

## COOS 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 Coos County was conducted from April to November 1996. Data collection resulted in 592 recruited households. Of these, 328 provided the necessary information to result in completed surveys. The total number of activities reported was 21,096, and the total number of trips was 5,274. These totals translate into an average of about 64.32 activities and about 16.08 trips per household for the two-day period. As expected, trip rates were shown to increase with respect to household size.

#### Average Person Trips Per Day

- One-person households averaged 3.15 trips per day,
- Two-person households averaged 6.90 trips per day,
- Three-person households averaged 10.77 trips per day,
- Four-person households averaged 14.91 trips per day,
- Five-person households averaged 20.70 trips per day,
- Six-person households averaged 22.70 trips per day, and
- Seven-or-more person households averaged 39.50 trips per day.

The average rate for all households was roughly eight (8) 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 cities of Coos Bay and North Bend in Coos County. The household count for the study area was 17,023 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 Coos 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 Coos County sample included the cities of Coos Bay (97420) and North Bend (97459). These zip codes cover 65% 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 - 592 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 58% (or 379) of the unknown sample (58%) to the total number of recruited households.

Recruitment Rate Calculation		
	Calculation	Total/ Percent
Number of Recruited Households		592
Total Number of Eligible and Ineligible Sample	777 + 569	1,346
Proportion of Eligible Sample	777 / 1,346	58%
Proportion of Ineligible Sample	569 / 1,346	42%
Number of Eligible Households	592 + 379	971
Recruitment Rate	592 / 971	61%

**Table II-1  
Final Sample Dispositions (n=2,051)**

Dispositions	Frequency	Percent	Total Number and Percent
<b>Eligible Sample</b>			38.9%
Recruited	592	29.6	
Second Refusal	115	5.7	
Terminated in middle of interview	23	1.2	
Over Quota	47	2.3	
			777
<b>Ineligible Sample</b>			28.4%
Disconnected Number	381	19.0	
Deaf/Language	19	1.0	
Business/Government	109	5.5	
Computer/Fax	54	2.7	
Non-Qualified	5	0.3	
Non-Resident	1	0.1	
			569
<b>Eligibility Unknown Sample</b>			32.7%
First Refusal	318	15.9	
No Answer	119	5.9	
Busy	18	0.9	
Answering Machines	116	5.8	
Call Back Appointments/Requests	83	4.1	
			654
<b>Total Sample Pieces</b>	<b>2,000</b>	<b>100.0</b>	

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 (328) by the total number of recruited households (592). A completion rate of 55% was obtained. The **Overall Response Rate** is calculated by multiplying the recruitment rate (60%) by the completion rate (55%) for a rate of 33%.

The final day-of-week distribution is displayed in Table II-2. A fairly even distribution was obtained across days of the week with the exception of the Tuesday/Wednesday, Friday/Saturday, Sunday/Monday pairs.

**Table II-2  
Travel Day of Week Distribution  
(n=420)**

Travel Day Pairs	Percent
Monday/Tuesday	21.9%
Tuesday/Wednesday	15.5%
Wednesday/Thursday	20.8%
Thursday/Friday	22.5%
Friday/Saturday	15.9%
Saturday/Sunday	0.0%
Sunday/Monday	3.4%

### 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 and housing characteristics with the 1990 STF-3A Census data for Coos County for reasonableness. In 1990 Coos County had 60,273 residents in 24,134 households; the total number of housing units was 26,668 while the number of occupied housing units was 24,134. During the study, 592 households were recruited, and 328 actually completed the survey. The following three tables (II-3, II-4, and II-5) compare these Census data elements to the survey data.

Survey respondents reported higher household incomes than are reflected by the Census (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). A higher percentage of employed persons would generate a higher level of income, and this condition is reflected in the data as well.

Household sizes correspond well with Census data with the exception of an over-representation of 2-person households (Table II-4). Percentages of surveyed housing units with one, two, and three vehicles correspond with Census findings (Table II-5). There is divergence at the extremes, however.

