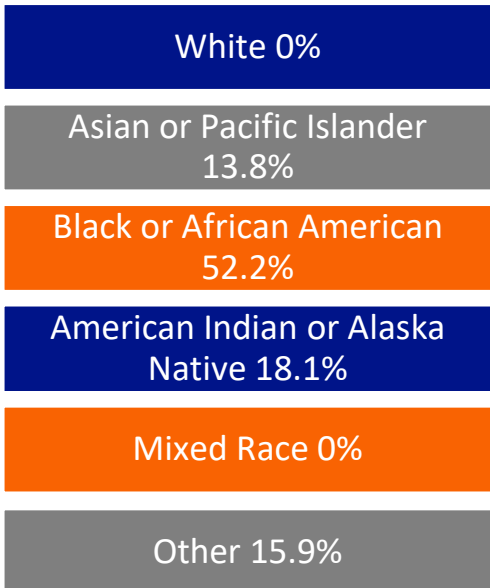
Ethnicity

0%
Hispanic

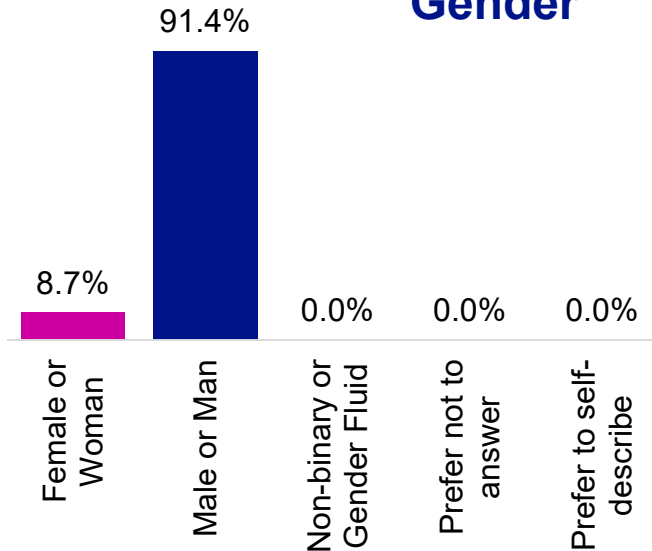


Fluency in Speaking English

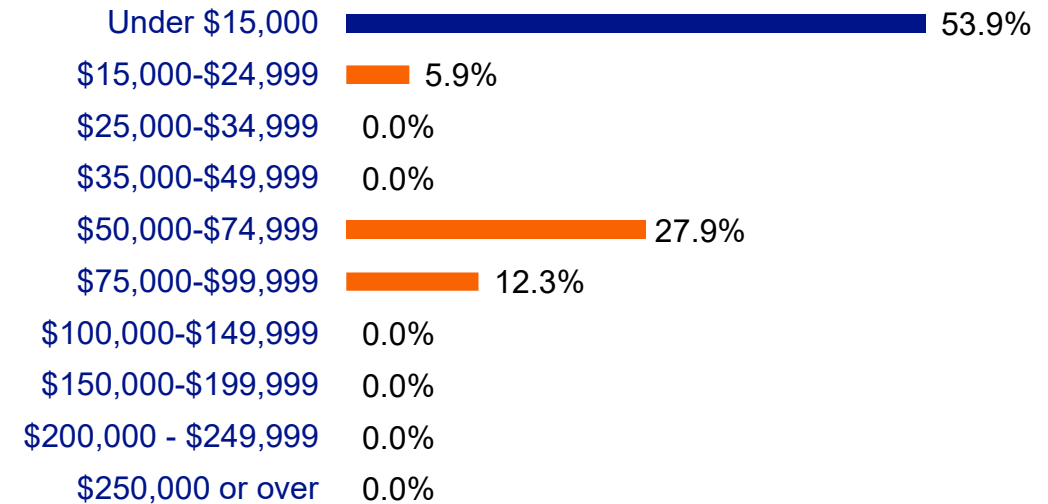
Race



Gender

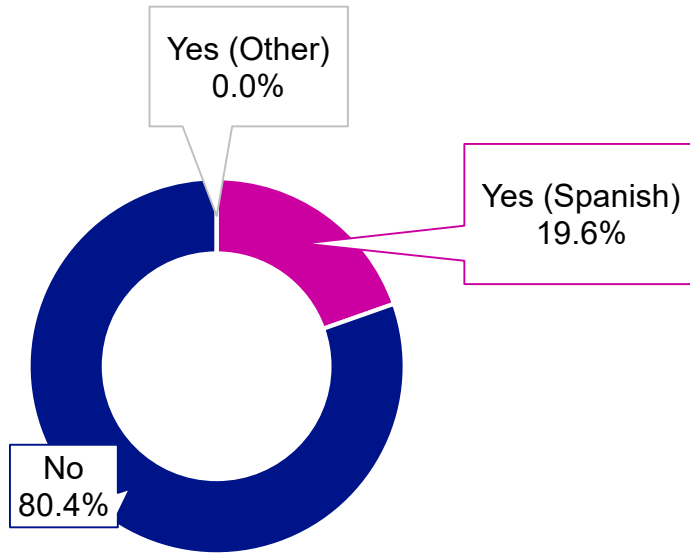


Annual Household Income

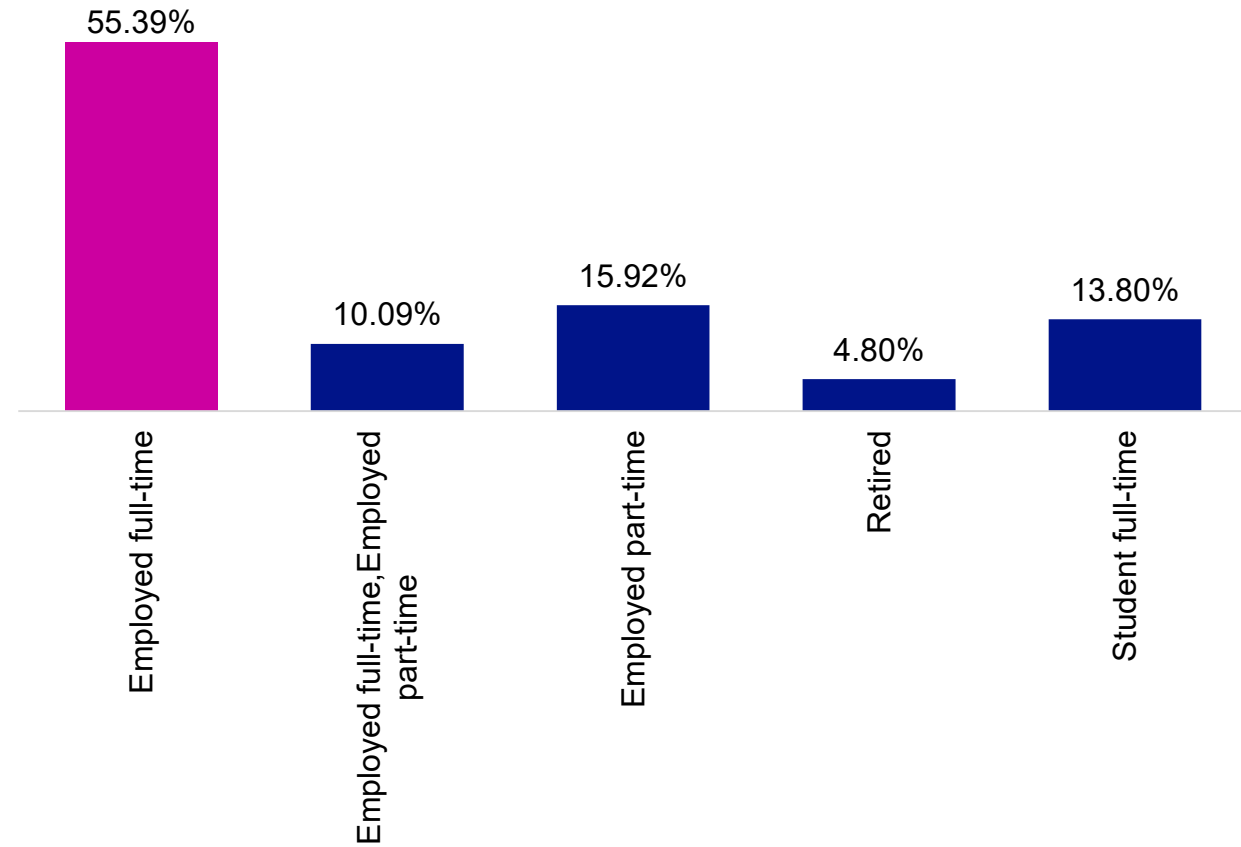


NORFOLK ST. TRAVEL PROFILE

Speak a Language Other than English



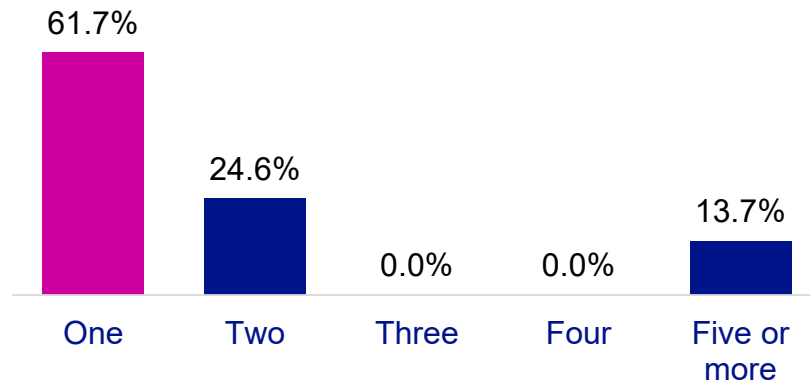
Employment Status (N = 11)



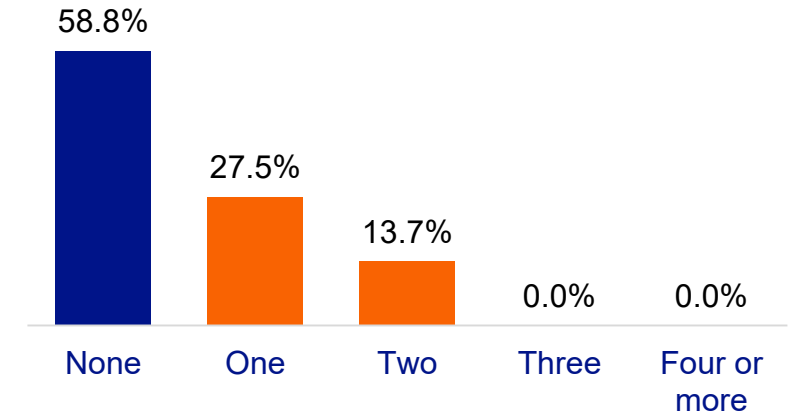


NORFOLK ST. TRAVEL PROFILE

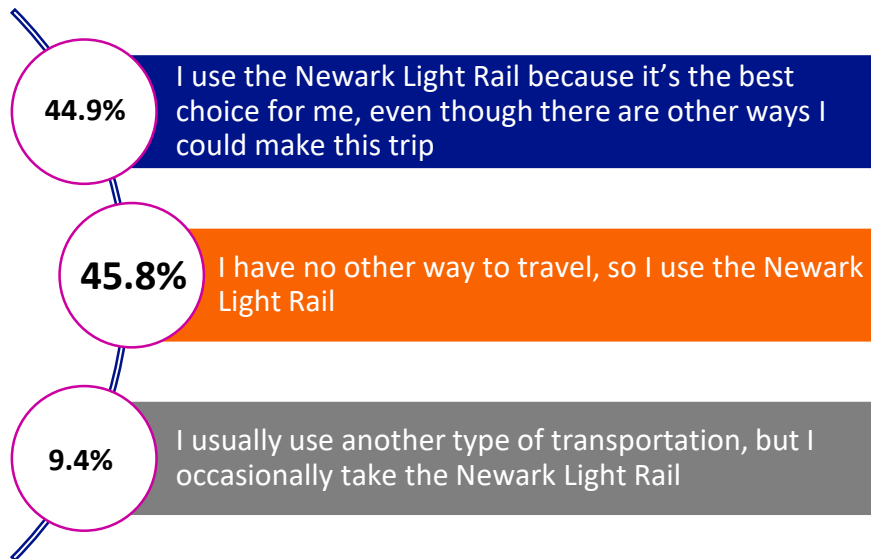
Household Size



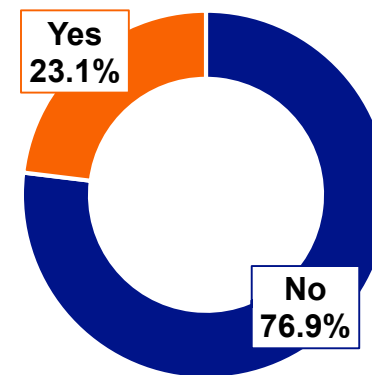
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes, no respondents indicated they used wheelchair and/or other mobility device.



NORFOLK ST. TRAVEL PROFILE

Common Theme from Respondents' Comments - Improve User Experience on the Newark Light Rail

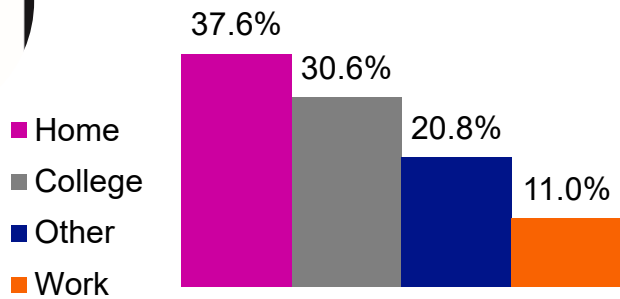
Cleanliness

- Rail stations are sometimes unclean due to litterers, homeless, etc.
- The smell of some of the trains can be better
- Clean the Norfolk Station

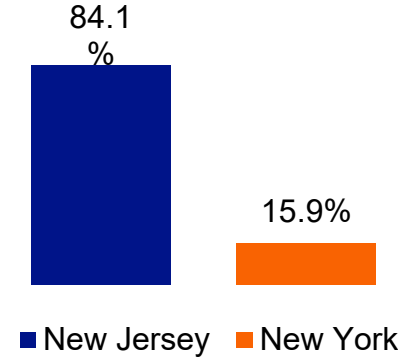
WARREN ST. / NJIT TRAVEL PROFILE



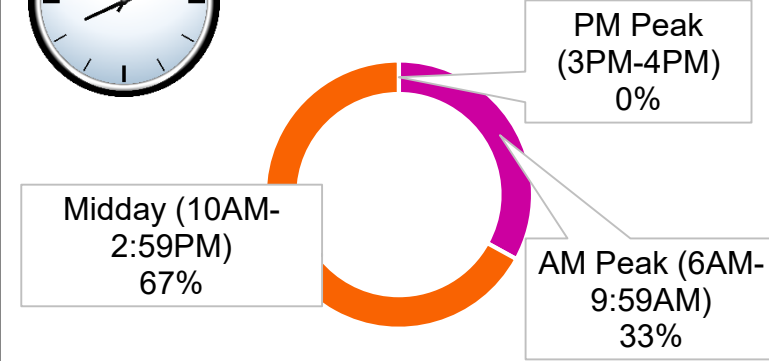
Where Did You Begin This Trip Today?



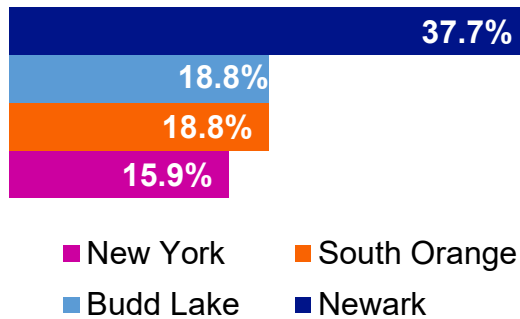
Origin State



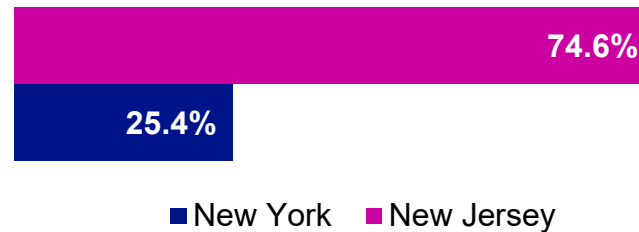
Travel Period



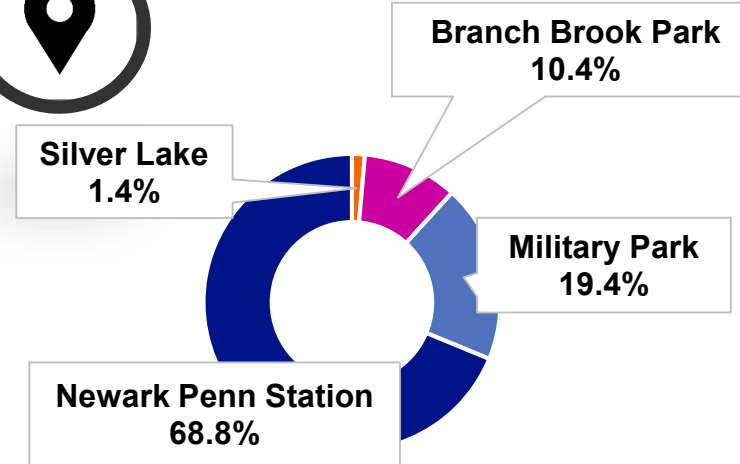
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

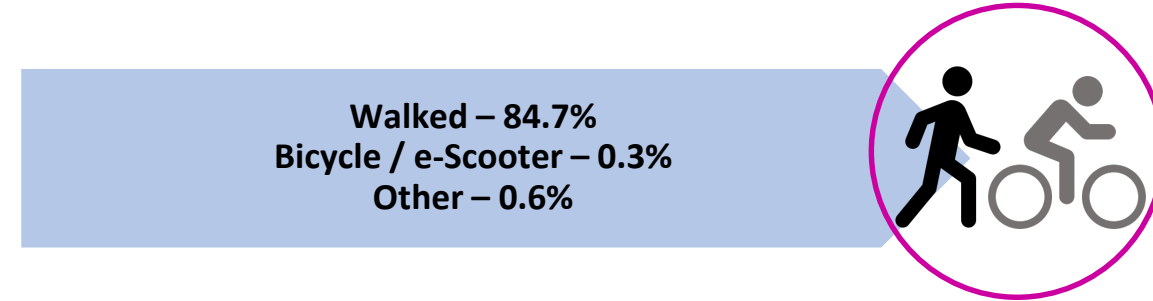
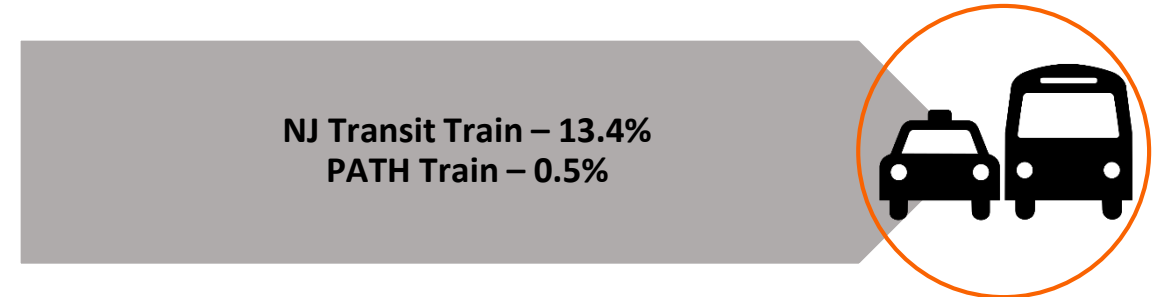
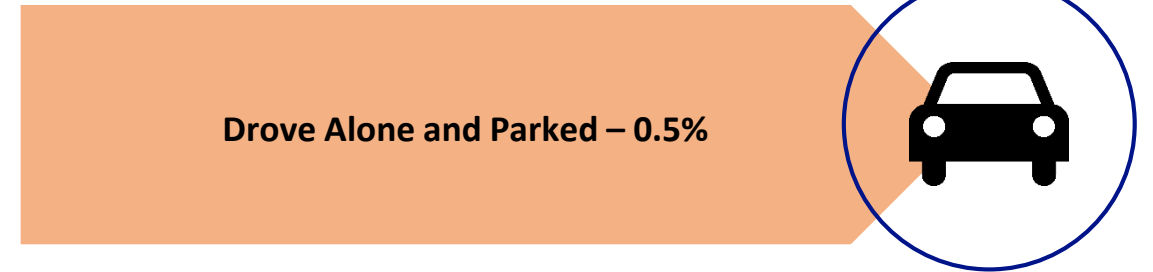


WARREN ST. / NJIT TRAVEL PROFILE

Access Mode to Boarding Station

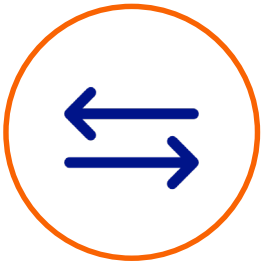


Travel Mode for those Disembarking at Warren St. / NJIT Station (N=115)



WARREN ST. / NJIT TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 99.7%



Take a bus – 0%



Other – 0.3%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 47.1%

Light Rail Monthly Pass 4.2%

Bus Monthly Pass 1.7%

FLEXPASS 1.4%

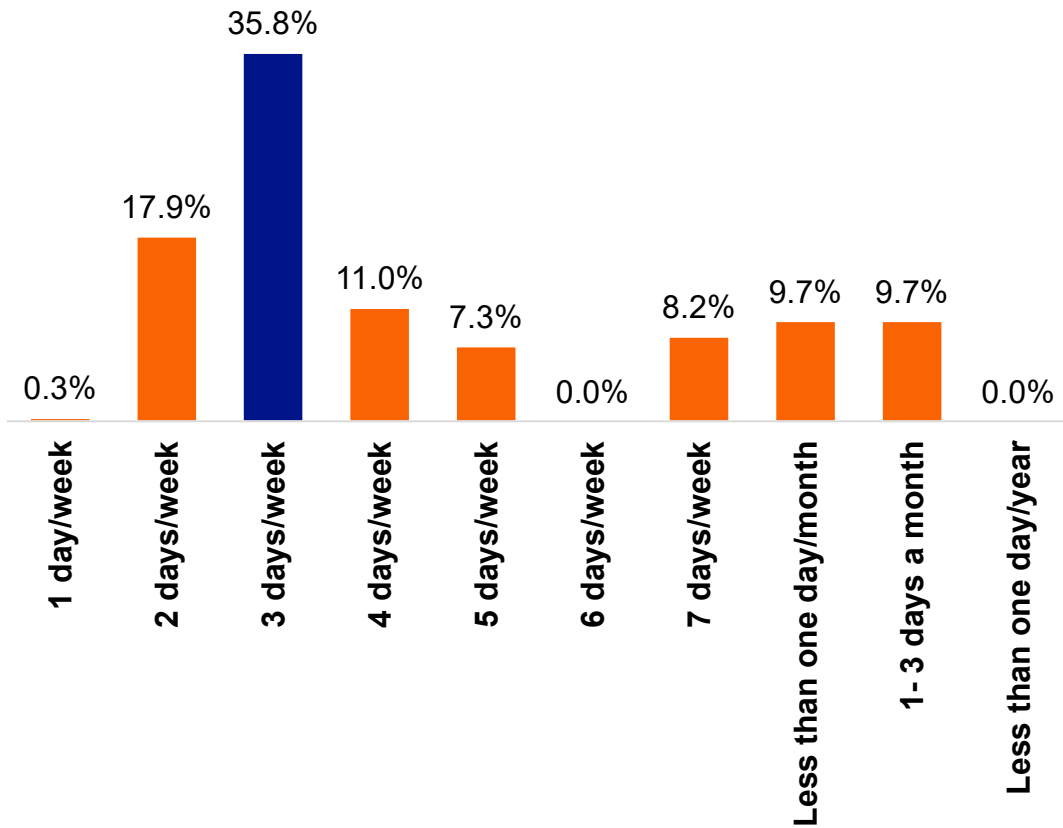
Underground Fare 37.4%

Other 8.2%

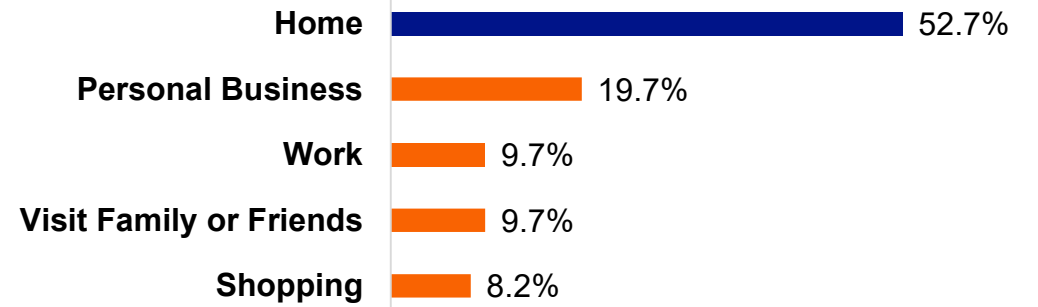


WARREN ST. / NJIT TRAVEL PROFILE

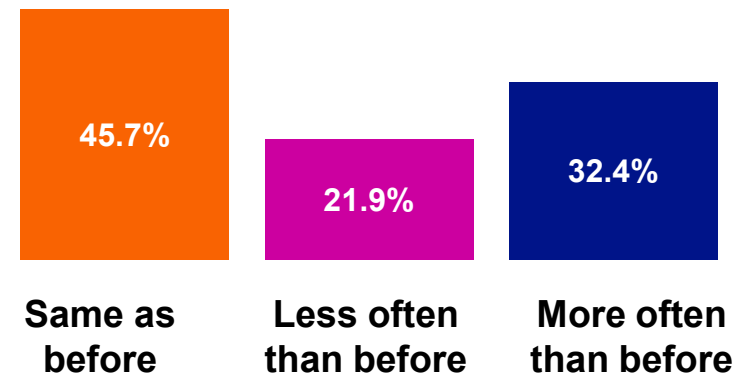
Trip Frequency



Trip Purpose



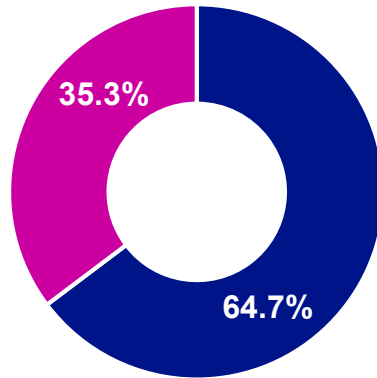
Usage of Newark Light Rail since Covid-19 Pandemic



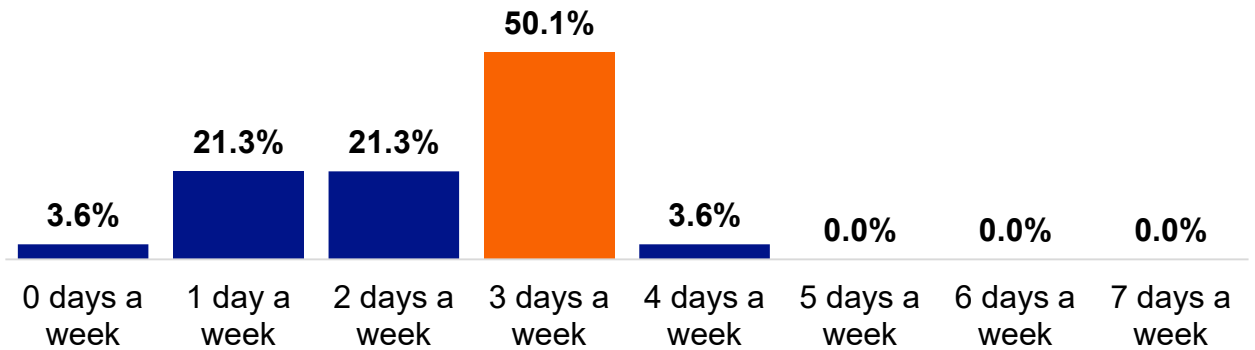
WARREN ST. / NJIT TRAVEL PROFILE

Does your employer allow you to work from home? (N = 4)

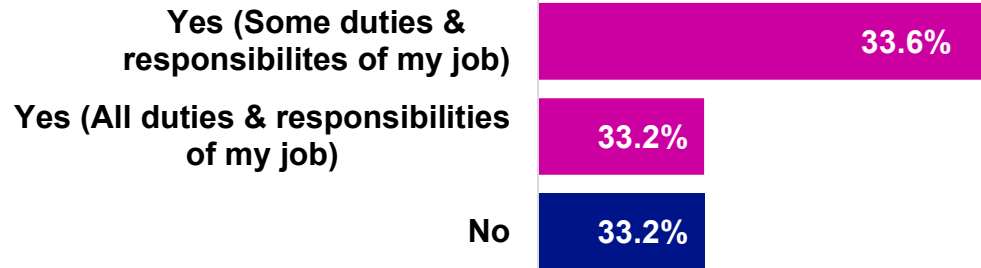
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



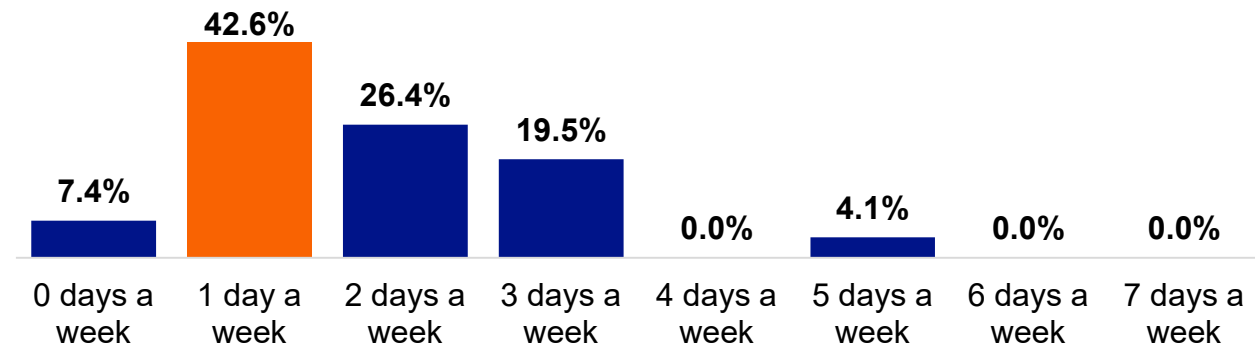
Number of days working from home in the past seven days (N = 7)



Able to complete job from home, if it was allowed by employer (N = 5)



Number of days attending school lectures from home in the past seven days (N = 10)

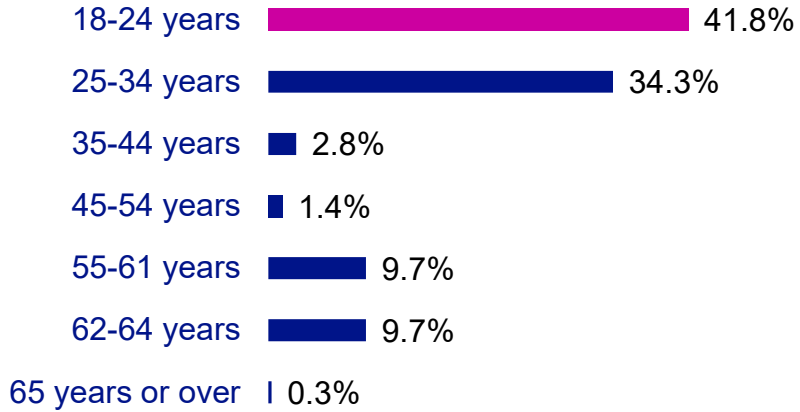


Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.



