

KLAMATH COUNTY SUMMARY OF FINDINGS

I Executive Summary

Introduction

The purpose of the 1996 Oregon Travel Behavior Survey is to provide information suitable for gaining an in-depth understanding of the activity and travel behavior of both households in non-metropolitan areas and the individuals within those households. The sampling approach used was designed to ensure that representative statewide data were obtained.

The 1996 Oregon Travel Behavior Survey was conducted under the auspices of the Oregon Department of Transportation. This survey relied on the willingness of area residents to complete diary records of their daily travel. Recruitment of households was conducted through a "recruitment interview" in which respondents were informed of the survey, its purpose and the respondent's obligation to complete diaries. Data on households and household members were also collected during the recruitment interview.

Participating households were assigned a "2-day travel period", which typically occurred 10 days after recruitment. Household members were asked to record travel information in their diaries for the specified 48-hour period. Immediately after the assigned date, households were contacted to retrieve the diary information.

The survey consisted of a scientifically formulated sample design, appropriate instruments for data collection, a package of written materials to communicate with survey respondents, a toll-free survey hotline, and data collection, processing and reporting procedures that comported to standards of the Council of American Survey Research Organizations (CASRO).

Data collection of Klamath County was conducted from April to November 1996. Data collection resulted in 609 recruited households. Of these, 389 provided the necessary information to result in completed surveys. The total number of activities reported was 24,515, and the total number of trips was 5,738. These totals translate into an average of about 63.02 activities and about 14.76 trips per household for the two-day period. There were too few 6+ person households to make reliable estimates of trips per day.

Average Person Trips Per Day

- One-person households averaged 3.27 trips per day,
- Two-person households averaged 5.75 trips per day,
- Three-person households averaged 9.70 trips per day,
- Four-person households averaged 14.40 trips per day,
- Five-person households averaged 17.27 trips per day,

The average rate for all households was roughly seven (7) trips per day.

Summary of Methods

The accompanying "Technical Memorandum" describes the sampling methodology in detail.

II Sampling and Response

Sample Design

The universe consists of households in the city of Klamath Falls in Klamath County. The household count for the study area was 18,075 households. It was determined using projections of annual growth rates from 1994 and/or 1995 commercial estimates. For purposes of the survey, a household was defined as “all persons currently living in the same dwelling who typically share meals together as well as share at least a part of their income.”

The Oregon Travel Behavior Survey used a random sample of telephone numbers in the study area. A random sample is one in which the probability, or relative chance, that any given household will be included in the sample is the same for all households in the universe. The sampling frame for the Oregon Travel Behavior Survey consisted of listed and unlisted telephone numbers for Klamath County drawn in proportion to their distribution within the county. Due to the nature of the sampling frame requested in the survey proposal, households without telephones were excluded from the sample.

The Klamath County sample included the city of Klamath Falls (zip codes 97603 and 97601). These zip codes cover 76% of the households in the county.

Response Rate

The Oregon Travel Behavior Survey used a two-stage sampling process (household recruitment and household retrieval). In such a case, response rates for recruitment and retrieval stages are reported independently, and then an overall response rate is reported by multiplying the two rates.

The **recruitment rate** is calculated using the following formula:

$$\text{Recruitment rate} = \frac{\text{Number of Recruited Households}}{\text{Number of Eligible Households in Sample}}$$

The number of recruited households is known - 609 households. The number of eligible households in the sample is calculated from the dispositions recorded for each sample piece. Contact attempts yielded three types of sample dispositions: (1) Eligible Sample, (2) Ineligible Sample, and (3) Eligibility Unknown Sample (see Table II-1). In estimating the eligible households, the number of eligible sample units is combined with a pro-rated number of eligibility unknown sample units. The pro-rated number is determined by totaling the number of eligible and ineligible sample, and then identifying the portion of the total comprised by eligible or ineligible sample. The number of eligible households is then calculated by adding the proportion of unknown sample (64%) to the total number of recruited households. The recruitment rate for households in Klamath County was 50% of all eligible households.

