



**Pre-Census Travel Behavior Report**  
**Analysis of the 2000 SACOG Household Travel Survey**

*prepared for*  
Sacramento Area  
Council of Governments

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## 1 Executive Summary

### *1.1 Background*

A detailed survey of travel behavior of 9,130 people in 3,941 households in the Sacramento region was made in Spring 2000. The region included all of Sacramento, Yolo, Yuba and Sutter Counties, and the western portions of Placer and El Dorado Counties. The survey was undertaken for three major reasons:

- The survey will be used to develop SACOG's next generation of travel and land use forecasting models. The models will be used for preparation of the regional transportation plan, air quality conformity analyses, and other regional planning activities. Other agencies will use the models for planning studies, such as ridership estimates for light rail projects, and environmental analyses for transportation projects and general plans. Development of the new models will begin in the coming year, with the first versions ready for use in two to three years.
- The survey will be used to update SACOG's current travel forecasting model for use in the 2002 Metropolitan Transportation Plan. The last comprehensive update of the current model was completed in 1994. The survey provides a rich source of data for fine-tuning the current model.
- The survey is intended to provide a resource for others in the region. The survey report provides a limited number of tabulations. A more detailed set of tabulations is provided in the Appendix. Additionally, the survey datasets will be made available to researchers and other organizations for their own projects.

This report is titled the "Pre-Census", because it was prepared prior to the release of detailed results from the 2000 U.S. Census. Information from the Census will be used to *weight* or *expand* the survey sample to represent aggregate travel behavior in the region. SACOG tracks housing and population growth between Census years, and estimates regional population, employment and household characteristics. These estimates were used to prepare *interim weighting factors* used for the analysis presented in this report. A "Post-Census" survey report will be published in about two years, which will have somewhat different numbers.

Each of the results of the survey cited in this report is provided in *unweighted* and *weighted* form. The weighting factors expand the responses of the survey sample to the population of the entire region, and also correct for any bias in the survey response. For example, proportionally more small households, and especially households with retired adults, participated and provided complete responses in the survey. Proportionally fewer larger families and families with children responded. The interim weighting factors correct for these biases.

## ***1.2 What is “Travel Behavior”?***

For the purposes of this report, travel behavior is defined as ***the movement of a person from one place to another to participate in a necessary or desired activity***. The characteristics of travel examined in this report include the frequency, purpose, mode, timing and duration of travel. Because the survey only included residents of the region, it does not include any other type of travel, such as freight or goods movement.

The report uses two different units of travel to analyze travel behavior.

- A ***trip*** is the most common unit of analysis, and this is literally the movement of a person from one place to another. The survey questionnaires, travel diaries, and forms were all designed to record information about all of the places a person visited during the course of the day.
- A ***tour*** is the other unit used, and it focuses on a ***series of linked trips*** that a person makes over the course of the day, and the pattern of activities included in that series of trips. In short, a tour is defined by all of the travel a person does from the time they leave their home until the next time they return home. The concept of the tour was developed because of the inherent interdependencies of a given trip with the prior trip made, and the next trip a person will make.

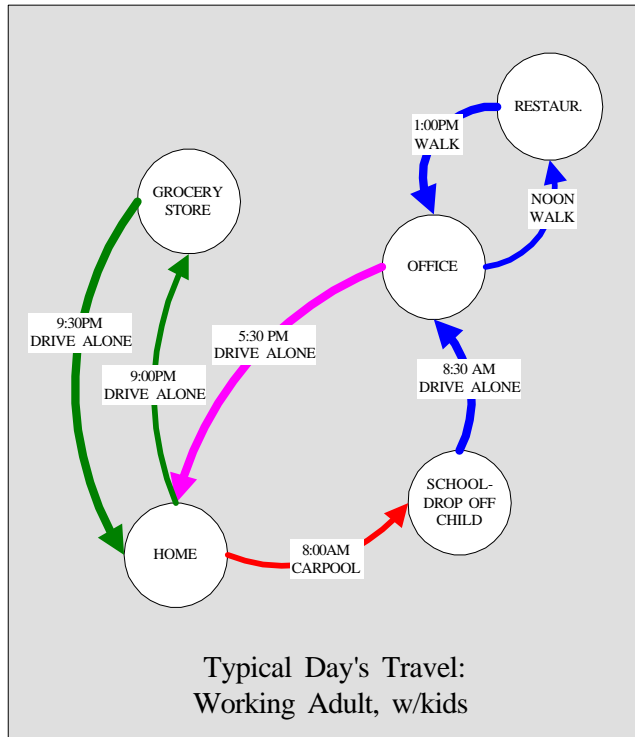
A comparison of trips and tours for a typical person-day of travel is shown in Figure ES-1.

The survey includes a record of all of the travel each of the 9,130 persons in 3,941 households in the sample made over the course of a weekday. The survey also includes the characteristics of the person (age, gender, education level, employment status, etc.), the other persons in the household and the household itself (numbers of persons, numbers of vehicles, income, etc.), and some characteristics of the places each person visited during the course of the day. This provides a rich source of data for analyzing travel behavior. The focus of the analysis was to identify key characteristics of persons, households, and places which influenced travel behavior significantly.

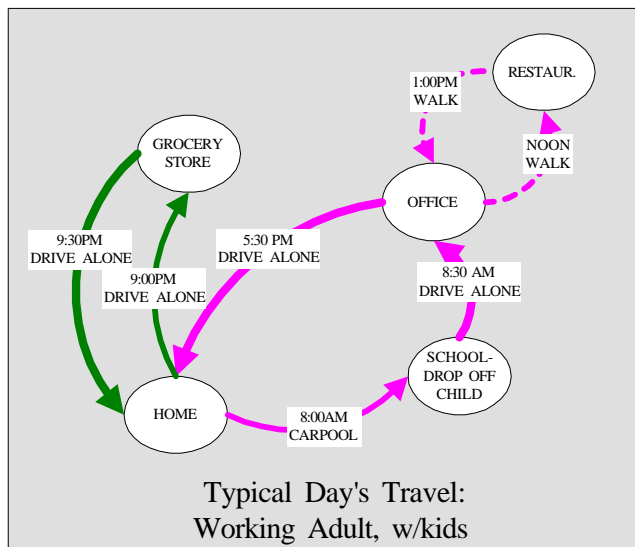
## ***1.3 Frequency of Travel***

The average number of daily trips per person in the survey was 3.6 (3.7 weighted). The minimum number of trips was zero, and 5 percent of the persons in the survey made 9 or more trips on the survey day. Trips-per-person varies strongly by household income level, and by type of person.

- About 11 percent (9 percent weighted) of the households in the survey made no trips on the survey day. These households tended to be smaller households, and just over one-half were senior households.



TRIP PURPOSE	Vehicle Trips Made	Transit Trips Made	Non-Motorized Trips Made	All Modes
Work	1			1
Shop	2			2
Home-Other	1			1
Work-Other	1		2	3
Other-Other				
School				
ALL PURPOSES	5		2	7



Tour Type	Number of Tours	Mode	Intermediate Stops	Tour Segments
Work	1	Auto	1	3
Work Sub Tour	1	Walk	0	2
Shop	1	Auto	0	2
Totals	3	n/a	n/a	7

Figure ES-1: Comparison of Trips and Tours for a Typical Person Day of Travel

- Household size had a significant effect on the number of trips generated by a household. One-person household generated about 3.6 trips per day, increasing to over 21.4 trips-per-day for households with 6-or-more persons.
- Trips-per-person averaged 2.7 per day (2.9 weighted) for persons in households with income less than \$15,000, increasing to 4.2 for persons in over-\$75,000-income households. Trips-per-person did not vary strongly by number of persons in the household.
- Daily trips-per-person for adults with children in the household (4.5) were higher than for adults without children (3.4). However, daily trips were significantly higher for females with children (4.9) than for males with children (4.1).

The average number of daily person trips-per-household in the survey was 8.4 (9.6 weighted). However, the range of trips-per-household was very wide. Some households made no trips, and 5 percent of the sample made 23 or more trips-per-day. Household size and structure affected the number of trips a household makes.

- Daily trips-per-household averaged 3.6 for households with one person, increasing to 21.4 (21.0 weighted) for households with 6-or-more persons.
- Daily trips-per-household ranged from 12.5 to 16.2 (13.6 to 16.6 weighted) for various types of households with children, and 5.4 to 8.7 (5.7 to 9.0 weighted) for households without children present.

## ***1.4 Purpose of Travel***

Travel characteristics varied widely according to the activity which caused the person to travel. Many different types of trips were analyzed, but the difference between work travel and non-work travel were the most striking. Two different definitions of work travel were used: for *trips* work travel focused on “commute trips”, or trips made from a person’s home to their workplace, or vice versa. For this report, only these commute trips were counted as “work” trips.

For *tours* work travel included not only commute trips, but also stops made going to and from the workplace. Tours are intended to capture the way that people chain together trips for different purposes. The purpose of a tour is determined by the most important activity which is undertaken from when a person leaves home, to when they return home. Work is considered to be the primary activity on any tour which includes work, but work tours can include trips for dropping-off or picking-up a passenger, shopping, going to a gym, or eating a meal out of the home.

- Only about 18 percent of all *trips* made were work trips (i.e., home-to-work or work-to-home). The vast majority of trips are home-based trips made for reasons other than work

(i.e. to drop a child off at school, do shopping, visit the doctor, etc.), or non-home-based trips (i.e. trips made from the workplace to a non-home location, or from a shopping center to a school to pick up a child, etc.).

- Because *work tours* include all trips made in the process of going to work and returning home, a much greater percentage of tours were work or work-based (about 28 percent).
- Only about 56 percent of all work tours were traditional home-to-work and work-to-home commutes. The remaining 44 percent included one or more stops along the way.

## *1.5 Mode of Travel*

Travel modes analyzed in the survey were single-occupant vehicle (SOV), high-occupancy vehicle (HOV split into 2-person vehicles and 3-or-more persons per vehicle), public transit (split into walk-access and drive-access modes), walk, and bicycle. Mode of travel was strongly influenced by the purpose of the trip, the ratio of vehicles to workers at the household, and by the origin and destination areas of the trip.

- The SOV share for work trips (81 percent, 82 percent weighted) was much higher than for non-work trips (44 percent, 40 percent weighted). Because non-work trips include social and recreational trips, as well as trips to drop-off or pick-up passengers, they were far more likely to be HOV trips.
- Transit share was also much higher for work trips (3 percent) than for non-work trips (less than one percent). Work trips were more likely to occur in areas where transit service was good, and work travelers were far more likely to face parking charges and other disincentives to drive. Also, transit service was best during peak hours, when work trips tend to occur.
- In households with no automobiles, transit share of all trips (21 percent, 15 percent weighted) and walk and bike share (43 percent, 39 percent weighted) were very high. However, zero-auto households only account for about 4 percent of the households (3 percent weighted) and 1 percent of the trips in the survey.
- In households where workers outnumber automobiles, transit share of all trips was 4 percent (3 percent weighted), compared to less than one percent for households in which each worker had access to at least one vehicle.
- Work trips made to Downtown Sacramento, where transit access was the best, and where parking charges were the highest, had a transit share of 14 percent, compared to most other areas where transit share of work trips was three percent or less.
- Davis was a unique area in terms of mode of travel. Bike share of work trips was 31 percent (35 percent weighted), and 12 percent (13 percent weighted) of non-work trips. Of the bicycle trips captured in the survey, 56 percent (53 percent weighted) occurred in Davis.

- Non-work trips made in Downtown Sacramento had a walk share of 17 percent, and 10 percent in Davis. For other area types, the maximum walk share was 7 percent. This relates in part to the populations within these areas. The daytime population of Downtown Sacramento includes workers, who are likely to make walk trips for lunch or other incidentals during work. The population in Davis includes university students, who are slightly less likely to own cars, and more likely to face charges for parking on-campus. Also, the areas include relatively dense residential and commercial areas, where walking and biking is more feasible.

## ***1.6 Time of Travel***

The time that travel occurs is determined by a number of different factors. Timing of certain types of travel is discretionary (e.g. shopping trips). For other types, such as work, timing of travel is relatively fixed. The analysis of the survey focused on the likelihood of travel to occur during ***peak periods***, when travel demand is the highest, versus ***off-peak periods***. The off-peak periods were split into the midday period, and the evening period.

- On the average, about 20 percent (21 percent weighted) of all travel occurred during the morning peak period, and 27 percent during the afternoon/evening peak period. The peak periods were defined as 7:00AM to 10:00AM, and 3:00PM to 6:00PM, respectively.
- About 57 percent (56 percent weighted) of work travel occurred during the AM and PM peak periods.
- About 33 percent (34 percent weighted) of non-work travel occurred during the midday period (10:00AM to 3:00PM).

Since ***tours*** take place over the course of the day, and include a number of trips and stops, the tabulation of the timing of tours takes into account the time a person left home to start a tour, and the time they left the primary destination on the tour to return home. The tabulation is for a pair of time periods. For a work tour, the time pair includes the departure time from home, and the departure time from work.

- About 36 percent of all work tours (34 percent weighted) were “***AM peak/PM peak***” tours. The departure from home occurred during the AM peak period, and the departure from work, during the PM peak period.
- Another 21 percent (23 percent weighted) of work trips were “***pre-AM peak/PM peak***” tours, in which the departure from home occurred before 7:00AM, but the departure from work occurred during the PM peak period.

## *1.7 Duration of Travel*

The duration of travel refers to how long each unit of travel lasts, or the length of the trips. For this report, duration means the time between when a survey respondent reported leaving one activity location, and when they reported arriving at the next activity location. This is not a perfectly accurate or consistent measure, since people may have different ideas about when they left (Is it when they walked out the door of their office? Is it when they left the parking lot in their vehicle? Etc.). Also, people tend to round their times to the nearest quarter- or half- hour. However, it is assumed that these judgments and biases average out over the sample.

Duration of travel varies by purpose of travel, the mode of travel, and by the areas the travel occurs.

- Work trips were the longest of all trip purposes, averaging 24 minutes (25 weighted). However, variation in work trip times is high. Five percent of trips are over 60 minutes.
- Non-work trips ranged from 13 to 18 minutes in average length, depending on the specific purpose of the trip.
- Trips made by transit were the longest of all modes, averaging 40 minutes for walk-access and 45 minutes for drive-access trips.
- Walk trips were the shortest of all modes, averaging 12 minutes.
- Trip lengths for households located in rural areas were the longest of all area types, averaging 20 minutes (19 weighted). Average trip lengths for households located in ex-urban, suburban, and urban areas were 17, 16 and 16 respectively (17, 17, 16 weighted).

Another measure of travel duration is the total time a person devoted to travel during the course of a day, often called a “*travel time budget*”.

- The average travel time budget for the survey respondents was 62 minutes per person, or 143 minutes per household (163 weighted).
- Work travel accounted for 16 minutes or 25 percent of the average travel time budget. (Note that for this measure, work travel time was averaged over all people in the survey, not just workers. For this reason, it is lower than the average work trip length.)
- Working adults had higher travel time budgets than non-working adults. Working males spent 79 minutes traveling, and females, 72 minutes, compared to 61 and 56 minutes for non-working males and females, respectively.
- Seniors and children had the lowest travel time budgets, with 47 and 46 minutes, respectively.

## 2 Background

The 2000 SACOG Household Travel Survey was undertaken for three major reasons. First, the survey will be used to develop the next generation of regional travel forecasting models. The models will be used by SACOG for development and analysis of the regional transportation plan, air quality conformity analyses, and other regional planning activities. The models will be used by other agencies within the region, too. For example, the models have been used for ridership estimates for light rail projects, and by local agencies for general planning, environmental analyses, and traffic studies. The survey provides the data for estimating statistical models to predict travel behavior, and in validating those models before they are used for forecasting.

Historically, SACOG has, like virtually all other regional agencies around the country, utilized modeling tools which were based on a system of traffic analysis zones (TAZ's). The SACOG modeling area is divided into about 1250 TAZ's. Because of limitations in the software used for travel forecasting, this was about the maximum level of detail which could be handled. New software and modeling approaches have been developed, using more powerful computers commonly available today. These approaches do not rely on a system of TAZ's, but simulate travel at the household or even person level. All aspects of the household survey (questionnaires, sampling approach, recruiting strategy, data retrieval, and data coding) were carefully designed to allow for the development of the new modeling approaches for the Sacramento region.

The second major use of the survey is to update the current travel forecasting tools, and to calibrate the models to reflect current travel behavior. Because new forecasting tools will not be developed and ready for use for at least two years, the current model will be used for important regional planning projects, such as the 2002 Metropolitan Transportation Plan. However, the current tools have not had a comprehensive update since 1994. The 2000 Household Survey, plus other data such as the 1999 On-Board Transit survey, provided a rich source of information for fine-tuning the current regional travel demand model.

Third, the survey is intended to provide a resource for others in the region interested in travel behavior. For this reason, an Appendix with many detailed data tabulations and breakdowns from the survey is provided.

The survey area included the entire SACOG region: Sacramento, Yolo, Yuba, and Sutter Counties in their entirety, and the western portions of El Dorado and Placer Counties. The survey area had an estimated population of 1,849,000 in the year 2000, with approximately 701,000 households. A total of 3,941 households completed the survey, well above the target of 3,500 households. The group of households which responded to the survey is referred to as the survey *sample*.

The recruitment process was designed to maximize participation in the survey, and started with an invitation letter from SACOG explaining the importance of the survey for transportation planning. Households were contacted by telephone for the actual recruitment. Once recruited, travel diaries to record travel from each resident in the household were mailed out, and survey responses were retrieved via telephone.

The survey was administered during the months of March, April and May of 2000. These months were selected because no major holidays occur during that time, most schools are in session, and the likelihood of major inclement weather which may affect survey results is minimal. Respondents were asked to record travel during the weekdays only, and not on weekends. The survey attempted to capture *typical weekday travel* during the springtime months.

During the entire process, care was taken to get accurate, complete information from each respondent. The entire recruitment and data retrieval process was beta-tested prior to the actual survey, to work out any kinks in the process and refine the survey questionnaires and travel diary forms. Finally, the survey respondents were tracked through the course of the survey, to ensure that sample targets were met.

More detail on the survey process can be found in the “2000 Household Travel Survey Report” by NuStats Research and Consulting, the firm that implemented the survey.

This report is organized into sections, according to key characteristics of travel behavior. Section 3 presents information on the demographics of the survey sample, and on weighting and expansion factors applied to the sample. Section 4 presents some definitions of travel behavior and terminology used in the report. The following four sections present information on frequency of travel (Section 5), mode of travel (Section 6), time of travel (Section 7) and duration of travel (Section 8). For Sections 5 through 8, the first part presents *trip* summaries from the survey, and the second part present *tour* summaries. Section 9 includes a discussion of workplace amenities which have some influence on travel behavior.

## 3 Demographics of the Survey Sample

### *3.1 Background on the Sampling Approach.*

For the purposes of the survey, the region was split into four different area types: rural, ex-urban, suburban, and urban:

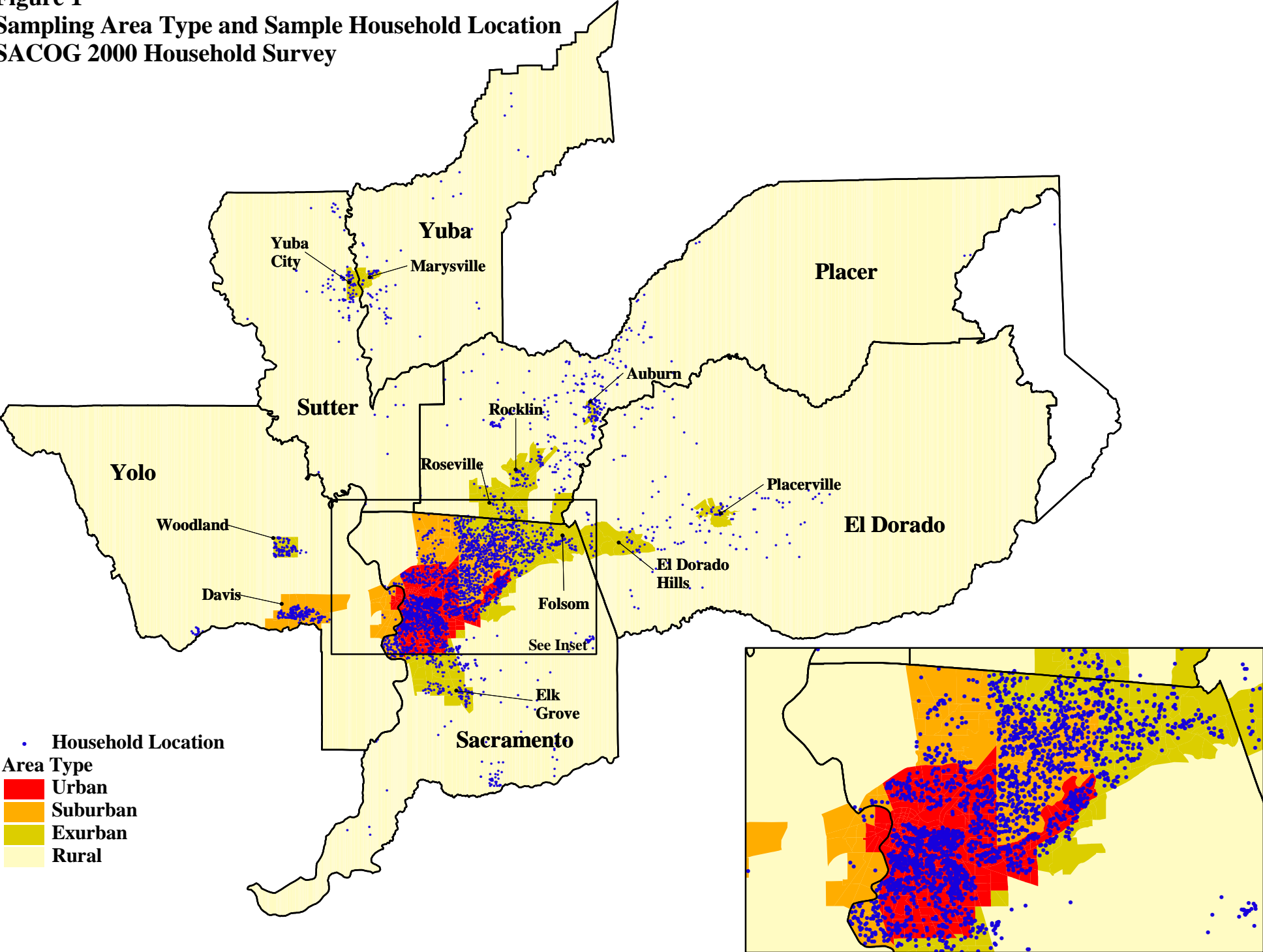
- Rural areas have relatively low-density development, have very little non-agricultural employment, and are served by no fixed route transit service.
- Ex-urban areas are also relatively low density, but have slightly more non-agricultural employment and some, limited fixed route transit service. Transit service is limited to the peak hours.
- Suburban areas are moderate in overall density, with some concentrations of employment, and are served by some fixed route transit. At least some transit service is provided during off-peak hours.
- Urban areas are relatively high in density, with significant concentrations of employment. A full range of transit service is provided during both peak and off-peak hours.