WARREN ST. / NJIT TRAVEL PROFILE

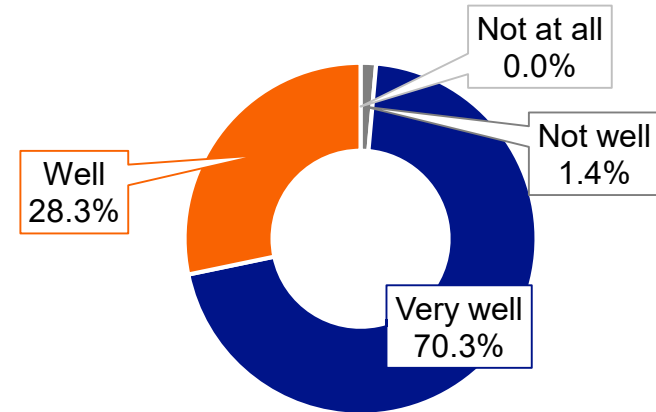
Age



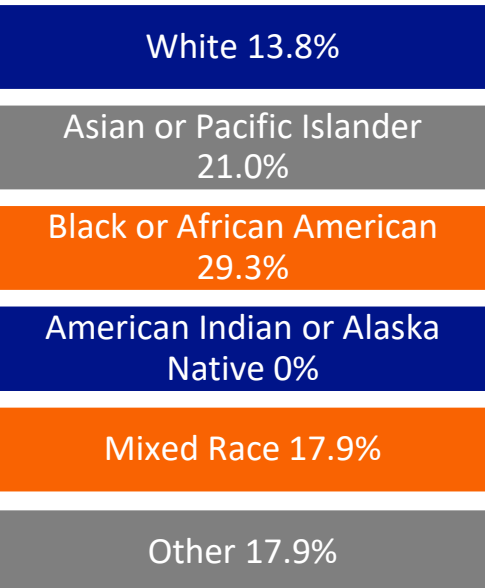
Ethnicity

15.0%
Hispanic

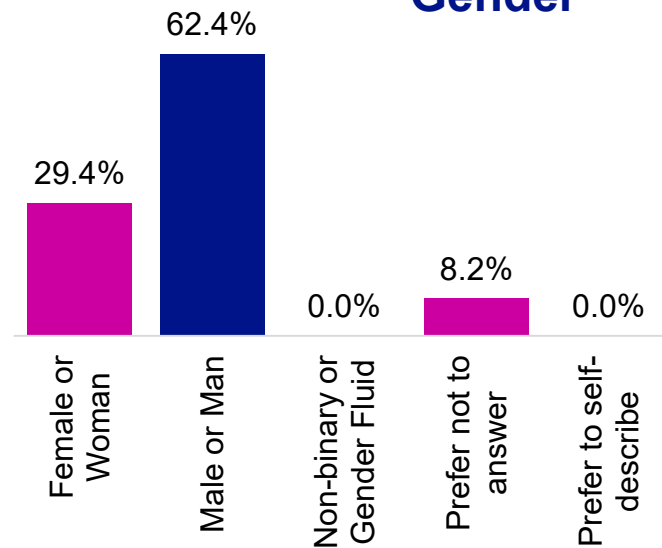
Fluency in Speaking English



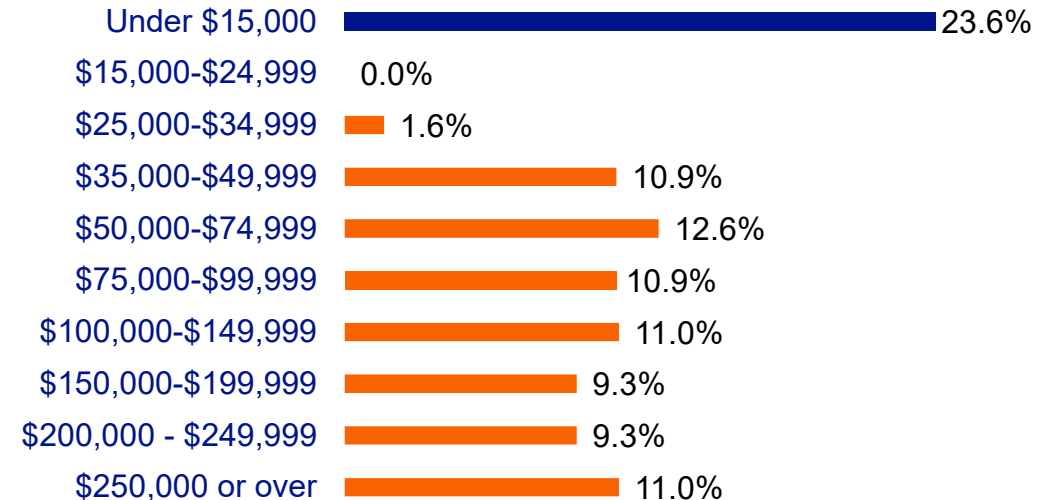
Race



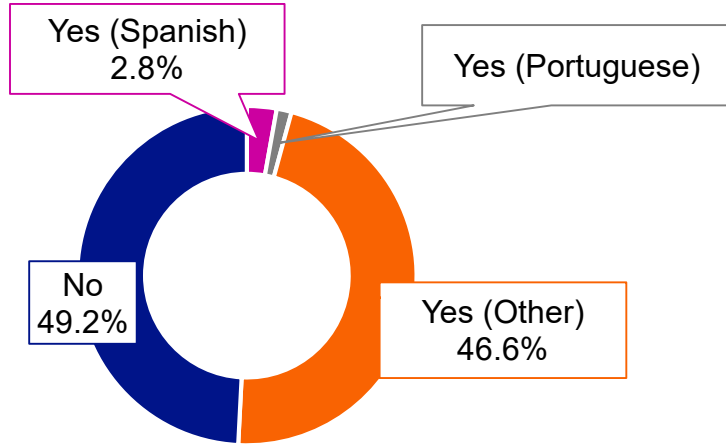
Gender



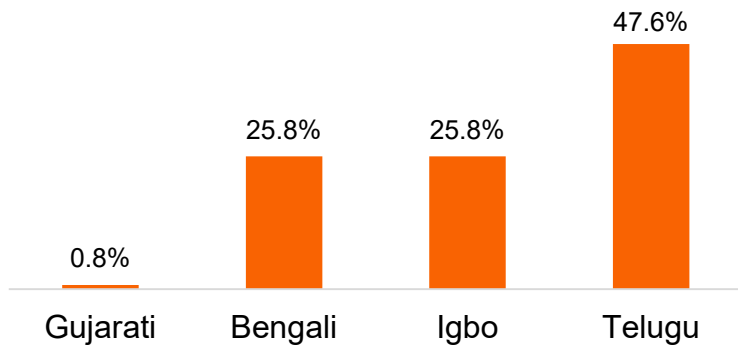
Annual Household Income



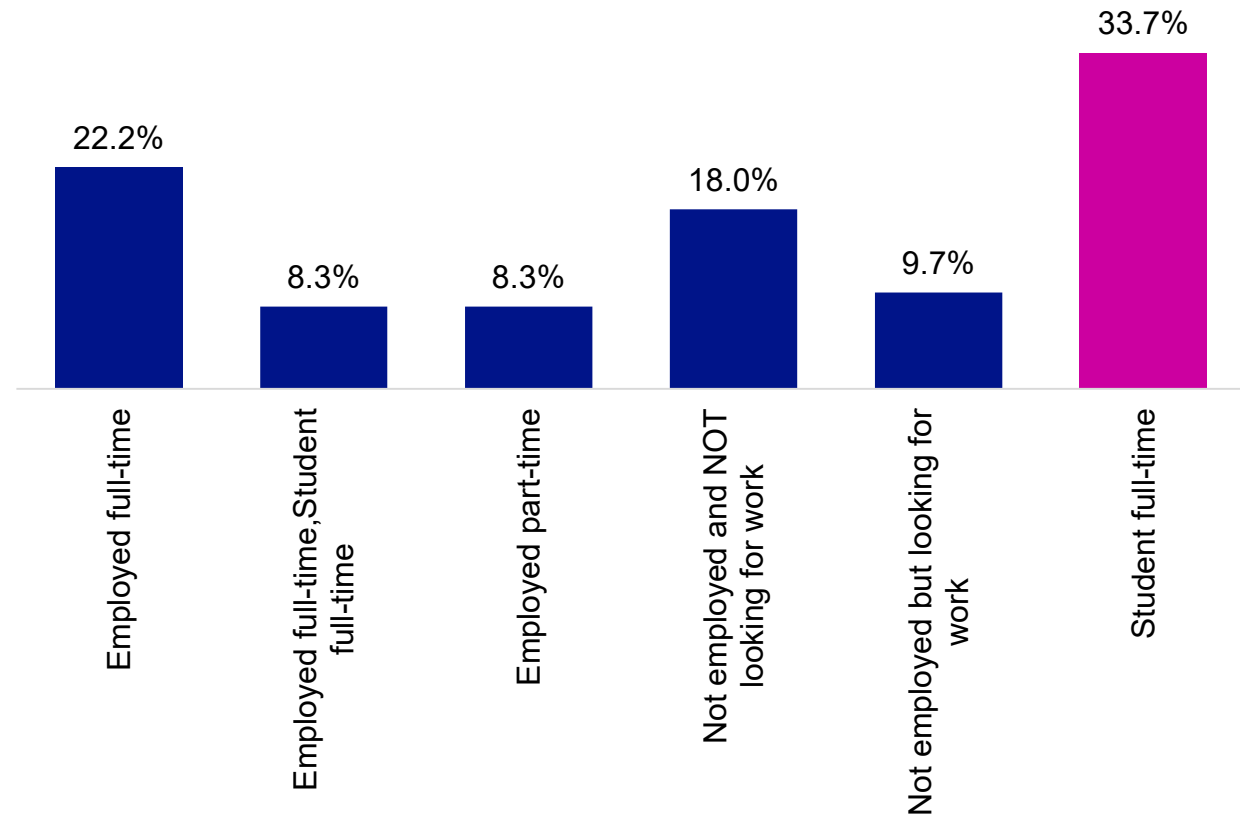
Speak a Language Other than English



Other Languages Spoken (N = 9)



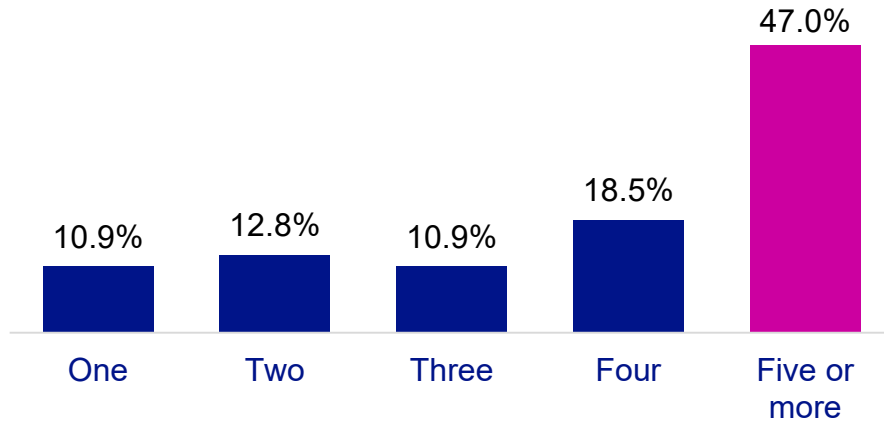
Employment Status (N = 19)



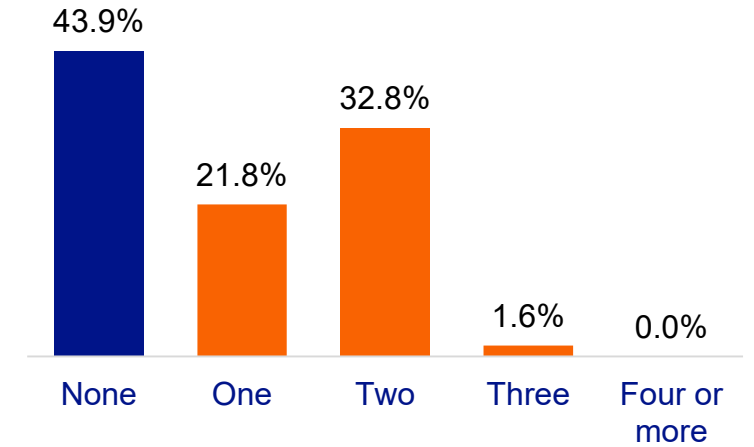


WARREN ST. / NJIT TRAVEL PROFILE

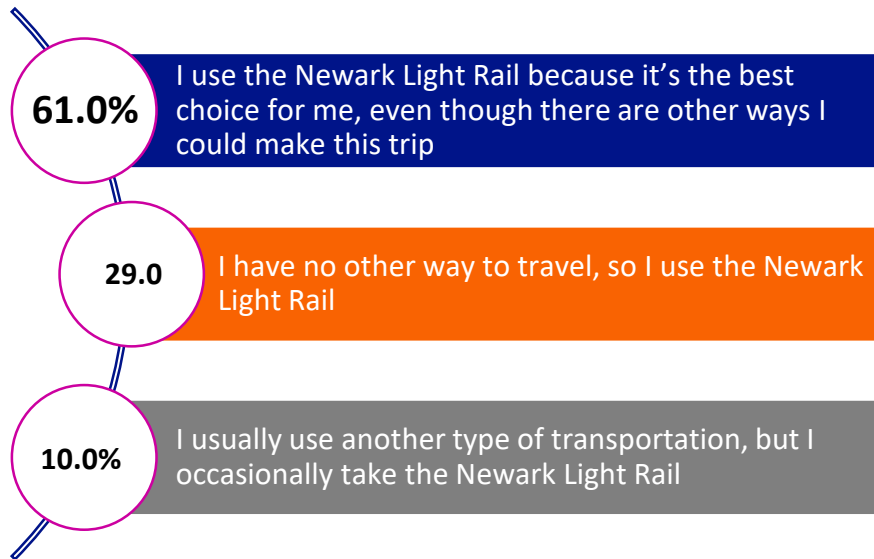
Household Size



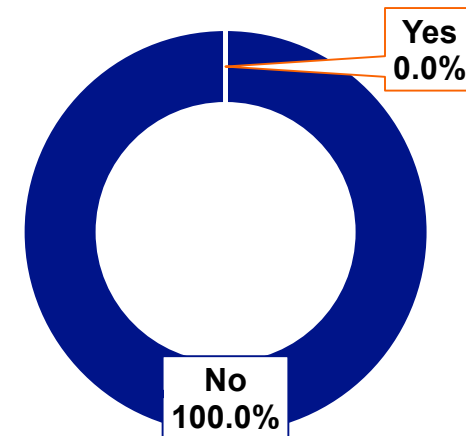
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train





WARREN ST. / NJIT TRAVEL PROFILE

Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency / Timing of Train Operation

- Maintain the timings
- On-time/ Improved reliability
- More train, lower fares
- Have it be similar frequency at night
- Accurate arrival time

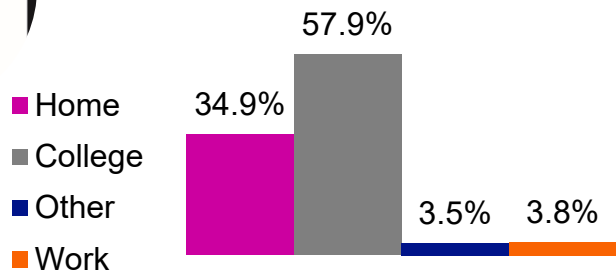
Other

- Lower the volume for door deeps, just a little

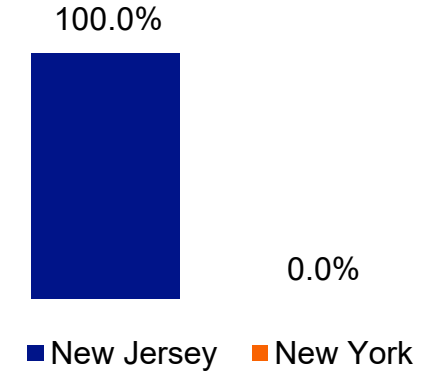
WASHINGTON ST. TRAVEL PROFILE



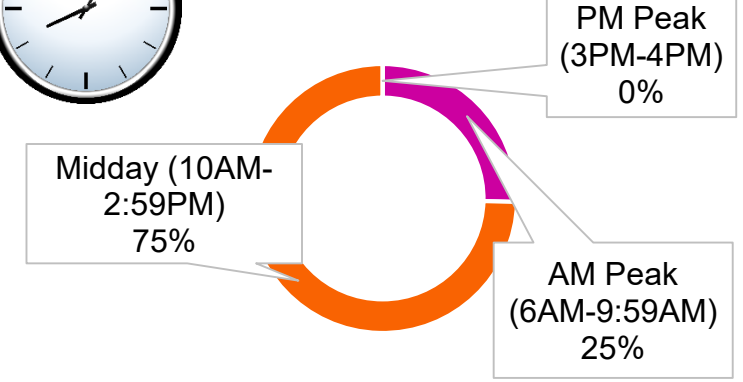
Where Did You Begin This Trip Today?



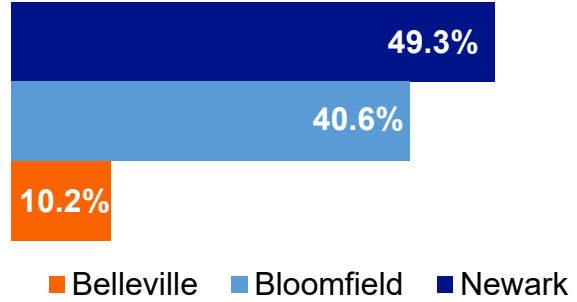
Origin State



Travel Period



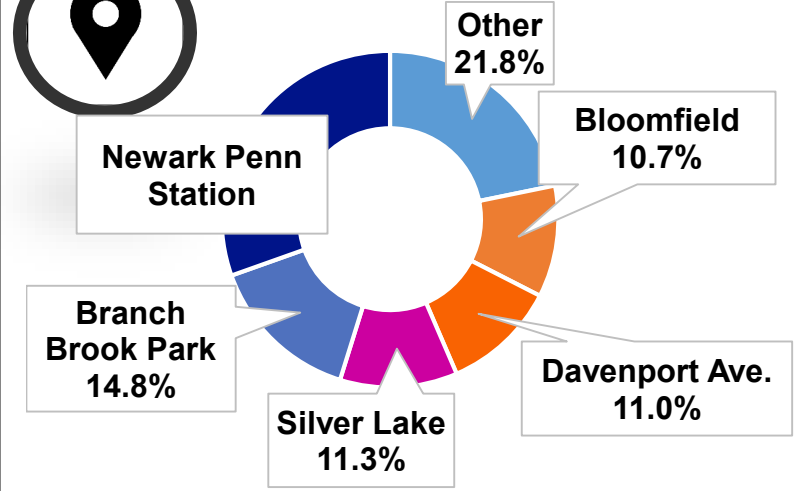
Top Origin Towns



Is Final Destination In NY or NJ?

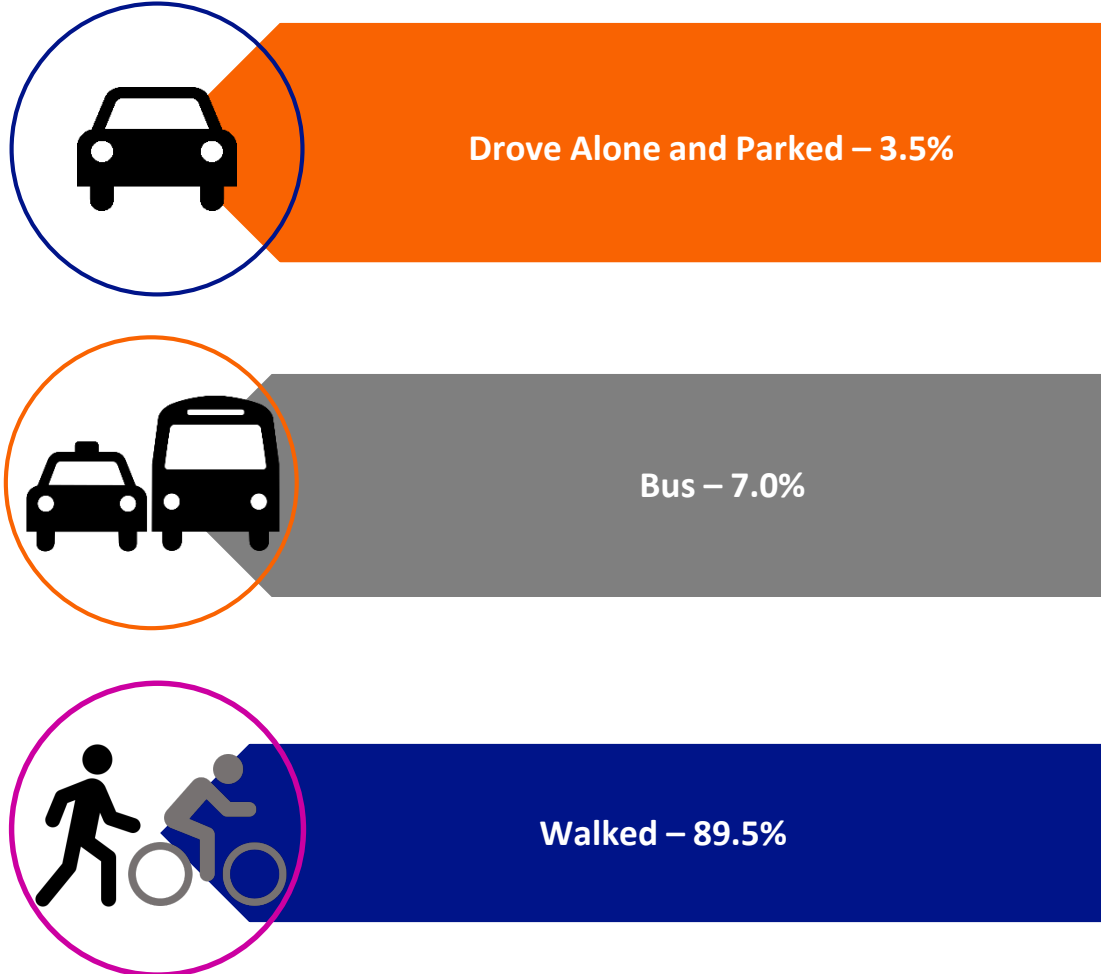


Destination Station

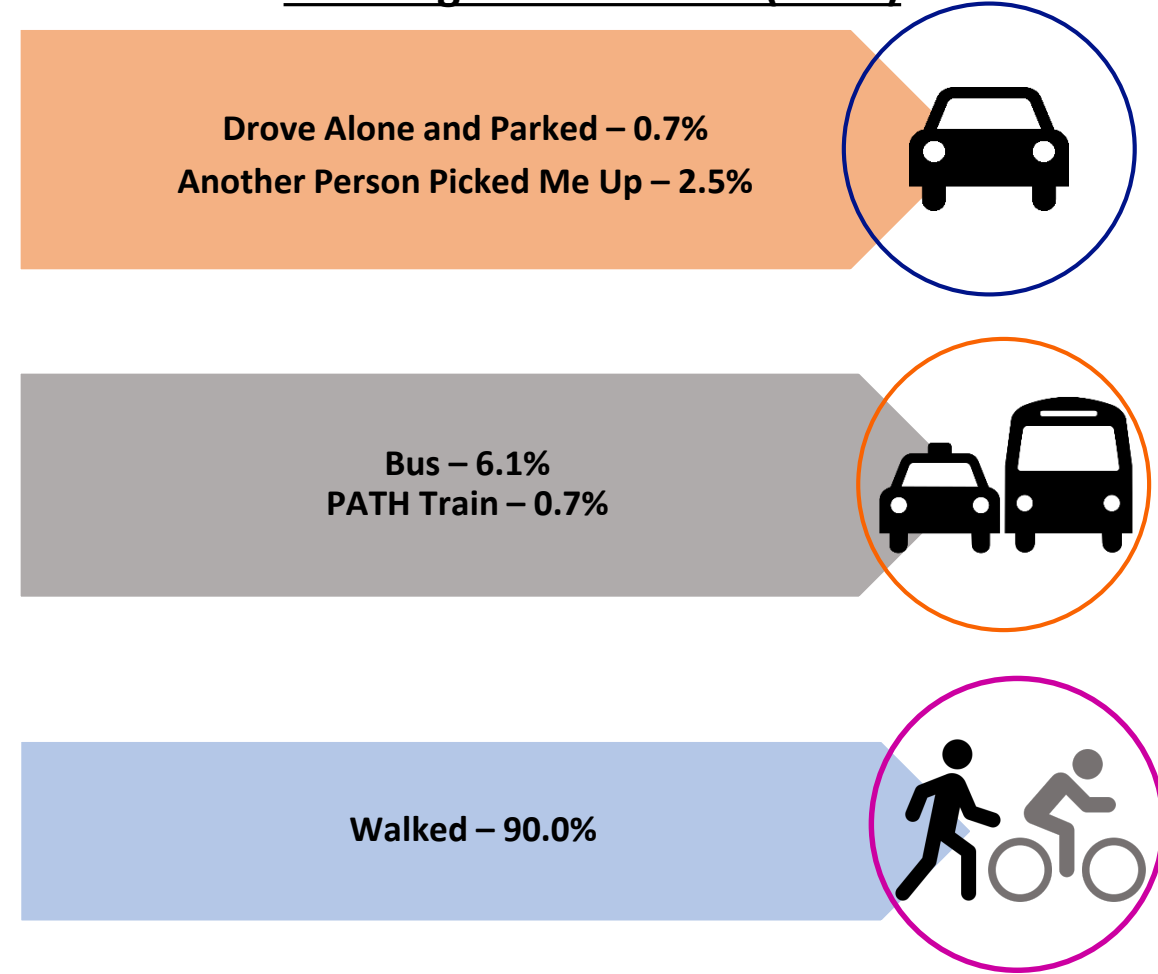


WASHINGTON ST. TRAVEL PROFILE

Access Mode to Boarding Station

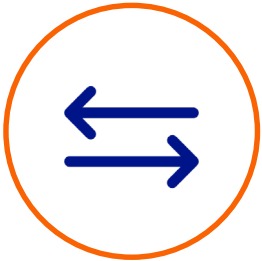


Travel Mode for those Disembarking at Washington St. Station (N=64)



