

# NHTS



## Highlights of the 2001 National Household Travel Survey

U.S. Department of  
Transportation



Bureau of Transportation  
Statistics



# NHTS

## Highlights of the 2001 National Household Travel Survey

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# Executive Summary

## BACKGROUND

The 2001 National Household Travel Survey (NHTS) is the first comprehensive household survey of both daily and long-distance travel, allowing for analysis of the full continuum of personal travel by Americans. This report highlights the breadth of topics covered by the survey, the different kinds of analyses possible using the data gathered, and the unique features of these data.

In addition to providing the first comprehensive look at travel by Americans, the 2001 NHTS also incorporates additional enhancements to the previous survey designs (see box A). For example, long-distance travel was expanded to include trips as short as 50 miles and, for the first time, includes trips made for the purpose of commuting to work—often overlooked segments of personal long-distance travel. The survey also introduces the first look at the daily travel characteristics of children under the age of five years.

### Box A

#### About the 2001 NHTS

This survey updates information gathered by two prior survey series—the Nationwide Personal Transportation Survey (NPTS) conducted in 1969, 1977, 1983, 1990, and 1995 and the American Travel Survey (ATS) conducted in 1977 and 1995. The final NPTS, sponsored by the Federal Highway Administration, primarily focused on daily travel, with an abbreviated long-distance component. The 1995 ATS, sponsored by the Bureau of Transportation Statistics, provided a detailed look at long-distance travel defined as trips of 100 miles or more from home.

Furthermore, specific questions and probes were added to capture biking and walking trips—trips thought to be underrepresented in prior surveys. As a result of the changes to trip definitions, population coverage, and survey methodology, a limited amount of direct comparisons can be made between data from the 1995 surveys and the data from the 2001 NHTS, as presented in this report.

Within the 2001 NHTS, daily and long-distance travel do not have the same definition. While each includes travel by all modes and for all purposes, trips captured in daily travel are reported for one specific day referred to as the “travel day.” Travel made from one address to another is reported as a separate trip; therefore, a trip does not have to originate from home and, in fact, home-to-home journeys made during the day are reported as multiple trips with varying originating locations. Conversely, long-distance trips are defined as trips of at least 50 miles to the furthest destination—originating from home—and include the return component of the trip as well as any overnight stops and stops made to change transportation modes. Long-distance trips were collected during a specific 4-week period, known as the “travel period.” It is also important to note that trips of 50 miles or more away from home made during the travel day are potentially included both in daily and long-distance travel; however, the way in which

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**NOTE:** Tables with an “A” prefix (Tables A1, A2, etc.) can be found in Appendix A.

the trips are reported differs in definition, details collected, and estimated distance traveled.

The objective of this report is to answer the questions of *who* is traveling in the nation, and *how, why, when* and *where* they are traveling—both on a daily basis and on longer distance trips. Consequently, this report is divided into three main areas:

- travel-related characteristics of households and individuals in the United States,
- characteristics of daily trips taken in the nation, and
- characteristics of long-distance trips made domestically (and to other countries).

## RESULTS

The 2001 NHTS data demonstrate a widespread prevalence of drivers and personal vehicles in the nation. Nationwide, about 88 percent of persons 15 years or older are reported as drivers (table A-1). While the mean number of vehicles owned or available to U.S. households is 1.9 personal vehicles, on average those households have 1.8 drivers (table A-2). Only 8 percent of households report not having a vehicle available for regular use (table A-4). Not surprisingly, the dominant mode of transportation for both daily and long-distance travel is by personal vehicle. The majority of daily trips, 87 percent, were taken by personal vehicle (table A-10). Similarly, 90 percent of long-distance trips of 50 miles or more away from home were made in personal vehicles (table 4 on p. 14).

### Daily Travel

Results from the 2001 NHTS show that daily travel in the United States totaled about 4 trillion miles (table A-8), an average of 14,500 miles per person annually. On a daily basis, Americans averaged 4 trips per day, totaling on average 40 miles of travel—most of it (35 miles) in a personal vehicle. While there were no significant differences between men and women in the number of daily trips taken,<sup>1</sup> there were differences based on age. The total number of trips peaked among the

traditional working population ages 25 to 54 (4.6 daily trips) (table A-9). Children under the age of five made the fewest daily trips, but still averaged 3.2 trips per day. Individuals 65 years or older averaged 3.4 trips per day.

