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# **Tucson Household Travel Survey Final Report**

February 2001

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## 1. INTRODUCTION

The objective of Pima Association of Governments' (PAG) Tucson Household Travel Survey (THTS) was to obtain data about activity behavior and travel patterns of Tucson area households. The information collected will be used for modeling travel patterns and planning transportation systems and services within the Tucson area. Specifically, THTS collected data on the activities and travel over a 24-hour period for all members of 2,076 households, a representative sample of the households in the Tucson area.

The data was collected in three steps: (1) a random-digit-dial (RDD) telephone recruitment interview to solicit participation, collect baseline information on the household, and assign an activity day; (2) mailing of an information packet with activity diaries for each household member; (3) telephone interviews the night following the activity day to collect household members' activity and travel information. The survey was pilot tested in August 2000. After minor modifications, the survey went into the field in September of 2000 and was completed in the beginning of December 2000.

This report documents the survey procedures and provides a preliminary evaluation of the survey data collected. All tabulations in this report are of unweighted data.

The report is organized in eight sections. The next (second) section is a review of the data collection procedures. The sampling plan and results are presented in the third section, including summaries of sample disposition and response rates. The distribution of the major characteristics of respondent households and individuals are compared with projected census characteristics for the PAG service area population. The fourth section presents a more detailed profile of the respondent households and the individuals within those households. The fifth section examines the activity and travel patterns reported by the respondents. The sixth section reports the results of geocoding home and location data. The seventh section reviews the data checks performed, and the last section summarizes the findings from this evaluation.

## 2. DATA COLLECTION PROCEDURES

The Tucson Household Travel Survey was conducted in the following three steps:

- Recruited Tucson area households via telephone to participate in the survey
- Mailed recruited households a packet of survey materials
- Retrieved survey information from all household members

### 2A. Recruitment

Households were recruited for the Tucson Household Travel Survey from a random-digit-dial list of telephone numbers in the PAG service area, primarily Pima County. The sample was purchased from Survey Sampling, Inc. of Fairfield, Connecticut. Up to five attempts were made to contact each household, and the attempts were made at different times of the evening and/or different days of the week, including Saturday and Sunday. In total, 4,086 households were recruited to participate in the survey.

MORPACE telephone interviewers identified themselves and briefly introduced the study before reviewing the research quality control standards (calls may be monitored, information provided is treated confidentially, and no sales calls result from participating). Interviewers confirmed that the contact person for the household was at least 18 years of age, while Spanish-speaking households were coded as such and called back by a Spanish-speaking interviewer.

Interviewers also confirmed the phone number dialed and the county and zip code of the household, to be sure that the household is located within the PAG planning region.

A secondary introduction was then read to the contact person. This introduction more clearly explained the project purpose and stressed the importance of having all members of the household participate. After the contact person agreed that the household would participate, mailing information was obtained. Each household could choose to have the survey information sent to their home, a post office box, or another address, such as a work location. If a household requested the survey information be sent to an address other than home, the home address information was collected in addition, so that the home location, where most trips begin, would be known. Address information collected included cross streets, in addition to street number and name, city and zip code.

An activity date was then assigned to the household, usually 8 to 17 days from the date of the recruit interview. All days of the week, except Sundays, were assigned as activity dates.

To encourage participation of larger households, which tend to have lower response rates in travel surveys, an incentive was offered to households with four or more members. \$20.00 was offered to households with four members, while households with five or more members were offered \$30.00. Households were told that the incentive would be sent after all household members completed the survey. Households were asked to choose between accepting a check for the household or donating the incentive to the United Way of Greater Tucson. The assumption was that lower income households would be motivated to participate by the cash incentive, while higher income households would be motivated by a charitable donation in their name. Results of the incentives are reported on page 6.

During the recruit interview, households were asked about the number of working vehicles available for their use. The year, make, and model of each vehicle were also recorded.

Also, questions were asked about homeownership, the type of residence, and whether the home is the primary residence. Person information collected for each household member included first name, gender, age, driving ability, public transportation use, and racial/ethnic background. Household information included income, number of fax machines, e-mail access, and Internet access.

The recruit interview concluded by summarizing key information (including the activity date, follow-up telephone call, and the importance of participation) and thanking the household. If requested, the toll-free information number for the survey and the PAG website address were provided.

## **2B. Survey Material Mailing**

Each household that was recruited to participate in the Tucson Household Travel Survey was mailed a packet of survey materials. The packet, which was available in English and Spanish, contained the following items:

- Personalized cover letter, which:
  - Thanked the household for agreeing to participate
  - Stated the survey objective
  - Informed household of locations of the instructions and example guide
  - Asked household members to carry diaries with them on the activity date
  - Reminded household of the retrieval call
  - Reiterated MORPACE's confidentiality policy
  - Provided a toll-free telephone number for questions or concerns and the PAG website address
  - Explained the incentive (if offered)
- Example guide
- Set of diaries – one for each member, regardless of age. Each diary was personalized with a tracking number, telephone number, the respondent's first name or initials, and the assigned activity date.
- Postage-paid return envelope

## 2C. Retrieval Process

Each recruited household was called the day after the assigned 24-hour activity period. The contact person was asked for and this person was asked if the household members had completed their diaries. If the diaries were completed, the interviewer then asked the person questions about work and school before collecting the information about their travel and activities for the day.

When the retrieval process was completed for the first person in the household, the second person was asked for, and so on, until each member of the household was interviewed.

If the time of the call was inconvenient for the household, a different time was scheduled for retrieval. If the household did not fill out the diaries, a new activity date was assigned. If the household never received or misplaced the diaries, the mailing information was confirmed, a new activity date was assigned, and the survey materials were remailed to the household.

The option of mailing back the activity diaries was offered to households that were not cooperating or threatened to terminate due to the time involved in collecting the extensive travel and activity information over the phone. Diaries received by mail were manually checked and entered into the CATI system by a trained MORPACE interviewer. Respondents were called back if information was missing or clarification was needed.

## 3. SAMPLE EVALUATION

### 3A. Recruitment and Response Rate

The Tucson Household Travel Survey used a two-stage sampling process (i.e., household recruitment and household information retrieval). Participation rates for recruitment and retrieval are reported independently.

The CATI electronically recorded a disposition (or outcome) for each of the 57,068 phone numbers in the sample. Call attempts yielded three types of dispositions: (1) eligible, (2) ineligible, and (3) unknown eligibility. Subcategories for each are shown below.

Table 1. Final Sample Disposition

| Sample Category                   | Frequency     | Percent       |
|-----------------------------------|---------------|---------------|
| <i>Eligible</i>                   | <i>21,699</i> | <i>38.0%</i>  |
| Recruited                         | 4,086         | 7.2%          |
| Refused                           | 14,390        | 25.2%         |
| Terminated during introductions   | 2,743         | 4.8%          |
| Terminated mid-interview          | 480           | 0.8%          |
| <i>Ineligible</i>                 | <i>19,276</i> | <i>33.8%</i>  |
| Question terminated               | 212           | 0.4%          |
| Disconnected/changed/new number   | 12,095        | 21.2%         |
| Deaf/language barrier             | 477           | 0.8%          |
| Wrong number/business number      | 6,492         | 11.4%         |
| <i>Unknown Eligibility</i>        | <i>16,093</i> | <i>28.2%</i>  |
| No answer or busy                 | 8,963         | 15.7%         |
| Answering machine                 | 5,650         | 9.9%          |
| Respondent scheduled for callback | 1,480         | 2.6%          |
| <i>Total Sample</i>               | <i>57,068</i> | <i>100.0%</i> |

In calculating the response rate, the unknown eligibility sample represents both eligible and ineligible households. Since the exact outcome for these categories is unknown, it is assumed that they would follow the existing distribution for eligible sample and ineligible sample. Of the 40,975 numbers with known outcomes, 53.0% or 21,699 numbers are eligible and 47.0% or 19,276 numbers are ineligible. Therefore, it is assumed that of the 16,093 numbers with unknown eligibility, 53.0% or 8,529 numbers would be eligible. The recruitment rate is then calculated as the number recruited divided by the sum of the total eligible sample plus the portion of unknown eligibility sample assumed to be eligible or  $4,086 / (21,699 + 8,529) = 13.5\%$

The completion rate is a measure of how many recruited households complete the survey process. It reflects sample attrition. This rate is calculated by dividing the number of households with completed retrieval information for every member by the number of recruited households. Of the 4,086 recruited households, MORPACE completed retrieval interviews with all members of 2,076 households for a completion rate of 50.8%.

The recruitment response rate was 13.5% and the completion rate was 50.8%.

### 3B. Comparison of Respondents to Sampling Plan and Population

The sampling plan for the Tucson Household Travel Survey followed a random-digit-dial sample distributed proportionally by zip code within the Pima Association of Governments' planning area. The combined total sample goal was 2,000 households.

Table 2 shows the distribution of respondent households by zip code, compared to the sampling plan.

The following zip codes were not represented in the original sampling plan, but one to three households were recruited in each of the zip codes: 85622, 85652, 85703, 85707, 85720, 85721, 85725, 85728, 85733, 85734, 85740, 85751, and 85752.

Most of the sample goals were exceeded. Three (3) zip codes did not reach the sample goal, but were at least 85% (85711 was 97%, 85718 was 87%, and 85735 was 92%).

The following four (4) zip codes were underrepresented in the survey: 85705, 85706, 85713, and 85746. It is important to note that each of these zip codes contains at least 50 households, a sufficient sample size. Also, the retrieval response rates for these zip codes (44%, 32%, 39%, and 34%, respectively) were significantly lower than the average response rate (51%).

Three (3) additional zip codes were underrepresented in the survey: 85619, 85714, and 85736. However, sample goals for these zip codes were quite small, ranging from 3 to 29 households.