WASHINGTON ST. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 76.6%



Take a bus – 7.8%



Other – 15.6%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 64.8%

Light Rail Monthly Pass 8.1%

Rail Monthly Pass 7.8%

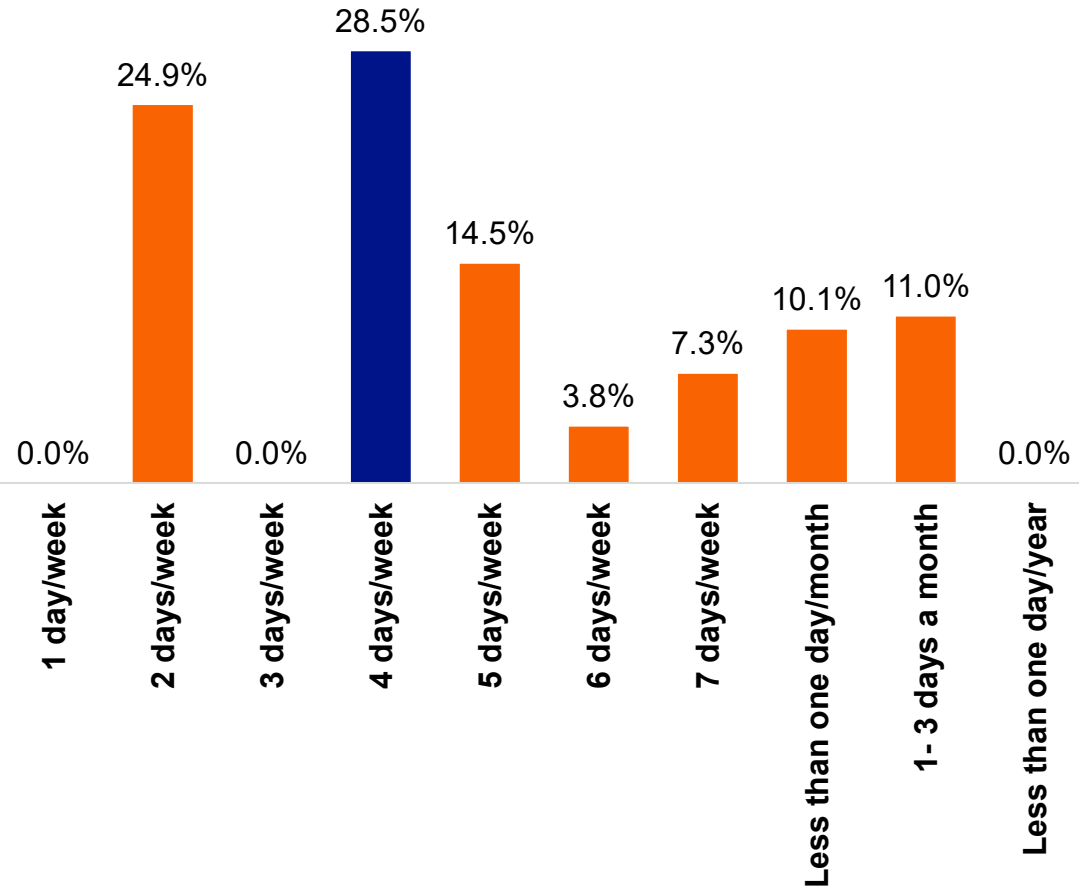
Bus Monthly Pass 15.3%

Reduced Fares for Senior Citizens & Customers with Disabilities 4.0%

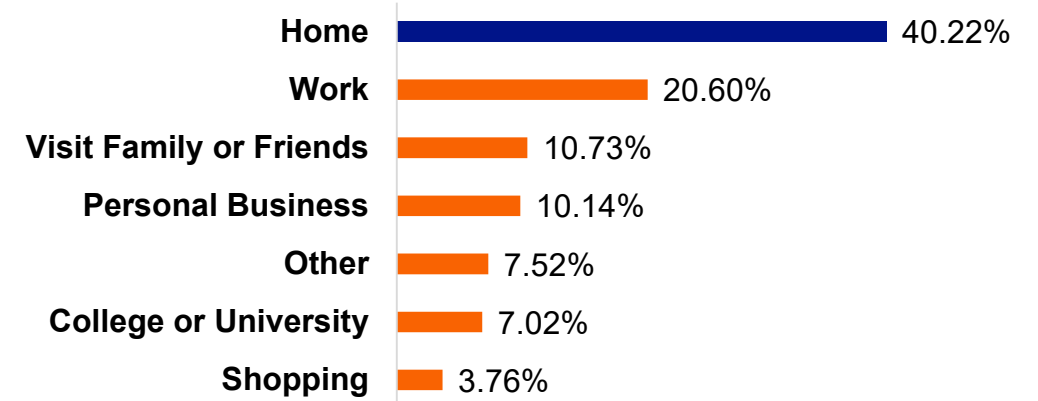


WASHINGTON ST. TRAVEL PROFILE

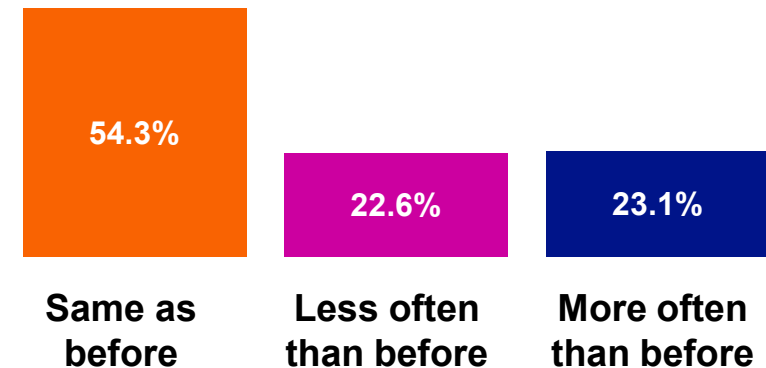
Trip Frequency



Trip Purpose



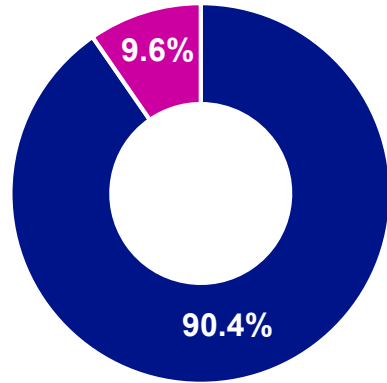
Usage of Newark Light Rail since Covid-19 Pandemic



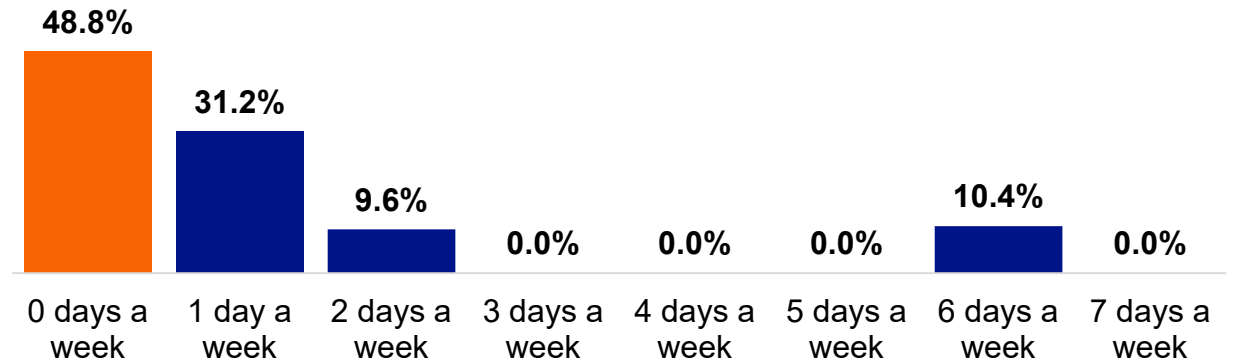
WASHINGTON ST. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 8)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time

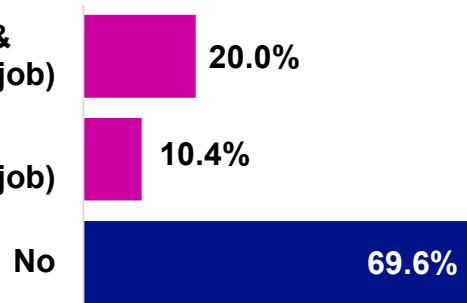


Number of days working from home in the past seven days (N = 8)

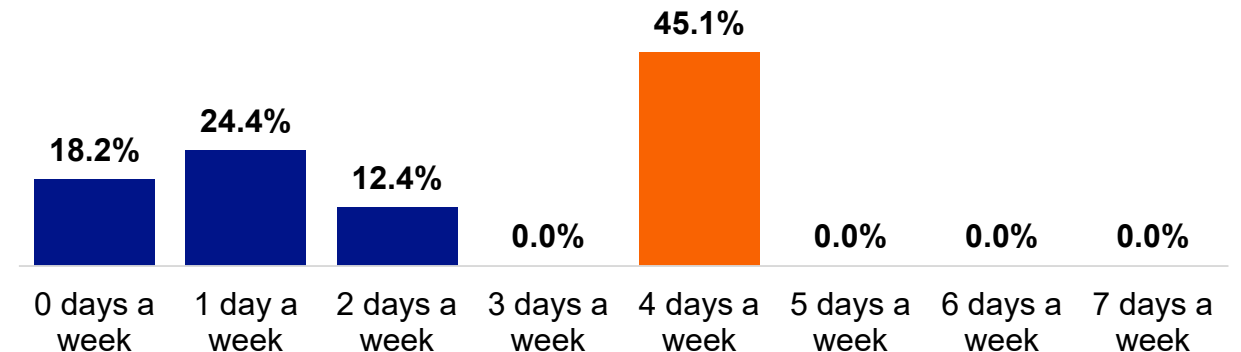


Able to complete job from home, if it was allowed by employer (N = 8)

- Yes (Some duties & responsibilities of my job)
- Yes (All duties & responsibilities of my job)
- No



Number of days attending school lectures from home in the past seven days (N = 12)

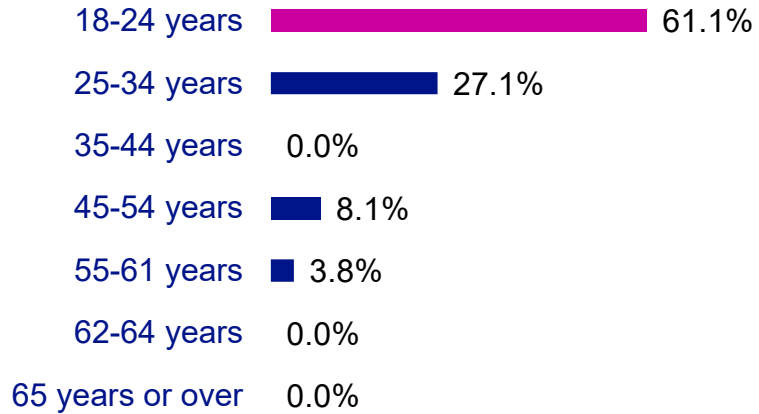


Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.



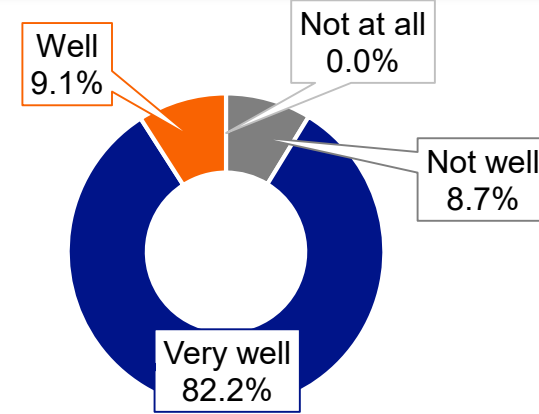
WASHINGTON ST. TRAVEL PROFILE

Age



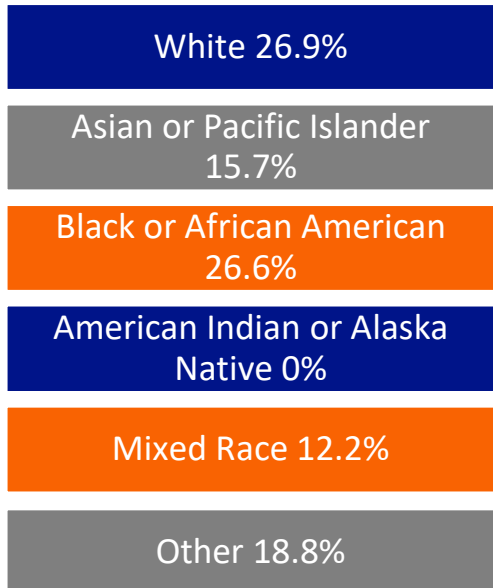
Ethnicity

34.5%
Hispanic

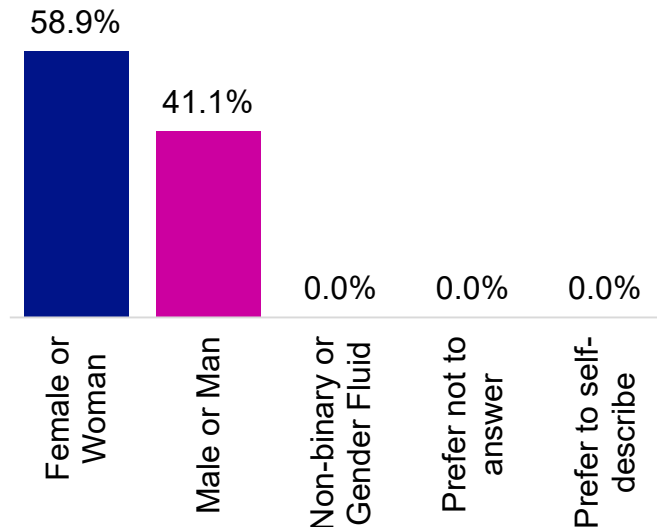


Fluency in Speaking English

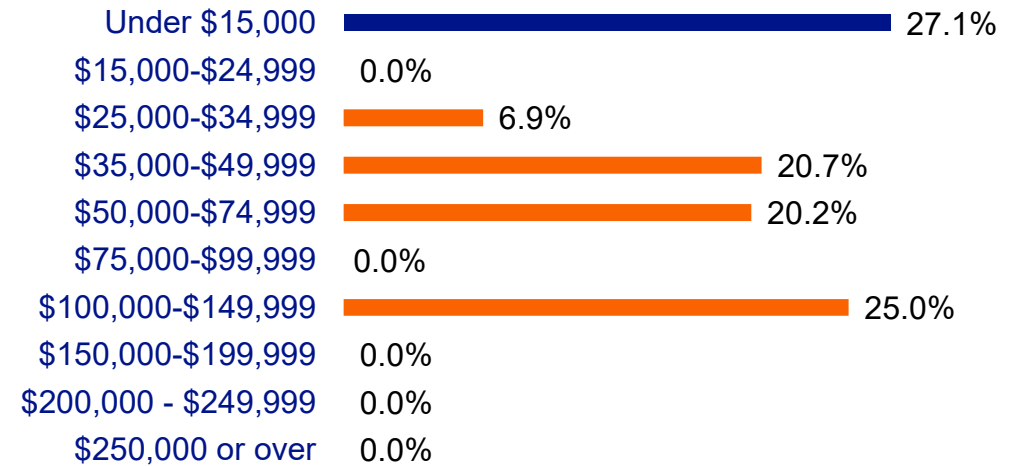
Race



Gender

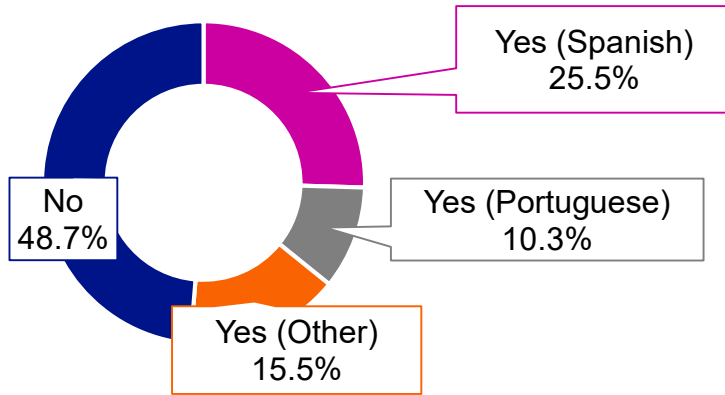


Annual Household Income

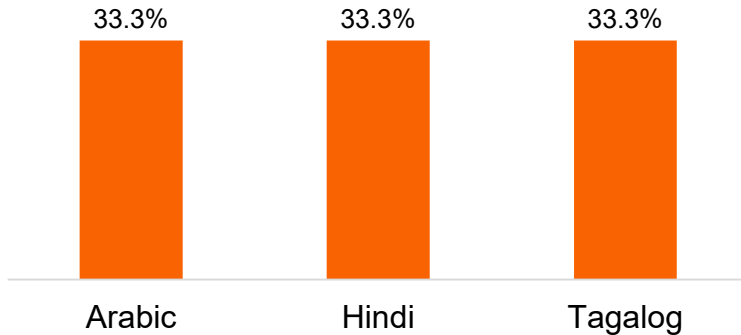


WASHINGTON ST. TRAVEL PROFILE

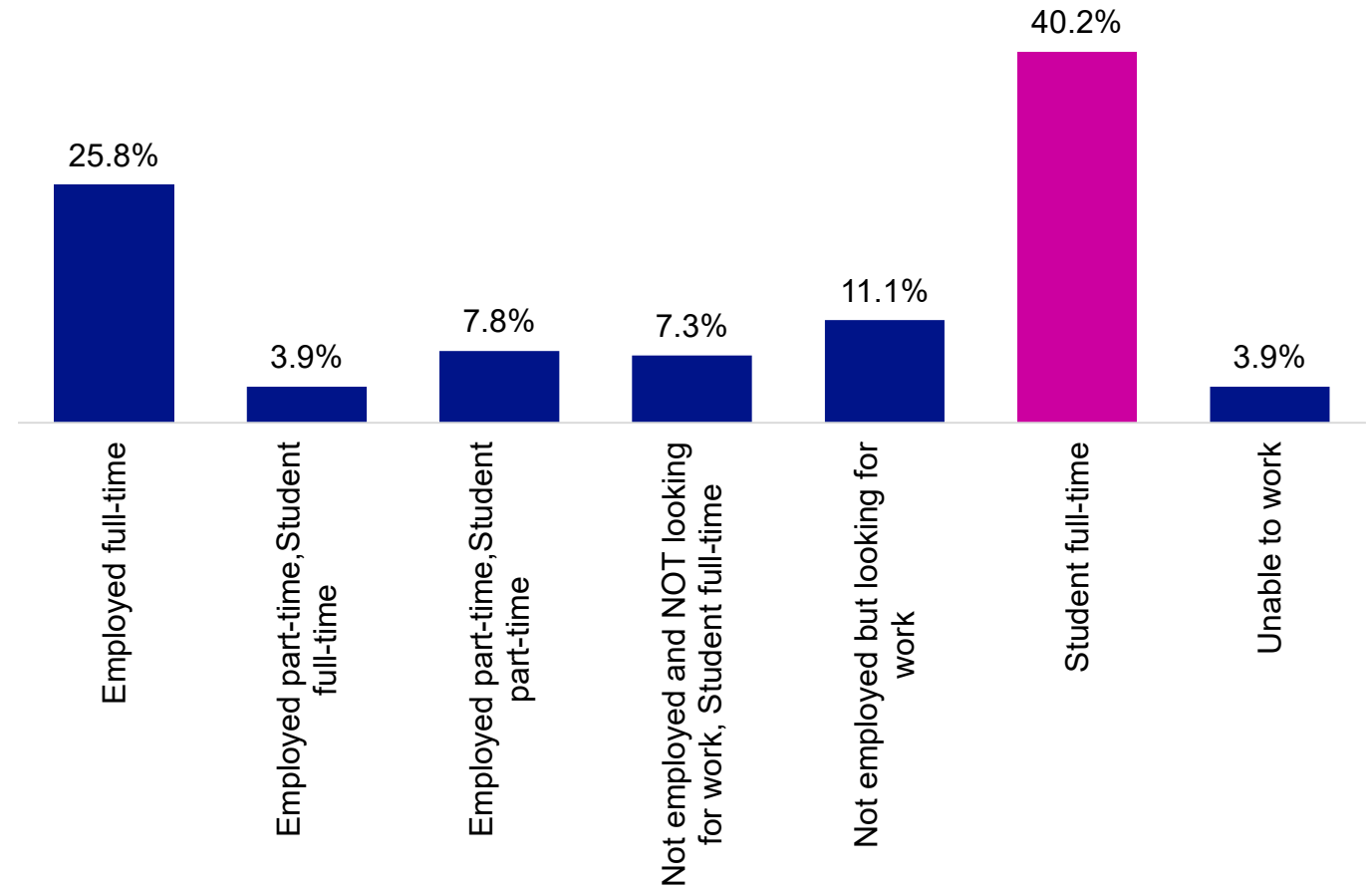
Speak a Language Other than English



Other Languages Spoken (N = 3)



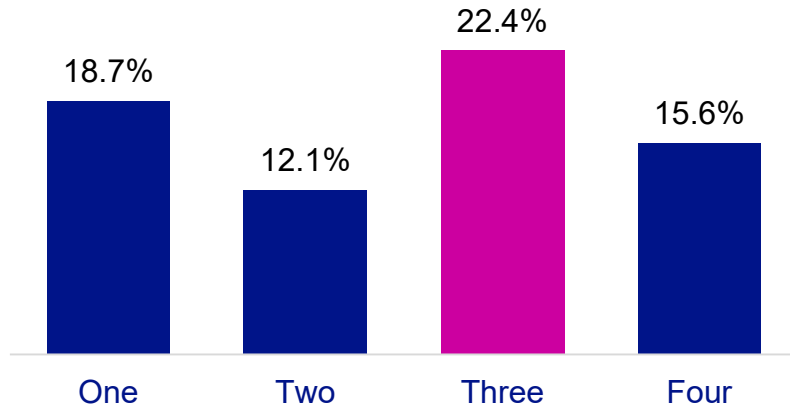
Employment Status (N = 20)



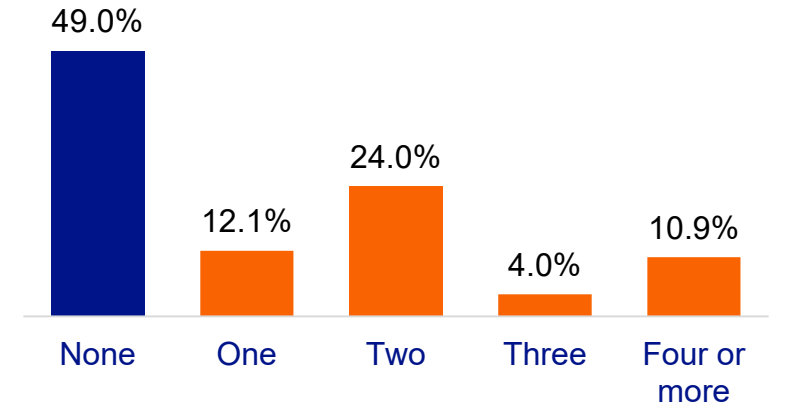


WASHINGTON ST. TRAVEL PROFILE

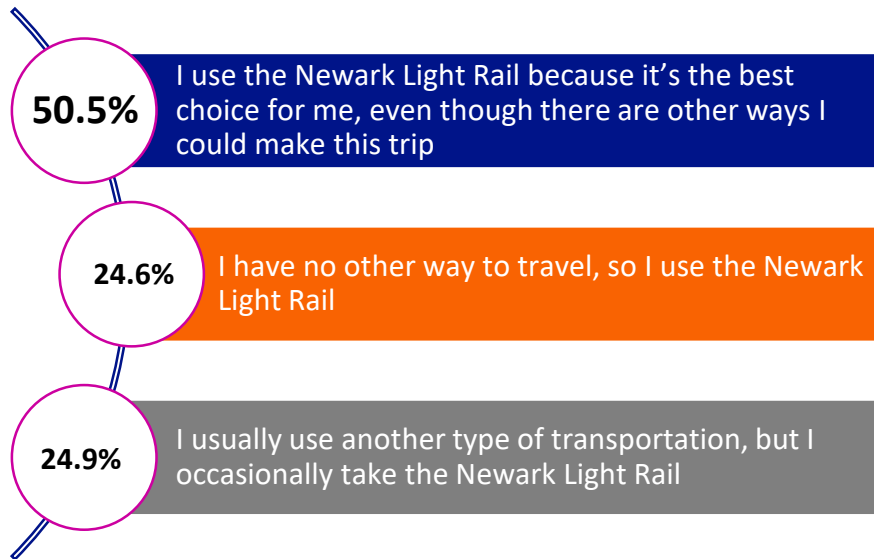
Household Size



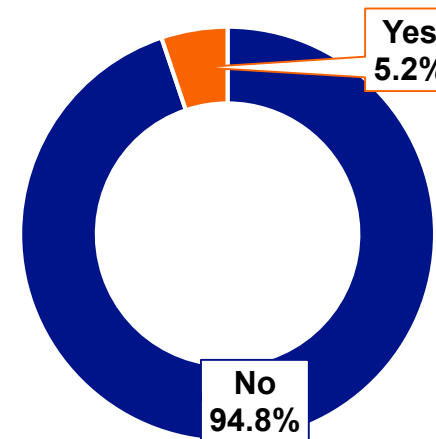
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=1), no respondents indicated that they used wheelchair and/or other mobility device.