Figure 1 shows the area types, and also shows the locations of each household in the survey sample. The sample was randomly drawn from within each area type, but the sample was more heavily drawn in the urban areas. This was done for two reasons: First, household structure and travel behavior tends to be more complex in the urban areas, and a higher sampling rate was needed to capture this complexity.

The second reason was pragmatic. The 1991 household travel survey (the last such survey taken in the Sacramento region) was randomly drawn throughout the region. The overall transit mode share in the region is about one percent, and the number of transit trips captured in the 1991 survey reflected this (less than 150 transit trips in total). For developing mode choice models, which are a key component of forecasting models used for evaluation of projects like light rail or bus systems, this provides barely enough trips to work with. By drawing relatively more cases from the urban areas of the region, a much higher number of transit trips were captured in the 2000 survey sample (just over 400), which will provide a better basis for developing the next set of forecasting models.

Drawing the sample in this way does present one issue, related to the use of the sample results to generalize about the region as a whole. The process of *expanding* or *weighting* the sample results to reflect the region is an issue for any survey, but because the sample was drawn more heavily from urban areas, it is a bit more complicated for this survey. In general, weighting of a sample is done by comparing the demographic characteristics of the sample to known

**Figure 1**  
**Sampling Area Type and Sample Household Location**  
**SACOG 2000 Household Survey**



characteristics of the region, and using the ratio between the region and the sample to weight the sample results. These ratios are known as *weighting factors*.

For example, this survey sample included 3,941 households. From other sources, it is known that the region from which it was drawn includes about 701,000 households. One way of weighting the survey would be to apply the ratio (701,000 / 3,941, or 177.8) to each case in the sample. Because the sample was drawn more heavily from urban areas, and less from the other areas, this would not be a good way to weight the sample. Weighting factors which correspond to the area types used for drawing the sample are needed.

Ideally, census data would be used to develop weighting factors. In addition to providing current information on numbers of households and people in each of the sampling areas, the census provides valuable information on household structure, employment, vehicle ownership, and other variables which influence travel behavior. Detailed census breakdowns will not be available until later this year. As an interim measure, SACOG's estimates of households, population, and employment were used to develop weighting factors. The final weighting factors were broken down by the sampling area types, numbers of persons in the household, and number of workers in the household. Each tabulation of data is presented in both *weighted* and *unweighted* forms.

Because the weighted results of the survey are being reported prior to the availability of detailed tabulations from the US Census, this survey report is titled the "*Pre-Census* Travel Behavior Report", and should be considered as an interim report. Several checks were made to ensure that the weighting and expansion of the survey was reasonable. However, a final report on the travel survey will be produced after information is available from the US Census, and will be somewhat different from the numbers reported here.

## ***3.2 Key Demographic Variables***

This section of the report provides a portrait of the survey sample group (i.e. the 3,941 households which provided complete responses to the survey), and some points of comparison to reliable regional data.

### **3.2.1 Population**

- The sample included 9,130 persons. The weighted population was 1,824,000. The best available estimate of the region's household population in 2000 was 1,848,000. The weighted sample was within 1.3 percent of the independent estimate of regional household population (Table 1).
- The sample included 3,941 households. The weighted number of households was 696,000. The best independent estimate of 2000 households in the region was 701,000. The weighted sample was within 0.6 percent of the independent estimate of regional households (Table 1).

- The sample average household size was 2.32. The weighted average household size was 2.62. Based on the best available estimates, the regional average household size in 2000 was 2.64. The average household size in the weighted sample was within 0.7 percent of the independent estimate of regional household size (Table 1).

Variable	Survey Results	Weighted Results	Regional Comparison Total	% Difference
Households	3,941	696,200	700,636 <sup>1</sup>	-0.6%
Persons	9,130	1,824,300	1,848,529 <sup>1</sup>	-1.3%
Workers	4,500	853,300	850,147 <sup>2</sup>	0.4%
Vehicles	7,732	1,439,000	n/a	n/a
Persons/HH	2.32	2.62	2.64	-0.7%
Workers/HH	1.14	1.23	1.21	1.0%
Vehicles/HH	1.96	2.07	n/a	n/a

Source: DKS Associates  
Notes: <sup>1</sup> SACOG 1999 Projections  
<sup>2</sup> SACOG estimates

### 3.2.2 Household Structure

**Household structure** means the number of persons in a household, their age and employment status, and their relationships to the other people in the household. Below are some highlights from the sample. Unfortunately, until the detailed information from the U.S. Census is available, very limited data on household structure, other than aggregate persons per household and workers per household, are available. (More detailed information on the survey sample is provided in Table A2 in the Appendix).

- The *modal* (i.e. most common) household size was 2 persons, with 43 percent of the sample in that category. The modal household size for the weighted sample was also 2, but the percentage in that category decreased to 34.
- About 25 percent of the sample households included school-age children. After weighting, the percentage increased to 35.
- Just over 30 percent had no workers present. After weighting, the “no-workers” percentage dropped to 25.
- Just over 24 percent of the sample households were composed of adults 65 years and older. After weighting, the percentage decreased to 18.

No independent estimates of these variables were available for comparison. Based on a comparison of the sample to the weighted totals, the sample probably drew too heavily from smaller households, with older household members. The weighting factors applied to the

sample appear to have corrected for this bias in the sample. This issue will be revisited when detailed tabulations from the US Census are available.

### **3.2.3 Employment and Income**

As will be discussed throughout this report, employment status and income have significant effects on travel behavior. Until detailed information is available from the US Census, no independent estimates of household income are available for the entire region. (More detailed information on the survey sample is provided in Table A3 the Appendix).

- The total number of workers in the sample was 4,500. The weighted sample included 853,000 workers. The best estimate of total workers in the region was 850,000. The weighted sample was within 0.4 percent of the regional comparison total (Table 1).
- The average number of workers per sample household was 1.14. The weighted average number was 1.23. The best estimate of total workers per household in the region was about 1.21. The weighted sample was within 1 percent of the regional comparison total.
- The modal number of workers per household was one, with 32 percent of the sample in that category. Weighting of the sample did not alter the modal category, but increased the percentage with one worker to 36.
- The median household income category was \$45,000-49,999. Weighting the sample did not change the median income.

Based on a comparison of the sample to weighted totals, the sample drew somewhat more heavily from households with no workers. The weighting factors applied to the sample appear to have corrected this bias. Again, this issue will be revisited when detailed tabulations from the US Census are available.

### **3.2.4 Vehicle Ownership**

Vehicle ownership, or the number of private vehicles available for use within a household, has a significant effect on the mode of travel and other travel characteristics. (More detailed information from the survey is provided in Table A4 in the Appendix).

- The total number of vehicles held by households in the sample was 7,732. The weighted sample included 1,439,000 (Table 1).
- The average number of vehicles held in the sample households was 1.96. After weighting, the average number increased to 2.07 vehicles per household.
- The modal number of vehicles held by households was two, with 42 percent of the sample in that category. This result was unchanged by the weighting (More detailed information on vehicle ownership is reported in Table A4 in the Appendix).
- Only 4 percent of the sample households had no vehicles. After weighting, this number decreased to 3 percent.

## 4 What is travel behavior?

Most people would define “travel” as the movement from one place to another. Travel is considered to be a *derived demand*. That is, people seldom travel without purpose, or for pure recreational value. Aside from an occasional drive in the country for relaxation, the demand for all travel is derived from participation in other activities: going to work, shopping, visiting a friend or relative, visiting a doctor, etc. In fact, most people seek to minimize the amount of travel through their choices of where to live or work, by consolidating trips, or by scheduling trips to occur at times when traffic is light. However, some activities do not allow a traveler much flexibility. For example, most people have a wide range of options for when to shop, but work start times for many people are not flexible or negotiable.

Because this report focuses on travel by persons living in households, all travel described in this report is by residents of the region (i.e. not equipment or goods). For the purposes of this report, then, “travel” is defined as *a person’s movement from one place to another to participate in a necessary or desired activity*. “Travel behavior” encompasses all aspects of travel by people. Specifically, this includes:

- The frequency of travel
- The purpose of travel, or the types of activities which generate the demand for travel
- The modes of travel used
- The time of travel
- The combination of all of the above into pattern of activity for a person throughout the course of the day.

Listed below are some terms which are used throughout the document.

### ***4.1 Trips***

Trips have historically been the basic unit of travel behavior. For this report, a trip means a *person trip*, or the travel by a person between one physical location and another. A person trip can be made in a vehicle (automobile, bus, train, etc.), or by some non-motorized means (bike or walk). Several person trips can be made in one vehicle trip (e.g. in a carpool). Trips have a definite beginning point or origin, and ending point or destination. Trips also have a beginning and ending time.

#### **4.1.1 Trip Purpose**

By the definition of travel used here, all travel (and all trips) have some *purpose*, related to the activity or activities engaged in at the ends of the trip. The range of possible purposes is

practically infinite, and literally as varied as the population of the region. However, for purposes of this report, a much more simplified set of definitions will be used for defining trip purposes.

- **Home-Work** trips have one end at home, and one at work. Home-work trips are made for the purposes of working (i.e. not for dropping-off or picking up a passenger at work), and must have at least one end of the trip at home (i.e. not another workplace, or a store stopped at on the way to or from work). These are “typical” commute trips. For this report, only these trips will be counted as “work” trips.
- **Home-Shop** trips have one end at home, and the other at a retail establishment, and are made to shop for any good needed or desired to sustain a household. These trips must have at least one end at home.
- **Home-Other** trips have one end at home, and the other at some non-home location. Home-other trips are made to participate in any activity other than working, shopping, or school. Examples are trips made to drop-off a student at school, to the doctor, to visit a friend, or to eat a meal at a restaurant.
- **Work-Other** trips have one end at the workplace, and the other at a non-home location. The “other” end can be a restaurant (to eat lunch), a shopping center (to pick up groceries on the way home), or to pick-up or drop-off a passenger.
- **Other-Other** trips have both trips ends at non-home and non-work locations. Examples of other-other trips include a trip between a shopping center and a dry cleaner.
- **Home-School** trips are made by school-age children to get to a K-12 school, or to return home. No trip made by an adult or by a student to a school other than K-12 is a home-school trip. If an adult drives a student to school, the adult trip is classified as “home-other”, and the child trip is “home-school”.

Home-shop and home-other trips are collectively referred to as **home-non-work** trips. Work-other and other-other are referred to as **non-home-based** trips. Commercial and freight trips are not treated in this report.

## 4.1.2 Trip Mode

Trips can be made by a huge number of modes. The most prevalent are by driving or riding in a vehicle. However, the range of vehicles people use to make a trip is extremely wide, and includes everything from an automobile to a unicycle. For the purposes of this report, trip modes will be limited to the following seven:

- **Single-Occupant Vehicle (SOV)** mode includes trips made in a car, van, or truck, with the driver as the sole vehicle occupant.
- **High-Occupancy Vehicle (HOV)** mode includes trips made in vehicles, but with the driver and at least one passenger. No differentiation is made between the driver and passenger in this definition (i.e. both the driver and passenger in a two-person carpool

would be traveling in an HOV mode). For some purposes the number of persons in the vehicle is of interest, so the HOV mode is split into 2-person and 3+ person modes.

- **Public Transit** mode includes all trips made by publicly provided buses or trains. The mode is subdivided by mode of access (walk versus drive).
- **Walk.** This mode seems the most self-explanatory of all, but there are nuances which should be understood. For example, only trips which are made wholly by walking are included. The walk from a parking space to a store, or a transit stop to an office, are not counted as walk trips. A certain amount of walking is presumed to be a part of trips by all other modes, and is not counted as separate walk mode trips.
- **Bike.** As with walk trips, only trips made in their entirety (other than short walks from to get to or from an activity to the bike) by bicycle are counted as bike trips.

### **4.1.3 Time of Travel**

In general, time of travel simply means the time a particular trip begins and ends. All other things being equal, most persons would chose to schedule a trip at a time when traffic is likely to be the lightest, or when a particular preferred mode of travel (transit or carpool, for example) is available to them. In fact, because travel is derived from the activities people participate in, the time of travel is constrained by the times those activities can occur. From a regional or system perspective, this results in travel clustering or **peaking** during certain time periods. For this report, four time periods will be used and referred to:

- **Morning Peak Period** is the highest three hours of travel activity in the morning hours, falling roughly between 7:00AM and 10:00AM, which includes the morning rush hour in most areas.
- **Midday Period** is the five-hour period between 10:00AM and 3:00PM. This includes a minor peak around noon or 1:00PM, when lunch-related travel mixes with retail and commercial travel.
- **Afternoon Peak Period** is the highest three hours of travel activity in the afternoon and early evening hours, falling roughly between 3:00PM and 6:00PM. In general, this is the highest period of travel demand, because the afternoon commute travel mixes with other peaks for retail- and school- related travel.
- **Evening Period** is the remaining thirteen hours of the day, after 6:00PM and before 7:00AM. This includes a declining volume of travel activity during the early evening hours, very low activity levels during the late evening and early morning hours, and an increase leading into the morning peak period.

## 4.1.4 Duration of Travel

While time of travel refers to the time of day which travel occurs, duration of travel refers to the amount of time spent in travel. Duration of travel is affected by the purpose of the trip. People are willing to travel further to work, or to purchase an automobile or washing machine, for example, than they are to purchase a bag of groceries.

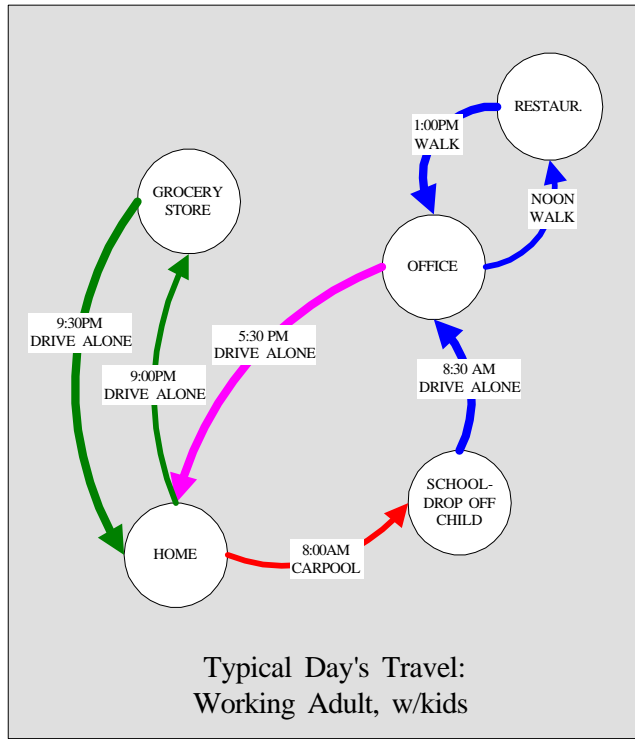
## *4.2 Tours and Day Patterns*

Increasingly over time, the trip is being replaced as the fundamental unit of travel behavior with more complex units called “*tours*” or a “*day patterns*”. A *tour* is defined as a sequence of trips by a person beginning and ending at home. For example, the simplest sort of tour includes two trips (e.g. a tour from home, to a shopping center to pick up groceries, and returning home). A tour, though, can be very complex (e.g. from home to school, dropping of a child, then to work, and returning home with a stop at the dry cleaners). Figure 2 illustrates a typical set of tours for a worker, and compares it to the same pattern of activity broken down into trips.

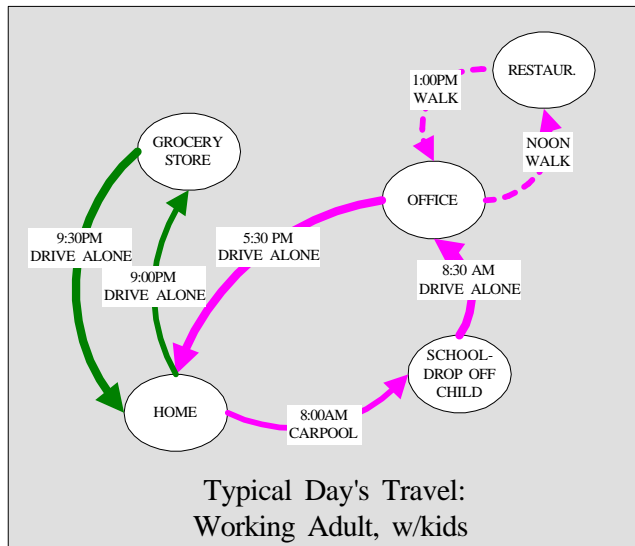
Within a given tour can be one or more *sub-tours*. While a tour is defined by a series of trips beginning and ending at home, a sub-tour is a similar series of trips beginning and ending at a non-home location, such as the workplace or school. An example of a simple sub-tour is a trip by a worker from his/her workplace to a restaurant for lunch, and returning to the workplace. A *day pattern* is a sequence of tours and sub-tours over the course of an entire day for one person.

With a tour as the fundamental unit of travel behavior, none of the variables described above (purpose, mode, time of travel) apply in the same way as they do for trips. For example, while a trip can be thought of as having a single definable purpose, a tour can combine many different purposes and activities. Likewise with mode of travel, a trip is defined as having a single mode of travel, while a tour can mix modes together. Finally, with time of travel, because a tour involves a linked series of trips, the time of travel can be spread out over the course of an entire day, rather than contained within a predefined time period.

If looking at tours is so complicated, why bother? The main answer to this question is that many important aspects of travel behavior cannot be explained (or predicted) without looking at the overall pattern of activity a person is involved in over the course of an entire day. A simple example of this is a working parent with children. The need to drop a child off at school on the way to work makes travel by a mode such as transit very difficult, even if transit service exists for each leg of the trip.



TRIP PURPOSE	Vehicle Trips Made	Transit Trips Made	Non-Motorized Trips Made	All Modes
Work	1			1
Shop	2			2
Home-Other	1			1
Work-Other	1		2	3
Other-Other				
School				
ALL PURPOSES	5		2	7



Tour Type	Number of Tours	Mode	Intermediate Stops	Tour Segments
Work	1	Auto	1	3
Work Sub Tour	1	Walk	0	2
Shop	1	Auto	0	2
Totals	3	n/a	n/a	7

Figure 2: Comparison of Trips and Tours for a Typical Person Day of Travel

- Another example of the dependency of mode choice to a tour or day pattern is the unlikelihood of choosing a mode of travel different than that chosen for the trip (or trips) from home to work, for example. Again using the working parent with children as an example, even if the other parent was picking the child up, and direct transit service existing from the workplace to home, the person in the example is unlikely to choose transit given that other trips on the tour require an automobile.

Using tours as the fundamental unit of analysis, purpose, mode, and time of travel have different meanings than those applied to trips.

- **Tour purpose** is defined according to the main activity undertaken in the course of the tour. There is a hierarchy of eight activities, and the tour is classified by the highest-ranking activity occurring within the tour. For example, a tour which includes both out-of-home-work and school would be classified as a “work tour”, with work as the **primary destination** of the tour.
- **Tour mode** is also defined according to a hierarchy of travel modes. The tour mode is defined by the highest mode used in the course of the tour.
- **Time of travel** is defined according to two time periods: the time period which the first trip of a tour (or sub-tour) begins, and the time period in which the departure from the primary destination occurs.

Several new concepts apply to tours, which are not relevant to trips:

- **Tour Hierarchy** is defined to distinguish multiple tours made by one person in the course of a day. The same hierarchy of activities used to define the purpose of the tour is applied to define the hierarchy of tours within a day. For example, if a person made two tours (one a work tour, the second a shop tour) the work tour would be considered the **primary tour** and the shop tour would be the **secondary tour**.
- **Intermediate stops** are made on trips to and trips from the primary destination of the tour. The number of stops to the defining destination of the tour (i.e. from home to work on a work tour) and from the defining destination and home are tabulated separately.

## 5 Frequency of Travel

Frequency of travel is the number of trips or tours made by a person over the course of a day. The frequency of travel varies strongly by the purpose of the trip, the characteristics of the person making the trip, and by the structure of the household to which a person belongs.

### 5.1 Analysis of Trips

- A total of 33,014 trips were recorded in the survey sample (Table 2). (The weighted sample included 6,687,000 trips. See Table A5 in the Appendix for weighted results).
- Average trips-per-household and per person in the survey sample were 8.4 and 3.6, respectively (Table 2). (The weighted sample averages for households and persons were 9.6 and 3.7, respectively).
- The range of trips-per-household was quite wide. One-person households averaged 3.6 trips-per-day, increasing to 21.4 trips-per-day for households with six-or-more persons. However, the average daily trips-per-person only ranged from 3.3 to 4.1, and did not vary strongly by household size (Table 2).
- The range of trips-per-household in the sample was very wide. The minimum was 0 (11 of the sample, 9 percent weighted). About 7 percent of the sample (and 10 percent of the weighted sample) had 20 or more trips-per-household. (See Table A6 in the Appendix for more information).

No. Persons Per Household	# HH's	# Persons	# Trips	Trips/ HH	Trips/ Person
1	1,008	1,008	3,585	3.6	3.6
2	1,693	3,386	11,713	6.9	3.5
3	580	1,740	6,231	10.7	3.6
4	436	1,744	7,113	16.3	4.1
5	138	690	2,528	18.3	3.7
6+	86	562	1,844	21.4	3.3
<b>Total</b>	3,941	9,130	33,014	8.4	3.6

Source: DKS Associates

#### **5.1.1 Variation in Trip Frequency by Purpose of Travel**

Trip purpose has a huge influence on the frequency of travel. Work, or commute, trips accounted for about one-in-six trips in the survey, with shop, school and other home-based trips (home-shop, home-other, and home-school) accounting for nearly one-half of all trips

made. Other non-home-based trips (work-other and other-other) accounted from the remaining third of trips made in the sample (Table 3).

- Home-work trips accounted for 18 percent of the sample trips (17 percent weighted) and averaged 1.5 per household (1.7 weighted). (Weighted results are reported in Table A7 in the Appendix).
- Home-shop and home-other trips accounted for 43 percent of the sample trips (44 percent weighted), and averaged 3.7 per household (4.1 weighted).
- Non-home-based trips (work-other and other-other) accounted for 33 percent of the sample trips (32 percent of the sample), and averaged 2.7 per household (3.1 weighted).
- Home-school trips accounted for 6 percent of the sample trips (8 percent weighted), and averaged 0.5 per household (0.7 weighted).

