MUNICIPALITY OF ANCHORAGE

ANCHORAGE HOUSEHOLD TRAVEL SURVEY

Final Report

September 26, 2002

NuStats

3006 Bee Caves Rd., Suite A-300 . Austin, Texas 78746
(512) 306-9065 . fax (512) 306-9077 . *www.nustats.com*

Contact: Johanna Zmud, President

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

BACKGROUND

This report presents selected results from the 2002 Household Travel Survey for the Municipality of Anchorage. The survey collected weekday travel behavior characteristics from a representative sample of households residing in the Municipality of Anchorage. It was designed to capture activity and travel information for household members (age five and older) during a 24-hour timeframe. The data will be used by AMATS (Anchorage Metropolitan Area Transportation Study) to update transportation demand forecasting models and to identify transportation needs in the region. All data collection activities conformed to standard procedures for conducting household travel surveys. The sampling, survey design, and reporting methodologies are recognized by major research organizations, including the Transportation Research Board (TRB), the American Association of Public Opinion Research (AAPOR), and the Council of American Survey Research Organizations (CASRO).

SURVEY OBJECTIVE

The survey objective was to provide data for regional transportation modeling databases, which include socioeconomic and travel behavior information of area households. The updated databases will be used by the Municipality of Anchorage to update and expand regional transportation demand models, including the functions of estimating trip generation and distribution, mode choice, and assignments. In order to achieve the desired results, the survey had the following goals:

- Capture a random sample of households within the Municipality of Anchorage.
- Over sample households in Eagle River and Chugiak.
- Collect demographic data about all persons in households.
- Collect data on vehicles available to households.
- Capture data from trips made by all modes including origin / destination addresses.
- Capture an enrichment sample of transit users.
- Collect 24-hour activity and trip details for each person age five years and older.

SURVEY METHODOLOGY

Beginning in March 2002, households in the Municipality of Anchorage were recruited by telephone to participate in the survey, which required every household member age five years or older to complete a 24-hour travel log. Demographic interviews were conducted with a representative sample of these households to gather data about the household and its members. A complete list of data items collected during the survey is located in the accompanying Technical Report of Methods. Following the demographic interviews, households were randomly assigned a travel day on which their members age five and older were asked to record travel destination locations, travel mode, trip duration, persons traveling and destination activity. All trip data were collected before May 30, 2002.

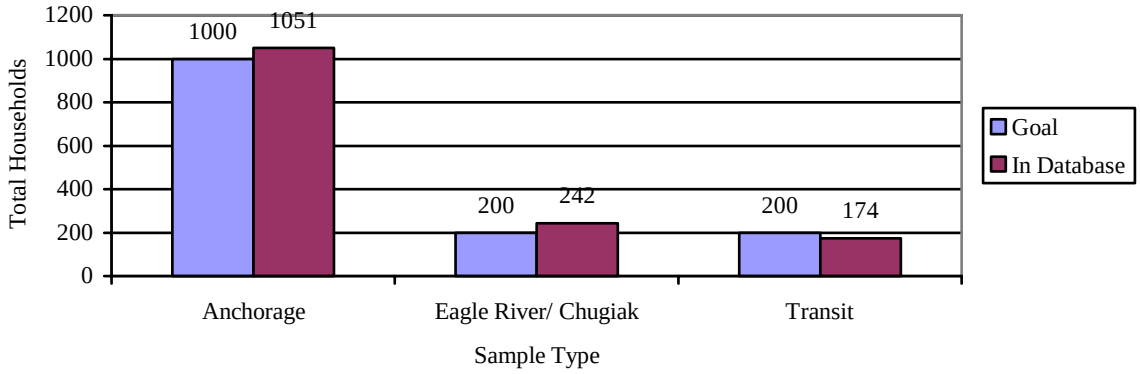
The sampling plan for the Household Travel Survey was a multi-frame design. The main sample was a pure random sample of households with telephones located within Anchorage. There were 1,051 households in this Anchorage sample. As the Technical Report of Methods documents, the survey sample was a good representation of households in Anchorage, with the exception of household size. The sample under-represented larger (4+ person) households, as do most household travel surveys.

In addition to a pure random sample of households in Anchorage, there was an over sample of households with telephones located in the communities of Eagle River and Chugiak. This over sample was done because Eagle Creek and Chugiak are located in a high-growth corridor that tends to attract high-income householders. Such households were assumed to have significantly different socio-demographic characteristics and travel patterns from those located in the Anchorage Bowl, and their data would be important for reliable updates to the regional transportation demand models. In the final sample database, there were 242 households located in Eagle River and Chugiak, representing 19 percent of all sampled households. The actual percentage of households in Eagle River and Chugiak, relative to the rest of the Anchorage borough, was 11 percent according to the 2000 Census. Therefore, a weight by geography was developed and applied for data analysis and reporting.

Findings presented in this report are based on aggregated data, totaling 1,293 randomly sampled households, including 1,051 households with telephones in Anchorage and the over sample of 242 households in Eagle River and Chugiak. These aggregate data have been weighted to control for the over sample of households in Eagle River and Chugiak and also balanced by household size to account for the under representation of larger households in the sample. The data were expanded to 2000 estimates for total households from the U.S. Bureau of the Census. Thus, the 1,293 sampled households were used to represent all 94,822 households in the study area. (Also see Technical Report of Methods for full disclosure of sampling and data collection methods, sample weight and expansion factor construction, and response rate calculations.)

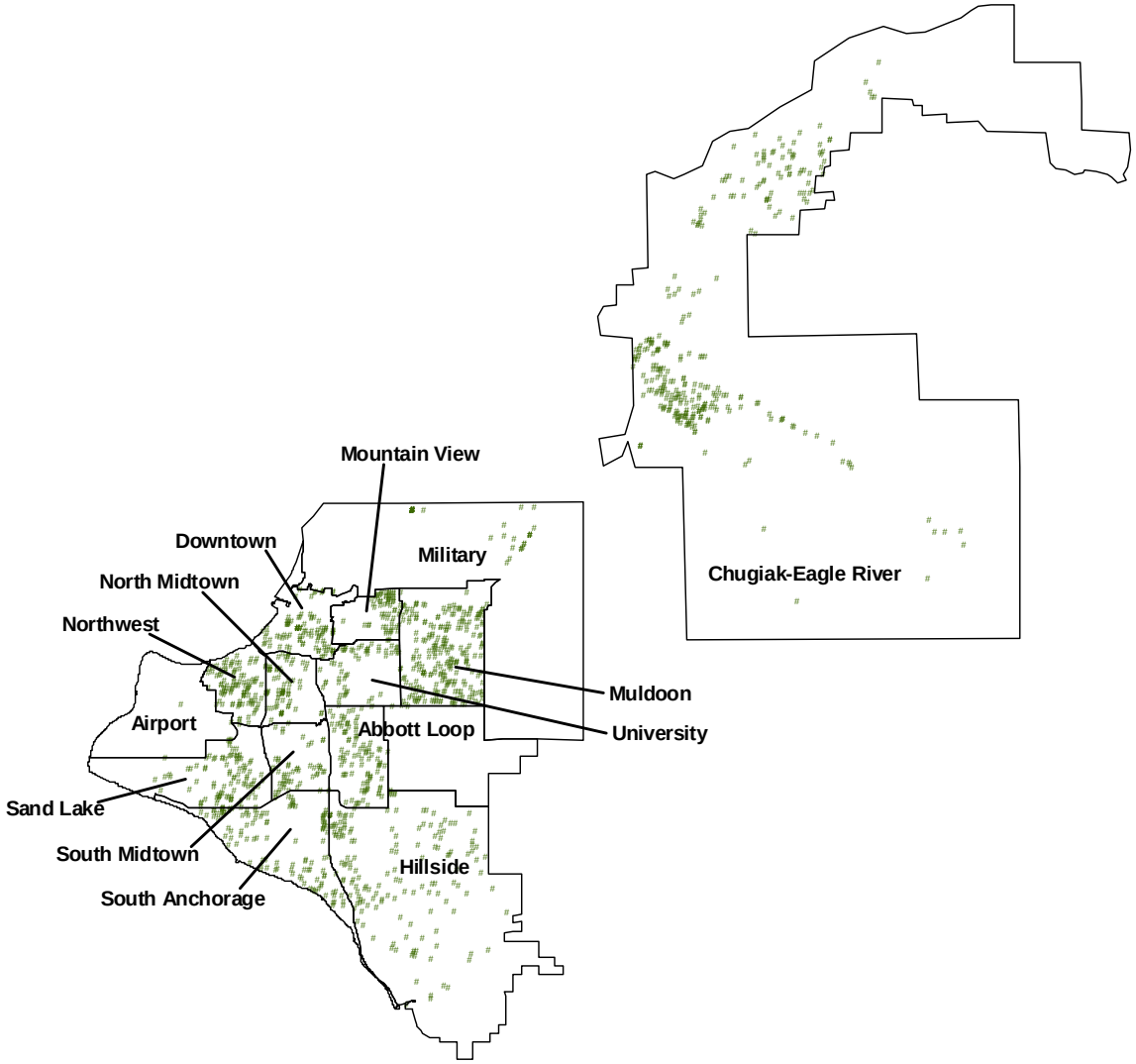
This report also contains a section describing the socio-demographic characteristics and travel patterns of an enrichment sample of People Mover users, sampled via non-probability techniques. These People Mover users form their own database. There are data from 174 transit-using households available for analysis. Because these data were not based on probability sampling techniques, they cannot be expanded to represent total transit users in Anchorage. However, the unweighted transit-user data provide useful insights.

FIGURE 1: SAMPLE GOALS AND PERFORMANCE



The primary final database (that is, the one excluding the transit using households) provides a good geographic representation of households in the study area. Figure 2 illustrates the geographic dispersion of sampled households among fourteen (14) sub-areas.

FIGURE 2: GEOGRAPHIC DISTRIBUTION OF SAMPLED HOUSEHOLDS



KEY FINDINGS

As shown in Table 1, the 1,293 households in the survey sample represented 94,822 households and 250,522 persons in the Municipality of Anchorage. Data from the Census 2000 indicated that the Municipality of Anchorage had 94,822 households and 260,283 persons. While the expanded data matched total households, it totaled fewer persons due to the under representation of larger (4+ person) households in the sample. Because of the weight by household size that was applied to the data, the average household size for the expanded data was 2.64 persons. This estimate closely matched the Census 2000 estimate of 2.67 persons. Other key household statistics based on the expanded survey data also closely matched Census 2000 estimates. The mean number of workers per household was 1.48; and the average number of vehicles available to each household was 2.02.

TABLE 1: KEY HOUSEHOLD (HH) STATISTICS FOR THE MUNICIPALITY OF ANCHORAGE

Variable	Expanded Data
Total Households	94,822
Total Persons	250,522
Persons per HH	2.64
Total Workers	141,109
Workers per HH	1.48
Total Vehicles	191,421
Vehicles per HH	2.02

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

In these social statistics, Anchorage was comparable to estimates for the state of Alaska, with the exception of vehicle availability. According to 2000 data from the U.S. Bureau of the Census, the average household size for the state was 2.74; the number of workers averaged 1.47; and the average number of vehicles available for households was 1.37. Anchorage statistics mirrored those for the United States, with the exception of workers per household. For the United States as a whole, household size averaged 2.59 persons; workers per household averaged 1.28; and the average number of vehicles available for households in the United States was 2.0.

Table 2 summarizes the survey trip characteristics of persons and households residing in the study area. When the sample data of 12,092 unlinked trips were expanded to the Municipality of Anchorage, there were nearly one million person trips generated in the region on an average weekday. For purposes of this reporting, a "trip" was defined as travel from one place to another place. Data were reported for a 24-hour period from 3:00 a.m. to 2:59 a.m. Total trips were based on unlinked trips for persons aged five years and older.

Of all trips, 89 percent were vehicle trips. Seven percent of total trips were non-motorized trips and four percent were transit trips. The majority of vehicle trips (51 percent) were single occupancy vehicle (SOV) trips. Among all vehicle trips, the average vehicle occupancy (AVO) was 1.75 persons. The AVO was based on both household and non-household members traveling with a driver. Work trip AVO was 1.18.

TABLE 2: KEY TRIP STATISTICS FOR THE MUNICIPALITY OF ANCHORAGE

Variable	Expanded Data
Total Person Trips	980,165
Mean Trips per HH	10.3
Mean Trips per Person	4.1
Mean Trip Duration (minutes)	16.3
Total Vehicle Trips	868,157
Total Transit Trips[1]	40,233
Total Non-motorized Trips[2]	71,775

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent total daily person trips.

On a per person basis, 4.1 trips were made on an average weekday, and 10.3 trips were generated per household. Mean travel time during the week for all trips was slightly over 16 minutes, and for work trips, mean travel time was just over 17 minutes.

Table 3 presents a comparison of key statistics from Anchorage's 2002 Household Travel Survey with recent surveys in other metropolitan areas. In order to validate the comparison, all statistics of Table 3 are calculated using the same formulas from data weighted to Census 2000 parameters. Each of the studies was conducted by NuStats and employed the same procedures and methodology.

Relative to other metropolitan areas in Table 3, households in Anchorage were larger and owned more vehicles on average. The trip rates among persons and households were also significantly higher in Anchorage. These higher rates might be due to more active lifestyles of Anchorage residents than persons in the Midwest or East Coast. The larger households of Anchorage residents might also generate more non-work trips.

TABLE 3: COMPARATIVE METRO AREA STATISTICS

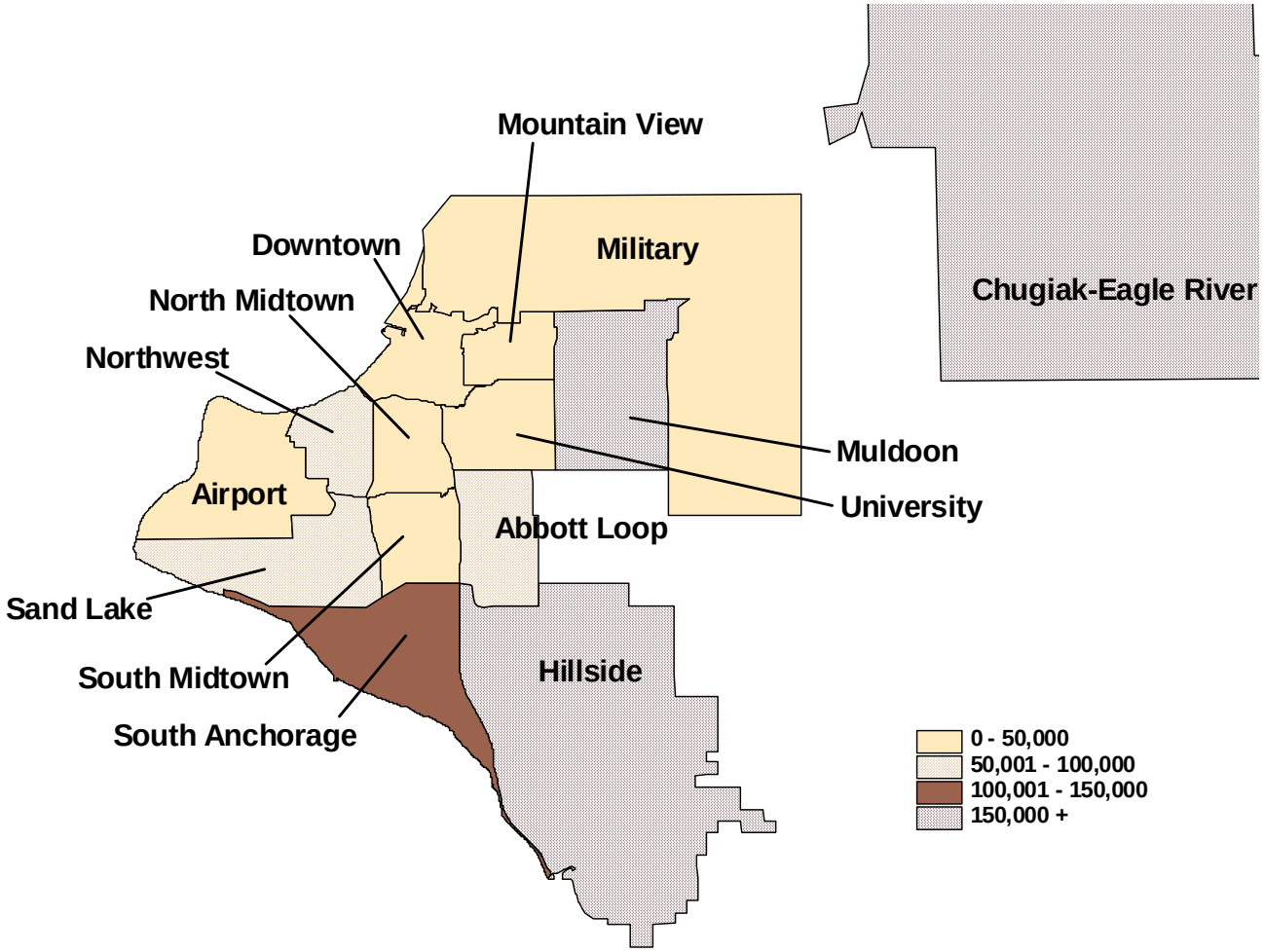
	ANCHORAGE (AMATS)	PITTSBURGH (SPC)	PHILADELPHIA (DVRPC)	COLUMBUS (MORPC)	KNOXVILLE (KUA MPO)
Year of Survey	2002	2001-2002	1999-2000	1999	1999-2000
Sample Size	1,293	2,500	5,700	5,500	1,500
Household Size	2.6	2.4	2.4	2.5	2.4
Household Vehicles	2.0	1.8	1.6	1.7	1.8
Person Trip Rate	4.1	3.2	3.5	3.8	3.8
Household Trip Rate	10.3	7.2	8.1	9.5	8.2
Vehicle Occupancy	1.8	1.6	1.7	1.5	1.7

All statistics derived from weighted sample data.

On an average day, households located in the areas of Hillside, Chugiak and Eagle River, Muldoon, and South Anchorage made the greatest volumes of trips. (See Figure 3 Total Trips by Subarea within the Municipality of Anchorage.) While the high volume of trips in the Muldoon area was strictly associated with the equally high number of total households in the area, Hillside and Chugiak / Eagle River had fewer total households but higher numbers of total trips.

[1] Transit trips were defined as public bus, school bus, and taxi, shuttle, and limo trips.
[2] Non-motorized trips were defined as walk and bike trips.