WASHINGTON ST. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- More evening service
- Have more trains for Broad St. Station after 11am
- Stop taking so long / stopping at BBP all the time

Better Communication & Be On Time

- No delays
- Live location of shuttles
- Upgrade the app
- Announcements of delays or problems

Cleanliness

- Clean trains regularly
- Cleaner trains

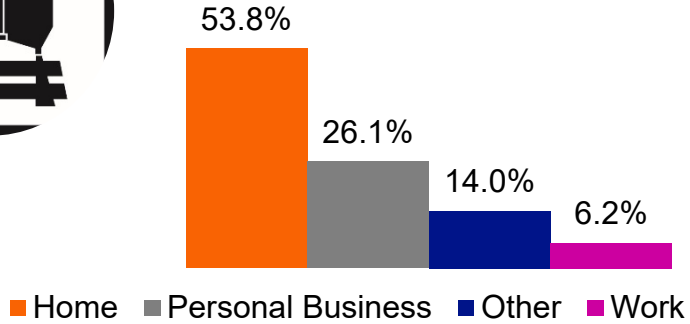
Other concerns (Tickets & Safety)

- Have a scanner like they have on buses and offer discounted tickets to even for non-full-time students
- They need to have fare enforcers on the light rail and regular clothed security guards because there are times where people would act uncivilized on the light rail because there are barely anyone of authority around. Even though the LR conductor is on the train, they are also unaware of what is going on the other side of the train. So I think it would be good to have someone on standby for safety purposes.
- Seguridad en la noche

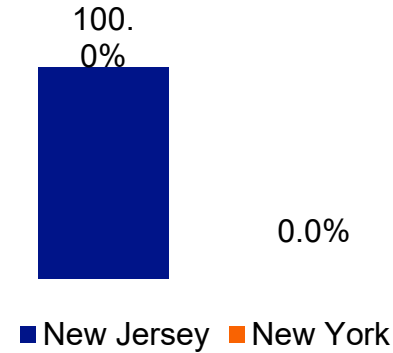
MILITARY PARK TRAVEL PROFILE



Where Did You Begin This Trip Today?



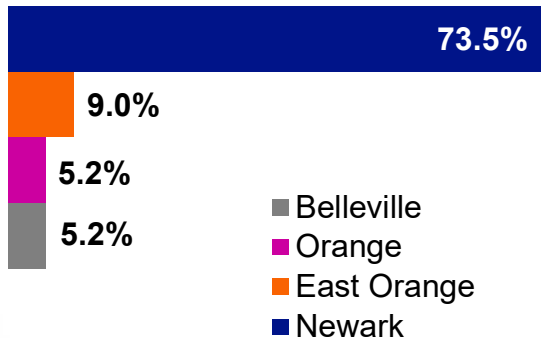
Origin State



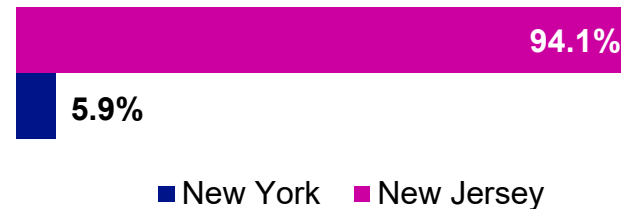
Travel Period



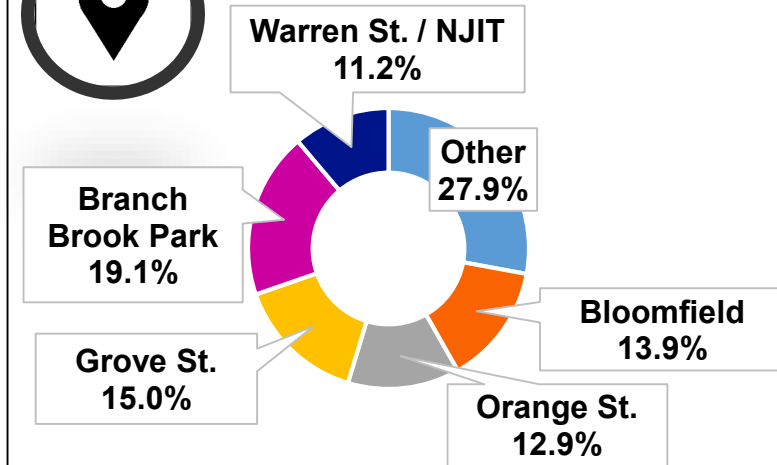
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

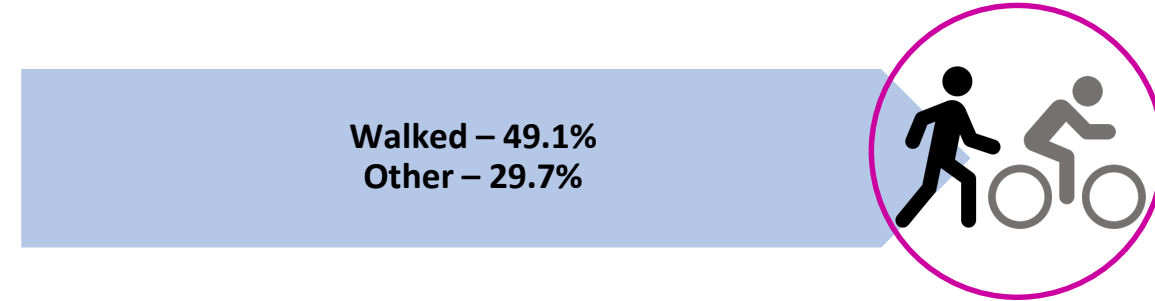
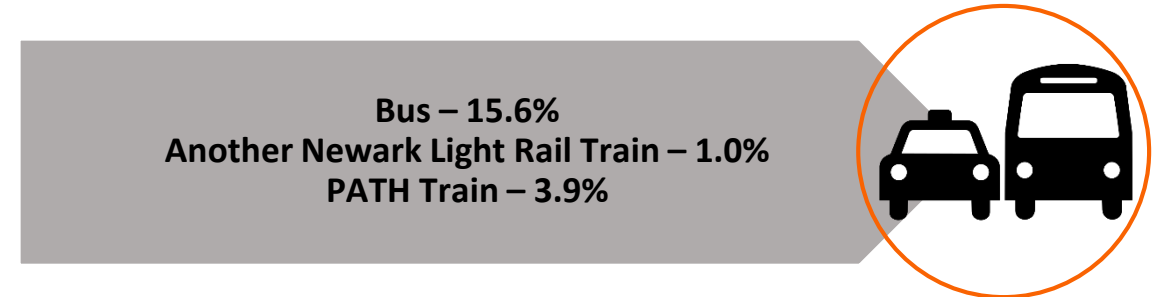
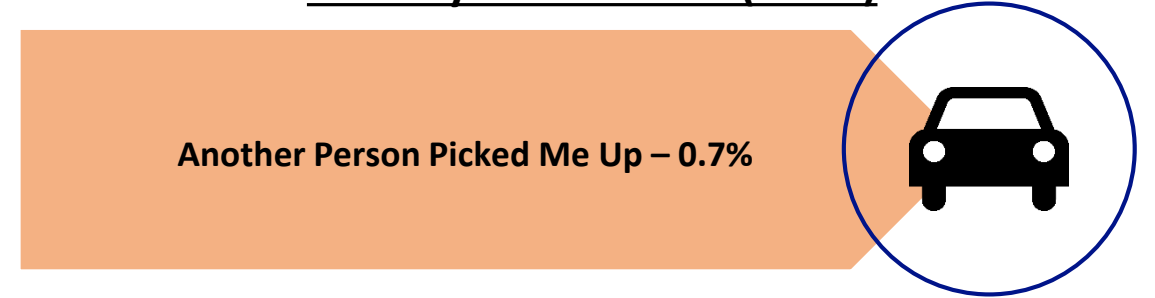


MILITARY PARK TRAVEL PROFILE

Access Mode to Boarding Station

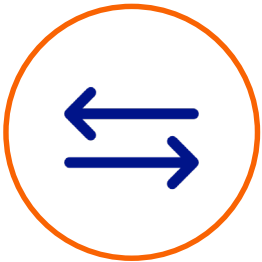


Travel Mode for those Disembarking at Military Park Station (N=57)



MILITARY PARK TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 62.4%



Take a bus – 32.9%



Other – 4.7%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 62.9%

Light Rail Monthly Pass 1.7%

Rail Monthly Pass 1.7%

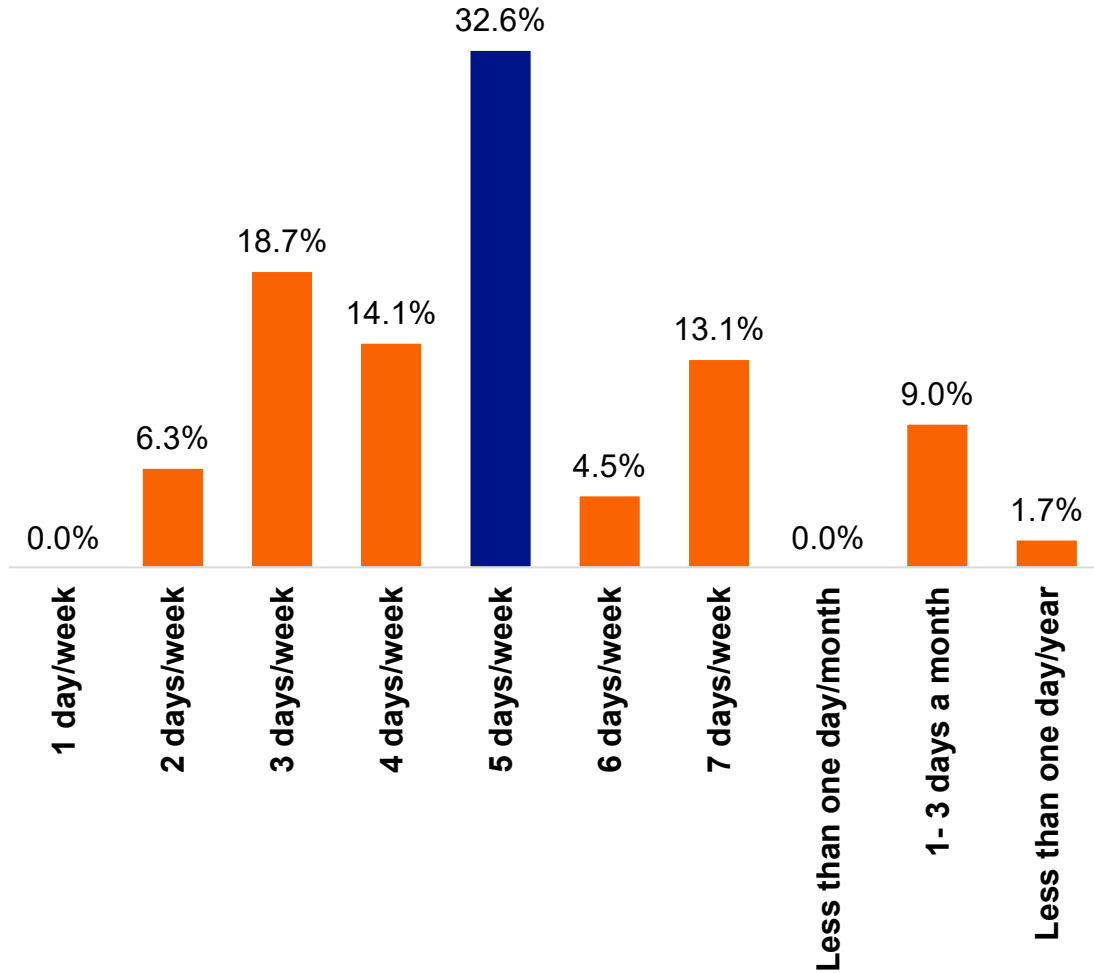
Bus Monthly Pass 31.9%

FLEXPASS 1.7%

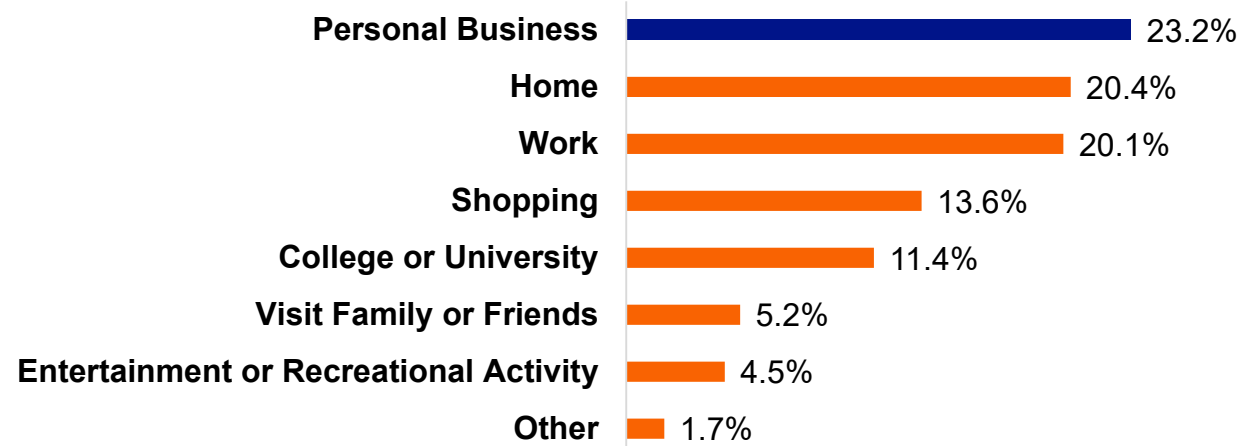


MILITARY PARK TRAVEL PROFILE

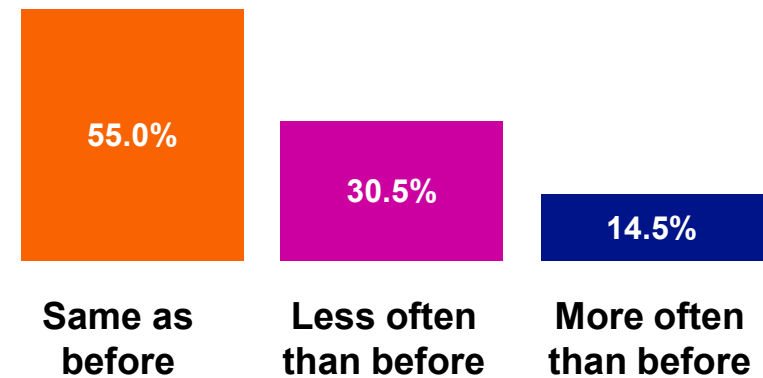
Trip Frequency



Trip Purpose



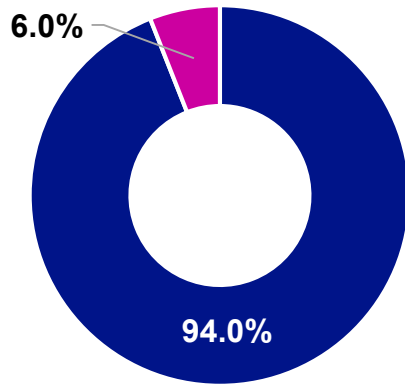
Usage of Newark Light Rail since Covid-19 Pandemic



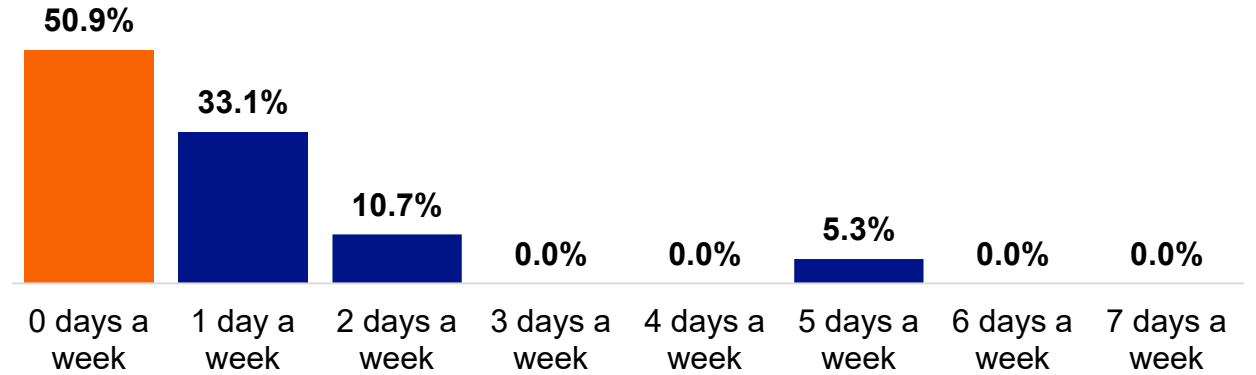
MILITARY PARK TRAVEL PROFILE

Does your employer allow you to work from home? (N = 10)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



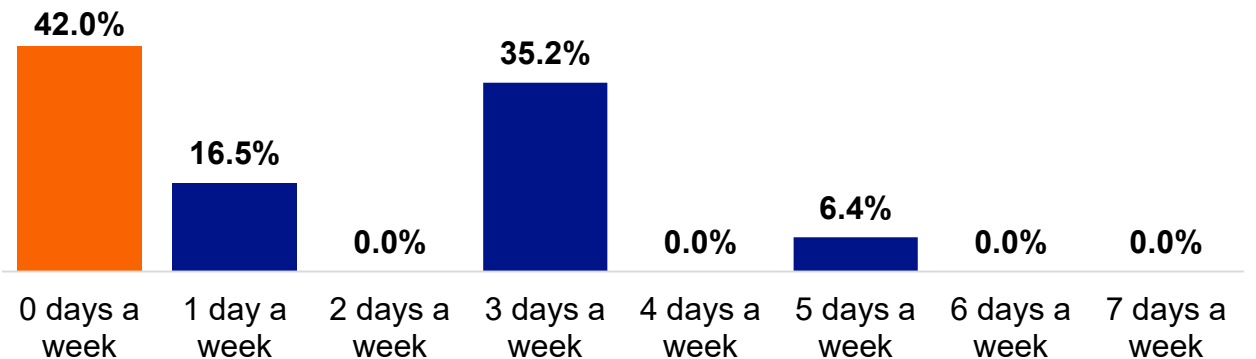
Number of days working from home in the past seven days (N = 12)



Able to complete job from home, if it was allowed by employer (N = 12)



Number of days attending school lectures from home in the past seven days (N = 9)

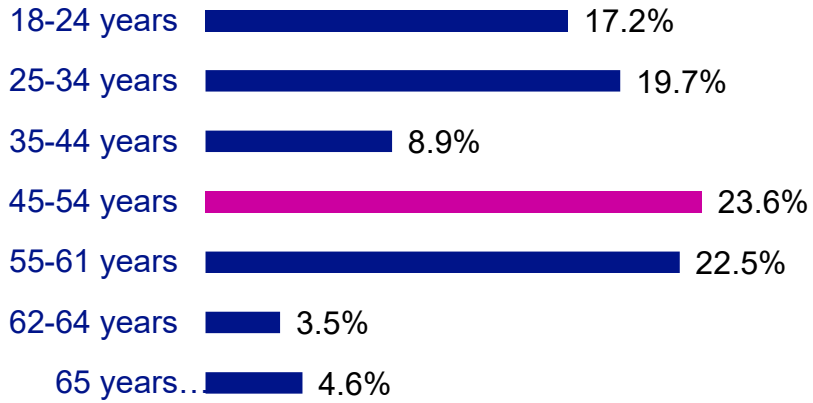


Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.



MILITARY PARK TRAVEL PROFILE

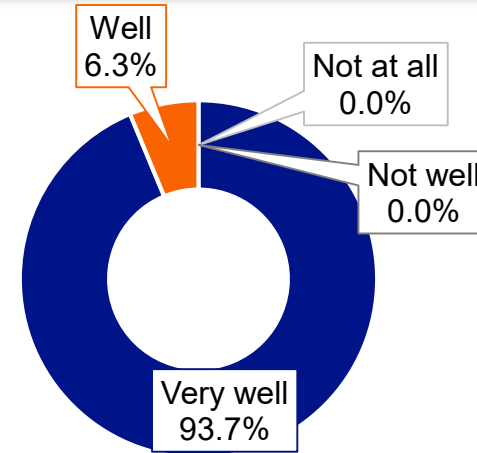
Age



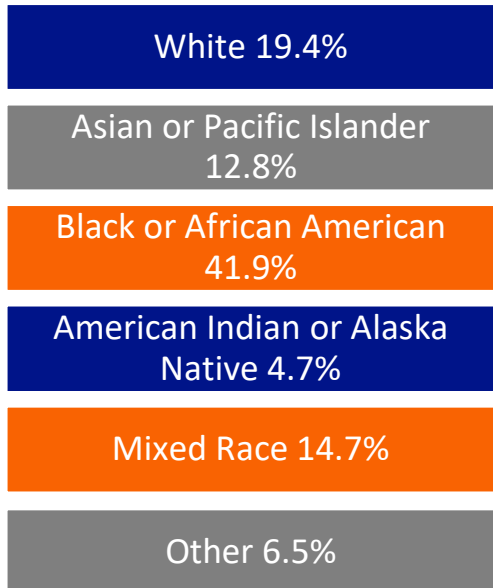
Ethnicity

18.1%
Hispanic

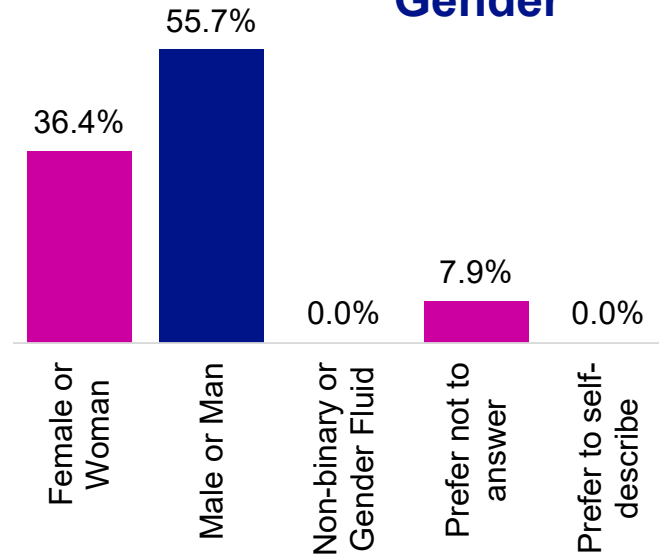
Fluency in Speaking English



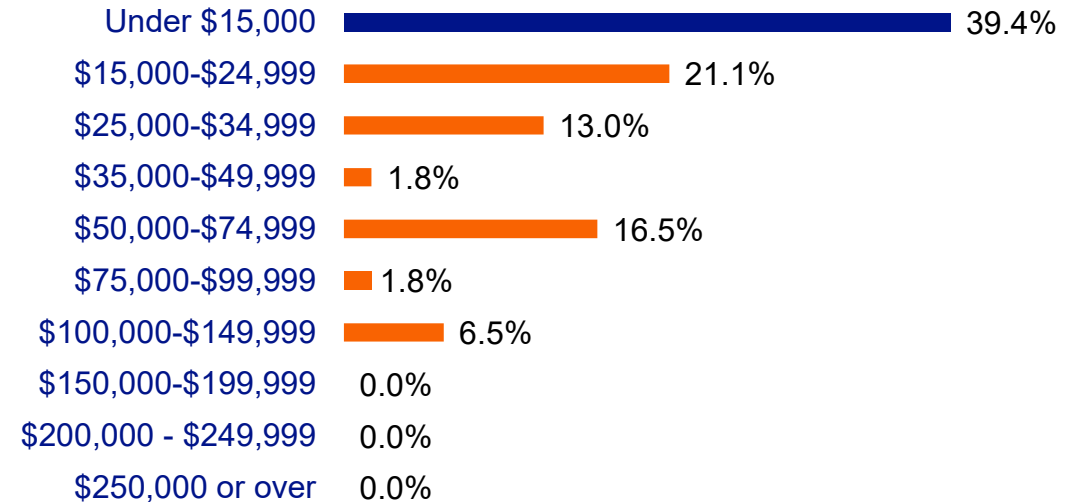
Race



Gender

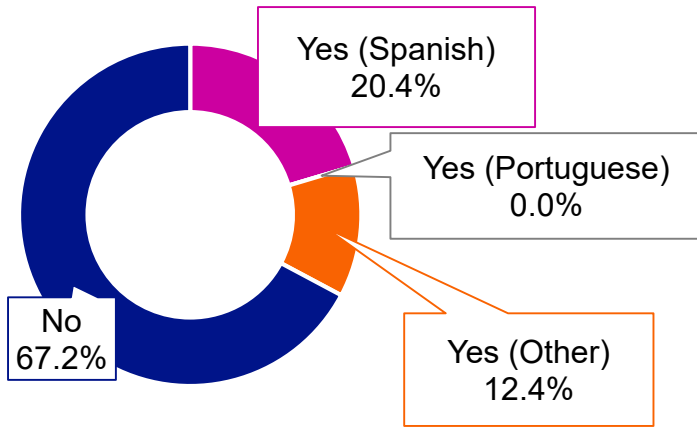


Annual Household Income

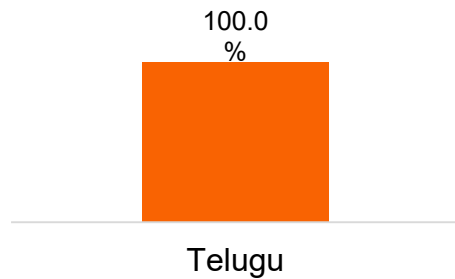


MILITARY PARK TRAVEL PROFILE

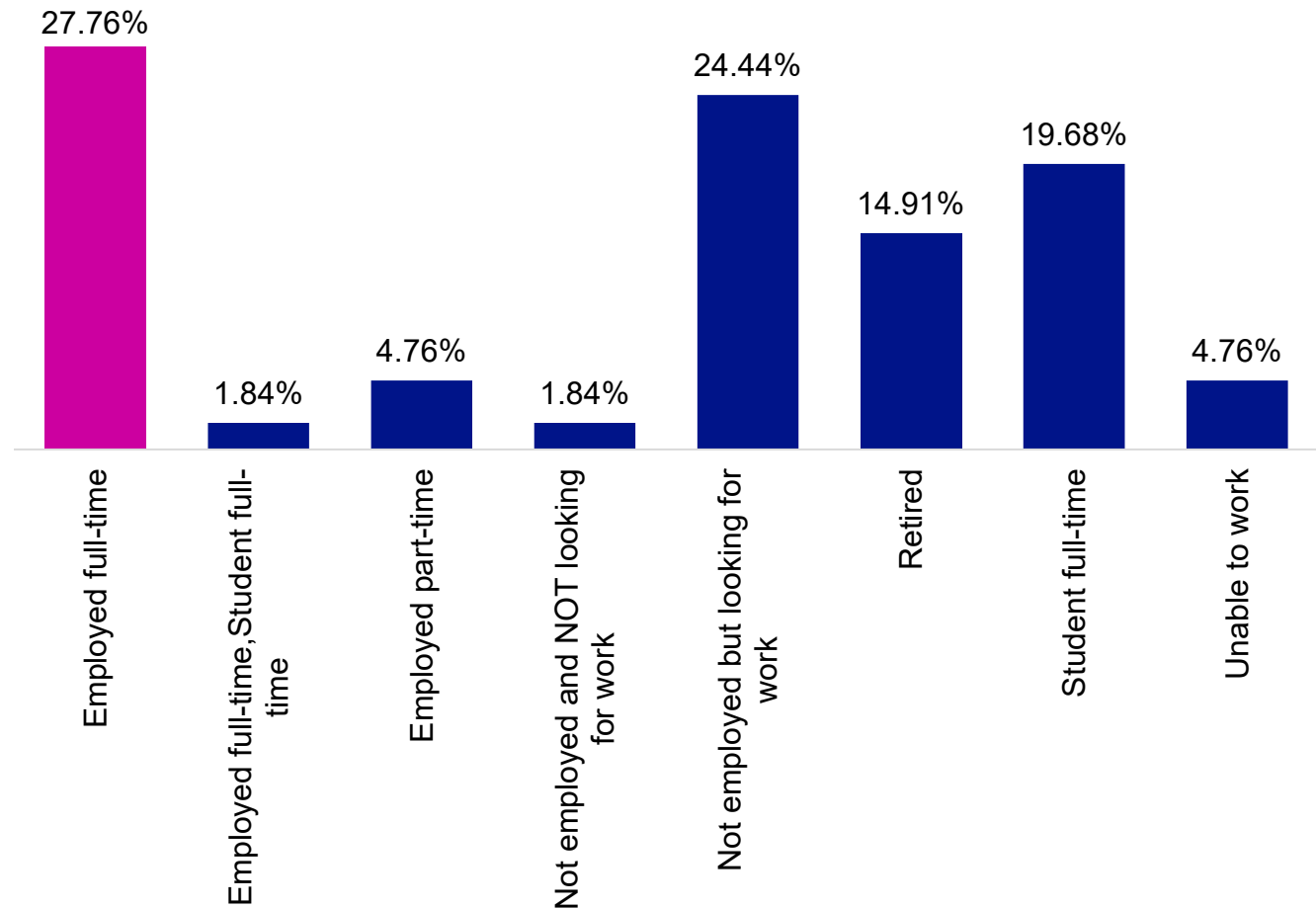
Speak a Language Other than English



Other Languages Spoken (N = 2)



