FINAL REPORT

2015 ONBOARD ORIGIN-DESTINATION STUDY

RSG
the science of insight

6.23.2016

PREPARED FOR:
UTAH TRANSIT AUTHORITY

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1.0 STUDY PURPOSE AND DESCRIPTION

In September of 2015, RSG in cooperation with ETC undertook an onboard origin-destination (OD) study on behalf of Utah Transit Authority (UTA). This project was conducted to fulfill FTA's mandated Before and After requirement for the Draper extension. The 2015 survey serves as the "After" study and is similar to the previous survey, conducted in 2013, which represented the 'Before' conditions of the Draper light rail corridor.

In addition to serving as the data source for the 'After' conditions of the Draper light rail corridor, this project also provides the basis for the 'Before' conditions of the Provo-Orem bus rapid transit corridor.

The study relied on a tablet-based questionnaire. Staff conducted surveys directly with riders on UTA transit vehicles. The data collected from this effort were weighted and expanded using Automatic Passenger Counter (APC) data maintained by UTA.

This survey provides UTA and relevant agencies with a comprehensive overview of their transit riders, including: (a) socio-demographics, (b) fare payment, (c) travel purpose, (d) means of access and egress to/from the system and (e) time of travel, and (f) ultimate origins and destinations.

2.0 SAMPLING

2.1 | OVERVIEW

The study team developed sampling plans for each of UTA's weekday fixed routes. The sampling plans identified the number of surveys to be completed on each route by direction and time of day with an eye for ensuring an adequate number of surveys by boarding and alighting stop group pair.

Surveying was conducted on Mondays through Thursdays and focused on trips occurring between 6:30 a.m. and 9:00 p.m., consistent with the 2013 study. Specifically, the sampling plans and all survey efforts were constructed around the following four UTA defined time periods:

- AM Peak (6:30-9:30am)
- Midday (9:30am-3:30pm)
- PM Peak (3:30-6:30pm)
- Evening (6:30pm-9pm)

The O-D survey sampling plan was designed to obtain surveys from 9% of average weekday boardings by route/line, time period, and direction, roughly proportional to actual ridership. While 10% is consistent with current FTA best practices, a 9% target provides a survey sample approaching best practice which is proportional to actual ridership while also staying within UTA's available budget for the project. Overall, in 2014, UTA had approximately 145,000 weekday boardings, with 68,000 on bus and 77,000 on rail. Based on 2014 ridership data, we targeted approximately 13,400 completed surveys, allocated proportionally based on route ridership (see Table 1 and Table 2).

TABLE 1: RAIL ROUTES AND AVERAGE DAILY BOARDINGS (2014)

ROUTE	AVERAGE BOARDINGS PER DAY
TRAX- Red	24,334
TRAX- Blue	21,969
TRAX- Green	14,081
Frontrunner	15,819
S-Line	1,074
Total	**77,277**

TABLE 2: BUS ROUTES AND AVERAGE DAILY BOARDINGS (2014)

ROUTE	AVERAGE BOARDINGS PER DAY
2	2192
3	592
6	828
9	546
11	410
17	493
21	2313
33	1586
35	912
39	1582
41	2132
45	1394
47	1746
54	1079
62	316
72	443
200	3889
201	403
205	2353
209	3000
213	1155
217	3377
218	541
220	1825
223	126
227	198
228	653
232	158
240	767
248	389
307	77
313	68
320	52
354	82
451	196
453	171
454	20

ROUTE	AVERAGE BOARDINGS PER DAY
455	1287
456	22
460	41
461	69
462	75
463	50
470	3106
471	73
472	332
473	374
477	28
500	549
509	797
513	102
516	1026
519	495
520	322
525	418
526	109
551	97
603	1658
604	498
606	92
608	40
612	2087
613	184
616	34
625	441
626	185
627	168
630	418
640	943
645	397
650	232
664	50
665	47
674	35

ROUTE	AVERAGE BOARDINGS PER DAY
675	35
805	205
806	86
807	82
811	628
821	544
822	149
830	2593
831	729
833	80
834	175
836	76
838	57
840	101
841	832
842	114
850	1605
862	623
863	104
880	55
901	30
902	165
919	122
920	82
951	45
952	28
953	41
954	17
960	284
962	123
990	584
992	256
2X	140
35M	2729

The RSG team avoided surveying during holidays or weeks when the college campuses were out of session. The avoided blackout dates are shown in Table 3.

TABLE 3: BLACKOUT DATES FOR ENTIRE STUDY AREA

DAY OF WEEK	DATE	HOLIDAY	TYPE OF HOLIDAY
Wednesday	11/11/2015	Veterans Day	National
Thursday	11/26/2015	Thanksgiving	National
Friday	11/27/2015	Thanksgiving	National
All	12/11/2015-01/10/2016	No classes at local colleges and universities	University/college days off
Friday	01/01/2016	New Years	National
Monday	01/18/2016	Martin Luther King Day	National
Monday	02/15/2015	Lincoln / Washington / Presidents' Day	National

3.0 SURVEY INSTRUMENT

The Full OD survey was administered by an interviewer with a tablet computer. The complete questionnaire can be seen in Appendix A: Questionnaire.

The data collected for the OD survey include:

- Route;
- Any other transit routes used and number of transfers;
- Time of trip;
- Origin;
- Boarding location;
- Alighting location;
- Destination;
- Origin and destination type (e.g. home, work);
- Access and egress modes;
- Method of payment (cash, employer pass, university pass, etc.);
- Home address of respondent;
- Frequency of transit use;
- Other mode options for trip; and
- Gender, race, income, age, employment/student status, language use, and vehicle ownership/use of respondent.

4.0 SURVEY ADMINISTRATION

After discussions with UTA, RSG, and the FTA, it was decided that no On-to-Off survey would be necessary for this project. This decision was made for the following reasons:

- In Salt Lake City, response rates are typically very high, thus there is little non-response bias, making the On-to-Off survey less important, as the boarding and alighting patterns obtained in the O-D survey should have mirrored reality sufficiently well.
- One key reason to use an On-to-Off survey is for weighting up short trips that are usually under-represented due to the fact that riders don't have time to complete the survey before alighting. For this, ETC made follow-up phone calls to respondents with short trips to complete their surveys.
- Finally, UTA's budget did not allow for both an On-to-Off survey and a tablet-based O-D survey with a 10% sample.

4.1 | OD SURVEY ADMINISTRATION

ETC Institute led data collection in two phases:

1) **Fall**: between October 28th and December 4th, 2015

2) **Winter**: between January 12th and February 28th 2016

Full-day data collection training was conducted on October 27th, 2015 and January 11th, 2016, respectively. A total of twenty and ten interviewers, respectively, were hired for the fall and winter survey periods. Survey staff included Spanish-speaking interviewers (two in fall, one in winter).

Interviewers selected riders at random to participate in the survey based on the sampling goals established for each route. Once an interviewer selected a rider for the survey, the interviewer did the following:

- The interviewer approached the person selected and asked them to participate in the survey.
- If the person refused, the interviewer ended the survey, but the refusal was recorded to help assess the overall response rate to the survey.
- If the rider agreed to participate, the interviewer asked if he/she had at least five minutes to complete the survey.
- If the rider did NOT have at least five minutes, the surveyor asked the rider to provide his/her boarding location, alighting location, name, and phone number. ETC Institute's call center contacted the respondent within 48 hours and asked him/her to complete the survey by phone. If a respondent could not or would not provide a phone number, then a printed copy of the survey with prepaid return postage was provided. This ensured that short trips were well represented.

- If the respondent had at least five minutes, the surveyor administered the full survey to the respondent as a face-to-face interview using a tablet computer.

4.2 | SURVEY TOTALS

The survey staff rode trips within the study period throughout the four primary time windows and in both directions. A small number of surveys (n = 150 or .07% of all usable surveys) were conducted just outside of the study time and were included in the dataset, as these were otherwise valid surveys and assumed to be similar to AM Peak and Evening period trips, respectively.

Table 4 shows ridership and both targeted and achieved sampling for UTA buses and each rail line. Surveying on all rail lines and the UTA bus system as a whole exceeded targets. Overall, greater than 12% of UTA ridership was surveyed.

TABLE 4: RAIL AND BUS SURVEY COLLECTION

Route	Average Weekday Ridership (Oct. 1 – Nov. 30, 2014)	Sampling Goal	Usable Surveys	% of Target
TRAX- Red	24,334	2,190	2,793	127%
TRAX- Blue	21,969	1,977	2,186	111%
TRAX- Green	14,081	1,267	1,717	135%
Frontrunner	15,819	1,424	1,699	119%
S-Line	1,074	97	123	127%
Bus	68,468	6,162	7,890	128%
Total	**145,746**	**13,117**	**16,408**	**125%**

5.0 DATA PROCESSING

5.1 | DATA CLEANING

COMPLETENESS OF DATA

Incomplete surveys were not counted toward the survey returns. For this Full OD study, the tablet survey tool did not allow the interviewer to continue through the survey if a question was left unanswered. The only exceptions were certain demographic questions, which some respondents might have been uncomfortable answering (e.g., household income). Therefore, a completed survey was one which had every question answered except those few demographic questions. If, while interviewing a respondent, it was found the respondent could not finish the survey, that survey was marked incomplete and was not counted toward the quota goal.

REAL-TIME DATA REVIEW

To ensure that accurate and quality data were collected, completed surveys were reviewed by field supervisors upon receipt. Field supervisors then provided feedback and additional training to interviewers. Real-time review had the added benefit of calculating the number of surveys completed by time period. Additionally, it provided overall daily progress, the progress of each route, and the progress of the surveyors. This information was also used in the creation of the weekly progress reports.

REAL-TIME GEOCODING

Because a web-based tablet survey was used to conduct and administer intercept interviews, addresses and intersections collected during field interviews were instantaneously geocoded with nearly 100% accuracy because the tablets were equipped with 4G/3G service and interface with Google Maps in real-time. In addition, after addresses and intersections were geocoded, the survey software plots the locations on a map, which served as a visual aid that interviewers used to confirm accurate information was gathered.

INTERVIEWER TRACKING AND MONITORING

ETC tracked the location of their equipment and surveyors using GPS technology. Each surveyor was assigned a surveyor number and a route. Because the equipment used to administer the survey was GPS-enabled, supervisors know where each of their surveyors was located at any given time.

Field Supervisors also rode along with each surveyor periodically throughout the day to check on their accuracy and productivity.

VERIFICATION OF DATA COLLECTION

The following data cleaning steps were taken after data collection:

- Checking for valid home, origin, and destination street names, city names, and zip codes;

- Ensuring the number of household occupants was greater than or equal to the number of employed members of the household;
- Ensuring the respondents who indicated that they were employed also reported that at least one member of their household was employed;
- Ensuring that transit route/line names and stops/stations were consistently spelled/coded
- Ensuring that transfers to/from other transit routes/lines were possible, with some leeway provided for riders who walk several blocks to reach their next route;
- Ensuring the time of day a survey was completed was reasonable given the published operating schedule for the route;
- Ensuring the directionality of the record was correct based upon the route, origin, and destination;
- Ensuring the origin and destination addresses are not the same;
- Ensuring that the boarding and alighting addresses are not the same;
- Ensuring the boarding and alighting addresses make sense for the route;
- Ensuring that the respondent did not list the same route twice;
- Ensuring that the appropriate fare type was used in response to the age of the respondent;
- Checking to be sure the access/egress mode is appropriate given the distance of travel from the trip origin/destination to place where the respondent boarded/alighted transit; and
- Reviewing the total distance on transit compared to the total trip distance.