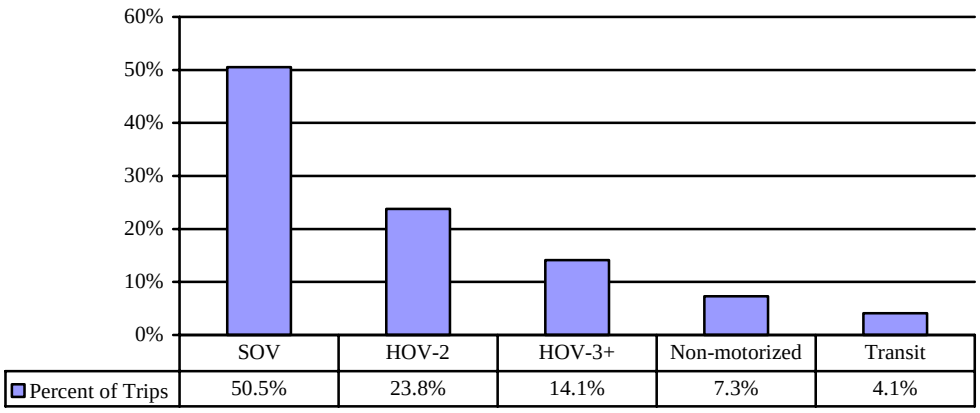
FIGURE 3: TOTAL TRIPS BY SUBAREA WITHIN THE MUNICIPALITY OF ANCHORAGE



MODE OF TRAVEL

Nearly one million unlinked person trips were made within the Municipality of Anchorage on an average weekday. Half of these trips (51 percent) were made in single-occupancy vehicles (SOV). This estimate reflects nearly 500,000 SOV trips on an average weekday. Rideshare trips accounted for 38 percent of all trips, of which more than half were vehicles with only two persons. Seven percent of trips were via walking or biking, and four percent were by transit.

FIGURE 4: MODE OF TRAVEL FOR DAILY PERSON TRIPS



Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Five areas within the municipality accounted for nearly half of trip origins and destinations on an average weekday: Chugiak-Eagle River, Muldoon, North Midtown, South Anchorage, and Hillside.

TABLE 4: PERSON TRIP ORIGINS AND DESTINATIONS BY SUBAREA

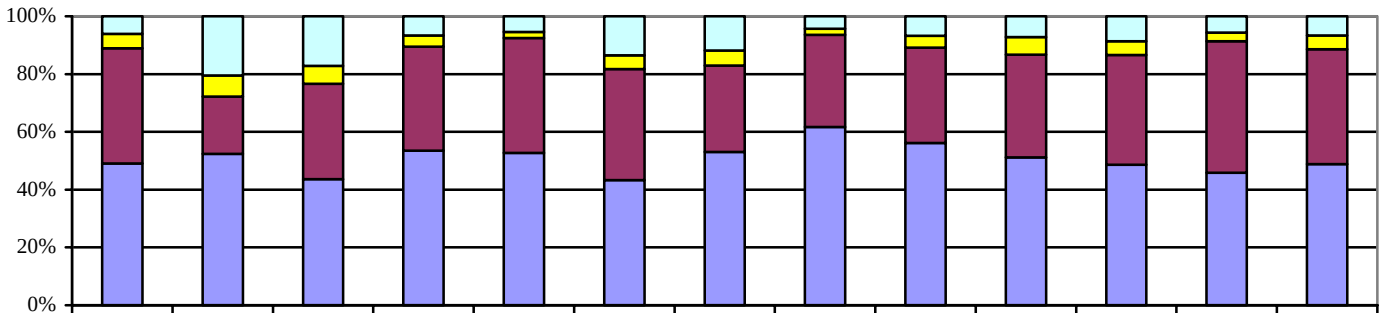
Subarea	Trip Origins	%	Trip Destinations	%
Chugiak-Eagle River	119,685	12.7	119,656	12.7
Muldoon	111,589	11.8	111,352	11.8
North Midtown	97,848	10.9	108,140	11.5
Hillside	101,402	10.7	101,017	10.7
South Anchorage	99,859	10.6	99,775	10.6
Downtown	76,764	8.1	76,439	8.1
University	59,965	6.1	59,409	6.3
South Midtown	55,674	5.9	55,869	5.9
Abbott Loop	50,851	5.4	50,749	5.4
Sand Lake	43,099	4.6	42,963	4.5
Northwest	37,704	3.8	37,495	4.0
Military	31,598	3.3	35,971	3.8
Mountain View	27,918	3.1	31,799	3.4
Airport	13,164	1.4	13,694	1.5

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area. System missing totaled 34,387 origins and 35,837 destinations. The percents provided exclude missing trips.

Households varied in their choice of travel mode according to their area of residence (See Figures 5 and 6). For instance, SOV was the dominant mode for trips made by households located in Sand Lake, South Midtown, Abbott Loop, Muldoon, Northwest and University. On the other hand, trips made by households located in North Midtown and Hillside were as likely to be HOV trips as they were to be SOV trips. Households located in the Downtown area made the greatest volume of transit trips. Non-motorized (mostly walk) trips were reported in greatest volumes among households located in the Downtown area and Mountain View. These data show that proximity to employment areas had a significant impact on mode choice.

Mode usage by destination location showed some interesting patterns. For some areas – Muldoon, Northwest, Abbott Loop, South Anchorage, Eagle River/ Chugiak – there were no discernible differences between data in Figure 5 and Figure 6. For others, such as Military, Mountain View, North Midtown, and University, SOV trips increased significantly. In Downtown, Sand Lake and South Midtown, the percent of HOV trips increased.

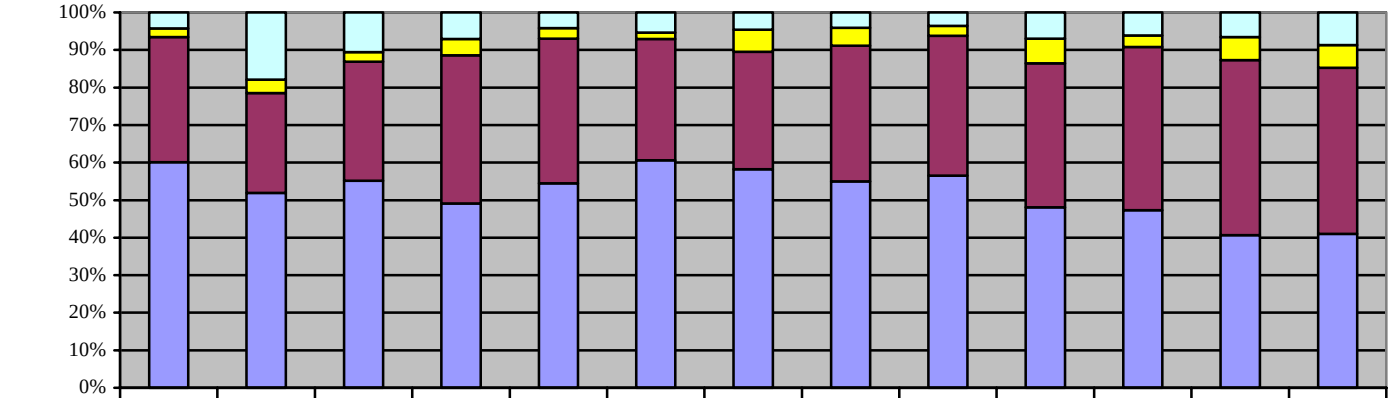
FIGURE 5: MODE OF TRAVEL BY HOME LOCATION



	Military	Downtown	Mountain View	Muldoon	Northwest	North Midtown	University	Sand Lake	South Midtown	Abbott Loop	South Anchorage	Hillside	Chugiak/ ER
Non-Motor	6.1%	20.5%	17.2%	6.6%	5.4%	13.5%	11.9%	4.3%	6.7%	7.2%	8.6%	5.6%	6.6%
Transit	5.0%	7.3%	6.2%	3.9%	2.1%	4.7%	5.2%	2.1%	4.2%	6.1%	4.8%	3.0%	4.8%
HOV	39.8%	19.8%	33.0%	36.1%	39.7%	38.4%	29.8%	32.0%	32.9%	35.5%	38.0%	45.6%	39.8%
SOV	49.0%	52.3%	43.7%	53.5%	52.7%	43.3%	53.1%	61.7%	56.2%	51.2%	48.6%	45.8%	48.8%

Base: 12,092 unlinked trips weighted by geography and household size, expanded to represent 980,165 total trips in the Anchorage area. Data for households located in the Airport area were excluded because of their small number, leading to unreliable estimates.

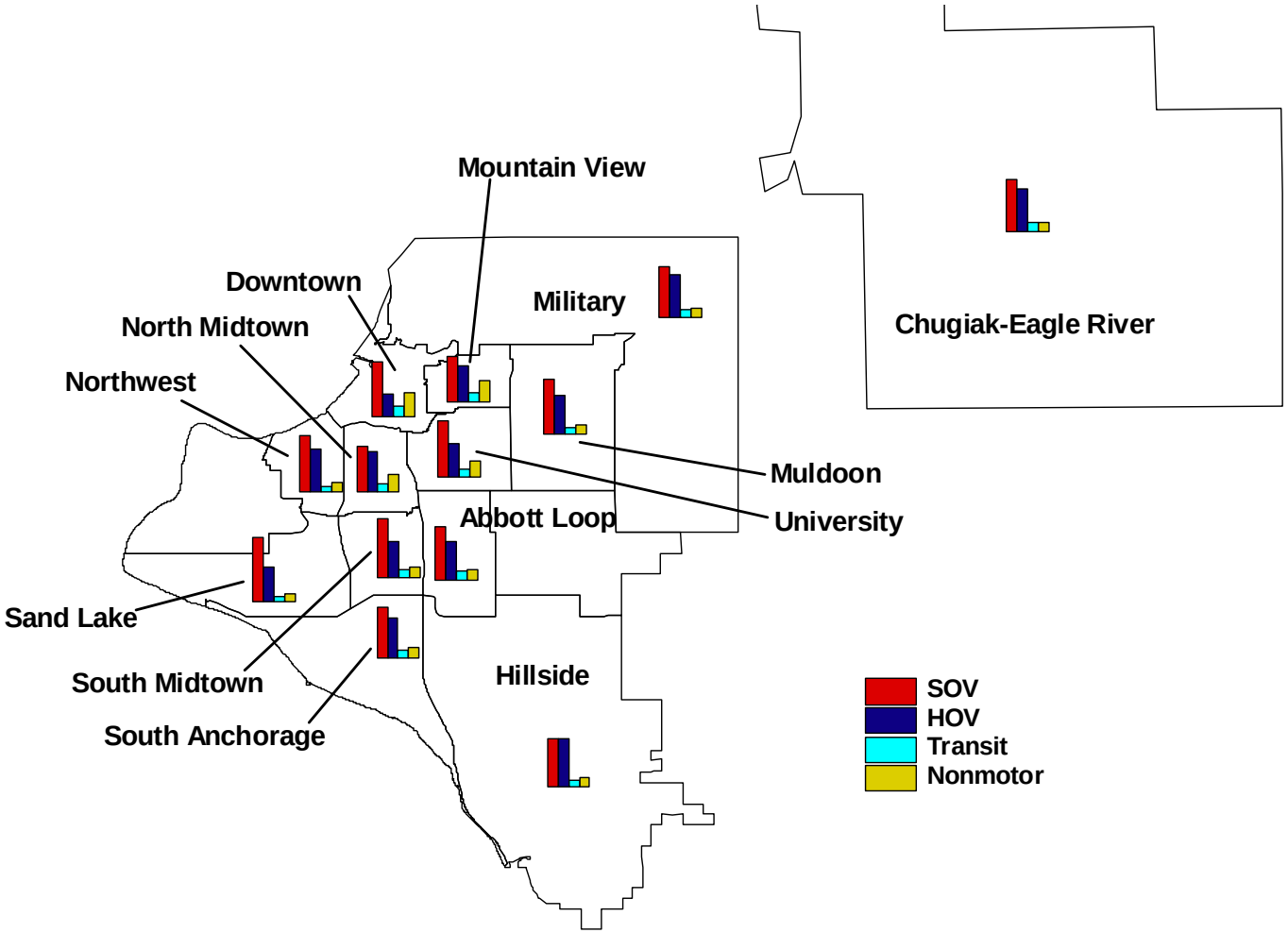
FIGURE 6: MODE OF TRAVEL BY DESTINATION LOCATION



	Military	Downtown	Mountain View	Muldoon	Northwest	North Midtown	University	Sand Lake	South Midtown	Abbott Loop	South Anchorage	Hillside	Chugiak/ Eagle River
Non-Motor	4.3%	17.9%	10.6%	7.1%	4.2%	5.4%	4.6%	4.1%	3.6%	7.0%	6.1%	6.6%	8.7%
Transit	2.3%	3.6%	2.5%	4.3%	2.8%	1.7%	5.9%	4.8%	2.6%	6.5%	3.1%	6.1%	6.0%
HOV	33.3%	26.6%	31.7%	39.5%	38.5%	32.3%	31.3%	36.1%	37.3%	38.4%	43.5%	46.6%	44.2%
SOV	60.2%	51.9%	55.1%	49.1%	54.5%	60.7%	58.2%	55.0%	56.5%	48.0%	47.3%	40.7%	41.0%

Base: 12,092 unlinked trips weighted by geography and household size, expanded to represent 980,165 total trips in the Anchorage area. Data for households located in the Airport area were excluded because of their small number, leading to unreliable estimates.

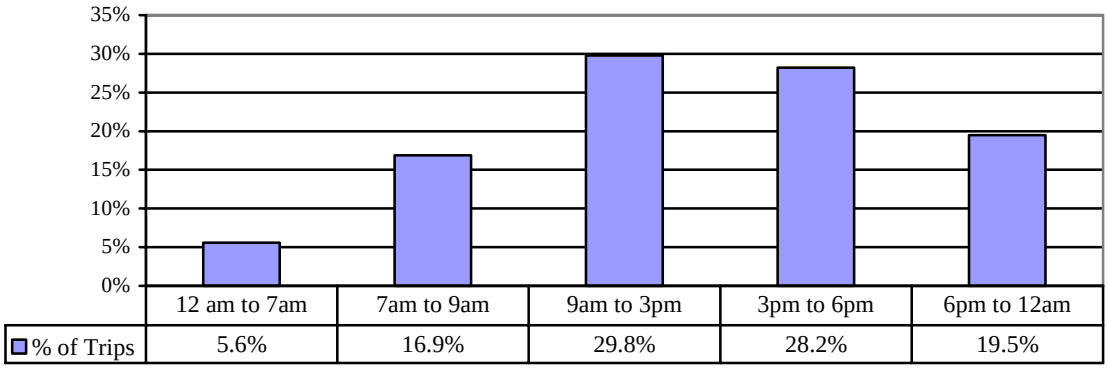
FIGURE 7: MODE OF TRAVEL BY HOME LOCATION



TIME OF TRAVEL

PM Peak (3 to 6 p.m.) was the time of day with the heaviest concentrated travel (28 percent of trips). These two peak periods (AM and PM) accounted for 50 percent of all trips. About 20 percent of all trips took place during the evening hours (6 p.m. to 12 a.m.).

FIGURE 8: TRIP DISTRIBUTION BY TIME OF DAY

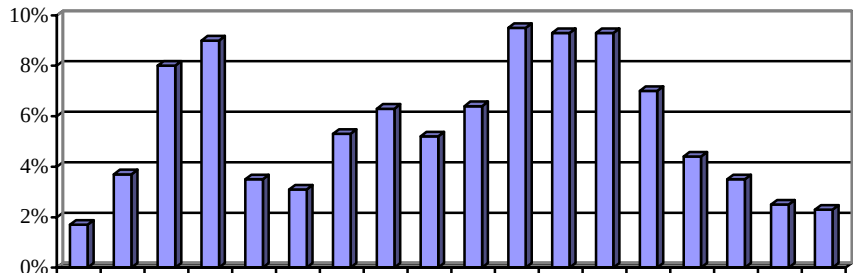


	12 am to 7am	7am to 9am	9am to 3pm	3pm to 6pm	6pm to 12am
% of Trips	5.6%	16.9%	29.8%	28.2%	19.5%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

On an average day, most trips were made between 3 p.m. and 6 p.m. Trip making dropped off between 6 and 7 p.m. During the morning hours, trip making between 8 and 9 a.m. came close to the volume of the PM Peak. The shoulder periods for the PM Peak were significantly more heavily traveled than those of the AM Peak.

FIGURE 9: TRIP DISTRIBUTION BY TRIP DEPARTURE HOUR

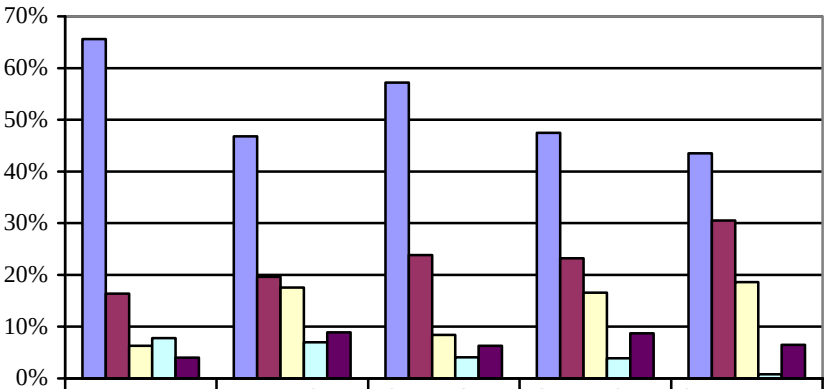


	12-5a	6a	7a	8a	9a	10a	11a	12p	1p	2p	3p	4p	5p	6p	7p	8p	9p	10-12a
% of Trips	1.7	3.7	8.0	9.0	3.5	3.1	5.3	6.3	5.2	6.4	9.5	9.3	9.3	7.0	4.4	3.5	2.5	2.3

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Traveling households tended to shift from SOV to HOV as the day progressed. HOV-2 persons comprised 16 percent of the early morning time period and 31 percent of the evening time period. At the same time SOV comprised 66 percent of the early morning time period and 44 percent of the evening time period. On the other hand, transit use diminished as the day progressed, perhaps due to the definition of transit mode that included school bus. Non-motorized modes (i.e., walk and bike) were used most frequently during the AM and PM peak periods. These findings were related to the fact that trip purpose changed as the day progressed and that mode choice was associated with trip purpose. During the PM peak there were more trips for non-work purposes like shopping and eat meals for which vehicle occupancy was typically higher than for work trips.