Recruitment Rate Calculation		
	Calculation	Total/ Percent
Number of Recruited Households	609	
Total Number of Eligible and Ineligible Sample	768 + 433	1,201
Proportion of Eligible Sample	768 / 1,201	64%
Proportion of Ineligible Sample	433 / 1,201	36%
Number of Eligible Households	768 + 454	1,222
Recruitment Rate	609 / 1,222	50%

Table II-1

Final Sample Dispositions (n=1,901)

Dispositions	Frequency	Percent	Total Number and Percent
Eligible Sample			40.4%
Recruited	609	29.6	
Second Refusal	130	22.5	
Terminated in middle of interview	8	0.7	
Over Quota	21	1.4	
			768
Ineligible Sample			22.8%
Disconnected Number	258	11.4	
Deaf/Language	21	0.4	
Business/Government	102	6.6	
Computer/Fax	35	1.7	
Non-Qualified	14	1.2	
Non-Resident	3	.1	
			433
Eligibility Unknown Sample			36.8%
First Refusal	324	8.0	
No Answer	146	5.0	
Busy	21	.8	
Answering Machines	152	6.3	
Call Back Appointments/Requests	57	4.3	
			700
Total Sample Pieces	1,901	100.0	

The **completion rate** is the rate at which recruited households complete the survey process. It is a measure of sample attrition, which is one determinant of sample bias. This rate is calculated by dividing the total number of completed surveys (389) by the total number of recruited households (609). A completion rate of 64% was obtained. The **Overall Response Rate** is calculated by multiplying the recruitment rate (50%) by the completion rate (64%) for a rate of 32%.

The final day-of-week distribution is displayed in Table II-2. It shows a heavy concentration on beginning and end of the week travel, which should be considered during data analysis.

**Table II-2
Travel Day of Week Distribution
(n=389)**

Travel Day Pairs	Percent
Monday/Tuesday	29.3%
Tuesday/Wednesday	24.2%
Wednesday/Thursday	12.6%
Thursday/Friday	28.5%
Friday/Saturday	4.1%
Sunday/Monday	1.3%

Survey Validation

The objective of validation was to estimate the precision of the survey results and evaluate the reasonableness of the survey results. The survey validation involved comparing regional population

Klamath Falls County

and housing characteristics with the 1990 STF-3A Census data for Josephine County for reasonableness. In 1990 Klamath County had 57,702 residents in 22,341 households; the total number of housing units was 25,954 while the number of occupied housing units was 22,341. During the study, 599 households were recruited, and 389 actually completed the survey. A completed household is one in which all members of the household completed a travel and activity diary. The following three tables (II-3, II-4, and II-5) compare survey data to Census parameters to identify potential biased estimates.

Low-income households (under \$15,000) are under-represented in the survey sample as compared to Census data (Table II-3). Several factors account for this discrepancy. First, the survey contacted only telephone households, while the Census reached every household. Non-telephone households tend to have lower incomes than telephone households, and this bias is reflected in the data. Second, six years have passed since Census data were collected. Incomes tend to increase over time, and this trend is reflected in the data. Third, the unemployment rate of survey respondents was considerably lower than the county-wide rate reported in the Census (see Table IV-4). This may be due, in part, to the reluctance of survey respondents to report being unemployed. A higher percentage of employed persons would generate a higher level of income, and this condition is reflected in the data as well.

When compared to Census data, two-person households are over-represented in the sample (Table II-4). However, the sample represents large households reasonably well. The sample distribution in terms of number of vehicles owned diverges from the Census data at the extremes (Table II-5).