<b>Trip Purpose</b>	<b># Trips</b>	<b>%</b>	<b>Trips/ HH</b>	<b>Trips/ Person</b>
<b>Home-Work</b>	6,086	18%	1.5	0.7
<b>Home-Shop</b>	3,393	10%	0.9	0.4
<b>Home-Other</b>	10,908	33%	2.8	1.2
<b>Work-Other</b>	3,947	12%	1.0	0.4
<b>Other-Other</b>	6,780	21%	1.7	0.7
<b>Home-School</b>	1,923	6%	0.5	0.2
<b>Total</b>	33,037	100%	8.4	3.6

Source: DKS Associates

### **5.1.2 Variation in Trip Frequency by Household Structure**

Key variables related to household structure also have a large effect on the number of trips made. A household class variable was created, which relates the presence (or absence) of workers, and the presence (or absence) of school age children in the household. (See Table 4).

- Households with school age children ranged from 12.5 to 16.2 person trips-per-day compared to 5.4 to 8.7 trips-per-day for households without school age children. Ranges for the same classes in the weighted sample were 13.6 to 16.6, and 5.7 to 9.0, respectively. (Weighted results are reported in Table A8 in the Appendix).
- “Retired” households (i.e. with all adults over 65, none working, and no school age children present) had the lowest trip rate: 4.3 per day (4.2 weighted).

- Most of the variation appears to be accounted for in household sizes corresponding to these classes. Average trips-per-person range from 3.2 to 4.0 for non-retired households (3.0 to 4.0 in the weighted sample).
- Persons in retired households averaged the lowest per-person trip rate: 2.9 trips-per-person.

Household Class	# HH	# Persons	# Trips	Trips/ HH	Trips/Person	Person/HH
<b>No Workers + School Age Kids</b>	49	179	612	12.5	3.4	3.7
<b>1 Worker + School Age Kids</b>	335	1,215	4,571	13.6	3.8	3.6
<b>2+ Workers + School Age Kids</b>	591	2,385	9,598	16.2	4.0	4.0
<b>No Workers, No Kids</b>	334	567	1,804	5.4	3.2	1.7
<b>1 Worker, No Kids</b>	937	1,477	5,227	5.6	3.5	1.6
<b>2+ Workers, No Kids</b>	877	2,076	7,653	8.7	3.7	2.4
<b>Retired</b>	818	1,231	3,549	4.3	2.9	1.5
<b>Total</b>	3,941	9,130	33,014	8.4	3.6	2.3

Source: DKS Associates

### **5.1.3 Variation in Trip Frequency by Income and Auto Ownership**

In general, per-person trip rates increase with household income. This pattern has been observed in many household travel surveys. Households with higher incomes have greater opportunity and desire for non-work travel (e.g. shopping and recreation), and also are more likely to have workers within the household (Table 5).

- Per-person trip rates averaged the lowest for households with less than \$15,000 per year in income: 2.7 trips per person (2.9 weighted). (Weighted results are reported in Table A9 in the Appendix).
- Per-person trip rates increased consistently with household income to 4.2 trips-per-person from households with income greater than \$75,000.
- Per-person trip rates also increase with vehicle ownership. Zero-auto household average the lowest per-person trip rates: 2.0 daily trips-per-person (2.1 weighted).
- Per-person trip rates increased to over 4 trips-per-person for households with 4 vehicles. However, households holding 5 or more vehicles have slightly lower per-person trip rates: 3.7 daily trips-per-person (3.6 weighted). (More detailed information on auto ownership and travel frequency is reported in Table A4 in the Appendix).

<b>Income Category</b>	<b># HH</b>	<b># Persons</b>	<b># Trips</b>	<b>Trips/HH</b>	<b>Trips/Person</b>	<b>Person/HH</b>
<\$15,000	356	671	1,842	5.2	2.7	1.9
\$15,000-24,999	399	760	2,161	5.4	2.8	1.9
\$25,000-44,999	775	1,734	5,905	7.6	3.4	2.2
\$45,000-74,999	1,105	2,666	10,040	9.1	3.8	2.4
>\$75,000	928	2,536	10,579	11.4	4.2	2.7
Declined/Didn't Know	378	763	2,487	6.6	3.3	2.0
<b>Total</b>	<b>3,941</b>	<b>9,130</b>	<b>33,014</b>	<b>8.4</b>	<b>3.6</b>	<b>2.3</b>

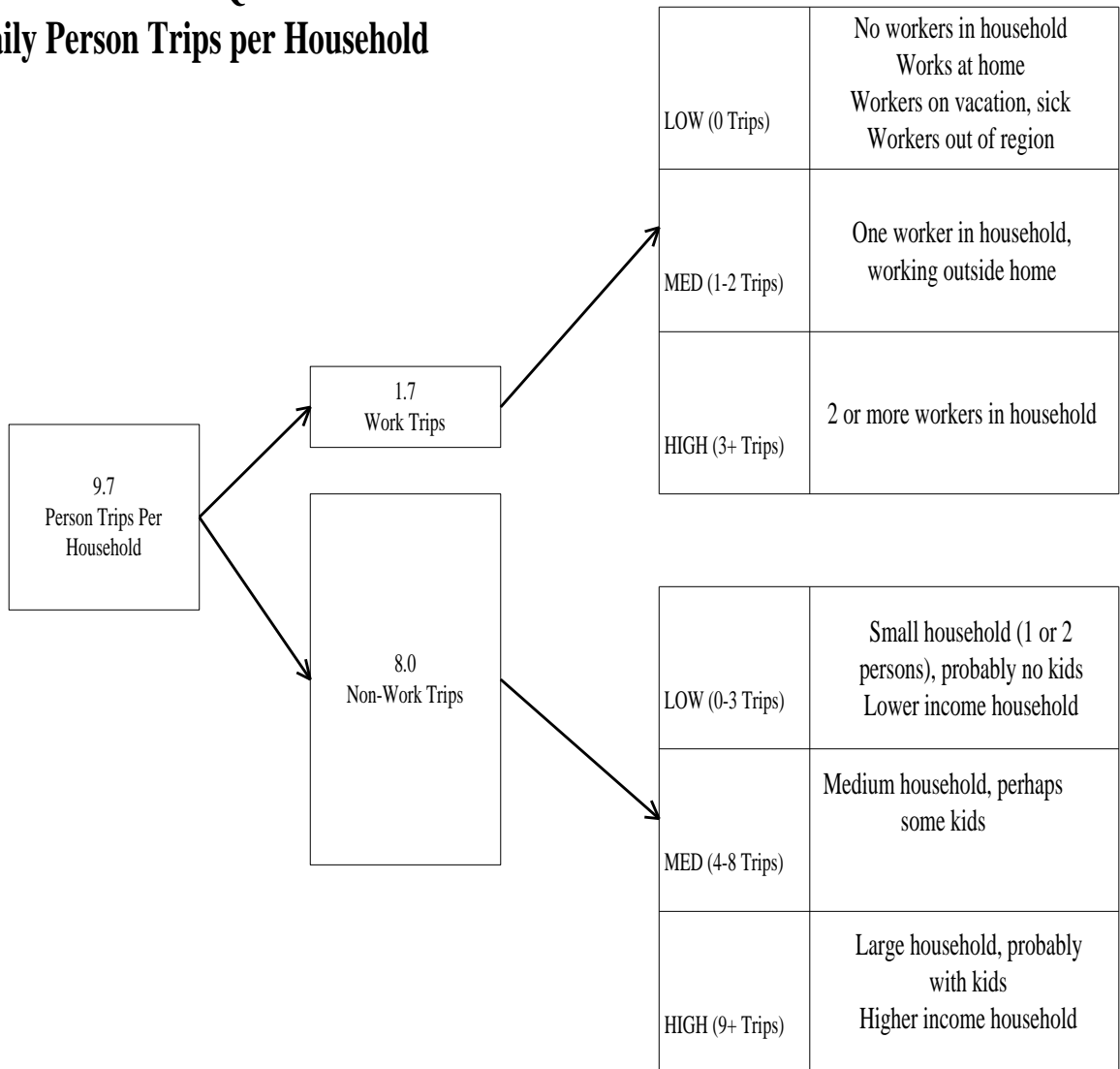
Source: DKS Associates

While there does appear to be a strong connection of trip frequency with income and auto ownership, other factors are also important. Higher household income is also related to more persons and vehicles in the household. When the number of persons is taken into account the variation in trip frequency by income and auto ownership is much less pronounced (see Figures A1 and A2 in the Appendix).

#### **5.1.4 Trip Summary**

Trip frequency is affected by household size, income, household structure, and trip purpose. Figure 3 provides an illustration of some of this variation. Specifically, trip frequency is higher for larger households, households with higher income, and households with workers or children. Trip frequency is lower for smaller households, lower income households, and households without workers or children. Work travel (i.e. home-to-work and work-to-home trips) account for less than one-in-five trips. Other tabulations related to travel frequency are provided in Tables A17 to A19 in the Appendix.

**Figure 3**  
**VARIATION FREQUENCY OF TRAVEL:**  
**Daily Person Trips per Household**



## 5.2 Analysis of Tours

As with trips, the frequency of tours varies widely by person and household. The total number of tours reported in the survey was 11,896. The average number of tours-per-person was 1.4. The average number of tours-per-household was 3.1.

- About 8 percent of the persons in the sample (and 6 percent in the weighted sample) made no tours at all (Table 6). (Weighted results are reported in Table A10 in the Appendix).
- About 13 percent (17 percent weighted) made 8 or more tours.
- The modal number of tours-per-day was two, but only 17 percent of the sample (15 percent weighted) made two tours. This means that the number of tours-per-person varies widely in the sample.

<b>Number of Tours Made</b>	<b># Persons</b>	<b>%</b>
<b>0</b>	703	8%
<b>1</b>	1,111	13%
<b>2</b>	1,518	17%
<b>3</b>	1,264	14%
<b>4</b>	1,067	12%
<b>5</b>	823	9%
<b>6</b>	619	7%
<b>7</b>	486	6%
<b>8 or More</b>	1,146	13%
<b>Total</b>	<b>8,737</b>	<b>100%</b>

Source: DKS Associates

### 5.2.1 Variation of Tour Frequency by Purpose of Travel

Patterns of variation in travel frequency seen in the trip analysis are also seen in the analysis of tours, with some significant exceptions.

- Work tours were much more prevalent than home-work trips: 28 percent (26 percent weighted) of all tours had work as a primary destination (Table 7), compared to only 18 percent of all trips (Table 3).

Work tours are, in fact, the most prevalent tour type, accounting for more than one-in-four tours. Work tours capture many trip segments made to and from work, which in the trip analysis were typed as “home-other” or “work-other” trips (e.g. passenger serving trips or shopping trips on the way to and from work). By putting these trip segments into a context of a pattern of travel related to work, the overall amount of work-related travel is higher.

Type of Tour	# Tours	%	Tours/ HH	Tours/ Person
Work	3,333	28%	0.9	0.4
Education	1,478	12%	0.4	0.2
Personal business/other	2,420	20%	0.6	0.3
Shopping	1,326	11%	0.3	0.2
Visit/recreation	586	5%	0.2	0.1
Meal	886	7%	0.2	0.1
Serve passenger	811	7%	0.2	0.1
Work/school-based	1,056	9%	0.3	0.1
<b>Total</b>	<b>11,896</b>	<b>100%</b>	<b>3.1</b>	<b>1.4</b>

Source: DKS Associates

### **5.2.2 Variation in Tour Frequency by Household Structure and Person Type**

Frequency of tours roughly mirrors frequency of trips, when household structure was taken into account. Households with school age children, greater numbers of workers, and more people had more tours per household. However, except from retired households, per-person tour frequency did not vary as strongly.

Per-person tour frequency was higher for workers than for non-workers. Per-person tour frequency also increased with age of the traveler. Children under 5 averaged just less than one tour per day, while persons 25-64 years of age average more than 1.5 tours per day. The average rate of tours per day for persons 65 years and older dropped again to just over one per day. (See Tables A12, A13, and A14 in the Appendix for more detailed information).

### **5.2.3 Tour Complexity**

Because tours may include many trip segments spread over the course of a day, tours can be very complex, with many intermediate stops. The prevalence of complex tours (i.e. with intermediate stops on the way to or from the main destination of the tour) varied by type of person.

- Slightly more than one-half (56.1 percent) of all work tours had no stops going to or coming from work. Men were more likely than women to have no stops either way (Table 8). (Weighted results and more detailed information are reported in Tables A15 and A16 in the Appendix).
- Women with children were twice as likely to have stops on the way to and from work than men with children. About one-quarter of all women with children made stops going to and from work.

Sequencing of Stops on Tour	Gender/Children in Household Class					
	Male		Female		School Age Kids	All
	No Kids in HH	Kids in HH	No Kids in HH	Kids in HH		
<b>No stops</b>	61.8%	56.5%	55.9%	45.0%	50.0%	56.1%
<b>Stops On Way to Primary Destination</b>	7.7%	13.2%	8.6%	13.5%	25.0%	10.1%
<b>Stops on Way from Primary Destination</b>	21.6%	18.0%	25.8%	17.3%	25.0%	21.4%
<b>Stops Both Ways</b>	9.0%	12.3%	9.8%	24.1%	0.0%	12.3%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: DKS Associates

### **5.2.4 Tour Summary**

Tour frequency corresponds to many of the same variables as trip frequency: number of persons in a household, income, and household structure. Many work tours include intermediate stops and “sub-tours” from the workplace. Work tours account for more than one-quarter of all tours.

## 6 Mode of Travel

Mode of travel is affected by many factors. Choosing transit is difficult in areas where transit service is limited. Home-non-work trips (e.g. trips to go shopping, drop off or pick up a student or worker, or trips to visit a friend or relative) are much more likely to be made by carpool, simply because these trips are more social in nature. Personal characteristics of the traveler make a difference, too.

### 6.1 Analysis of Trips.

#### 6.1.1 Variation in Trip Mode by Purpose of Travel

Mode choice was influenced strongly by trip purpose.

- Over 80 percent (82 percent weighted) of home-work trips were made in single-occupant vehicles, compared to only 44 percent (40 percent weighted) of non-work trips (Table 9). (Weighted results are reported in Table A20 in the Appendix).
- The total carpool share for non-work trips was 47 percent (51 percent weighted), compared to about 10 percent for work trips.
- Transit share of non-work trips was less than one percent, compared to over 3 percent for work trips.

Travel Mode	Mode Share		
	Purpose		
	Non-Work	Work	All
SOV	44.2%	80.9%	51.0%
HOV-2 Persons	29.2%	7.9%	25.3%
HOV-3 or More Persons	17.7%	1.8%	14.8%
Transit (Walk Access)	0.5%	2.3%	0.9%
Transit (Drive Access)	0.3%	1.1%	0.4%
Walk	5.6%	2.6%	5.1%
Bike	1.2%	3.3%	1.6%
Other	1.2%	0.2%	1.0%
<b>Total</b>	100.0%	100.0%	100.0%

Source: DKS Associates

## **6.1.2 Variation in Trip Mode by Household Structure**

Presence of children in the household affected mode choice for both work and non-work trips.

- For work trips, 3+ person carpool shares were nearly 4 percent for households with children, compared to less than one percent for households with no school-age children. (Detailed information is reported in Table A21 in the Appendix).
- Conversely, work trip transit, bike, and walk share for households without children was 11 percent (10 percent weighted), compared to 7 percent for households with children (less than six percent weighted).
- Perhaps most strikingly, nearly 60 percent of non-work trips were made by single occupant vehicle for households without children, compared to less than 30 percent by households with children.
- About two-thirds of all carpools for work trips, and over 70 percent for non-work trips, were composed entirely of household members. (For more detailed information see Table A22 in the Appendix).

## **6.1.3 Variation in Trip Mode by Vehicle Ownership**

For the purposes of this analysis, household classifications based on the relationship between the numbers of workers and numbers of vehicles owned in the household were used to create household classes.

- Not surprisingly, households not owning vehicles made very few trips by single occupant vehicle (about 3 percent). In fact, the most common mode for these households was walking, with a 27 percent mode share (Table 10). However, only about one percent of the trips were made by households in this category. (Weighted results and more detailed information is reported in Tables A23, A24 and A25 in the Appendix).
- In households which own vehicles, but where workers outnumber vehicles, single occupant vehicle share was also quite low (31 percent), and transit share (4 percent) and walk and bike share (about 13.2 percent) were quite high. This household class accounted for about 5 percent of the trips in the survey.
- Where workers in a household are likely to have access to a vehicle, or where no workers were present, single-occupant vehicle shares were the highest, at nearly 50 percent. Transit shares were less than one percent for these classes, and bike-and-walk shares average about 5 percent or less. Combined, these households accounted for about 93 percent of the sample.

Travel Mode	Mode Share				
	Vehicles-to-Workers In HH				
	Vehicle=0	Workers>0, Vehicles<Workers	Workers>0, Vehicle=>Workers	Workers=0	All
SOV	3.2%	31.0%	53.0%	52.3%	51.0%
HOV-2 Persons	13.4%	29.6%	22.9%	35.3%	25.3%
HOV-3 or More Persons	20.9%	21.1%	16.0%	7.1%	14.8%
Transit (Walk Access)	17.2%	3.2%	0.5%	0.2%	0.9%
Transit (Drive Access)	3.8%	0.8%	0.4%	0.1%	0.4%
Walk	27.5%	9.0%	4.7%	3.6%	5.1%
Bike	12.6%	4.2%	1.4%	0.8%	1.6%
Other	1.4%	1.3%	1.1%	0.5%	1.0%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Percent of Trips in Category</b>	1%	5%	76%	17%	100%

Source: DKS Associates

### **6.1.4 Variation in Trip Mode by Area Type**

The types of destinations for both work and non-work trips also affects the mode of travel. Two employment areas stand out in the region: Davis and Downtown Sacramento.

- 89 percent of work trips to jobs in rural and ex-urban areas were made by single-occupant vehicles. Less than one percent of work trips to these areas were made by transit (Table 11). (Weighted results and more detailed information is reported in Table A26 in the Appendix).
- The single-occupant vehicle shares to jobs in Davis were the smallest of any area analyzed (less than 50 percent). Also, about one-third of all work trips were made by bicycle. This includes reported work trips made by students to the University.
- Transit share of work trips was highest to Downtown Sacramento, with nearly 14 percent.

Mode shares for non-work trips also varied by area, but differently than they did for work trips. Again, Davis and Downtown Sacramento are unique.

- The bike share of non-work trips to Davis was about 12 percent (Table 12), compared to less than 3 percent for all other areas. (See Table A27 in the Appendix).
- The walk share of non-work trips to Downtown Sacramento was about 17 percent, compared to about 10 percent for trips to Davis, and less than 7 percent for other areas.

<b>Table 11</b>					
<b>Work Trips Mode Share by Employment Area Type</b>					
<b>Travel Mode</b>	<b>Mode Share</b>				
	<b>Employment Area Type</b>				
	<b>Rural/Ex-Urban</b>	<b>Suburban (less Davis)</b>	<b>Urban (Less Sacramento Downtown)</b>	<b>Davis</b>	<b>Sacramento Downtown</b>
<b>SOV</b>	88.7%	86.4%	81.0%	48.0%	70.4%
<b>HOV-2 Persons</b>	7.5%	7.4%	8.0%	8.0%	9.3%
<b>HOV-3 or More Persons</b>	1.4%	2.2%	1.9%	3.0%	0.9%
<b>Transit (Walk Access)</b>	0.4%	1.2%	2.0%	5.5%	8.0%
<b>Transit (Drive Access)</b>	0.2%	0.1%	0.8%	0.0%	5.9%
<b>Walk</b>	1.2%	1.6%	4.5%	4.5%	2.6%
<b>Bike</b>	0.5%	1.0%	1.5%	30.7%	2.6%
<b>Other</b>	0.1%	0.0%	0.3%	0.5%	0.2%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%

Source: DKS Associates

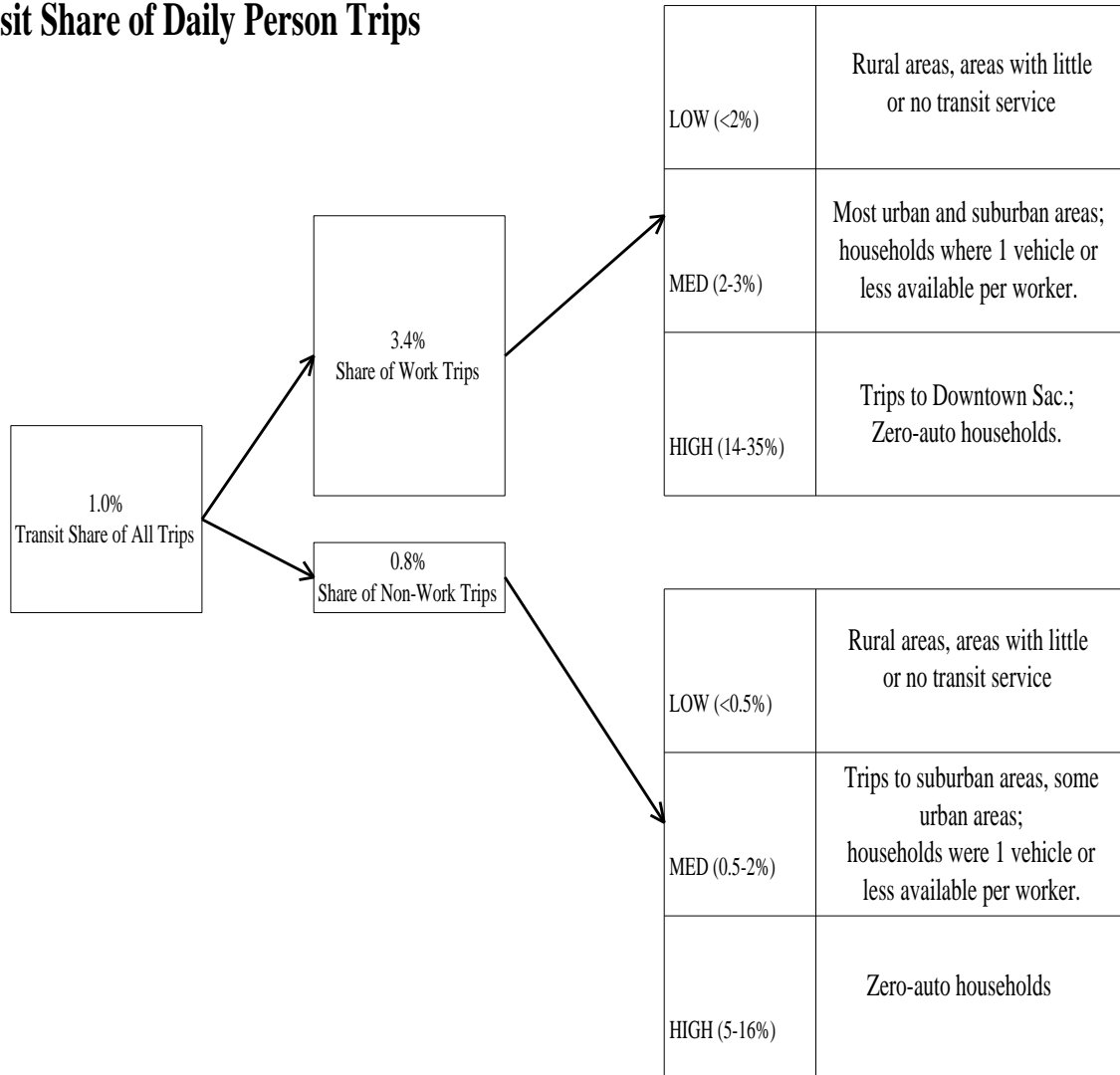
<b>Table 12</b>					
<b>Non-Work Trips by Mode and "Attraction" Area Type</b>					
<b>Travel Mode</b>	<b>Mode Share</b>				
	<b>"Attraction" Area Type</b>				
	<b>Rural/Ex-Urban</b>	<b>Suburban (less Davis)</b>	<b>Urban (Less Sacramento Downtown)</b>	<b>Davis</b>	<b>Sacramento Downtown</b>
<b>SOV</b>	44.8%	44.4%	44.7%	39.5%	42.6%
<b>HOV-2 Persons</b>	30.2%	30.3%	29.3%	23.6%	23.7%
<b>HOV-3 or More Persons</b>	19.2%	18.9%	16.9%	14.3%	11.0%
<b>Transit (Walk Access)</b>	0.1%	0.4%	0.8%	0.5%	2.0%
<b>Transit (Drive Access)</b>	0.0%	0.3%	0.3%	0.1%	1.2%
<b>Walk</b>	3.5%	3.8%	6.5%	9.5%	17.1%
<b>Bike</b>	0.3%	0.8%	0.6%	12.4%	2.4%
<b>Other</b>	1.8%	1.1%	0.8%	0.2%	0.1%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%