Table 2. Distribution of Households by Zip Code (Compared to Sampling Plan)

| Zip Code | City Name                | Count of H'hlds | Sample Goals | Sample Target | # Recruited | # Retrieved | % of Target Reached | Response Rate |
|----------|--------------------------|-----------------|--------------|---------------|-------------|-------------|---------------------|---------------|
| 85614    | Green Valley             | 13,170          | 3.92%        | 78            | 137         | 91          | 116%                | 66%           |
| 85619    | Mount Lemmon             | 481             | 0.14%        | 3             | 1           | 1           | 35%                 | 100%          |
| 85622    | Green Valley             |                 |              |               | 1           | 1           |                     |               |
| 85629    | Sahuarita/Pima County *  | 2,141           | 0.64%        | 13            | 29          | 20          | 157%                | 69%           |
| 85641    | Vail **                  | 1,572           | 0.47%        | 9             | 22          | 11          | 118%                | 50%           |
| 85652    | Cortaro (PO Boxes only)  |                 |              |               | 1           | 1           |                     |               |
| 85653    | Marana                   | 3,837           | 1.14%        | 23            | 50          | 30          | 131%                | 60%           |
| 85654    | Rillito *                | 7               | 0.00%        | 0             | 0           | 0           |                     |               |
| 85701    | Tucson                   | 2,709           | 0.81%        | 16            | 31          | 17          | 106%                | 55%           |
| 85703    | Tucson                   |                 |              |               | 1           | 1           |                     |               |
| 85704    | County                   | 13,768          | 4.09%        | 82            | 144         | 89          | 109%                | 62%           |
| 85705    | Tucson                   | 25,739          | 7.65%        | 153           | 243         | 106         | 69%                 | 44%           |
| 85706    | Tucson                   | 19,670          | 5.85%        | 117           | 195         | 63          | 54%                 | 32%           |
| 85707    | Davis Monthan AFB/Tucson |                 |              |               | 1           | 1           |                     |               |
| 85708    | Tucson/Pima County       | 1,343           | 0.40%        | 8             | 19          | 10          | 125%                | 53%           |
| 85710    | Tucson                   | 25,435          | 7.56%        | 151           | 353         | 183         | 121%                | 52%           |
| 85711    | Tucson                   | 17,798          | 5.29%        | 106           | 201         | 103         | 97%                 | 51%           |
| 85712    | Tucson                   | 15,186          | 4.52%        | 90            | 218         | 104         | 115%                | 48%           |
| 85713    | Tucson/South Tucson      | 16,940          | 5.04%        | 101           | 152         | 60          | 60%                 | 39%           |
| 85714    | Tucson                   | 4,901           | 1.46%        | 29            | 29          | 9           | 31%                 | 31%           |
| 85715    | Tucson                   | 8,552           | 2.54%        | 51            | 122         | 79          | 155%                | 65%           |
| 85716    | Tucson                   | 16,470          | 4.90%        | 98            | 239         | 113         | 115%                | 47%           |
| 85718    | Pima County              | 15,144          | 4.50%        | 90            | 135         | 78          | 87%                 | 58%           |
| 85719    | Tucson                   | 16,474          | 4.90%        | 98            | 219         | 119         | 121%                | 54%           |
| 85720    | Tucson                   |                 |              |               | 1           | 0           |                     |               |
| 85721    | University of Arizona    |                 |              |               | 1           | 1           |                     |               |
| 85725    | Tucson                   |                 |              |               | 1           | 1           |                     |               |
| 85728    | Tucson                   |                 |              |               | 1           | 0           |                     |               |
| 85730    | Tucson                   | 13,443          | 4.00%        | 80            | 204         | 92          | 115%                | 45%           |
| 85733    | Tucson                   |                 |              |               | 1           | 0           |                     |               |
| 85734    | Tucson                   |                 |              |               | 2           | 0           |                     |               |
| 85735    | Pima County **           | 3,289           | 0.98%        | 20            | 40          | 18          | 92%                 | 45%           |
| 85736    | Pima County **           | 2,499           | 0.74%        | 15            | 14          | 5           | 34%                 | 36%           |
| 85737    | Oro Valley               | 13,049          | 3.88%        | 78            | 156         | 98          | 126%                | 63%           |
| 85738    | Catalina **              | 45              | 0.01%        | 0             | 4           | 2           |                     | 50%           |
| 85739    | Pima County              | 3,264           | 0.97%        | 19            | 59          | 32          | 165%                | 54%           |
| 85740    | Tucson                   |                 |              |               | 3           | 2           |                     |               |
| 85741    | Marana/Pima County       | 11,231          | 3.34%        | 67            | 147         | 82          | 123%                | 56%           |
| 85742    | Marana/Pima County       | 9,161           | 2.72%        | 54            | 110         | 64          | 117%                | 58%           |
| 85743    | Marana/Pima County       | 6,572           | 1.95%        | 39            | 90          | 40          | 102%                | 44%           |
| 85745    | Tucson/Pima County       | 12,211          | 3.63%        | 73            | 147         | 73          | 101%                | 50%           |
| 85746    | Pima County              | 14,533          | 4.32%        | 86            | 156         | 53          | 61%                 | 34%           |
| 85747    | Tucson *                 | 1,741           | 0.52%        | 10            | 73          | 37          | 357%                | 51%           |
| 85748    | Tucson                   | 5,073           | 1.51%        | 30            | 103         | 53          | 176%                | 51%           |
| 85749    | Tucson/Pima County       | 7,279           | 2.16%        | 43            | 97          | 62          | 143%                | 64%           |
| 85750    | Pima County              | 11,544          | 3.43%        | 69            | 131         | 70          | 102%                | 53%           |
| 85751    | Tucson                   |                 |              |               | 1           | 0           |                     |               |
| 85752    | Tucson                   |                 |              |               | 1           | 1           |                     |               |
|          | Totals                   | 336,271         | 100.00%      | 2,000         | 4,086       | 2,076       | 104%                | 51%           |

\* PCLIS boundaries do not match zip code map

\*\* Zip code not in PCLIS

The next table shows the distribution of household size of the respondent households and in the Tucson area from the U.S. Census projections for 1999.

Table 3. Distribution of Households by Size

| Size of Household | Recruited Households |         | Respondent Households |         | 1999 Census Projection for Tucson Area |
|-------------------|----------------------|---------|-----------------------|---------|--|
|                   | Frequency            | Percent | Frequency             | Percent | Percent                                |
| 1 person          | 1,011                | 24.7%   | 619                   | 29.8%   | 29.0%                                  |
| 2 persons         | 1,460                | 35.7%   | 771                   | 37.1%   | 34.6%                                  |
| 3 persons         | 668                  | 16.3%   | 252                   | 12.1%   | 15.0%                                  |
| 4 persons         | 574                  | 14.0%   | 282                   | 13.6%   | 12.0%                                  |
| 5 persons         | 247                  | 6.0%    | 105                   | 5.1%    | 6.1%                                   |
| 6+ persons        | 126                  | 3.1%    | 47                    | 2.3%    | 3.3%                                   |
| Total             | 4,086                | 100.0%  | 2,076                 | 100.0%  | 100.0%                                 |

The average household size is 2.35 persons, compared to the 1999 U.S. Census estimate of 2.46 persons.

Nationally, nearly all household activity and travel surveys have had lower response rates for larger households than for smaller households. To help alleviate this problem, households with four persons were offered an incentive of \$20.00, which they could have in the form of a check or as a donation to charity (the United Way of Greater Tucson). Households with more than four persons were offered the same options, with a \$30.00 incentive. The offers were made during the recruitment interview with the stipulation that the incentive would only be paid if all members of the household completed the survey (either through the retrieval survey or by mailing back the diaries).

The next table shows the numbers and types of incentives offered and the corresponding completion ratios.

Table 4. Incentives to Larger Households

| Incentive                 | Recruited Households | Respondent Households | Completion Ratio |
|---------------------------|----------------------|-----------------------|------------------|
| \$20.00 check             | 373                  | 203                   | 54.4%            |
| \$20.00 charity donation  | 199                  | 79                    | 39.7%            |
| Refused \$20.00 incentive | 1                    | 0                     | 0.0%             |
| \$30.00 check             | 268                  | 124                   | 46.3%            |
| \$30.00 charity donation  | 104                  | 28                    | 26.9%            |
| Refused \$30.00 incentive | 1                    | 0                     | 0.0%             |
| Total                     | 946                  | 434                   | 45.9%            |

Since the overall completion rate of households recruited is 50.8%, the incentives appear to have been successful in keeping completion rates for four-person households at the average (49.2%). However, even with the \$30.00 incentive, the completion rate for households with more than four persons still dropped 10% to 40.8%.

The following table shows the income distribution of the respondent households and of households in the Tucson area from 1999 U.S. Census projections.

Table 5. Distribution of Households by Income (Ranges)

| Income                | Respondent Households |         | 1999 Census Projection<br>for Tucson Area |
|-----------------------|-----------------------|---------|---|
|                       | Frequency             | Percent | Percent                                   |
| <\$10,000             | 67                    | 3.2%    | 12.9%                                     |
| \$10,000 - \$19,999   | 207                   | 10.0%   | 53.9%                                     |
| \$20,000 - \$29,999   | 277                   | 13.3%   |   |
| \$30,000 - \$39,999   | 314                   | 15.1%   |   |
| \$40,000 - \$49,999   | 261                   | 12.6%   |   |
| \$50,000 - \$59,999   | 209                   | 10.1%   |   |
| \$60,000 - \$74,999   | 183                   | 8.8%    | 16.1%                                     |
| \$75,000 - \$99,999   | 159                   | 7.7%    | 8.4%                                      |
| \$100,000 - \$124,999 | 71                    | 3.4%    | 5.7%                                      |
| \$125,000 - \$149,999 | 27                    | 1.3%    |   |
| \$150,000 +           | 31                    | 1.5%    | 2.9%                                      |
| Don't know            | 90                    | 4.3%    | --  |
| Refused               | 180                   | 8.7%    | --  |
| Total                 | 2,076                 | 100.0%  | 100.0%                                    |

Non-response to the income question was 8.7% and "don't know" responses added another 4.3% to missing values of income. To decrease non-response to the income question, gross income categories were asked. When asked only if their income was above or below \$30,000, the number of refusals and "don't know" responses decreased by about one-half. The following table shows the gross income distribution.

Table 6. Distribution of Households by Income (Over/Under \$30,000)

| Income     | Respondent Households |         | 1999 Census Projection<br>for Tucson Area |
|------------|-----------------------|---------|---|
|            | Frequency             | Percent | Percent                                   |
| <\$30,000  | 570                   | 27.5%   | 44%                                       |
| >\$30,000  | 1,376                 | 66.3%   | 56%                                       |
| Don't know | 40                    | 1.9%    | --  |
| Refused    | 90                    | 4.3%    | --  |
| Total      | 2,076                 | 100.0%  | 100%                                      |

The next table shows the distribution of vehicle ownership by the respondent households and households in the Tucson area from 1999 U.S. Census projections.