VISUAL INSPECTION

This step involved a visual inspection of the trip record. The key tasks that were conducted as part of this visual inspection include:

- Visually inspecting and examining key variables of survey trips with very short distances;
- Visually inspecting the sensibility of trips with zero transfers or three or more transfers;
- Visually inspecting the sensibility of drive access/egress trips given the distance traveled by car relative to the distance traveled by transit;
- Visually inspecting the sensibility of drive access/egress trips with more than one transfer;
- Visually inspecting sensibility of the origin-to-destination path with respect to the survey route that was used for the trip; and
- Visually inspecting the routes reported being used for the trip.

If a record passed all of the visual checks and verifications listed above, the record was classified as "useable" and tagged for inclusion in the final survey database.

5.2 | DATA WEIGHTING/EXPANSION

The study team recognized the importance of weighting data to the most disaggregate level possible and followed a multi-step process similar to one used on FTA-driven OD studies.

Stop-level APC data for the study period were obtained from UTA. For the TRAX light rail routes, the Sugarhouse streetcar and Frontrunner, weekday data (excluding holidays) were used from the period between October 26 and December 11, 2015. For bus routes, weekday (excluding holidays) data were used from the period between January 12, 2016 and February 25, 2016.

On many bus routes, APC data were collected on a selection of dates throughout the study period. The average boardings and alightings used were equal to their sum divided by the number of observations on each specific trip.

Bus and rail stops were assigned to segments based on geography. APC records were assigned to one of four time periods, mentioned earlier:

- AM Peak (6:30-9:30am)
- Midday (9:30am-3:30pm)
- PM Peak (3:30-6:30pm)
- Evening (6:30pm-9pm)

For both bus and rail surveys, the data were expanded to match full ridership levels. This allows for easier analysis of both demographic data and travel flows by estimating everything in terms of actual riders.

Data were weighted and expanded by an iterative proportional fit (IPF) procedure to match average daily ridership for each boarding and alighting segment by route, time of day, and direction with the OD survey providing the seed for IPF (Table 5: Weighting and Total Ridership).

TABLE 5: WEIGHTING AND TOTAL RIDERSHIP

Route	Average Weekday Ridership*	Sampling Goal	Surveys (Unweighted/ Not expanded)	Surveys (Weighted/ Expanded)
TRAX- Red	22,635	2,190	2,793	22,635
TRAX- Blue	21,869	1,977	2,186	21,869
TRAX- Green	13,840	1,267	1,717	13,840
Frontrunner	15,309	1,424	1,699	15,309
S-Line	1,136	97	123	1,136
Bus	66,611	6,162	7,890	66,611
Total	**141,400**	**13,117**	**16,408**	**141,400**

Note: Ridership data for TRAX, the Sugarhouse streetcar and Frontrunner are weekday data (excluding holidays) from the period between October 26 and December 11, 2015. Ridership data for bus routes are weekday data (excluding holidays) from the period between January 12, 2016 and February 25, 2016.

5.3 | GEOGRAPHY

Origin and destination addresses were joined to Traffic Analysis Zones (TAZs) using GIS software. The TAZs have been further aggregated for simplicity of analysis. In this report, results are reported by "medium" TAZ district. The 41 medium TAZ districts within the study area are shown in Figure 1: Medium TAZ Districts. Analysis included in this report is based on these geographies. A description of each district is provided in Table 6: Medium TAZ District Descriptions.

FIGURE 1: MEDIUM TAZ DISTRICTS

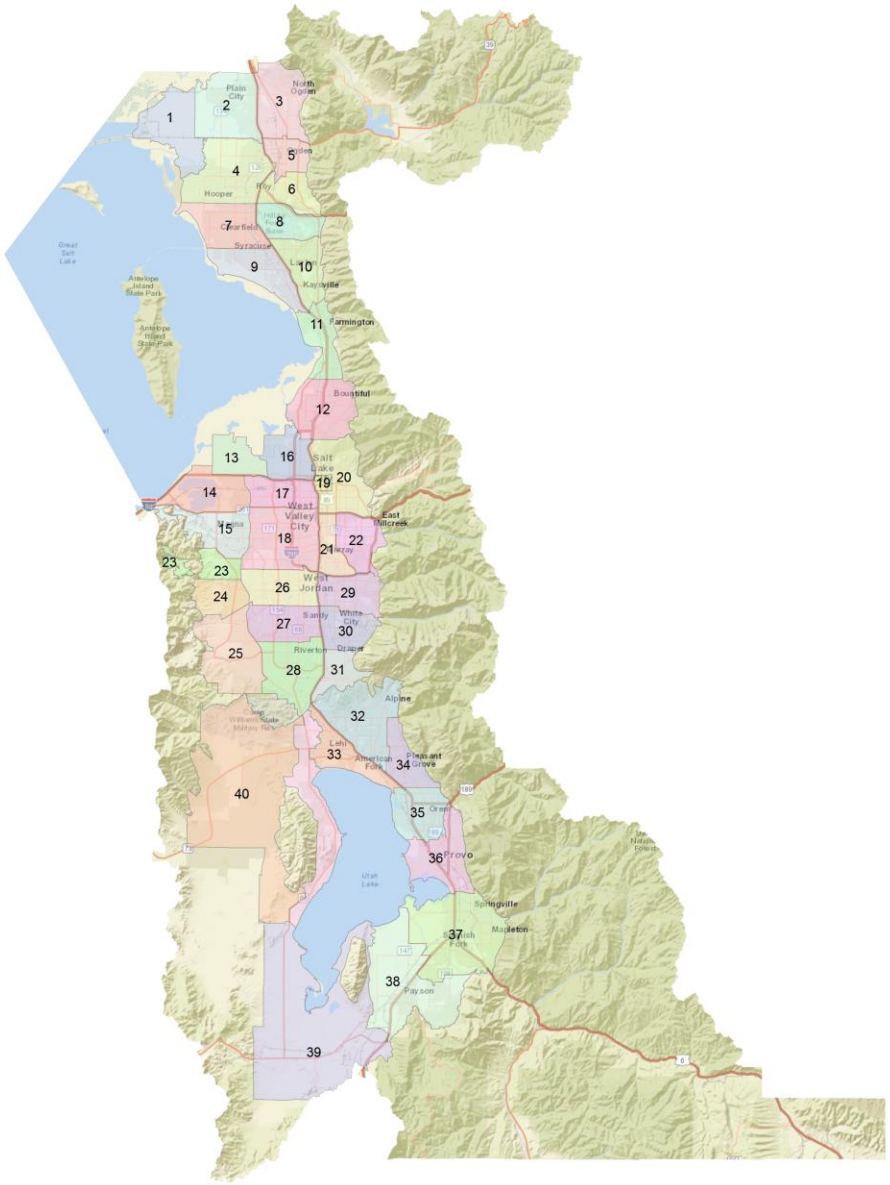


TABLE 6: MEDIUM TAZ DISTRICT DESCRIPTIONS

DISTRICT	LOCATION	DISTRICT	LOCATION
1	Ex-West Weber	22	Millcreek-Holladay
2	NW Weber	23	S.Flat, U-111@62nd
3	North Ogden	24	WJ, WB, west of MVC
4	Hooper-Roy-W.Haven	25	W.Daybreak, Herriman
5	Ogden Core	26	WJ, I-15 to MVC
6	S.Og-Riverdale-Uintah	27	SJ, I-15 to MVC
7	Clinton-W.Pt-Clearfield	28	Riv, I-15 to MVC
8	HAFB area	29	Midvale, Cot, N.Sandy
9	Kaysville-Syracuse	30	Sandy
10	Layton-Ft.Heights	31	Draper
11	Farmington-Centerville	32	Alp, High, AF, Lehi
12	WX, Bountiful, NSL	33	Lehi, I-15 to River
13	NW Quad-International	34	PG, Cedar H, Lindon
14	MVC to Tailings	35	Orem
15	MVC-Magna-ATK	36	Provo
16	Airport-Rose Park	37	Springv., SF, Mapleton
17	I-15 to MVC, I-80 to 20	38	Payson-Salem-Benj.
18	WVC-Taylors	39	Santaquin-Goshen
19	SL CBD	40	Cedar Valley, Eagle Mt
20	SLC east of I-15	41	Saratoga
21	SSL-Murray		

6.0 RIDER PROFILE

The survey collected potentially useful information on the diverse riding population of the region. The demographic data presented below reflect the entire sample, adjusted for linked trips and weighted according to the procedures described above. We report choice ridership – whether or not someone could have taken a car for their trip – by transit mode, since there is considerable variation between the three modes.

6.1 | DEMOGRAPHICS

Men outnumbered women in the sample 59% to 41% (Figure 2). Over half of the respondents, 56%, were ages 18-34 (Figure 3).

FIGURE 2: GENDER

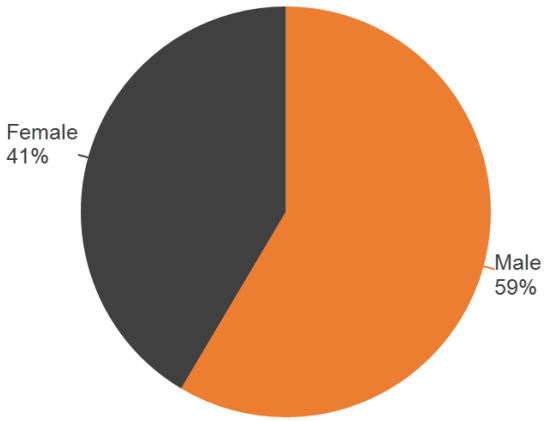
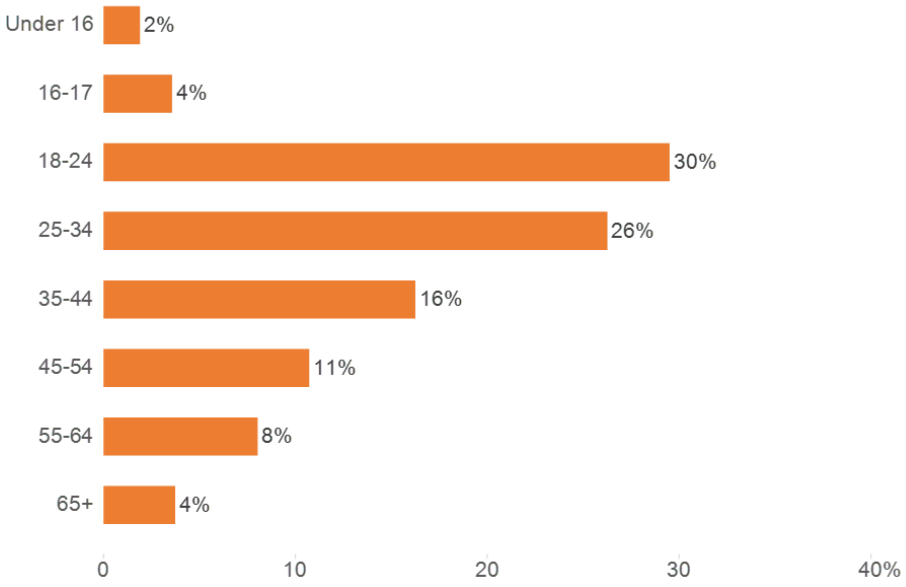


FIGURE 3: AGE



More than one third of respondents, 36%, reported annual household incomes of under $25,000 while median annual household income was in the $25,000-$49,999 range (Figure 4). Over three quarter of respondents, 77%, identified as White (Figure 5).