**Table II-3
Household Income**

Income	Recruited Households (n=609)	Completed Households (n=389)	Census Data (n=22,414)
\$0-\$4,999	1.3%	1.0%	7.4%
\$5,000-\$9,999	3.9%	4.1%	11.8%
\$10,000-\$14,999	8.4%	7.5%	12.8%
\$15,000-\$19,999	7.4%	7.5%	11.0%
\$20,000-\$24,999	6.7%	7.7%	10.7%
\$25,000-\$29,999	9.5%	10.3%	9.4%
\$30,000-\$34,999	7.4%	8.2%	8.1%
\$35,000-\$39,999	8.4%	9.8%	7.4%
\$40,000-\$44,999	7.9%	8.2%	5.3%
\$45,000-\$49,999	6.6%	6.7%	4.0%
\$50,000-\$54,999	4.6%	4.9%	2.8%
\$55,000-\$59,999	2.8%	3.1%	2.4%
\$60,000-\$100,000	5.1%	5.7%	5.3%
\$100,000 or more	2.0%	2.3%	1.6%
Refused	18.1%	13.1%	--

**Table II-4
Household Size**

Persons per Household	Recruited Households (n=609)	Completed Households (n=389)	Census Data (n=22,414)
1 Person	21.3%	25.2%	24.1%
2 Persons	44.0%	44.5%	36.7%
3 Persons	12.5%	12.6%	15.4%
4 Persons	12.8%	9.5%	13.8%
5 Persons	6.1%	6.2%	6.7%
6 Persons	2.6%	2.1%	2.3%
7 or More Persons	0.7%	0.0%	1.0%
Refused	0.00%	0.00%	--

**Table II-5
Vehicles available per Occupied Housing Unit**

Vehicles Available	Recruited Households (n=609)	Completed Households (n=389)	Census Data (n=22,341)
None	2.8%	2.6%	7.1%
One	20.5%	22.4%	30.0%
Two	39.4%	39.6%	39.9%
Three	21.5%	20.8%	16.1%
Four	10.0%	9.8%	4.5%
Five or More	6.4%	4.9%	2.4%
Refused	0.00%	0.00%	--

III Household Characteristics

The following tables provide information about respondents' households. Where available, collected data is compared to Census Data.

**Table III-1
Household Size by Income (Completed Households=389)**

Income		HH Size						Row Total
		1	2	3	4	5	6	
less than \$4,999	Count	4	0	0	0	0	0	4
	Row %	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
	Column %	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
\$5,000 to \$9,999	Count	10	2	1	1	0	2	16
	Row %	62.5%	12.5%	6.3%	6.3%	0.0%	12.5%	4.1%
	Column %	10.2%	1.2%	2.0%	2.7%	0.0%	25.0%	
\$10,000 to \$14,999	Count	15	9	3	1	0	1	29
	Row %	51.7%	31.0%	10.3%	3.4%	0.0%	3.4%	7.5%
	Column %	15.3%	5.2%	6.1%	2.7%	0.0%	12.5%	
\$15,000 to \$19,999	Count	13	10	2	3	0	1	29
	Row %	44.8%	34.5%	6.9%	10.3%	0.0%	3.4%	7.5%
	Column %	13.3%	5.8%	4.1%	8.1%	0.0%	12.5%	
\$20,000 to \$24,999	Count	7	16	1	3	3	0	30
	Row %	23.3%	53.3%	3.3%	10.0%	10.0%	0.0%	7.7%
	Column %	7.1%	9.2%	2.0%	8.1%	12.5%	0.0%	
\$25,000 to \$29,999	Count	14	15	6	2	3	0	40
	Row %	35.0%	37.5%	15.0%	5.0%	7.5%	0.0%	10.3%
	Column %	14.3%	8.7%	12.2%	5.4%	12.5%	0.0%	
\$30,000 to \$34,999	Count	10	10	5	5	2	0	32
	Row %	31.3%	31.3%	15.6%	15.6%	6.3%	0.0%	8.2%
	Column %	10.2%	5.8%	10.2%	13.5%	8.3%	0.0%	
\$35,000 to \$39,999	Count	3	23	7	2	2	1	38
	Row %	7.9%	60.5%	18.4%	5.3%	5.3%	2.6%	9.8%
	Column %	3.1%	13.3%	14.3%	5.4%	8.3%	12.5%	