Source: DKS Associates

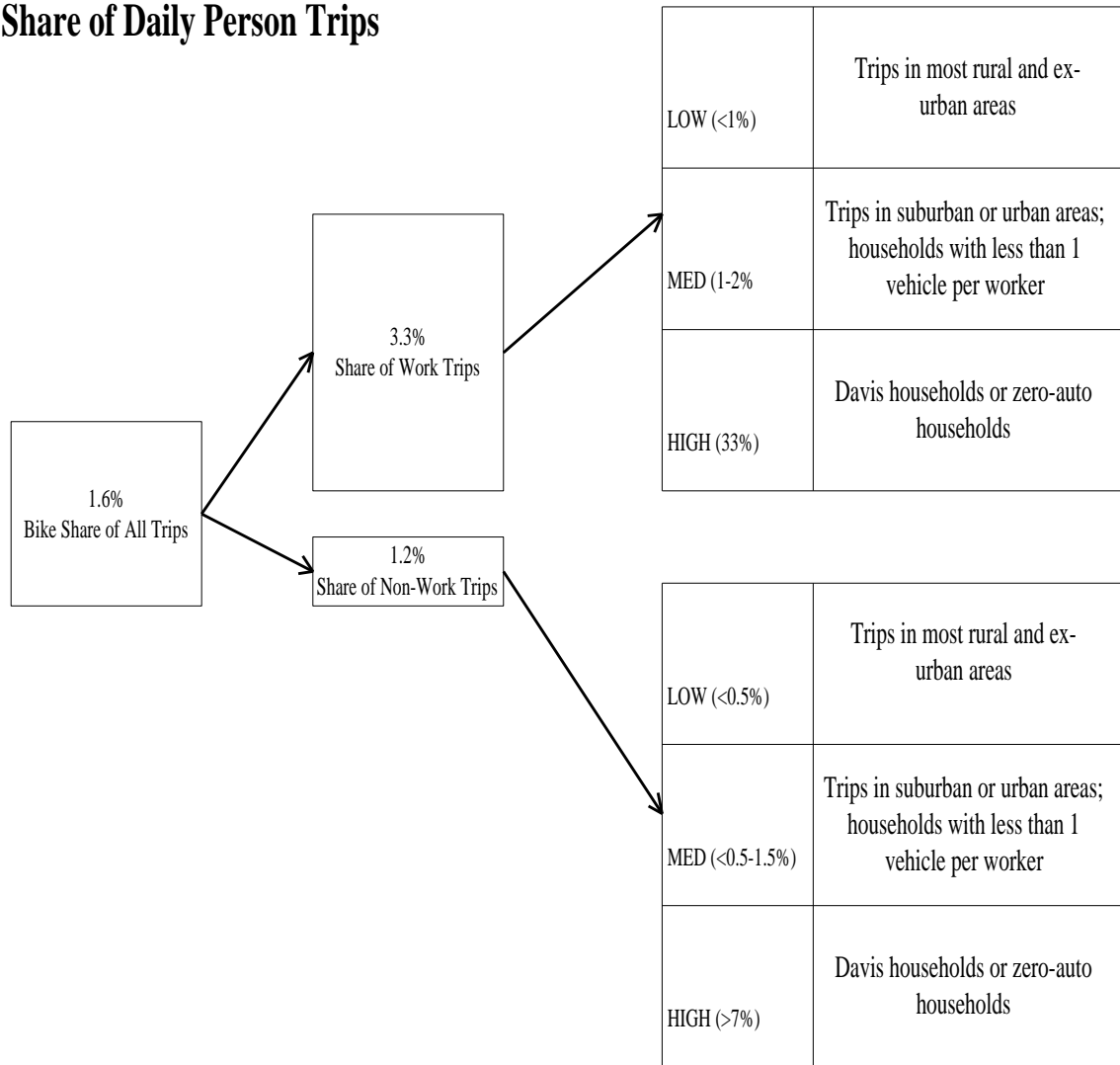
### 6.1.5 Trip Summary

Trip purpose, vehicle ownership, and the area in which a trip is made all affect the mode of travel chosen. Figures 4, 5, and 6 illustrate some of these effects. Work trips and trips to areas with good transit service are more likely to be made by transit. Non-work trips are more likely to be made by carpools. Davis and Downtown Sacramento are unique in the region, because of high transit, bike, and non-motorized trip shares.

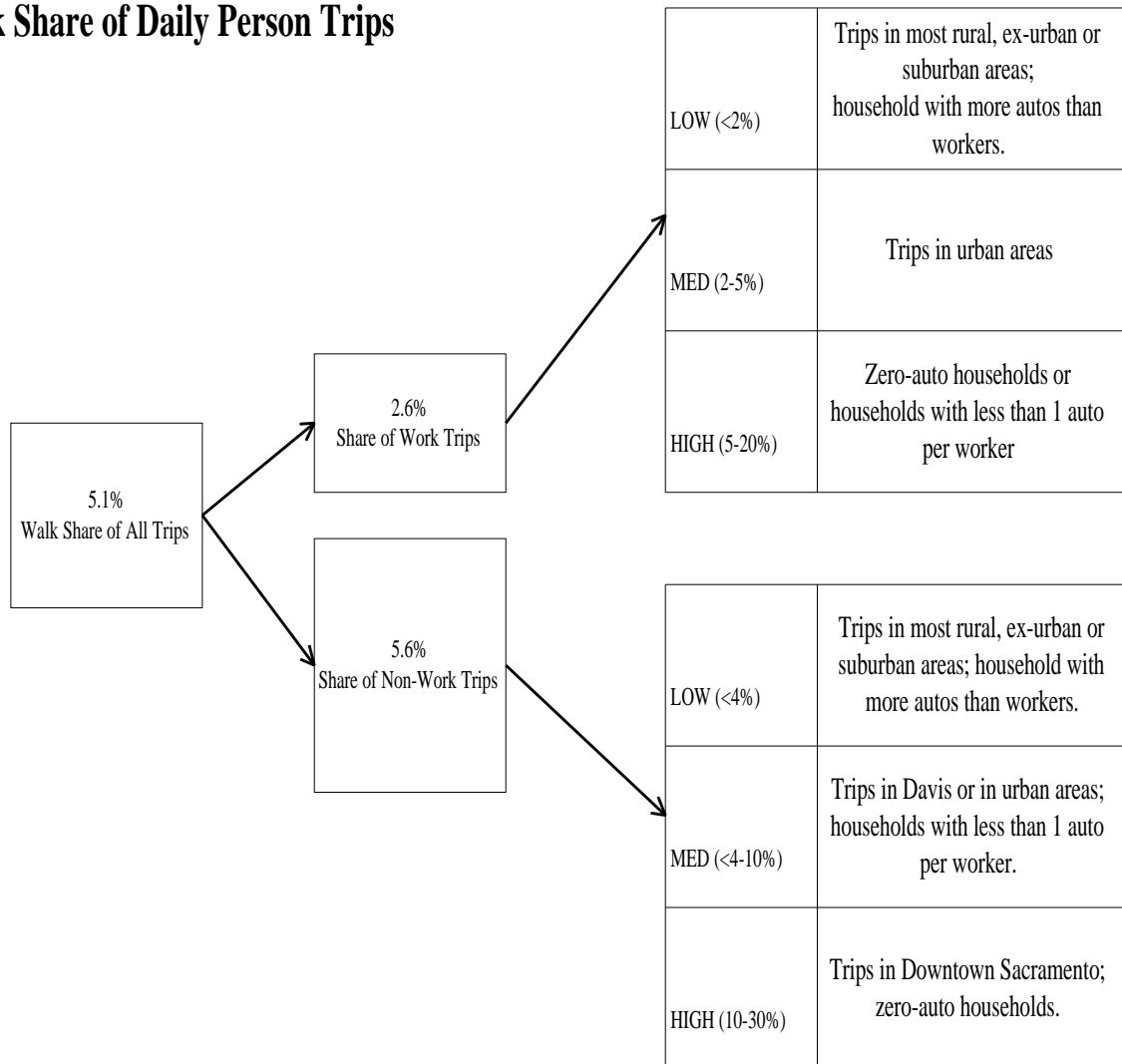
**Figure 4**  
**MODE OF TRAVEL:**  
**Transit Share of Daily Person Trips**



**Figure 5**  
**MODE OF TRAVEL:**  
**Bike Share of Daily Person Trips**



**Figure 6**  
**MODE OF TRAVEL:**  
**Walk Share of Daily Person Trips**



## ***6.2 Analysis of Tours***

As mentioned above, because tours include multiple trip segments, the mode of travel can vary within the tour. However, most tours (over 90 percent) are made using only one mode of travel for the entire tour.

### **6.2.1 Variation in Mode of Travel by Purpose**

As with the analysis of trips, the main mode of travel for a tour varies significantly by tour purpose. (See Table A28 in the Appendix for more information).

- Work tours had the highest auto driver mode shares (88 percent).
- Tours made for education and school had the lowest auto-driver share by far (17 percent, and 14 percent weighted).
- Work- or school- based sub-tours had relatively high walk shares at about 12 percent.
- Tours made for social/recreational purposes, or to eat a meal out of the home, had the highest auto-passenger shares, at about 30 to 50 percent.

### **6.2.2 Variation in Mode of Travel by Person Type**

Tour mode varied somewhat by gender and by the presence/absence of school age children in the household in the survey sample. (See Tables A29 and A30 in the Appendix for more information).

- For work trips, transit mode share was highest for males with no children in the household. These persons were nearly three times as likely to take public transit (nearly four percent compared to less than two percent, weighted). For female workers, no pronounced difference in mode choice by presence or absence of children was observed.
- For non-work trips, females with children had the highest auto-passenger share (over 22 percent with children, and 11 percent without). This was significantly higher than the comparable groups for males.

## 7 Time of Travel

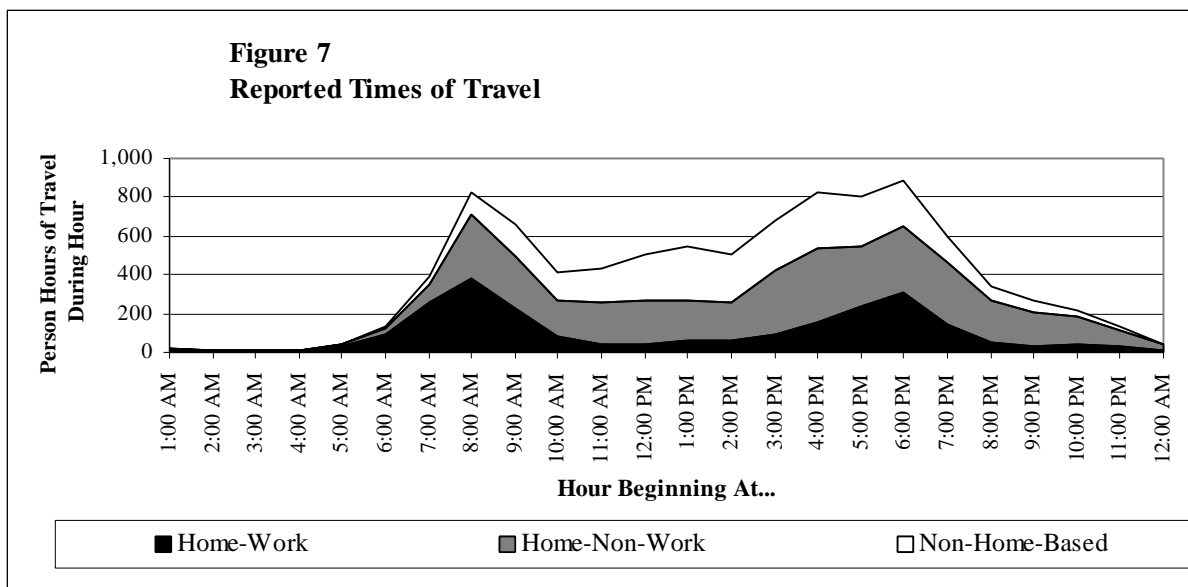
Time of travel refers to the time periods in which survey respondents chose travel. Time of travel varies significantly by trip or tour purpose. The reported travel times in the survey were used to tabulate the number of person hours of travel which occurred during each hour of the day. Some caveats need to be stated regarding reported times of travel. First, reported times of travel are often times rounded to the nearest 5, 10, or 15-minute increment by respondents, rather than the exact times. Second, different persons judge the beginning or ending time of a trip by different milestones (e.g. the time at which a person parked the car may be used as the trip end point by one person, and the time at which the person arrived at his or her desk may be used by another person).

### 7.1 Analysis of Trips

The distribution of travel over the hours of the day is shown in Figure 7. Time of travel is shown for three generalized trip purposes: home-work, home-non-work, and non-home based. Home-work trips are typical commute trips. Home non-work includes home-shop and home-other trips. Non-home-based trips include trips with both ends at non-home locations (e.g. a trip from work to a restaurant for lunch, a trip from work to another workplace for a business meeting, or a trip from school to a shopping center).

- Home-work travel showed the expected double-peak pattern. About 16 percent of all work travel occurred during the hour from 7:00 to 8:00 AM. About 13 percent occurred between 5:00 and 6:00PM. (Table 13). (More detailed information and weighted results are reported in Tables A32 and A33 in the Appendix).
- Home non-work travel also showed two peaks, but much less pronounced than home-work travel. About 9 percent of home-non-work travel occurred during the hour from 7:00 to 8:00 AM, and about 10 percent during the hour from 3:00 to 4:00 PM.
- Non-home-based travel showed only one true peak, which occurred between 3:00 and 4:00 PM. However, this type of travel exceeded 8 percent during each hour from 11:00AM to 6:00PM.
- Nearly one-half of all travel occurred during the three hour AM and PM peak periods (six hours total, or 25 percent of the day).
- Almost 29 percent of all travel occurred during the five-hour midday period, between the AM and PM peak periods.

Hour Starting At...	% of Total By Purpose				Time Period Groupings	
	Home-Work	All Home-Non-Work	Non-Home-Based	All	Period Name	% Travel During Period
12:00 AM	0.3%	0.3%	0.1%	0.2%	Late Evening/ Early Morning Period (Part 1)	23.9%
1:00 AM	0.2%	0.2%	0.1%	0.2%		
2:00 AM	0.1%	0.1%	0.1%	0.1%		
3:00 AM	0.3%	0.0%	0.0%	0.1%		
4:00 AM	1.4%	0.2%	0.1%	0.5%		
5:00 AM	4.0%	0.8%	0.4%	1.5%		
6:00 AM	10.6%	2.3%	1.4%	4.2%	AM Peak Period	20.3%
7:00 AM	15.7%	8.0%	4.3%	8.9%		
8:00 AM	9.5%	6.5%	5.7%	7.0%		
9:00 AM	3.5%	4.6%	5.1%	4.4%	Mid-Day Period	28.7%
10:00 AM	1.8%	5.3%	6.2%	4.7%		
11:00 AM	1.7%	5.5%	8.6%	5.4%		
12:00 PM	2.6%	4.9%	10.1%	5.9%		
1:00 PM	2.6%	4.8%	8.9%	5.5%		
2:00 PM	3.9%	7.9%	9.2%	7.3%	PM Peak Period	27.0%
3:00 PM	6.3%	9.4%	10.4%	8.9%		
4:00 PM	9.6%	7.7%	9.0%	8.6%		
5:00 PM	13.0%	8.2%	8.5%	9.5%	Late Evening/ Early Morning Period (Part 2)	Included in Part 1
6:00 PM	6.0%	7.8%	4.7%	6.4%		
7:00 PM	2.1%	5.3%	2.8%	3.7%		
8:00 PM	1.4%	4.3%	1.9%	2.8%		
9:00 PM	1.7%	3.4%	1.3%	2.3%		
10:00 PM	1.4%	1.9%	0.8%	1.4%	Daily	100.0%
11:00 PM	0.6%	0.6%	0.3%	0.5%		
<b>Total Daily</b>	100.0%	100.0%	100.0%	100.0%		



Source: DKS Associates.

## 7.2 Analysis of Tours

As mentioned above, because tours take place over the course of the day, the analysis of time of travel must take into account more than just the beginning and ending points. Tours were cross-tabulated by the time of departure from home (or from work or school for sub-tours), and by departure from main destination of the tour. For example, this would be the time a person left home for work, and the time he or she left work to return home. This cross tabulation does not account for timing of intermediate stops, if any.

- For work tours, the most times of travel were an AM peak (7:00-9:59 AM) departure from home, and a PM peak (3:00-5:59 PM) departure from work. Just over one-third of all work tours fit this pattern (Table 14). (More detailed information and weighted results are reported in Table A34 in the Appendix).
- Another 20-plus percent of work tours departed home in the early AM peak (i.e. before 7:00AM), and returned home in the PM peak period.
- The timing of non-work tours was more dispersed. Just over 20 percent of all non-work tours departed the tour origin during the AM peak period, and departed the main tour destination during either the midday (10:00 AM to 2:59 PM) or PM peak period (See Table A35 in the Appendix).
- Just over 16 percent of all non-work tours began and ended within the midday period.

<b>Table 14</b>							
<b>Times of Travel for Work Tours</b>							
	<b>% of Total Tours</b>						
	<b>Time Leaving Tour Destination (Work)</b>						
<b>Time Leaving Tour Origin (Home)</b>	<b>Early</b>	<b>AM Peak</b>	<b>Midday</b>	<b>PM Peak</b>	<b>Eve.</b>	<b>Late Eve.</b>	<b>All</b>
<b>Early AM (4:00-6:59AM)</b>	0.1%	0.2%	6.0%	21.3%	2.8%	0.2%	30.6%
<b>AM Peak Period (7:00AM -9:59AM)</b>	0.0%	0.5%	8.8%	35.8%	10.9%	0.7%	56.6%
<b>Midday Period (10:00AM-2:59PM)</b>	0.0%	0.0%	1.8%	2.6%	2.8%	1.8%	9.0%
<b>PM Peak Period (3:00PM-5:59PM)</b>	0.0%	0.0%	0.0%	0.3%	1.6%	0.9%	2.8%
<b>Evening (6:00PM-9:59PM)</b>	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.5%
<b>Late Evening (10:00PM-3:59AM)</b>	0.0%	0.0%	0.3%	0.1%	0.1%	0.0%	0.5%
<b>All</b>	0.1%	0.8%	17.0%	60.1%	18.3%	3.8%	100.0%

Source: DKS Associates

## 8 Duration of Travel

The duration of travel refers to how long each unit of travel lasts, or the length of the trips. For this report, duration means the time between a survey respondent reported leaving one activity location, and when they reported arriving at the next activity location. This is not a perfectly accurate measure, since people may have different ideas about when they left (Is it when they walked out the door of their office? Is it when they left the parking lot in their vehicle? Etc.). Also, people tend to round their times to the nearest 5, 10 or 15-minute time increment. However, it is assumed that these judgments and biases average out over the sample.

Duration of travel varies by purpose of travel, the mode of travel, and by the areas the travel occurs.

- Home-work trips were the longest of all trip purposes, averaging 24 minutes (25 weighted). However, variation in work trip times is high. Five percent of trips are over 60 minutes (Table 15). (More detailed information and weighted results are reported in Table A37 in the Appendix).
- Non-work trips ranged from 13 to 18 minutes in average length, depending on the specific purpose of the trip.

Duration of travel also varied by mode of travel, household structure, and person type. (See Tables A38 and A39 in the Appendix for detailed information).

- Trips made by transit were the longest of all modes, averaging 40 minutes for walk-access and 45 minutes for drive access trips.
- Walk trips were the shortest of all modes, averaging 12 minutes.
- Trip lengths for households located in rural areas were the longest of all area types, averaging 20 minutes (19 weighted). Average trip lengths for households located in ex-urban, suburban, and urban areas were 17, 16 and 16 respectively (17, 17, 16 weighted).

Another measure of travel duration is the total time a person devoted to travel during the course of a day, often called a “*travel time budget*”.

- The average travel time budget for the survey respondents was 62 minutes per person (Table 16), or 143 minutes per household (163 weighted). (For weighted results and more detailed information, see Tables A40 and A41 in the Appendix).