FIGURE 4: ANNUAL HOUSEHOLD INCOME

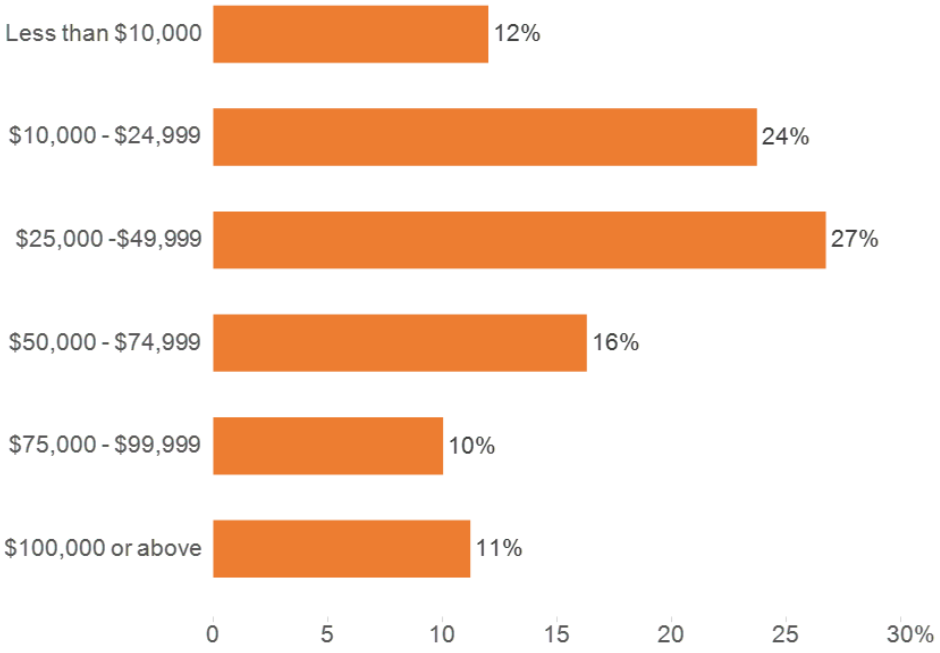
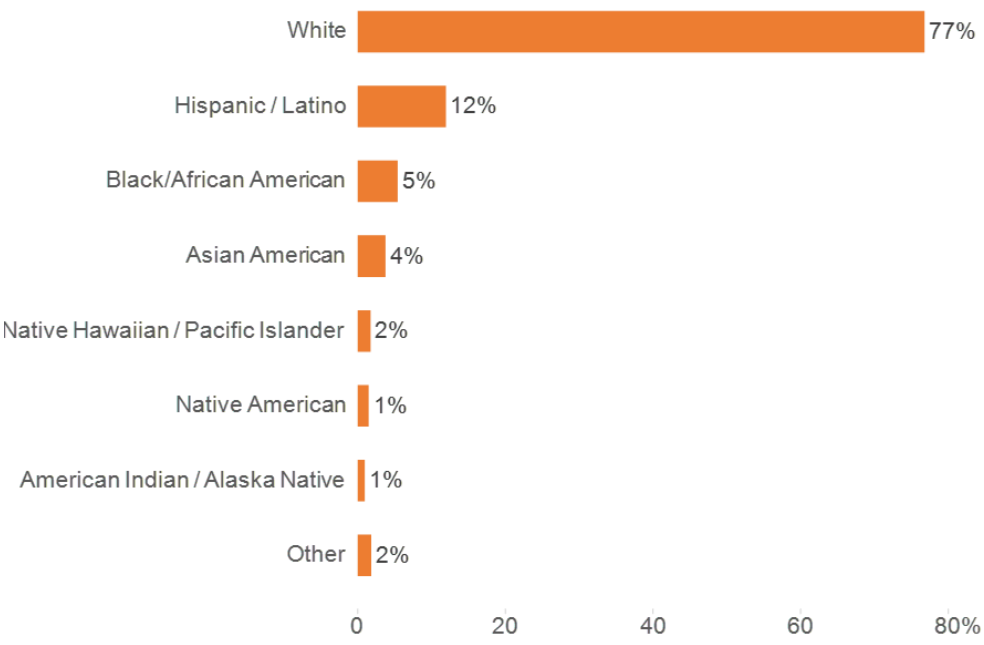


FIGURE 5: RACE



Note: Respondents could select multiple responses and therefore the totals do not add to 100%.

Nearly half of respondents reported working full-time while one quarter of respondents identified as either unemployed or retired (Figure 6). Thirty-five percent of respondents identified as a full or part-time student at some level (Figure 7).

FIGURE 6: EMPLOYMENT STATUS

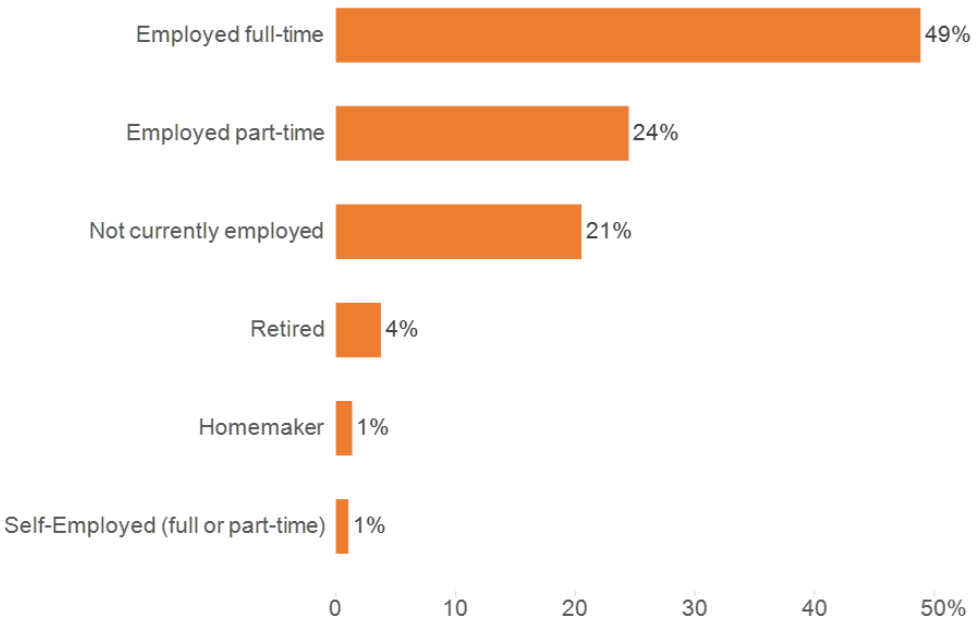
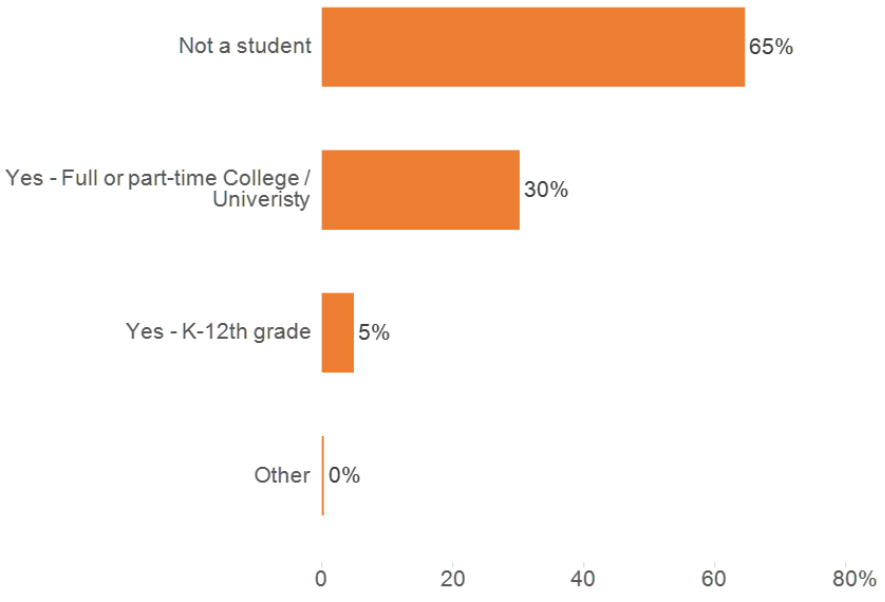


FIGURE 7: STUDENT STATUS



6.2 | CHOICE RIDERSHIP

Over half of the overall sample is made up of "choice" riders, or people who had the option to use a car for the same trip. This varies significantly, however, by transit mode; respondents who rode the bus were much less likely to be choice riders than those who rode light rail or, even more so, commuter rail (Figure 8). Ninety-two percent of commuter rail riders have at least one car in their household while only 70% and 67% of light rail and bus riders, respectively, do (Figure 9).