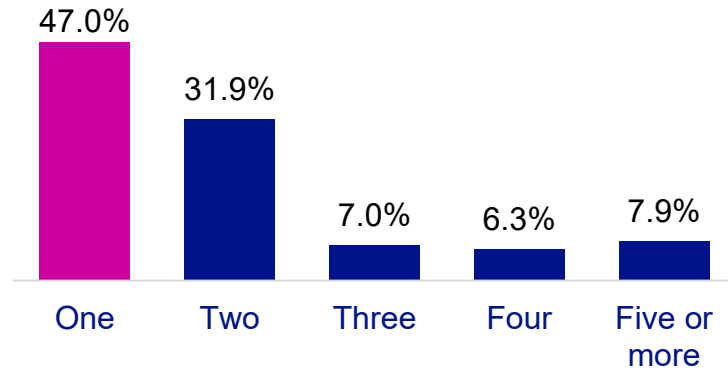
Employment Status (N = 26)



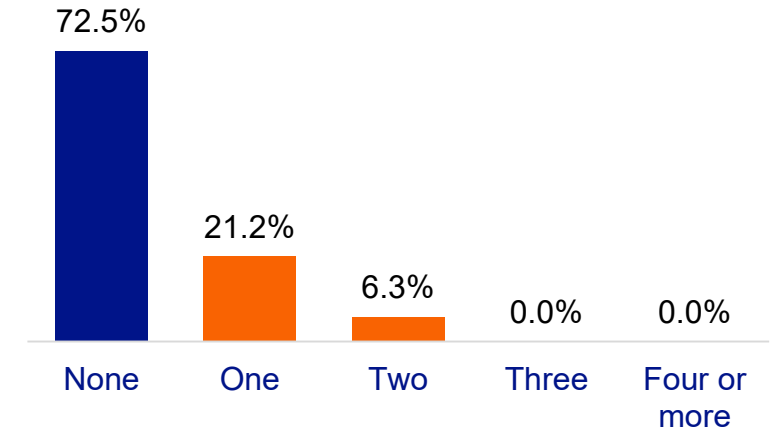


MILITARY PARK TRAVEL PROFILE

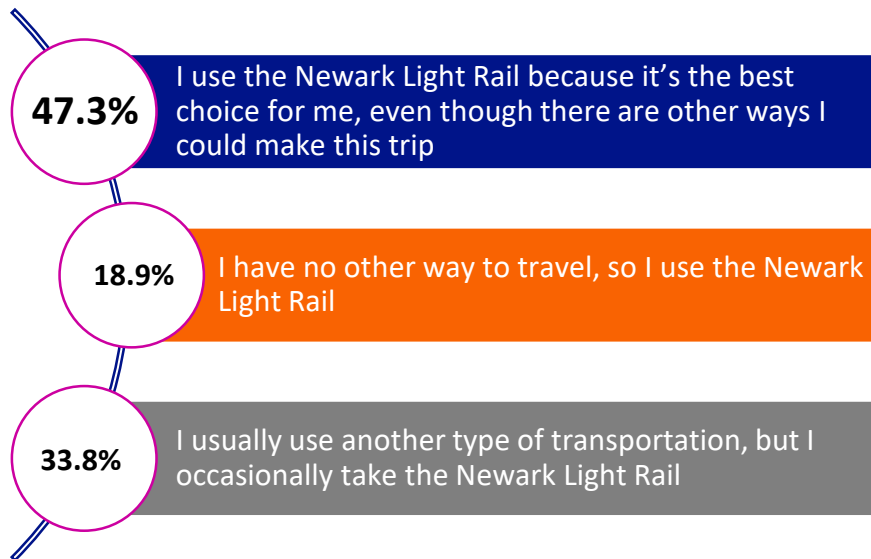
Household Size



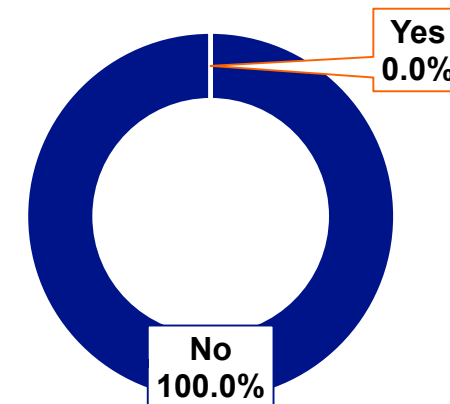
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train





MILITARY PARK TRAVEL PROFILE

Common Theme from Respondents' Comments - Improve User Experience on the Newark Light Rail

Be on time / Communication

- They could be on time at all time
- Be on time and make people get to their destination a lot better
- Any scheduling or operational difficulties announced over loudspeaker

Frequency of Light Rail

- More frequent trips
- Longer cars, more cars rush hour, late night
- Faster service

Other matters

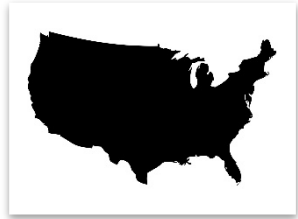
- Throw some of the old trolleys back on board
- Cleanliness



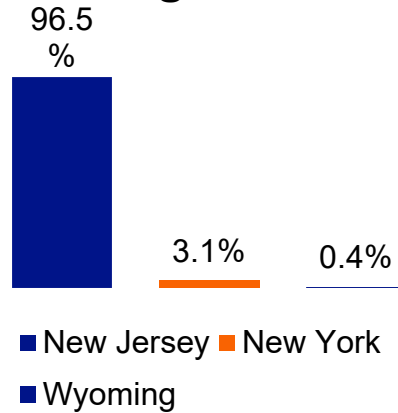
NEWARK PENN STATION TRAVEL PROFILE



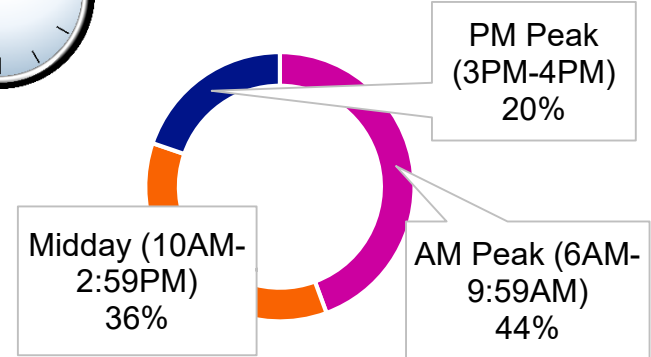
Where Did You Begin This Trip Today?



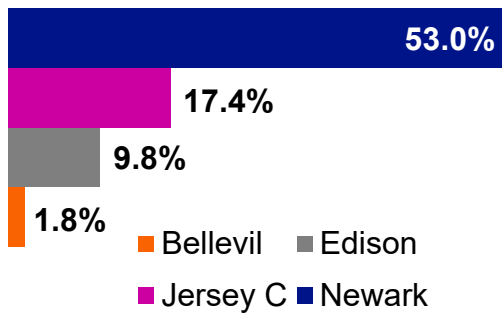
Origin State



Travel Period



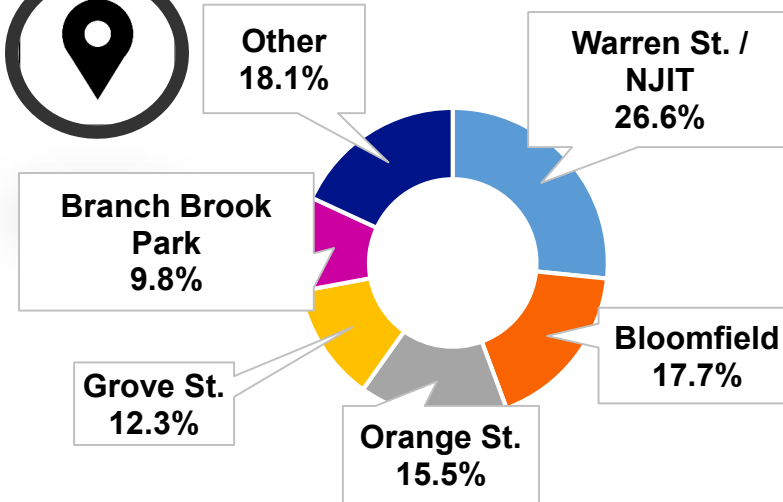
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station

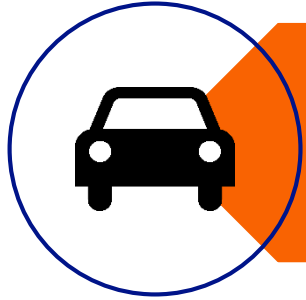


Travel Period: The survey was conducted between 6AM and 4:00PM.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 284 Respondents (Margin of Error $\pm 3.0\%$ at 95% Confidence Level)

NEWARK PENN STATION TRAVEL PROFILE

Access Mode to Boarding Station



Drove Alone and Parked – 0.2%
 Another Person Dropped Me Off – 0.9%
 Taxi – 0.2%
 Uber/Lyft/Other App-based Service – 0.2%



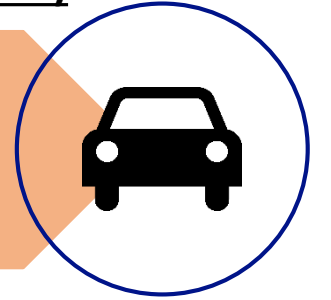
Bus – 21.4%
 Another Newark Light Rail Train – 5.1%
 NJ Transit Train – 20.5%
 PATH Train – 16.5%



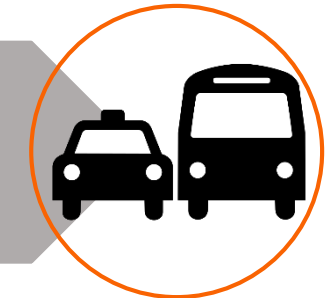
Walked – 29.6%
 Bicycle / e-Scooter – 0.2%
 Other – 5.3%

Travel Mode for those Disembarking at Newark Penn Station (N=332)

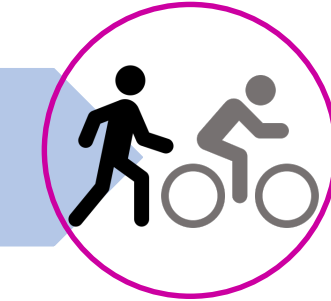
Drove Alone and Parked – 0.2%
 Another Person Picked Me Up – 1.2%
 Taxi – 0.2%
 Uber/Lyft/Other App-based Service – 0.4%



Bus – 7.4%
 Another Newark Light Rail Train – 1.4%
 NJ Transit Train – 21.6%
 PATH Train – 38.5%

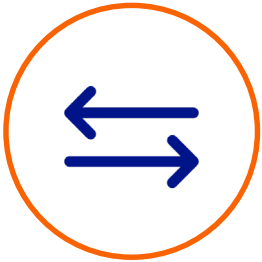


Walked – 23.5%
 Bicycle / e-Scooter – 1.5%
 Other – 4.2%



NEWARK PENN STATION TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 88.7%



Take a bus – 3.3%



Other – 8.0%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 40.8%

Light Rail Monthly Pass 10.1%

Rail Monthly Pass 15.0%

Bus Monthly Pass 7.5%

Reduced Fares for Senior Citizens & Customers with Disabilities 6.4%

FLEXPASS 1.7%

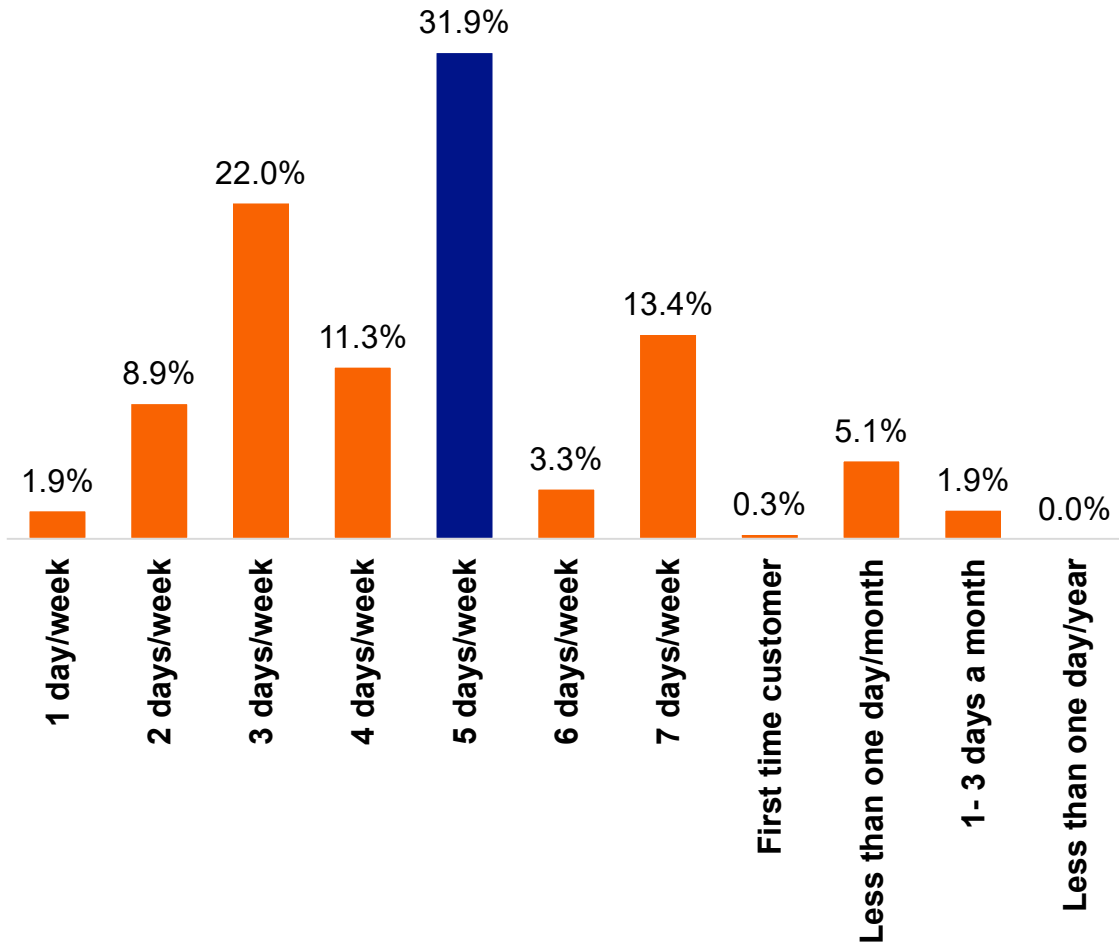
Underground Fare 3.5%

Other 15.0%

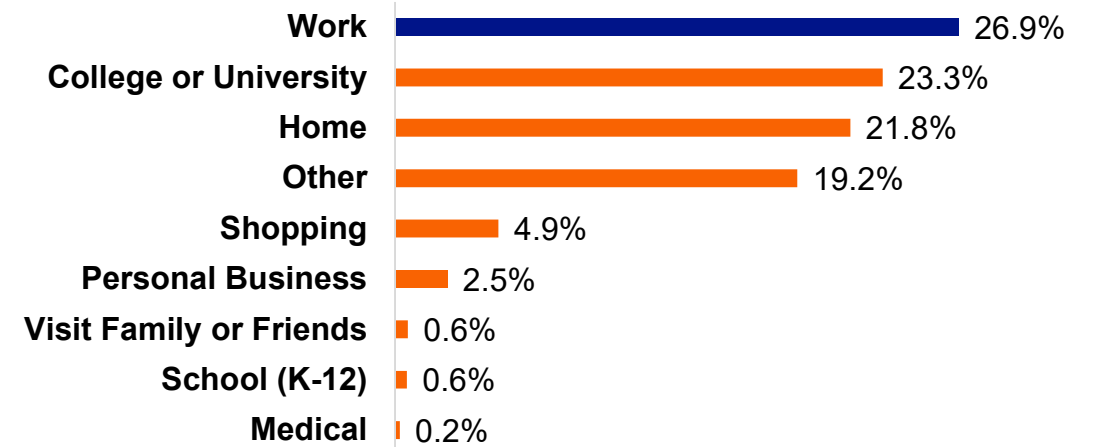


NEWARK PENN STATION TRAVEL PROFILE

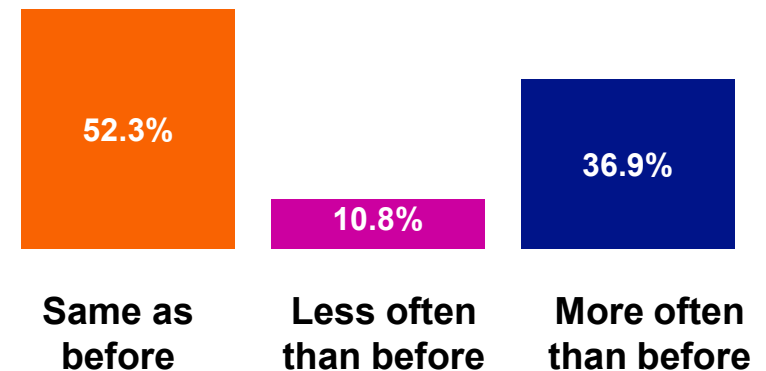
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

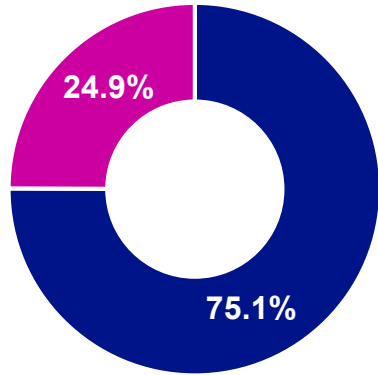




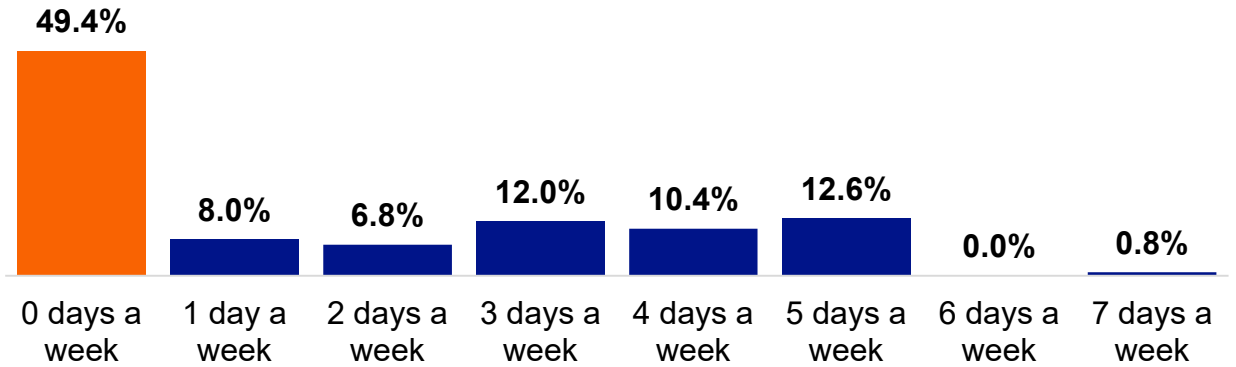
NEWARK PENN STATION TRAVEL PROFILE

Does your employer allow you to work from home? (N = 136)

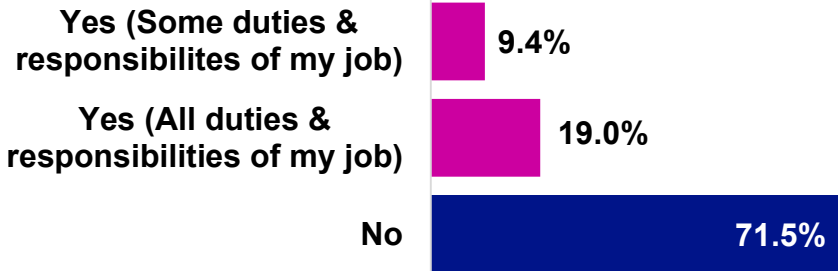
- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



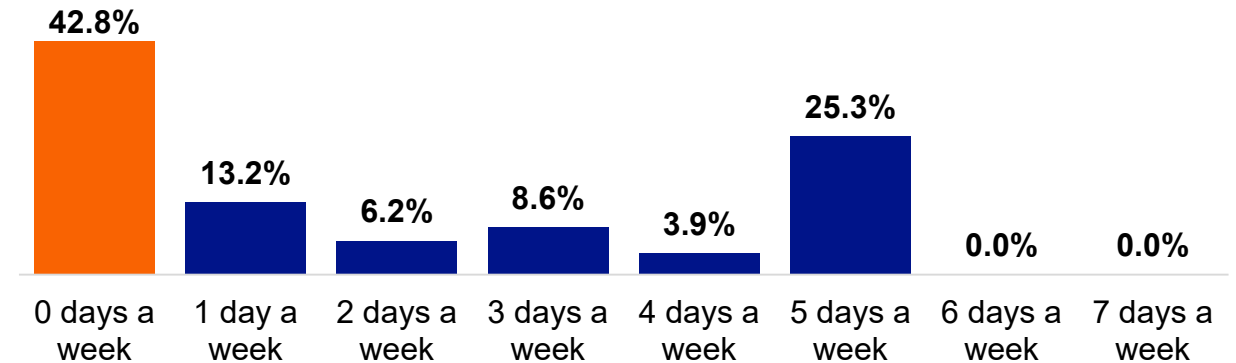
Number of days working from home in the past seven days (N = 170)



Able to complete job from home, if it was allowed by employer (N = 153)



Number of days attending school lectures from home in the past seven days (N = 101)



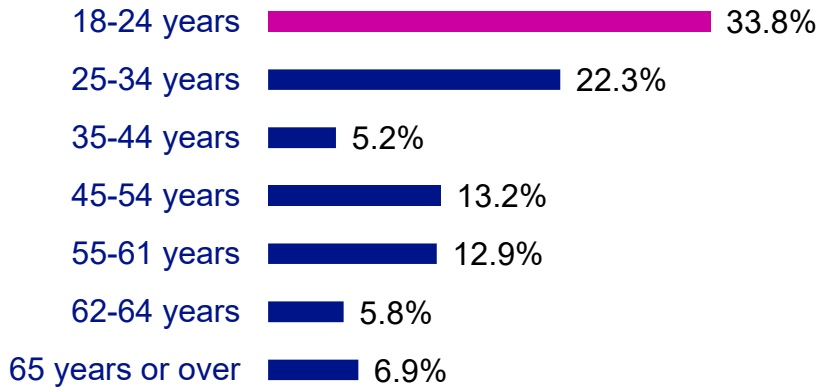
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 284 Respondents (Margin of Error \pm 3.0% at 95% Confidence Level)