Table 7. Distribution of Households Vehicle Ownership

| Number of Vehicles Available to the Household | Respondent Households |         | 1999 Census Projection for Tucson Area |
|---|-----------------------|---------|--|
|   | Frequency             | Percent | Percent                                |
| 0 vehicles                                    | 61                    | 2.9%    | 8%                                     |
| 1 vehicle                                     | 803                   | 38.7%   | 40%                                    |
| 2 vehicles                                    | 871                   | 42.0%   | 36%                                    |
| 3 vehicles                                    | 253                   | 12.2%   | 15%                                    |
| 4 vehicles                                    | 71                    | 3.4%    |  |
| 5 vehicles                                    | 11                    | 0.5%    |  |
| 6 vehicles                                    | 5                     | 0.2%    |  |
| 7 vehicles                                    | 1                     | 0.0%    |  |
| Total   | 2,076                 | 100.0%  | 100%                                   |

Households with no vehicles are underrepresented, while households with two vehicles are slightly over represented.

Next, the age and racial/ethnic background of the 4,882 persons from the respondent households are tabulated and compared to the distributions of the population of the Tucson area, as reported in the U.S. Census projections for 1999.

Table 8. Age

| Age           | Persons in Respondent Households |         | 1999 Census Projection for Tucson Area |
|---------------|----------------------------------|---------|--|
|               | Frequency                        | Percent | Percent                                |
| 0 – 5 years   | 407                              | 8.3%    | 8.7%                                   |
| 6 – 11 years  | 415                              | 8.5%    | 8.6%                                   |
| 12 – 17 years | 413                              | 8.5%    | 7.7%                                   |
| 18 – 24 years | 319                              | 6.5%    | 9.9%                                   |
| 25 – 34 years | 553                              | 11.3%   | 14.4%                                  |
| 35 – 44 years | 732                              | 15.0%   | 16.0%                                  |
| 45 – 54 years | 799                              | 16.4%   | 12.3%                                  |
| 55 – 64 years | 503                              | 10.3%   | 8.4%                                   |
| 65+ years     | 658                              | 13.5%   | 14.0%                                  |
| Don't know    | 27                               | 0.6%    | --                                     |
| Refused       | 56                               | 1.1%    | --                                     |
| Total         | 4,882                            | 100.0%  | 100.0%                                 |

The 18-34 age group is underrepresented, while the 45-64 age group is over represented. Age was not obtained for 1.7% of the persons in the respondent households.

Table 9. Racial/Ethnic Background

| Racial/Ethnic Background | Persons in Respondent Households |         |
|--------------------------|----------------------------------|---------|
|                          | Frequency                        | Percent |
| White                    | 3,871                            | 79.3%   |
| Spanish/Hispanic/Latino  | 585                              | 12.0%   |
| Black/African American   | 73                               | 1.5%    |
| Native American (Indian) | 40                               | 0.8%    |
| Asian                    | 52                               | 1.1%    |
| Other race               | 207                              | 4.2%    |
| Don't know               | 21                               | 0.4%    |
| Refused                  | 33                               | 0.7%    |
| Total                    | 4,882                            | 100.0%  |

Census projections do not have Hispanic as a unique category.

#### 4. DISTRIBUTION OF RESPONDENT CHARACTERISTICS

This section presents the descriptive characteristics of the respondent households and persons within these households. These questions were asked during the recruitment interview.

Table 10. Home Ownership

| Do you own or rent your home? | Respondent Households |         |
|-------------------------------|-----------------------|---------|
|                               | Frequency             | Percent |
| Own                           | 1,570                 | 75.6%   |
| Rent                          | 497                   | 23.9%   |
| Refused                       | 9                     | 0.4%    |
| Total                         | 2,076                 | 100.0%  |

Table 11. Type of Home

| Which of the following best describes your home? | Respondent Households |         |
|--|-----------------------|---------|
|  | Frequency             | Percent |
| Detached house or condominium                    | 1,336                 | 64.4%   |
| Attached house or condominium                    | 280                   | 13.5%   |
| Apartment  | 257                   | 12.4%   |
| Mobile home                                      | 173                   | 8.3%    |
| Farm/Ranch                                       | 16                    | 0.8%    |
| Group Quarters/Dormitory/Retirement Facility     | 5                     | 0.2%    |
| RV, Van, Boat, etc.                              | 4                     | 0.2%    |
| Don't know                                       | 1                     | 0.0%    |
| Refused  | 4                     | 0.2%    |
| Total  | 2,076                 | 100.0%  |

Table 12. Primary Residence

| How many months per year do you reside at this home? | Respondent Households |         |
|--|-----------------------|---------|
|  | Frequency             | Percent |
| Less than one month                                  | 4                     | 0.2%    |
| One month  | 5                     | 0.2%    |
| Two months   | 2                     | 0.1%    |
| Three months   | 5                     | 0.2%    |
| Four months  | 4                     | 0.2%    |
| Five months  | 5                     | 0.2%    |
| Six months   | 18                    | 0.9%    |
| Seven months   | 9                     | 0.4%    |
| Eight months   | 6                     | 0.3%    |
| Nine months  | 23                    | 1.1%    |
| Ten months   | 22                    | 1.1%    |
| Eleven months  | 14                    | 0.7%    |
| Twelve months (Full-time resident)                   | 1,954                 | 94.1%   |
| Refused  | 5                     | 0.2%    |
| Total  | 2,076                 | 100.0%  |

Table 13. Fax Lines

| How many fax machines do you have in your home? | Respondent Households |         |
|---|-----------------------|---------|
|   | Frequency             | Percent |
| None  | 1,659                 | 79.9%   |
| One   | 392                   | 18.9%   |
| Two   | 18                    | 0.9%    |
| Three   | 1                     | 0.0%    |
| Refused   | 6                     | 0.3%    |
| Total   | 2,076                 | 100.0%  |

Table 14. E-mail Access

| Within your home, do you have access to e-mail? | Respondent Households |         |
|---|-----------------------|---------|
|   | Frequency             | Percent |
| Yes   | 1,370                 | 66.0%   |
| No  | 700                   | 33.7%   |
| Don't know                                      | 1                     | 0.0%    |
| Refused   | 5                     | 0.2%    |
| Total   | 2,076                 | 100.0%  |

Table 15. Internet Access

| Within your home, do you have access to the Internet? | Respondent Households |         |
|---|-----------------------|---------|
|   | Frequency             | Percent |
| Yes   | 1,355                 | 65.3%   |
| No  | 715                   | 34.4%   |
| Don't know  | 1                     | 0.0%    |
| Refused   | 5                     | 0.2%    |
| Total   | 2,076                 | 100.0%  |

Table 16. Gender

| Gender  | Persons in Respondent Households |         |
|---------|----------------------------------|---------|
|         | Frequency                        | Percent |
| Male    | 2,302                            | 47.2%   |
| Female  | 2,579                            | 52.8%   |
| Refused | 1                                | 0.0%    |
| Total   | 4,882                            | 100.0%  |

Table 17. Driving Frequency

| Do you drive . . . ?                 | Persons in Respondent Households |         |
|--------------------------------------|----------------------------------|---------|
|                                      | Frequency                        | Percent |
| Regularly                            | 3,068                            | 62.8%   |
| Occasionally                         | 397                              | 8.1%    |
| Rarely                               | 109                              | 2.2%    |
| Do not drive                         | 481                              | 9.9%    |
| Do not drive (under 12 years of age) | 822                              | 16.8%   |
| Don't know                           | 2                                | 0.0%    |
| Refused                              | 3                                | 0.1%    |
| Total                                | 4,882                            | 100.0%  |

Table 18. Public Transportation Use

| Do you use public transportation . . . ? | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Regularly                                | 217                              | 4.4%    |
| Occasionally                             | 238                              | 4.9%    |
| Rarely                                   | 424                              | 8.7%    |
| Do not use public transportation         | 3,997                            | 81.9%   |
| Don't know                               | 3                                | 0.1%    |
| Refused                                  | 3                                | 0.1%    |
| Total                                    | 4,882                            | 100.0%  |

The following questions were asked during the retrieval interview.

Table 19. Employment Status

| Do you currently work on a regular basis? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Yes                                       | 2,406                            | 59.3%   |
| No  | 1,633                            | 40.2%   |
| Don't know                                | 21                               | 0.5%    |
| Valid Total                               | 4,060                            | 100.0%  |
| Missing - under 12 years of age           | 822                              |         |
| Total                                     | 4,882                            |         |

Respondents who do not work and are over the age of 40 (or did not report age) were asked if they are retired. This question is summarized in the next table.

Table 20. Retirement

| Are you retired?                        | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Yes                                     | 833                              | 81.6%   |
| No                                      | 179                              | 17.5%   |
| Don't know                              | 9                                | 0.9%    |
| Valid Total                             | 1,021                            | 100.0%  |
| Missing - currently employed            | 2,406                            |         |
| Missing - don't know employment status  | 21                               |         |
| Missing - not working, but under age 41 | 612                              |         |
| Missing - under 12 years of age         | 822                              |         |
| Total                                   | 4,882                            |         |

Table 21. Number of Jobs

| How many different jobs do you have?   | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| One                                    | 2,122                            | 88.2%   |
| Two                                    | 227                              | 9.4%    |
| Three                                  | 27                               | 1.1%    |
| Four                                   | 4                                | 0.2%    |
| Six                                    | 1                                | 0.0%    |
| Eight                                  | 1                                | 0.0%    |
| Nine                                   | 1                                | 0.0%    |
| Don't know                             | 23                               | 1.0%    |
| Valid Total                            | 2,406                            | 100.0%  |
| Missing - not currently employed       | 1,633                            |         |
| Missing - don't know employment status | 21                               |         |
| Missing - under 12 years of age        | 822                              |         |
| Total                                  | 4,882                            |         |

Table 22. Full-time or Part-time Work

| Do you work full-time, part-time, or occasionally? | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Full-time  | 1,916                            | 79.6%   |
| Part-time  | 455                              | 18.9%   |
| Occasionally                                       | 32                               | 1.3%    |
| Don't know   | 3                                | 0.1%    |
| Valid Total  | 2,406                            | 100.0%  |
| Missing - not currently employed                   | 1,633                            |         |
| Missing - don't know employment status             | 21                               |         |
| Missing - under 12 years of age                    | 822                              |         |
| Total  | 4,882                            |         |



Table 23. Number of Days Worked Per Week – Outside the Home

| During a typical workweek, how many days do you work outside the home? | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| One  | 32                               | 1.3%    |
| Two  | 88                               | 3.7%    |
| Three  | 128                              | 5.3%    |
| Four   | 206                              | 8.6%    |
| Five   | 1,564                            | 65.0%   |
| Six  | 214                              | 8.9%    |
| Seven  | 54                               | 2.2%    |
| None   | 88                               | 3.7%    |
| Don't know   | 31                               | 1.3%    |
| Refused  | 1                                | 0.0%    |
| Valid Total  | 2,406                            | 100.0%  |
| Missing – not currently employed                                       | 1,633                            |         |
| Missing – don't know employment status                                 | 21                               |         |
| Missing – under 12 years of age  | 822                              |         |
| Total  | 4,882                            |         |