FIGURE 10: MODE OF TRAVEL DISTRIBUTION BY TIME OF DAY

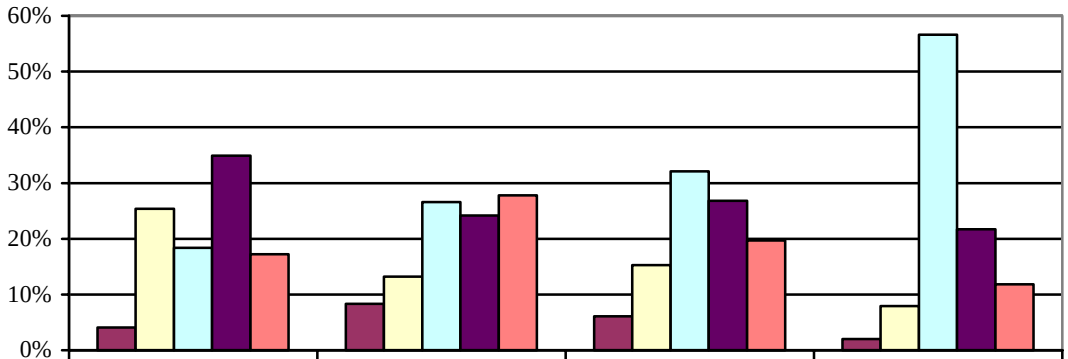


	12am to 7am	7am to 9am	9am to 3pm	3pm to 6pm	6pm to 12 am
SOV	65.6%	46.8%	57.2%	47.5%	43.5%
HOV-2	16.4%	19.6%	23.8%	23.2%	30.5%
HOV-3	6.3%	17.6%	8.4%	16.6%	18.6%
Transit	7.8%	7.0%	4.1%	3.9%	0.8%
Non-Motorized	4.0%	8.9%	6.3%	8.7%	6.5%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Times of travel varied by age. The majority of persons age 65+ (57 percent) traveled during the midday (9 a.m. to 3 p.m.). Children, aged 5-17, tended to travel during the AM and PM peak periods. Young adults, 18-24 years, spread their travel among all time periods, whereas older adults traveled most frequently during midday and PM peak periods.

FIGURE 11: TIME OF TRAVEL BY AGE



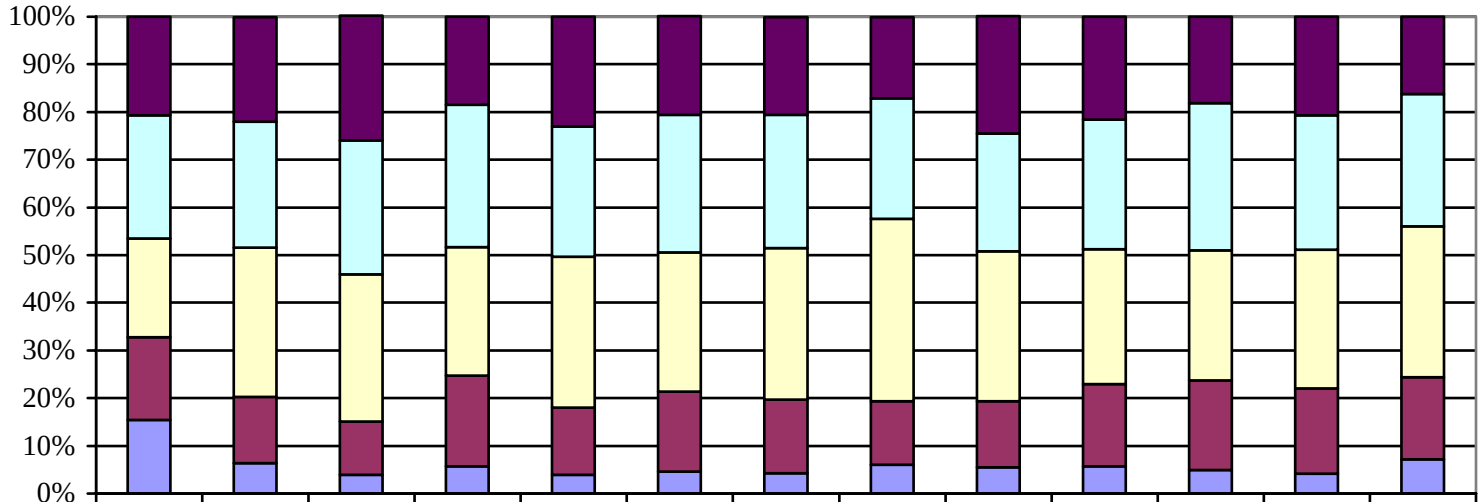
	5-17 years	18-24 years	25-64 years	65+ years
12am to 7am	4.1%	8.3%	6.1%	2.0%
7am to 9am	25.4%	13.2%	15.3%	7.9%
9am to 3pm	18.4%	26.6%	32.1%	56.6%
3pm to 6pm	34.9%	24.2%	26.8%	21.7%
6pm to 12am	17.2%	27.8%	19.7%	11.8%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Time of travel varied by the area within the Municipality of Anchorage in which households were located. (See Figure 12.) Households located in the military area exhibited a unique pattern, with more trips taking place in the early morning than was recorded for other areas. Households located in the Sand Lake subarea recorded significantly more midday trips than households in other areas.

Trip destinations varied by time period as well. There are five maps following Figure 12 that illustrate trip destinations by time period.

FIGURE 12: TIME OF TRAVEL BY HOUSEHOLD LOCATION



	Military	Downtown	Mountain View	Muldoon	Northwest	North Midtown	University	Sand Lake	South Midtown	Abbott Loop	South Anchorage	Hillside	Chugiak-Eagle River
6pm to 12 am	20.7%	21.9%	26.2%	18.5%	23.0%	20.7%	20.5%	17.0%	24.6%	21.6%	18.1%	20.7%	16.2%
3pm to 6pm	25.8%	26.4%	28.0%	29.8%	27.3%	28.8%	28.0%	25.3%	24.7%	27.2%	30.9%	28.2%	27.8%
9am to 3pm	20.7%	31.3%	30.9%	27.0%	31.7%	29.2%	31.7%	38.3%	31.5%	28.3%	27.3%	29.1%	31.6%
7am to 9am	17.4%	13.9%	11.2%	19.0%	14.1%	16.8%	15.4%	13.3%	13.8%	17.2%	18.8%	17.9%	17.2%
12am to 7am	15.4%	6.4%	3.9%	5.7%	3.9%	4.6%	4.3%	6.0%	5.5%	5.7%	4.9%	4.1%	7.2%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

FIGURE 13: DESTINATIONS FOR NIGHTTIME TRIPS (MIDNIGHT TO 7 A.M.)

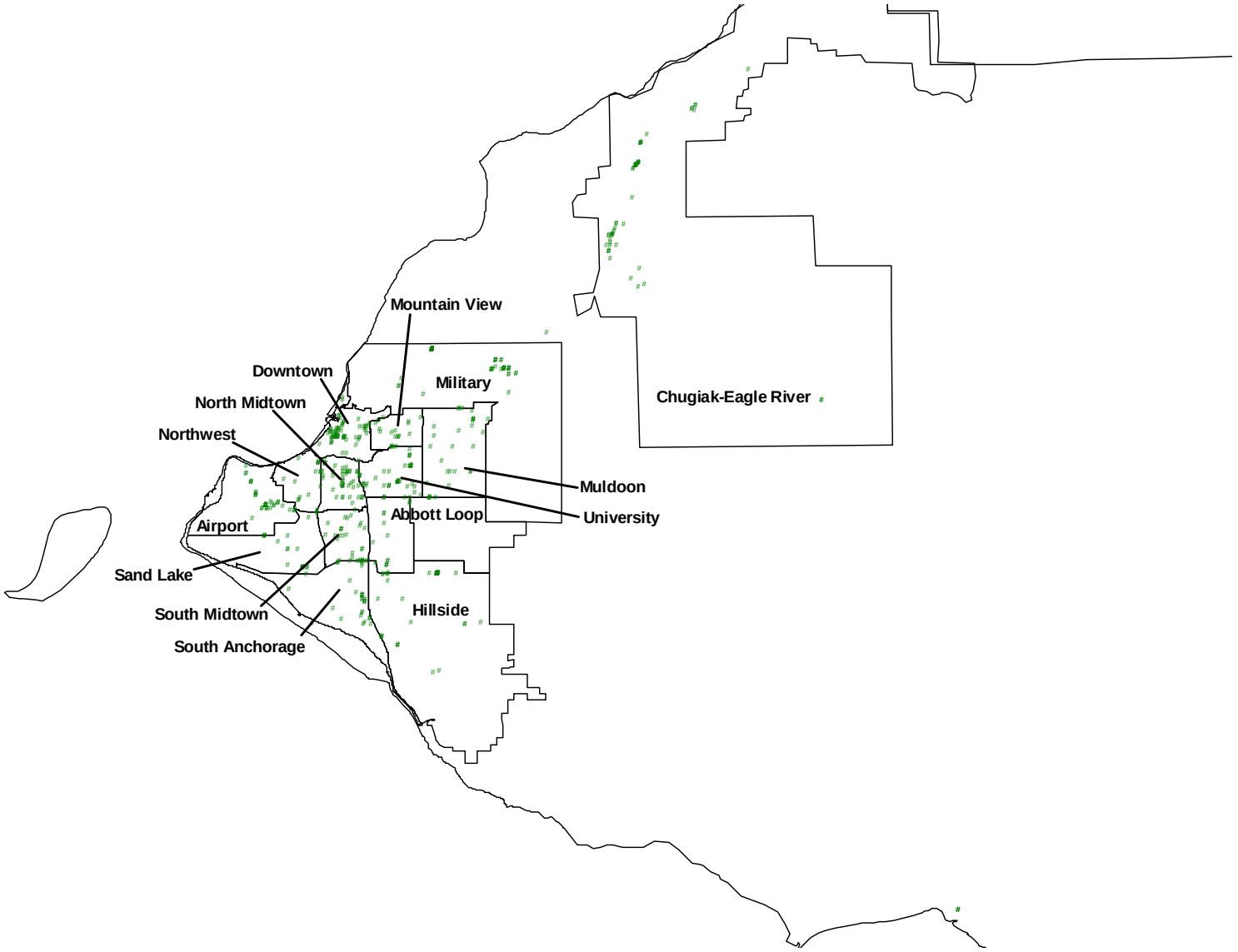


FIGURE 14: DESTINATIONS FOR AM PEAK TRIPS (7 A.M. TO 9 A.M.)

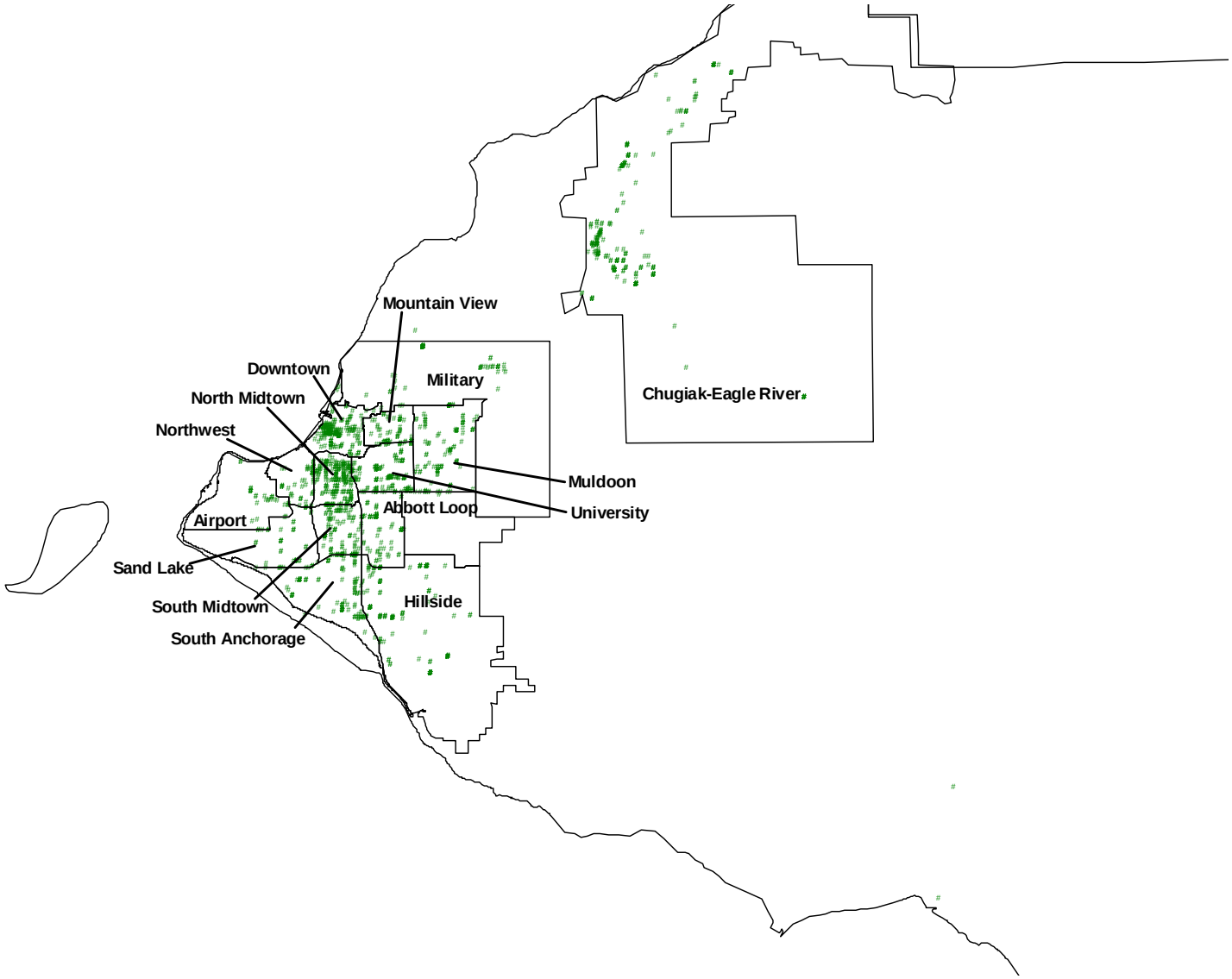


FIGURE 15: DESTINATIONS FOR MIDDAY TRIPS (9 A.M. TO 3 P.M.)

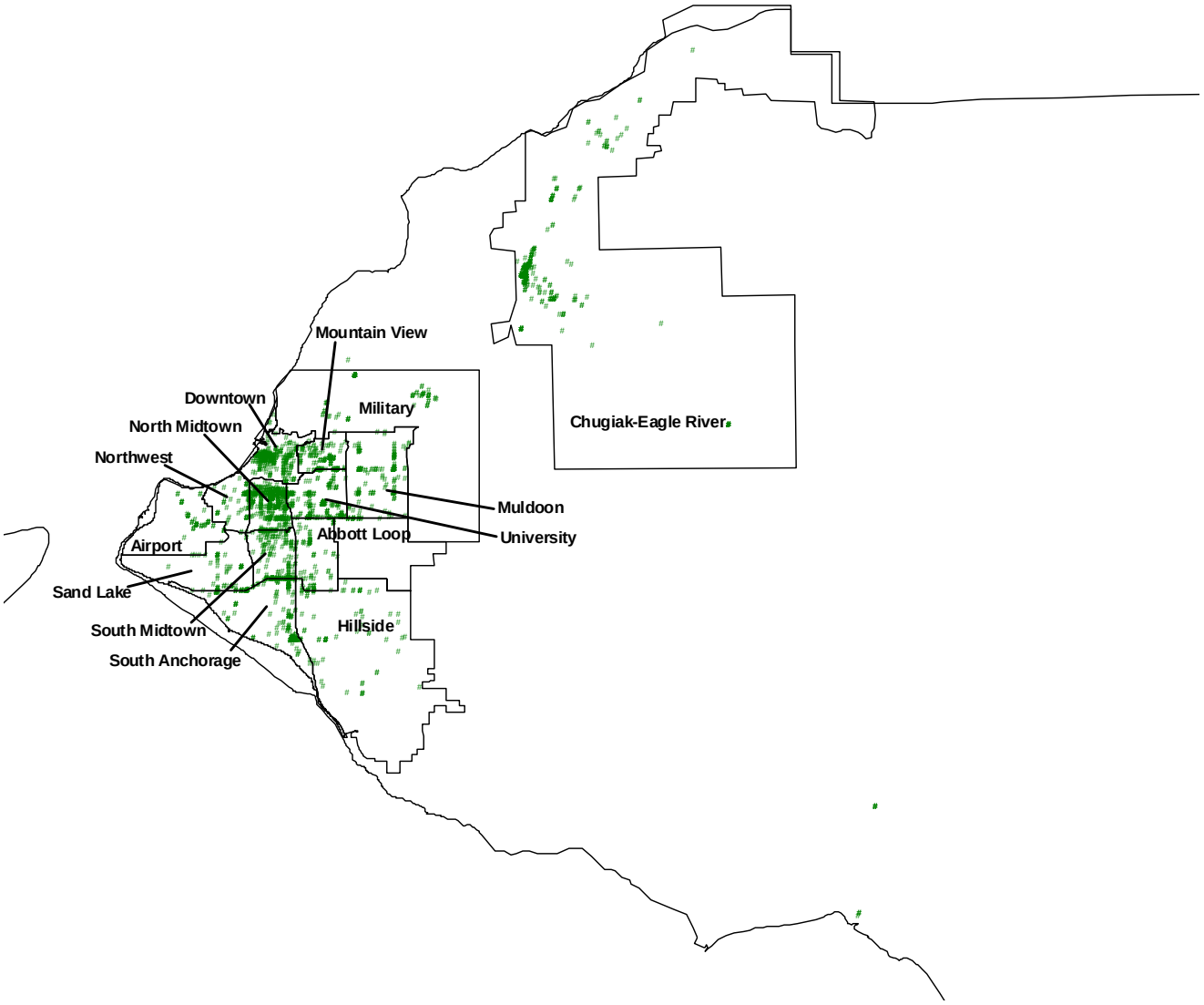


FIGURE 16: DESTINATIONS FOR PM PEAK TRIPS (3 P.M. TO 6 P.M.)