NEWARK PENN STATION TRAVEL PROFILE

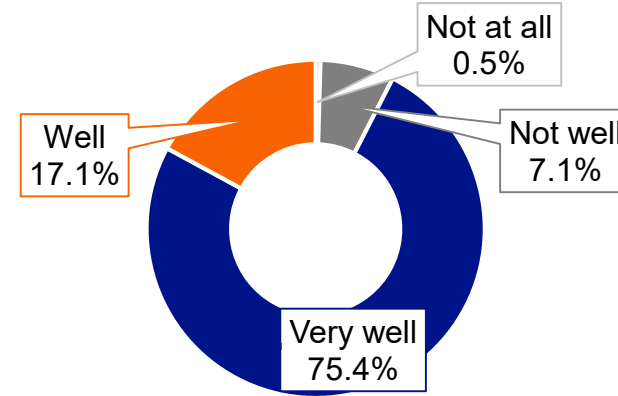
Age



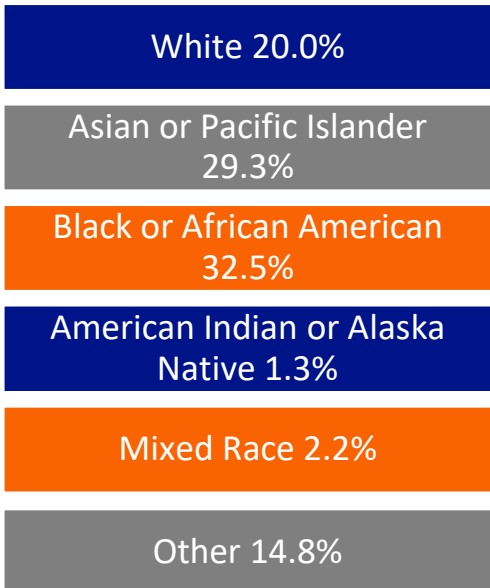
Ethnicity

21.3%
Hispanic

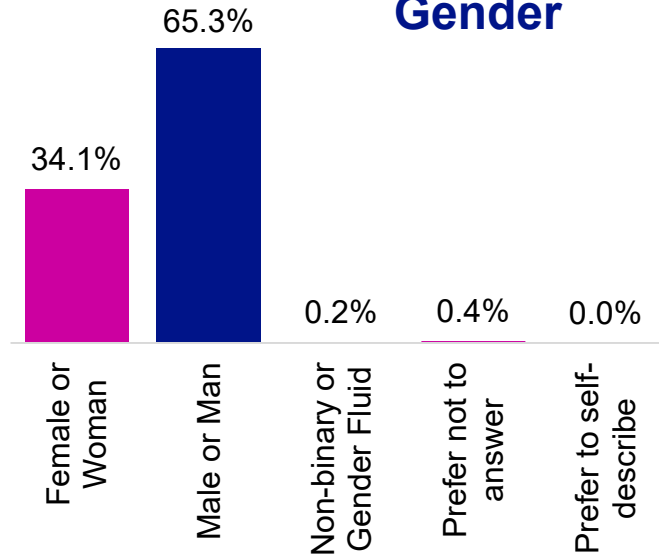
Fluency in Speaking English



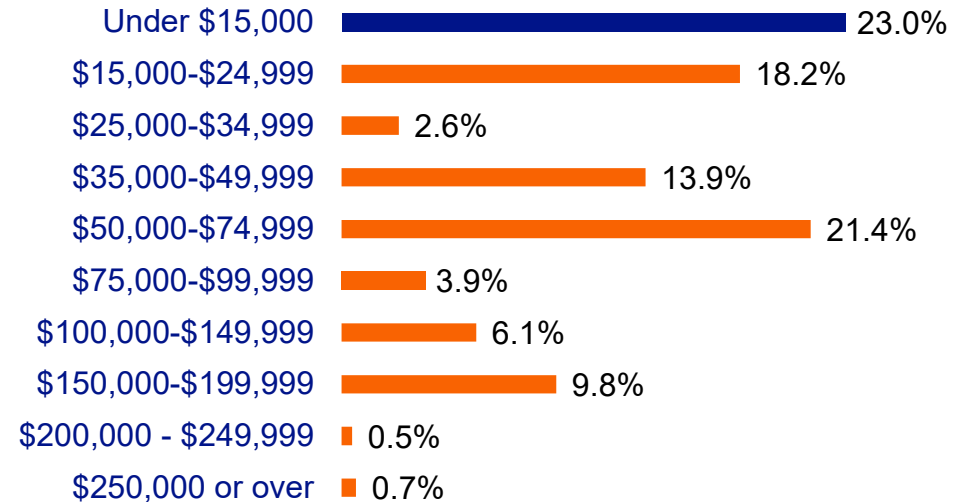
Race



Gender

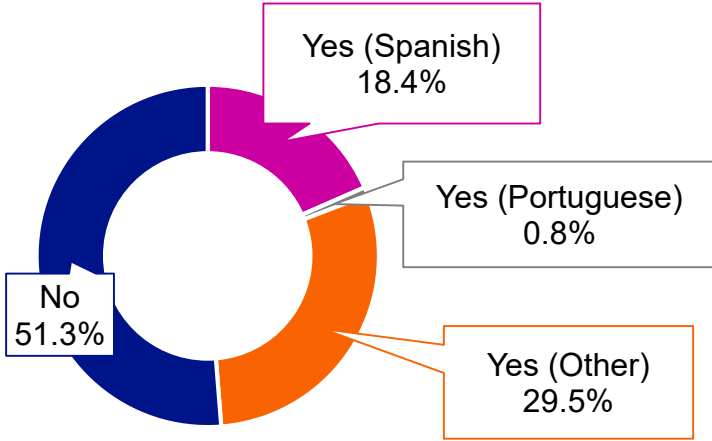


Annual Household Income

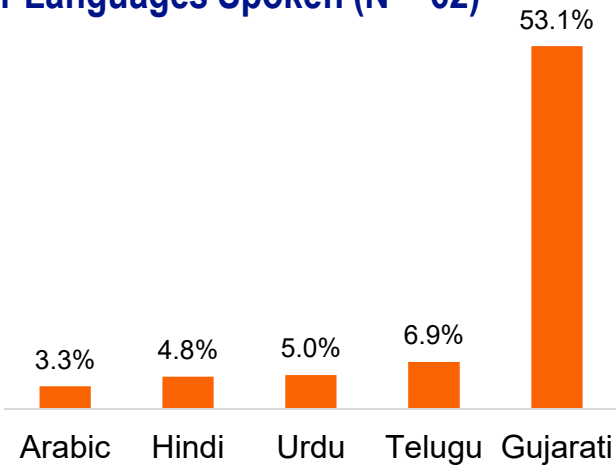


NEWARK PENN STATION TRAVEL PROFILE

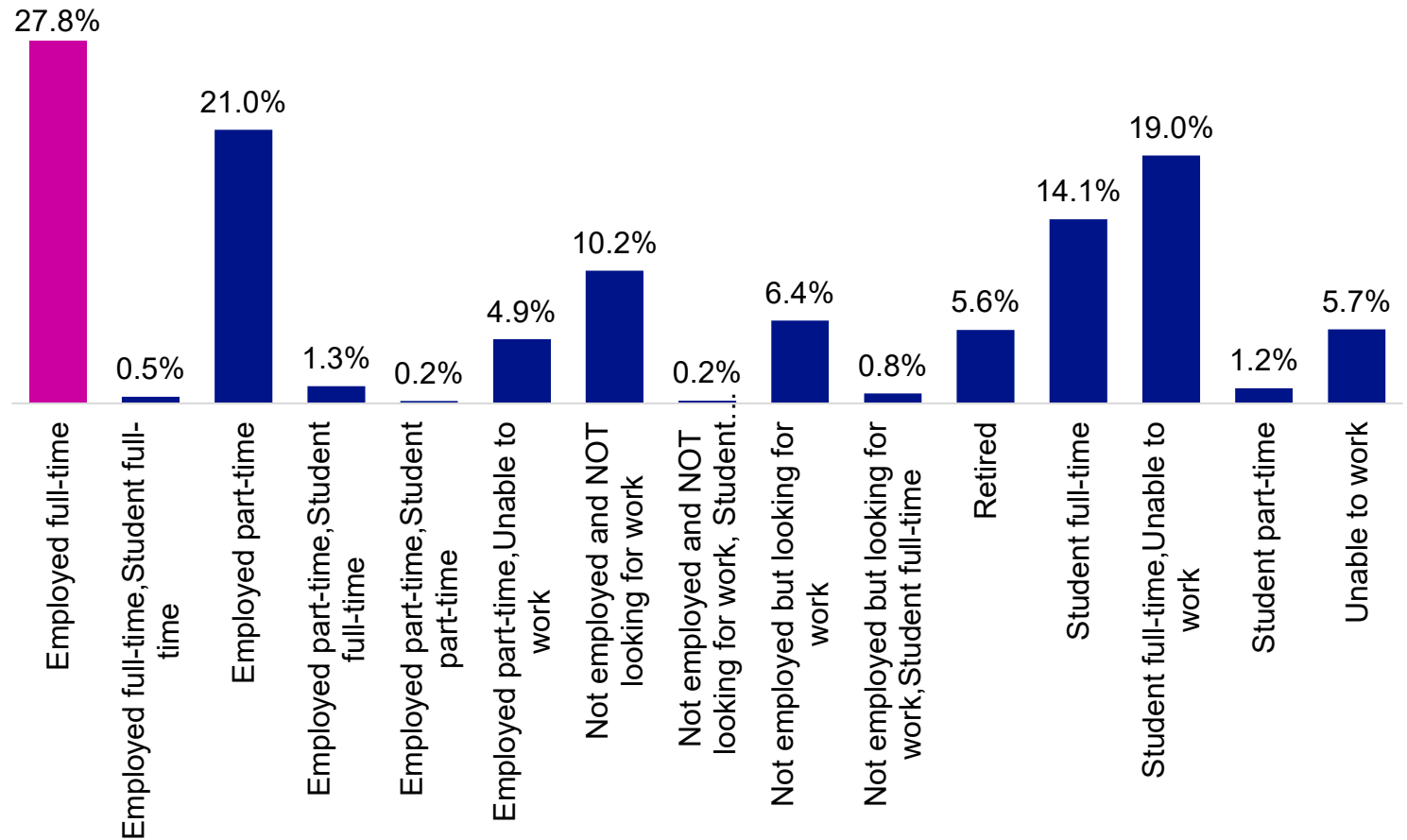
Speak a Language Other than English



Other Languages Spoken (N = 62)



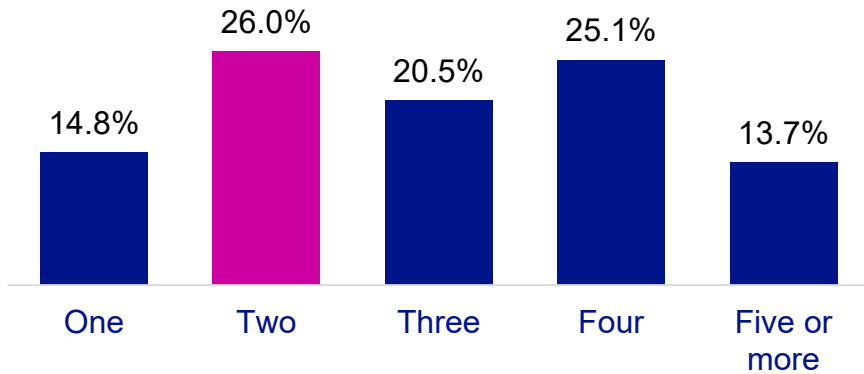
Employment Status (N = 270)



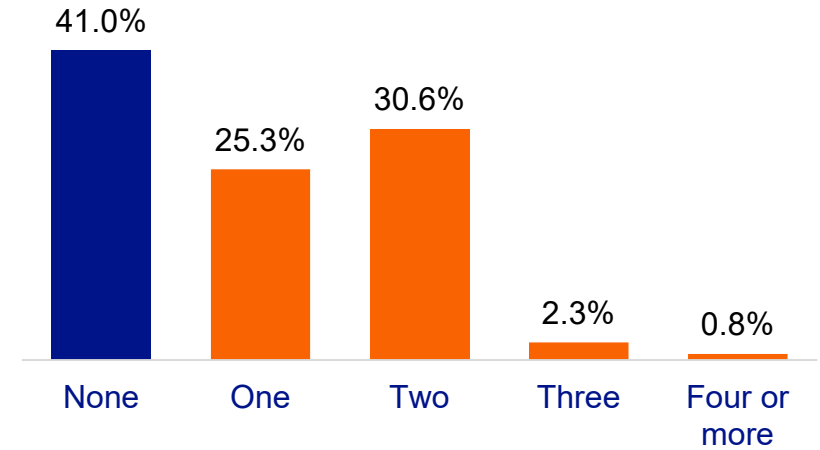


NEWARK PENN STATION TRAVEL PROFILE

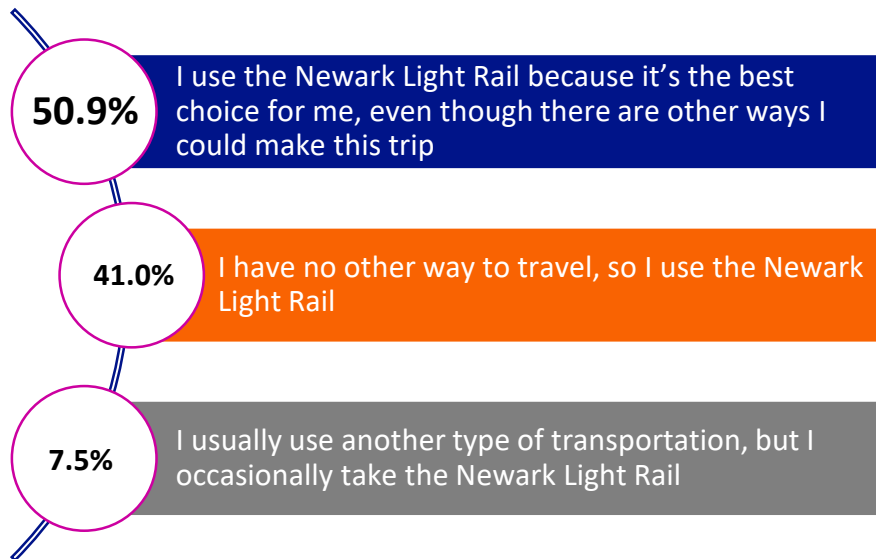
Household Size



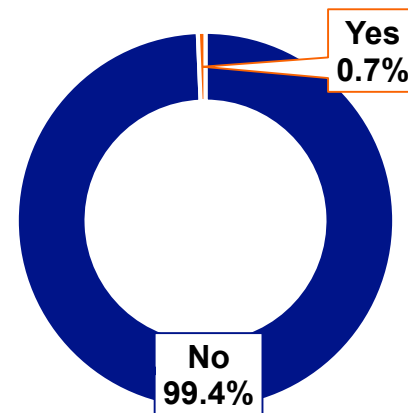
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes (N=3),
100% used other mobility device.



NEWARK PENN STATION TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency of The Train

- More trains
- Running regularly because lately it's been really hectic taking the light rail due to maintenance.
- Run more often
- Should be every 4 minutes all throughout the day on weekdays
- More trains between Penn & Broad
- More Broad St. stops
- Reduce crowded trains when school is out

Better Communication & Be On Time

- Light rails should be on time or communicate more
- Cell service underground, times showing next light rail on mezzanine level
- Depart on time, no sooner or later
- Better signage

Cleanliness

- Cleaner light rail please.
- I would like it to be cleaner
- Newark Light Rail needs to be upgraded and cleaned regularly.

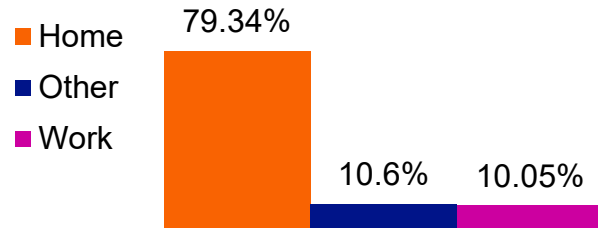
Other comments

- Homeless on Newark Penn Station
- Fewer homeless people on trains and stations
- Prevent drunks from getting on
- Make sure all riders pay the fare
- Bathrooms on trains like planes
- Drivers, not all, need training in being more patient

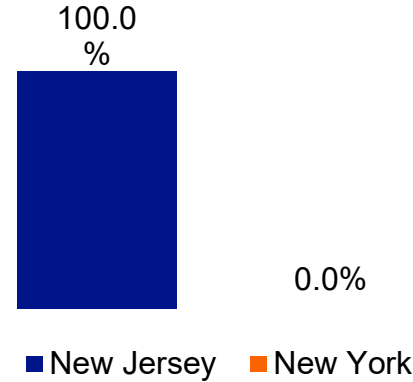
BROAD ST. TRAVEL PROFILE



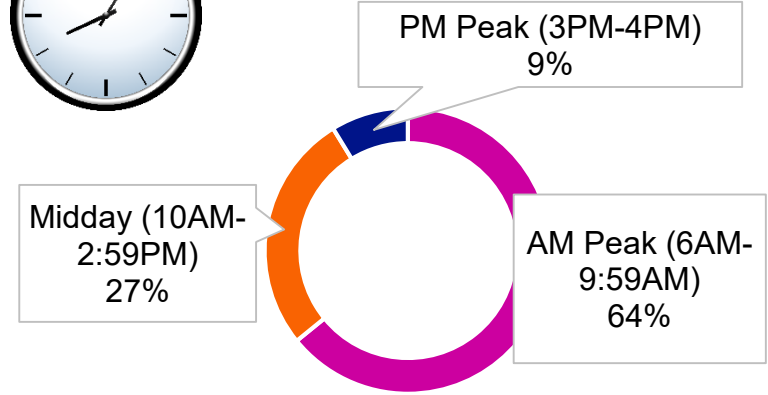
Where Did You Begin This Trip Today?



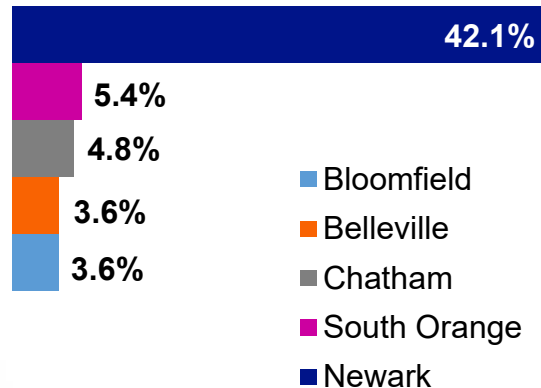
Origin State



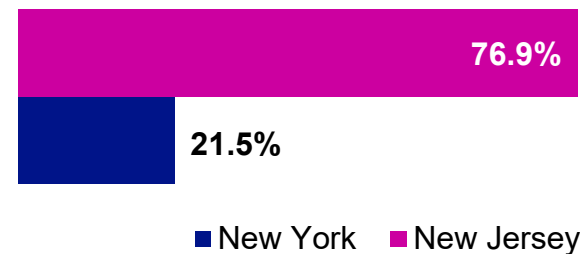
Travel Period



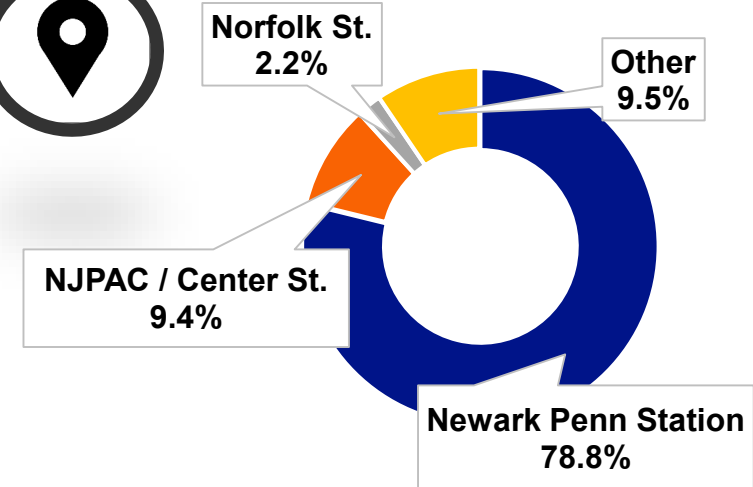
Top Origin Towns



Is Final Destination In NY or NJ?

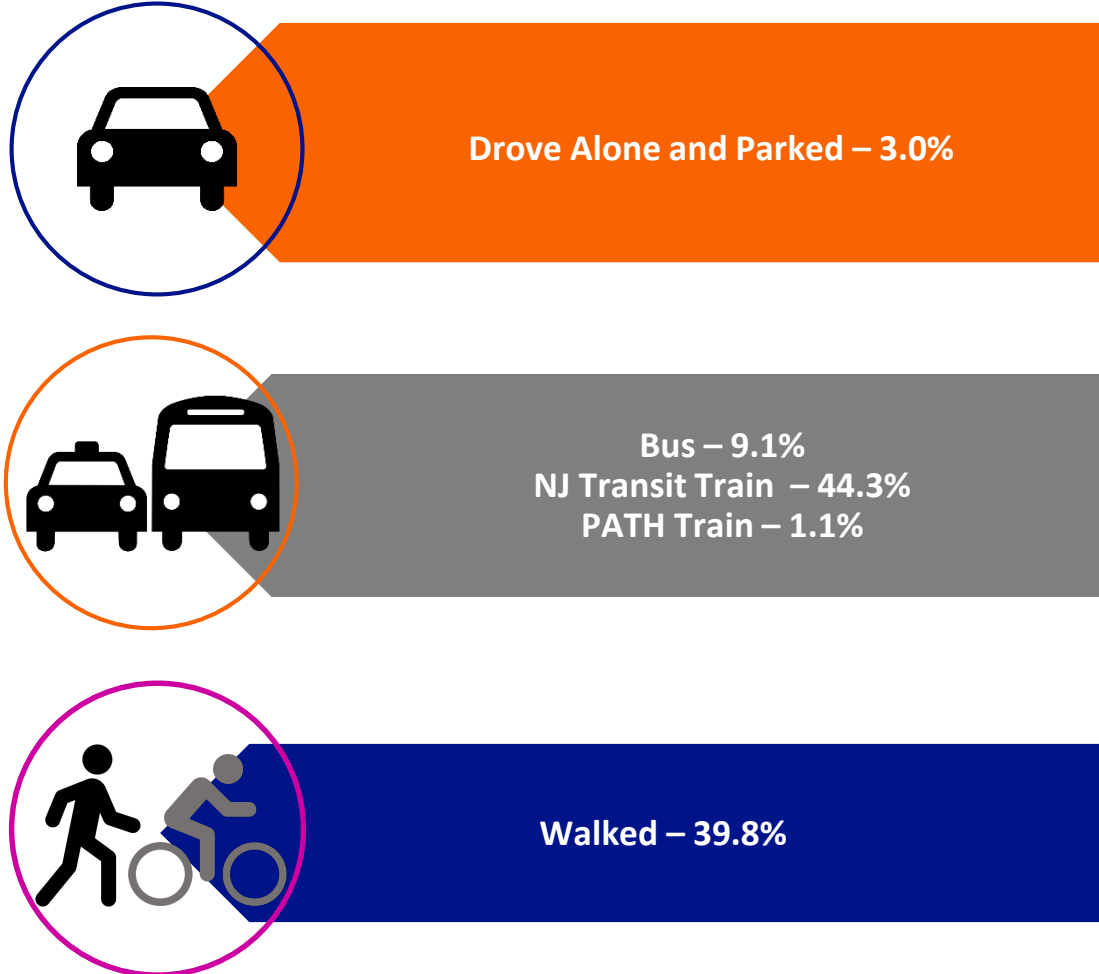


Destination Station

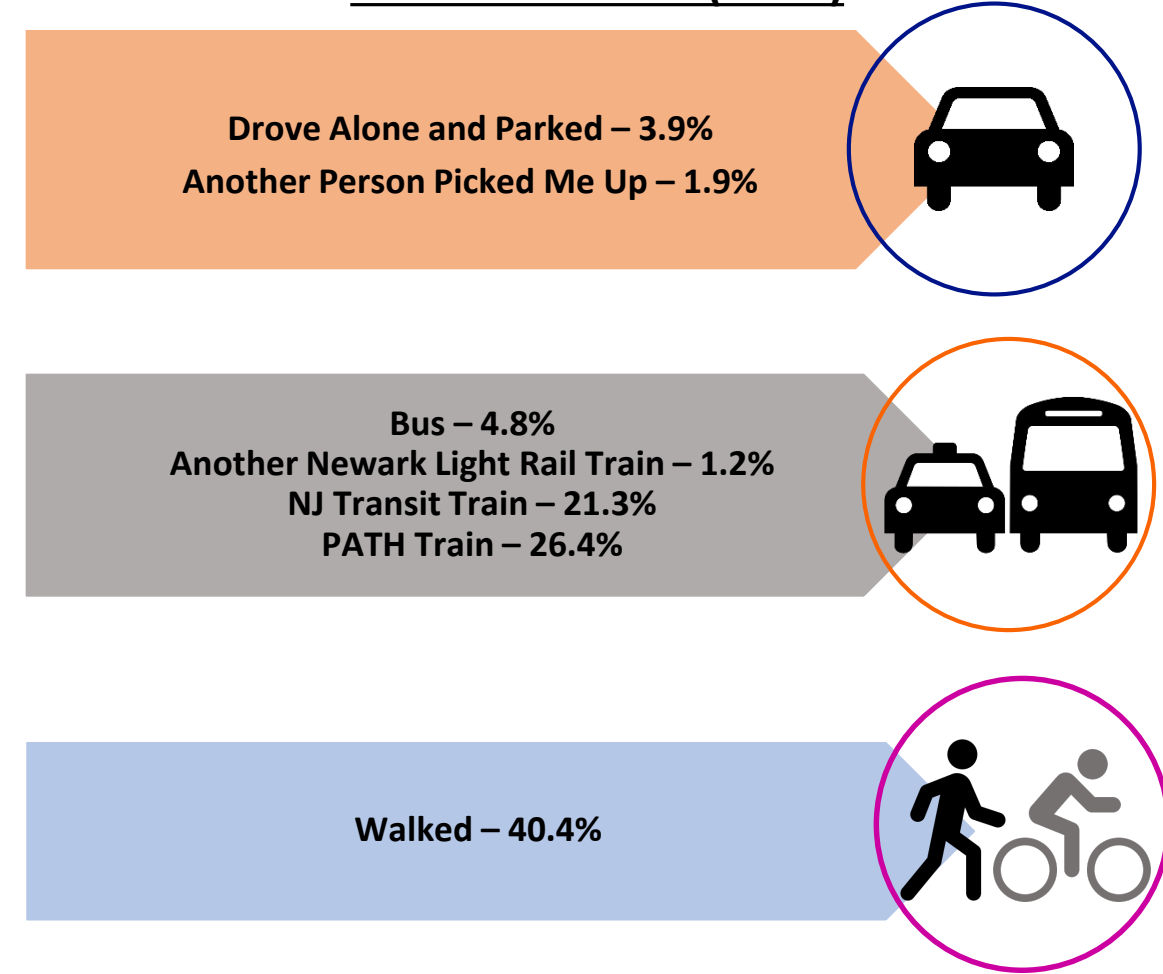


BROAD ST. TRAVEL PROFILE

Access Mode to Boarding Station

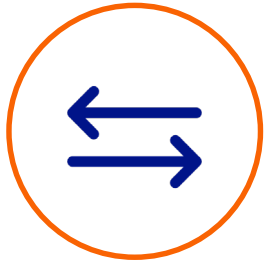


Travel Mode for those Disembarking at Broad St. Station (N=43)



BROAD ST. TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 80.9%



Take a bus – 8.3%



Other – 10.8%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 47.7%

Light Rail Monthly Pass 3.9%

Rail Monthly Pass 11.0%

Bus Monthly Pass 7.9%

Reduced Fares for Senior Citizens & Customers with Disabilities 8.6%

FLEXPASS 7.8%

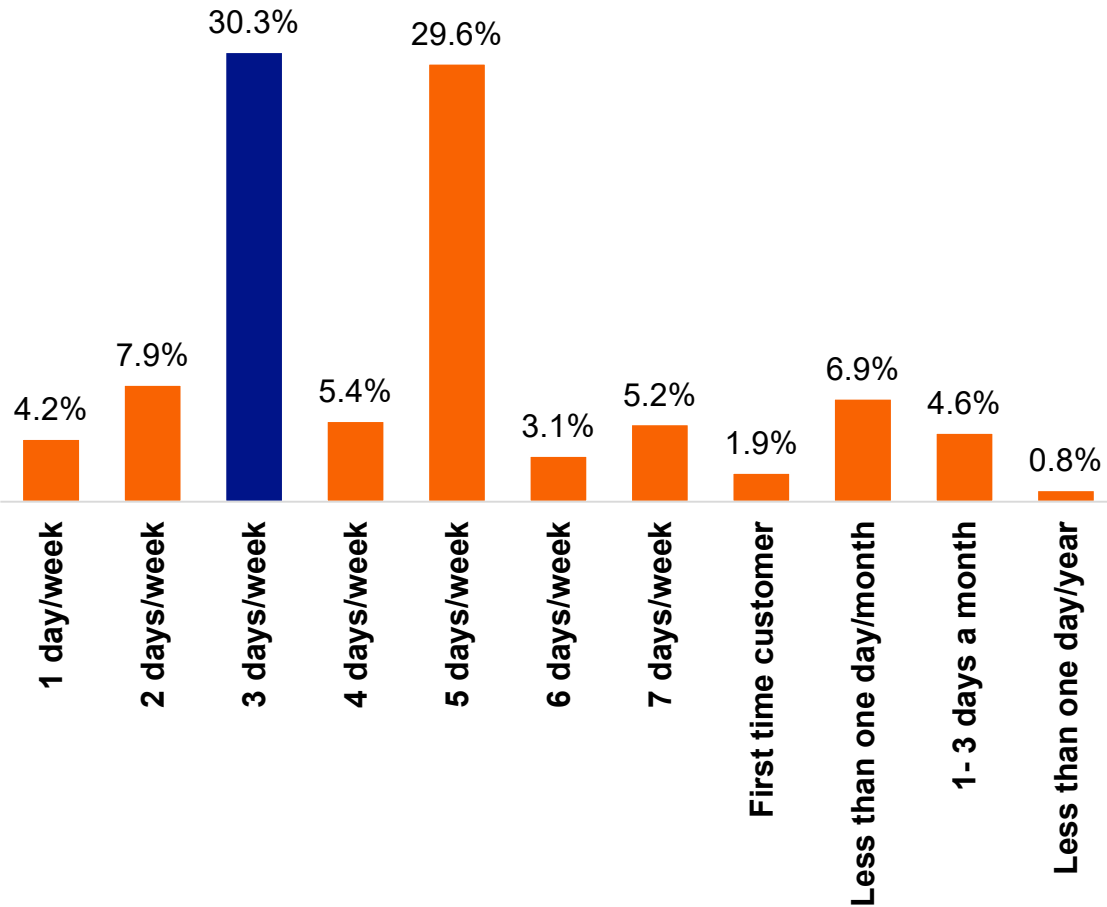
Underground Fare 2.0%

Other 11.2%

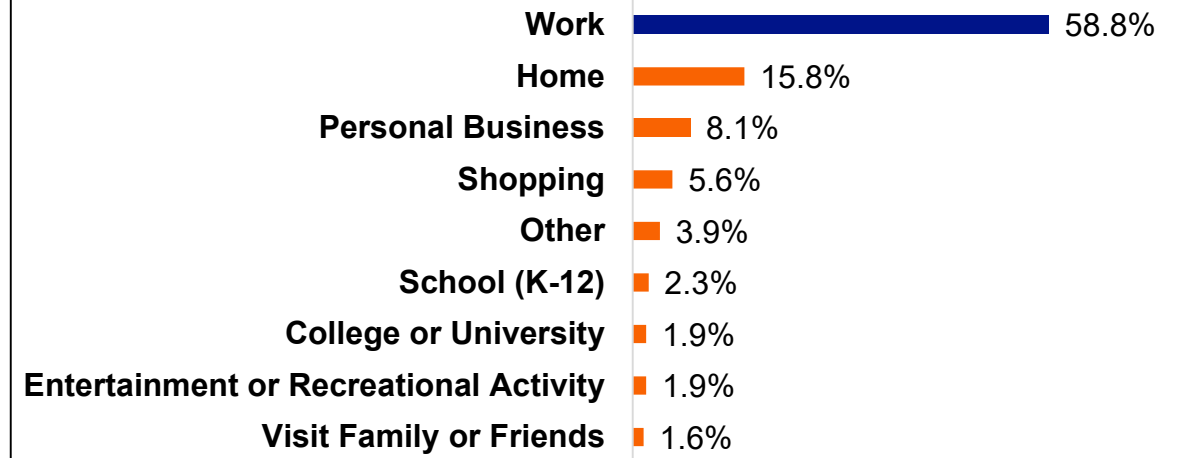


BROAD ST. TRAVEL PROFILE

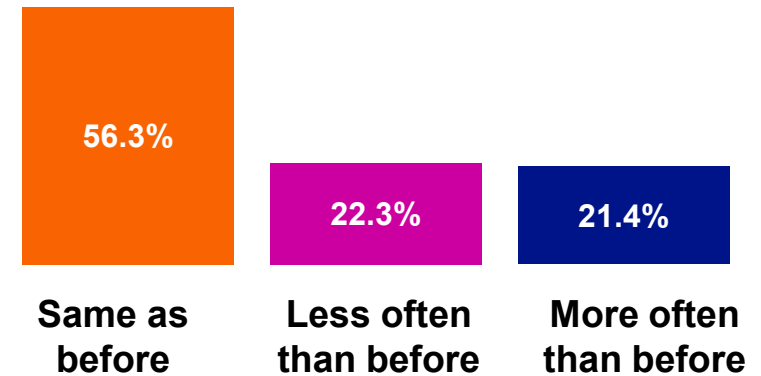
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