Table 24. Number of Days Worked Per Week – At Home

| During a typical workweek, how many days do you work at home? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| One   | 111                              | 4.6%    |
| Two   | 84                               | 3.5%    |
| Three   | 47                               | 2.0%    |
| Four  | 21                               | 0.9%    |
| Five  | 84                               | 3.5%    |
| Six   | 29                               | 1.2%    |
| Seven   | 55                               | 2.3%    |
| None  | 1,887                            | 78.4%   |
| Don't know  | 83                               | 3.4%    |
| Refused   | 5                                | 0.2%    |
| Valid Total   | 2,406                            | 100.0%  |
| Missing – not currently employed                              | 1,633                            |         |
| Missing – don't know employment status                        | 21                               |         |
| Missing – under 12 years of age                               | 822                              |         |
| Total   | 4,882                            |         |

Table 25. Drop Off Minor on the Way to Work

| During your typical trip from home to work, do you drop off a minor? | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Yes  | 359                              | 15.5%   |
| No   | 1,910                            | 82.4%   |
| Don't know   | 48                               | 2.1%    |
| Refused  | 1                                | 0.0%    |
| Valid Total  | 2,318                            | 100.0%  |
| Missing – do not work outside the home                               | 88                               |         |
| Missing – not currently employed                                     | 1,633                            |         |
| Missing – don't know employment status                               | 21                               |         |
| Missing – under 12 years of age                                      | 822                              |         |

Table 26. Drop Off Minor on the Way to Work – Location – 1st Mention

| Do you typically drop off a minor at day care, school, or somewhere else? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Day Care  | 99                               | 27.6%   |
| School  | 224                              | 62.4%   |
| Bus Stop  | 8                                | 2.2%    |
| Babysitter  | 7                                | 1.9%    |
| Family member (father, grandparents)                                      | 9                                | 2.5%    |
| Other   | 12                               | 3.3%    |
| Valid Total   | 359                              | 100.0%  |
| Missing – do not drop off a minor   | 1,959                            |         |
| Missing – do not work outside the home                                    | 88                               |         |
| Missing – not currently employed  | 1,633                            |         |
| Missing – don't know employment status                                    | 21                               |         |
| Missing – under 12 years of age   | 822                              |         |
| Total   | 4,882                            |         |

Table 27. Drop Off Minor on the Way to Work – Location – 2nd Mention

| Do you typically drop off a minor at day care, school, or somewhere else? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Day Care  | 0                                | --      |
| School  | 20                               | 69.0%   |
| Bus Stop  | 2                                | 6.9%    |
| Babysitter  | 0                                | --      |
| Family member (father, grandparents)                                      | 4                                | 13.8%   |
| Other   | 3                                | 10.3%   |
| Valid Total   | 29                               | 100.0%  |
| Missing – only one drop off location mentioned                            | 330                              |         |
| Missing – do not drop off a minor   | 1,959                            |         |
| Missing – do not work outside the home                                    | 88                               |         |
| Missing – not currently employed  | 1,633                            |         |
| Missing – don't know employment status                                    | 21                               |         |
| Missing – under 12 years of age   | 822                              |         |
| Total   | 4,882                            |         |

Table 28. Employer Subsidy of Public Transportation

| Does your employer subsidize public transportation use? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Yes   | 271                              | 11.3%   |
| No  | 1,848                            | 76.8%   |
| Don't know  | 277                              | 11.5%   |
| Refused   | 10                               | 0.4%    |
| Valid Total   | 2,406                            | 100.0%  |
| Missing – not currently employed                        | 1,633                            |         |
| Missing – don't know employment status                  | 21                               |         |
| Missing – under 12 years of age                         | 822                              |         |
| Total   | 4,882                            |         |

Table 29. Work Schedule

| Which of the following statements best describes your working schedule? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| "I have no flexibility in the times I have to be at work."              | 992                              | 41.2%   |
| "I can vary my schedule a bit, but not by more than 30 minutes."        | 680                              | 28.3%   |
| "I'm pretty much free to adjust my schedule as I like."                 | 718                              | 29.8%   |
| Don't know  | 16                               | 0.7%    |
| Valid Total   | 2,406                            | 100.0%  |
| Missing - not currently employed  | 1,633                            |         |
| Missing - don't know employment status                                  | 21                               |         |
| Missing - under 12 years of age   | 822                              |         |
| Total   | 4,882                            |         |

Table 30. Type of Employer

| Are you ...?   | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Employed by a for-profit company or business                         | 1,317                            | 54.7%   |
| Employed by a not-for-profit, tax-exempt, or charitable organization | 295                              | 12.3%   |
| A government employee  | 526                              | 21.9%   |
| Self-employed in a business, professional practice, or farm          | 234                              | 9.7%    |
| Working without pay in a family business or farm                     | 15                               | 0.6%    |
| Don't know   | 18                               | 0.7%    |
| Refused  | 1                                | 0.0%    |
| Valid Total  | 2,406                            | 100.0%  |
| Missing - not currently employed                                     | 1,633                            |         |
| Missing - don't know employment status                               | 21                               |         |
| Missing - under 12 years of age                                      | 822                              |         |
| Total  | 4,882                            |         |

Table 31. Industry

| What type of business or industry do you work in? | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Accommodations & Food Services                    | 129                              | 5.4%    |
| Agriculture, Forestry, Mining                     | 29                               | 1.2%    |
| Business Services                                 | 86                               | 3.6%    |
| Communications                                    | 84                               | 3.5%    |
| Construction                                      | 120                              | 5.0%    |
| Educational Services                              | 356                              | 14.8%   |
| Entertainment and Recreation                      | 55                               | 2.3%    |
| Finance, Insurance, Real Estate                   | 103                              | 4.3%    |
| Government Services                               | 229                              | 9.5%    |
| Health Services                                   | 286                              | 11.9%   |
| Manufacturing                                     | 166                              | 6.9%    |
| Personal Services                                 | 95                               | 3.9%    |
| Professional Services                             | 166                              | 6.9%    |
| Repair Services                                   | 55                               | 2.3%    |
| Retail Trade                                      | 169                              | 7.0%    |
| Transportation                                    | 61                               | 2.5%    |
| Utilities   | 20                               | 0.8%    |
| Wholesale Trade                                   | 24                               | 1.0%    |
| Computers/Software                                | 19                               | 0.8%    |
| Landscaping                                       | 9                                | 0.4%    |
| Legal   | 6                                | 0.2%    |
| Aerospace   | 12                               | 0.5%    |
| Research  | 19                               | 0.8%    |
| Community and Social Services                     | 27                               | 1.1%    |
| Delivery Services                                 | 4                                | 0.2%    |
| Engineering                                       | 9                                | 0.4%    |
| Art   | 7                                | 0.3%    |
| Military  | 11                               | 0.5%    |
| Protective Services                               | 16                               | 0.7%    |
| Other   | 17                               | 0.7%    |
| Don't know  | 15                               | 0.6%    |
| Refused   | 2                                | 0.1%    |
| Valid Total                                       | 2,406                            | 100.0%  |
| Missing - not currently employed                  | 1,633                            |         |
| Missing - don't know employment status            | 21                               |         |
| Missing - under 12 years of age                   | 822                              |         |
| Total   | 4,882                            |         |

Table 32. Occupation

| What is your primary occupation?               | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Architecture and Engineering                   | 100                              | 4.2%    |
| Arts, Design, Entertainment, Sports and Media  | 77                               | 3.2%    |
| Building and Grounds Cleaning and Maintenance  | 25                               | 1.0%    |
| Business and Financial Operations              | 134                              | 5.6%    |
| Community and Social Services                  | 42                               | 1.7%    |
| Computers and Mathematics                      | 88                               | 3.7%    |
| Construction                                   | 70                               | 2.9%    |
| Education, Training, and Libraries             | 233                              | 9.7%    |
| Farming, Fishing, and Forestry                 | 7                                | 0.3%    |
| Food Preparation and Service                   | 93                               | 3.9%    |
| Healthcare Practitioners and Technical         | 159                              | 6.6%    |
| Healthcare Support                             | 83                               | 3.4%    |
| Installation, Maintenance, and Repair          | 97                               | 4.0%    |
| Legal  | 40                               | 1.7%    |
| Life, Physical, and Social Sciences            | 31                               | 1.3%    |
| Management                                     | 230                              | 9.6%    |
| Military                                       | 33                               | 1.4%    |
| Office and Administrative Support              | 288                              | 12.0%   |
| Personal Care and Service                      | 81                               | 3.4%    |
| Production                                     | 38                               | 1.6%    |
| Protective Service                             | 66                               | 2.7%    |
| Sales  | 203                              | 8.4%    |
| Transportation                                 | 50                               | 2.1%    |
| Scientist/Researcher                           | 24                               | 1.0%    |
| Professional Specialty (Carpenter/Electrician) | 32                               | 1.3%    |
| Technician/Technical Support                   | 30                               | 1.2%    |
| Student  | 7                                | 0.3%    |
| Other  | 14                               | 0.6%    |
| Don't know                                     | 28                               | 1.2%    |
| Refused  | 3                                | 0.1%    |
| Valid Total                                    | 2,406                            | 100.0%  |
| Missing – not currently employed               | 1,633                            |         |
| Missing – don't know employment status         | 21                               |         |
| Missing – under 12 years of age                | 822                              |         |
| Total  | 4,882                            |         |

Table 33. School Attendance

| Do you attend school? | Persons in Respondent Households |         |
|-----------------------|----------------------------------|---------|
|                       | Frequency                        | Percent |
| Yes                   | 1,476                            | 30.2%   |
| No                    | 3,375                            | 69.1%   |
| Don't know            | 31                               | 0.6%    |
| Total                 | 4,882                            | 100.0%  |

Table 34. Full-time or Part-time School Attendance

| Do you attend full-time or part-time? | Persons in Respondent Households |         |
|---------------------------------------|----------------------------------|---------|
|                                       | Frequency                        | Percent |
| Yes                                   | 1,167                            | 79.1%   |
| No                                    | 306                              | 20.7%   |
| Don't know                            | 3                                | 0.2%    |
| Valid Total                           | 1,476                            | 100.0%  |
| Missing - not attending school        | 3,406                            |         |
| Total                                 | 4,882                            |         |

Table 35. Type of School

| What level of school do you attend?                 | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Day Care  | 60                               | 4.1%    |
| Nursery School/Preschool                            | 67                               | 4.5%    |
| Elementary/Middle School (Grades K-8)               | 619                              | 41.9%   |
| High School (Grades 9-12)                           | 274                              | 18.6%   |
| College undergraduate (freshman to senior)          | 276                              | 18.7%   |
| Graduate or professional school (dental, law, etc.) | 116                              | 7.9%    |
| Vocational or trade school                          | 30                               | 2.0%    |
| Home schooling/Independent Study                    | 11                               | 0.7%    |
| Continuing education/Work related                   | 5                                | 0.3%    |
| Community college                                   | 3                                | 0.2%    |
| Private/charter school                              | 3                                | 0.2%    |
| Adult education                                     | 3                                | 0.2%    |
| Other   | 6                                | 0.4%    |
| Don't know  | 3                                | 0.2%    |
| Valid Total   | 1,476                            | 100.0%  |
| Missing - not attending school                      | 3,406                            |         |
| Total   | 4,882                            |         |

## 5. ACTIVITIES AND TRIPS

The following section summarizes the responses to the activity and trip questions asked in the retrieval interview (or obtained from the mailed-back diaries).