While the majority of daily trips were taken in personal vehicles, walking trips accounted for the next highest percentage at almost 9 percent of all trips (table A-10). Trips by transit and by school bus each represented approximately 2 percent of daily trips taken in 2001.

The largest portion of daily trips, 45 percent, was made for family and personal reasons, such as shopping and running errands (table A-11). Another 27 percent were made for social and recreational purposes, and 15 percent were made for commuting to work.

### Long-Distance Travel

In 2001, Americans took about 2.6 billion long-distance trips of 50 miles or more, totaling over 1.3 trillion personal miles of long-distance travel (table A-22). The vast majority of these trips (98 percent) were to destinations within the United States, with 62 percent of all long-distance trips to destinations within the traveler's home state (table 5 on p. 15).

The majority of long-distance travel was made by men, accounting for 57 percent of all long-distance trips (table 3 on p. 12). Over half, or 57 percent, of all long-distance trips were taken by persons living in households with total household income of \$50,000 or more (table A-19). Nearly two-thirds of all long-distance trips were made by persons aged 25 to 64 (table A-21).

Approximately 9 out of 10 long-distance trips were taken by personal vehicle. Trips by airplane accounted for the largest mode share of the remaining trips, representing over 7 percent of all long-distance trips in 2001. Travel by bus accounted for 2 percent of these trips, and train trips represented less than 1 percent of long-distance travel. Not surprisingly, the mode of transportation was strongly influenced by the distance of the trip. Personal vehicles were used for over 97 percent of all trips of less than 300 roundtrip miles, while nearly three-quarters of trips over 2,000 roundtrip miles were made by airplane (table 4 on p. 14).

<sup>1</sup> Although there are no significant differences between men and women in number of daily trips taken, differences do exist in the length and duration of trip.

Trips taken for pleasure purposes—vacations, sightseeing trips, visiting friends and relatives, outdoor recreation, etc.—represented over half (56 percent) of all long-distance trips taken in 2001 (figure 12, p. 14, table A-24a). Meanwhile, business trips to attend conferences or meetings accounted for 16 percent of long-distance travel,

and commuting trips to work represented 13 percent of all long-distance travel. Trips made for personal reasons or family business represented 13 percent of these trips.

The remainder of the report takes a detailed look at traveler characteristics and the characteristics of long-distance and daily travel.



# Highlights from the 2001 National Household Travel Survey

## INTRODUCTION

### Passenger Travel in the United States

Almost every person in the United States is affected in some way by the quality of our transportation infrastructure. A safe and efficient transportation system can further national interests, support economic well-being, and enhance the quality of life for persons in the country. To achieve this, the Department of Transportation has identified five strategic objectives related to safety, mobility, global connectivity, environmental stewardship, and security.<sup>2</sup> A few of these are dominant themes in the arena of passenger travel. For example, the promotion of public health and safety by working towards the elimination of transportation-related deaths and injuries directly impacts the condition under which people can move around their neighborhoods and across the country. Similarly, the shaping of an accessible, affordable, and reliable transportation system for all people and regions affects the quality of life for all people in the nation.

In order to attain the objectives outlined by the Department and the needs of transportation planners, better data are needed to understand the current situation and measure changes over time. One of the Department's goals is to improve mobility through outcomes such as decreased congestion and improved accessibility of transportation. In part, the decisions on how to reduce congestion cannot be made without data that answer questions such as how, why, when, where, for how long, and how far people travel, and whether there are differences across socio-demographic or geography-based groups. Similarly, in order to be inclusive, transportation must be available to all people, including low-income persons, the elderly, and persons with disabilities. The process of improving the

transportation infrastructure related to passenger travel requires an understanding of current passenger travel behavior patterns. Data on the travel behavior of these populations help inform urban planners and policymakers on how best to serve the interests of such special-needs populations.

The 2001 National Household Travel Survey (NHTS) is also intended to be used by researchers and analysts in organizations, such as metropolitan planning organizations, universities, and state and local governments, to understand how people make travel and residential decisions and to predict the impact of those decisions on public transportation from national and local perspectives. Greater understanding of travel patterns allows communities to plan, invest in, and operate transportation systems that are better suited to the public's needs in areas such as travel demand forecasting, multimode travel, transportation safety, and facility accessibility and use by all segments of the population.