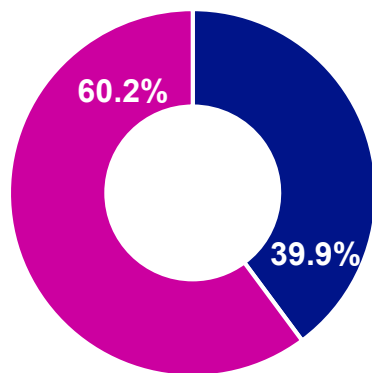




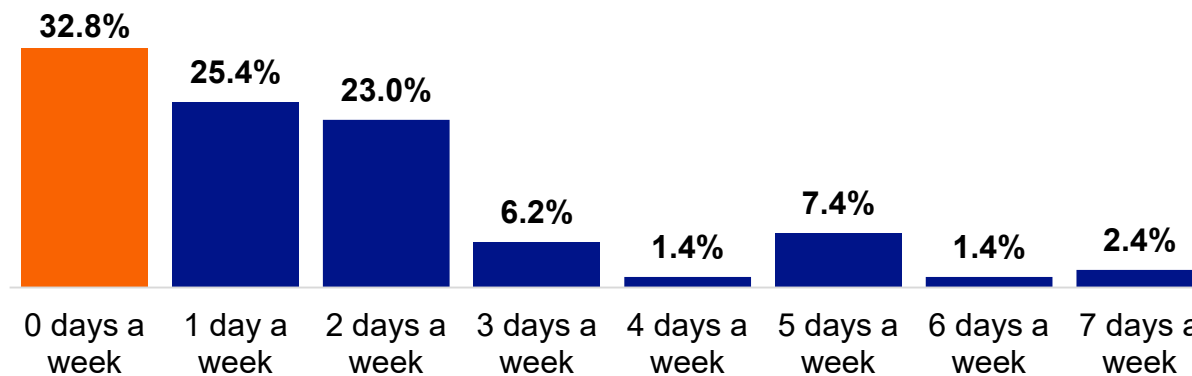
BROAD ST. TRAVEL PROFILE

Does your employer allow you to work from home? (N = 66)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



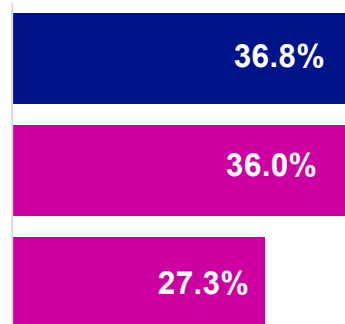
Number of days working from home in the past seven days (N = 74)



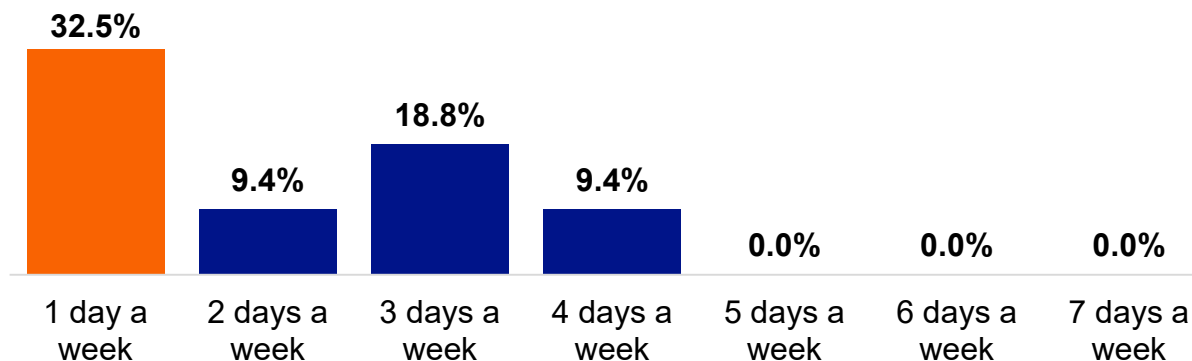
Able to complete job from home, if it was allowed by employer (N = 72)

- Yes (Some duties & responsibilities of my job)
- Yes (All duties & responsibilities of my job)

No



Number of days attending school lectures from home in the past seven days (N = 9)



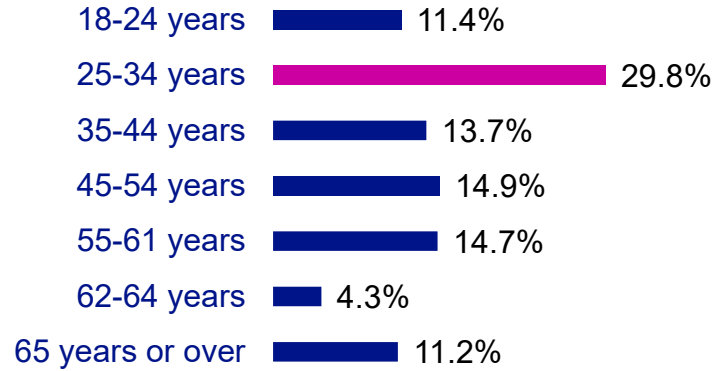
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 96 Respondents (Margin of Error \pm 2.0% at 95% Confidence Level)



BROAD ST. TRAVEL PROFILE

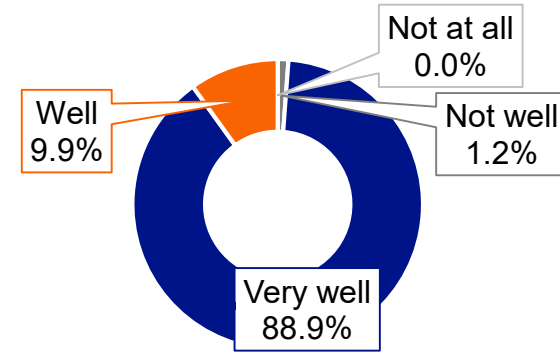
Age



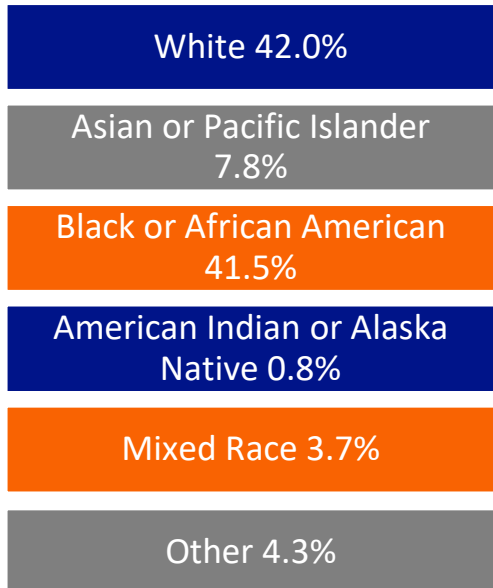
Ethnicity

13.4%
Hispanic

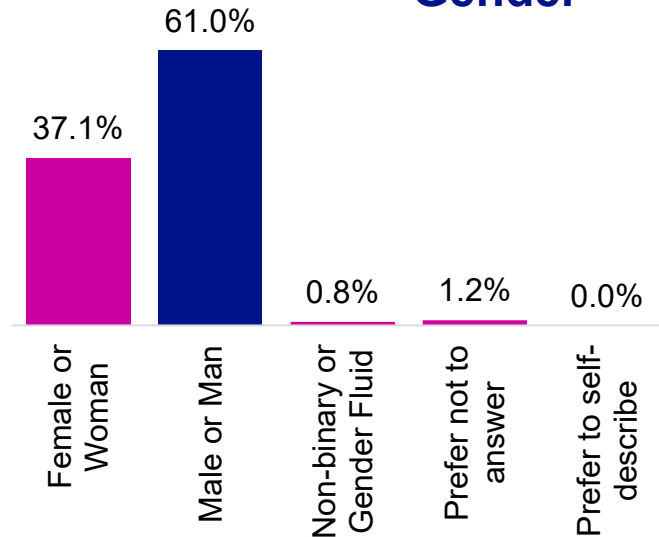
Fluency in Speaking English



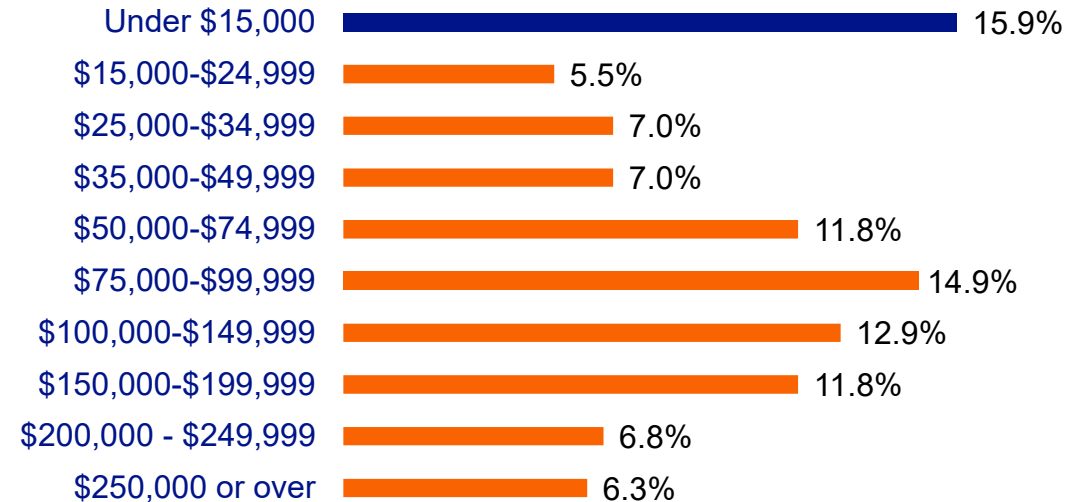
Race



Gender

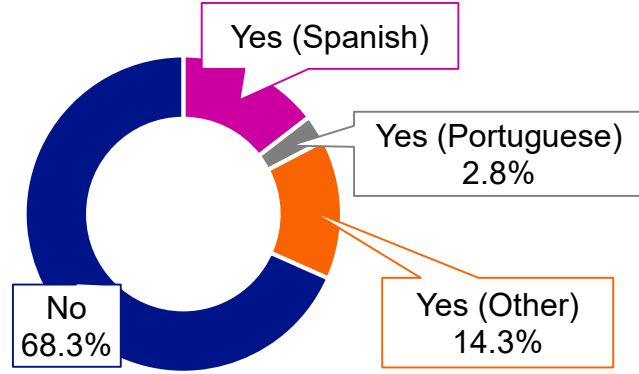


Annual Household Income

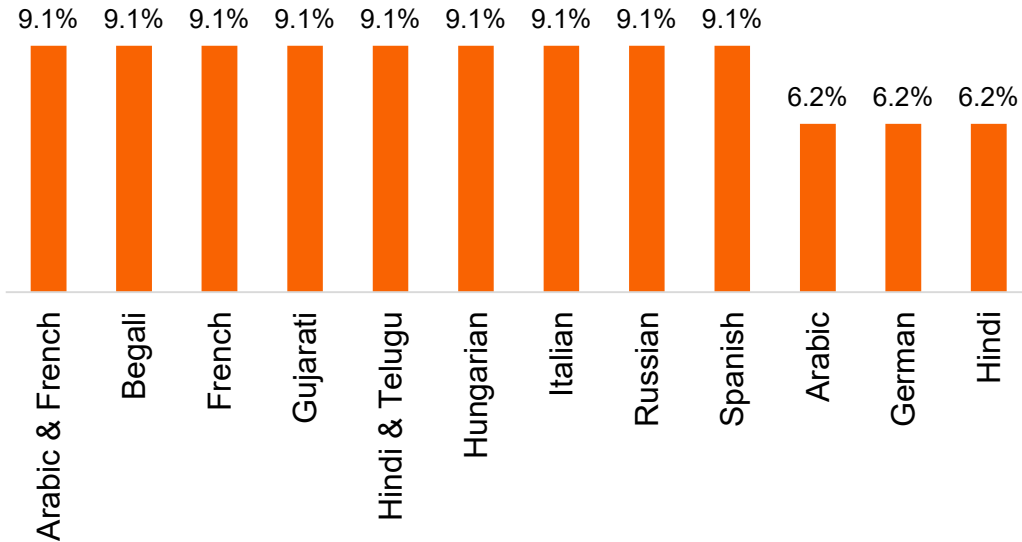


BROAD ST. TRAVEL PROFILE

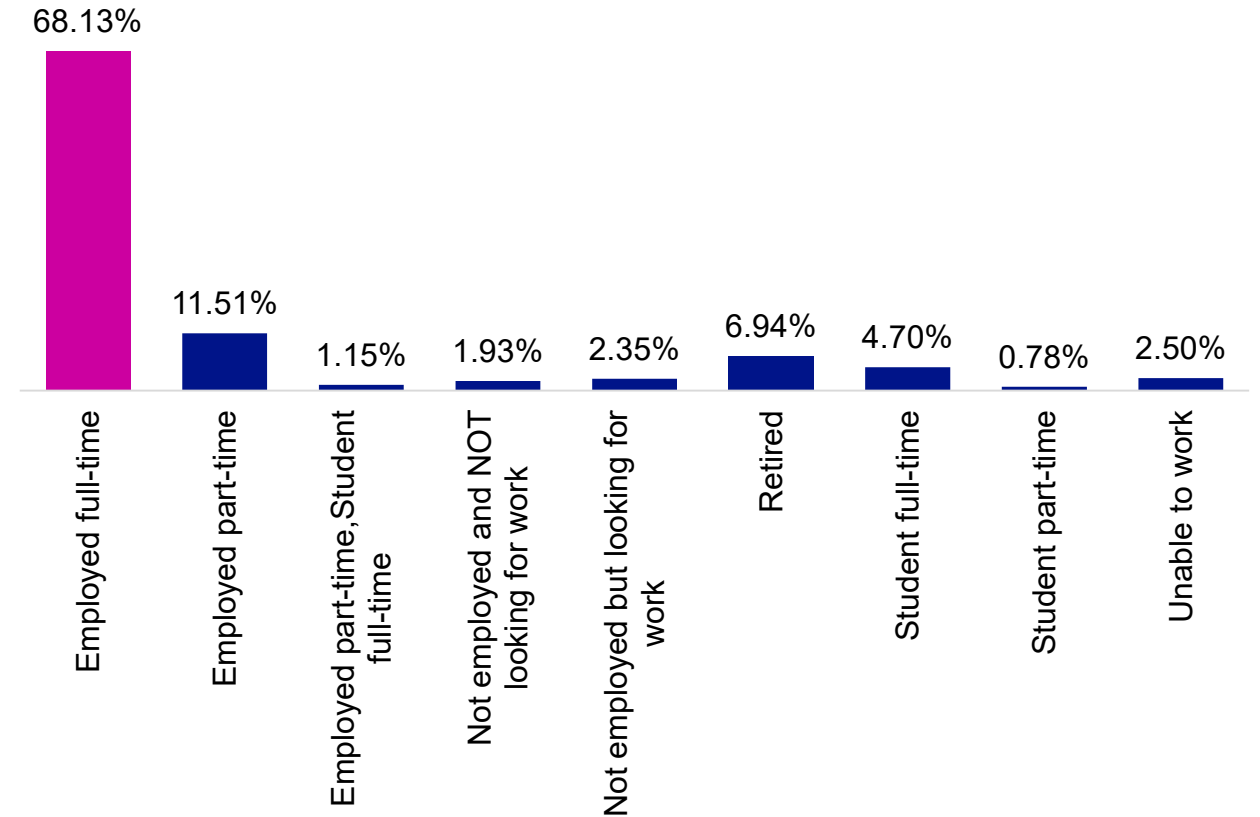
Speak a Language Other than English



Other Languages Spoken (N = 12)



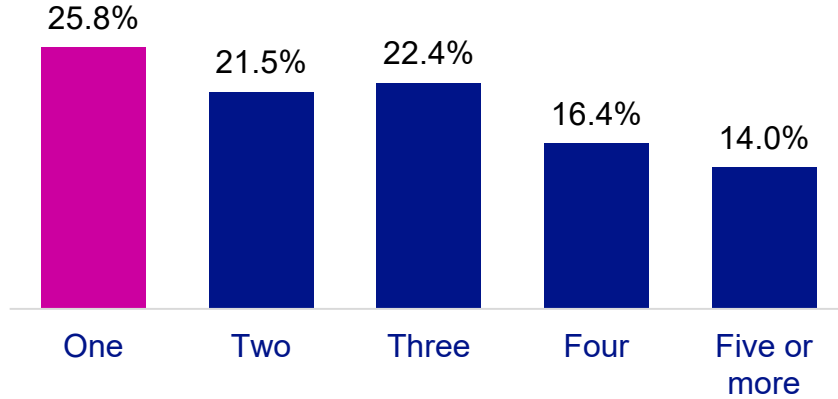
Employment Status (N = 95)



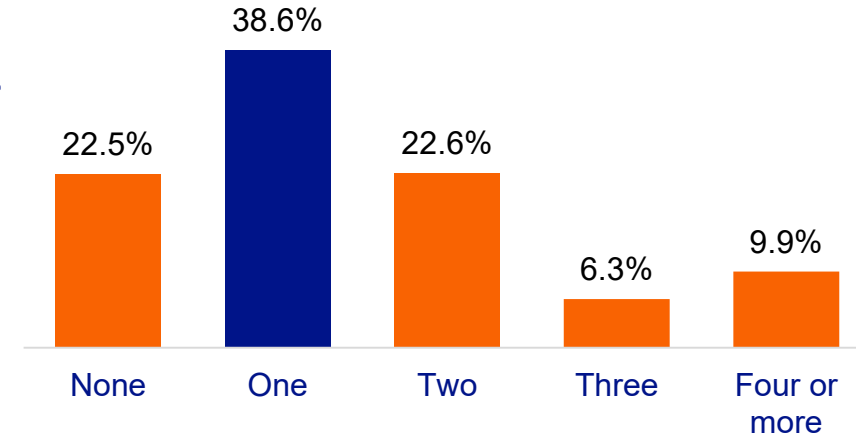


BROAD ST. TRAVEL PROFILE

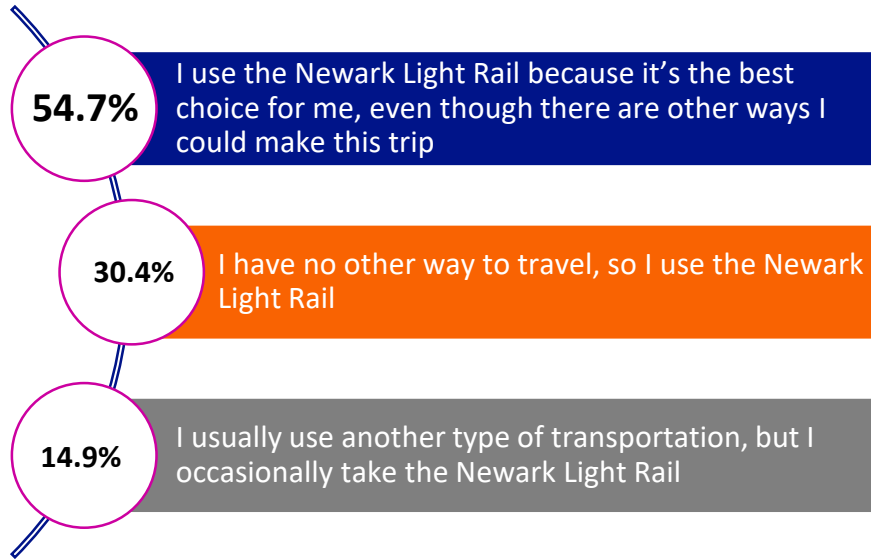
Household Size



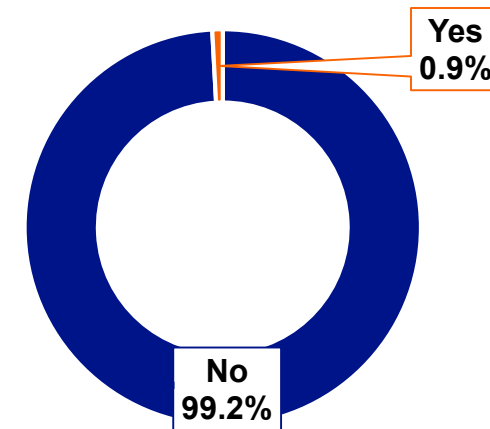
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train



Among those who said yes, no respondents indicated they used wheelchair and/or other mobility device.



BROAD ST. TRAVEL PROFILE

Common Themes from Respondents' Comments - Improve User Experience on the Newark Light Rail

Frequency and Connections of Light Rail

- Run more light rails more often
- More frequent schedule and extended network to Hoboken; Connect from Newark to Hoboken
- Better connection between Light Rail and NJT Trains
- Better weekend service
- Extend to other part of New Jersey
- Why does the light rail entering Broad St. pull so far up to discharge passengers? It causes passengers to have to run to catch trains maybe coming in 3 minutes.

Better Communication & Be On Time

- Come on time ; Real time data
- Clear signage
- Give passengers more than one minute to board
- I have seen folks, most likely customer service personnel, spend the entire time on the cell phone while I was at the LR Broad St Station. Why are they there? They have the vest on and do not even make eye contact with the customer and seem that they do not want to be bothered. Even when there was a major disruption to train service, they seem oblivious to what is happening.

Elevators & Ticketing System

- Keep elevators working; Ensure elevators and stations work
- Please make sure Penn Station Newark LR inbound elevators and escalators are working. Both were out last week, and it was a painful experience walking up the stairs.
- Better ticketing system, the subway or PATH
- Ability to purchase ticket online
- Have Light Rail video monitors of schedules near all the ticket machines
- Add more staff (ticket checkers) onboard to avoid homeless people always on the light rail

Other concerns

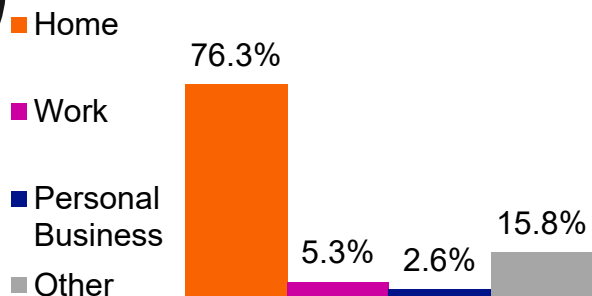
- Get new seats that do not include fabric, the fabric on the current seats is very dirty
- Police presence on buses and platforms
- Find a way to keep the homeless from riding the Light Rail
- When it's cold out, you should be able to sit on the LR at Broad St. Station before it's time to pull out. I have waited 5 mins standing in the cold while the LR sits at the end of the station. These things would improve passenger experience, especially those who are elderly and have mobility issues.



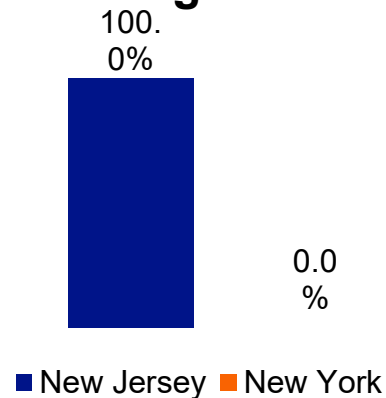
BROAD ST LINE STATIONS TRAVEL PROFILE



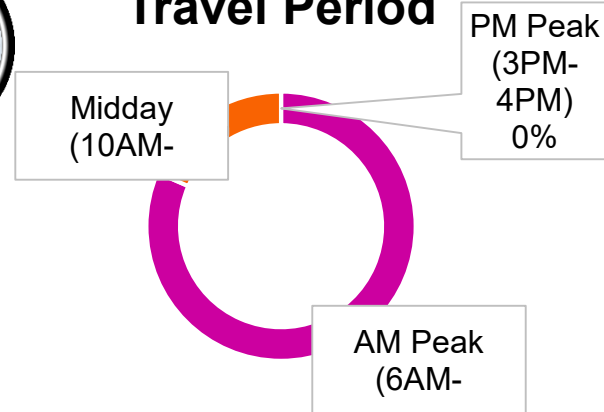
Where Did You Begin This Trip Today?



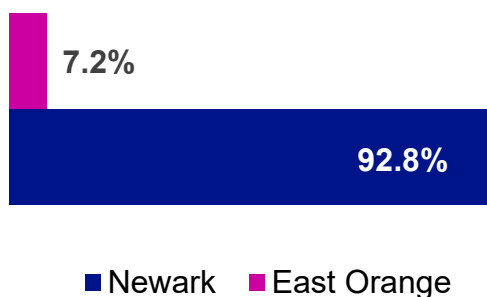
Origin State



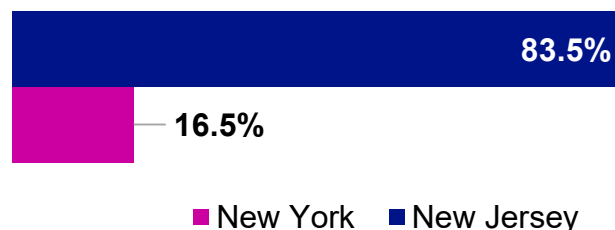
Travel Period



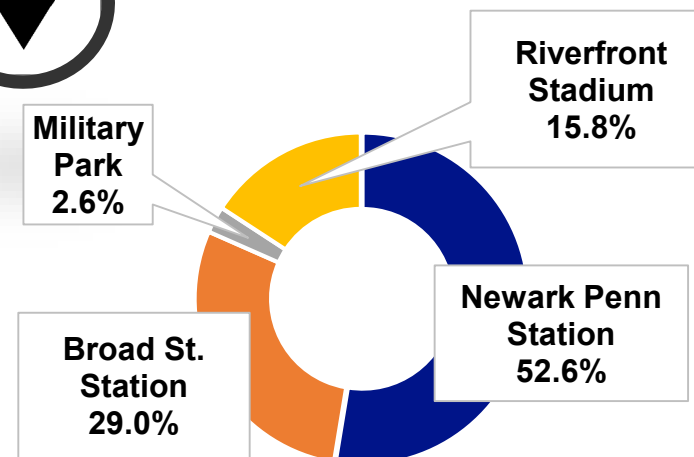
Top Origin Towns



Is Final Destination In NY or NJ?