The option of mailing the survey back was offered, at the discretion of the interviewer, when a respondent was about to terminate the interview or was not cooperating because of the amount of time involved in conducting the interviews by phone. Mailed-back diaries were manually checked and entered into the CATI system. Respondents were called back if information was missing or if clarification was needed. Twenty-six percent (26%) of the completed household interviews were received by mail. Mailbacks increased the response from households with more than one person from 70% in the overall survey to 77% among mailback households. However, mailback households were more likely to be suburban homeowners with higher incomes. Overall, 45% of completed households are suburban, while 50% of mailback households are suburban. Seventy-six percent (76%) of completed households own their home, compared to 82% of mailback households. Thirty-three percent (33%) of completed households reported an annual household income of \$50,000 or more, while 41% of mailback households reported this income level.

The first day that households recorded activity information for the survey was September 21, 2000. The last day information was recorded was November 18, 2000. The following table shows the distribution of activity dates by calendar week.

Table 36. Activity Date by Calendar Week

| Calendar Week                   | Persons in Respondent Households |         |
|---------------------------------|----------------------------------|---------|
|                                 | Frequency                        | Percent |
| September 21 – 23, 2000         | 6                                | 0.1%    |
| September 25 – 30, 2000         | 594                              | 12.2%   |
| October 2 – 7, 2000             | 489                              | 10.0%   |
| October 9 – 14, 2000            | 599                              | 12.3%   |
| October 16 – 21, 2000           | 641                              | 13.1%   |
| October 23 – 28, 2000           | 764                              | 15.6%   |
| October 30 – November 4, 2000   | 908                              | 18.6%   |
| November 6 – November 11, 2000  | 666                              | 13.6%   |
| November 13 – November 18, 2000 | 215                              | 4.4%    |
| Total                           | 4,882                            | 100.0%  |

The following table lists the frequencies of activity dates by day of the week.

Table 37. Activity Date by Day of the Week

| Day of Week | Persons in Respondent Households |         |
|-------------|----------------------------------|---------|
|             | Frequency                        | Percent |
| Monday      | 1,106                            | 22.7%   |
| Tuesday     | 859                              | 17.6%   |
| Wednesday   | 788                              | 16.1%   |
| Thursday    | 711                              | 14.6%   |
| Friday      | 849                              | 17.4%   |
| Saturday    | 569                              | 11.7%   |
| Total       | 4,882                            | 100.0%  |

Table 38. Total Activities Reported

| Activity Reported                        | Frequency | Percent |
|--|-----------|---------|
| Driving, Riding, Walking, Biking, Flying | 15,379    | 24.8%   |
| Sleep                                    | 9,645     | 15.5%   |
| Meals                                    | 8,553     | 13.8%   |
| Work                                     | 2,867     | 4.6%    |
| School                                   | 1,647     | 2.7%    |
| Personal Activities                      | 11,858    | 19.1%   |
| Personal Business                        | 1,983     | 3.2%    |
| Personal Internet/E-mail                 | 859       | 1.4%    |
| Volunteer/Civic/Religious Activities     | 400       | 0.6%    |
| Shopping                                 | 1,946     | 3.1%    |
| Sick or Ill/Medical Appointment          | 406       | 0.7%    |
| Recreation/Entertainment                 | 4,375     | 7.0%    |
| Pick-Up/Drop-Off Passenger               | 1,625     | 2.6%    |
| Out of the Tucson area                   | 35        | 0.1%    |
| Don't know                               | 525       | 0.8%    |
| Refused                                  | 1         | 0.0%    |
| Total                                    | 62,104    | 100.0%  |

Respondents were given the opportunity to report simultaneous activities, that is, they might be doing two or three activities at once (i.e., eating dinner while watching television). While most of the activities were carried out singly, there were reports of up to five activities carried out simultaneously. The following table gives the frequencies of single and multiple activities reported.

Table 39. Number of Simultaneous Activities Reported

| Number of Simultaneous Activities Reported | Frequency | Percent |
|--|-----------|---------|
| One  | 46,126    | 87.5%   |
| Two  | 4,473     | 8.5%    |
| Three                                      | 1,609     | 3.1%    |
| Four                                       | 465       | 0.9%    |
| Five                                       | 69        | 0.1%    |
| Total                                      | 52,742    | 100.0%  |

Thus, an average of 12.7 activities was reported for each person and 29.9 activities for each household.

The following table shows the first activity reported.

Table 40. Activities Reported (1st Activity)

| Activity Reported                        | Frequency | Percent |
|--|-----------|---------|
| Driving, Riding, Walking, Biking, Flying | 15,379    | 29.2%   |
| Sleep                                    | 8,963     | 17.0%   |
| Meals                                    | 6,408     | 12.1%   |
| Work                                     | 2,738     | 5.2%    |
| School                                   | 1,442     | 2.7%    |
| Personal Activities                      | 8,827     | 16.7%   |
| Personal Business                        | 1,574     | 3.0%    |
| Personal Internet/E-mail                 | 318       | 0.6%    |
| Volunteer/Civic/Religious Activities     | 350       | 0.7%    |
| Shopping                                 | 1,890     | 3.6%    |
| Sick or Ill/Medical Appointment          | 365       | 0.7%    |
| Recreation/Entertainment                 | 2,333     | 4.4%    |
| Pick-Up/Drop-Off Passenger               | 1,594     | 3.0%    |
| Out of the Tucson area                   | 35        | 0.1%    |
| Don't know                               | 525       | 1.0%    |
| Refused                                  | 1         | 0.0%    |
| Total                                    | 52,742    | 100.0%  |



Tables 41 through 44 list the activities for cases where multiple activities were reported simultaneously.

Table 41. Activities Reported (2nd Activity)

| Activity Reported                    | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sleep                                | 245       | 3.7%    |
| Meals                                | 1,781     | 26.9%   |
| Work                                 | 94        | 1.4%    |
| School                               | 142       | 2.1%    |
| Personal Activities                  | 2,657     | 40.2%   |
| Personal Business                    | 210       | 3.2%    |
| Personal Internet/E-mail             | 188       | 2.8%    |
| Volunteer/Civic/Religious Activities | 29        | 0.4%    |
| Shopping                             | 48        | 0.7%    |
| Sick or Ill/Medical Appointment      | 20        | 0.3%    |
| Recreation/Entertainment             | 1,178     | 17.8%   |
| Pick-Up/Drop-Off Passenger           | 24        | 0.4%    |
| Total                                | 6,616     | 100.0%  |

Table 42. Activities Reported (3rd Activity)

| Activity Reported                    | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sleep                                | 270       | 12.6%   |
| Meals                                | 315       | 14.7%   |
| Work                                 | 33        | 1.5%    |
| School                               | 46        | 2.1%    |
| Personal Activities                  | 350       | 16.3%   |
| Personal Business                    | 154       | 7.2%    |
| Personal Internet/E-mail             | 240       | 11.2%   |
| Volunteer/Civic/Religious Activities | 10        | 0.5%    |
| Shopping                             | 6         | 0.3%    |
| Sick or Ill/Medical Appointment      | 18        | 0.8%    |
| Recreation/Entertainment             | 695       | 32.4%   |
| Pick-Up/Drop-Off Passenger           | 6         | 0.3%    |
| Total                                | 2,143     | 100.0%  |

Table 43. Activities Reported (4th Activity)

| Activity Reported                    | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sleep                                | 156       | 29.2%   |
| Meals                                | 48        | 9.0%    |
| Work                                 | 2         | 0.4%    |
| School                               | 16        | 3.0%    |
| Personal Activities                  | 24        | 4.5%    |
| Personal Business                    | 43        | 8.1%    |
| Personal Internet/E-mail             | 95        | 17.8%   |
| Volunteer/Civic/Religious Activities | 7         | 1.3%    |
| Shopping                             | 1         | 0.2%    |
| Sick or Ill/Medical Appointment      | 3         | 0.6%    |
| Recreation/Entertainment             | 138       | 25.8%   |
| Pick-Up/Drop-Off Passenger           | 1         | 0.2%    |
| Total                                | 534       | 100.0%  |

Table 44. Activities Reported (5th Activity)

| Activity Reported                    | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sleep                                | 11        | 15.9%   |
| Meals                                | 1         | 1.4%    |
| School                               | 1         | 1.4%    |
| Personal Business                    | 2         | 2.9%    |
| Personal Internet/E-mail             | 18        | 26.1%   |
| Volunteer/Civic/Religious Activities | 4         | 5.8%    |
| Shopping                             | 1         | 1.4%    |
| Recreation/Entertainment             | 31        | 44.9%   |
| Total                                | 69        | 100.0%  |

## 5A. Travel

A total of 15,379 activities were reported as travel (driving, riding, walking, biking, flying activities - trips).

Table 45. Reported Activity is Travel (Drive, Ride, Walk, etc.) – Number of Transportation Types

| Number of Transportation Types | Frequency | Percent |
|--------------------------------|-----------|---------|
| One                            | 14,903    | 96.9%   |
| Two                            | 399       | 2.6%    |
| Three                          | 77        | 0.5%    |
| Total                          | 15,379    | 100.0%  |

Table 46. Reported Activity is Travel (Drive, Ride, Walk, etc.) – 1st Mode

| Mode                | Frequency | Percent |
|---------------------|-----------|---------|
| Car, van, truck     | 13,511    | 87.9%   |
| Bicycle             | 209       | 1.4%    |
| Walk                | 1,033     | 6.7%    |
| Motorcycle or moped | 29        | 0.2%    |
| Train               | 3         | 0.0%    |
| Taxi                | 8         | 0.1%    |
| Bus/School Bus      | 503       | 3.3%    |
| Airplane            | 5         | 0.0%    |
| Golf cart           | 19        | 0.1%    |
| Skateboard          | 9         | 0.1%    |
| Shuttle             | 2         | 0.0%    |
| Wheelchair          | 3         | 0.0%    |
| Gas vehicle         | 2         | 0.0%    |
| Electric vehicle    | 1         | 0.0%    |
| Scooter             | 6         | 0.0%    |
| Hayride             | 2         | 0.0%    |
| RV                  | 4         | 0.0%    |
| Other               | 5         | 0.0%    |
| Don't know          | 25        | 0.2%    |
| Total               | 15,379    | 100.0%  |

Respondents that used a car, van, or truck for their travel were asked if they were the driver of the vehicle or a passenger, how many people were in the vehicle, and, if the vehicle used was from their household, which vehicle was used.