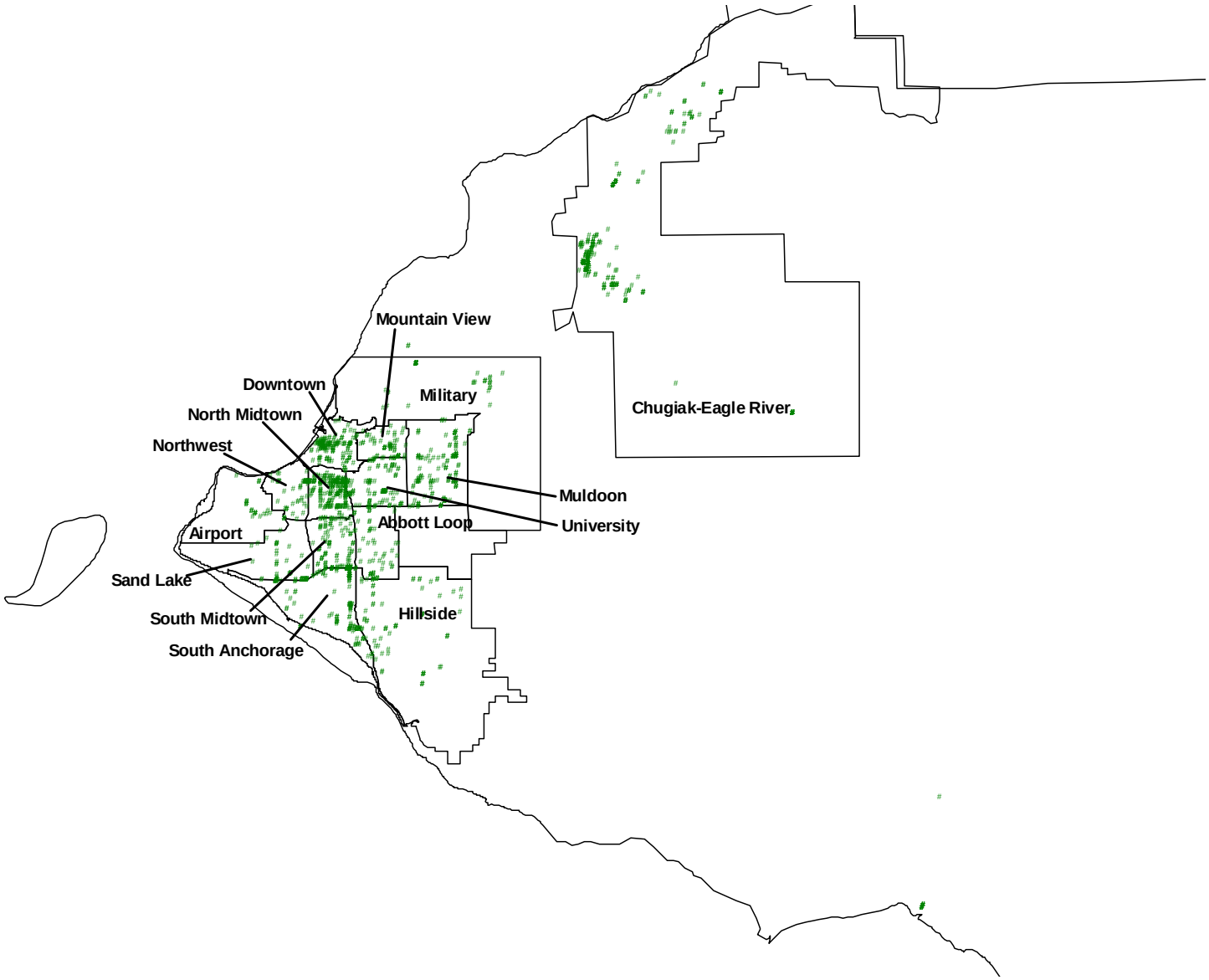
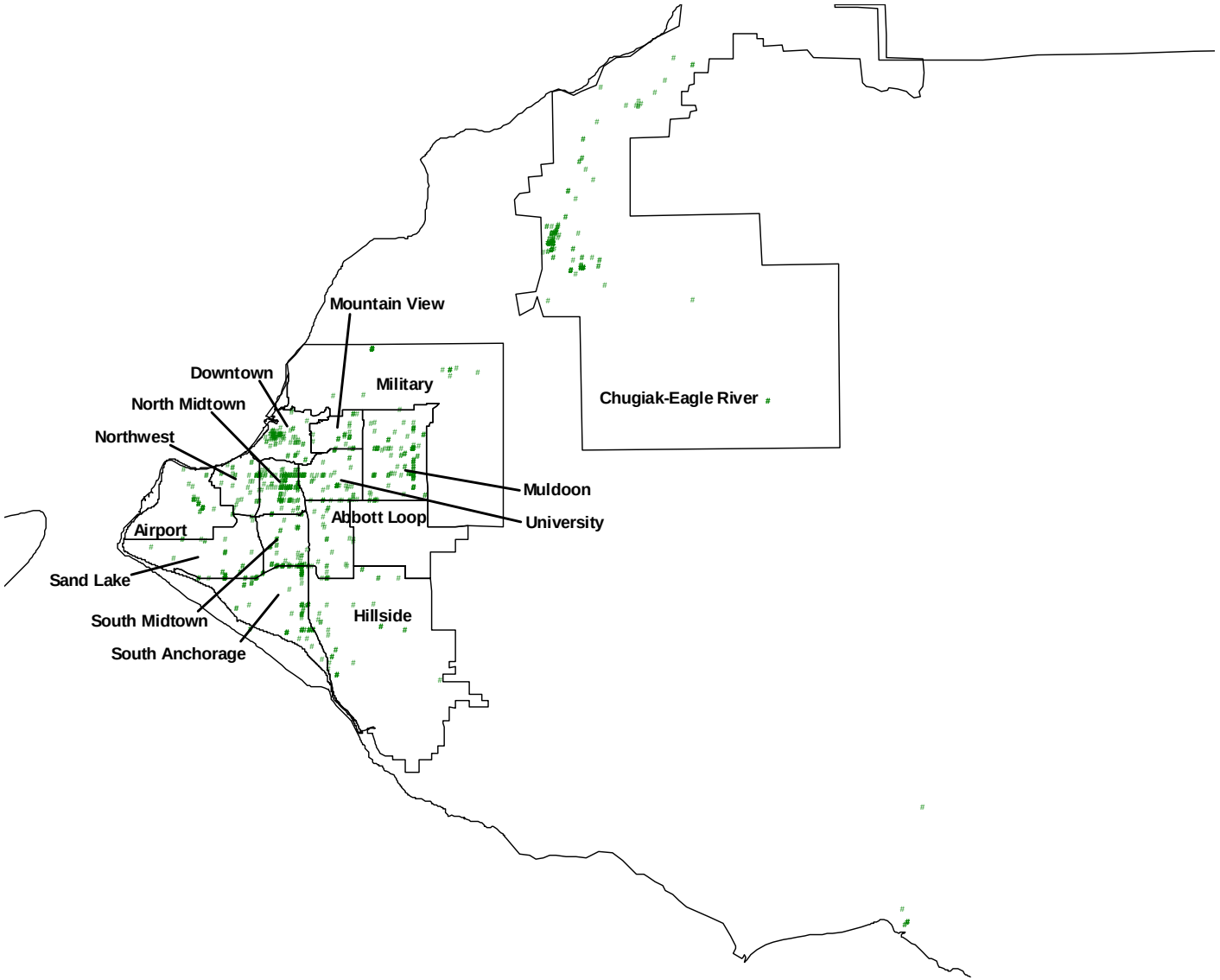


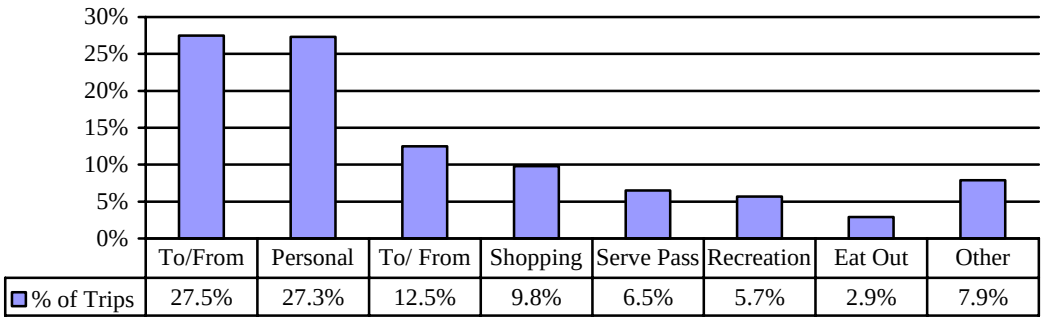
FIGURE 17: DESTINATIONS FOR EVENING TRIPS (6 P.M. TO MIDNIGHT)



PURPOSE FOR TRAVEL

Of the nearly one million unlinked trips taken in the Municipality of Anchorage on an average weekday, about one out of four (28 percent) were to or from work. Another 27 percent were for personal business. This type of trip covers destinations pertaining to healthcare, legal issues, beauty / barber shops, etc. Another ten percent of trips were for shopping, six percent were for recreations, and three percent were to eat a meal outside of the home. Seven percent of all these trips were done to "ferry" another person to and from a desired destination (i.e., serve passenger).

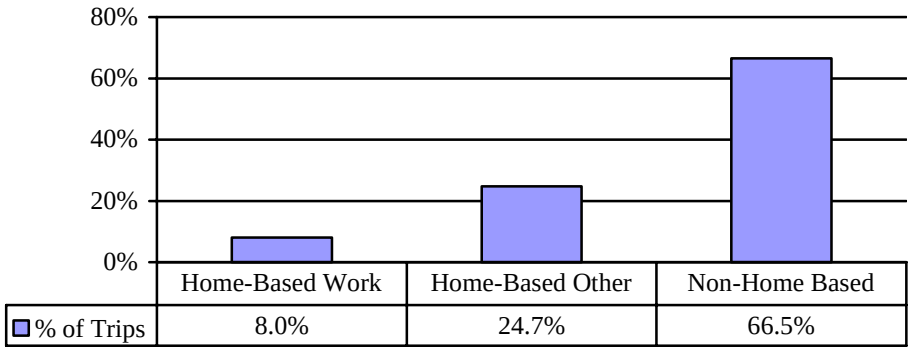
FIGURE 18: DISTRIBUTION OF PURPOSES FOR TRAVEL



Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

An analysis of the unlinked trips indicated that most were non-home based (67 percent). Home-based work trips accounted for only eight percent of all trips, indicating that many people made stops on their way to work.

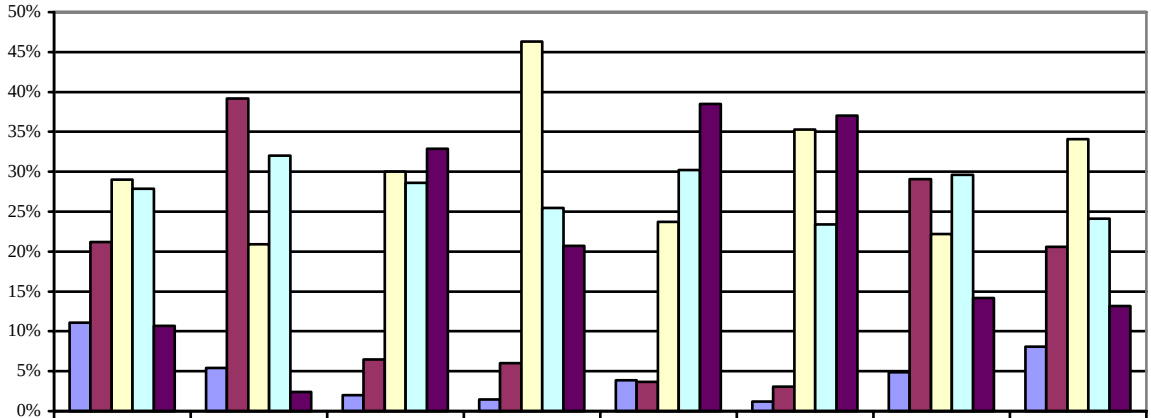
FIGURE 19: DISTRIBUTION OF TRIP TYPE



Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Trips to or from work were spread between 7 a.m. and 6 p.m. Trips to or from school were focused in the AM and PM peaks (See Figure 20). Shopping trips were largely concentrated between 9 a.m. and 3 p.m., while trips for recreational purposes clustered in the evening hours, after 6 p.m.

FIGURE 20: TRIP PURPOSE BY TIME OF DAY

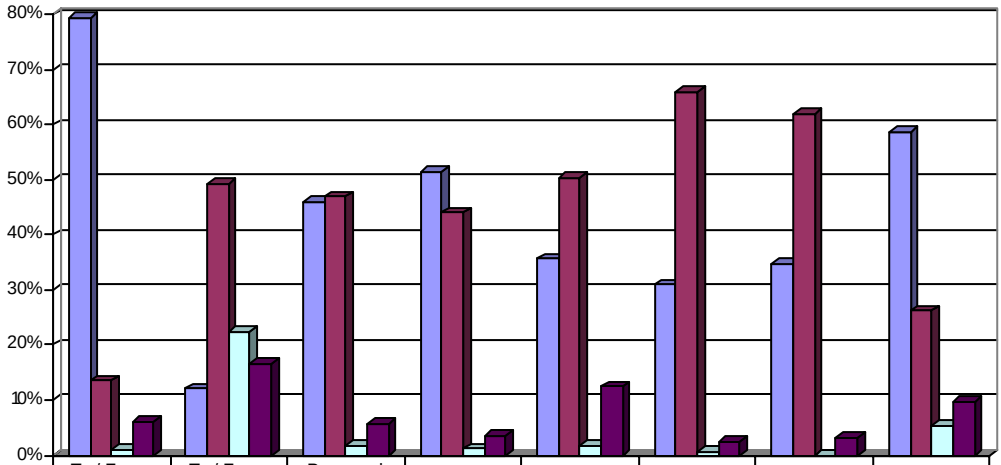


	To/ From Work	To/ From School	Personal Bus	Shopping	Recreation	Eat Out	Serve Pass	Other
12am-7am	11.1%	5.4%	2.0%	1.5%	3.9%	1.2%	4.9%	8.1%
7am-9am	21.2%	39.2%	6.5%	6.0%	3.7%	3.1%	29.1%	20.6%
9am-3pm	29.0%	20.9%	30.0%	46.3%	23.7%	35.3%	22.2%	34.1%
3pm-6pm	27.9%	32.0%	28.6%	25.5%	30.2%	23.4%	29.6%	24.1%
6pm-midnight	10.7%	2.4%	32.9%	20.7%	38.5%	37.0%	14.2%	13.2%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Mode of travel varied depending on the trip purpose. The majority of work trips (80 percent) were made in an SOV. Most trips to school were also made in a vehicle, with 12 percent in an SOV, and 49 percent in an HOV. About a fourth of school trips (22 percent) were via a bus. Half of all shopping trips (52 percent) were done in an SOV, as were almost half of all trips for personal business.

FIGURE 21: MODE OF TRAVEL BY TRIP PURPOSE



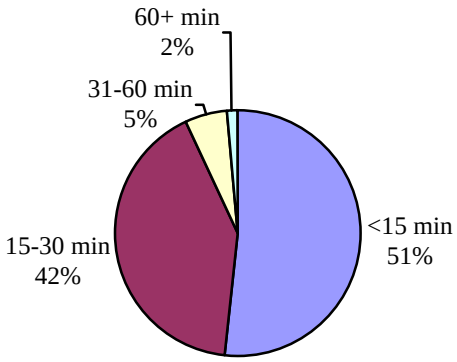
	To/ From Work	To/ From School	Personal Bus	Shopping	Recreation	Serve Pass	Eat Out	Other
SOV	79.5%	12.0%	46.0%	51.5%	35.6%	30.9%	34.7%	58.7%
HOV	13.5%	49.2%	46.9%	44.0%	50.4%	65.9%	62.1%	26.2%
Transit	0.9%	22.4%	1.6%	1.1%	1.6%	0.7%	0.0%	5.2%
Non-Motorized	6.1%	16.5%	5.6%	3.4%	12.4%	2.5%	3.1%	9.8%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

TRIP DURATION

Overall, the unlinked trips recorded in the travel survey were short. More than half (51 percent) were less than 15 minutes in length. Less than one in ten of the trips took longer than 30 minutes.

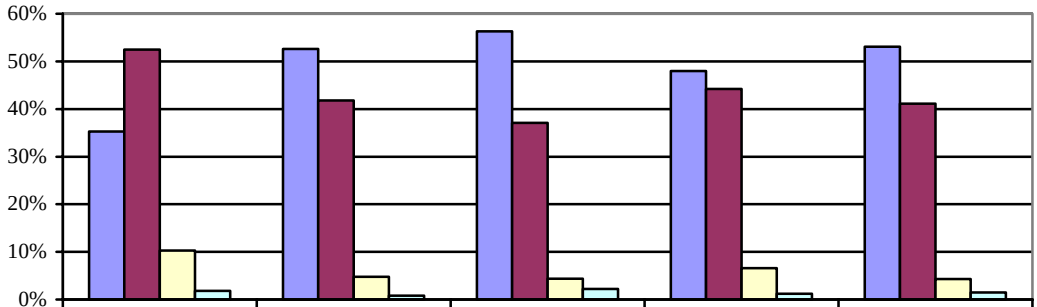
FIGURE 22: DISTRIBUTION OF TRIP DURATION



Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

On average, longer unlinked trips were reported in the PM Peak than in the AM Peak; most likely due to heavier road congestion. The shortest trip lengths were reported during AM Peak. The average trip length during the early morning hours was 20.5 minutes, 15.2 minutes in the AM Peak, 16.2 in the midday, 16.9 in the PM Peak, and 15.6 in the evening.