**Table 15**  
**Trip Duration by Purpose of Travel**

Trip Purpose	Cumulative Trip Results					
	# Trips	%	Reported Travel Duration (Hours)	%	Average Trip Length (Minutes)	Standard Deviation (Minutes)
Home-Work	6,086	18%	2,438	26%	24	19
Home-Shop	3,393	10%	751	8%	13	11
Home-Other	10,908	33%	2,932	31%	16	20
Work-Other	3,947	12%	1,174	12%	18	18
Other-Other	6,780	21%	1,646	17%	15	17
Home-School	1,923	6%	493	5%	15	13
<b>Total</b>	<b>33,037</b>	<b>100%</b>	<b>9,434</b>	<b>100%</b>	<b>17</b>	<b>18</b>

Source: DKS Associates

- Work travel accounted for 16 minutes or 25 percent of the average travel time budget.
- Working adults spent had higher travel time budgets than non-working adults. Working males spent 79 minutes traveling, and females, 72 minutes, compared to 61 and 56 minutes for non-working males and females, respectively.
- Seniors and children had the lowest travel time budgets, with 47 and 46 minutes, respectively.

**Table 16**  
**Travel Time Budgets by Person Type**

Person Type	Survey Results							
	# Persons	%	Total Travel Duration (Hours)			Travel Duration Per Person (Minutes)		
			Home-Work	Non-Work	Total	Home-Work	Non-Work	Total
Kid	1,737	19%	21	1,301	1,322	1	45	46
Male Worker	2,361	26%	1,377	1,722	3,098	35	44	79
Female Worker	2,063	23%	920	1,550	2,471	27	45	72
Male Non-Worker	459	5%	56	409	465	7	53	61
Female Non-Worker	797	9%	50	690	740	4	52	56
Senior	1,698	19%	11	1,310	1,321	0	46	47
Uncodable	15	0%	2	12	14	6	49	55
<b>Total</b>	<b>9,130</b>	<b>100%</b>	<b>2,437</b>	<b>6,994</b>	<b>9,431</b>	<b>16</b>	<b>46</b>	<b>62</b>

Source: DKS Associates

## **9 Workplace Amenities**

Workplace amenities considered in the analysis included the ability to flex-time, presence of facilities such as on-site cafeterias or eating establishments, presence of bike lockers, availability of transit subsidies, etc. In general, it was difficult to parse out the specific effects of these amenities, because of strong correlations and patterns in where specific amenities were provided, and what type of employee had access to them. However, travel behavior was significantly different for those workers which had access to some workplace amenities. (See Tables A42 to A47 in the Appendix for more detailed information).

- One of the most significant effects seemed to be presence of on-site childcare. For workers with on-site childcare, SOV mode split was 12 percent less, and carpool, transit, bike and walk mode splits were higher. However, on-site childcare was far more likely to be provided at worksites in urban areas, and the area type of the worksite may explain part of the variation.
- For workers facing parking charges at the worksite had 20 percent less SOV share for work trips, and significantly higher carpool, transit and bike shares. Again, though, worksites with worker-paid parking were far more likely to be located in urban areas, where transit service is the best.

## **Appendix**

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**Pre-Census Travel Behavior Report**  
**Analysis of the 2000 SACOG Household Travel Survey**  
**Appendix**

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**Table A1**  
**Demographics of the Sample**

<b>Variable</b>	<b>Survey Results</b>	<b>Weighted Results</b>	<b>Regional Comparison Total</b>	<b>% Difference</b>
Households	3,941	696,200	700,636	-0.6%
Persons	9,130	1,824,300	1,848,529	-1.3%
Workers	4,500	853,300	850,147	0.4%
Vehicles	7,732	1,439,000	n/a	n/a
Persons/HH	2.32	2.62	2.64	-0.7%
Workers/HH	1.14	1.23	1.21	1.0%
Vehicles/HH	1.96	2.07	n/a	n/a

**Table A2**  
**Household Structure**

Variables	Number of Households				Average Weighting
	Survey Results	%	Weighted Results	%	
<b>Persons Per Household</b>					
1	1,008	26%	155,500	22%	154.3
2	1,693	43%	234,700	34%	138.6
3	580	15%	122,600	18%	211.4
4	436	11%	119,700	17%	274.5
5	138	4%	41,100	6%	297.8
6+	86	2%	22,600	3%	262.8
Total	3,941	100%	696,200	100%	176.7
<b>HH w/ School Age Children</b>					
Without Children	2,966	75%	452,700	65%	152.6
With Children	975	25%	243,500	35%	249.7
Total	3,941	100%	696,200	100%	176.7
<b>Number of Workers</b>					
0	1201	30%	171,000	25%	142.4
1	1272	32%	254,000	36%	199.7
2	1228	31%	225,300	32%	183.5
3+	240	6%	45,900	7%	191.3
Total	3941	100%	696200	100%	176.7
<b>HH w/ All Adults &gt;= 65 Years</b>					
Not All >=65	2985	76%	570,000	82%	191.0
All >= 65	956	24%	126,200	18%	132.0
Total	3,941	100%	696,200	100%	176.7

**Table A3**  
**Household Income**

Income Category	Number of Households				Average Weighting
	Survey Results	Valid %	Weighted Results	Valid %	
<\$5,000	117	3%	18,400	3%	157.3
\$5,000-9,999	174	5%	29,700	5%	170.7
\$10,000-14,999	186	5%	31,700	5%	170.4
\$15,000-19,999	213	6%	34,900	6%	163.8
\$20,000-24,999	233	7%	39,300	6%	168.7
\$25,000-29,999	208	6%	36,700	6%	176.4
\$30,000-34,999	143	4%	24,700	4%	172.7
\$35,000-39,999	191	5%	34,200	5%	179.1
\$40,000-44,999	335	10%	57,200	9%	170.7
\$45,000-49,999	418	12%	77,400	12%	185.2
\$50,000-59,999	353	10%	72,000	11%	204.0
\$60,000-74,999	312	9%	59,200	9%	189.7
\$75,000-99,999	346	10%	61,600	10%	178.0
\$100,000-149,999	209	6%	39,500	6%	189.0
>\$150,000	61	2%	12,200	2%	200.0
Didn't Know/Didn't Answer	503	n/a	79,800	n/a	n/a
Valid Total	3,499	100%	628,700	100%	179.7
% Missing or Unusable	14%		13%		n/a

**Table A4**  
**Household Vehicle Ownership**

Vehicles Owned in Household	Survey Results								
	# HH's	%	# Persons	%	# Trips	%	Trips/Person	Person/H	Persons/HH
<b>0</b>	171	4%	241	3%	494	1%	2.0	2.9	1.4
<b>1</b>	1,194	30%	1,995	22%	6,567	20%	3.3	5.5	1.7
<b>2</b>	1,656	42%	4,158	46%	15,538	47%	3.7	9.4	2.5
<b>3</b>	625	16%	1,768	19%	6,563	20%	3.7	10.5	2.8
<b>4</b>	185	5%	594	7%	2,467	7%	4.2	13.3	3.2
<b>5 or More</b>	110	3%	374	4%	1,385	4%	3.7	12.6	3.4
<b>Total</b>	3,941	100%	9,130	100%	33,014	100%	3.6	8.4	2.3

Vehicles Owned in Household	Weighted Results								
	# HH's	%	# Persons	%	# Trips	%	Trips/Person	Person/H	Persons/HH
<b>0</b>	22,900	3%	39,100	2%	84,000	1%	2.1	3.7	1.7
<b>1</b>	192,200	28%	363,000	20%	1,195,300	18%	3.3	6.2	1.9
<b>2</b>	294,700	42%	821,700	45%	3,099,100	46%	3.8	10.5	2.8
<b>3</b>	124,400	18%	385,300	21%	1,433,700	21%	3.7	11.5	3.1
<b>4</b>	38,500	6%	130,200	7%	569,200	9%	4.4	14.8	3.4
<b>5 or More</b>	23,600	3%	85,000	5%	305,600	5%	3.6	12.9	3.6
<b>Total</b>	696,300	100%	1,824,300	100%	6,686,900	100%	3.7	9.6	2.6

**Table A5**  
**Households, Persons, and Trips by Household Size**

No. Persons Per Household	Survey Results							
	# HH's	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person
1	1,008	26%	1,008	11%	3,585	11%	3.6	3.6
2	1,693	43%	3,386	37%	11,713	35%	6.9	3.5
3	580	15%	1,740	19%	6,231	19%	10.7	3.6
4	436	11%	1,744	19%	7,113	22%	16.3	4.1
5	138	4%	690	8%	2,528	8%	18.3	3.7
6+	86	2%	562	6%	1,844	6%	21.4	3.3
<b>Total</b>	3,941	100%	9,130	100%	33,014	100%	8.4	3.6

No. Persons Per Household	Weighted Results							
	# HH's	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person
1	155,500	22%	155,500	9%	566,700	8%	3.6	3.6
2	234,700	34%	469,400	26%	1,650,000	25%	7.0	3.5
3	122,600	18%	367,900	20%	1,335,200	20%	10.9	3.6
4	119,700	17%	478,800	26%	1,917,500	29%	16.0	4.0
5	41,100	6%	205,300	11%	742,800	11%	18.1	3.6
6+	22,600	3%	147,400	8%	474,900	7%	21.0	3.2
<b>Total</b>	696,200	100%	1,824,300	100%	6,687,100	100%	9.6	3.7

**Table A6**  
**Household Trip Frequency**

Trips Per Household	Survey Results							
	# HH's	%	# Persons	%	# Trips	%	Trips/ Person	Person/ HH
<b>No Trips</b>	441	11%	726	8%	0	0%	0.0	1.6
<b>1-5 Trips</b>	1,218	31%	2,098	23%	4,072	12%	1.9	1.7
<b>6-10 Trips</b>	1,128	29%	2,464	27%	8,717	26%	3.5	2.2
<b>11-15 Trips</b>	583	15%	1,638	18%	7,440	23%	4.5	2.8
<b>16-20 Trips</b>	293	7%	1,001	11%	5,214	16%	5.2	3.4
<b>Over 20 Trips</b>	278	7%	1,203	13%	7,571	23%	6.3	4.3
<b>Total</b>	3,941	100%	9,130	100%	33,014	100%	3.6	2.3

Trips Per Household	Weighted Results							
	# HH's	%	# Persons	%	# Trips	%	Trips/ Person	Person/ HH
<b>No Trips</b>	60,000	9%	104,900	6%	0	0%	0.0	1.7
<b>1-5 Trips</b>	200,100	29%	371,100	20%	673,900	10%	1.8	1.9
<b>6-10 Trips</b>	188,200	27%	452,500	25%	1,457,200	22%	3.2	2.4
<b>11-15 Trips</b>	110,900	16%	342,400	19%	1,423,100	21%	4.2	3.1
<b>16-20 Trips</b>	66,000	9%	236,500	13%	1,175,700	18%	5.0	3.6
<b>Over 20 Trips</b>	71,100	10%	316,800	17%	1,957,100	29%	6.2	4.5
<b>Total</b>	696,300	100%	1,824,200	100%	6,687,000	100%	3.7	2.6

**Table A7**  
**Trips by Purpose**

Trip Purpose	Survey Results				Weighted Results			
	# Trips	%	Trips/ HH	Trips/ Person	# Trips	%	Trips/ HH	Trips/ Person
Home-Work	6,086	18%	1.5	0.7	1,153,054	17%	1.7	0.6
Home-Shop	3,393	10%	0.9	0.4	650,911	10%	0.9	0.4
Home-Other	10,908	33%	2.8	1.2	2,254,477	34%	3.2	1.2
Work-Other	3,947	12%	1.0	0.4	760,948	11%	1.1	0.4
Other-Other	6,780	21%	1.7	0.7	1,391,248	21%	2.0	0.8
Home-School	1,923	6%	0.5	0.2	516,675	8%	0.7	0.3
<b>Total</b>	<b>33,037</b>	<b>100%</b>	<b>8.4</b>	<b>3.6</b>	<b>6,727,313</b>	<b>100%</b>	<b>9.7</b>	<b>3.7</b>

**Table A8**  
**Households, Persons and Trips by Household Class**

Household Class	Survey Results								
	# HH	%	# Persons	%	# Trips	%	Trips/ HH	Trips/ Person	Person/ HH
No Workers + School Age Kids	49	1%	179	2%	612	2%	12.5	3.4	3.7
1 Worker + School Age Kids	335	9%	1,215	13%	4,571	14%	13.6	3.8	3.6
2+ Workers + School Age Kids	591	15%	2,385	26%	9,598	29%	16.2	4.0	4.0
No Workers, No Kids	334	8%	567	6%	1,804	5%	5.4	3.2	1.7
1 Worker, No Kids	937	24%	1,477	16%	5,227	16%	5.6	3.5	1.6
2+ Workers, No Kids	877	22%	2,076	23%	7,653	23%	8.7	3.7	2.4
Retired	818	21%	1,231	13%	3,549	11%	4.3	2.9	1.5
<b>Total</b>	<b>3,941</b>	<b>100%</b>	<b>9,130</b>	<b>100%</b>	<b>33,014</b>	<b>100%</b>	<b>8.4</b>	<b>3.6</b>	<b>2.3</b>

Household Class	Weighted Results								
	# HH	%	# Persons	%	# Trips	%	Trips/ HH	Trips/ Person	Person/ HH
No Workers + School Age Kids	23,300	3%	95,600	5%	317,600	5%	13.6	3.3	4.1
1 Worker + School Age Kids	89,800	13%	348,500	19%	1,306,900	20%	14.6	3.8	3.9
2+ Workers + School Age Kids	130,400	19%	535,300	29%	2,162,300	32%	16.6	4.0	4.1
No Workers, No Kids	45,200	6%	84,600	5%	258,000	4%	5.7	3.0	1.9
1 Worker, No Kids	164,200	24%	263,500	14%	935,500	14%	5.7	3.6	1.6
2+ Workers, No Kids	140,800	20%	345,900	19%	1,271,700	19%	9.0	3.7	2.5
Retired	102,500	15%	150,800	8%	434,900	7%	4.2	2.9	1.5
<b>Total</b>	<b>696,200</b>	<b>100%</b>	<b>1,824,200</b>	<b>100%</b>	<b>6,686,900</b>	<b>100%</b>	<b>9.6</b>	<b>3.7</b>	<b>2.6</b>

**Table A9**  
**Households, Persons and Trips by Income Category**

Household Income	Survey Results								
	# HH	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person	Person/HH
<\$15,000	356	9%	671	7%	1,842	6%	5.2	2.7	1.9
\$15,000-24,999	399	10%	760	8%	2,161	7%	5.4	2.8	1.9
\$25,000-44,999	775	20%	1,734	19%	5,905	18%	7.6	3.4	2.2
\$45,000-74,999	1,105	28%	2,666	29%	10,040	30%	9.1	3.8	2.4
>\$75,000	928	24%	2,536	28%	10,579	32%	11.4	4.2	2.7
Declined/Didn't Know	378	10%	763	8%	2,487	8%	6.6	3.3	2.0
<b>Total</b>	<b>3,941</b>	<b>100%</b>	<b>9,130</b>	<b>100%</b>	<b>33,014</b>	<b>100%</b>	<b>8.4</b>	<b>3.6</b>	<b>2.3</b>

Household Income	Weighted Results								
	# HH	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person	Person/HH
<\$15,000	58,700	8%	137,800	8%	398,900	6%	6.8	2.9	2.3
\$15,000-24,999	66,600	10%	148,800	8%	428,900	6%	6.4	2.9	2.2
\$25,000-44,999	134,900	19%	343,500	19%	1,187,200	18%	8.8	3.5	2.5
\$45,000-74,999	206,500	30%	549,100	30%	2,052,500	31%	9.9	3.7	2.7
>\$75,000	172,400	25%	518,600	28%	2,198,400	33%	12.8	4.2	3.0
Declined/Didn't Know	57,200	8%	126,700	7%	421,100	6%	7.4	3.3	2.2
<b>Total</b>	<b>696,300</b>	<b>100%</b>	<b>1,824,500</b>	<b>100%</b>	<b>6,687,000</b>	<b>100%</b>	<b>9.6</b>	<b>3.7</b>	<b>2.6</b>

**Table A10**  
**Persons by Tour Frequency**

Number of Tours Made	Survey Results		Weighted Results	
	# Persons	%	# Persons	%
<b>0</b>	703	8%	106,400	6%
<b>1</b>	1,111	13%	192,900	11%
<b>2</b>	1,518	17%	264,900	15%
<b>3</b>	1,264	14%	227,700	13%
<b>4</b>	1,067	12%	225,500	13%
<b>5</b>	823	9%	181,300	10%
<b>6</b>	619	7%	139,500	8%
<b>7</b>	486	6%	126,300	7%
<b>8 or More</b>	1,146	13%	310,100	17%
<b>Total</b>	8,737	100%	1,774,600	100%

**Table A11**  
**Tour Frequency by Purpose**

Type of Tour	Survey Results				Weighted Results			
	# Tours	%	Tours/ HH	Tours/ Person	# Tours	%	Tours/ HH	Tours/ Person
<b>Work</b>	3,333	28%	0.9	0.4	644,800	26%	0.9	0.4
<b>Education</b>	1,478	12%	0.4	0.2	373,200	15%	0.5	0.2
<b>Per.bus/other</b>	2,420	20%	0.6	0.3	466,800	19%	0.7	0.3
<b>Shopping</b>	1,326	11%	0.3	0.2	266,300	11%	0.4	0.2
<b>Visit/recreation</b>	586	5%	0.2	0.1	112,900	5%	0.2	0.1
<b>Meal</b>	886	7%	0.2	0.1	178,200	7%	0.3	0.1
<b>Serve passenger</b>	811	7%	0.2	0.1	210,200	9%	0.3	0.1
<b>Work/school-based</b>	1,056	9%	0.3	0.1	207,700	8%	0.3	0.1
<b>Total</b>	11,896	100%	3.1	1.4	2,460,100	100%	3.5	1.4

**Table A12**  
**Distribution of Households, Persons and Tours by Household Class**

Household Class	Survey Results								
	# HH	%	# Persons	%	# Tours	%	Tours/HH	Tours/Person	Person/HH
No Workers + School Age Kids	47	1%	168	2%	222	2%	4.7	1.3	3.6
1 Worker + School Age Kids	332	9%	1,153	13%	1,653	14%	5.0	1.4	3.5
2+ Workers + School Age Kids	588	15%	2,287	26%	3,494	29%	5.9	1.5	3.9
No Workers, No Kids	325	8%	549	6%	622	5%	1.9	1.1	1.7
1 Worker, No Kids	902	23%	1,409	16%	1,852	16%	2.1	1.3	1.6
2+ Workers, No Kids	871	23%	1,968	23%	2,807	24%	3.2	1.4	2.3
Retired	800	21%	1,203	14%	1,246	10%	1.6	1.0	1.5
<b>Total</b>	<b>3,865</b>	<b>100%</b>	<b>8,737</b>	<b>100%</b>	<b>11,896</b>	<b>100%</b>	<b>3.1</b>	<b>1.4</b>	<b>2.3</b>

Household Class	Weighted Results								
	# HH	%	# Persons	%	# Tours	%	Tours/HH	Tours/Person	Person/HH
No Workers + School Age Kids	22,554	3%	90,910	5%	121,114	5%	5.4	1.3	4.0
1 Worker + School Age Kids	90,608	13%	338,263	19%	485,099	20%	5.4	1.4	3.7
2+ Workers + School Age Kids	132,431	19%	523,037	29%	801,392	33%	6.1	1.5	3.9
No Workers, No Kids	45,194	6%	83,615	5%	92,837	4%	2.1	1.1	1.9
1 Worker, No Kids	160,987	23%	255,623	14%	332,644	14%	2.1	1.3	1.6
2+ Workers, No Kids	142,610	20%	333,237	19%	471,982	19%	3.3	1.4	2.3
Retired	101,833	15%	149,895	8%	154,984	6%	1.5	1.0	1.5
<b>Total</b>	<b>696,218</b>	<b>100%</b>	<b>1,774,580</b>	<b>100%</b>	<b>2,460,053</b>	<b>100%</b>	<b>3.5</b>	<b>1.4</b>	<b>2.5</b>

**Table A13**  
**Tours by Person Type**

Person Type	Survey Results				
	# Persons	%	# Tours	%	Tours/ Person
Worker, No Other Adults in HH	474	5%	766	6%	1.6
Worker, Other Working Adult(s) in HH	1,956	22%	3,122	26%	1.6
Worker, Non-Working Adult(s) In HH	1,762	20%	2,670	22%	1.5
Non-Worker, No Other Adults in HH	544	6%	585	5%	1.1
Non-Worker, Other Working Adult(s) in HH	1,044	12%	1,276	11%	1.2
Non-Worker, Non-Working Adult(s) in HH	1,300	15%	1,426	12%	1.1
Child Under 18	1,657	19%	2,051	17%	1.2
<b>Total</b>	<b>8,737</b>	<b>100%</b>	<b>11,896</b>	<b>100%</b>	<b>1.4</b>

Person Type	Weighted Results				
	# Persons	%	# Tours	%	Tours/ Person
Worker, No Other Adults in HH	88,200	5%	142,800	6%	1.6
Worker, Other Working Adult(s) in HH	362,100	20%	592,600	24%	1.6
Worker, Non-Working Adult(s) In HH	355,800	20%	541,100	22%	1.5
Non-Worker, No Other Adults in HH	77,200	4%	86,300	4%	1.1
Non-Worker, Other Working Adult(s) in HH	235,800	13%	306,100	12%	1.3
Non-Worker, Non-Working Adult(s) in HH	204,800	12%	238,500	10%	1.2
Child Under 18	450,600	25%	552,800	22%	1.2
	<b>1,774,500</b>	<b>100%</b>	<b>2,460,200</b>	<b>100%</b>	<b>1.4</b>

**Table A14**  
**Tours by Age Group**

Survey Results					
Age Group	# Persons	%	# Tours	%	Tours/ Person
<5 yrs	361	4%	358	3%	0.99
5-17 yrs	1,296	15%	1,693	14%	1.31
18-24 yrs	561	6%	799	7%	1.42
25-64 yrs	4,625	53%	7,011	59%	1.52
65+ yrs	1,894	22%	2,035	17%	1.07
<b>Total</b>	<b>8,737</b>	<b>100%</b>	<b>11,896</b>	<b>100%</b>	<b>1.36</b>

Weighted Results					
Age Group	# Persons	%	# Tours	%	Tours/ Person
<5 yrs	98,700	6%	97,100	4%	0.98
5-17 yrs	351,900	20%	455,600	19%	1.29
18-24 yrs	116,100	7%	164,700	7%	1.42
25-64 yrs	920,900	52%	1,430,700	58%	1.55
65+ yrs	287,000	16%	311,900	13%	1.09
<b>Total</b>	<b>1,774,600</b>	<b>100%</b>	<b>2,460,100</b>	<b>100%</b>	<b>1.39</b>