Table 47. Car/Van/Truck Used for Travel – Driver or Passenger - 1st Mode

| Were you the driver or a passenger?  | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Driver                               | 9,451     | 70.0%   |
| Passenger                            | 4,029     | 29.8%   |
| Unknown (originally an other answer) | 17        | 0.1%    |
| Don't know                           | 14        | 0.1%    |
| Total                                | 13,511    | 100.0%  |

Table 48. Car/Van/Truck Used for Travel – Number of People in the Vehicle - 1st Mode

| How many people were in the vehicle? | Frequency | Percent |
|--------------------------------------|-----------|---------|
| One                                  | 6,702     | 49.6%   |
| Two                                  | 3,622     | 26.8%   |
| Three                                | 1,693     | 12.5%   |
| Four                                 | 912       | 6.8%    |
| Five                                 | 302       | 2.2%    |
| Six                                  | 192       | 1.4%    |
| Seven                                | 22        | 0.2%    |
| Eight                                | 2         | 0.0%    |
| Nine                                 | 3         | 0.0%    |
| Ten                                  | 1         | 0.0%    |
| Eleven                               | 7         | 0.0%    |
| Twelve                               | 3         | 0.0%    |
| Unknown (originally an other answer) | 17        | 0.1%    |
| Don't know                           | 32        | 0.2%    |
| Refused                              | 1         | 0.0%    |
| Total                                | 13,511    | 100.0%  |

Table 49. Car/Van/Truck Used for Travel – Household Vehicle - 1st Mode

| Was the vehicle used from your household? | Frequency | Percent |
|---|-----------|---------|
| Yes                                       | 12,648    | 93.6%   |
| No  | 770       | 5.7%    |
| Unknown (originally an other answer)      | 17        | 0.1%    |
| Don't know                                | 76        | 0.6%    |
| Total                                     | 13,511    | 100.0%  |

Respondents that used a bus for their travel were asked to specify the type of bus used.

Table 50. Bus Used for Travel – Type of Bus - 1st Mode

| Type of Bus                          | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sun Tran                             | 110       | 21.9%   |
| Airport Shuttle                      | 1         | 0.2%    |
| Employer Shuttle Bus                 | 4         | 0.8%    |
| School Bus                           | 332       | 66.0%   |
| Van Tran of Tucson                   | 2         | 0.4%    |
| Cozy Casa Day Care Van               | 3         | 0.6%    |
| Park and Recreation Bus              | 2         | 0.4%    |
| University of Arizona Shuttle        | 2         | 0.4%    |
| Handi Car                            | 4         | 0.8%    |
| City/Public Bus                      | 1         | 0.2%    |
| Unknown (originally an other answer) | 35        | 7.0%    |
| Other                                | 4         | 0.8%    |
| Don't know                           | 3         | 0.6%    |
| Total                                | 503       | 100.0%  |

Table 51. Reported Activity is Travel (Drive, Ride, Walk, etc.) – 2nd Mode

| Mode                | Frequency | Percent |
|---------------------|-----------|---------|
| Car, van, truck     | 87        | 18.3%   |
| Bicycle             | 10        | 2.1%    |
| Walk                | 162       | 34.0%   |
| Motorcycle or moped | 5         | 1.1%    |
| Taxi                | 1         | 0.2%    |
| Bus/School Bus      | 190       | 39.9%   |
| Airplane            | 6         | 1.3%    |
| Shuttle             | 13        | 2.7%    |
| Electric vehicle    | 1         | 0.2%    |
| Hayride             | 1         | 0.2%    |
| Total               | 476       | 100.0%  |

Table 52. Car/Van/Truck Used for Travel – Driver or Passenger – 2nd Mode

| Were you the driver or a passenger? | Frequency | Percent |
|-------------------------------------|-----------|---------|
| Driver                              | 52        | 59.8%   |
| Passenger                           | 33        | 37.9%   |
| Don't know                          | 2         | 2.3%    |
| Total                               | 87        | 100.0%  |

Table 53. Car/Van/Truck Used for Travel – Number of People in the Vehicle – 2nd Mode

| How many people were in the vehicle? | Frequency | Percent |
|--------------------------------------|-----------|---------|
| One                                  | 42        | 48.3%   |
| Two                                  | 24        | 27.6%   |
| Three                                | 10        | 11.5%   |
| Four                                 | 4         | 4.6%    |
| Five                                 | 1         | 1.1%    |
| Six                                  | 3         | 3.4%    |
| Ten                                  | 1         | 1.1%    |
| Don't know                           | 2         | 2.3%    |

Table 54. Car/Van/Truck Used for Travel – Household Vehicle – 2nd Mode

| Was the vehicle used from your household? | Frequency | Percent |
|---|-----------|---------|
| Yes                                       | 70        | 80.5%   |
| No  | 13        | 14.9%   |
| Don't know                                | 4         | 4.6%    |
| Total                                     | 87        | 100.0%  |

Table 55. Bus Used for Travel – Type of Bus – 2nd Mode

| Type of Bus                          | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Sun Tran                             | 84        | 44.2%   |
| Airport Shuttle                      | 2         | 1.1%    |
| Employer Shuttle Bus                 | 2         | 1.1%    |
| School Bus                           | 85        | 44.7%   |
| Park and Recreation Bus              | 2         | 1.1%    |
| University of Arizona Shuttle        | 3         | 1.6%    |
| City/Public Bus                      | 2         | 1.1%    |
| Unknown (originally an other answer) | 7         | 3.7%    |
| Don't know                           | 3         | 1.6%    |
| Total                                | 190       | 100.0%  |

Table 56. Reported Activity is Travel (Drive, Ride, Walk, etc.) – 3rd Mode

| Mode            | Frequency | Percent |
|-----------------|-----------|---------|
| Car, van, truck | 23        | 29.9%   |
| Bicycle         | 2         | 2.6%    |
| Walk            | 50        | 64.9%   |
| Bus/School Bus  | 1         | 1.3%    |
| Wheelchair      | 1         | 1.3%    |
| Total           | 77        | 100.0%  |

Table 57. Car/Van/Truck Used for Travel – Driver or Passenger – 3rd Mode

| Were you the driver or a passenger? | Frequency | Percent |
|-------------------------------------|-----------|---------|
| Driver                              | 9         | 39.1%   |
| Passenger                           | 14        | 60.9%   |
| Total                               | 23        | 100.0%  |

Table 58. Car/Van/Truck Used for Travel – Number of People in the Vehicle – 3rd Mode

| How many people were in the vehicle? | Frequency | Percent |
|--------------------------------------|-----------|---------|
| One                                  | 7         | 30.4%   |
| Two                                  | 5         | 21.7%   |
| Three                                | 2         | 8.7%    |
| Four                                 | 2         | 8.7%    |
| Five                                 | 5         | 21.7%   |
| Six                                  | 1         | 4.3%    |
| Don't know                           | 1         | 4.3%    |
| Total                                | 23        | 100.0%  |

Table 59. Car/Van/Truck Used for Travel – Household Vehicle – 3rd Mode

| Was the vehicle used from your household? | Frequency | Percent |
|---|-----------|---------|
| Yes                                       | 19        | 82.6%   |
| No  | 4         | 17.4%   |

Table 60. Bus Used for Travel - Type of Bus - 3rd Mode

| Type of Bus | Frequency | Percent |
|-------------|-----------|---------|
| School Bus  | 1         | 100.0%  |
| Total       | 1         | 100.0%  |

Respondents who traveled were asked if they stopped anywhere along the way, other than to change types of transportation. (Note: If a respondent ended the day with a trip, they were not asked if they stopped anywhere along the way.) They were also asked the activity purpose for which they stopped, the address/location of the stop, the number of minutes they stopped, and the transportation mode they were using when they stopped.

Table 61. Stop Activities - 1st Stop (All Mentions)

| Activity                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Sleep                           | 1         | 0.0%    |
| Meals                           | 359       | 13.5%   |
| Work                            | 39        | 1.5%    |
| School                          | 8         | 0.3%    |
| Personal Activities             | 127       | 4.8%    |
| Personal Business               | 482       | 18.2%   |
| Personal Internet/E-mail        | 1         | 0.0%    |
| Volunteer/Civic/Religious       | 19        | 0.7%    |
| Shopping                        | 580       | 21.9%   |
| Sick or Ill/Medical Appointment | 27        | 1.0%    |
| Recreation/Entertainment        | 59        | 2.2%    |
| Pick-Up/Drop-Off Passenger      | 929       | 35.0%   |
| Don't know                      | 22        | 0.8%    |
| Total                           | 2,653     | 100.0%  |

Table 62. Stop Activities - 1st Stop (1st Mention)

| Activity                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Sleep                           | 1         | 0.0%    |
| Meals                           | 356       | 13.7%   |
| Work                            | 38        | 1.5%    |
| School                          | 7         | 0.3%    |
| Personal Activities             | 122       | 4.7%    |
| Personal Business               | 464       | 17.8%   |
| Personal Internet/E-mail        | 1         | 0.0%    |
| Volunteer/Civic/Religious       | 17        | 0.7%    |
| Shopping                        | 567       | 21.8%   |
| Sick or Ill/Medical Appointment | 27        | 1.0%    |
| Recreation/Entertainment        | 57        | 2.2%    |
| Pick-Up/Drop-Off Passenger      | 926       | 35.5%   |
| Don't know                      | 22        | 0.8%    |
| Total                           | 2,605     | 100.0%  |

Table 63. Stop Activities – 1st Stop (2nd Mention)

| Activity                   | Frequency | Percent |
|----------------------------|-----------|---------|
| Meals                      | 3         | 6.8%    |
| Work                       | 1         | 2.3%    |
| School                     | 1         | 2.3%    |
| Personal Activities        | 5         | 11.4%   |
| Personal Business          | 17        | 38.6%   |
| Volunteer/Civic/Religious  | 2         | 4.5%    |
| Shopping                   | 11        | 25.0%   |
| Recreation/Entertainment   | 2         | 4.5%    |
| Pick-Up/Drop-Off Passenger | 2         | 4.5%    |
| Total                      | 44        | 100.0%  |

Table 64. Stop Activities – 1st Stop (3rd Mention)

| Activity                   | Frequency | Percent |
|----------------------------|-----------|---------|
| Personal Business          | 1         | 25.0%   |
| Shopping                   | 2         | 50.0%   |
| Pick-Up/Drop-Off Passenger | 1         | 25.0%   |
| Total                      | 4         | 100.0%  |

Table 65. Mode Used While Stopping (1st Stop)

| Mode                | Frequency | Percent |
|---------------------|-----------|---------|
| Car, van, truck     | 2,497     | 95.9%   |
| Bicycle             | 15        | 0.6%    |
| Walk                | 65        | 2.5%    |
| Motorcycle or moped | 4         | 0.2%    |
| Train               | 1         | 0.0%    |
| Taxi                | 1         | 0.0%    |
| Bus/School Bus      | 15        | 0.6%    |
| Skateboard          | 2         | 0.0%    |
| Scooter             | 1         | 0.0%    |
| RV                  | 1         | 0.0%    |
| Don't know          | 3         | 0.1%    |
| Total               | 2,605     | 100.0%  |

Some respondents made more than one stop during their trip. The following tables detail the stop activities after the first stop.