FIGURE 8: COULD USE A VEHICLE FOR THIS TRIP

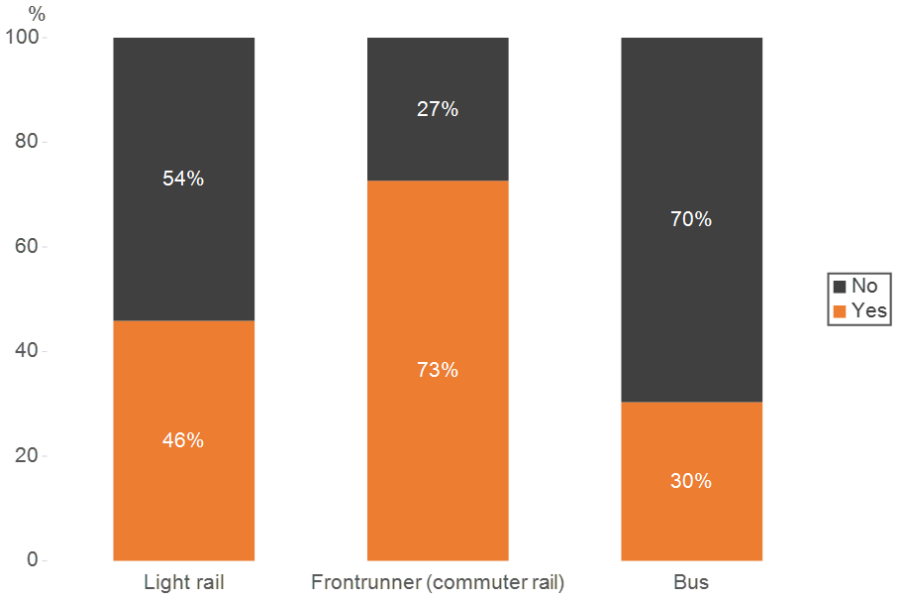
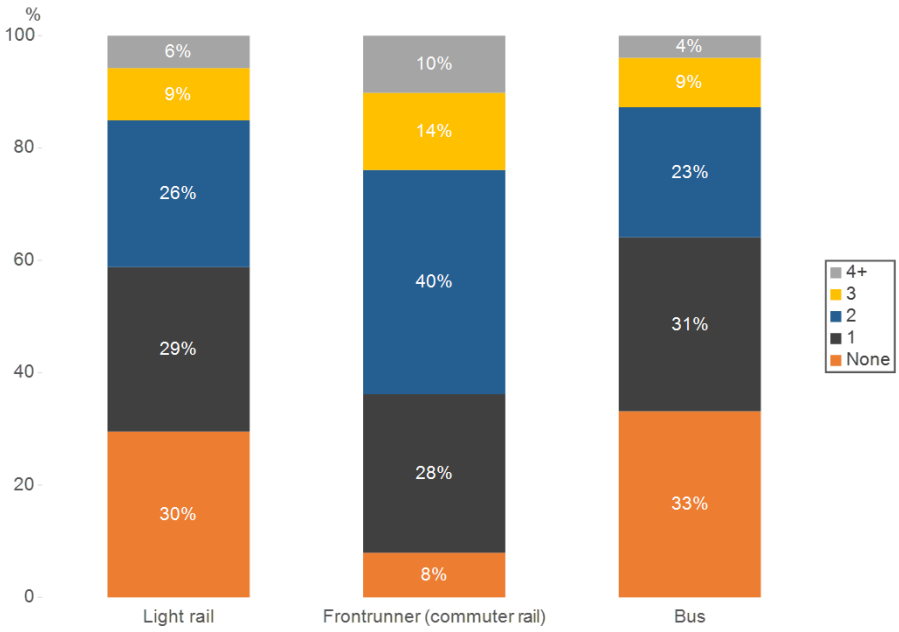


FIGURE 9: NUMBER OF VEHICLES IN HOUSEHOLD



Bus rider respondents without cars are less likely than both light rail or commuter rail riders to expect to buy a car soon (Figure 10). Respondents who rode the bus are also least likely to have a driver's license (Figure 11).

FIGURE 10: IF WITHOUT CAR IS GOING TO BUY ONE SOON

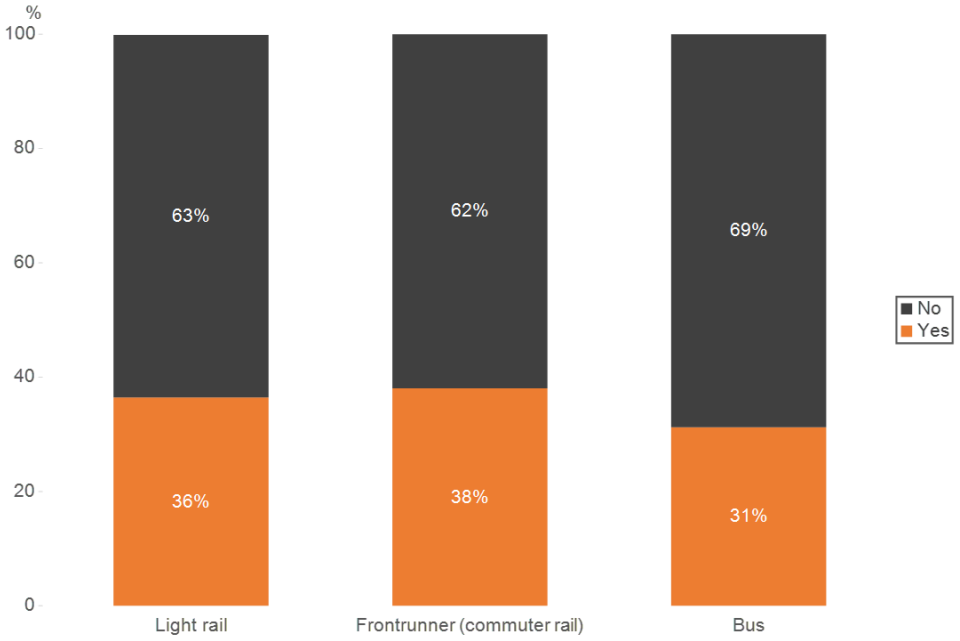
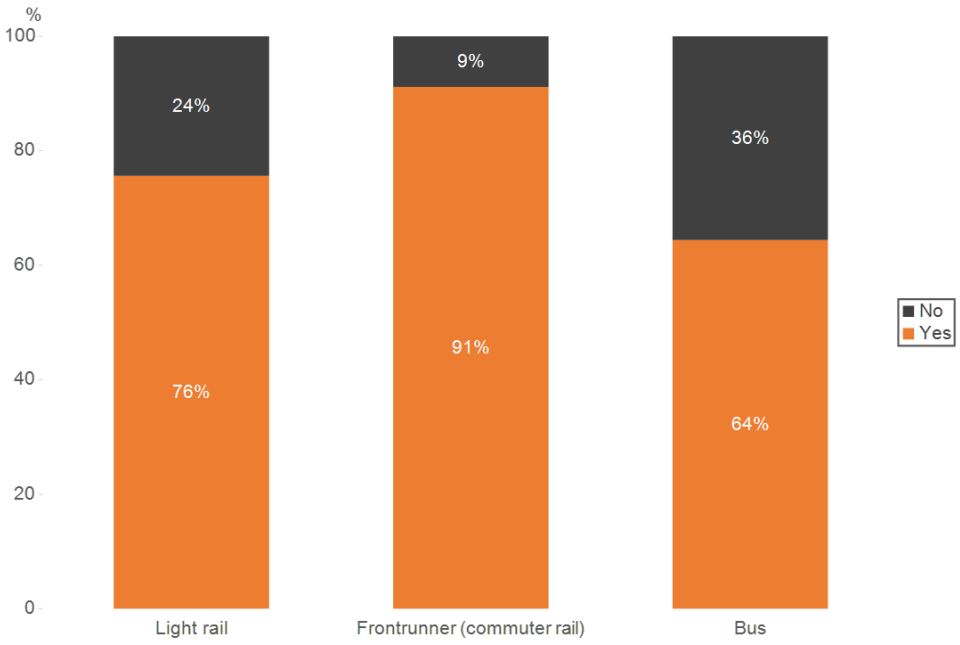


FIGURE 11: DRIVER'S LICENSE



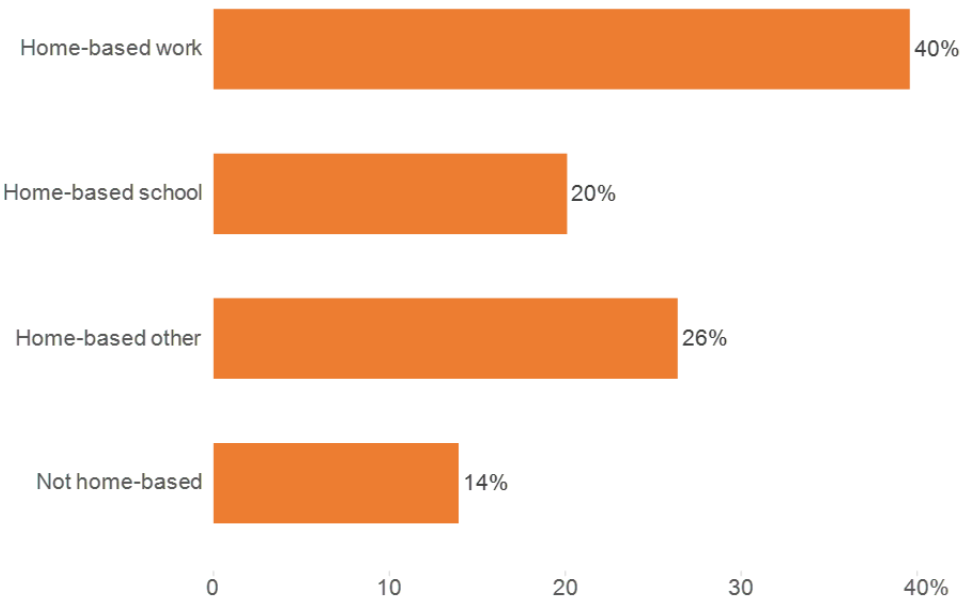
7.0 TRIP PROFILE

In addition to characteristics of the riders themselves, the survey collected data on the nature of each trip. Here, we present trip data for survey respondents.

7.1 | TRIP PURPOSE

In addition to origin and destination addresses, the questionnaire asks each respondent about the function of those places, such as home, work, or school. From these, we can interpret the purpose of the transit trip. For the purposes of this report, we have divided trip purpose into four categories: home-based work trips (i.e., between home and work), home-based school trips (i.e., between home and a college or K-12 school), home-based non-work trips (i.e., between home and a place other than work or school), and trips that are not home-based (i.e., neither the origin nor destination is the respondent's home). Forty percent of the sampled trips on the corridor were home-based work trips, with an additional 20% as home-based school trips (Figure 12)

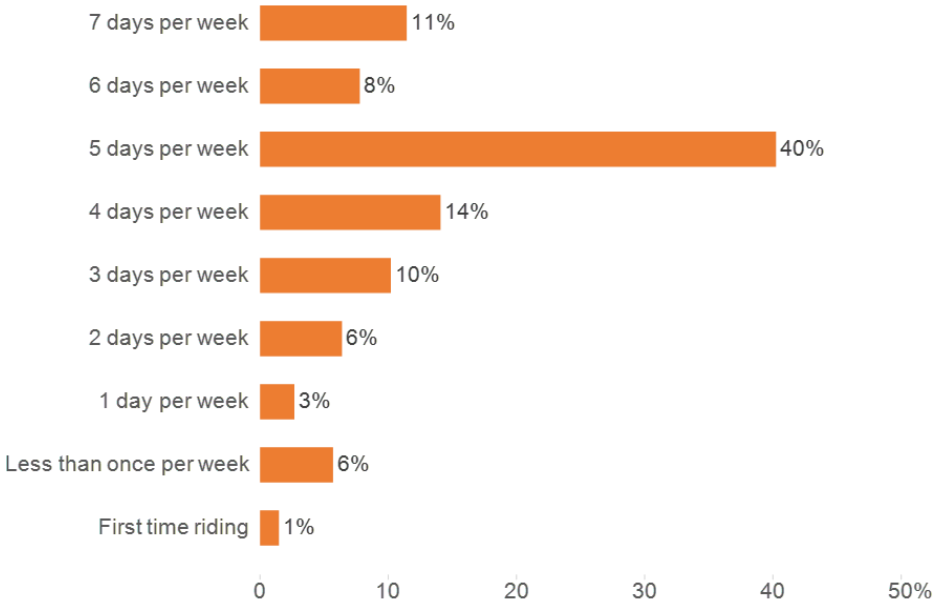
FIGURE 12: TRIP PURPOSE



7.2 | TRIP FREQUENCY

In conjunction with the percentage of home-based work trips, 40% of riders use transit five days per week. Over 80% of riders use transit three or more days per week (Figure 13).