**Table A15**

**Number of Stops on Work Tours by Gender and Presence of School Age Children in Household**

Sequencing of Stops on Tour	Survey Results											
	# of Tours						% of Tours					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age Kids	All	Male		Female		School Age Kids	All
	Kids	No Kids	Kids	No Kids			No Kids	Kids	No Kids	Kids		
No stops	685	368	553	250	14	1,870	61.8%	56.5%	55.9%	45.0%	50.0%	56.1%
Stops On Way to Prim. Dest.	85	86	85	75	7	338	7.7%	13.2%	8.6%	13.5%	25.0%	10.1%
Stops on Way from Prim. Dest	239	117	255	96	7	714	21.6%	18.0%	25.8%	17.3%	25.0%	21.4%
Stops Both Ways	100	80	97	134	0	411	9.0%	12.3%	9.8%	24.1%	0.0%	12.3%
<b>Total</b>	<b>1,109</b>	<b>651</b>	<b>990</b>	<b>555</b>	<b>28</b>	<b>3,333</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Sequencing of Stops on Tour	Weighted Results											
	# of Tours						% of Tours					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age Kids	All	Male		Female		School Age Kids	All
	Kids	No Kids	Kids	No Kids			No Kids	Kids	No Kids	Kids		
No stops	115,600	94,000	91,700	54,400	3,000	358,700	61.3%	58.3%	55.0%	44.4%	49.2%	55.6%
Stops On Way to Prim. Dest.	15,100	18,300	14,300	16,400	1,500	65,600	8.0%	11.4%	8.6%	13.4%	24.6%	10.2%
Stops on Way from Prim. Dest	40,900	28,600	44,200	21,800	1,600	137,100	21.7%	17.8%	26.5%	17.8%	26.2%	21.3%
Stops Both Ways	17,000	20,200	16,400	29,900	0	83,500	9.0%	12.5%	9.8%	24.4%	0.0%	12.9%
<b>Total</b>	<b>188,600</b>	<b>161,100</b>	<b>166,600</b>	<b>122,500</b>	<b>6,100</b>	<b>644,900</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A16**

**Number of Stops on Non-Work Tours by Gender and Presence of School Age Children in Household**

	Survey Results											
	# of Tours						% of Tours					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age		Male		Female		School Age	
Sequencing of Stops on Tour	Kids	No Kids	Kids	No Kids	Kids	All	No Kids	Kids	No Kids	Kids	Kids	All
No stops	1,428	573	1,285	827	1,376	5,489	63.7%	70.5%	58.8%	63.7%	68.0%	64.1%
Stops On Way to Prim. Dest.	253	81	246	153	161	894	11.3%	10.0%	11.3%	11.8%	8.0%	10.4%
Stops on Way from Prim. Dest	384	115	445	197	323	1,464	17.1%	14.1%	20.4%	15.2%	16.0%	17.1%
Stops Both Ways	177	44	210	122	163	716	7.9%	5.4%	9.6%	9.4%	8.1%	8.4%
<b>Total</b>	<b>2,242</b>	<b>813</b>	<b>2,186</b>	<b>1,299</b>	<b>2,023</b>	<b>8,563</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

	Weighted Results											
	# of Tours						% of Tours					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age		Male		Female		School Age	
Sequencing of Stops on Tour	Kids	No Kids	Kids	No Kids	Kids	All	No Kids	Kids	No Kids	Kids	Kids	All
No stops	226,600	147,800	200,700	226,200	376,600	1,177,900	63.9%	70.0%	58.5%	62.8%	68.9%	64.9%
Stops On Way to Prim. Dest.	39,100	20,300	39,200	43,200	43,900	185,700	11.0%	9.6%	11.4%	12.0%	8.0%	10.2%
Stops on Way from Prim. Dest	60,700	30,500	69,600	56,800	84,500	302,100	17.1%	14.4%	20.3%	15.8%	15.5%	16.6%
Stops Both Ways	28,200	12,500	33,300	34,000	41,800	149,800	8.0%	5.9%	9.7%	9.4%	7.6%	8.3%
<b>Total</b>	<b>354,600</b>	<b>211,100</b>	<b>342,800</b>	<b>360,200</b>	<b>546,800</b>	<b>1,815,500</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A17**  
**Households, Persons and Trips by Number of Workers**

Number of Workers in HH	Survey Results								
	# HH	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person	Person/HH
<b>0</b>	1,201	30%	1,977	22%	5,965	18%	5.0	3.0	1.6
<b>1</b>	1,272	32%	2,692	29%	9,798	30%	7.7	3.6	2.1
<b>2</b>	1,228	31%	3,493	38%	13,629	41%	11.1	3.9	2.8
<b>3+</b>	240	6%	968	11%	3,622	11%	15.1	3.7	4.0
<b>Total</b>	3,941	100%	9,130	100%	33,014	100%	8.4	3.6	2.3

Number of Workers in HH	Weighted Results								
	# HH	%	# Persons	%	# Trips	%	Trips/HH	Trips/Person	Person/HH
<b>0</b>	171,000	25%	331,000	18%	1,010,500	15%	5.9	3.1	1.9
<b>1</b>	254,000	36%	612,100	34%	2,242,400	34%	8.8	3.7	2.4
<b>2</b>	225,300	32%	691,800	38%	2,720,400	41%	12.1	3.9	3.1
<b>3+</b>	45,900	7%	189,500	10%	713,600	11%	15.5	3.8	4.1
<b>Total</b>	696,200	100%	1,824,400	100%	6,686,900	100%	9.6	3.7	2.6

**Table A18**  
**Persons and Trips by Person Type**

Person Type	Survey Results				
	# Persons	%	# Trips	%	Trips/ Person
Male, No Kids in HH	2,650	29%	9,259	28%	3.5
Male w/ Kids in HH	956	10%	3,970	12%	4.2
Female, No Kids in HH	2,690	29%	8,946	27%	3.3
Female w/ Kids in HH	1,081	12%	5,291	16%	4.9
Kids	1,737	19%	5,502	17%	3.2
Not Codable	16	0%	46	0%	2.9
All Adults, No Kids in HH	5,340	58%	18,205	55%	3.4
All Adults, w/ Kids in HH	2,037	22%	9,261	28%	4.5
<b>Total</b>	<b>9,130</b>	<b>100%</b>	<b>33,014</b>	<b>100%</b>	<b>3.6</b>

Person Type	Weighted Results				
	# Persons	%	# Trips	%	Trips/ Person
Male, No Kids in HH	421,700	23%	1,483,600	22%	3.5
Male w/ Kids in HH	242,400	13%	991,200	15%	4.1
Female, No Kids in HH	421,300	23%	1,411,000	21%	3.3
Female w/ Kids in HH	273,000	15%	1,350,000	20%	4.9
Kids	463,000	25%	1,441,900	22%	3.1
Not Codable	2,900	0%	9,100	0%	3.1
All Adults, No Kids in HH	843,000	46%	2,894,600	43%	3.4
All Adults, w/ Kids in HH	515,400	28%	2,341,200	35%	4.5
<b>Total</b>	<b>1,824,300</b>	<b>19981%</b>	<b>6,686,800</b>	<b>20254%</b>	<b>3.7</b>

**Table A19**  
**Distribution of Households, Persons and Tours by Income Category**

Household Income Category	Survey Results								
	# HH	%	# Persons	%	# Tours	%	Tours/HH	Tours/Person	Person/HH
<\$15,000	345	9%	640	7%	698	6%	2.0	1.1	1.9
\$15,000-24,999	389	10%	729	8%	792	7%	2.0	1.1	1.9
\$25,000-44,999	761	20%	1,667	19%	2,130	18%	2.8	1.3	2.2
\$45,000-74,999	1,081	28%	2,536	29%	3,581	30%	3.3	1.4	2.3
>\$75,000	917	24%	2,427	28%	3,757	32%	4.1	1.5	2.6
Declined/Didn't Know	372	10%	738	8%	938	8%	2.5	1.3	2.0
<b>Total</b>	<b>3,865</b>	<b>100%</b>	<b>8,737</b>	<b>100%</b>	<b>11,896</b>	<b>100%</b>	<b>3.1</b>	<b>1.4</b>	<b>2.3</b>

Household Income Category	Weighted Results								
	# HH	%	# Persons	%	# Tours	%	Tours/HH	Tours/Person	Person/HH
<\$15,000	57,500	8%	131,500	7%	150,700	6%	2.6	1.1	2.3
\$15,000-24,999	66,400	10%	145,100	8%	161,000	7%	2.4	1.1	2.2
\$25,000-44,999	135,100	19%	335,500	19%	440,400	18%	3.3	1.3	2.5
\$45,000-74,999	205,800	30%	530,900	30%	753,400	31%	3.7	1.4	2.6
>\$75,000	174,100	25%	506,600	29%	791,400	32%	4.5	1.6	2.9
Declined/Didn't Know	57,300	8%	124,900	7%	163,200	7%	2.8	1.3	2.2
<b>Total</b>	<b>696,200</b>	<b>100%</b>	<b>1,774,500</b>	<b>100%</b>	<b>2,460,100</b>	<b>100%</b>	<b>3.5</b>	<b>1.4</b>	<b>2.5</b>

**Table A20**  
**Trips by Mode and Purpose**

Travel Mode	Survey Results					
	# Trips			Mode Share		
	Purpose			Purpose		
	Non-Work	Work	All	Non-Work	Work	All
SOV	11,925	4,923	16,848	44.2%	80.9%	51.0%
HOV-2 Persons	7,871	479	8,350	29.2%	7.9%	25.3%
HOV-3 or More Persons	4,772	107	4,879	17.7%	1.8%	14.8%
Transit (Walk Access)	143	141	284	0.5%	2.3%	0.9%
Transit (Drive Access)	68	67	135	0.3%	1.1%	0.4%
Walk	1,520	157	1,677	5.6%	2.6%	5.1%
Bike	336	200	536	1.2%	3.3%	1.6%
Other	316	12	328	1.2%	0.2%	1.0%
<b>Total</b>	<b>26,951</b>	<b>6,086</b>	<b>33,037</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Travel Mode	Weighted Results					
	# Trips			Mode Share		
	Purpose			Purpose		
	Non-Work	Work	All	Non-Work	Work	All
SOV	2,249,500	948,900	3,198,400	40.4%	82.3%	47.5%
HOV-2 Persons	1,596,300	87,400	1,683,700	28.6%	7.6%	25.0%
HOV-3 or More Persons	1,235,300	23,800	1,259,100	22.2%	2.1%	18.7%
Transit (Walk Access)	22,300	21,500	43,800	0.4%	1.9%	0.7%
Transit (Drive Access)	11,700	11,000	22,700	0.2%	1.0%	0.3%
Walk	307,100	23,400	330,500	5.5%	2.0%	4.9%
Bike	53,300	34,600	87,900	1.0%	3.0%	1.3%
Other	98,700	2,300	101,000	1.8%	0.2%	1.5%
<b>Total</b>	<b>5,574,200</b>	<b>1,152,900</b>	<b>6,727,100</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A21**  
**Trips by Mode and Presence of School Age Children in Household**

Travel Mode	Survey Results (Work Trips)						Survey Results (Non-Work Trips)					
	# Trips			Mode Share			# Trips			Mode Share		
	School Age Child. In HH?			School Age Child. In HH?			School Age Child. In HH?			School Age Child. In HH?		
	No	Yes	All	No	Yes	All	No	Yes	All	No	Yes	All
SOV	3,235	1,685	4,920	81.3%	80.0%	80.9%	8,395	3,516	11,911	58.9%	27.7%	44.2%
HOV-2 Persons	289	190	479	7.3%	9.0%	7.9%	4,194	3,673	7,867	29.4%	29.0%	29.2%
HOV-3 or More Persons	29	78	107	0.7%	3.7%	1.8%	812	3,958	4,770	5.7%	31.2%	17.7%
Transit (Walk Access)	111	30	141	2.8%	1.4%	2.3%	74	69	143	0.5%	0.5%	0.5%
Transit (Drive Access)	42	25	67	1.1%	1.2%	1.1%	50	18	68	0.4%	0.1%	0.3%
Walk	113	44	157	2.8%	2.1%	2.6%	563	957	1,520	3.9%	7.5%	5.6%
Bike	154	46	200	3.9%	2.2%	3.3%	162	174	336	1.1%	1.4%	1.2%
Other	5	7	12	0.1%	0.3%	0.2%	5	311	316	0.0%	2.5%	1.2%
<b>Total</b>	<b>3,978</b>	<b>2,105</b>	<b>6,083</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>14,255</b>	<b>12,676</b>	<b>26,931</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Travel Mode	Weighted Results (Work Trips)						Weighted Results (Non-Work Trips)					
	# Trips			Mode Share			# Trips			Mode Share		
	School Age Child. In HH?			School Age Child. In HH?			School Age Child. In HH?			School Age Child. In HH?		
	No	Yes	All	No	Yes	All	No	Yes	All	No	Yes	All
SOV	547,100	401,800	948,900	82.5%	82.0%	82.3%	1,354,000	895,500	2,249,500	60.0%	27.0%	40.4%
HOV-2 Persons	46,800	40,600	87,400	7.1%	8.3%	7.6%	645,000	951,300	1,596,300	28.6%	28.7%	28.6%
HOV-3 or More Persons	5,200	18,700	23,900	0.8%	3.8%	2.1%	140,500	1,094,800	1,235,300	6.2%	33.0%	22.2%
Transit (Walk Access)	15,900	5,600	21,500	2.4%	1.1%	1.9%	8,800	13,500	22,300	0.4%	0.4%	0.4%
Transit (Drive Access)	6,300	4,700	11,000	1.0%	1.0%	1.0%	8,300	3,500	11,800	0.4%	0.1%	0.2%
Walk	15,000	8,400	23,400	2.3%	1.7%	2.0%	75,900	231,300	307,200	3.4%	7.0%	5.5%
Bike	25,800	8,700	34,500	3.9%	1.8%	3.0%	22,200	31,000	53,200	1.0%	0.9%	1.0%
Other	700	1,700	2,400	0.1%	0.3%	0.2%	500	98,300	98,800	0.0%	3.0%	1.8%
<b>Total</b>	<b>662,900</b>	<b>490,200</b>	<b>1,153,000</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2,255,200</b>	<b>3,319,200</b>	<b>5,574,400</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A22**

**Work Trip High Occupancy Vehicles with Household and Non-Household Members**

Survey Results								
Number of Trips Reported					Percent of Trips Reported			
HOV Travelers are...					HOV Travelers are...			
HOV Mode	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total
HOV (2 Persons)	159	320	0	479	33%	67%	0%	100%
HOV (3+ Persons)	29	66	12	107	27%	62%	11%	100%
<b>Total</b>	188	386	12	586	32%	66%	2%	100%

Weighted Results								
Number of Trips Reported					Percent of Trips Reported			
HOV Travelers are...					HOV Travelers are...			
HOV Mode	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total
HOV (2 Persons)	29,100	58,400	0	87,500	33%	67%	0%	100%
HOV (3+ Persons)	5,400	15,900	2,500	23,800	23%	67%	11%	100%
<b>Total</b>	34,500	74,300	2,500	111,300	31%	67%	2%	100%

**Table A22 (cont.)**

**Non-Work Trip High Occupancy Vehicles with Household and Non-Household Members**

Survey Results								
Number of Trips Reported					Percent of Trips Reported			
HOV Travelers are...					HOV Travelers are...			
HOV Mode	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total
HOV (2 Persons)	1,883	6,467	0	8,350	23%	77%	0%	100%
HOV (3+ Persons)	824	2,779	1,275	4,878	17%	57%	26%	100%
<b>Total</b>	2,707	9,246	1,275	13,228	20%	70%	10%	100%

Weighted Results								
Number of Trips Reported					Percent of Trips Reported			
HOV Travelers are...					HOV Travelers are...			
HOV Mode	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total	All Non-Household Members	All Household Members	Both HH Members and Non-Members	Total
HOV (2 Persons)	352,500	1,331,200	0	1,683,700	21%	79%	0%	100%
HOV (3+ Persons)	177,300	775,800	305,900	1,259,000	14%	62%	24%	100%
<b>Total</b>	529,800	2,107,000	305,900	2,942,700	18%	72%	10%	100%

**Table A23**  
**Work Trips by Mode and Vehicle/Worker Household Class**

Travel Mode	Survey Results									
	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkrs	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkrs	Wkrs=0	All
SOV	3	199	4,635	83	4,920	2.9%	44.9%	85.8%	61.0%	80.9%
HOV-2 Persons	11	113	336	19	479	10.6%	25.5%	6.2%	14.0%	7.9%
HOV-3 or More Persons	0	17	88	2	107	0.0%	3.8%	1.6%	1.5%	1.8%
Transit (Walk Access)	31	31	74	5	141	29.8%	7.0%	1.4%	3.7%	2.3%
Transit (Drive Access)	7	9	51	0	67	6.7%	2.0%	0.9%	0.0%	1.1%
Walk	20	40	87	10	157	19.2%	9.0%	1.6%	7.4%	2.6%
Bike	32	34	117	17	200	30.8%	7.7%	2.2%	12.5%	3.3%
Other	0	0	12	0	12	0.0%	0.0%	0.2%	0.0%	0.2%
<b>Total</b>	104	443	5,400	136	6,083	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Percent of Trips in Category</b>	2%	7%	89%	2%	100%	n/a	n/a	n/a	n/a	n/a

Travel Mode	Weighted Results									
	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All
SOV	700	35,300	897,300	15,500	948,800	4.1%	47.5%	86.7%	58.1%	82.3%
HOV-2 Persons	1,600	18,400	64,600	2,800	87,400	9.5%	24.8%	6.2%	10.5%	7.6%
HOV-3 or More Persons	0	3,500	20,200	200	23,900	0.0%	4.7%	2.0%	0.7%	2.1%
Transit (Walk Access)	4,300	4,300	12,600	400	21,600	25.4%	5.8%	1.2%	1.5%	1.9%
Transit (Drive Access)	900	1,700	8,500	0	11,100	5.3%	2.3%	0.8%	0.0%	1.0%
Walk	2,700	5,600	13,700	1,400	23,400	16.0%	7.5%	1.3%	5.2%	2.0%
Bike	6,700	5,500	16,000	6,400	34,600	39.6%	7.4%	1.5%	24.0%	3.0%
Other	0	0	2,300	0	2,300	0.0%	0.0%	0.2%	0.0%	0.2%
<b>Total</b>	16,900	74,300	1,035,200	26,700	1,153,100	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Percent of Trips in Category</b>	1%	6%	90%	2%	100%	n/a	n/a	n/a	n/a	n/a

**Table A24**  
**Non-Work Trips by Mode and Vehicle/Worker Household Class**

Travel Mode	Survey Results									
	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkr s	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkr s	Wkrs=0	All
SOV	13	344	8,639	2,915	11,911	3.3%	26.2%	44.0%	52.1%	44.2%
HOV-2 Persons	55	406	5,405	2,001	7,867	14.1%	31.0%	27.5%	35.8%	29.2%
HOV-3 or More Persons	103	353	3,908	406	4,770	26.4%	26.9%	19.9%	7.3%	17.7%
Transit (Walk Access)	54	25	55	9	143	13.8%	1.9%	0.3%	0.2%	0.5%
Transit (Drive Access)	12	5	47	4	68	3.1%	0.4%	0.2%	0.1%	0.3%
Walk	116	117	1,090	197	1,520	29.7%	8.9%	5.6%	3.5%	5.6%
Bike	30	39	238	29	336	7.7%	3.0%	1.2%	0.5%	1.2%
Other	7	22	257	30	316	1.8%	1.7%	1.3%	0.5%	1.2%
<b>Total</b>	<b>390</b>	<b>1,311</b>	<b>19,639</b>	<b>5,591</b>	<b>26,931</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Percent of Trips in Category</b>	<b>1%</b>	<b>5%</b>	<b>73%</b>	<b>21%</b>	<b>100%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Travel Mode	Weighted Results									
	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All
SOV	1,700	61,500	1,747,600	438,700	2,249,500	2.5%	24.5%	40.5%	46.6%	40.4%
HOV-2 Persons	6,300	77,900	1,174,500	337,600	1,596,300	9.3%	31.0%	27.2%	35.8%	28.6%
HOV-3 or More Persons	27,300	71,800	1,032,400	103,800	1,235,300	40.3%	28.6%	23.9%	11.0%	22.2%
Transit (Walk Access)	5,900	3,700	11,000	1,800	22,400	8.7%	1.5%	0.3%	0.2%	0.4%
Transit (Drive Access)	1,300	1,000	9,100	300	11,700	1.9%	0.4%	0.2%	0.0%	0.2%
Walk	20,200	24,400	226,600	36,000	307,200	29.8%	9.7%	5.3%	3.8%	5.5%
Bike	3,400	6,400	37,400	6,000	53,200	5.0%	2.5%	0.9%	0.6%	1.0%
Other	1,600	4,600	74,900	17,700	98,800	2.4%	1.8%	1.7%	1.9%	1.8%
<b>Total</b>	<b>67,700</b>	<b>251,300</b>	<b>4,313,500</b>	<b>941,900</b>	<b>5,574,400</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Percent of Trips in Category</b>	<b>1%</b>	<b>5%</b>	<b>77%</b>	<b>17%</b>	<b>100%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

**Table A25**  
**All Trips by Mode and Vehicle/Worker Household Class**

Survey Results										
Travel Mode	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkr s	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh=>Wkr s	Wkrs=0	All
SOV	16	543	13,274	2,998	16,831	3.2%	31.0%	53.0%	52.3%	51.0%
HOV-2 Persons	66	519	5,741	2,020	8,346	13.4%	29.6%	22.9%	35.3%	25.3%
HOV-3 or More Persons	103	370	3,996	408	4,877	20.9%	21.1%	16.0%	7.1%	14.8%
Transit (Walk Access)	85	56	129	14	284	17.2%	3.2%	0.5%	0.2%	0.9%
Transit (Drive Access)	19	14	98	4	135	3.8%	0.8%	0.4%	0.1%	0.4%
Walk	136	157	1,177	207	1,677	27.5%	9.0%	4.7%	3.6%	5.1%
Bike	62	73	355	46	536	12.6%	4.2%	1.4%	0.8%	1.6%
Other	7	22	269	30	328	1.4%	1.3%	1.1%	0.5%	1.0%
<b>Total</b>	494	1,754	25,039	5,727	33,014	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Percent of Trips in Category</b>	1%	5%	76%	17%	100%	n/a	n/a	n/a	n/a	n/a