(Table continues on next page)

**Table III-1 (Continued)
Household Size by Income (Completed Households=389)**

Income		HH Size						Total
		1	2	3	4	5	6	
\$40,000 to \$44,999	Count	5	15	5	3	3	1	32
	Row %	15.6%	46.9%	15.6%	9.4%	9.4%	3.1%	8.2%
	Column %	5.1%	8.7%	10.2%	8.1%	12.5%	12.5%	
\$45,000 to \$49,999	Count	2	6	5	6	7	0	26
	Row %	7.7%	23.1%	19.2%	23.1%	26.9%	0.0%	6.7%
	Column %	2.0%	3.5%	10.2%	16.2%	29.2%	0.0%	
\$50,000 to \$54,999	Count	2	8	4	3	2	0	19
	Row %	10.5%	42.1%	21.1%	15.8%	10.5%	0.0%	4.9%
	Column %	2.0%	4.6%	8.2%	8.1%	8.3%	0.0%	
\$55,000 to \$59,999	Count	0	8	2	2	0	0	12
	Row %	0.0%	66.7%	16.7%	16.7%	0.0%	0.0%	3.1%
	Column %	0.0%	4.6%	4.1%	5.4%	0.00%	0.0%	
\$60,000 to \$100,000	Count	2	14	1	3	1	1	22
	Row %	9.1%	63.6%	4.5%	13.6%	4.5%	4.5%	5.7%
	Column %	2.0%	8.1%	2.0%	8.1%	4.2%	12.5%	
more than \$100,000	Count	0	6	2	0	0	1	9
	Row %	0.0%	66.7%	22.2%	0.0%	0.0%	11.1%	2.3%
	Column %	0.0%	3.5%	4.1%	0.0%	0.0%	12.5%	
Refused	Count	11	31	5	3	1	0	51
	Row %	21.6%	60.8%	9.8%	5.9%	2.0%	0.0%	13.1%
	Column %	11.2%	17.9%	10.2%	8.1%	4.2%	0.0%	
Column Total	Count	98	173	49	37	24	8	389
	%	25.2%	44.5%	12.6%	9.5%	6.2%	2.1%	100%

**Table III-2
Household Size by Number of Vehicles Available
(Completed Households=389)**

Vehicles		HH Size						Row
		1	2	3	4	5	6	Total
None	Count	8	2	0	0	0	0	10
	Row %	80.0%	20.0%	0.0%	0.0%	0.0%	0.0%	2.6%
	Column %	8.2%	1.21%	0.0%	0.0%	0.0%	0.0%	
1	Count	58	20	3	5	0	1	87
	Row %	66.7%	23.0%	3.4%	5.7%	0.0%	1.1%	22.4%
	Column %	59.2%	11.6%	6.1%	13.5%	0.0%	12.5%	
2	Count	25	89	17	8	11	4	154
	Row %	16.2%	57.8%	11.0%	5.2%	7.1%	2.6%	39.6%
	Column %	25.5%	51.4%	34.7%	21.6%	45.8%	50.0%	
3	Count	4	37	14	13	10	3	81
	Row %	4.9%	45.7%	17.3%	16.0%	12.3%	3.7%	20.8%
	Column %	4.1%	21.4%	28.6%	35.1%	41.7%	37.5%	
4	Count	3	16	7	10	2	0	38
	Row %	7.9%	42.1%	18.4%	26.3%	5.3%	0.0%	9.8%
	Column %	3.1%	9.2%	14.3%	27.0%	8.3%	0.0%	
5 or more	Count	0	9	8	1	1	0	19
	Row %	0.0%	47.4%	42.1%	7.1%	7.1%	0.0%	5.0%
	Column %	0.0%	5.2	16.3%	2.7%	4.2%	0.0%	
Refused	Count	0	0	0	0	0	0	0
	Row %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.0%
	Column %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Column	Count	98	173	49	37	24	8	389
Total	%	25.2%	44.5%	12.6%	9.5%	6.2%	2.1%	100.0%