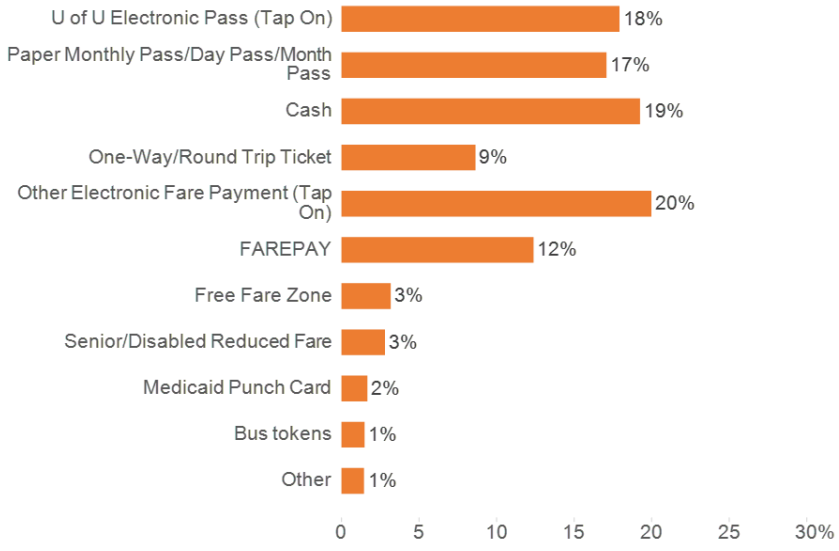
FIGURE 13: TRIP FREQUENCY



7.3 | FARE PAYMENT

Respondents paid for their trip through a range of methods. Tap On electronic passes were used by 38% of sampled riders (Figure 14).

FIGURE 14: PAYMENT METHOD

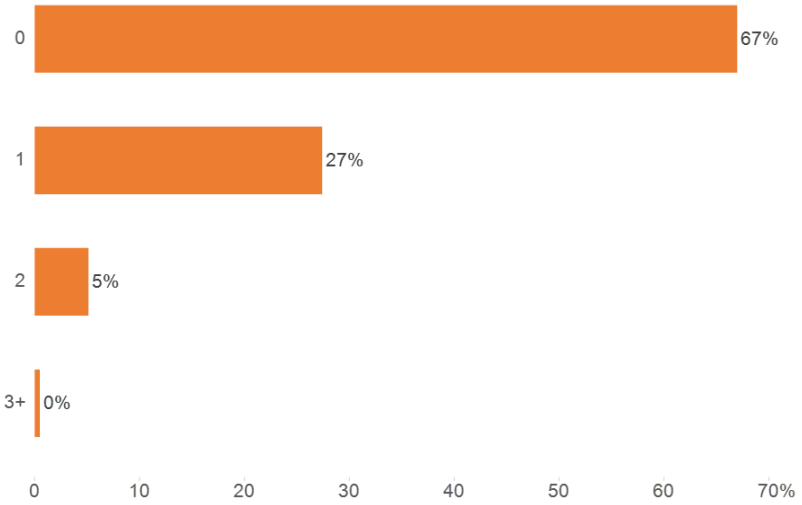


Note: Respondents could select multiple responses and therefore the totals do not add to 100%.

7.4 | TRANSFERS

Nearly 70% of surveyed riders required no transfer and fewer than 6% of riders required more than one transfer (Figure 15).

FIGURE 15: TRANSFERS



7.5 | ACCESS AND EGRESS MODE

Approximately 80% of transit trips began or ended on foot. Fewer than 5% of trips began or ended with anything other than a walk or personal vehicle trip (Figure 16 and Figure 17).

FIGURE 16: ACCESS MODE

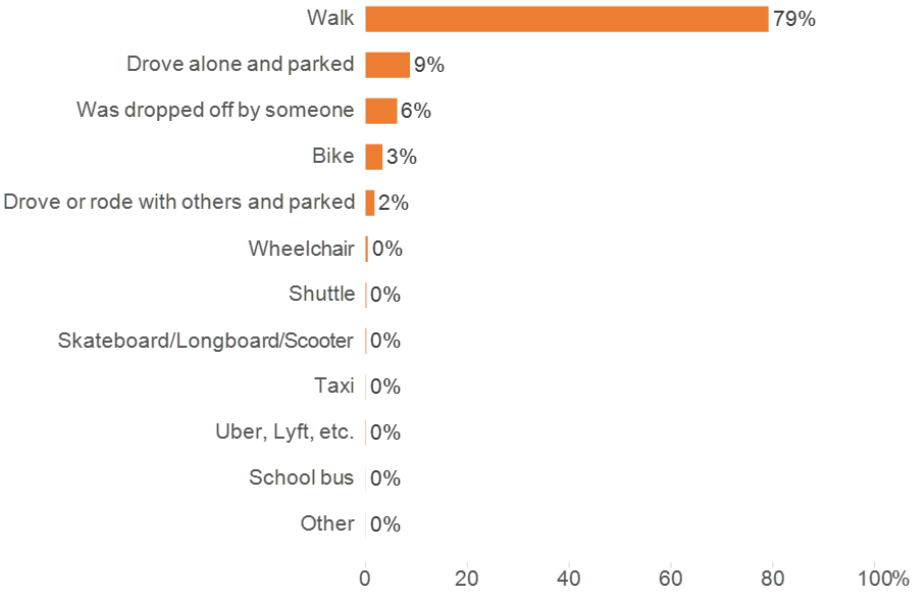
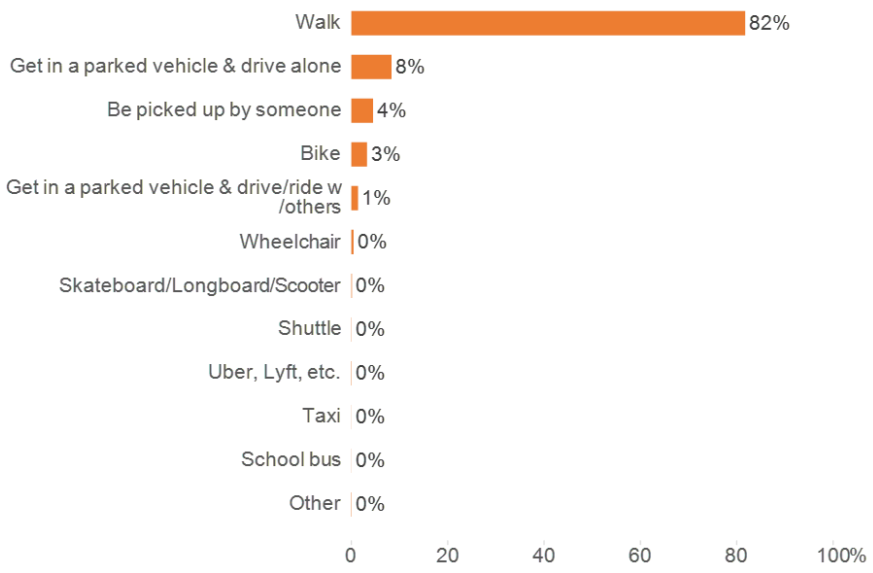


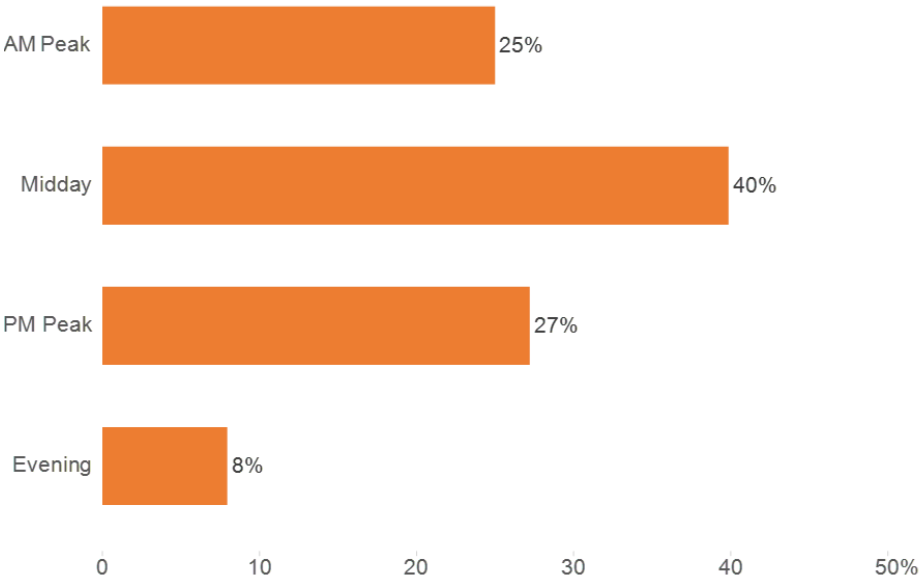
FIGURE 17: EGRESS MODE



7.6 | TIME OF TRAVEL

While over half of all surveyed trips occurred during the AM (6:30AM-9:30AM) and PM (3:30PM-6:30PM) peaks, 40% of respondent trips occurred midday (9:30AM-3:30PM) (Figure 18).

FIGURE 18: TIME PERIOD BOARDED ROUTE



8.0 ORIGIN-DESTINATION ANALYSIS

The four maps below illustrate trip production and attraction by medium TAZ district at two times of day: an early period (6:30am-3:30pm) and a late period (3:30pm-9:00pm). The majority of activity is proximate to the blue line, though there are many trips starting or ending to the blue line's north and south.

FIGURE 19: TRIP PRODUCTION MAP (6:30AM-3:30PM)