Weighted Results										
Travel Mode	# Trips					Mode Share				
	Vehicles-to-Workers In HH					Vehicles-to-Workers In HH				
	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All	Veh=0	Wkrs>0, Veh<Wkrs	Wkrs>0, Veh<Wkrs	Wkrs=0	All
SOV	2,400	96,800	2,644,900	454,200	3,198,300	2.8%	29.7%	49.4%	46.9%	47.5%
HOV-2 Persons	7,900	96,300	1,239,100	340,400	1,683,700	9.3%	29.6%	23.2%	35.1%	25.0%
HOV-3 or More Persons	27,300	75,300	1,052,600	104,000	1,259,200	32.3%	23.1%	19.7%	10.7%	18.7%
Transit (Walk Access)	10,200	8,000	23,600	2,200	44,000	12.1%	2.5%	0.4%	0.2%	0.7%
Transit (Drive Access)	2,200	2,700	17,600	300	22,800	2.6%	0.8%	0.3%	0.0%	0.3%
Walk	22,900	30,000	240,300	37,400	330,600	27.1%	9.2%	4.5%	3.9%	4.9%
Bike	10,100	11,900	53,400	12,400	87,800	11.9%	3.7%	1.0%	1.3%	1.3%
Other	1,600	4,600	77,200	17,700	101,100	1.9%	1.4%	1.4%	1.8%	1.5%
<b>Total</b>	84,600	325,600	5,348,700	968,600	6,727,500	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Percent of Trips in Category</b>	1%	5%	80%	14%	100%	n/a	n/a	n/a	n/a	n/a

**Table A26**  
**Work Trips by Mode and Employment Area Type**

Travel Mode	Survey Results									
	# Trips					Mode Share				
	Employment Area Type					Employment Area Type				
	Rural/ Ex-Urban	Suburban (less Davis)	Urban (less Sac.Dtn.)	Davis	Sac. Downtown	Rural/ Ex-Urban	Suburban (less Davis)	Urban (Less Sac.Dtn.)	Davis	Sac. Downtown
SOV	1,862	746	1,361	211	569	88.7%	86.4%	81.0%	48.0%	70.4%
HOV-2 Persons	158	64	135	35	75	7.5%	7.4%	8.0%	8.0%	9.3%
HOV-3 or More Persons	29	19	32	13	7	1.4%	2.2%	1.9%	3.0%	0.9%
Transit (Walk Access)	9	10	33	24	65	0.4%	1.2%	2.0%	5.5%	8.0%
Transit (Drive Access)	4	1	14	0	48	0.2%	0.1%	0.8%	0.0%	5.9%
Walk	25	14	76	20	21	1.2%	1.6%	4.5%	4.5%	2.6%
Bike	10	9	25	135	21	0.5%	1.0%	1.5%	30.7%	2.6%
Other	3	0	5	2	2	0.1%	0.0%	0.3%	0.5%	0.2%
<b>Total</b>	<b>2,100</b>	<b>863</b>	<b>1,681</b>	<b>440</b>	<b>808</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Travel Mode	Weighted Results									
	# Trips					Mode Share				
	Employment Area Type					Employment Area Type				
	Rural/ Ex-Urban	Suburban (less Davis)	Urban (less Sac.Dtn.)	Davis	Sac. Downtown	Rural/ Ex-Urban	Suburban (less Davis)	Urban (Less Sac.Dtn.)	Davis	Sac. Downtown
SOV	414,700	140,700	232,800	29,700	93,900	88.3%	85.4%	83.4%	44.8%	71.2%
HOV-2 Persons	34,700	12,500	20,100	5,000	12,600	7.4%	7.6%	7.2%	7.5%	9.6%
HOV-3 or More Persons	7,900	4,400	5,500	3,200	1,600	1.7%	2.7%	2.0%	4.8%	1.2%
Transit (Walk Access)	2,200	2,300	4,400	2,900	9,700	0.5%	1.4%	1.6%	4.4%	7.4%
Transit (Drive Access)	600	100	2,100	0	8,200	0.1%	0.1%	0.8%	0.0%	6.2%
Walk	5,300	3,000	10,300	2,200	2,500	1.1%	1.8%	3.7%	3.3%	1.9%
Bike	3,600	1,700	3,400	23,100	2,900	0.8%	1.0%	1.2%	34.8%	2.2%
Other	900	0	700	200	500	0.2%	0.0%	0.3%	0.3%	0.4%
<b>Total</b>	<b>469,900</b>	<b>164,700</b>	<b>279,300</b>	<b>66,300</b>	<b>131,900</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A27**  
**Non-Work Trips by Mode and "Attraction" Area Type**

Travel Mode	Survey Results									
	# Trips					Mode Share				
	"Attraction" Area Type					"Attraction" Area Type				
	Rural/ Ex-Urban	Suburban (less Davis)	Urban (less Sac.Dtn.)	Davis	Sac. Downtown	Rural/ Ex-Urban	Suburban (less Davis)	Urban (Less Sac.Dtn.)	Davis	Sac. Downtown
SOV	4,787	2,129	3,445	526	810	44.8%	44.4%	44.7%	39.5%	42.6%
HOV-2 Persons	3,235	1,456	2,261	314	451	30.2%	30.3%	29.3%	23.6%	23.7%
HOV-3 or More Persons	2,053	907	1,301	190	209	19.2%	18.9%	16.9%	14.3%	11.0%
Transit (Walk Access)	15	17	63	7	39	0.1%	0.4%	0.8%	0.5%	2.0%
Transit (Drive Access)	3	12	23	1	22	0.0%	0.3%	0.3%	0.1%	1.2%
Walk	374	184	503	127	325	3.5%	3.8%	6.5%	9.5%	17.1%
Bike	36	40	50	165	45	0.3%	0.8%	0.6%	12.4%	2.4%
Other	192	55	60	3	2	1.8%	1.1%	0.8%	0.2%	0.1%
<b>Total</b>	<b>10,695</b>	<b>4,800</b>	<b>7,706</b>	<b>1,333</b>	<b>1,903</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Travel Mode	Weighted Results									
	# Trips					Mode Share				
	"Attraction" Area Type					"Attraction" Area Type				
	Rural/ Ex-Urban	Suburban (less Davis)	Urban (less Sac.Dtn.)	Davis	Sac. Downtown	Rural/ Ex-Urban	Suburban (less Davis)	Urban (Less Sac.Dtn.)	Davis	Sac. Downtown
SOV	1,132,000	366,200	512,500	67,700	123,600	40.0%	40.2%	41.2%	37.4%	41.1%
HOV-2 Persons	815,600	277,100	363,100	43,700	69,600	28.8%	30.4%	29.2%	24.1%	23.1%
HOV-3 or More Persons	684,500	203,700	253,100	27,100	41,600	24.2%	22.3%	20.3%	15.0%	13.8%
Transit (Walk Access)	4,300	2,900	8,300	1,100	5,500	0.2%	0.3%	0.7%	0.6%	1.8%
Transit (Drive Access)	600	2,400	3,000	300	3,700	0.0%	0.3%	0.2%	0.2%	1.2%
Walk	115,300	37,700	84,500	17,300	51,000	4.1%	4.1%	6.8%	9.6%	16.9%
Bike	10,600	6,900	6,800	23,400	5,500	0.4%	0.8%	0.5%	12.9%	1.8%
Other	69,200	14,900	12,800	400	400	2.4%	1.6%	1.0%	0.2%	0.1%
<b>Total</b>	<b>2,832,100</b>	<b>911,800</b>	<b>1,244,100</b>	<b>181,000</b>	<b>300,900</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A28**  
**Main Mode of Tour by Tour Purpose, Survey Results**

# of Tours									
Tour Purpose/Destination									
Main Mode of Tour	Work	Educ.	Pers.Bus/ Other	Shop	Social/ Recreation	Eat Meal Out of Home	Serve Passenger	Work or School Based Subtour	All
Auto Driver	2,942	248	1,790	953	308	533	652	782	8,208
Auto Passenger	154	771	527	297	247	258	110	100	2,464
Public Transit	117	62	27	5	1	1	1	8	222
Walk	50	155	49	58	25	71	47	130	585
Bike	59	67	22	12	3	21	1	25	210
Other	11	175	5	1	2	2	0	11	207
<b>Total</b>	<b>3,333</b>	<b>1,478</b>	<b>2,420</b>	<b>1,326</b>	<b>586</b>	<b>886</b>	<b>811</b>	<b>1,056</b>	<b>11,896</b>

Mode Share									
Tour Purpose/Destination									
Main Mode of Tour	Work	Educ.	Pers.Bus/ Other	Shop	Social/ Recreation	Eat Meal Out of Home	Serve Passenger	Work or School Based Sub-Tours	All
Auto Driver	88.3%	16.8%	74.0%	71.9%	52.6%	60.2%	80.4%	74.1%	69.0%
Auto Passenger	4.6%	52.2%	21.8%	22.4%	42.2%	29.1%	13.6%	9.5%	20.7%
Public Transit	3.5%	4.2%	1.1%	0.4%	0.2%	0.1%	0.1%	0.8%	1.9%
Walk	1.5%	10.5%	2.0%	4.4%	4.3%	8.0%	5.8%	12.3%	4.9%
Bike	1.8%	4.5%	0.9%	0.9%	0.5%	2.4%	0.1%	2.4%	1.8%
Other	0.3%	11.8%	0.2%	0.1%	0.3%	0.2%	0.0%	1.0%	1.7%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A28 (cont.)  
Main Mode of Tour by Tour Purpose, Weighted Results**

# of Tours									
Tour Purpose/Destination									
Main Mode of Tour	Work	Educ.	Pers.Bus/ Other	Shop	Social/ Recreation	Eat Meal Out of Home	Serve Passenger	Work or School Based Subtour	All
Auto Driver	567,600	51,200	328,300	182,300	53,600	99,500	163,500	149,900	1,595,900
Auto Passenger	28,800	195,000	116,000	68,400	52,700	59,000	31,600	20,800	572,300
Public Transit	18,300	12,100	3,000	500	100	100	200	900	35,200
Walk	7,600	40,600	7,200	8,200	3,500	12,000	10,700	24,400	114,100
Bike	8,500	12,500	2,800	1,600	300	3,800	100	4,800	34,400
Other	1,700	54,900	600	100	500	400	0	2,900	61,100
<b>Total</b>	<b>632,500</b>	<b>366,300</b>	<b>457,900</b>	<b>261,100</b>	<b>110,700</b>	<b>174,800</b>	<b>206,100</b>	<b>203,700</b>	<b>2,413,000</b>

Mode Share									
Tour Purpose/Destination									
Main Mode of Tour	Work	Educ.	Pers.Bus/ Other	Shopping	Social/ Recreation	Eat Meal Out of Home	Serve passenger	Work or School Based Sub-Tours	All
Auto Driver	89.7%	14.0%	71.7%	69.8%	48.4%	56.9%	79.3%	73.6%	66.1%
Auto Passenger	4.6%	53.2%	25.3%	26.2%	47.6%	33.8%	15.3%	10.2%	23.7%
Public Transit	2.9%	3.3%	0.7%	0.2%	0.1%	0.1%	0.1%	0.4%	1.5%
Walk	1.2%	11.1%	1.6%	3.1%	3.2%	6.9%	5.2%	12.0%	4.7%
Bike	1.3%	3.4%	0.6%	0.6%	0.3%	2.2%	0.0%	2.4%	1.4%
Other	0.3%	15.0%	0.1%	0.0%	0.5%	0.2%	0.0%	1.4%	2.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A29**

**Main Mode of Work Tour by Gender and Presence of School Age Children in Household**

Main Mode of Tour	Survey Results									
	# of Tours					Mode Share				
	Gender/Children in Household Class					Gender/Children in Household Class				
	Male		Female		All	Male		Female		All
	Kids	No Kids	Kids	No Kids		Male/ No Kids	Male/ Kids	Female/ No Kids	Female/ Kids	
Auto Driver	990	593	860	485	2,928	89.3%	91.1%	86.9%	87.4%	88.6%
Auto Passenger	31	21	58	35	145	2.8%	3.2%	5.9%	6.3%	4.4%
Public Transit	48	13	38	18	117	4.3%	2.0%	3.8%	3.2%	3.5%
Walk	14	4	21	8	47	1.3%	0.6%	2.1%	1.4%	1.4%
Bike	22	17	12	6	57	2.0%	2.6%	1.2%	1.1%	1.7%
Other	4	3	1	3	11	0.4%	0.5%	0.1%	0.5%	0.3%
<b>Total</b>	<b>1,109</b>	<b>651</b>	<b>990</b>	<b>555</b>	<b>3,305</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Main Mode of Tour	Weighted Results									
	# of Tours					Mode Share				
	Gender/Children in Household Class					Gender/Children in Household Class				
	Male		Female		All	Male		Female		All
	Kids	No Kids	Kids	No Kids		Male/ No Kids	Male/ Kids	Female/ No Kids	Female/ Kids	
Auto Driver	170,800	148,700	147,400	108,800	575,700	90.5%	92.3%	88.5%	88.8%	90.1%
Auto Passenger	5,100	5,300	9,500	7,300	27,200	2.7%	3.3%	5.7%	6.0%	4.3%
Public Transit	7,200	2,200	5,400	3,800	18,600	3.8%	1.4%	3.2%	3.1%	2.9%
Walk	2,200	900	2,800	1,400	7,300	1.2%	0.6%	1.7%	1.1%	1.1%
Bike	2,900	3,200	1,400	800	8,300	1.5%	2.0%	0.8%	0.7%	1.3%
Other	500	800	100	400	1,800	0.3%	0.5%	0.1%	0.3%	0.3%
<b>Total</b>	<b>188,700</b>	<b>161,100</b>	<b>166,600</b>	<b>122,500</b>	<b>638,900</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A30**

**Mode of Non-Work Tour by Gender and Presence of School Age Children in Household**

Main Mode of Tour	Survey Results											
	# of Tours						Mode Share					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age Kids	All	Male		Female		School Age Kids	All
Kids	No Kids	Kids	No Kids	Male/ Kids			No Kids	Female/ Kids	No Kids			
Auto Driver	1,848	691	1,525	1,071	131	5,266	82.4%	85.0%	69.8%	82.4%	6.5%	61.5%
Auto Passenger	199	55	495	136	1,425	2,310	8.9%	6.8%	22.6%	10.5%	70.4%	27.0%
Public Transit	29	1	30	4	41	105	1.3%	0.1%	1.4%	0.3%	2.0%	1.2%
Walk	109	55	92	80	199	535	4.9%	6.8%	4.2%	6.2%	9.8%	6.2%
Bike	49	10	39	5	48	151	2.2%	1.2%	1.8%	0.4%	2.4%	1.8%
Other	8	1	5	3	179	196	0.4%	0.1%	0.2%	0.2%	8.8%	2.3%
<b>Total</b>	<b>2,242</b>	<b>813</b>	<b>2,186</b>	<b>1,299</b>	<b>2,023</b>	<b>8,563</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Main Mode of Tour	Weighted Results											
	# of Tours						Mode Share					
	Gender/Children in Household Class						Gender/Children in Household Class					
	Male		Female		School Age Kids	All	Male		Female		School Age Kids	All
Kids	No Kids	Kids	No Kids	Male/ Kids			No Kids	Female/ Kids	No Kids			
Auto Driver	292,200	179,500	243,600	302,400	30,600	1,048,300	82.4%	85.0%	71.1%	84.0%	5.6%	57.8%
Auto Passenger	33,300	17,600	76,500	38,200	388,400	554,000	9.4%	8.3%	22.3%	10.6%	71.0%	30.5%
Public Transit	4,900	200	3,300	500	8,400	17,300	1.4%	0.1%	1.0%	0.1%	1.5%	1.0%
Walk	15,200	12,000	11,500	17,200	52,700	108,600	4.3%	5.7%	3.4%	4.8%	9.6%	6.0%
Bike	7,800	1,500	7,100	900	9,200	26,500	2.2%	0.7%	2.1%	0.2%	1.7%	1.5%
Other	1,200	300	600	900	57,400	60,400	0.3%	0.1%	0.2%	0.2%	10.5%	3.3%
<b>Total</b>	<b>354,600</b>	<b>211,100</b>	<b>342,600</b>	<b>360,100</b>	<b>546,700</b>	<b>1,815,100</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A31**  
**Number of Modes Used During Tour**

Number of Modes	Survey Results		Weighted Results	
	# Tours	%	# Tours	%
1	10,986	92.4%	2,260,400	91.9%
2	722	6.1%	155,700	6.3%
3	178	1.5%	42,300	1.7%
4	10	0.1%	1,600	0.1%
<b>Total</b>	11,896	100.0%	2,460,100	100.0%

**Table A32**  
**Reported Times of Travel by Trip Purpose (Survey Results)**

Hour Starting At...	Trip Purpose								Time Period Grouping	
	Person Hours of Travel During Hour				% of Total By Purpose				Period Name	% Travel During Period
	Home-Work	All Home-Non-Work	Non-Home-Based	All	Home-Work	All Home-Non-Work	Non-Home-Based	All		
12:00 AM	7	14	2	23	0.3%	0.3%	0.1%	0.2%	Late Evening/ Early Morning Period (Part 1)	23.9%
1:00 AM	4	7	3	14	0.2%	0.2%	0.1%	0.2%		
2:00 AM	2	4	1	8	0.1%	0.1%	0.1%	0.1%		
3:00 AM	6	1	1	9	0.3%	0.0%	0.0%	0.1%		
4:00 AM	33	9	4	45	1.4%	0.2%	0.1%	0.5%		
5:00 AM	97	31	10	138	4.0%	0.8%	0.4%	1.5%		
6:00 AM	256	93	40	390	10.6%	2.3%	1.4%	4.2%	AM Peak Period	20.3%
7:00 AM	378	330	120	829	15.7%	8.0%	4.3%	8.9%		
8:00 AM	229	267	160	656	9.5%	6.5%	5.7%	7.0%		
9:00 AM	84	187	141	412	3.5%	4.6%	5.1%	4.4%	Mid-Day Period	28.7%
10:00 AM	43	217	174	434	1.8%	5.3%	6.2%	4.7%		
11:00 AM	41	224	241	506	1.7%	5.5%	8.6%	5.4%		
12:00 PM	64	203	282	549	2.6%	4.9%	10.1%	5.9%		
1:00 PM	63	197	249	510	2.6%	4.8%	8.9%	5.5%		
2:00 PM	93	325	257	676	3.9%	7.9%	9.2%	7.3%	PM Peak Period	27.0%
3:00 PM	153	384	290	827	6.3%	9.4%	10.4%	8.9%		
4:00 PM	233	318	252	803	9.6%	7.7%	9.0%	8.6%		
5:00 PM	314	336	239	889	13.0%	8.2%	8.5%	9.5%		
6:00 PM	146	318	132	596	6.0%	7.8%	4.7%	6.4%	Late Evening/ Early Morning Period (Part 2)	Included in Part 1
7:00 PM	50	218	77	345	2.1%	5.3%	2.8%	3.7%		
8:00 PM	33	177	54	263	1.4%	4.3%	1.9%	2.8%		
9:00 PM	42	141	35	219	1.7%	3.4%	1.3%	2.3%		
10:00 PM	33	79	23	135	1.4%	1.9%	0.8%	1.4%		
11:00 PM	14	23	7	44	0.6%	0.6%	0.3%	0.5%		
<b>Total Daily</b>	2,418	4,104	2,796	9,318	100.0%	100.0%	100.0%	100.0%	Daily	100.0%

**Table A33**  
**Reported Times of Travel by Trip Purpose (Weighted Results)**

Hour Starting At...	Trip Purpose								Time Period Groupings	
	Person Hours of Travel During Hour				% of Total By Purpose				Period Name	% Travel During Period
	Home-Work	All Home-Non-Work	Non-Home-Based	All	Home-Work	All Home-Non-Work	Non-Home-Based	All		
12:00 AM	1,279	3,261	388	4,929	0.3%	0.4%	0.1%	0.3%	Late Evening/ Early Morning Period (Part 1)	24.2%
1:00 AM	755	1,392	591	2,738	0.2%	0.2%	0.1%	0.1%		
2:00 AM	329	731	303	1,363	0.1%	0.1%	0.1%	0.1%		
3:00 AM	1,759	220	168	2,147	0.4%	0.0%	0.0%	0.1%		
4:00 AM	7,031	1,923	830	9,784	1.5%	0.2%	0.1%	0.5%		
5:00 AM	20,159	6,764	2,133	29,056	4.3%	0.8%	0.4%	1.5%		
6:00 AM	54,206	19,350	8,317	81,872	11.4%	2.2%	1.5%	4.3%	AM Peak Period	20.7%
7:00 AM	73,190	78,124	25,868	177,182	15.5%	9.1%	4.6%	9.4%		
8:00 AM	43,139	55,672	32,796	131,607	9.1%	6.5%	5.9%	7.0%		
9:00 AM	15,814	39,099	28,043	82,955	3.3%	4.5%	5.0%	4.4%	Mid-Day Period	28.0%
10:00 AM	8,740	42,711	33,156	84,608	1.8%	5.0%	5.9%	4.5%		
11:00 AM	7,318	45,675	47,008	100,001	1.5%	5.3%	8.4%	5.3%		
12:00 PM	12,328	39,709	54,791	106,828	2.6%	4.6%	9.8%	5.6%		
1:00 PM	11,547	38,504	47,873	97,925	2.4%	4.5%	8.6%	5.2%		
2:00 PM	18,132	68,541	53,872	140,545	3.8%	8.0%	9.7%	7.4%	PM Peak Period	27.1%
3:00 PM	30,097	88,483	58,078	176,658	6.4%	10.3%	10.4%	9.3%		
4:00 PM	45,507	63,971	51,522	161,000	9.6%	7.4%	9.2%	8.5%		
5:00 PM	60,563	67,068	47,784	175,414	12.8%	7.8%	8.6%	9.3%	Late Evening/ Early Morning Period (Part 2)	Included in Part 1
6:00 PM	28,088	67,061	26,316	121,465	5.9%	7.8%	4.7%	6.4%		
7:00 PM	9,407	45,794	14,758	69,959	2.0%	5.3%	2.6%	3.7%		
8:00 PM	6,300	38,435	10,253	54,988	1.3%	4.5%	1.8%	2.9%		
9:00 PM	8,088	28,971	6,667	43,726	1.7%	3.4%	1.2%	2.3%		
10:00 PM	6,801	15,253	4,952	27,006	1.4%	1.8%	0.9%	1.4%		
11:00 PM	3,129	4,822	1,297	9,248	0.7%	0.6%	0.2%	0.5%	Daily	100.0%
<b>Total Daily</b>	473,704	861,535	557,764	1,893,003	100.0%	100.0%	100.0%	100.0%		

**Table A34**  
**Reported Origin and Destination Departure Times of Travel For Work Tours**

Survey Results														
Time Leaving Tour Origin (Home)	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
Early AM (4:00-6:59AM)	3	8	201	709	92	6	1,019	0.1%	0.2%	6.0%	21.3%	2.8%	0.2%	30.6%
AM Peak Period (7:00AM -9:59AM)	0	16	293	1,193	363	22	1,887	0.0%	0.5%	8.8%	35.8%	10.9%	0.7%	56.6%
Midday Period (10:00AM-2:59PM)	0	0	61	85	93	61	300	0.0%	0.0%	1.8%	2.6%	2.8%	1.8%	9.0%
PM Peak Period (3:00PM-5:59PM)	0	0	0	11	53	30	94	0.0%	0.0%	0.0%	0.3%	1.6%	0.9%	2.8%
Evening (6:00PM-9:59PM)	0	0	0	0	8	7	15	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.5%
Late Evening (10:00PM-3:59AM)	0	1	10	4	2	1	18	0.0%	0.0%	0.3%	0.1%	0.1%	0.0%	0.5%
All	3	25	565	2,002	611	127	3,333	0.1%	0.8%	17.0%	60.1%	18.3%	3.8%	100.0%