Destination Station



Travel Period: The survey was conducted between 6AM and 4:00PM.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 10 Respondents (Margin of Error \pm 0.7% at 95% Confidence Level)

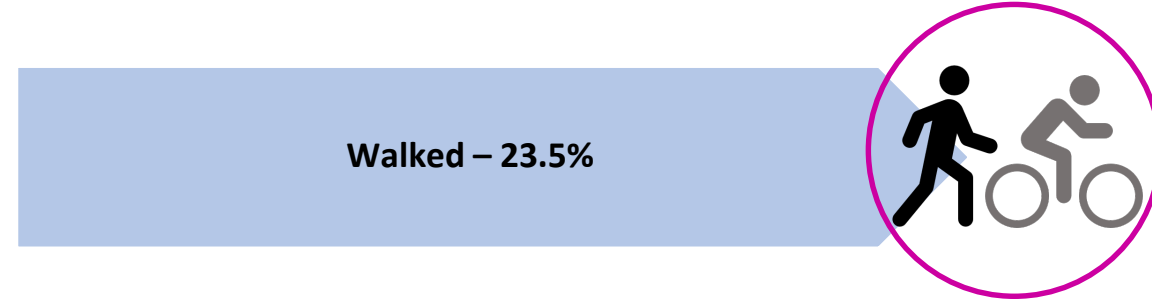
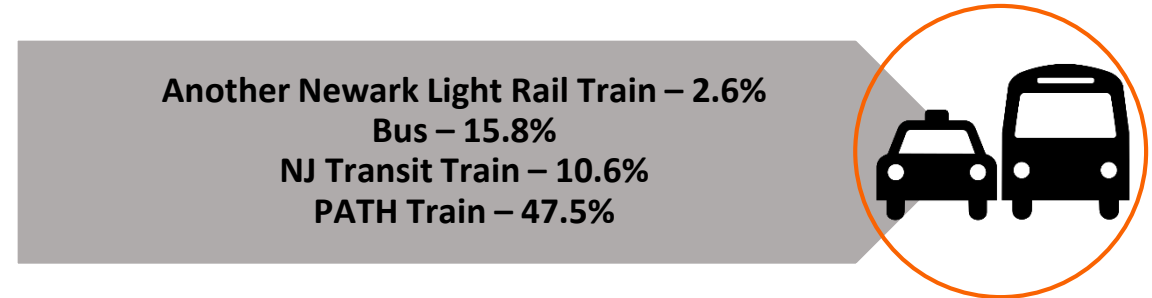
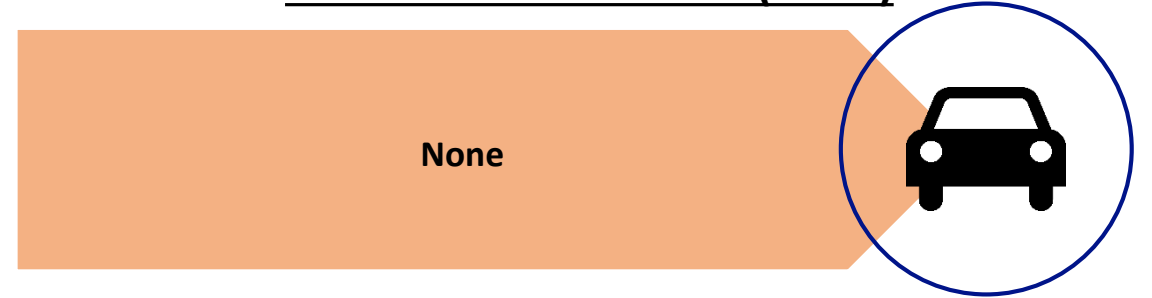


BROAD ST LINE STATIONS TRAVEL PROFILE

Access Mode to Boarding Station



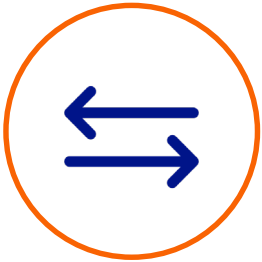
Travel Mode for those Disembarking at Broad St. Line Stations (N=10)





BROAD ST LINE STATIONS TRAVEL PROFILE

Travel Method for Return Trip



Travel the same way in the opposite direction – 91.9%



Take a bus – 0%



Other – 8.1%

What type of Light Rail Ticket are you Using for this Trip?

One-way Ticket 13.1%

Bus Monthly Pass 18.4%

Reduced Fares for Senior Citizens & Customers with Disabilities 15.8%

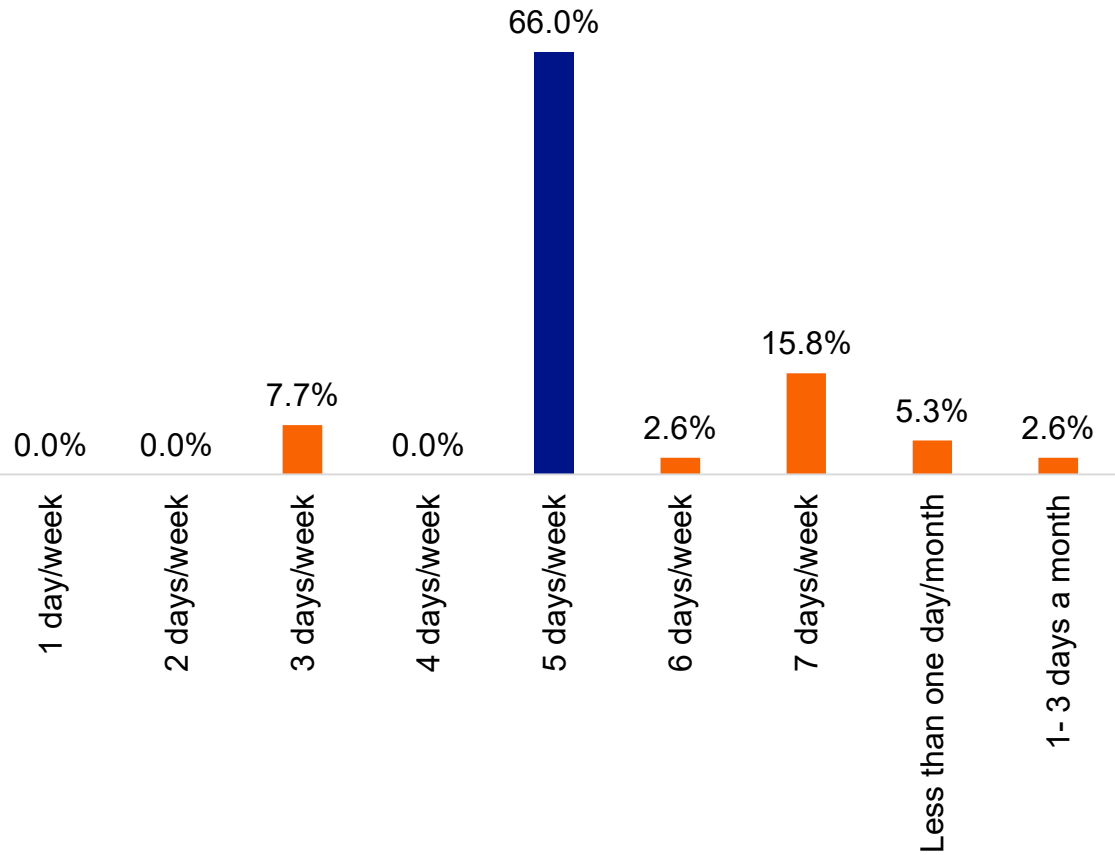
Underground Fare 47.5%

Rail Monthly Pass 5.2%

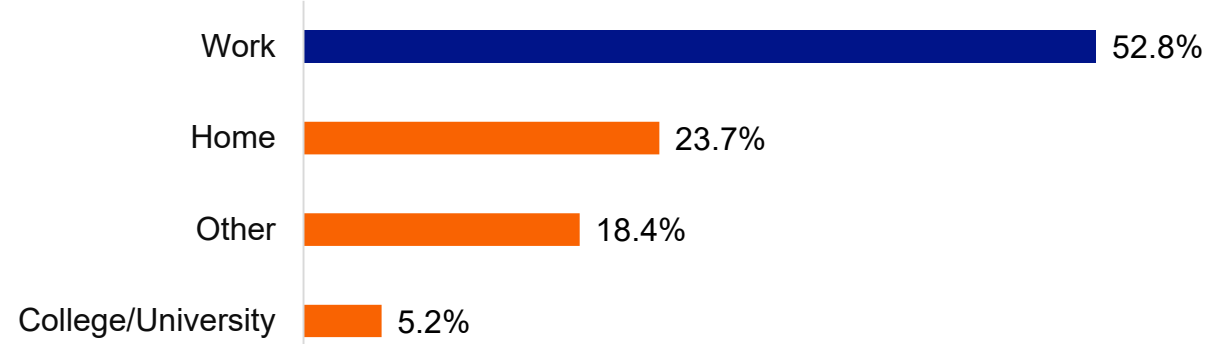


BROAD ST LINE STATIONS TRAVEL PROFILE

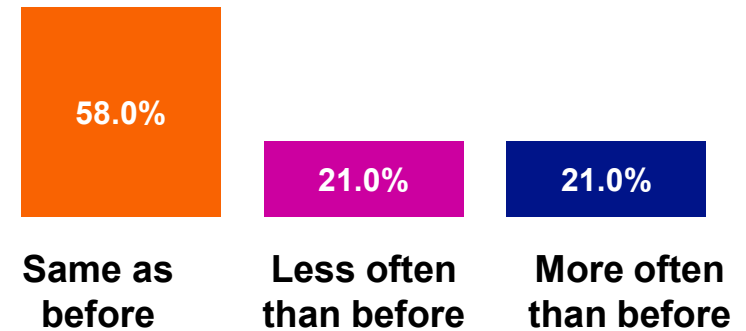
Trip Frequency



Trip Purpose



Usage of Newark Light Rail since Covid-19 Pandemic

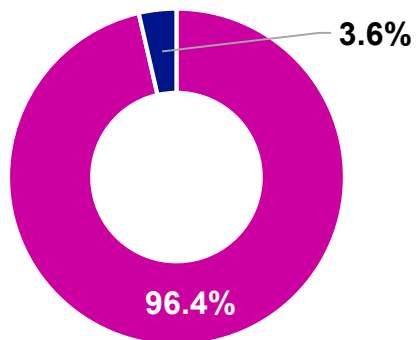




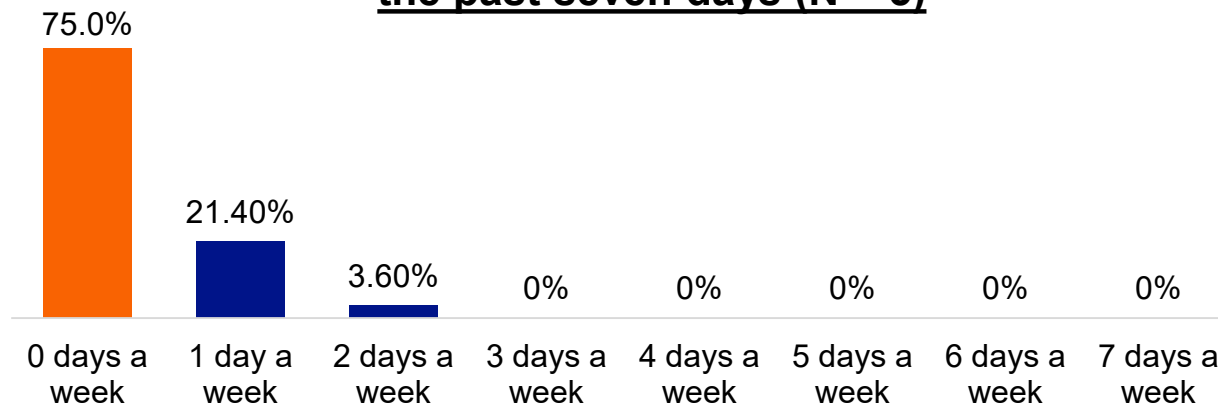
BROAD ST LINE STATIONS TRAVEL PROFILE

Does your employer allow you to work from home? (N = 5)

- No, my employer requires me to be in the office or at my worksite
- Yes, I am allowed to work at home at least some of the time



Number of days working from home in the past seven days (N = 5)



Able to complete job from home, if it was allowed by employer (N = 5)

Yes (Some duties & responsibilities of my job)

67.9%

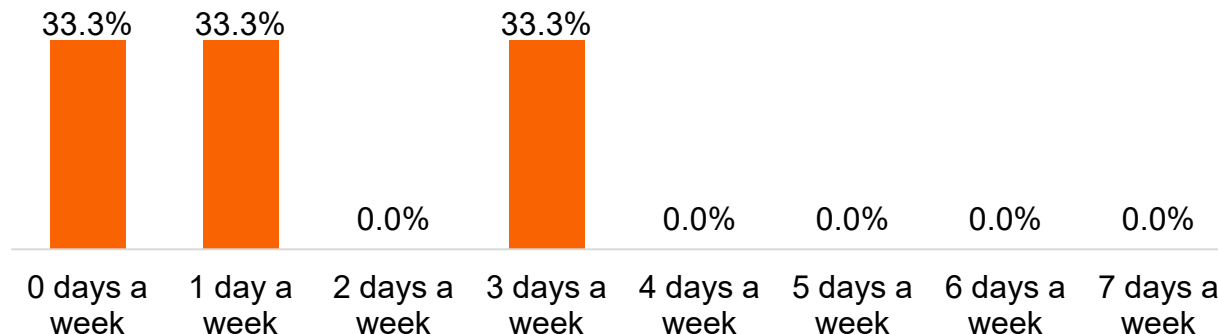
Yes (All duties & responsibilities of my job)

7.1%

No

25.0%

Number of days attending school lectures from home in the past seven days (N = 3)



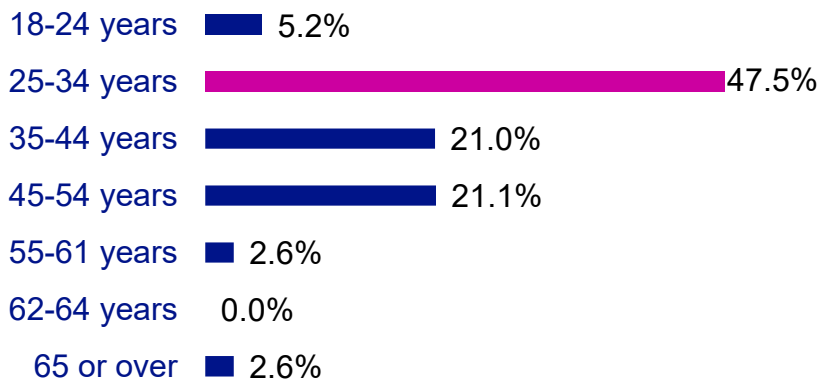
Work-related questions were only asked of respondents who reported that they are currently employed full or part-time. School-related question was only asked of respondents who reported attending school full or part-time. These respondents were not necessarily taking the Light Rail for the work or school trip.

Source: NJT Light Rail Survey, Survey Conducted in 2022/2023; 10 Respondents (Margin of Error $\pm 0.7%$ at 95% Confidence Level)



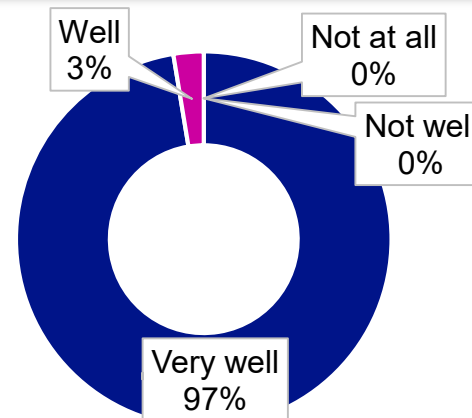
BROAD ST LINE STATIONS TRAVEL PROFILE

Age



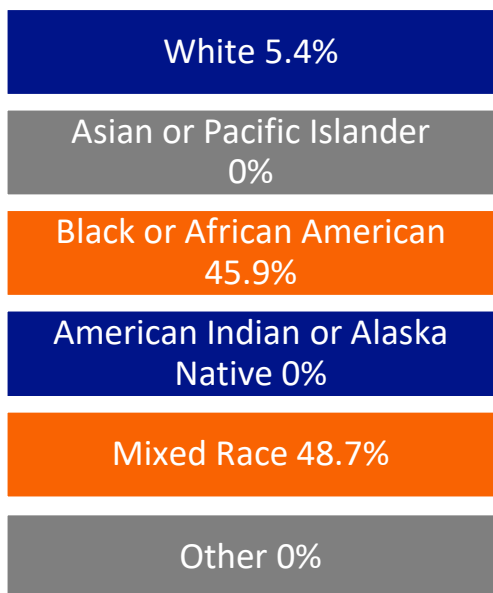
Ethnicity

2.6%
Hispanic

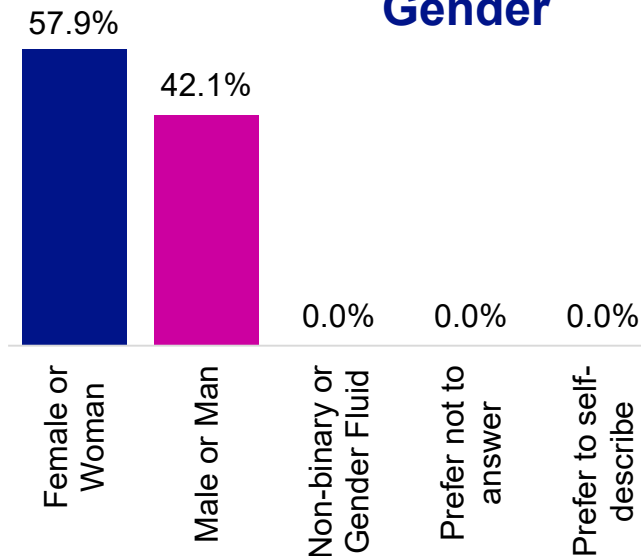


Fluency in Speaking English

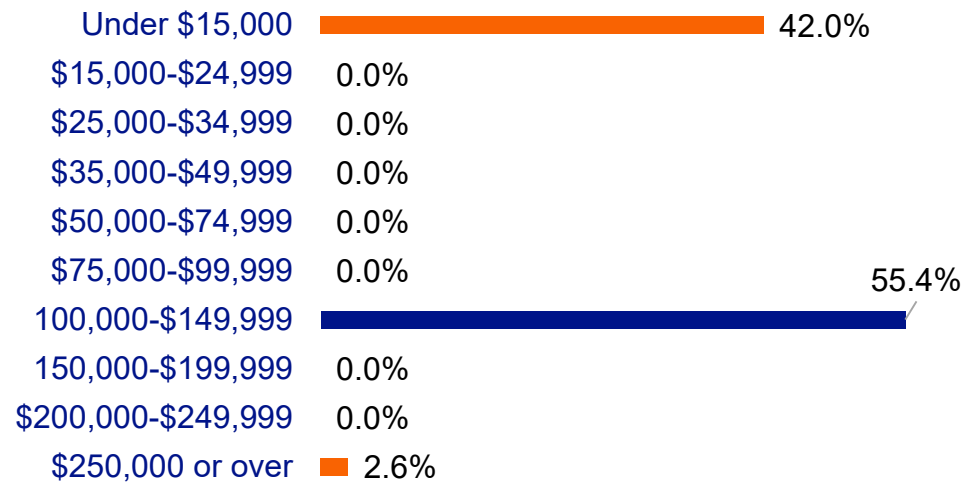
Race



Gender



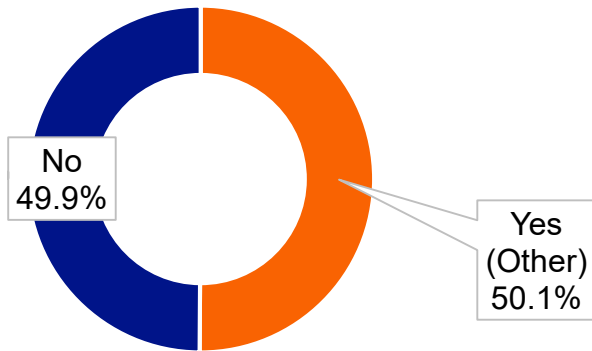
Annual Household Income



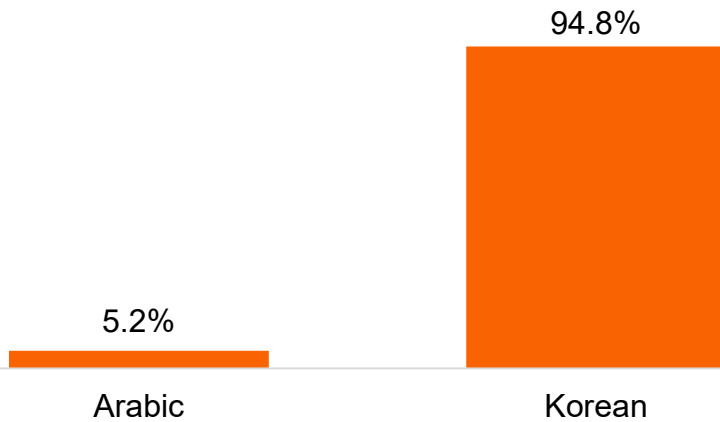


BROAD ST LINE STATIONS TRAVEL PROFILE

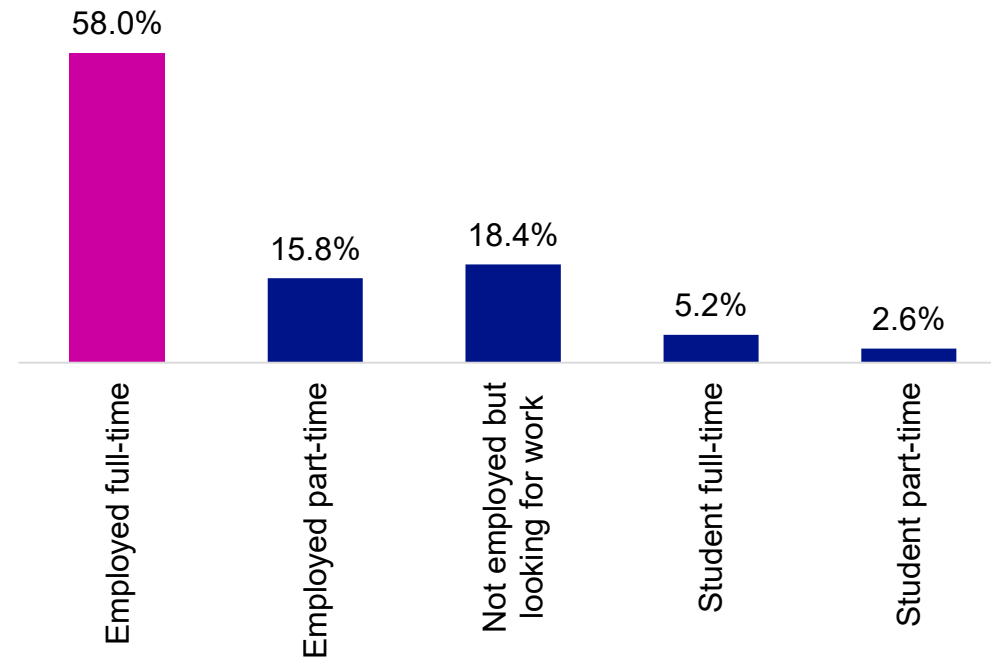
Speak a Language Other than English



Other Languages Spoken (N = 2)



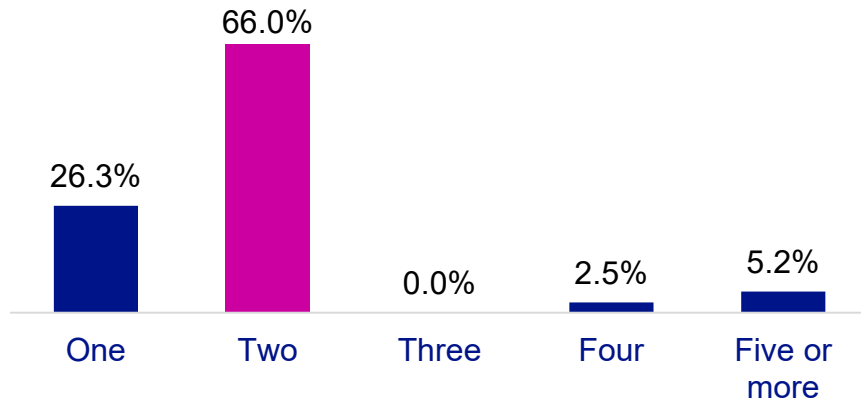
Employment Status (N = 10)



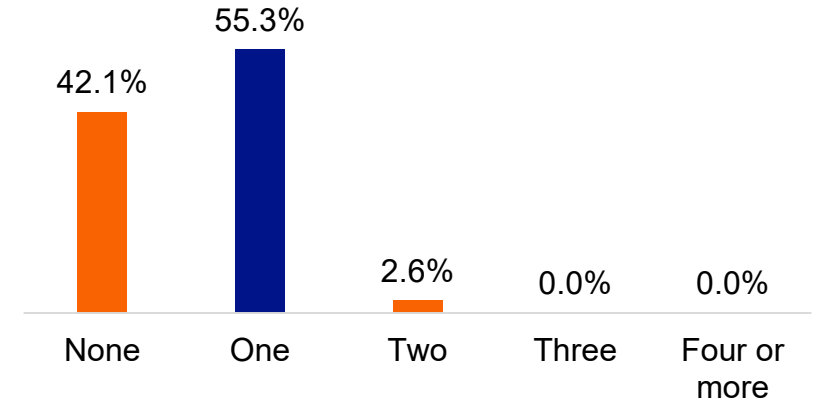


BROAD ST LINE STATIONS TRAVEL PROFILE

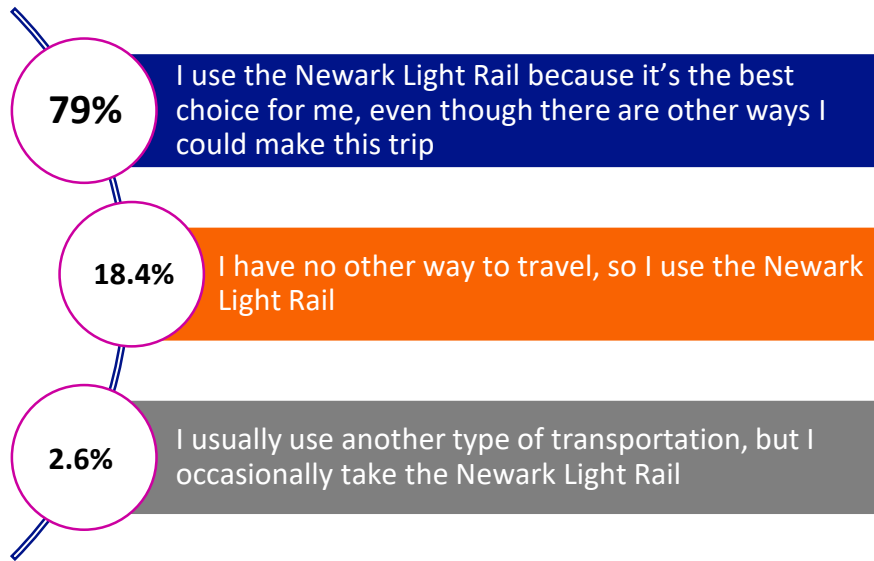
Household Size



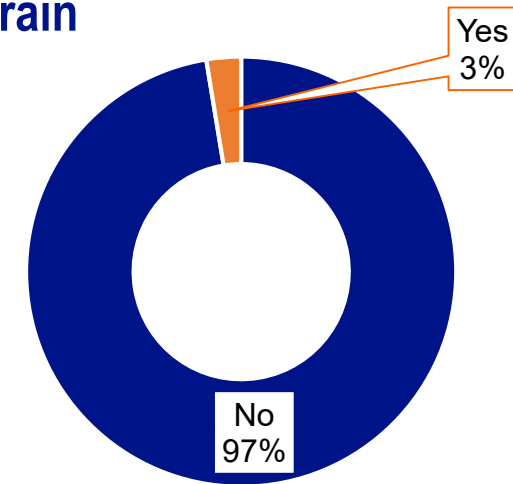
Number of Vehicles



Captivity



Has a physical condition that makes it difficult to use the train





BROAD ST LINE STATIONS TRAVEL PROFILE

Respondents' Comments - Improve User Experience on the Newark Light Rail

NJPAC Station

- To run on schedule and add 1 more stop by Fulton street (if possible)

Atlantic St. Station

- Fix the electric sign at Atlantic
- Working elevators
- Remove the homeless from the station. Safety issue.

Riverfront Station

- More availability of trains