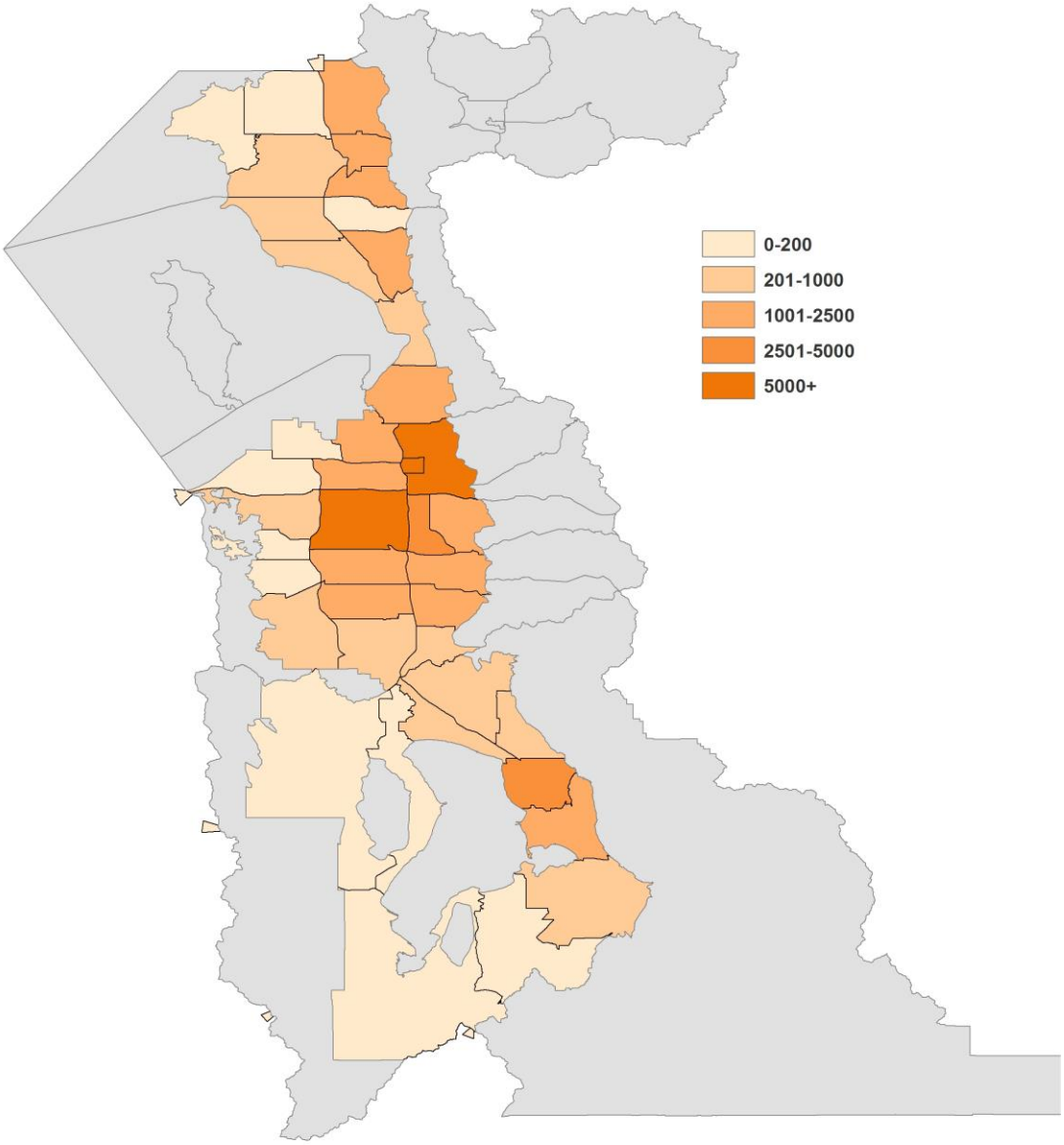


FIGURE 20: TRIP PRODUCTION MAP (3:30PM-9PM)

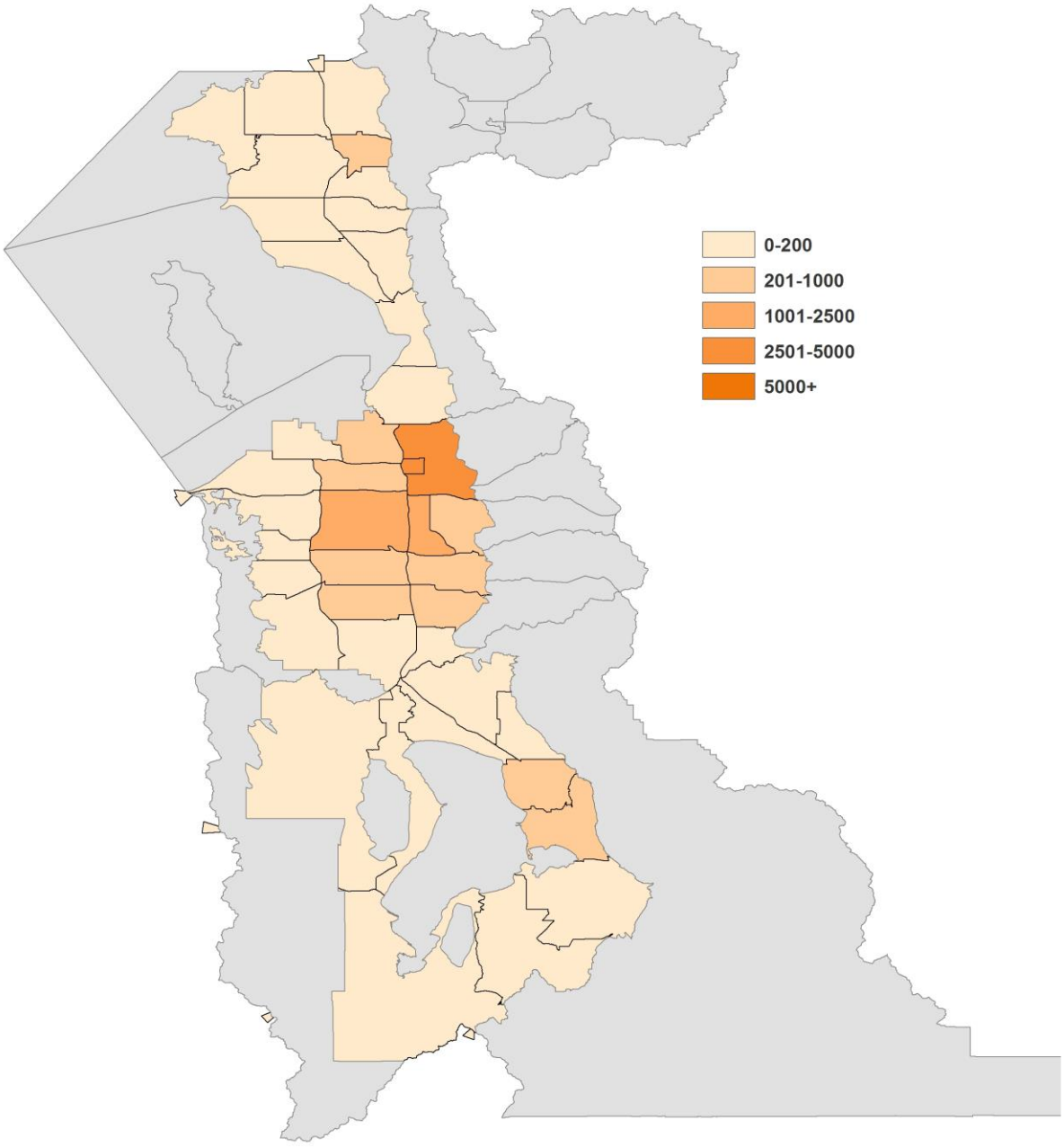


FIGURE 21: TRIP ATTRACTION MAP (6:30AM-3:30PM)

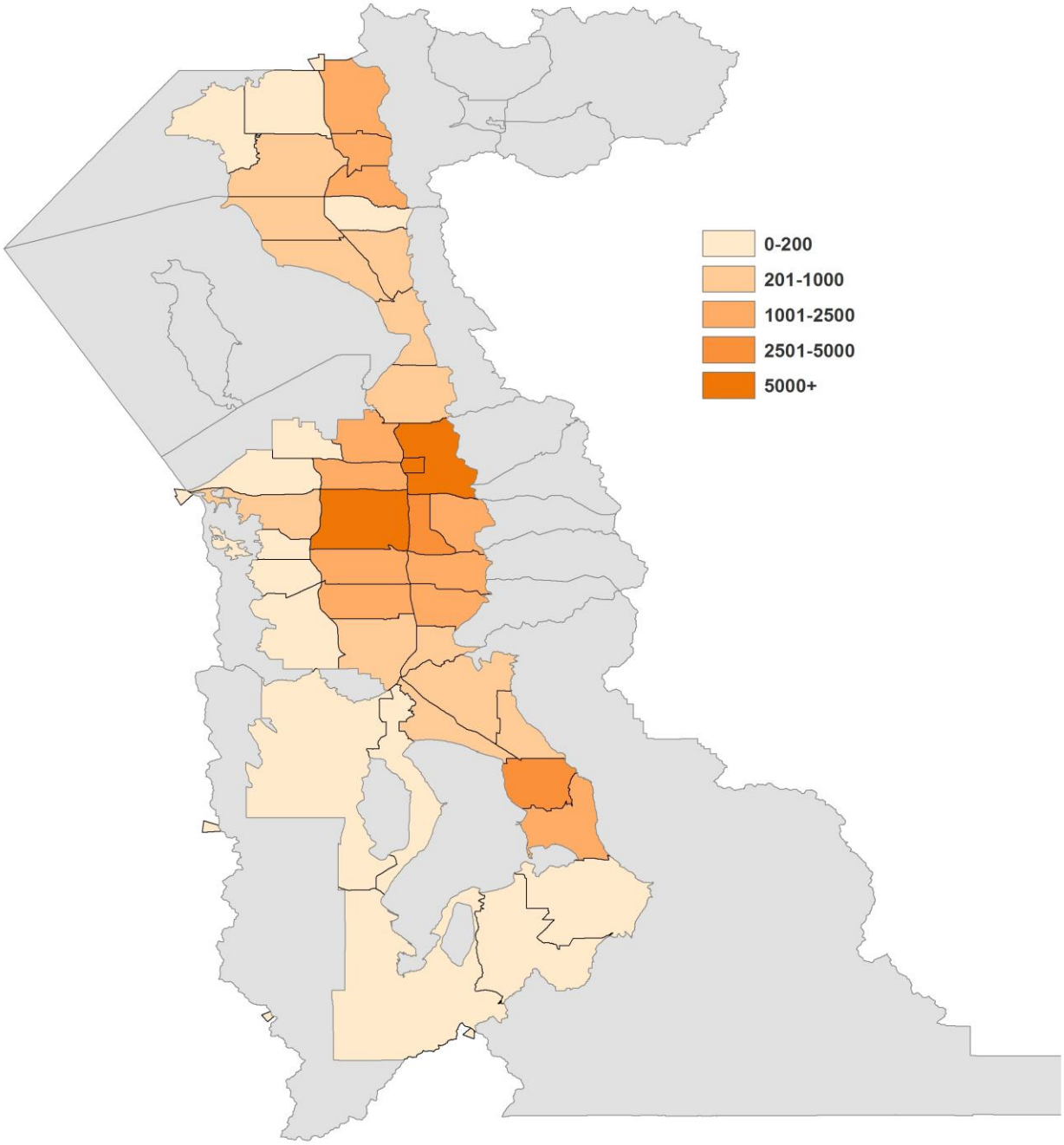
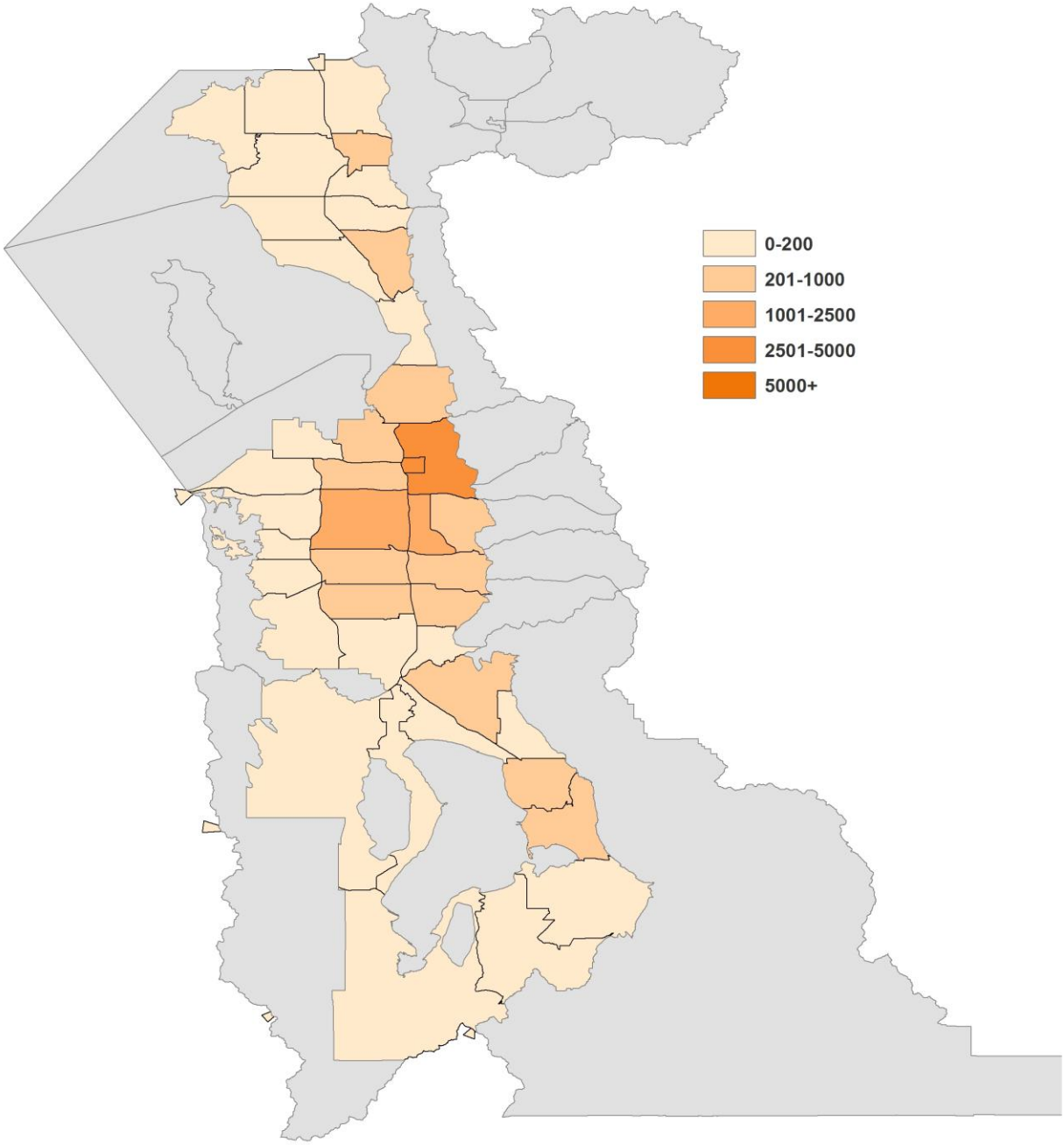