**Table II-3  
Household Income**

Income	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=24,193)
\$0-\$4,999	1.18%	1.22%	6.93%
\$5,000-\$9,999	4.73%	3.35%	13.36%
\$10,000-\$14,999	9.12%	8.54%	13.95%
\$15,000-\$19,999	9.97%	10.37%	10.83%
\$20,000-\$24,999	8.11%	8.23%	10.23%
\$25,000-\$29,999	7.94%	9.15%	9.26%
\$30,000-\$34,999	7.94%	8.54%	8.33%
\$35,000-\$39,999	6.25%	7.62%	6.38%
\$40,000-\$44,999	6.25%	6.40%	5.46%
\$45,000-\$49,999	6.93%	7.93%	3.93%
\$50,000-\$54,999	5.91%	6.71%	2.85%
\$55,000-\$59,999	4.56%	3.96%	1.91%
\$60,000-\$100,000	9.29%	10.06%	5.00%
\$100,000 or more	2.70%	2.74%	1.58%
Refused	9.12%	5.18%	--

**Table II-4  
Household Size**

Persons per Household	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=24,193)
1 Person	21.62%	26.22%	24.34%
2 Persons	43.41%	46.04%	39.22%
3 Persons	14.70%	11.89%	14.98%
4 Persons	13.51%	10.98%	13.05%
5 Persons	4.39%	3.05%	5.83%
6 Persons	1.86%	1.52%	1.65%
7 or More Persons	0.51%	0.30%	0.93%
Refused	0.00%	0.00%	--

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

Vehicles Available	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=24,134)
None	3.89%	3.35%	7.89%
One	22.80%	25.30%	32.91%
Two	41.22%	42.98%	41.50%
Three	17.40%	16.46%	13.08%
Four	7.26%	8.23%	3.53%
Five or More	7.43%	3.68%	1.09%
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=328)**

Income		HH Size							Total
		1	2	3	4	5	6	7+	
<b>less than \$4,999</b>	Count	2	1	1	0	0	0	0	<b>4</b>
	Row %	50.00%	25.00%	25.00%	0.00%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	2.32%	0.66%	2.56%	0.00%	0.00%	0.00%	0.00%	<b>1.2%</b>
<b>\$5,000 to \$9,999</b>	Count	10	1	0	0	0	0	0	<b>11</b>
	Row %	90.91%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	11.63%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>3.4%</b>
<b>\$10,000 to \$14,999</b>	Count	14	10	2	2	0	0	0	<b>28</b>
	Row %	50.00%	35.72%	7.14%	7.14%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	16.28%	6.62%	5.13%	5.56%	0.00%	0.00%	0.00%	<b>8.5%</b>
<b>\$15,000 to \$19,999</b>	Count	13	15	2	0	3	1	0	<b>34</b>
	Row %	38.24%	44.12%	5.88%	0.00%	8.82%	2.94%	0.00%	<b>100.0%</b>
	Column %	15.11%	9.93%	5.13%	0.00%	30.00%	20.00%	0.00%	<b>10.4%</b>
<b>\$20,000 to \$24,999</b>	Count	9	11	6	1	0	0	0	<b>27</b>
	Row %	33.33%	40.74%	22.22%	3.70%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	10.47%	7.29%	15.39%	2.78%	0.00%	0.00%	0.00%	<b>8.2%</b>
<b>\$25,000 to \$29,999</b>	Count	9	17	1	2	0	1	0	<b>30</b>
	Row %	30.00%	56.67%	3.33%	6.67%	0.00%	3.33%	0.00%	<b>100.0%</b>
	Column %	10.47%	11.26%	2.56%	5.56%	0.00%	20.00%	0.00%	<b>9.2%</b>
<b>\$30,000 to \$34,999</b>	Count	6	14	3	4	1	0	0	<b>28</b>
	Row %	21.43%	50.00%	10.71%	14.29%	3.57%	0.00%	0.00%	<b>100.0%</b>
	Column %	6.98%	9.27%	7.69%	11.11%	10.00%	0.00%	0.00%	<b>8.5%</b>
<b>\$35,000 to \$39,999</b>	Count	4	13	4	4	0	0	0	<b>25</b>
	Row %	16.00%	52.00%	16.00%	16.00%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	4.65	8.61%	10.26%	11.11%	0.00%	0.00%	0.00%	<b>7.6%</b>

(Table continues on next page)