FIGURE 23: TRIP DURATION BY PERIOD OF DAY

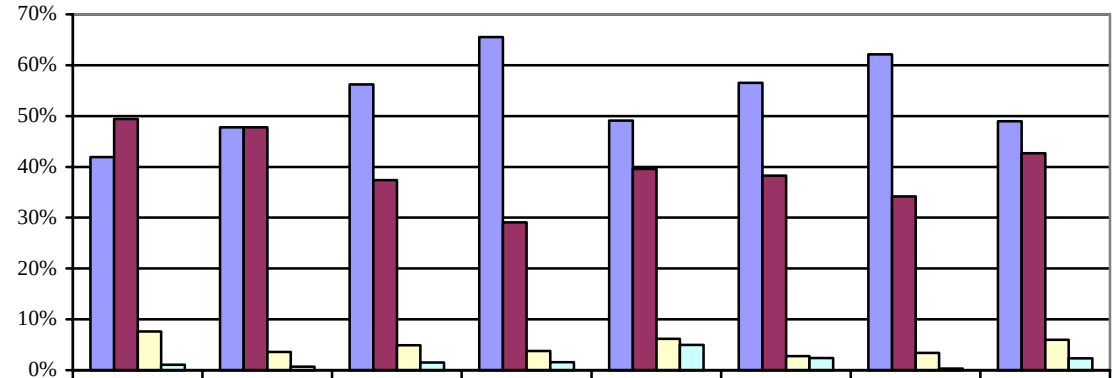


	12am-7am	7am-9am	9am-3pm	3pm-6pm	6pm-midnight
<15 min	35.3%	52.6%	56.3%	48.0%	53.1%
15-30 min	52.5%	41.8%	37.1%	44.2%	41.1%
31-60 min	10.3%	4.8%	4.4%	6.6%	4.3%
60+ min	1.8%	0.8%	2.2%	1.2%	1.5%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

Trips for consumer purposes (i.e., personal business, shopping, eating out) were the shortest as they were most likely done quite close to home or work. The longest trips were for recreational purposes. Nine out of ten work trips (91 percent) took less than 30 minutes, with 42 percent taking less than 15 minutes.

FIGURE 24: TRIP DURATION BY TRIP PURPOSE



	To/ From Work	To/ From School	Personal Bus	Shopping	Recreation	Eat Out	Serve Passenger	Other
<15 min	41.9%	47.8%	56.2%	65.5%	49.1%	56.5%	62.1%	49.0%
15-30 min	49.4%	47.8%	37.4%	29.1%	39.6%	38.3%	34.2%	42.7%
31-60 min	7.6%	3.6%	4.9%	3.8%	6.2%	2.8%	3.4%	6.0%
60+ min	1.1%	0.7%	1.5%	1.6%	5.0%	2.4%	0.3%	2.3%

Base: 12,092 unlinked trips weighted by geography and household size and expanded to represent 980,165 total trips in the Anchorage area.

SPECIALIZED TRAVEL: WORK AND PM PEAK

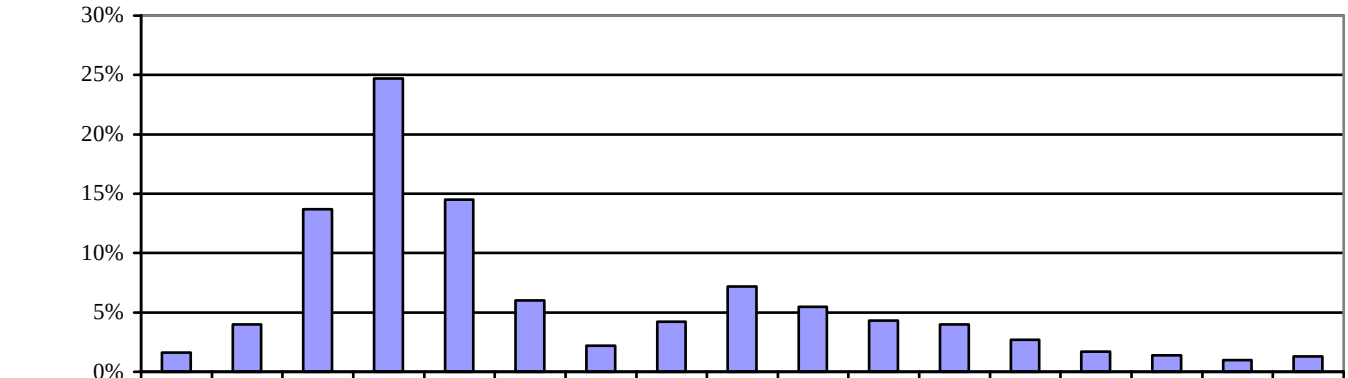
Because of their unique characteristics and significance to transportation planning, specialized analyses were done on trips to work and trips taken during the PM Peak.

TRIPS TO WORK

On an average weekday, 163,971 trips were taken to work (Figure 27 on the following page illustrates the work destinations). Work destinations tended to cluster Downtown and in North Midtown. There were also noticeable patterns of work destinations in the University, South Midtown, and Airport areas.

The highest volume of trips to work was between 7 and 8 a.m., followed by 8 to 9 a.m. There was evidence of some split shifts, with about 14 percent of work trips starting between 12 noon and 2 p.m. Nearly four of five trips departed from work between 4pm and 6pm.

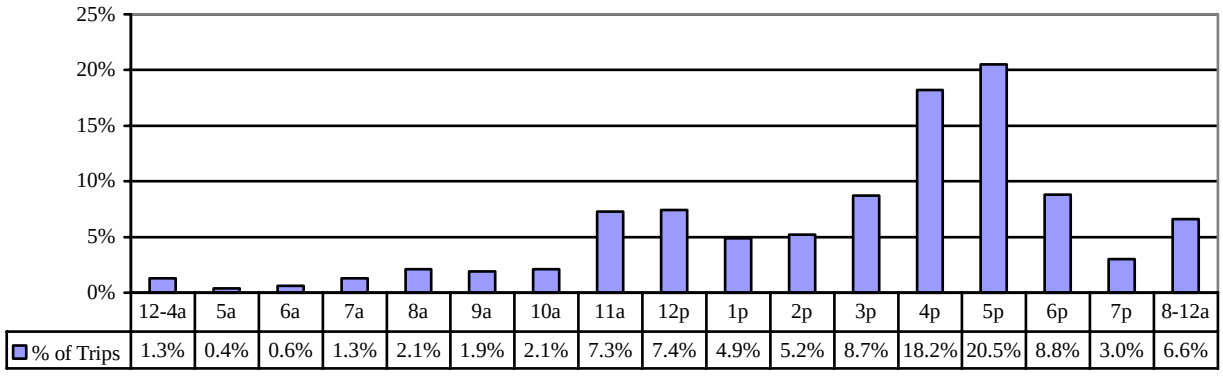
FIGURE 25: STARTING HOUR FOR TRIPS TO WORK



	12-4a	5a	6a	7a	8a	9a	10a	11a	12p	1p	2p	3p	4p	5p	6p	7p	8-12a
% of Trips	1.6%	4.0%	13.7%	24.7%	14.5%	6.0%	2.2%	4.2%	7.2%	5.5%	4.3%	4.0%	2.7%	1.7%	1.4%	1.0%	1.3%

Base: 2,200 unlinked trips weighted by geography and household size and expanded to represent 163,971 total trips to work in the Anchorage area.

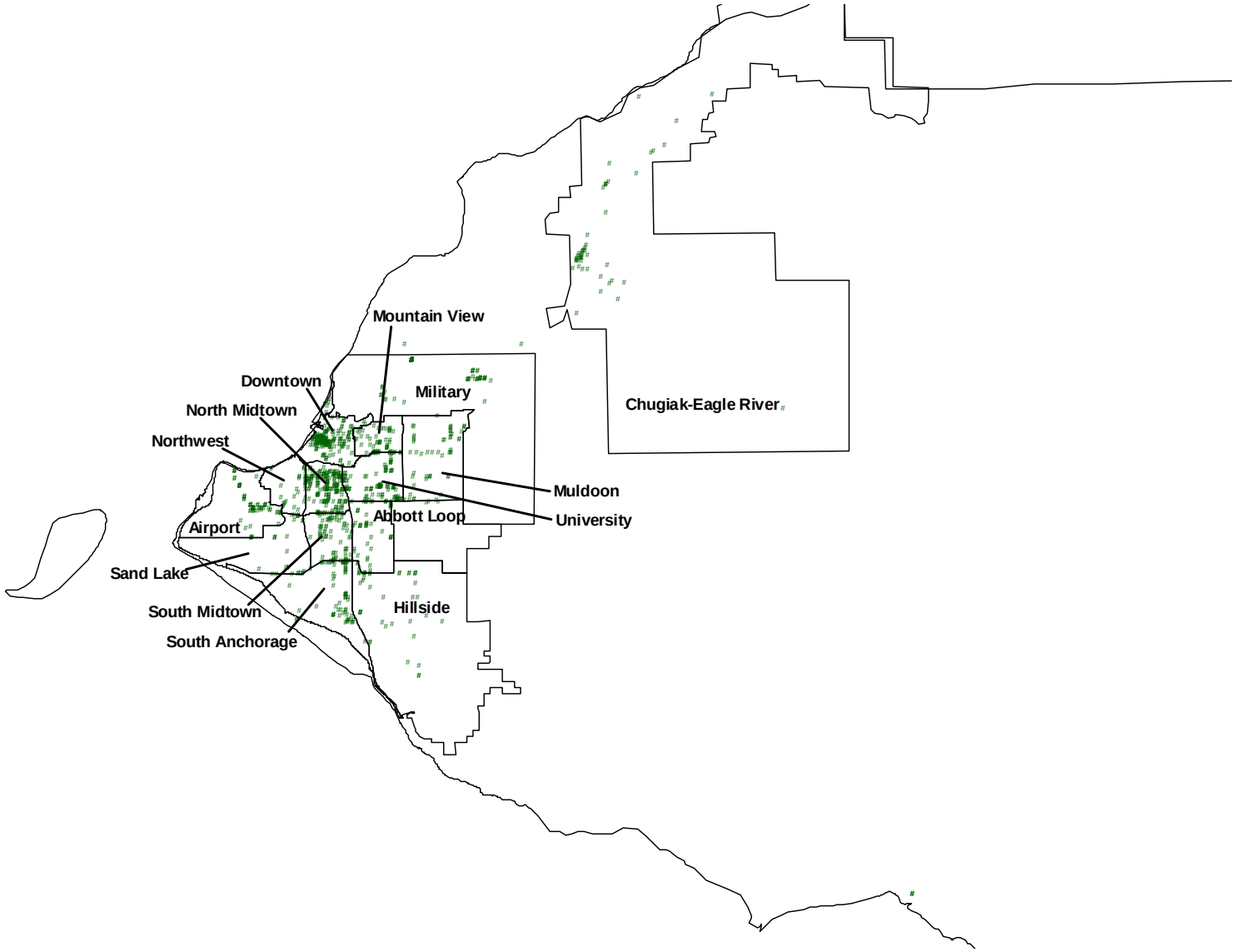
FIGURE 26: STARTING HOUR FOR TRIPS FROM WORK



	12-4a	5a	6a	7a	8a	9a	10a	11a	12p	1p	2p	3p	4p	5p	6p	7p	8-12a
% of Trips	1.3%	0.4%	0.6%	1.3%	2.1%	1.9%	2.1%	7.3%	7.4%	4.9%	5.2%	8.7%	18.2%	20.5%	8.8%	3.0%	6.6%

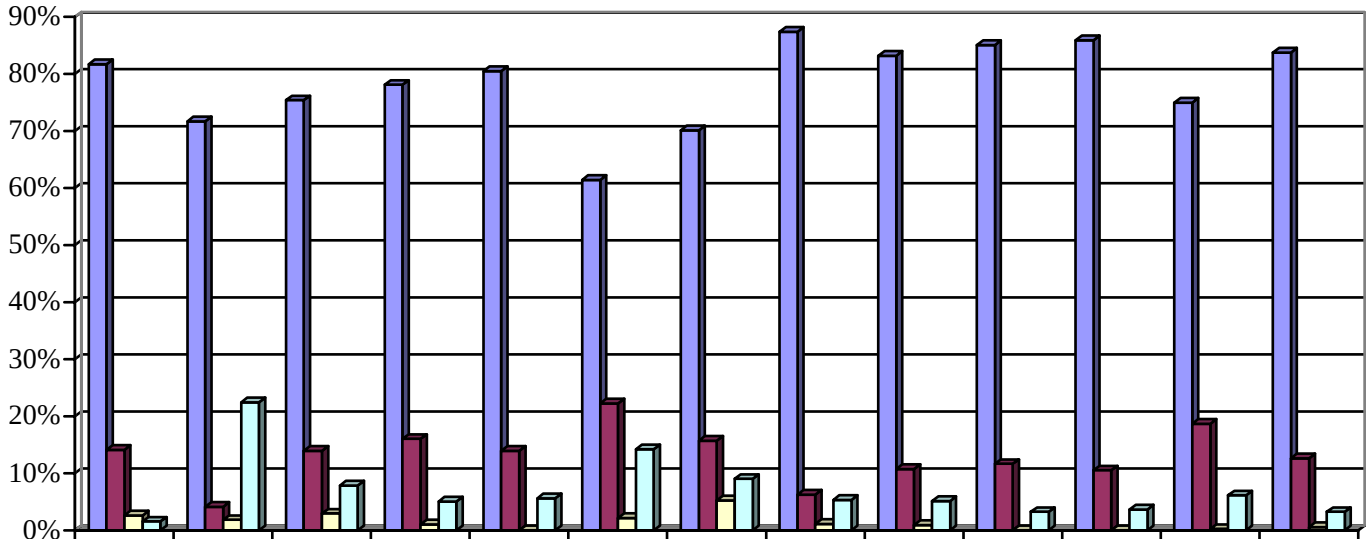
Base: 2,200 unlinked trips weighted by geography and household size and expanded to represent 163,971 total trips to work in the Anchorage area

FIGURE 27: GEOGRAPHIC DISTRIBUTION OF WORK LOCATIONS



SOV dominated as the mode of choice for work trips to a much greater extent than was noted for all trips. HOV were used most frequently by households located in North Midtown, University, Muldoon and Hillside. Transit was used most frequently by households located in the University area. Several areas evidenced a fairly healthy number of non-motorized work trips. These were Downtown, North Midtown, and the University area.

FIGURE 28: MODE OF WORK TRIP BY SUBAREA



	Military	Downtown	Mountain View	Muldoon	Northwest	North Midtown	University	Sand Lake	South Midtown	Abbott Loop	South Anchorage	Hillside	Chugiak-Eagle River
SOV	81.7%	71.7%	75.4%	78.1%	80.5%	61.4%	70.1%	87.4%	83.2%	85.1%	85.9%	75.0%	83.8%
HOV	14.1%	4.1%	13.9%	16.0%	13.9%	22.2%	15.7%	6.2%	10.7%	11.6%	10.5%	18.7%	12.6%
Transit	2.6%	1.8%	2.9%	1.0%	0.0%	2.1%	5.2%	1.1%	0.9%	0.0%	0.0%	0.2%	0.5%
Non-Motorized	1.5%	22.4%	7.8%	5.0%	5.6%	14.2%	9.0%	5.3%	5.1%	3.2%	3.6%	6.1%	3.2%

Base: 2,200 unlinked trips weighted by geography and household size and expanded to represent 163,971 total trips to work in the Anchorage area.

Though SOV was the dominant mode choice for work trips, women were more likely to travel via HOV than were males.

FIGURE 29: MAIN MODE OF TRIP TO WORK BY GENDER

	Male	Female
SOV	82.9%	76.5%
HOV	10.5%	17.6%
Transit	0.6%	1.0%
Non-Motor	5.9%	4.8%

Base: 2,200 unlinked trips weighted by geography and household size and expanded to represent 163,971 total trips to work in the Anchorage area.

The average vehicle occupancy for work trips was 1.18 persons. Among the HOV vehicles on trips to work, 88 percent were HOV – 2 persons and 12 percent were HOV – 3 persons. These proportions changed when the traveling party was only comprised of household members. In such cases, the HOV – 2 percent increased to 93 percent.

TABLE 5: WORK TRIP HIGH OCCUPANCY VEHICLES WITH HOUSEHOLD AND NON-HOUSEHOLD MEMBERS

HOV Mode	HOV 2	HOV 3
All Non-Household Members	85.4%	14.6%
All Household Members	93.1%	6.9%
Both Household and Non-Household Members	88.2%	11.8%

Base: 2,200 unlinked trips weighted by geography and household size and expanded to represent 163,971 total trips to work in the Anchorage area.

PM PEAK TRAVEL

The PM Peak was defined as 3 to 6 p.m. On an average weekday, 276,095 trips took place during this time period. North Midtown was the origin of most PM Peak trips, while Muldoon was the destination of most PM Peak trips. Also see Figure 16 (on Pg. 17) for a map of PM Peak trip destinations.

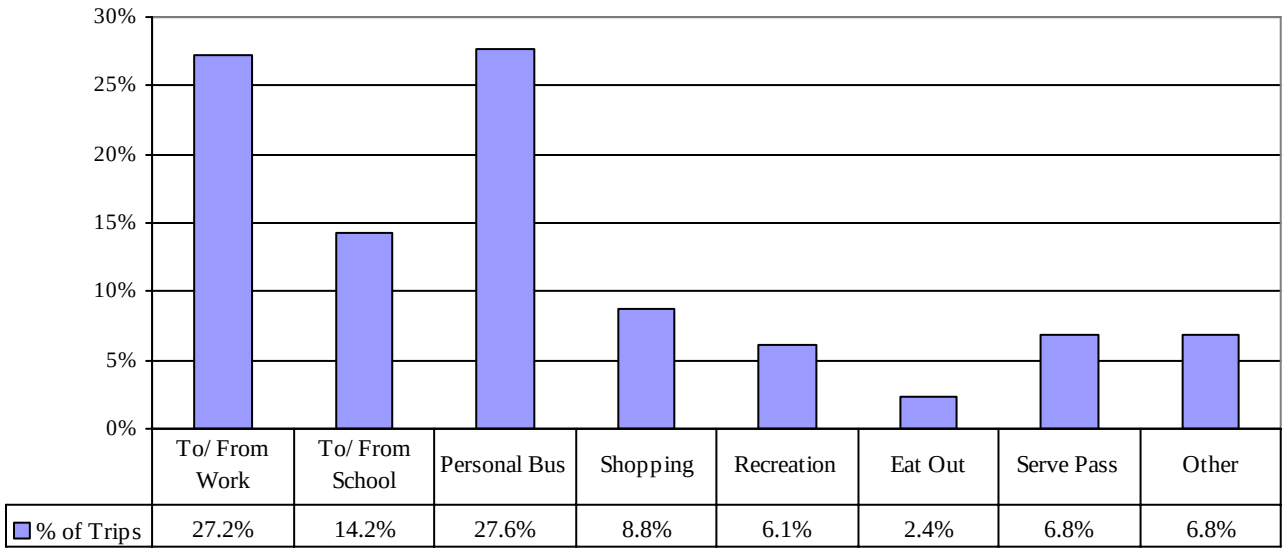
TABLE 6: PM PEAK TRIP ORIGINS AND DESTINATIONS BY SUBAREA

Subarea	Trip Origins	%	Trip Destinations	%
North Midtown	33,953	12.8	26,063	9.7
Chugiak-Eagle River	28,805	10.9	37,342	13.9
Hillside	27,211	10.3	34,009	12.6
Muldoon	27,055	10.2	39,970	14.9
Downtown	26,880	10.1	15,210	5.7
South Anchorage	25,318	9.6	32,585	12.1
University	19,798	7.5	14,128	5.3
South Midtown	16,389	6.2	13,971	5.2
Abbott Loop	14,303	5.4	15,983	5.9
Military	11,537	4.4	7,353	2.7
Mountain View	11,074	4.2	8.017	3.0
Sand Lake	8,904	3.4	11,913	4.4
Northwest	9,026	3.4	10,696	4.0
Airport	4,793	1.8	1,727	0.6

Base: 3,331 unlinked trips weighted by geography and household size and expanded to represent 276,095 PM Peak trips in the Anchorage area.