Table 66. Stop Activities - Multiple Stops (All Mentions)

| Activity                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Sleep                           | 1         | 0.2%    |
| Meals                           | 49        | 8.5%    |
| Work                            | 16        | 2.8%    |
| School                          | 4         | 0.7%    |
| Personal Activities             | 33        | 5.7%    |
| Personal Business               | 139       | 24.0%   |
| Personal Internet/E-mail        | 1         | 0.2%    |
| Volunteer/Civic/Religious       | 6         | 1.0%    |
| Shopping                        | 187       | 32.4%   |
| Sick or Ill/Medical Appointment | 2         | 0.3%    |
| Recreation/Entertainment        | 11        | 1.9%    |
| Pick-Up/Drop-Off Passenger      | 128       | 22.1%   |
| Don't know                      | 1         | 0.2%    |
| Total                           | 578       | 100.0%  |

Table 67. Stop Activities - Multiple Stops (1st Mention)

| Activity                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Sleep                           | 1         | 0.2%    |
| Meals                           | 46        | 8.1%    |
| Work                            | 16        | 2.8%    |
| School                          | 4         | 0.7%    |
| Personal Activities             | 31        | 5.5%    |
| Personal Business               | 137       | 24.1%   |
| Personal Internet/E-mail        | 1         | 0.2%    |
| Volunteer/Civic/Religious       | 6         | 1.1%    |
| Shopping                        | 185       | 32.6%   |
| Sick or Ill/Medical Appointment | 2         | 0.4%    |
| Recreation/Entertainment        | 11        | 1.9%    |
| Pick-Up/Drop-Off Passenger      | 127       | 22.4%   |
| Don't know                      | 1         | 0.2%    |
| Total                           | 568       | 100.0%  |

Table 68. Stop Activities - Multiple Stops (2nd Mention)

| Activity                   | Frequency | Percent |
|----------------------------|-----------|---------|
| Meals                      | 3         | 37.5%   |
| Personal Activities        | 1         | 12.5%   |
| Personal Business          | 1         | 12.5%   |
| Shopping                   | 2         | 25.0%   |
| Pick-Up/Drop-Off Passenger | 1         | 12.5%   |
| Total                      | 8         | 100.0%  |

Table 69. Stop Activities - Multiple Stops (3rd Mention)

| Activity            | Frequency | Percent |
|---------------------|-----------|---------|
| Personal Activities | 1         | 50.0%   |
| Personal Business   | 1         | 50.0%   |
| Total               | 2         | 100.0%  |



Table 70. Mode Used While Stopping (Multiple Stops)

| Mode                | Frequency | Percent |
|---------------------|-----------|---------|
| Car, van, truck     | 542       | 95.4%   |
| Bicycle             | 1         | 0.2%    |
| Walk                | 17        | 3.0%    |
| Motorcycle or moped | 2         | 0.4%    |
| Bus/School Bus      | 4         | 0.7%    |
| Don't know          | 2         | 0.4%    |
| Total               | 568       | 100.0%  |

The following table summarizes all of the stop activities.

Table 71. Stop Activities – All Stops (All Mentions)

| Activity                        | Frequency | Percent |
|---------------------------------|-----------|---------|
| Sleep                           | 2         | 0.1%    |
| Meals                           | 408       | 12.6%   |
| Work                            | 55        | 1.7%    |
| School                          | 12        | 0.4%    |
| Personal Activities             | 160       | 5.0%    |
| Personal Business               | 621       | 19.2%   |
| Personal Internet/E-mail        | 2         | 0.1%    |
| Volunteer/Civic/Religious       | 25        | 0.8%    |
| Shopping                        | 767       | 23.7%   |
| Sick or Ill/Medical Appointment | 29        | 0.9%    |
| Recreation/Entertainment        | 70        | 2.2%    |
| Pick-Up/Drop-Off Passenger      | 1,057     | 32.7%   |
| Don't know                      | 23        | 0.7%    |
| Total                           | 3,231     | 100.0%  |

Trips are often defined as one-way journeys between an origin and a destination. However, people do not think of them that way. Consequently, stops made for short activities along the way are often not reported if the person is questioned about trips only. Also, changes in mode are often perceived as part of the total trip. This survey approached the problem differently, and the total number of one-way journeys between an origin and destination is calculated from information about travel activities, stops, and changes in mode. The following table shows the calculated number of trip segments.

Table 72. Combined Trip Segments

| Trip Segment                      | Total  |
|-----------------------------------|--------|
| Travel activities                 | 15,379 |
| Stops                             | 3,173  |
| Mode changes                      | 553    |
| Total trip segments               | 19,105 |
| Total trip segments per person    | 3.9    |
| Total trip segments per household | 9.2    |

Thus, there is an average of 3.9 trip segments per person and 9.2 per household.

Table 73. Total Trip Segments by Mode

| Mode                | Frequency | Percent |
|---------------------|-----------|---------|
| Car, van, truck     | 16,660    | 87.2%   |
| Bicycle             | 237       | 1.2%    |
| Walk                | 1,327     | 6.9%    |
| Motorcycle or moped | 40        | 0.2%    |
| Train               | 4         | 0.0%    |
| Taxi                | 10        | 0.1%    |
| Bus/School Bus      | 713       | 3.7%    |
| Airplane            | 11        | 0.1%    |
| Golf cart           | 19        | 0.1%    |
| Skateboard          | 11        | 0.1%    |
| Shuttle             | 15        | 0.1%    |
| Wheelchair          | 4         | 0.0%    |
| Gas vehicle         | 2         | 0.0%    |
| Electric vehicle    | 2         | 0.0%    |
| Scooter             | 7         | 0.0%    |
| Hayride             | 3         | 0.0%    |
| RV                  | 5         | 0.0%    |
| Other               | 5         | 0.0%    |
| Don't know          | 30        | 0.2%    |
| Total               | 19,105    | 100.0%  |

## 5B. Internet Activity

A series of questions was asked about Internet activity at home. Respondents who did not report personal Internet use as an activity were asked, "At home, did you use the Internet or a modem during the day?" The results are presented in the table below.

Table 74. Internet Use

| At home, did you use the Internet or a modem during the day? | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Yes  | 536                              | 12.7%   |
| No   | 2,471                            | 58.6%   |
| Don't know   | 1,199                            | 28.4%   |
| Refused  | 14                               | 0.3%    |
| Valid Total  | 4,220                            | 100.0%  |
| Missing - reported Internet use as an activity               | 662                              |         |
| Total  | 4,882                            |         |

The Internet use questions were not printed in the diaries, so it is important to note that 92% of the "don't know" responses to this question were from mailed back diaries.

Respondents who reported personal Internet use as an activity and respondents who indicated use of the Internet or a modem at home were asked if their Internet use or modem use was for work or personal use.

Table 75. Business or Personal Internet Use

| Was your Internet or modem use for . . . ?  | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Work  | 51                               | 4.3%    |
| Personal Use                                | 734                              | 61.3%   |
| Both  | 177                              | 14.8%   |
| Don't know                                  | 235                              | 19.6%   |
| Refused                                     | 1                                | 0.1%    |
| Valid Total                                 | 1,198                            | 100.0%  |
| Missing - no Internet or modem use reported | 3,684                            |         |
| Total                                       | 4,882                            |         |

Respondents who reported personal Internet use were asked for what purposes the Internet was used.

Table 76. Purposes of Internet Use (1st Mention)

| Your personal use was for . . . ?           | Persons in Respondent Households |         |
|---|----------------------------------|---------|
|   | Frequency                        | Percent |
| Browsing/Searching/Information seeking      | 272                              | 29.9%   |
| Browsing/Shopping                           | 18                               | 2.0%    |
| Entertainment/games                         | 64                               | 7.0%    |
| Social (e-mail/chat rooms)                  | 483                              | 53.0%   |
| Banking/Financial                           | 24                               | 2.6%    |
| Travel browsing/reservations                | 4                                | 0.4%    |
| Studying or on-line courses for school      | 32                               | 3.5%    |
| Multimedia (CDs/videos/books)               | 8                                | 0.9%    |
| Don't know                                  | 6                                | 0.7%    |
| Valid Total                                 | 911                              | 100.0%  |
| Missing - no Internet or modem use reported | 3,684                            |         |
| Missing - no personal Internet use reported | 287                              |         |
| Total                                       | 4,882                            |         |

Table 77. Purposes of Internet Use (2nd Mention)

| Your personal use was for . . . ?      | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Browsing/Searching/Information seeking | 128                              | 28.4%   |
| Browsing/Shopping                      | 43                               | 9.6%    |
| Entertainment/games                    | 59                               | 13.1%   |
| Social (e-mail/chat rooms)             | 151                              | 33.6%   |
| Banking/Financial                      | 33                               | 7.3%    |
| Travel browsing/reservations           | 9                                | 2.0%    |
| Studying or on-line courses for school | 16                               | 3.6%    |
| Multimedia (CDs/videos/books)          | 11                               | 2.4%    |
| Total                                  | 450                              | 100.0%  |