**Table III-3
Dwelling Type (All Housing Units)**

Type of Dwelling	Recruited Households (n=609)	Completed Households (n=389)	Census Data (n=25,954)
Single, Detached	82.8%	82.8%	67.4%
Multi Unit	5.7%	7.5%	12.6%
Mobile Home or Trailer	10.5%	9.0%	18.9%
Other	1.0%	0.8%	1.1%
Refused	0.0%	0.0%	--

**Table III-4
Owner/Renter Status (Occupied Housing Units)**

Ownership Status	Recruited Households (n=609)	Completed Households (n=389)	Census Data (n=22,341)
Own	83.9%	82.8%	65.2%
Rent	15.6%	16.7%	34.8%
Other	0.5%	0.5%	--
Refused	0.0%	0.0%	--

IV Person Characteristics

The following tables provide information about the respondents themselves. Where available, collected data is compared to Census Data.

**Table IV-1
Gender**

Gender	Recruited Percentage (n=1,519)	Completed Percentage (n=907)	Census Data (n=57,702)
Male	47.9%	49.4%	50.4%
Female	52.1%	50.6%	49.6%
Refused	0.00%	0.00%	--

**Table IV-2
Age of Household Members**

Age	Recruited Percentage (n=1,519)	Completed Percentage (n=907)	Census Data (n=57,702)
0-4	5.6%	5.8%	7.1%
5-9	6.5%	5.1%	7.3%
10-14	8.0%	7.5%	7.9%
15-19	6.2%	5.3%	7.4%
20-24	3.7%	3.3%	6.4%
25-34	8.3%	8.2%	14.2%
35-44	14.9%	14.3%	15.2%
45-54	14.9%	17.1%	10.5%
55-64	11.5%	12.8%	9.6%
65-74	11.9%	12.2%	8.7%
75+	7.8%	8.3%	5.7%
Refused	0.9%	0.1%	--

**Table IV-3
Licensed Drivers by Persons**

License Status	Recruited Percentage (n=1,519)	Completed Percentage (n=907)	Census Data
Licensed	72.5%	75.0%	--
Non-Licensed	7.2%	6.6%	--
Not Applicable (under 15 years of age)	20.2%	18.4%	--
Refused	0.0%	0.00%	--

**Table IV-4
Employment Status by Persons 16 and older**

Employment Status	Recruited Percentage (n=1,189)	Completed Percentage (n=726)	Census Data (n=43,414)
Employed	53.3%	53.9%	54.4%
Unemployed	11.6%	9.8%	6.1%
Not in Labor Force	35.0%	36.3%	39.5%
Refused	0.1%	0.0%	--

**Table IV-5
Telecommute Status by Employed Persons**

Telecommute to Work?	Recruited Percentage (n=634)	Completed Percentage (n=391)	Census Data
Yes	11.4%	8.2%	--
No	88.6%	91.8%	--
Refused	0.00%	0.00%	--

**Table IV-6
Shift or Flexible Work Schedule by Employed Persons**

Shift or Flexible Work Schedule	Recruited Percentage (n=634)	Completed Percentage (n=391)	Census Data
Yes	35.6%	33.8%	--
No	21.1%	21.7%	--
Refused	43.2%	44.5%	--

**Table IV-7
Length of Employment by Employed Persons**

Length of Employment	Recruited Percentage (n=634)	Completed Percentage (n=391)	Census Data
Less than 1 year	18.1%	14.1%	--
1 - 1.9 years	10.6%	10.5%	--
2 - 2.9 years	6.5%	5.6%	--
3 - 3.9 years	7.6%	8.2%	--
4 - 4.9 years	4.3%	4.6%	--
5 or more years	48.3%	50.1%	--
Refused	4.7%	6.9%	--