Consumer trips (personal business, shopping, eating out) comprised 39 percent of PM Peak trips, of which the largest proportion (28 percent) was for personal business. Trips to or from work comprised 27 percent and school trips comprised 14 percent of PM Peak trips.

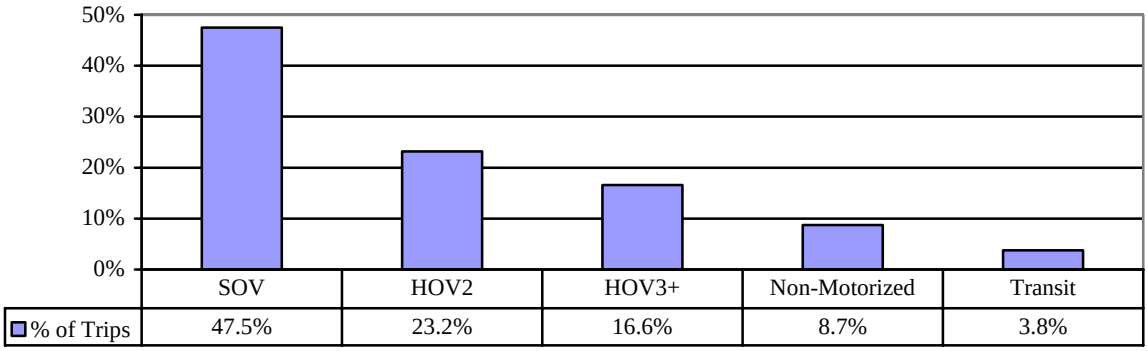
FIGURE 30: PM PEAK TRIPS BY TRIP PURPOSE



Base: 3,331 unlinked trips weighted by geography and household size and expanded to represent 276,095 PM Peak trips in the Anchorage area.

Compared to other time periods, PM peak travel was more likely to be by HOV. At nearly nine percent, non-motorized trips were more frequent as well. The percent of transit trips was actually lower than other time periods.

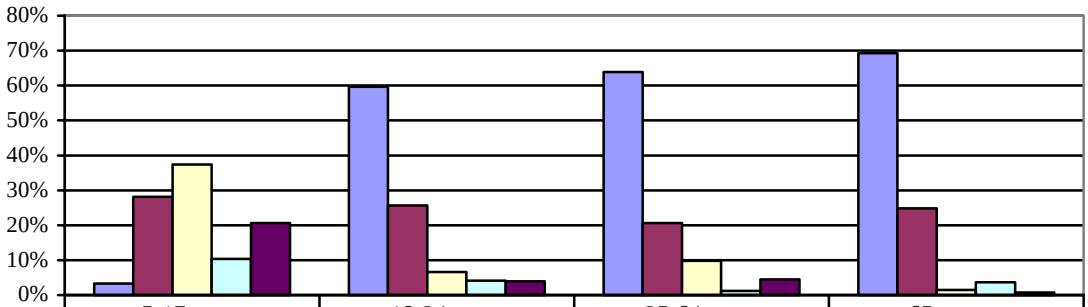
FIGURE 31: PM PEAK TRIPS BY TRAVEL MODE



Base: 3,331 unlinked trips weighted by geography and household size and expanded to represent 276,095 PM Peak trips in the Anchorage area.

PM Peak Travel by SOV increased by age. Persons aged 65 and older traveled via SOV to a significantly larger percent than did persons in other age categories. On the other hand, PM Peak travel by transit and non-motorized means decreased by age. Children were the most likely to travel via these modes during the PM peak.

FIGURE 32: PM PEAK PERSON TRIPS BY AGE BY TRAVEL MODE



	5-17 years	18-24 years	25-64 years	65+ years
SOV	3.3%	59.7%	63.9%	69.3%
HOV2	28.1%	25.7%	20.6%	24.8%
HOV3+	37.4%	6.6%	9.8%	1.5%
Transit	10.4%	4.1%	1.2%	3.7%
Non-Motorized	20.6%	3.9%	4.5%	0.7%

Base: 3,331 unlinked trips weighted by geography and household size and expanded to represent 276,095 PM Peak trips in the Anchorage area.

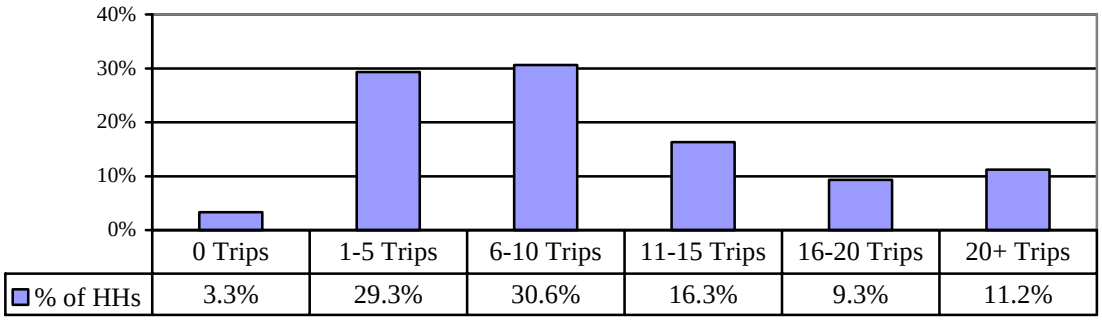
HOUSEHOLD CHARACTERISTICS

The 1,293 participating households provided important socioeconomic data about study area households. These data were used not only as inputs into the travel demand forecast models but also to provide insight into population characteristics for a variety of transportation planning and policy applications.

VOLUME OF TRIPS

Very few of the households (three percent) that participated in the survey reported making "zero" trips on their travel day. Most households reported making 10 trips or less, while one in ten households (11 percent) reported making more than 20 trips on their travel day. Thus, the household survey data set contains a rich body of trip information for the study area.

FIGURE 33: NUMBER OF TRIPS PER HOUSEHOLD ON ASSIGNED TRAVEL DAY



Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

As household size increased, the number of trips per household also increased. The largest volumes of trips were among the 2- and 4-person households.

TABLE 7: HOUSEHOLDS AND TRIPS BY HOUSEHOLD SIZE

Household (HH) Size	# HHs	%	# Trips	%	Trips/HH
1	23,295	24.6	104,357	10.6	4.5
2	30,151	31.8	242,960	24.8	8.1
3	16,512	17.4	184,121	18.8	11.2
4	14,035	14.8	218,429	22.3	15.6
5	6,578	6.9	133,167	13.6	20.3
6+	4,251	4.5	96,682	9.9	22.7
Total	**94,822**	**100.0**	**980,166**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

HOUSEHOLD COMPOSITION AND TRIP-MAKING

Two household composition variables were significantly associated with household trip rates – number of workers and presence of school age children. There were 140,293 workers among the 94,822 households in the Municipality of Anchorage. This estimate represented 1.48 workers per household. Two worker households were in the majority (42 percent), and 39 percent of households had one worker. Only 11 percent of households had zero workers in them. Less than one in ten (seven percent) had three or more workers, which tend to be fairly common in areas with large immigrant populations. The trips generated by employed persons were significant in the Anchorage area. Telecommuting was not well entrenched in most households. In fact, only 15 percent of households in the Anchorage study area had a telecommuter living in it. Not only did employed persons make home to work trips, but also their increased spending power increased the number of non-work trips.

Households with two workers generated nearly half of the reported trips in the survey. The trip rates of these two-worker households were nearly twice as high (per household) as zero-worker households (11.7 trips per household compared to 6.3 trips per household). While households with three or more workers were a small segment of the total population (seven percent), they generated a disproportionately large volume of trips (nearly 20 trips per household).

TABLE 8: TRIPS BY NUMBER OF WORKERS

Workers	# HHs	%	# Trips	%	Trips/HH
0	10,896	11.5	68,775	7.0	6.3
1	37.051	39.1	314,566	32.1	8.5
2	39,472	41.6	462,425	47.2	11.7
3+	7,402	7.3	134,399	13.7	18.16
Total	**94,822**	**100.0**	**980,166**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

By far, the majority of households in the sample (64 percent) did not contain children (defined as persons 17 years of age or younger). About seven percent of these households contained retirees and four percent of them contained children over the age of 17. Only slightly more than one-third (36 percent) of households in Anchorage contained one or more school age children. In this respect, Anchorage differed from the state of Alaska as a whole, where 43 percent of all households in the state contained one or more children.

The presence of school age children in the household was significantly associated with high trip making. Households with children generated more than 50 percent of all trips recorded during the travel survey when they only represented 36 percent of all households. Households without children averaged 7.3 trips whereas those with only one child averaged 12.2 trips per household and those with four children averaged 24.3 trips per household.

TABLE 9: HOUSEHOLDS, PERSONS, AND TRIPS BY PRESENCE OF CHILDREN (SURVEY POPULATION)

Number of Kids	# HHs	%	# Trips	%	Trips/HH
0	60,548	63.9	443,322	45.2	7.3
1	12,742	13.4	155,408	15.9	12.2
2	12.047	12.7	182,453	18.6	15.1
3	5,617	5.9	106,613	10.9	18.9
4	3,090	3.3	74,987	7.7	24.3
5+	778	0.8	17,383	1.8	22.3
Total	**94,822**	**100.0**	**980,166**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

The previous tables indicated how trip making increased as the number of workers in the household increased and how the presence of children also increased household travel. The following table examined the individual impact of these two variables on trip making.

As Table 10 indicates, regardless of the number of workers present, households with school age children made more trips. Even households with zero workers that contained school age kids made more trips than households with 2+ workers that contained "no" school age kids (10.5 trips per household compared with 9.1 trips per household).

TABLE 10: HOUSEHOLDS AND TRIPS BY HOUSEHOLD STRUCTURE

Household Class	#HHs	%	# Trips	%	Trips/HH
No Workers w/ Kids	668	0.7	7,000	0.7	10.5
1 Worker w/ Kids	10,794	11.4	165,602	16.9	15.3
2+ Workers w/ Kids	21,739	22.9	372,449	38.0	17.1
No Workers w/o Kids	3,032	3.2	19,275	2.0	6.4
1 Worker w/o Kids	25,147	26.5	138,198	14.1	5.5
2+ Workers w/o Kids	22,928	24.2	208,572	21.3	9.1
Kids age 18 and older	3,512	3.7	28,123	2.9	8.1
Retirees, No Kids	7,002	7.4	40,946	4.2	5.9
Total	**94,822**	**100.0**	**980,166**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

SOCIO-ECONOMIC STATUS AND TRIP-MAKING

Household income impacts trip making. Persons in households with incomes greater than $60,000 reported significantly more trips than did those in households with incomes that were less than $60,000. One factor contributing to these higher trip rates was that higher income households typically had more household members. For example, households with household incomes less than $20,000 contained an average of 2.0 persons, whereas those with household incomes greater than $100,000 contained an average of 3.1 persons.

TABLE 11: HOUSEHOLDS AND TRIPS BY INCOME

HH Income	#HHs	%	# Trips	%	Trips/HH
Less than 19,999	7,597	8.0	53,539	6.1	7.1
$20,000 - $29,999	7,315	7.7	50,699	5.8	6.9
$30,000 - $39,999	8,354	8.8	60,619	6.9	7.2
$40,000 - $49,999	8,323	8.8	68,696	7.8	8.2
$50,000 - $59,999	8,146	8.6	72,005	9.2	8.8
$60,000 - $69,999	11,577	12.2	137,358	15.6	11.9
$70,000 - $79,999	11,130	11.7	144,230	16.4	12.9
$80,000 - $89,999	4,085	4.3	47,114	5.4	11.5
$90,000 - $99,999	3,609	3.8	45,953	5.2	12.7
More than $100,000	14,579	15.4	198,769	22.6	13.6
Missing	10,107	10.7	--	--	--
Total	**94,822**	**100.0**	**878,982**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

Vehicle ownership in Anchorage was comparable to the national average. Only 2,779 households in the Municipality of Anchorage reported owning zero vehicles. Nearly half of households reported owning at least two vehicles, and nearly one-quarter reported owning three or more vehicles. The average number of vehicles owned was 2.0, which was comparable to the United States as a whole. The more vehicles per household, the greater the number of trips made with 4.4 trips recorded by households with zero vehicles and 11.3 trips per households for those with two vehicles.

TABLE 12: HOUSEHOLDS AND TRIPS BY VEHICLE OWNERSHIP

Vehicles	#HHs	%	# Trips	%	Trips/HH
0	2,779	2.9	12,109	1.2	4.4
1	24,663	26.0	147,236	15.0	5.9
2	45,658	48.2	516,100	52.7	11.3
3	14,730	15.5	196,131	20.0	13.3
4+	6,992	7.4	108,589	11.1	15.5
Total	**94,822**	**100.0**	**980,165**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

Three vehicle makes (Ford, Chevy, Dodge) comprise nearly half of all vehicles owned. Eighteen makes comprised nearly 90 percent of all vehicles owned. Subaru and Toyota, totaling nearly 12 percent of vehicles owned, were the most popular imports.

TABLE 13: MAKE OF VEHICLES OWNED BY HOUSEHOLDS

Make	Expanded Data	%
Ford	42,926	22.2
Chevrolet	34,008	17.6
Dodge	18,448	9.6
Subaru	11,525	6.0
Toyota	10,914	5.7
GMC	8,053	4.2
Jeep	6,830	3.5
Honda	6,642	3.4
Nissan	5,172	2.7
Plymouth	3,412	1.8
Oldsmobile	2,648	1.4
Pontiac	2,729	1.4
Chrysler	2,477	1.3
Mitsubishi	2,498	1.3
Saturn	2,601	1.3
Volkswagon	2,504	1.3
Mazda	2,208	1.1
Buick	2,035	1.1
All Others	20,550	11.5
Refused	3,164	1.6
Total	**191,346**	**100**

Base: 2,560 vehicles owned by 1,253 households.

According to theories of cluster analysis, the socio-demographic characteristics of households within neighborhoods are relatively consistent. Given this, we would expect trip rates to vary across subareas. Households in certain subareas made more trips than households in other areas. Three subareas generated the highest volumes of trips, as well as the most trips per household. These subareas were: Hillside, Chugiak, Eagle River, and South Anchorage. The average trip rate in South Midtown was quite high relative to the small number of households there. See Table 14 on the following page.

TABLE 14: HOUSEHOLDS, PERSONS, AND TRIPS BY HOUSEHOLD LOCATION

Subarea	# HHs	%	# Trips	%	Trips/HH
Hillside	13,065	13.8	182,103	18.6	13.9
Chugiak / Eagle River	14,158	14.9	171,630	17.6	12.1
South Anchorage	8,859	9.3	102,944	10.5	11.6
South Midtown	3,285	3.5	35,249	3.6	10.7
Sand Lake	6,696	7.1	70,259	7.2	10.5
Abbott Loop	6,984	7.4	68.707	7.0	9.8
Muldoon	17,933	18.9	166,272	17.0	9.3
Northwest	6,776	7.1	63,128	6.5	9.3
University	3,434	3.6	28,097	2.9	8.8
Military	3,227	3.4	24,175	2.5	7.5
Mountain View	3,009	3.2	21,754	2.2	7.2
North Midtown	2,991	3.2	21,054	2.2	7.0
Downtown	3,802	4.0	21,649	2.2	5.7
Airport	65	0.1	--	--	--
Missing	538	0.6	--	--	--
Total	**94,822**	**100.0**	**977,021**	**100.0**	**10.4**

Base: 1,293 Households in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

PERSON CHARACTERISTICS AND TRAVEL BEHAVIOR

The survey database contains demographic and travel information on 3,029 persons. These persons represent 250,522 persons in the Municipality of Anchorage, and they made 908,165 unlinked trips on their assigned travel days. These estimates reflect a trip rate per person of 4.07 trips. Eleven percent of people age five and over did not travel on their travel day, representing 25,918 residents.

DEMOGRAPHIC CHARACTERISTICS

The sample was nearly evenly split between males and females. However, females made the majority of trips (53 percent), with an average trip rate of 4.2 per person.

TABLE 15: PERSONS AND TRIPS BY GENDER

Gender	# Persons	%	# Trips	%	Trips/ Person
Male	122,492	48.9	459,455	47.0	3.9
Female	127,285	50.8	518,163	53.0	4.2
Refused	746	0.3	--	--	--
Total	**250,522**	**100.0**	**977,618**	**100.0**	**4.1**

Base: 3,029 Persons in the Municipality of Anchorage, age five and older, weighted by geography and household size and expanded to represent all households.

The sample included individuals of every major age group, which is useful for various analytic and modeling purposes. However, most of the persons in the sample are between the ages of 25 and 54.

Persons between the ages of 35-54 years reported the most trips during their assigned 24-hour period, an average of 4.7 trips per person. This trip rate was significantly higher than that reported by young adults (averaging 3.5 trips per person). We believe the higher trip rates among persons aged 35-54 and 25-44 is related to the fact that these former individuals are more likely than those of other ages to have kids. Persons with kids, regardless of gender, make significantly more trips than those without kids.