**Table III-1 (Continued)  
Household Size by Income (Completed Households=328)**

Income		HH Size							Total
		1	2	3	4	5	6	7+	
<b>\$40,000</b> <b>to</b> <b>\$44,999</b>	Count	3	8	2	4	1	2	1	<b>21</b>
	Row %	14.29%	38.10%	9.52%	19.05%	4.76%	9.52%	4.76%	<b>100.0%</b>
	Column %	3.49%	5.30%	5.13%	11.11%	10.00%	40.00%	100.0%	<b>6.4%</b>
<b>\$45,000</b> <b>to</b> <b>\$49,999</b>	Count	5	12	3	5	1	0	0	<b>26</b>
	Row %	19.23%	46.15%	11.54%	19.23%	3.85%	0.00%	0.00%	<b>100.0%</b>
	Column %	5.81%	7.95%	7.69%	13.89%	10.00%	0.00%	0.00%	<b>7.9</b>
<b>\$50,000</b> <b>to</b> <b>\$54,999</b>	Count	3	11	3	4	1	0	0	<b>22</b>
	Row %	13.64%	50.00%	13.64%	18.18%	4.54%	0.00%	0.00%	<b>100.0%</b>
	Column %	3.49%	7.29%	7.69%	11.11%	10.00%	0.00%	0.00%	<b>6.7%</b>
<b>\$55,000</b> <b>to</b> <b>\$59,999</b>	Count	0	5	3	4	1	0	0	<b>13</b>
	Row %	0.00%	38.46%	23.08%	30.77%	7.69%	0.00%	0.00%	<b>100.0%</b>
	Column %	0.00%	3.31%	7.69%	11.11%	10.00%	0.00%	0.00%	<b>4.0%</b>
<b>\$60,000</b> <b>to</b> <b>\$100,000</b>	Count	2	18	7	4	2	0	0	<b>33</b>
	Row %	6.06%	54.55%	21.21%	12.12%	6.06%	0.00%	0.00%	<b>100.0%</b>
	Column %	2.32%	11.92%	17.95%	11.11%	20.00%	0.00%	0.00%	<b>10.1%</b>
<b>more</b> <b>than</b> <b>\$100,000</b>	Count	0	6	1	1	0	1	0	<b>9</b>
	Row %	0.00%	66.67%	11.11%	11.11%	0.00%	11.11%	0.00%	<b>100.0%</b>
	Column %	0.00%	3.97%	2.56%	2.78%	0.00%	20.00%	0.00%	<b>2.7</b>
<b>Refused</b>	Count	6	9	1	1	0	0	0	<b>17</b>
	Row %	35.30%	52.94%	5.88%	5.88%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	6.98%	5.96%	2.57%	2.77%	0.00%	0.00%	0.00%	<b>5.2%</b>
<b>Total</b>	<b>Count</b>	<b>86</b>	<b>151</b>	<b>39</b>	<b>36</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>328</b>
	<b>Row %</b>	<b>26.22%</b>	<b>46.04%</b>	<b>11.89%</b>	<b>10.98%</b>	<b>3.05%</b>	<b>1.52%</b>	<b>0.30%</b>	<b>100%</b>
	<b>Column %</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table III-2  
Household Size by Number of Vehicles Available  
(Completed Households=328)**