Table 78. Purposes of Internet Use (3rd Mention)

| Your personal use was for . . . ?      | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Browsing/Searching/Information seeking | 20                               | 14.4%   |
| Browsing/Shopping                      | 13                               | 9.4%    |
| Entertainment/games                    | 23                               | 16.5%   |
| Social (e-mail/chat rooms)             | 41                               | 29.5%   |
| Banking/Financial                      | 20                               | 14.4%   |
| Travel browsing/reservations           | 4                                | 2.9%    |
| Studying or on-line courses for school | 11                               | 7.9%    |
| Multimedia (CDs/videos/books)          | 7                                | 5.0%    |
| Total                                  | 139                              | 100.0%  |

Table 79. Purposes of Internet Use (4th Mention)

| Your personal use was for . . . ?      | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Browsing/Searching/Information seeking | 1                                | 2.0%    |
| Browsing/Shopping                      | 3                                | 6.1%    |
| Entertainment/games                    | 3                                | 6.1%    |
| Social (e-mail/chat rooms)             | 12                               | 24.5%   |
| Banking/Financial                      | 8                                | 16.3%   |
| Travel browsing/reservations           | 4                                | 8.2%    |
| Studying or on-line courses for school | 5                                | 10.2%   |
| Multimedia (CDs/videos/books)          | 13                               | 26.5%   |
| Total                                  | 49                               | 100.0%  |

Table 80. Purposes of Internet Use (5th Mention)

| Your personal use was for . . . ?      | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Entertainment/games                    | 1                                | 6.7%    |
| Social (e-mail/chat rooms)             | 1                                | 6.7%    |
| Banking/Financial                      | 4                                | 26.7%   |
| Travel browsing/reservations           | 4                                | 26.7%   |
| Studying or on-line courses for school | 3                                | 20.0%   |
| Multimedia (CDs/videos/books)          | 2                                | 13.3%   |
| Total                                  | 15                               | 100.0%  |

Table 81. Purposes of Internet Use (All Mentions)

| Your personal use was for . . . ?      | Persons in Respondent Households |         |
|--|----------------------------------|---------|
|  | Frequency                        | Percent |
| Browsing/Searching/Information seeking | 421                              | 46.2%   |
| Browsing/Shopping                      | 77                               | 8.5%    |
| Entertainment/games                    | 150                              | 16.5%   |
| Social (e-mail/chat rooms)             | 688                              | 75.5%   |
| Banking/Financial                      | 89                               | 9.8%    |
| Travel browsing/reservations           | 25                               | 2.7%    |
| Studying or on-line courses for school | 67                               | 7.4%    |
| Multimedia (CDs/videos/books)          | 41                               | 4.5%    |
| Don't know                             | 6                                | 0.7%    |
| Total                                  | 911                              | 100.0%  |

## 6. GEOCODING

MapInfo's MapMarker Plus geocoding software was utilized to geocode the locations of all households and of all reported activities. The following table shows the levels of geocoding achieved for the home locations of the 2,076 households.

Table 82. Geocoding Results for Home Locations

| Home Locations       | Frequency | Percent |
|----------------------|-----------|---------|
| Address/Street level | 2,069     | 99.7%   |
| Intersection level   | 7         | 0.3%    |
| Total                | 2,076     | 100.0%  |

Table 83. Geocoding Results for Activity Locations

| Activity Locations              | Frequency | Percent |
|---------------------------------|-----------|---------|
| Address/Street level            | 20,540    | 89.0%   |
| Intersection level              | 1,886     | 8.2%    |
| Zip centroid level              | 267       | 1.2%    |
| Non-geocodable                  | 394       | 1.7%    |
| Valid Total                     | 23,087    | 100.0%  |
| Did not change location         | 14,276    |         |
| Travel activities (no location) | 15,379    |         |
| Total activities                | 52,742    |         |

Appendix B provides a guide to the geocoding result codes in the data file.

## 7. DATA COMPUTER CHECKS

MORPACE cleaned the data and performed a series of checks on the data. This section outlines the final results.

Please note that the overwhelming majority of data corrections made were necessary because interviewers needed to back-up within an interview. Although respondents are provided with an activity diary to record all of their activities and travel throughout the 24-hour assigned activity period, some respondents relate their activities to the interviewer in a non-sequential manner. The activity diary and the CATI prompt the respondent to report all activities in a chronological fashion, but sometimes respondents do not use the diary and recall their daily activities out of order. The CATI allows the interviewer to back-up and correct the information, but the answers to questions that were already asked then need to be cleaned up.

All phone numbers were verified during the recruit interview (PHONE=01). All household locations were confirmed as Pima or Pinal county (COUNTY2=01 or 02). Households indicating Pinal county (COUNTY2=02) were confirmed in the 85653 zip code (ZIP\_VER=85653).

The mailing information is not missing for any of the observations. Any households that requested the survey materials be sent to anything other than a home address (ADD\_TYPE <>01) were also asked for a home address.

No respondent was recruited for a Sunday activity day and no respondent completed the activity diary on a Sunday, in accordance with the study specifications.

All households with four members were asked if they would prefer a \$20.00 check or donation as an incentive for participating in the survey. All five members households were asked if they would prefer a \$30.00 check or donation. Two four-member households that were originally eligible for an incentive had household members removed, which lowered the number of household members to below the incentive requirement of four household members. These households were still provided with the original incentive amount because they were promised an incentive for participating during the recruit interview. However, the household's response to the incentive question was recoded to reflect the situation (INCENT20=05). Two households that added household members were also recoded for the incentive question (INCENT20=04). These households did not receive an incentive, although they had four members, because an incentive was never offered during the recruit interview.

All households were asked to report the number of vehicles available for use by members of the household (VEHICLES). The year (CARYEAR), as well as the make and model (CARTYPE), of each vehicle was recorded.

All households were asked if they own or rent their home (HOME\_OWN), in what type of home they live (HOME\_TYPE), and how many months per year they reside at the home (PRIMARY).

All households were asked to report the household's annual income (INCOME). Only households with an annual income of \$30,000 or above (INCOME=01) were asked the higher income question (INC\_OVER30), while households with an annual income below \$30,000 (INCOME=02) were asked the lower income question (INC\_LESS30).

All households were asked to report the number of working fax machines (FAX) at home, as well as whether they have access to e-mail (INTERNETA) and/or the Internet (INTERNETB).

No persons under the age of 12 were asked driving frequency (DRIVE). All persons were asked gender (GENDER), age (AGE), frequency of public transportation use (TRANSIT), and racial/ethnic background (RACE). (Note: Gender was recorded by observation when speaking to the person.)

Only persons over the age of 11 (or persons refusing to indicate age) were asked if they work (JOB). Only persons that do not work (JOB=02) that are at least 40 years of age (or refused to indicate age) were asked if they are retired (RETIRED). Only persons that work (JOB=01) were asked the follow-up work information questions (JOB\_NUM, JOB\_TIME, JOB\_DAYA, JOB\_DAYB, JOB\_DROP1, JOB\_DROP2, JOB\_SUB, JOB\_FLEX, JOB\_COMP, JOB\_INDUST, and JOB\_OCC). Only persons that typically drop off a minor on their way to work (JOB\_DROP1=01) were asked where they drop off a minor (JOB\_DROP2).

Only persons who attend school (SCHOOL=01) were asked the follow-up school information questions (SCH\_TIME and SCH\_TYPE).

Each time an activity took place at a different location, the next activity was correctly reported as a trip (ACTIVITY=01).

Each time a trip was reported (ACTIVITY=01), the respondent was asked the number of transportation types used for the trip (TRAN\_NUM) and the mode of each of these (TRAN\_TYPE) was recorded.

Each time a trip was taken using a car, van, or truck (TRAN\_TYPE=01), the following questions were asked: was the respondent the driver or a passenger (VEH\_DP), how many people were in the vehicle (VEH\_PEOPLE), and was the vehicle used from the household (VEH\_HOUSE). If the vehicle used was from the household (VEH\_HOUSE=01), which household vehicle was used (VEH\_USED) was asked.

Some transportation types that were recorded as “other” (TRAN\_TYPE=996) were recoded into an existing code by MORPACE’s coding department. However, responses recoded as car, van, or truck (TRAN\_TYPE=01) after the interview did not go through the follow-up questions for this vehicle type. Therefore, MORPACE answered these questions with special codes for this type of situation (VEH\_DP=03, VEH\_PEOPLE=91, and VEH\_HOUSE=03). Responses recoded as bus (TRAN\_TYPE=07) were not asked the follow-up bus question (BUS\_TYPE) during the interview. Therefore, this question was also filled with a special code (BUS\_TYPE=991).

Each time a trip was taken (ACTIVITY=01), the respondent was asked if they stopped anywhere along the way (STOPA). Follow-up questions, including the type of transportation being used when they stopped (TRAN\_STOP), the number of minutes the stop took (STOP\_MIN), and the location of the stop were asked for all stops (STOPA=01). Respondents who stopped were asked if they stopped anywhere else (STOPB) until they said no (STOPB=02). One exception that should be noted is the rare situation where a respondent ended the day with a trip. If the last activity of the day was a trip (ACTIVITY=01), the stop questions were not asked.

Each time a trip was taken (ACTIVITY=01), the location questions (name, type, address, city, state, zip, cross streets, and so forth) were not asked.

There are 4,882 end times of 3:00 am, which corresponds to the number of respondents.

Persons who did not report personal Internet use as an activity (ACTIVITY<>08) were asked if they used the Internet or a modem at home during the day (INET1). Persons who reported Internet use as an activity (ACTIVITY=08) and persons who reported using the Internet or a modem at home during their activity period (INET1=01) were asked if their Internet or modem use was for personal use (INET2). Persons who used the Internet for personal use (INET2=02 or 03) were asked for what purpose the Internet was used (INET3).

## 8. CONCLUSIONS

The results of this review of the Tucson Household Travel Survey survey process and data results are positive.

The sample is generally representative and missing data (refused or don’t know) for demographic variables is as follows:

- Income, 6.3% (above or below \$30,000) and 13.0% for income range increments
- Age, 1.7%
- Ethnic/racial background, 1.1%
- Number of jobs, 1.0%
- Number of days worked per week – outside the home 1.3%, at home 3.7%
- Drop off minor on the way to work, 2.1%
- Employer subsidy of public transportation, 11.9%
- Occupation, 1.3%
- For all other demographic variables, less than 1%
- For activities and transportation mode, less than 1%

An average of 12.7 activities per person and 29.9 activities per household was reported. There is an average of 3.9 trip segments per person and 9.2 per household.

Geocoding of activity locations to address street level is 89.0% and geocoding to street intersection is an additional 8.2%, for a total rate of 97.1%. This ratio excludes activities that occurred at the same location and includes out of region locations.