**Table IV-8
Student Status by Full- or Part-Time Schedule
Persons 3 years and older**

Student Status	Recruited Percentage (n=1,466)	Completed Percentage (n=876)	Census Data (n=55,233)
Not Enrolled	76.7%	79.1%	73.8%
Part-Time Student	20.1%	17.5%	26.2%
Full-Time Student	3.1%	3.4%	
Refused	0.00%	0.00%	--

**Table IV-9
Educational Attainment by Persons 25 years and older**

Educational Attainment	Recruited Percentage (n=1,054)	Completed Percentage (n=662)	Census Data
None through 4th Grade	0.1%	0.0%	-
5th through 7th Grade	0.2%	0.0%	
8th Grade	0.9%	0.9%	
9th through 11th Grade	7.8%	7.1%	-
12th Grade	22.4%	23.0%	-
College Freshman to Junior	25.9%	24.3%	-
College Senior	14.1%	15.6%	-
Post Graduate Work	6.9%	7.3%	-
Refused	21.7%	21.9%	--

**Table IV-10
Ethnicity by Person**

Ethnicity	Recruited Percentage (n=1,519)	Completed Percentage (n=907)	Census Data (n=57,702)
White, Not Hispanic	93.3%	94.2%	92.6%
Black, Not Hispanic	0.2%	0.1%	0.6%
American Indian, Eskimo or Aleutian, Not Hispanic	2.3%	2.4%	4.0%
Asian or Pacific Islander, Not Hispanic	0.1%	0.1%	0.6%
Other Race, Not Hispanic	2.1%	2.1%	2.2%
Hispanic (Any Race)	1.5%	1.1%	5.2%
Refused	0.5%	0.0%	--

**Table IV-11
Disability Status of Persons 16 years and older**

Disability Status	Recruited Percentage (n=1,188)	Completed Percentage (n=726)	Census Data (n=43,414)
With a mobility or self-care limitation	4.3%	4.3%	5.4%
Without a mobility or self-care limitation	95.7%	95.7%	94.6%
Refused	0.00%	0.00%	--

V Travel Characteristics

Respondents were asked to record all activities over a two-day period. In this report, activity data is reported for the 398 households in the Klamath County study. An average of 63.02 activities were reported by these households for the two-day period. As shown in Table V-1, the most frequently named activities are trips, meals, sleep, amusements (at home), personal hygiene, and household maintenance.

The mean number of activities per household for Day 1 is 29.60 and for Day 2 is 28.82. The relatively small difference between the number of activities reported for each day indicates that the two-day diary worked as planned.

While the diaries focused on respondent activities, information on person trips made in conjunction with those activities was also gathered. The mean number of person trips per household was 14.76 for the two-day period. The mean number of trips for Day 1 was 7.28, while an average of 7.48 trips were made per household on Day 2. The average daily trip rate by household size is shown in Table V-2.

The majority of zero-trip households and households with only one to nine trips had an average income of less than \$40,000. Households with incomes over \$40,000 had higher trip rates. These data are shown in Table V-3.

Table V-4 compares household size and trip rates. Smaller households generated fewer trips than larger households. For example, the majority of zero-trip households are households with less than three members, and there are no 70+ trip households with fewer than four members. This data is shown in Table V-4.

Respondents were asked to record mode usage for each trip taken. Of the 20,914 activities reported by respondents (shown in Table V-1), 16,286 took place at home or had no travel associated with them. For the remaining activities, the travel modes used in accessing the activities are shown in Table V-5.