Vehicles	HH Size								Total
	1	2	3	4	5	6	7+		
<b>None</b>	Count	11	0	0	0	0	0	0	<b>11</b>
	Row %	100.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	12.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>3.3%</b>
<b>1</b>	Count	53	21	6	2	1	0	0	<b>83</b>
	Row %	63.86%	25.30%	7.23%	2.41%	1.20%	0.00%	0.00%	<b>100.0%</b>
	Column %	61.63%	13.91%	15.39%	5.56%	10.00%	0.00%	0.00%	<b>25.3%</b>
<b>2</b>	Count	11	88	21	16	1	3	1	<b>141</b>
	Row %	7.80%	62.41%	14.89%	11.35%	0.71%	2.13%	0.71%	<b>100.0%</b>
	Column %	12.79%	58.28%	53.85%	44.44%	10.00%	60.00%	100.0%	<b>43.0%</b>
<b>3</b>	Count	8	27	3	10	5	1	0	<b>54</b>
	Row %	14.81%	50.00%	5.56%	18.52%	9.26%	1.85%	0.00%	<b>100.0%</b>
	Column %	9.30%	17.88%	7.69%	27.78%	50.00%	20.00%	0.00%	<b>16.5%</b>
<b>4</b>	Count	2	8	8	7	1	1	0	<b>27</b>
	Row %	7.41%	29.63%	29.63%	25.93%	3.70%	3.70%	0.00%	<b>100.0%</b>
	Column %	2.33%	5.30%	20.51%	19.44%	10.00%	20.00%	0.00%	<b>8.2%</b>
<b>5 or more</b>	Count	1	7	1	1	2	0	0	<b>12</b>
	Row %	8.34%	58.33%	8.33%	8.33%	16.67%	0.00%	0.00%	<b>100.0%</b>
	Column %	1.16%	4.63%	2.56%	2.78%	20.00%	0.00%	0.00%	<b>3.7%</b>
<b>Refused</b>	Count	0	0	0	0	0	0	0	<b>0</b>
	Row %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>100.0%</b>
	Column %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	<b>0.00%</b>
<b>Total</b>	<b>Count</b>	<b>86</b>	<b>151</b>	<b>39</b>	<b>36</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>328</b>
	<b>Row %</b>	<b>26.22%</b>	<b>46.04%</b>	<b>11.89%</b>	<b>10.98%</b>	<b>3.05%</b>	<b>1.52%</b>	<b>0.30%</b>	<b>100.0%</b>
	<b>Column %</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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

Type of Dwelling	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=26,668)
Single, Detached	83.95%	87.20%	66.75%
Multi Unit	6.93%	4.57%	14.78%
Mobile Home or Trailer	7.77%	7.01%	17.45%
Other	1.18%	0.91%	1.02%
Refused	0.17%	0.31%	--

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

Tenure	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=24,134)
Own	81.59%	86.59%	66.47%
Rent	17.40%	12.80%	33.53%
Other	0.84%	0.61%	--
Refused	0.17%	0.00%	--

**Table III-5  
Length of Residence (Occupied Housing Units)**

	Recruited Households (n=592)	Completed Households (n=328)	Census Data (n=24,134)
Less than 6 months	3.55%	3.05%	26.32%
6 months to 1 year	5.74%	4.88%	
1 to 5 years	13.68%	13.41%	26.94%
5 to 10 years	8.11%	7.32%	11.42%
10 to 20 years	6.59%	6.71%	19.62%
20 years or more	10.81%	12.50%	15.70%
Refused	51.52%	52.13%	--

## 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=1440)	Completed Percentage (n=736)	Census Data (n=60,273)
Male	48.82%	48.91%	49.31%
Female	50.76%	51.09%	50.69%
Refused	0.42%	0.00%	--

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

Age	Recruited Percentage (n=1440)	Completed Percentage (n=736)	Census Data (n=60,273)
0-4	3.89%	3.53%	6.42%
5-9	6.04%	5.43%	7.39%
10-14	7.85%	7.47%	7.18%
15-19	6.18%	5.03%	6.25%
20-24	3.61%	2.17%	4.69%
25-34	7.78%	6.38%	13.95%
35-44	16.04%	14.27%	15.18%
45-54	14.45%	16.58%	11.08%
55-64	13.75%	15.90%	10.59%
65-74	12.22%	14.54%	10.30%
75+	6.94%	8.02%	6.97%
Refused	1.25%	0.68%	--

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

License Status	Recruited Percentage (n=1440)	Completed Percentage (n=736)	Census Data
Licensed	73.26%	76.63%	--
Non-Licensed	8.33%	6.93%	--
Not Applicable (under 15 years of age)	17.78%	16.44%	--
Refused	0.63%	0.00%	--

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

Employment Status	Recruited Percentage (n=1164)	Completed Percentage (n=609)	Census Data (n=45,679)
Employed	51.46%	50.90%	51.19%
Unemployed	13.57%	10.67%	5.17%
Not in Labor Force	34.11%	38.43%	43.64%
Refused	0.86%	0.00%	--