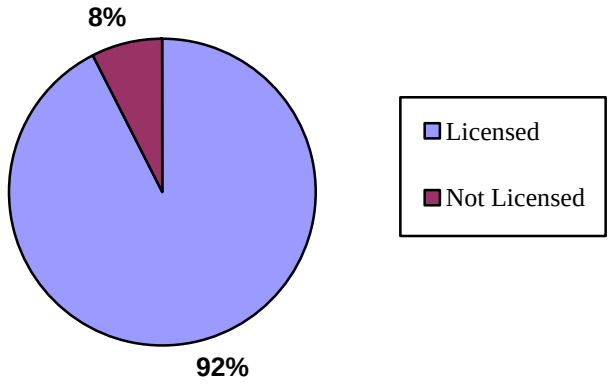
TABLE 16: PERSONS AND TRIPS BY AGE

Age	# Persons	%	# Trips	%	Trips/ Person
Less than 5 years	9,969	4.0	--	--	--
5-17 years	60,488	24.1	210,293	21.5	3.5
18-24 years	21,079	8.4	73,361	7.5	3.5
25-34 years	32,708	13.1	129,642	13.2	4.0
35-44 years	48,391	19.3	227,501	23.2	4.7
45-54 years	42,032	16.8	199,204	20.3	4.7
55-64 years	19,391	7.7	81,655	8.3	4.2
65+ years	16465	6.6	58,510	6.0	3.6
Total	**250,522**	**100.0**	**980,166**	**100.0**	**4.1**

Base: 3,029 Persons in the Municipality of Anchorage, age five and older, weighted by geography and household size and expanded to represent all households. Note: Trip information was not collected for persons less than five years of age.

Most persons age 16 and older (92 percent) were licensed drivers. On average, licensed drivers made 4.4 trips on their assigned travel day, compared to 2.5 trips for unlicensed drivers. About one-third of those who were unlicensed were between the ages of 16 and 18. Others were distributed throughout all age groups. Most unlicensed drivers (54 percent) were unemployed but more than one-fourth (28 percent) were employed full-time.

FIGURE 34: DISTRIBUTION OF LICENSED DRIVERS

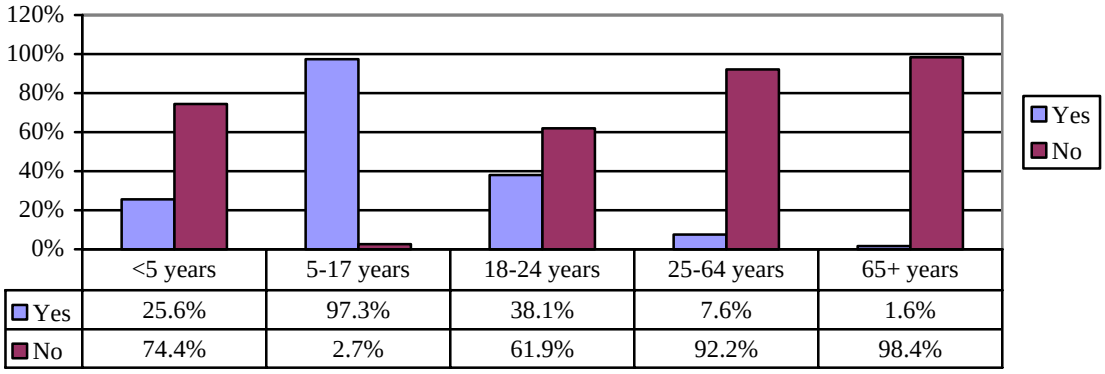


Base: 2,295 Persons in the Municipality of Anchorage, age 16 and older, weighted by geography and household size and expanded to represent all households.

SCHOOL ATTENDEES AND EDUCATIONAL ATTAINMENT

About one-third of the sample said that they attended school. Most of these persons were less than 18 years old. Still, a fairly sizable portion (38 percent) of young adults were students. Adults in school made more trips on their travel day than did non-students. Among young adults, those in school made 3.6 daily trips compared to 3.4 trips for non-students. Older adults who were attending school made 4.9 trips on their travel day, compared to 4.4 trips for non-students.

FIGURE 35: DISTRIBUTIONS OF PERSONS ENROLLED IN SCHOOL BY AGE



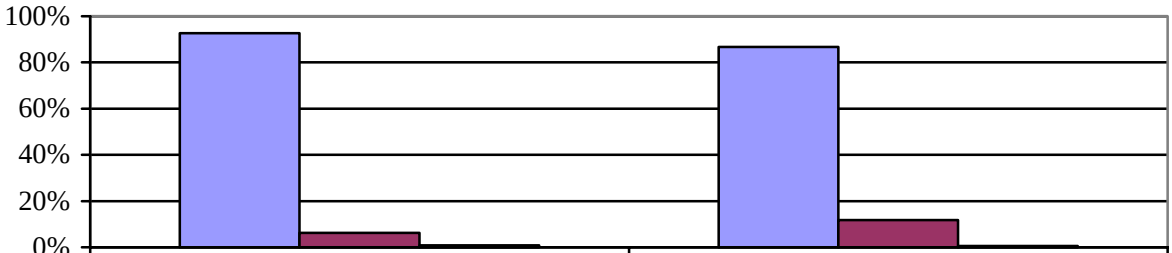
	<5 years	5-17 years	18-24 years	25-64 years	65+ years
Yes	25.6%	97.3%	38.1%	7.6%	1.6%
No	74.4%	2.7%	61.9%	92.2%	98.4%

Base: 3,029 Persons in the Municipality of Anchorage, age five and older, weighted by geography and household size and expanded to represent all households.

EMPLOYMENT

Three-fourths of adults, aged 15 years and older, were employed either full- or part-time, representing 141,109 persons in the Anchorage borough. Most (64 percent) were employed full-time, and 12 percent were employed part-time. Only a small number of persons (eight percent) held more than one job. Most of the persons who held more than one job worked both full- and part-time. Significantly fewer persons held two or more part-time jobs. The majority of persons employed full-time worked fixed hours. Part-time workers had more flexible work hours.

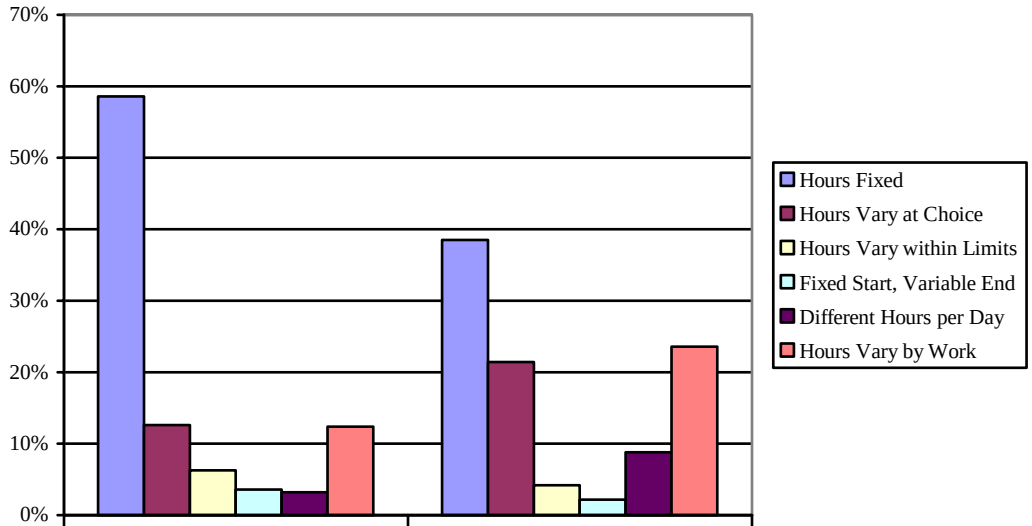
FIGURE 36: NUMBER OF JOBS AMONG EMPLOYED PERSONS



	Full-Time	Part-Time
1 Job	92.6%	86.7%
2 Jobs	6.3%	11.8%
3+ Jobs	0.8%	0.6%

Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

FIGURE 37: SCHEDULE FLEXIBILITY AMONG EMPLOYED PERSONS

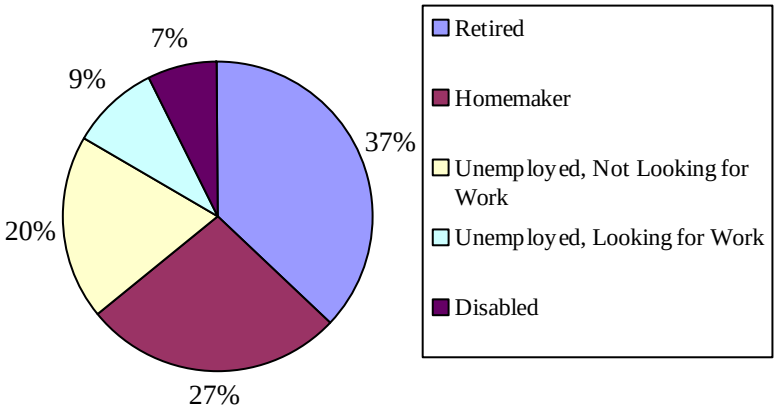


	Full-Time	Part-Time
Hours Fixed	58.6%	38.5%
Hours Vary at Choice	12.6%	21.4%
Hours Vary within Limits	6.3%	4.2%
Fixed Start, Variable End	3.6%	2.2%
Different Hours per Day	3.2%	8.8%
Hours Vary by Work	12.4%	23.6%

Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households (of those responding).

Twenty-four percent of the sample was unemployed, representing approximately 45,000 persons. Most of the unemployed individuals were retired (36 percent) or homemakers (26 percent).

FIGURE 38: STATUS OF UNEMPLOYED PERSONS



Base: 605 Non-Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

Employed persons made a total of 614,457 trips on their assigned travel day. They reported more trips than non-employed persons, with the exception of homemakers and retired persons. In fact, part-time workers and homemakers reported the most trips. Unemployed persons, whether or not they were actively seeking work, had rates of travel that were below the average for all persons.

TABLE 17: PERSONS AND TRIPS BY EMPLOYMENT STATUS

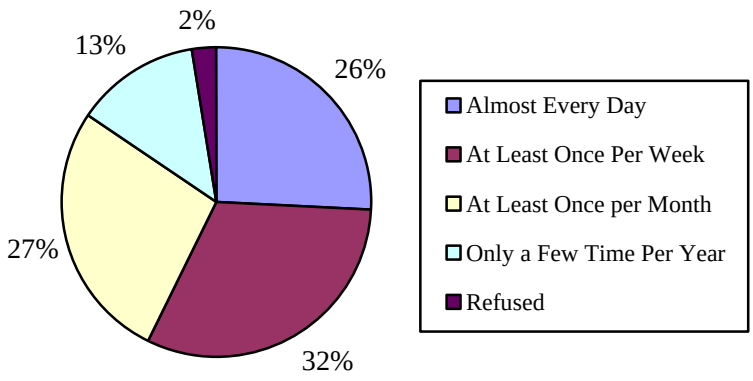
Employment Status	# Persons	%	# Trips	%	Trips/Person
Employed Full-Time	117,652	62.8	503,522	66.0	4.3
Employed Part-Time	22,550	12.0	108,004	14.1	4.8
Employed Full & Part-Time	907	0.5	2,931	.04	3.2
Not Employed, Retired	16,684	8.9	67,586	8.9	4.1
Not Employed, Disabled	3,248	1.7	9,548	1.3	2.9
Not Employed, Homemaker	12,200	6.5	58,752	7.7	4.8
Not Employed, Looking for Work	4,232	2.3	14,608	0.6	3.5
Not Employed, Not looking for Work	8,818	4.7	30,397	1.2	3.5
Refused	1,072	0.6	--	--	--
Total	**187,363**	**100.0**	**763,393**	**100.0**	**4.1**

Base: 2,469 Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

TELECOMMUTING

About 15 percent of employed persons said they telecommute; thus, there were approximately 21,000 telecommuters in Anchorage at the time of the survey. Fifteen percent of full-time workers and 14% of part-time workers telecommute. More than half of telecommuters (58 percent) do so at least once per week. Four percent of all employed persons telecommute almost every day; they represent 5,899 fewer daily commuters on Anchorage roadways.

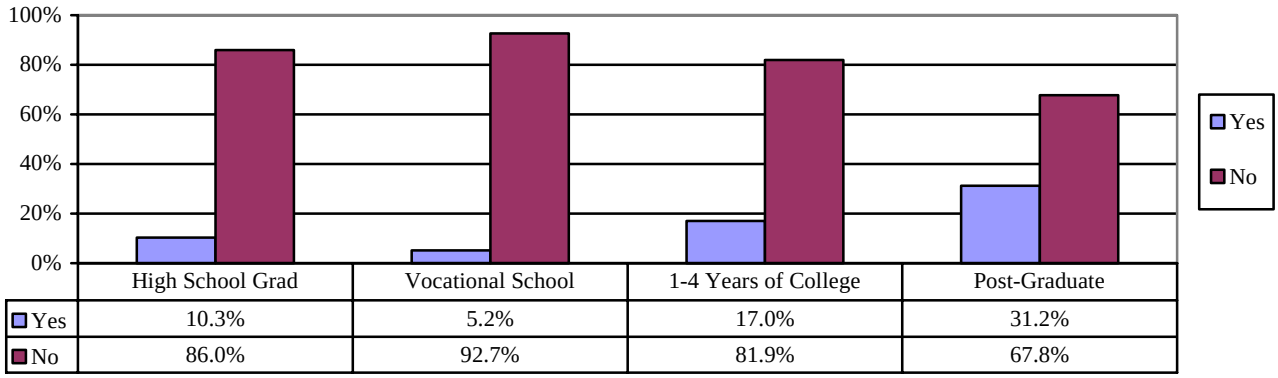
FIGURE 39: FREQUENCY OF TELEWORKING



Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

Higher levels of educational attainment were associated with telecommuting. Telecommuters were much more likely to have a post-graduate or college degree than not. Telecommuters were also most likely to be ages 45-64.

FIGURE 40: TELEWORKING BY EDUCATIONAL ATTAINMENT

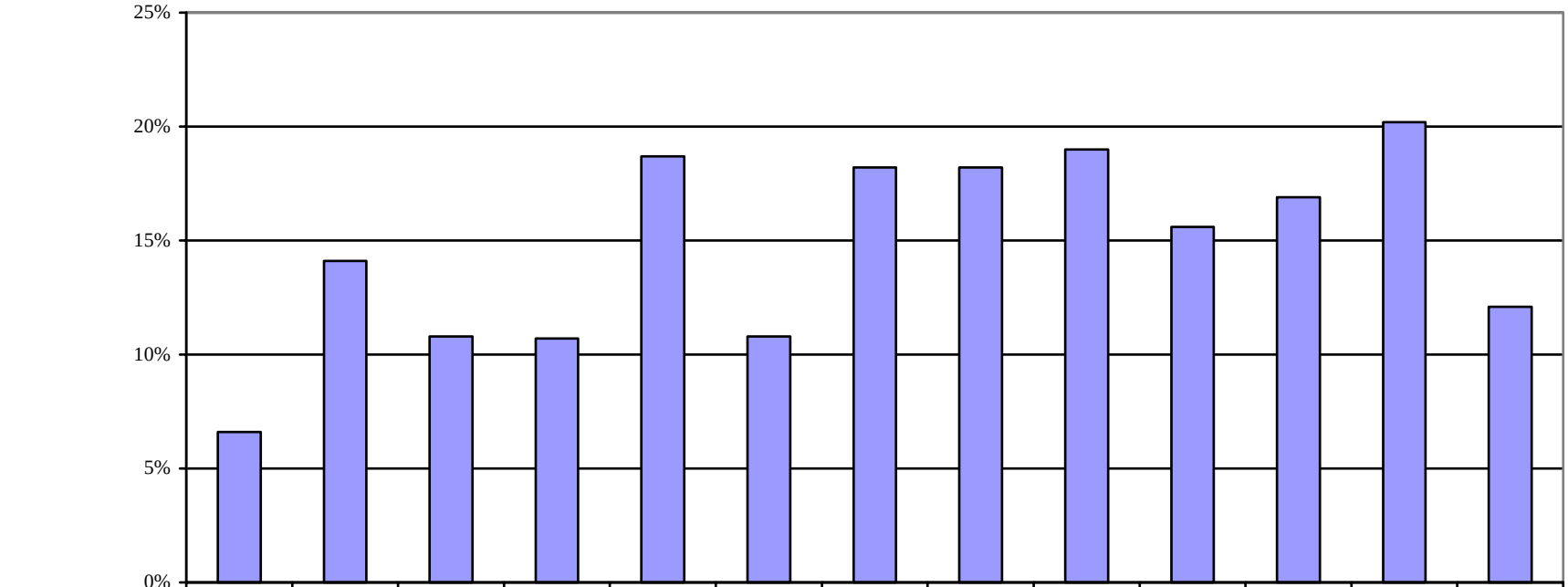


	High School Grad	Vocational School	1-4 Years of College	Post-Graduate
Yes	10.3%	5.2%	17.0%	31.2%
No	86.0%	92.7%	81.9%	67.8%

Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage weighted by geography and household size and expanded to represent all households. (Refusal responses not presented in the table.)

Telecommuters were most likely to reside in Hillside, South Midtown, Northwest, University, Sand Lake and South Anchorage. They were least likely to reside in Military, Mountain View, Muldoon and North Midtown.

FIGURE 41: PERCENT OF TELEWORKERS IN EACH SUBAREA



	Military	Downtown	Mountain View	Muldoon	Northwest	North Midtown	University	Sand Lake	South Midtown	Abbott Loop	South Anchorage	Hillside	Chugiak-Eagle River
% of Teleworkers	6.6%	14.1%	10.8%	10.7%	18.7%	10.8%	18.2%	18.2%	19.0%	15.6%	16.9%	20.2%	12.1%

Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

Telecommuters did not necessarily make fewer trips than non-telecommuters. On their travel day, they made, on average, one more trip per day than persons who did not telecommute (5.2 trips per day compared to 4.2 trips per day). Telecommuters who did so almost every day did have lower trip rates than those who telecommuted quite infrequently (4.7 trips per day compared to 5.5 trips per day). However, the trip rates of daily telecommuters were still higher than non-telecommuters.

TABLE 18: PERSONS AND TRIPS BY TELEWORKING

Telecommute	# Persons	%	# Trips	%	Trips / Person
Yes	20,801	14.7	107,781	18.1	5.2
No	116,400	82.5	488,229	81.9	4.2
Refuse	3,908	2.8	--	--	--
Total	**141,109**	**100.0**	**596,010**	**100.0**	**4.4**

Base: 1,864 Employed Persons, aged 15 and older, in the Municipality of Anchorage, weighted by geography and household size and expanded to represent all households.