Table V-6 shows average reported trip times by mode. Private vehicle trips were, on average, the shortest. Walking trips and bicycle trips were next, averaging about 21 and 23 minutes respectively. Trips recorded as "other", often out of the area, took the longest and were approximately 186 minutes in length. School bus trips were approximately 27 minutes long. Public bus trips lasted approximately 45 minutes.

**Table V-1
Activities by Type (n=24,515)**

Activity	Frequency	Percent
Trip	5738	23.4%
Meals	3925	16.0%
Sleep	3511	14.3%
Personal Hygiene	1854	7.6%
Work/Work-related activities	1120	4.5%
Rest and Relaxation	846	3.5%
School	164	0.7%
Shopping	636	2.6%
Visiting	449	1.8%
Pick-up/Drop-off Passengers	368	1.5%
Household Obligations/Childrearing	241	1.0%
Exercise/Athletics	143	0.6%
Hobbies	212	0.9%
Tag-along	50	0.2%
Pet Care	79	0.3%
Amusements (at home)	2518	10.3%
Amusements (out of home)	203	0.8%
Religion/Civil Services	57	0.2%
Out of area	126	0.5%
Civic	81	0.3%

**Table V-1 (Continued)
Activities by Type (n=24,515)**

Activity	Frequency	Percent
Medical Care	79	0.3%
Personal Services	19	0.1%
Casual Entertaining	55	0.2%
Culture	3	0.0%
Household/Personal Business	469	1.9%
Professional Services	9	0.0%
Household Maintenance	1132	4.6%
Spectator at Athletic Events	21	0.1%
Incidental	19	0.1%
Wait on Plane	2	0.00%
Wait on Bus	15	0.1%
Formal Entertaining	4	0.0%

**Table V-2
Average 1-Day Household Trip Rate
by Household Size**

Household Size	Average Daily Trips
One	3.27
Two	5.75
Three	9.70
Four	14.40
Five	17.27
Six or more	16.57

**Table V-3
2-Day Household Trips by Household Income (n=389)**

Number of Trips		Income			Total
		Under \$40,000	Over \$40,000	Refused	
none	Count	31	8	2	41
	Row %	75.61%	19.51%	4.88%	100.00%
	Column %	14.62%	7.77%	4.65%	11.5%
1 to 9	Count	80	23	21	124
	Row %	64.52%	18.55%	16.93%	100.00%
	Column %	37.74%	22.33%	48.84%	34.6%
10 to 19	Count	64	38	12	114
	Row %	56.14%	33.33%	10.53%	100.00%
	Column %	30.19%	36.89%	27.90%	31.8%
20 to 29	Count	25	19	4	48
	Row %	52.08%	39.58%	8.34%	100.00%
	Column %	11.79%	18.45%	9.30%	13.4%
30 to 39	Count	7	9	2	18
	Row %	38.89%	50.00%	11.11%	100.00%
	Column %	3.30%	8.74%	4.65%	5.0%
40 to 49	Count	3	3	1	7
	Row %	42.86%	42.86%	14.28%	100.00%
	Column %	1.42%	2.91%	2.33%	2.0%
50 to 59	Count	0	1	0	1
	Row %	0.00%	100.00%	0.00%	100.00%
	Column %	0.00%	0.97%	0.00%	0.3%
60 to 69	Count	1	1	1	3
	Row %	33.33%	33.33%	33.34%	100.00%
	Column %	0.47%	0.97%	2.33%	0.8%
more than 70	Count	1	1	0	2
	Row %	50.00%	50.00%	0.00%	100.00%
	Column %	0.47%	0.97%	0.00%	0.6%
Total	Count	212	103	43	358
	Row %	59.22%	28.77%	12.01%	100.00%
	Column %	100.00%	100.00%	100.00%	100.00%