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

Telecommute to Work?	Recruited Percentage (n=599)	Completed Percentage (n=310)	Census Data
Yes	8.18%	7.74%	--
No	91.82%	92.26%	--
Refused	0.00%	0.00%	--

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

Shift or Flexible Work Schedule	Recruited Percentage (n=599)	Completed Percentage (n=310)	Census Data
Yes	35.73%	29.35%	--
No	15.53%	18.71%	--
Refused	48.74%	51.94%	--

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

Length of Employment	Recruited Percentage (n=599)	Completed Percentage (n=310)	Census Data
Less than 1 year	12.85%	10.32%	--
1 - 1.9 years	6.18%	4.19%	--
2 - 2.9 years	6.51%	7.74%	--
3 - 3.9 years	7.18%	10.00%	--
4 - 4.9 years	3.01%	1.94%	--
5 or more years	62.27%	62.58%	--
Refused	2.00%	3.23%	--

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

Student Status	Recruited Percentage (n=1412)	Completed Percentage (n=724)	Census Data (n=58,205)
Not Enrolled	76.63%	79.01%	75.84%
Part-Time Student	2.41%	2.76%	24.16%
Full-Time Student	20.46%	18.23%	
Refused	0.50%	0.00%	--

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

Educational Attainment	Recruited Percentage (n=1043)	Completed Percentage (n=562)	Census Data (n=27,491)
None through 4th Grade	0.29%	0.18%	-
5th through 7th Grade	1.15%	1.07%	
8th Grade	1.73%	1.60%	
9th through 11th Grade	6.90%	4.63%	-
12th Grade	39.89%	37.72%	-
College Freshman to Junior	24.93%	24.02%	-
College Senior	13.42%	17.26%	-
Post Graduate Work	8.72%	11.56%	-
Refused	2.97%	1.96%	--

**Table IV-10  
Ethnicity by Person**

<b>Ethnicity</b>	<b>Recruited Percentage (n=1440)</b>	<b>Completed Percentage (n=736)</b>	<b>Census Data (n=61,714)</b>
White, Not Hispanic	94.51%	97.01%	93.41%
Black, Not Hispanic	0.21%	0.14%	0.17%
American Indian, Eskimo or Aleutian, Not Hispanic	1.95%	1.09%	2.65%
Asian or Pacific Islander, Not Hispanic	0.42%	0.14%	1.00%
Other Race, Not Hispanic	0.83%	0.27%	0.43%
Hispanic (Any Race)	0.83%	0.81%	2.34%
Refused	1.25%	0.54%	--

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

<b>Disability Status</b>	<b>Recruited Percentage (n=1164)</b>	<b>Completed Percentage (n=609)</b>	<b>Census Data (n=45,679)</b>
With a mobility or self-care limitation	5.42%	4.93%	6.51%
Without a mobility or self-care limitation	93.81%	95.07%	93.49%
Refused	0.77%	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 328 households in the Coos County study. An average of 64.32 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 30.93 and for Day 2 is 31.23. 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 16.08 for the two-day period. The mean number of trips for Day 1 was 7.95, while an average of 8.08 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 one to nineteen trips had an average income of less than \$40,000. Households with thirty to forty-nine trips and 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, there is only one zero-trip household with more than two members, and there are no 70+ trip households with fewer than six members. This data is shown in Table V-4.

Respondents were asked to record mode usage for each trip taken. Of the 21,096 activities reported by respondents (shown in Table V-1), 15,822 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. Bicycle trips and school bus trips were similar in mean, averaging 28 minutes. Trips recorded as "other", often out of the area, took the longest and were approximately 246 minutes in length. Walking trips were approximately 24 minutes in length. No public bus trips were reported during the survey.