FIGURE 22: TRIP ATTRACTION MAP (3:30PM-9PM)



The charts below show trip production and attraction by time period in absolute numbers (weighted and expanded). The geographical unit is again medium TAZ districts, which can be referenced in Figure 1 and Table 6: Medium TAZ District Descriptions. Approximately 40% of sampled trips either start or end in Districts 19 and 20, which represents the Salt Lake City's Downtown, Central City, and eastside neighborhoods.

FIGURE 23: TRIP PRODUCTION BY MEDIUM TAZ DISTRICT, 6:30AM-3:30PM

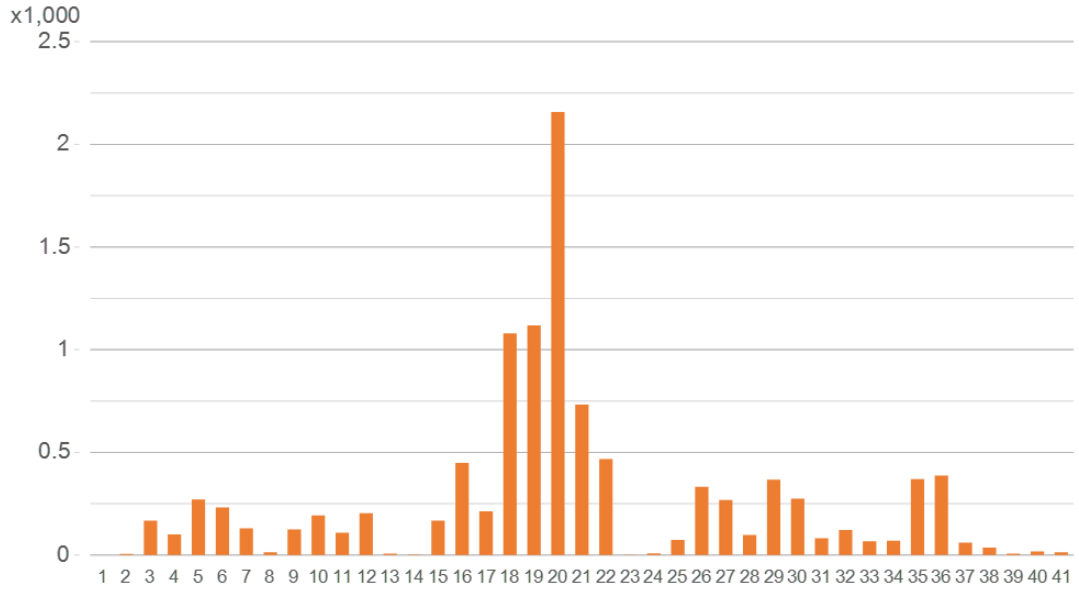


FIGURE 24: TRIP PRODUCTION BY MEDIUM TAZ DISTRICT, 3:30PM-9PM

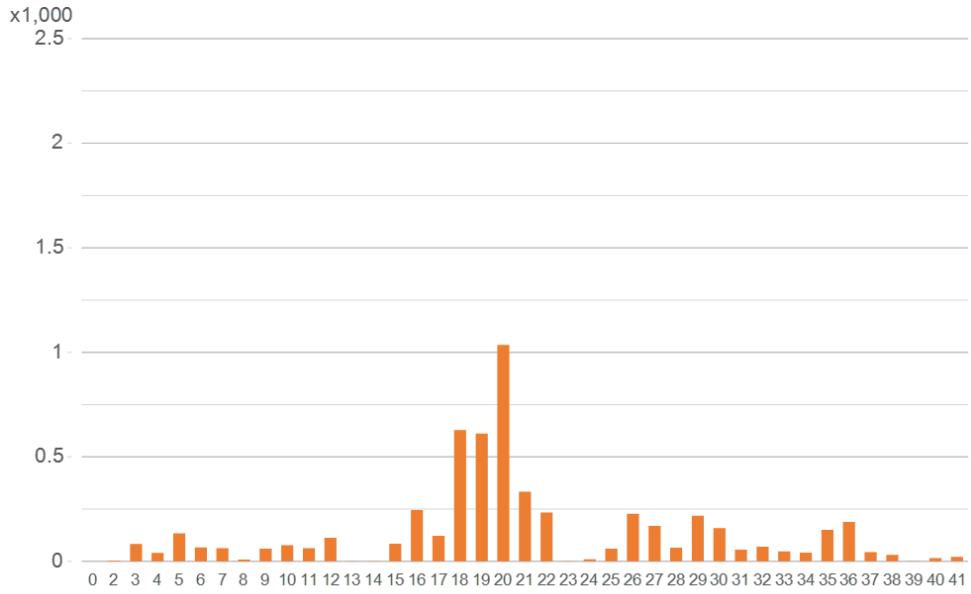


FIGURE 25: TRIP ATTRACTION BY MEDIUM TAZ DISTRICT, 6:30AM-3:30PM

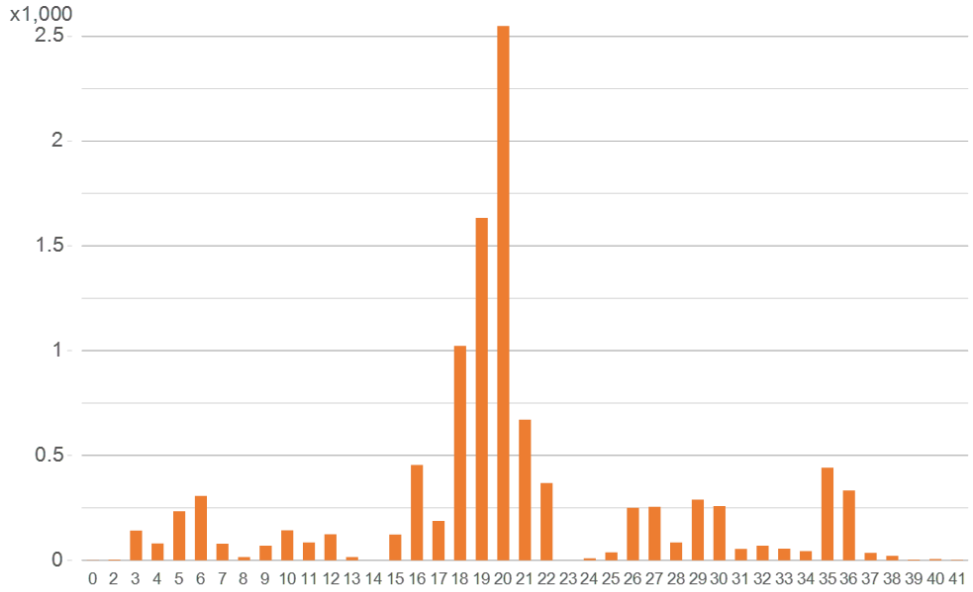
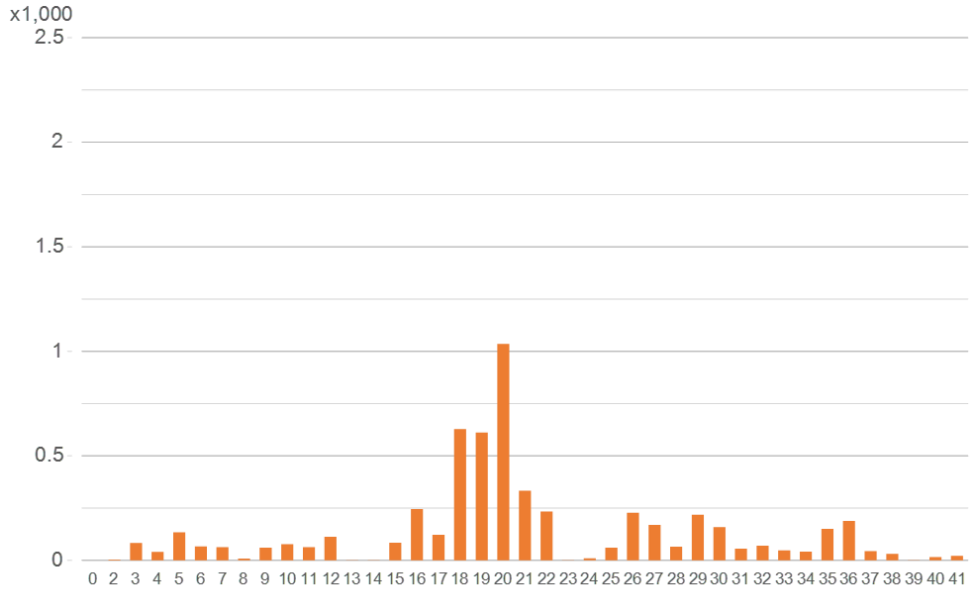
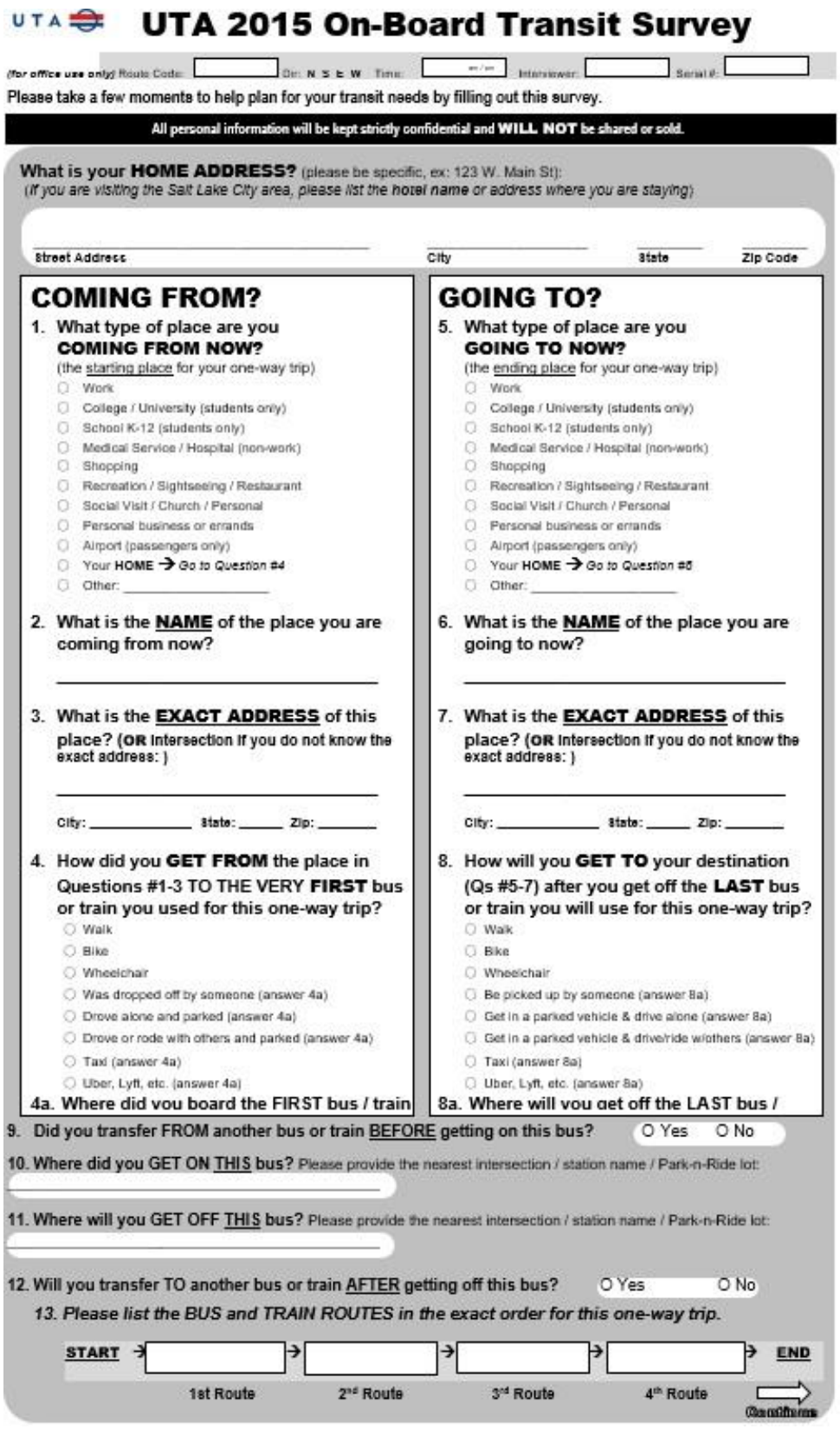


FIGURE 26: TRIP ATTRACTION BY MEDIUM TAZ DISTRICT, 3:30PM-9PM



9.0 APPENDIX A: QUESTIONNAIRE



UTA

UTA 2015 On-Board Transit Survey

(for office use only) Route Code: ____ Dir: N S E W Time: ____ Interviewer: ____ Serial #: ____

Please take a few moments to help plan for your transit needs by filling out this survey.

All personal information will be kept strictly confidential and WILL NOT be shared or sold.

What is your HOME ADDRESS? (please be specific, ex: 123 W. Main St):
(If you are visiting the Salt Lake City area, please list the hotel name or address where you are staying)

Street Address _____ City _____ State _____ Zip Code _____

COMING FROM?

1. What type of place are you **COMING FROM NOW?**
(the starting place for your one-way trip)
- ○ Work
- ○ College / University (students only)
- ○ School K-12 (students only)
- ○ Medical Service / Hospital (non-work)
- ○ Shopping
- ○ Recreation / Sightseeing / Restaurant
- ○ Social Visit / Church / Personal
- ○ Personal business or errands
- ○ Airport (passengers only)
- ○ Your HOME → *Go to Question #4*
- ○ Other: _____

2. What is the **NAME** of the place you are coming from now?
_____

3. What is the **EXACT ADDRESS** of this place? (**OR** intersection if you do not know the exact address:)
_____
City: _____ State: _____ Zip: _____

4. How did you **GET FROM** the place in Questions #1-3 TO THE VERY **FIRST** bus or train you used for this one-way trip?
- ○ Walk
- ○ Bike
- ○ Wheelchair
- ○ Was dropped off by someone (answer 4a)
- ○ Drove alone and parked (answer 4a)
- ○ Drove or rode with others and parked (answer 4a)
- ○ Taxi (answer 4a)
- ○ Uber, Lyft, etc. (answer 4a)

4a. Where did you board the FIRST bus / train

GOING TO?

5. What type of place are you **GOING TO NOW?**
(the ending place for your one-way trip)
- ○ Work
- ○ College / University (students only)
- ○ School K-12 (students only)
- ○ Medical Service / Hospital (non-work)
- ○ Shopping
- ○ Recreation / Sightseeing / Restaurant
- ○ Social Visit / Church / Personal
- ○ Personal business or errands
- ○ Airport (passengers only)
- ○ Your HOME → *Go to Question #8*
- ○ Other: _____

6. What is the **NAME** of the place you are going to now?
_____

7. What is the **EXACT ADDRESS** of this place? (**OR** intersection if you do not know the exact address:)
_____
City: _____ State: _____ Zip: _____

8. How will you **GET TO** your destination (Qs #5-7) after you get off the **LAST** bus or train you will use for this one-way trip?
- ○ Walk
- ○ Bike
- ○ Wheelchair
- ○ Be picked up by someone (answer 8a)
- ○ Get in a parked vehicle & drive alone (answer 8a)
- ○ Get in a parked vehicle & drive/ride w/others (answer 8a)
- ○ Taxi (answer 8a)
- ○ Uber, Lyft, etc. (answer 8a)

8a. Where will you get off the LAST bus /

9. Did you transfer FROM another bus or train BEFORE getting on this bus? ○ Yes ○ No

10. Where did you GET ON THIS bus? Please provide the nearest intersection / station name / Park-n-Ride lot:
_____

11. Where will you GET OFF THIS bus? Please provide the nearest intersection / station name / Park-n-Ride lot:
_____

12. Will you transfer TO another bus or train AFTER getting off this bus? ○ Yes ○ No

13. Please list the BUS and TRAIN ROUTES in the exact order for this one-way trip.

START → [ ] → [ ] → [ ] → [ ] → END

1st Route 2nd Route 3rd Route 4th Route

Questions

OTHER INFORMATION ABOUT THIS TRIP

14. What time did you BOARD this bus? _____ : _____ am / pm (circle one)

15. What fare payment methods were used for this one-way trip? *(select all that apply)*

- O Cash
- O Bus tokens
- O Paper Monthly Pass/Day Pass/Month Pass
- O One-Way/Round Trip Ticket
- O U of U Electronic Pass (Tap On)
- O Other Electronic Fare Payment (Tap On)
- O Senior/Disabled Reduced Fare
- O FAREPAY
- O Medicaid Punch Card
- O Free Fare Zone
- O Other_____

16. Will you (or did you) make this same trip using the same transit routes in exactly the opposite direction today? O No O Yes - **At what time did/will you leave for this trip in the opposite direction?** _____:_____ am/pm (circle one)

17. How often do you ride UTA?
- O 7 days per week
- O 6 days per week
- O 5 days per week
- O 4 days per week
- O 3 days per week
- O 2 days per week
- O 1 day per week
- O Less than once per week
- O First time riding

18. Did you have another option to make this trip today?
- O Yes- I could have driven, carpooled, biked, taxi, Uber, etc.
- O No- Riding UTA or walking was my only option

ABOUT YOU AND YOUR HOUSEHOLD

19. How many vehicles (cars, trucks, or motorcycles) are available to your household? _____ vehicles

19a. [If #19 is more than NONE] Could you have used one of these vehicles for this trip? O Yes O No

19b. [If #19 is NONE] Are you planning to buy a car as soon as you are able? O Yes O No

20. Including YOU, how many people live in your household? _____ people

21. Including YOU, how many people (over age 15) in your household are employed full/part-time? ____ people

22. How many children under age 5 are you traveling with today? _____ people

23. What is your employment status? (check the one response that BEST describes you)
- O Employed full-time
- O Employed part-time
- O Self-Employed (full or part-time)
- O Homemaker
- O Retired
- O Not currently employed

24. What is your student status? (check the one response that BEST describes you)
- O Not a student
- O Yes – Full or Part-time College/university
- O Yes – K - 12th grade
- O Yes – other_____

25. Do you have a disability that limits the kinds of transportation you use? O Yes O No

26. Do you have a valid driver's license? O Yes O No

27. Do you have a smartphone *(e.g. iPhone, Android / Windows Phone, Blackberry, etc.)*? O Yes O No

28. What is your AGE? O Under 16 O 16-18 O 18-24 O 25-34 O 35-44 O 45-54 O 55-64 O 65+

29. What is your race / ethnicity? (check all that apply)
- O American Indian / Alaska Native
- O Asian
- O Black/African American
- O Hispanic/Latino
- O Native Hawaiian / Pacific Islander
- O White
- O Other: _____

30. What is your gender? O Female O Male

31. Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2014 before taxes?
- O Less than $10,000
- O $10,000 - $14,999
- O $15,000 - $19,999
- O $20,000 - $24,999
- O $25,000 - $29,999
- O $30,000 - $49,999
- O $50,000 - $74,999
- O $75,000 - $99,999
- O $100,000 - $149,999
- O $150,000 - $199,999
- O $200,000 - $249,999
- O $250,000 or above

32. Do you speak a language other than English at home? O No O Yes - **Which language?** _____

31a. [If #31 is Yes] How well do you speak English? O Very Well O Well O Less than well O Not at all

Please provide your contact info in the event that we need to contact you to better understand your answers.

Your Name: _____

Phone Number: (_____) _____