**Table V-4
2-Day Household Trips by Household Size (n=358)**

Number of Trips		HH Size							Total
		1	2	3	4	5	6	7+	
none	Count	14	23	2	1	1	0	0	41
	Row %	34.14%	56.10%	4.88%	2.44%	2.44%	0.00%	0.00%	100.00%
	Column %	17.28%	11.74%	5.71%	3.03%	12.50%	0.00%	0.00%	11.5%
1 to 9	Count	52	67	3	2	0	0	0	124
	Row %	41.94%	54.03%	2.42%	1.61%	0.00%	0.00%	0.00%	100.00%
	Column %	64.20%	34.18%	8.57%	6.06%	0.00%	0.00%	0.00%	34.6 %
10 to 19	Count	13	80	14	6	1	0	0	114
	Row %	11.40%	70.18%	12.28%	5.26%	0.88%	0.00%	0.00%	100.00%
	Column %	16.05%	40.82%	40.00%	18.18%	12.50%	0.00%	0.00%	31.8%
20 to 29	Count	2	20	12	10	4	0	0	48
	Row %	4.17%	41.67%	25.00%	20.83%	8.33%	0.00%	0.00%	100.00%
	Column %	2.47%	10.20%	34.29%	30.31%	50.00%	0.00%	0.00%	13.4%
30 to 39	Count	0	6	3	7	1	0	1	18
	Row %	0.00%	33.33%	16.67%	38.89%	5.56%	0.00%	5.55%	100.00%
	Column %	0.00%	3.06%	8.57%	21.21%	12.50%	0.00%	33.33%	5.0%
40 to 49	Count	0	0	1	4	1	0	1	7
	Row %	0.00%	0.00%	14.29%	57.14%	14.29%	0.00%	14.28%	100.00%
	Column %	0.00%	0.00%	2.86%	12.12%	12.50%	0.00%	33.33%	2.0%
50 to 59	Count	0	0	0	0	0	0	1	1
	Row %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	Column %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.34%	0.3%
60 to 69	Count	0	0	0	2	0	1	0	3
	Row %	0.00%	0.00%	0.00%	66.67%	0.00%	33.33%	0.00%	100.00%
	Column %	0.00%	0.00%	0.00%	6.06%	0.00%	50.00%	0.00%	0.8%
more than 70	Count	0	0	0	1	0	1	0	2
	Row %	0.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%
	Column %	0.00%	0.00%	0.00%	3.03%	0.00%	50.00%	0.00%	0.84%
Total	Count	81	196	35	33	8	2	3	358
	Row %	22.62%	54.75%	9.78%	9.22%	2.23%	0.56%	0.84%	100.00%
	Column %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**Table V-5
Trip Mode (n=5738)**

Mode	Percent
Private Vehicle	90.5%
Walk	5.3%
Bicycle	0.9%
School Bus	3.0%
Public Bus	0.1%
Other	0.2%

**Table V-6
Average “Reported” Household Trip Times by Mode (n=5738)**

Mode	Mean Trip Length (min.)
Private Vehicle	15.67
Walk	19.27
Bicycle	28.40
School Bus	22.39
Public Bus	30.00
Other (Airplane)	167.69

VI Item Non-Response

The following tables show the item non-response for questions contained on the recruitment instrument. The non-response rate is the percentage of respondents who did not provide an answer to the item. As indicated in the tables below, all efforts were to minimize non-response.

**Table VI-1
Percent Item Non-Response - Household Questions (n=609)**

Household Variables	Percent Non-Response
Household Size	0.2%
Household Vehicles	0.0%
Home Ownership	0.0%
Dwelling Type	0.0%
Household Income	18.1%

**Table VI-2
Percent Item Non-Response - Person Questions (n=1,519)**

Household Variables	Percent Non-Response
Relation to Head of House	0.0%
Age	0.9%
Race	0.5%
Drivers License Status	0.0%
Employment Status	0.2%
Occupation	9.1%
Industry	1.7%
Shiftwork	43.2%
Years at Work Site	4.5%
Student Status	0.0%
Student Level - Head of House	0.0%
Student Level - Others	1.6%
Disability	0.0%