**Table V-1  
Activities by Type (n=21096)**

<b>Activity</b>	<b>Frequency</b>	<b>Percent</b>
Trip	5274	25.00%
Meals	3126	14.82%
Sleep	2881	13.66%
Personal Hygiene	1561	7.40%
Work/Work-related activities	873	4.14%
Rest and Relaxation	574	2.72%
School	458	2.17%
Shopping	637	3.02%
Visiting	396	1.88%
Pick-up/Drop-off Passengers	266	1.26%
Household Obligations/Childrearing	244	1.16%
Exercise/Athletics	155	0.73%
Hobbies	185	0.88%
Tag-along	40	0.19%
Pet Care	92	0.44%
Amusements (at home)	2209	10.47%
Amusements (out of home)	146	0.69%
Religion/Civil Services	50	0.24%
Out of area	56	0.27%
Civic	55	0.26%

**Table V-1 (Continued)  
Activities by Type (n=21096)**

Activity	Frequency	Percent
Medical Care	90	0.43%
Personal Services	38	0.18%
Casual Entertaining	0	0.00%
Culture	22	0.10%
Household/Personal Business	442	2.10%
Professional Services	9	0.04%
Household Maintenance	1129	5.35%
Spectator at Athletic Events	28	0.13%
Incidental	43	0.20%
Wait on Plane	1	0.00%
Wait on Bus	7	0.03%
Formal Entertaining	9	0.04%

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

Household Size	Average Daily Trips
One	3.15
Two	6.90
Three	10.77
Four	14.91
Five	20.70
Six	22.70
Seven or more	39.50

**Table V-3  
2-Day Household Trips by Household Income (n=328)**

Number of Trips		Income			Total
		Under \$40,000	Over \$40,000	Refused	
<b>none</b>	Count	10	6	2	<b>18</b>
	Row %	55.56%	33.33%	11.11%	<b>100.00%</b>
	Column %	5.35%	4.84%	11.76%	<b>5.49%</b>
<b>1 to 9</b>	Count	80	26	6	<b>112</b>
	Row %	71.43%	23.21%	5.36%	<b>100.00%</b>
	Column %	42.78%	20.97%	35.29%	<b>34.15%</b>
<b>10 to 19</b>	Count	58	42	5	<b>105</b>
	Row %	55.24%	40.00%	4.76%	<b>100.00%</b>
	Column %	31.01%	33.87%	29.41%	<b>32.01%</b>
<b>20 to 29</b>	Count	23	22	2	<b>47</b>
	Row %	48.94%	46.81%	4.25%	<b>100.00%</b>
	Column %	12.30%	17.74%	11.77%	<b>14.33%</b>
<b>30 to 39</b>	Count	8	13	2	<b>23</b>
	Row %	34.78%	56.52%	8.70%	<b>100.00%</b>
	Column %	4.28%	10.49%	11.77%	<b>7.01%</b>
<b>40 to 49</b>	Count	4	9	0	<b>13</b>
	Row %	30.77%	69.23%	0.00%	<b>100.00%</b>
	Column %	2.14%	7.26%	0.00%	<b>3.96%</b>
<b>50 to 59</b>	Count	2	2	0	<b>4</b>
	Row %	50.00%	50.00%	0.00%	<b>100.00%</b>
	Column %	1.07%	1.61%	0.00%	<b>1.22%</b>
<b>60 to 69</b>	Count	2	2	0	<b>4</b>
	Row %	50.00%	50.00%	0.00%	<b>100.00%</b>
	Column %	1.07%	1.61%	0.00%	<b>1.22%</b>
<b>more than 70</b>	Count	0	2	0	<b>2</b>
	Row %	0.00%	100.0%	0.00%	<b>100.00%</b>
	Column %	0.00%	1.61%	3.57%	<b>0.61%</b>
<b>Total</b>	<b>Count</b>	<b>187</b>	<b>124</b>	<b>17</b>	<b>328</b>
	<b>Row %</b>	<b>57.01%</b>	<b>37.81%</b>	<b>5.18%</b>	<b>100.00%</b>
	<b>Column %</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Table V-4  
2-Day Household Trips by Household Size (n=328)**