PEOPLE MOVER USERS AND THEIR TRAVEL BEHAVIOR

The information about People Mover users presented in this section was derived from intercept surveys of such users at bus stops in Anchorage. (See Technical Report of Methods for more information on the survey methods.) This enrichment sample contained information from 174 households.

Combined with the information about transit users in the regular sample, there are 222 transit users representing 215 households. Table 19 shows the breakdown of the transit users by sample type and transit use.

TABLE 19: TRANSIT USING HOUSEHOLDS IN SAMPLE

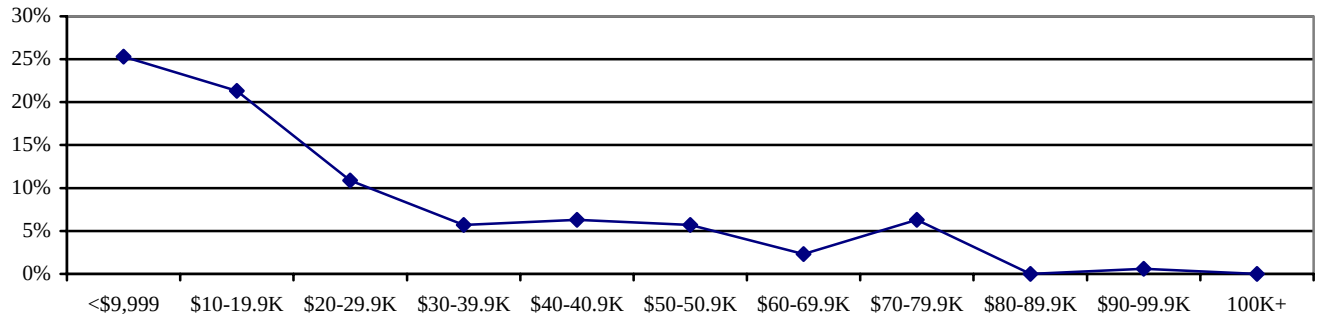
Sample Type	Total Sample	Transit Using Households in Sample
Anchorage	1,051	44
Chugiak/Eagle River	242	7
In-Person Telephone Intercept	27	16
In-Person Transit Intercept	147	147

Because the intercept households were not collected through random digit dialing procedures, they cannot be added to the regular sample data set. For simplicity, the following results section covers only the intercept households included in the transit-using database (see shaded rows in Table 19). The data are unweighted.

DEMOGRAPHICS

Half of the transit users in the survey sample reported a total household income per year of less than $30,000. Virtually no transit users (less than four percent) reported household incomes of $80,000 a year or more.

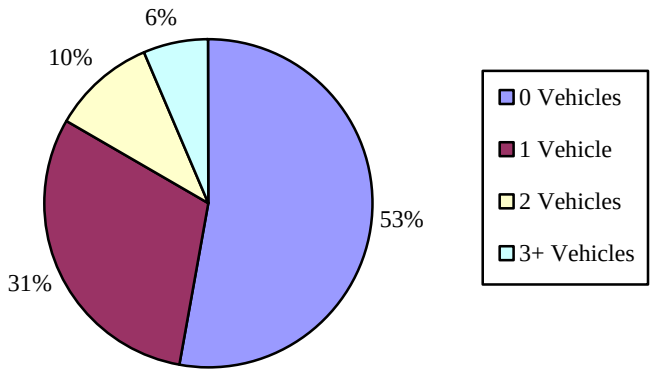
FIGURE 42: HOUSEHOLD INCOME FOR PEOPLE MOVER USERS



Base: 174 Households with People Mover users in the Municipality of Anchorage, unweighted.

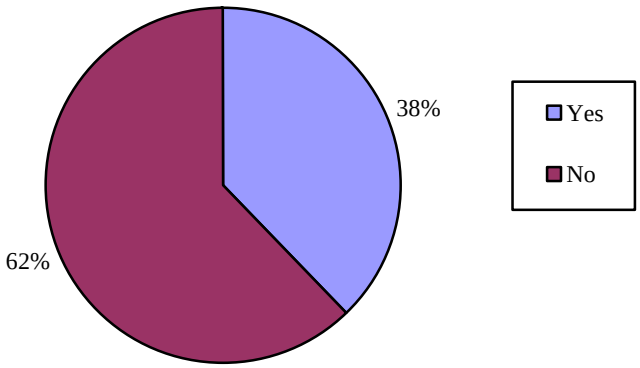
More than half of the transit users' households did not own a vehicle. Thirty percent owned one vehicle, and 16 percent own two or more. These statistics translate to 0.76 vehicles per household, compared to 2.02 for the Municipality of Anchorage as a whole. There were 191 people in this sample who were older than fifteen. Out of that total, only 38 percent had a driver's license.

FIGURE 43: HOUSEHOLD VEHICLE OWNERSHIP FOR PEOPLE MOVER USERS



Base: 174 Households with People Mover users in the Municipality of Anchorage, unweighted.

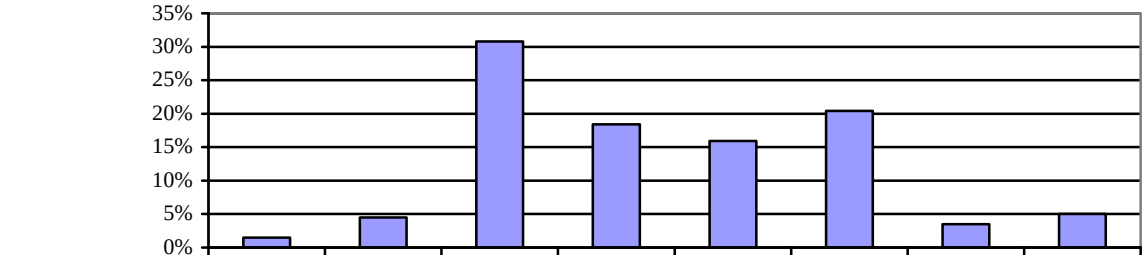
FIGURE 44: DISTRIBUTION OF DRIVERS LICENSES AMONG PEOPLE MOVER USERS



Base: 191 People Mover users in the Municipality of Anchorage, unweighted.

Ten percent more women (55 percent) than men (45 percent) were transit users. Almost 50% of the transit users were within the ages of 18 and 34, with a stronger concentration on the 18-24 year old range. One in five transit users were 45-54 years of age. Male transit users tended to be 18-24 or 45-54 years of age, whereas female transit users were more evenly spread throughout the age groups. The majority of female transit users, however, were 18-24 years of age. Twenty three percent of the transit-using sample were students. Almost half of these students were aged 18-24. This statistic might have been influenced by the intercept sampling sites.

FIGURE 45: AGE OF PEOPLE MOVER USERS

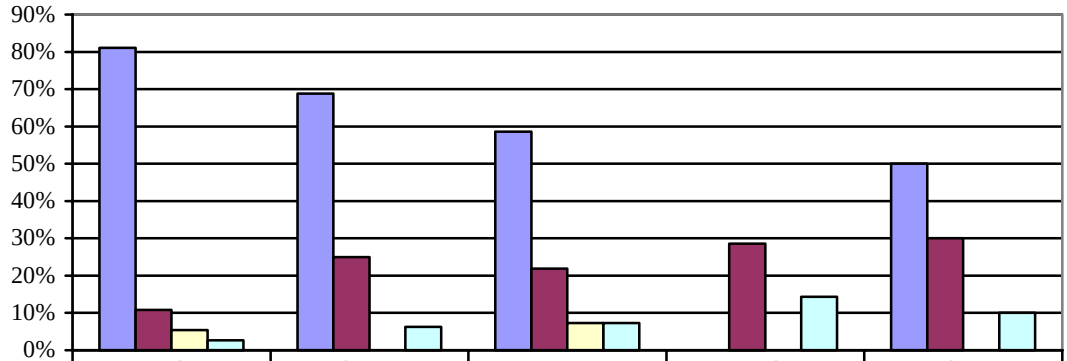


	<5 years	5-17 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
% of Transit Users	1.5%	4.5%	30.8%	18.4%	15.9%	20.4%	3.5%	5.0%

Base: 174 Households with People Mover users in the Municipality of Anchorage, unweighted.

Educational attainment was measured for persons aged 25 and older. Of the 127 persons fitting this description, more than half reported attaining no more than a high school education (67 percent). Older adults were more highly educated than the younger adults sampled.

FIGURE 46: EDUCATIONAL ATTAINMENT OF PEOPLE MOVER USERS BY AGE

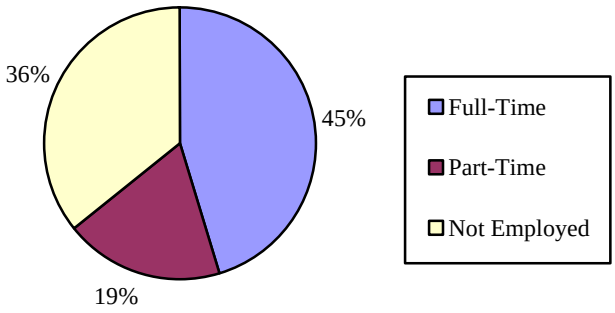


	25-34	35-44	45-54	55-64	65+
High School or less	81.1%	68.8%	58.6%	0.0%	50.0%
Associates / Vocational	10.8%	25.0%	21.9%	28.6%	30.0%
1-4 Years of College	5.4%	0.0%	7.3%	0.0%	0.0%
Post Graduate	2.7%	6.3%	7.3%	14.3%	10.0%

Base: 174 Households with People Mover users in the Municipality of Anchorage, unweighted. Percents do not add to 100% due to "refused" responses on education that are not reflected in the table.

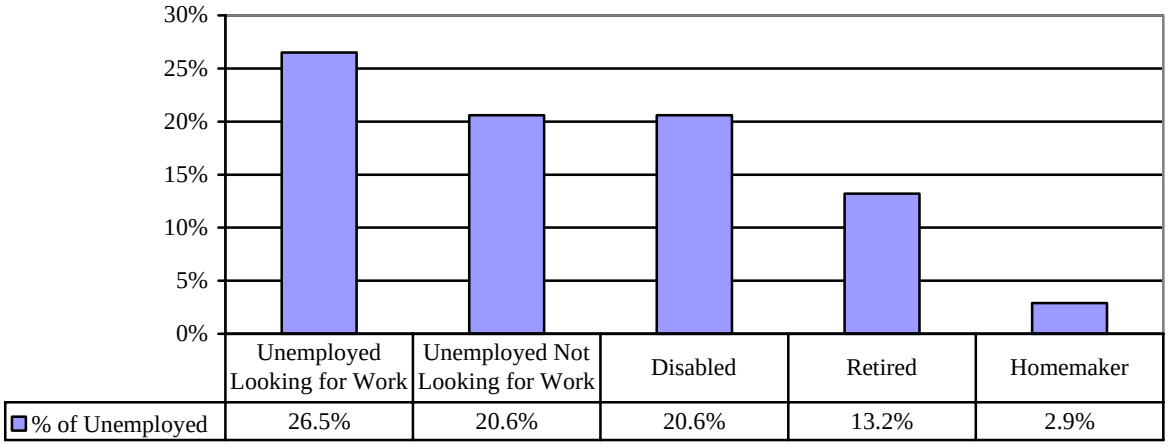
More than half (65 percent) of the People Mover users sampled were employed. The majority of them were employed full-time. Out of those that did not have a job, nearly one-fourth were looking for one. One in five (21%) were disabled. Very few were retired or homemakers.

FIGURE 47: EMPLOYMENT STATUS OF PEOPLE MOVER USERS



Base: 191People Mover users in the Municipality of Anchorage, unweighted.

FIGURE 48: STATUS OF UNEMPLOYED PEOPLE MOVER USERS

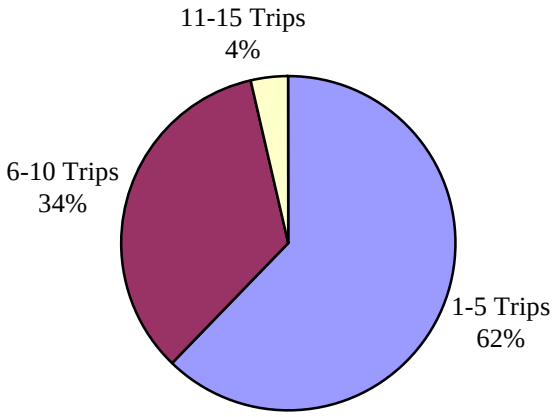


Base: 68 People Mover users in the Municipality of Anchorage, unweighted.

TRAVEL BEHAVIOR

The individuals in our People Mover sample reported an average of 2.4 trips per day per person. (The transit using individuals in our regular sample reported an average of 4.76 trips.) There were very few (four percent) heavy travelers among this group. Their trips, on average, took about 21 minutes. Transit trips took an average of 29 minutes, whereas walk trips took 12 minutes and auto driver trips took 15 minutes.

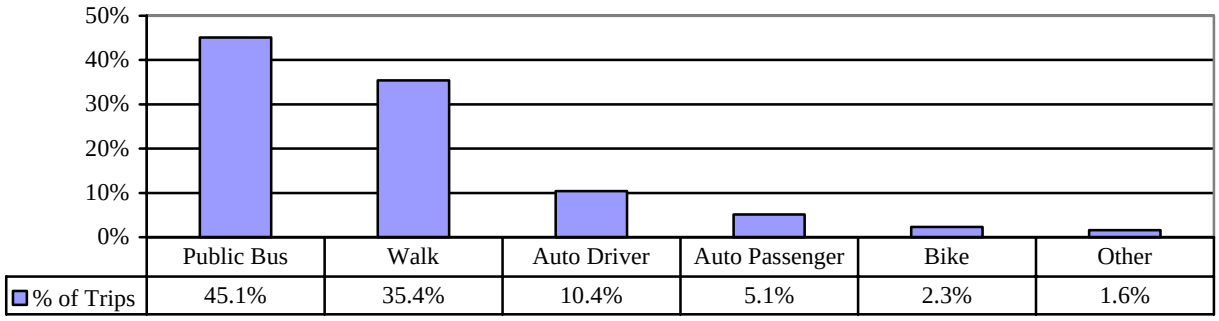
FIGURE 49: FREQUENCY OF TRAVEL



Base: 962 unlinked trips, unweighted.

Not surprisingly, the most common travel mode of travel for trips on the assigned travel day was public bus (45 percent). However, walking was also frequently used mode (35 percent). Fifteen percent of trips were taken in an auto, with most of these as the auto driver.

FIGURE 50: MODES OF TRAVEL ON ASSIGNED TRAVEL DAY FOR PEOPLE MOVER USERS

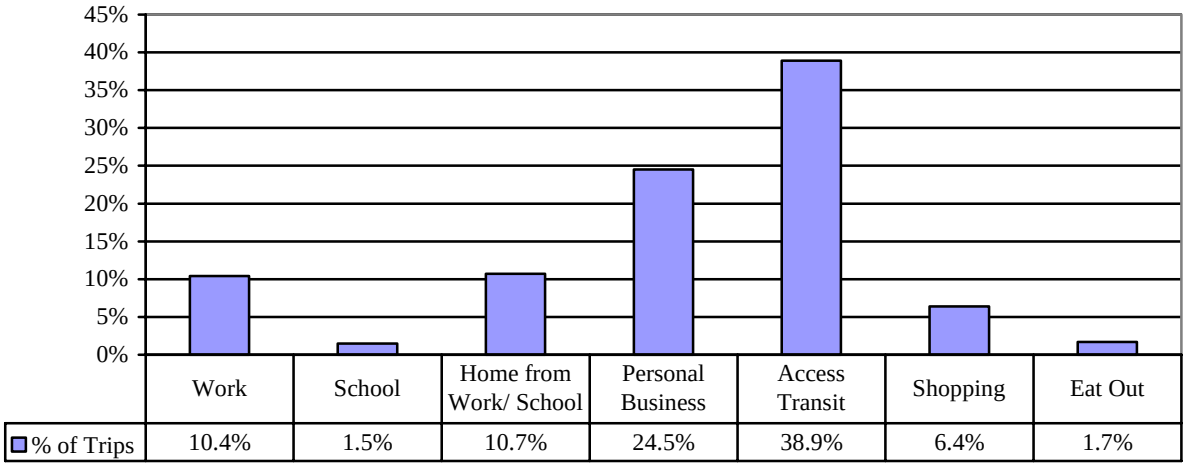


	Public Bus	Walk	Auto Driver	Auto Passenger	Bike	Other
% of Trips	45.1%	35.4%	10.4%	5.1%	2.3%	1.6%

Base: 962 unlinked trips, unweighted.

Of trips made on the assigned travel day, the most common purpose was to access transit (39 percent), followed by conduct personal business (25 percent).

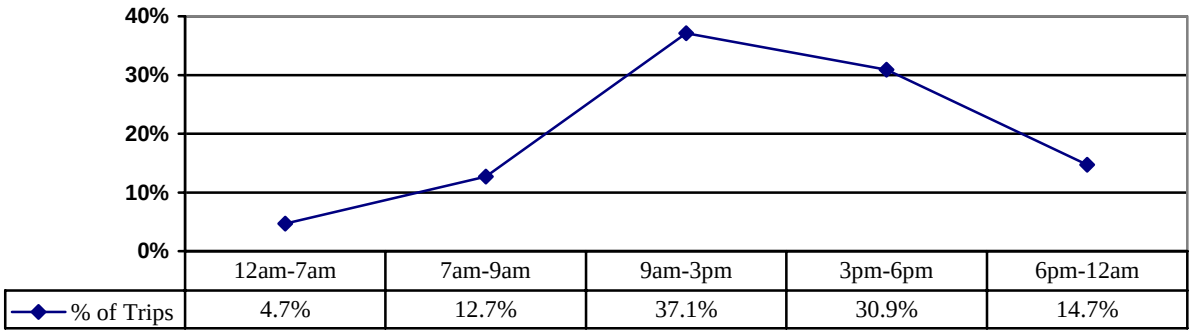
FIGURE 51: TRIP PURPOSES ON TRAVEL DAY AMONG PEOPLE MOVER USERS



Base: 962 unlinked trips, unweighted.

Two-thirds of all trips made by People Mover users in Anchorage were made during the period going from 9 a.m. to 6 p.m., with most of these (37 percent) taking place in the midday period.

FIGURE 52: DISTRIBUTION OF TRIPS BY PERIOD OF DAY FOR PEOPLE MOVER USERS



Base: 962 unlinked trips, unweighted.