Weighted Results														
Time Leaving Tour Origin (Home)	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
Early AM (4:00-6:59AM)	700	2,100	40,600	144,100	17,100	1,600	206,300	0.1%	0.3%	6.4%	22.8%	2.7%	0.3%	32.6%
AM Peak Period (7:00AM -9:59AM)	0	2,800	55,800	215,400	66,800	4,300	345,200	0.0%	0.4%	8.8%	34.1%	10.6%	0.7%	54.6%
Midday Period (10:00AM-2:59PM)	0	0	11,000	15,900	17,100	12,500	56,500	0.0%	0.0%	1.7%	2.5%	2.7%	2.0%	8.9%
PM Peak Period (3:00PM-5:59PM)	0	0	0	1,800	10,200	5,500	17,500	0.0%	0.0%	0.0%	0.3%	1.6%	0.9%	2.8%
Evening (6:00PM-9:59PM)	0	0	0	0	1,800	1,500	3,300	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.5%
Late Evening (10:00PM-3:59AM)	0	200	1,900	1,000	300	200	3,700	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	0.6%
All	700	5,200	109,400	378,300	113,300	25,600	632,400	0.1%	0.8%	17.3%	59.8%	17.9%	4.0%	100.0%

**Table A35**  
**Reported Origin and Destination Departure Times of Travel For Non-Work Tours**

	Survey Results													
	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
<b>Time Leaving Tour Origin (Home)</b>														
<b>Early AM (4:00-6:59AM)</b>	33	61	205	433	71	7	810	0.4%	0.7%	2.4%	5.1%	0.8%	0.1%	9.5%
<b>AM Peak Period (7:00AM -9:59AM)</b>	0	451	1,709	1,774	356	36	4,326	0.0%	5.3%	20.0%	20.7%	4.2%	0.4%	50.5%
<b>Midday Period (10:00AM-2:59PM)</b>	0	0	1,491	631	107	47	2,276	0.0%	0.0%	17.4%	7.4%	1.2%	0.5%	26.6%
<b>PM Peak Period (3:00PM-5:59PM)</b>	0	0	0	393	286	58	737	0.0%	0.0%	0.0%	4.6%	3.3%	0.7%	8.6%
<b>Evening (6:00PM-9:59PM)</b>	0	0	0	0	334	62	396	0.0%	0.0%	0.0%	0.0%	3.9%	0.7%	4.6%
<b>Late Evening (10:00PM-3:59AM)</b>	0	1	9	3	1	4	18	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%
<b>All</b>	33	513	3,414	3,234	1,155	214	8,563	0.4%	6.0%	39.9%	37.8%	13.5%	2.5%	100.0%

	Weighted Results													
	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
<b>Time Leaving Tour Origin (Home)</b>														
<b>Early AM (4:00-6:59AM)</b>	5,700	10,700	43,200	93,600	13,400	1,900	168,500	0.3%	0.6%	2.4%	5.3%	0.8%	0.1%	9.5%
<b>AM Peak Period (7:00AM -9:59AM)</b>	0	88,300	391,600	383,600	65,300	6,900	935,700	0.0%	5.0%	22.0%	21.5%	3.7%	0.4%	52.5%
<b>Midday Period (10:00AM-2:59PM)</b>	0	0	291,900	124,400	20,100	9,000	445,400	0.0%	0.0%	16.4%	7.0%	1.1%	0.5%	25.0%
<b>PM Peak Period (3:00PM-5:59PM)</b>	0	0	0	74,400	57,000	10,600	142,000	0.0%	0.0%	0.0%	4.2%	3.2%	0.6%	8.0%
<b>Evening (6:00PM-9:59PM)</b>	0	0	0	0	73,800	11,600	85,400	0.0%	0.0%	0.0%	0.0%	4.1%	0.7%	4.8%
<b>Late Evening (10:00PM-3:59AM)</b>	0	200	1,700	800	100	700	3,600	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%
<b>All</b>	5,700	99,200	728,500	676,900	229,600	40,800	1,780,600	0.3%	5.6%	40.9%	38.0%	12.9%	2.3%	100.0%

**Table A36**  
**Reported Origin and Destination Departure Times of Travel For All Tours**

	Survey Results													
	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
<b>Time Leaving Tour Origin (Home)</b>														
<b>Early AM (4:00-6:59AM)</b>	36	69	406	1,142	163	13	1,829	0.3%	0.6%	3.4%	9.6%	1.4%	0.1%	15.4%
<b>AM Peak Period (7:00AM -9:59AM)</b>	0	467	2,002	2,967	719	58	6,213	0.0%	3.9%	16.8%	24.9%	6.0%	0.5%	52.2%
<b>Midday Period (10:00AM-2:59PM)</b>	0	0	1,552	716	200	108	2,576	0.0%	0.0%	13.0%	6.0%	1.7%	0.9%	21.7%
<b>PM Peak Period (3:00PM-5:59PM)</b>	0	0	0	404	339	88	831	0.0%	0.0%	0.0%	3.4%	2.8%	0.7%	7.0%
<b>Evening (6:00PM-9:59PM)</b>	0	0	0	0	342	69	411	0.0%	0.0%	0.0%	0.0%	2.9%	0.6%	3.5%
<b>Late Evening (10:00PM-3:59AM)</b>	0	2	19	7	3	5	36	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.3%
<b>All</b>	36	538	3,979	5,236	1,766	341	11,896	0.3%	4.5%	33.4%	44.0%	14.8%	2.9%	100.0%

	Weighted Results													
	# of Tours							% of Total Tours						
	Time Leaving Tour Destination (Work)							Time Leaving Tour Destination (Work)						
	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All	Early	AM Peak	Midday	PM Peak	Eve.	Late Eve.	All
<b>Time Leaving Tour Origin (Home)</b>														
<b>Early AM (4:00-6:59AM)</b>	6,400	12,800	83,800	237,700	30,500	3,500	374,800	0.3%	0.5%	3.5%	9.9%	1.3%	0.1%	15.5%
<b>AM Peak Period (7:00AM -9:59AM)</b>	0	91,100	447,400	599,000	132,100	11,200	1,280,900	0.0%	3.8%	18.5%	24.8%	5.5%	0.5%	53.1%
<b>Midday Period (10:00AM-2:59PM)</b>	0	0	302,900	140,300	37,200	21,500	501,900	0.0%	0.0%	12.6%	5.8%	1.5%	0.9%	20.8%
<b>PM Peak Period (3:00PM-5:59PM)</b>	0	0	0	76,200	67,200	16,100	159,500	0.0%	0.0%	0.0%	3.2%	2.8%	0.7%	6.6%
<b>Evening (6:00PM-9:59PM)</b>	0	0	0	0	75,600	13,100	88,700	0.0%	0.0%	0.0%	0.0%	3.1%	0.5%	3.7%
<b>Late Evening (10:00PM-3:59AM)</b>	0	400	3,600	1,800	400	900	7,300	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.3%
<b>All</b>	6,400	104,400	837,900	1,055,200	342,900	66,400	2,413,000	0.3%	4.3%	34.7%	43.7%	14.2%	2.8%	100.0%

**Table A37**  
**Reported Trip Duration by Trip Purpose**

Trip Purpose	Survey Results								
	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
Home-Work	6,086	18%	2,438	26%	24	19	5	20	60
Home-Shop	3,393	10%	751	8%	13	11	3	10	31
Home-Other	10,908	33%	2,932	31%	16	20	3	11	40
Work-Other	3,947	12%	1,174	12%	18	18	3	15	47
Other-Other	6,780	21%	1,646	17%	15	17	2	10	38
Home-School	1,923	6%	493	5%	15	13	3	10	40
<b>Total</b>	<b>33,037</b>	<b>100%</b>	<b>9,434</b>	<b>100%</b>	<b>17</b>	<b>18</b>	<b>3</b>	<b>13</b>	<b>45</b>

Trip Purpose	Weighted Results								
	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
Home-Work	1,153,100	17%	478,100	25%	25	n/a	n/a	n/a	n/a
Home-Shop	650,900	10%	147,700	8%	14	n/a	n/a	n/a	n/a
Home-Other	2,254,500	34%	592,800	31%	16	n/a	n/a	n/a	n/a
Work-Other	760,900	11%	231,200	12%	18	n/a	n/a	n/a	n/a
Other-Other	1,391,200	21%	332,000	17%	14	n/a	n/a	n/a	n/a
Home-School	516,700	8%	134,900	7%	16	n/a	n/a	n/a	n/a
<b>Total</b>	<b>6,727,300</b>	<b>100%</b>	<b>1,916,700</b>	<b>100%</b>	<b>17</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

**Table A38**  
**Reported Trip Duration by Mode of Travel**

Travel Mode	Survey Results								
	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
SOV	16,848	51%	5,074	54%	18	18	4	15	45
HOV-2 Persons	8,350	25%	2,186	23%	16	16	3	11	40
HOV-3 or More Persons	4,879	15%	1,255	13%	15	22	3	10	35
Transit (Walk Access)	284	1%	191	2%	40	26	10	35	91
Transit (Drive Access)	135	0%	102	1%	45	32	9	40	110
Walk	1,677	5%	323	3%	12	11	1	10	30
Bike	536	2%	134	1%	15	15	4	10	45
Other	328	1%	169	2%	31	20	7	30	63
<b>Total</b>	<b>33,037</b>	<b>100%</b>	<b>9,434</b>	<b>100%</b>	<b>17</b>	<b>18</b>	<b>3</b>	<b>13</b>	<b>45</b>

Travel Mode	Weighted Results								
	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
SOV	3,198,349	48%	985,076	51%	18	n/a	n/a	n/a	n/a
HOV-2 Persons	1,683,709	25%	431,085	22%	15	n/a	n/a	n/a	n/a
HOV-3 or More Persons	1,259,160	19%	315,711	16%	15	n/a	n/a	n/a	n/a
Transit (Walk Access)	43,884	1%	29,845	2%	41	n/a	n/a	n/a	n/a
Transit (Drive Access)	22,726	0%	17,789	1%	47	n/a	n/a	n/a	n/a
Walk	330,565	5%	63,609	3%	12	n/a	n/a	n/a	n/a
Bike	87,830	1%	21,171	1%	14	n/a	n/a	n/a	n/a
Other	101,090	2%	52,445	3%	31	n/a	n/a	n/a	n/a
<b>Total</b>	<b>6,727,313</b>	<b>100%</b>	<b>1,916,730</b>	<b>100%</b>	<b>17</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

**Table A39**  
**Reported Trip Duration by Location of Household**

Survey Results									
Household Area Type	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
Rural	5,252	16%	1,736	18%	20	20	3	15	57
Ex Urban	8,491	26%	2,420	26%	17	19	3	11	45
Suburban	8,350	25%	2,283	24%	16	19	3	12	40
Urban	10,921	33%	2,991	32%	16	16	3	14	40
<b>Total</b>	<b>33,014</b>	<b>100%</b>	<b>9,431</b>	<b>100%</b>	<b>17</b>	<b>18</b>	<b>3</b>	<b>13</b>	<b>45</b>

Weighted Results									
Household Area Type	Cumulative Trip Results				Trip Length Statistics (Minutes)				
	# Trips	%	Reported Travel Duration (Hours)	%	Average	Std. Deviation	5 %-tile	Median	95 %-tile
Rural	1,472,500	22%	470,500	25%	19	n/a	n/a	n/a	n/a
Ex Urban	2,364,100	35%	657,700	34%	17	n/a	n/a	n/a	n/a
Suburban	1,374,800	20%	380,600	20%	17	n/a	n/a	n/a	n/a
Urban	1,516,000	23%	408,100	21%	16	n/a	n/a	n/a	n/a
<b>Total</b>	<b>6,727,400</b>	<b>100%</b>	<b>1,916,900</b>	<b>100%</b>	<b>17</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

**Table A40**  
**Reported Travel Duration per Person and Household**

Household Size	Survey Results												
	Breakdown of Households and Persons				Total Reported Travel Duration (Hours)			Travel Duration Per Household (Minutes)			Travel Duration Per Person (Minutes)		
	# HH	%	# Persons	%	Home-Work	Non-Work	Total	Home-Work	Non-Work	Total	Home-Work	Non-Work	Total
1	1,008	26%	1,008	11%	262	814	1,076	16	48	64	16	48	64
2	1,693	43%	3,386	37%	925	2,565	3,490	33	91	124	16	45	62
3	580	15%	1,740	19%	564	1,236	1,800	58	128	186	19	43	62
4	436	11%	1,744	19%	447	1,448	1,895	62	199	261	15	50	65
5	138	4%	690	8%	131	569	699	57	247	304	11	49	61
6+	86	2%	562	6%	109	361	470	76	252	328	12	39	50
<b>Total</b>	3,941	100%	9,130	100%	2,437	6,994	9,431	37	106	144	16	46	62

Household Size	Weighted Results												
	Breakdown of Households and Persons				Total Reported Travel Duration (Hours)			Travel Duration Per Household (Minutes)			Travel Duration Per Person (Minutes)		
	# HH	%	# Persons	%	Home-Work	Non-Work	Total	Home-Work	Non-Work	Total	Home-Work	Non-Work	Total
1	155,500	22%	155,500	9%	47,500	125,800	173,300	18	49	67	18	49	67
2	234,700	34%	469,400	26%	142,100	360,600	502,700	36	92	129	18	46	64
3	122,600	18%	367,900	20%	113,100	275,700	388,800	55	135	190	18	45	63
4	119,700	17%	478,800	26%	114,400	403,800	518,200	57	202	260	14	51	65
5	41,100	6%	205,300	11%	34,000	166,600	200,600	50	243	293	10	49	59
6+	22,600	3%	147,400	8%	24,700	96,500	121,200	66	256	322	10	39	49
<b>Total</b>	696,200	100%	1,824,300	100%	475,800	1,429,000	1,904,800	41	123	164	16	47	63

**Table A41**  
**Reported Travel Duration per Person by Person Type**

Person Type	Survey Results							
	# Persons	%	Total Travel Duration (Hours)			Travel Duration Per Person (Minutes)		
			Home-Work	Non-Work	Total	Home-Work	Non-Work	Total
<b>Kid</b>	1,737	19%	21	1,301	1,322	1	45	46
<b>Male Worker</b>	2,361	26%	1,377	1,722	3,098	35	44	79
<b>Female Worker</b>	2,063	23%	920	1,550	2,471	27	45	72
<b>Male Non-Worker</b>	459	5%	56	409	465	7	53	61
<b>Female Non-Worker</b>	797	9%	50	690	740	4	52	56
<b>Senior</b>	1,698	19%	11	1,310	1,321	0	46	47
<b>Uncodable</b>	15	0%	2	12	14	6	49	55
<b>Total</b>	9,130	100%	2,437	6,994	9,431	16	46	62

**Table A42**  
**Likelihood of Worker Having Worksite Amenities**

Education Level of Worker	Likelihood of Having...					
	Flextime	On-Site Cafeteria	On-Site Childcare	On-Site Shower	Access to Fleet Vehicle	Bike Locker
11th Grade or Less	22%	17%	3%	5%	6%	9%
High School Graduate	26%	20%	6%	13%	14%	13%
2 Years College or Assoc. Degree	29%	24%	5%	17%	16%	16%
4 Years College or Bach. Degree	35%	31%	9%	21%	17%	19%
Post Graduate	41%	40%	12%	25%	20%	25%
Other	32%	18%	0%	9%	18%	9%
Didn't Know/Refused	14%	13%	1%	4%	7%	6%
All	31%	27%	7%	18%	16%	17%

**Table A43**  
**Differences in Normal Mode of Commute by Presence of Worksite Amenity**

Mode of Travel to Work	Worksite Amenity								
	Flextime			On-Site Cafeteria			On-Site Childcare		
	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.
Drive Alone	85.3%	79.6%	-5.7%	85.0%	79.5%	-5.5%	84.3%	72.1%	-12.2%
Carpool (2 Person)	2.9%	6.0%	3.1%	2.8%	6.9%	4.1%	2.1%	24.9%	22.7%
Carpool (3+ Person)	5.6%	8.0%	2.4%	5.8%	7.9%	2.2%	5.9%	12.1%	6.1%
Vanpool	0.2%	0.6%	0.4%	0.2%	0.7%	0.5%	0.2%	4.2%	4.0%
Transit (Walk Access)	0.9%	0.5%	-0.3%	0.8%	0.7%	-0.1%	0.7%	1.0%	0.3%
Transit (Drive Access)	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.4%	0.3%
Walk	0.3%	0.5%	0.1%	0.2%	0.7%	0.5%	0.2%	2.1%	1.8%
Bike	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.7%	0.7%
Other	1.1%	2.6%	1.5%	1.3%	2.1%	0.7%	1.5%	2.4%	0.9%
	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	

Percent of Workers:                      69%      31%                      73%      27%                      93%      7%

Mode of Travel to Work	Worksite Amenity								
	On-Site Shower			Bike Locker			Access to Fleet Vehicle		
	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.
Drive Alone	84.0%	81.0%	-3.0%	85.5%	74.4%	-11.0%	84.3%	79.1%	-5.2%
Carpool (2 Person)	2.4%	10.9%	8.5%	2.5%	9.8%	7.3%	0.0%	0.0%	0.0%
Carpool (3+ Person)	6.1%	7.4%	1.3%	5.8%	9.0%	3.2%	6.1%	7.6%	1.5%
Vanpool	0.2%	1.0%	0.8%	0.2%	1.2%	1.0%	0.0%	0.0%	0.0%
Transit (Walk Access)	0.8%	0.5%	-0.3%	0.7%	1.2%	0.5%	0.8%	0.6%	-0.2%
Transit (Drive Access)	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%
Walk	0.3%	0.5%	0.2%	0.2%	1.1%	0.8%	0.2%	1.0%	0.8%
Bike	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%
Other	1.5%	1.7%	0.2%	1.4%	2.2%	0.8%	1.4%	2.3%	0.9%
	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	

Percent of Workers:                      82%      18%                      82%      18%                      84%      16%

**Table A44**  
**Travel Subsidies at Work Location**

Worksite Area Type	Survey Results									
	Number of Workers w/ Subsidy					Number of Workers w/ Subsidy				
	Travel Subsidy Type					Travel Subsidy Type				
	Transit Subsidy	Vanpool Subsidy	None	Didn't Know/ Refused	Total	Transit Subsidy	Vanpool Subsidy	None	Didn't Know/ Refused	Total
Rural	15	6	412	61	494	3%	13%	14%	13%	13%
Exurban	36	6	807	120	969	8%	13%	27%	26%	25%
Suburban	44	14	620	74	752	9%	30%	21%	16%	19%
Urban	385	20	1119	212	1736	80%	43%	38%	45%	44%
<b>Total</b>	480	46	2958	467	3951	100%	100%	100%	100%	100%

**Table A45**  
**Normal Mode of Travel to Work by Transit Subsidy**

Normal Mode of Commute	Survey Results									
	Number of Workers w/ Subsidy					Percent of Workers w/ Subsidy				
	Travel Subsidy Type					Travel Subsidy Type				
	Transit Subsidy	Vanpool Subsidy	None	Didn't Know/Ref used	Total	Transit Subsidy	Vanpool Subsidy	None	Didn't Know/Ref used	Total
Drive Alone	307	38	2,726	367	3,438	63.2%	76.0%	86.5%	84.6%	83.4%
Carpool (2 Person)	43	2	188	29	262	8.8%	4.0%	6.0%	6.7%	6.4%
Carpool (3+ Person)	5	1	21	4	31	1.0%	2.0%	0.7%	0.9%	0.8%
Vanpool	1	4	9	1	15	0.2%	8.0%	0.3%	0.2%	0.4%
Transit (Walk Access)	39	1	18	6	64	8.0%	2.0%	0.6%	1.4%	1.6%
Transit (Drive Access)	44	1	25	3	73	9.1%	2.0%	0.8%	0.7%	1.8%
Walk	18	1	80	16	115	3.7%	2.0%	2.5%	3.7%	2.8%
Bike	23	1	71	7	102	4.7%	2.0%	2.3%	1.6%	2.5%
Other	6	1	12	1	20	1.2%	2.0%	0.4%	0.2%	0.5%
Didn't Know/Refused	0	0	14	81	95	n/a	n/a	n/a	n/a	n/a
<b>Total</b>	<b>486</b>	<b>50</b>	<b>3,164</b>	<b>515</b>	<b>4,215</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table A46**  
**Worker Paid Parking by Worksite Area Type**

Worksite Area Type	Survey Results					
	Number of Workers			Percent of Workers		
	Worker Paid Parking?			Worker Paid Parking?		
	No	Yes	Total	No	Yes	Total
Rural	552	6	558	14%	2%	13%
Exurban	1,038	10	1,048	27%	3%	25%
Suburban	743	69	812	19%	18%	19%
Urban	1,516	303	1,819	39%	78%	43%
<b>Total</b>	<b>3,849</b>	<b>388</b>	<b>4,237</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Percent w/ Wkr. Pd. Pkg.</b>	91%	9%				

**Table A47**  
**Normal Mode of Commute by Worker Paid Parking**

Normal Mode of Commute	Survey Results					
	Number of Workers			Percent of Workers		
	Worker Paid Parking?			Worker Paid Parking		
	No	Yes	Total	No	Yes	Diff.
Drive Alone	3,184	254	3,438	85.4%	65.0%	-20.4%
Carpool (2 Person)	223	39	262	6.0%	10.0%	4.0%
Carpool (3+ Person)	26	5	31	0.7%	1.3%	0.6%
Vanpool	11	4	15	0.3%	1.0%	0.7%
Transit (Walk Access)	44	20	64	1.2%	5.1%	3.9%
Transit (Drive Access)	47	26	73	1.3%	6.6%	5.4%
Walk	107	8	115	2.9%	2.0%	-0.8%
Bike	73	29	102	2.0%	7.4%	5.5%
Other	14	6	20	0.4%	1.5%	1.2%
Didn't Know/Refused	93	2	95	n/a	n/a	n/a
<b>Total</b>	<b>3,822</b>	<b>393</b>	<b>4,215</b>	<b>100.0%</b>	<b>100.0%</b>	
<b>Percent w/Wkr.Pd.Pkg.</b>	<b>91%</b>	<b>9%</b>				