Number of Trips		HH Size							Total
		1	2	3	4	5	6	7+	
<b>none</b>	Count	10	7	0	0	0	1	0	<b>18</b>
	Row %	55.56%	38.89%	0.00%	0.00%	0.00%	5.55%	0.00%	<b>100.00%</b>
	Column %	11.63%	4.64%	0.00%	0.00%	0.00%	20.00%	0.00%	<b>5.49%</b>
<b>1 to 9</b>	Count	58	44	7	2	1	0	0	<b>112</b>
	Row %	51.79%	39.29%	6.25%	1.78%	0.89%	0.00%	0.00%	<b>100.00%</b>
	Column %	67.44%	29.14%	17.95%	5.56%	10.00%	0.00%	0.00%	<b>34.15 %</b>
<b>10 to 19</b>	Count	16	68	13	8	0	0	0	<b>105</b>
	Row %	15.24%	64.76%	12.38%	7.62%	0.63%	0.00%	0.00%	<b>100.00%</b>
	Column %	18.60%	45.03%	33.33%	22.22%	0.00%	0.00%	0.00%	<b>32.01%</b>
<b>20 to 29</b>	Count	2	25	10	8	1	1	0	<b>47</b>
	Row %	4.25%	53.19%	21.28%	17.02%	2.13%	2.13%	0.00%	<b>100.00%</b>
	Column %	2.33%	16.56%	25.64%	22.22%	10.00%	20.00%	0.00%	<b>14.33%</b>
<b>30 to 39</b>	Count	0	6	5	9	3	0	0	<b>23</b>
	Row %	0.00%	26.09%	21.74%	39.13%	13.04%	0.00%	0.00%	<b>100.00%</b>
	Column %	0.00%	3.97%	12.82%	25.00%	30.00%	0.00%	0.00%	<b>7.01%</b>
<b>40 to 49</b>	Count	0	1	4	5	2	1	0	<b>13</b>
	Row %	0.00%	7.69%	30.77%	38.46%	15.39%	7.69%	0.00%	<b>100.00%</b>
	Column %	0.00%	0.66%	10.26%	13.89%	20.00%	20.00%	0.00%	<b>3.96%</b>
<b>50 to 59</b>	Count	0	0	0	3	1	0	0	<b>4</b>
	Row %	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%	0.00%	<b>100.00%</b>
	Column %	0.00%	0.00%	0.00%	8.33%	10.00%	0.00%	0.00%	<b>1.22%</b>
<b>60 to 69</b>	Count	0	0	0	1	2	1	0	<b>4</b>
	Row %	0.00%	0.00%	0.00%	25.00%	50.00%	25.00%	0.00%	<b>100.00%</b>
	Column %	0.00%	0.00%	0.00%	2.78%	20.00%	20.00%	0.00%	<b>1.22%</b>
<b>more than 70</b>	Count	0	0	0	0	0	1	1	<b>2</b>
	Row %	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.67%	<b>100.00%</b>
	Column %	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	100.0%	<b>0.61%</b>
<b>Total</b>	<b>Count</b>	<b>86</b>	<b>151</b>	<b>39</b>	<b>36</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>328</b>
	<b>Row %</b>	<b>26.22%</b>	<b>46.04%</b>	<b>11.89%</b>	<b>10.98%</b>	<b>3.05%</b>	<b>1.52%</b>	<b>0.30%</b>	<b>100.00%</b>
	<b>Column %</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Table V-5  
Trip Mode (n=5274)**

<b>Mode</b>	<b>Percent</b>
Private Vehicle	88.40%
Walk	6.29%
Bicycle	1.08%
School Bus	3.98%
Public Bus	0.00%
Other	0.25%

**Table V-6  
Average “Reported” Household Trip Times by Mode (n=5274)**

<b>Mode</b>	<b>Mean Trip Length (min.)</b>
Private Vehicle	16.94
Walk	20.54
Bicycle	28.40
School Bus	28.16
Public Bus	-
Other (Airplane)	245.54

## 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=592)**

Household Variables	Percent Non-Response
Household Size	0.0%
Household Vehicles	0.0%
Home Ownership	0.2%
Time in Residence	51.5%
Dwelling Type	0.2%
Household Income	9.1%

**Table VI-2  
Percent Item Non-Response - Person Questions (n=1440)**

Household Variables	Percent Non-Response
Relation to Head of House	0.4%
Age	1.3%
Race	1.3%
Drivers License Status	0.6%
Employment Status	0.9%
Occupation	0.1%
Industry	0.1%
Shiftwork	48.7%
Years at Work Site	2.0%
Student Status	0.5%
Student Level - Head of House	0.1%
Student Level - Others	0.0%
Disability	0.8%