### Data Source

This report presents selected highlights from the 2001 NHTS on daily and long-distance passenger travel in the United States. The 2001 NHTS is sponsored primarily by two agencies within the U.S. Department of Transportation—the Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA), with additional funding from the National Highway Traffic Safety Administration (NHTSA).

The survey included items on the numbers of drivers and vehicles in the household, the characteristics of these vehicles, and the driver status of all people residing in the household, along with their views on transportation, use of public transit,

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<sup>2</sup> Draft DOT Strategic Plan for Fiscal Years 2003-2008, 1 July 2003.

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**NOTE:** Tables with an "A" prefix (Tables A-1, A-2, etc.) can be found in Appendix A.

walking, and biking activities in the last week. In addition, for each individual, data were collected on daily and long-distance trips taken during pre-assigned time frames. For daily trips, data were collected on trip times; means of transportation; which household vehicle was used, if any; wait and access and egress (time from end of transit trip to final destination) times for transit trips; purpose; and presence of household and non-household members. For long-distance trips of 50 miles or more one way, information was collected on the number of trips made during a four-week period, dates for the trips, whether the trip was recurring, purpose and destination of trip, type of lodging used at the destination, primary means of transportation, overnight stops, and access and egress information on airplane, bus, and train trips. In addition, demographic information such as age, sex, medical condition status, and country of birth was collected on the people residing in the household.

The 2001 NHTS updates information gathered in the Nationwide Personal Transportation Survey (NPTS) conducted in 1969, 1977, 1983, 1990, and 1995 and the American Travel Survey (ATS), conducted in 1977 and 1995. The data are results of telephone interviews with individuals in sampled households. Data were collected from about 26,000 nationally representative households and approximately 60,000 individuals, which documented about a quarter-million daily trips and 45,000 long-distance trips. Data were collected from March 2001 to May 2002 by Westat, which conducted the survey under contract for the Department. (See section V for further details on survey methodology.) The final public-use data files and complete survey documentation from the 2001 NHTS are scheduled for release in the fall of 2003.

Households were asked about all trips (daily travel) they took on a specific randomly assigned day, labeled the “travel day,” and about trips of 50 miles or more taken from home in the 27 days preceding and including the travel day (long-distance travel), a period labeled the “travel period.”

## Report Approach

Because the purpose of this report is to introduce readers to the contents and analytic potential of the 2001 NHTS survey and data, it does not provide indepth analysis of the different facets of the data. Instead it highlights the variety of topics covered in the survey using basic charts and tables. The report has three main content areas:

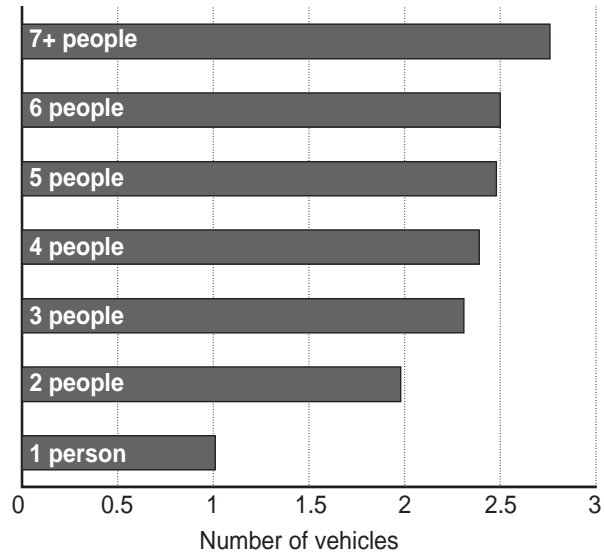
- travel-related characteristics of households and individuals in the United States,
- characteristics of daily trips taken in the nation, and
- characteristics of long-distance travel by people.

This report also includes a methodological section that provides details on data collection, methodological constraints, and the computation of standard errors for estimates in this report. There is also a glossary of travel-related terms used in this report. Appendix A provides tables with estimates that were used in the text and figures, along with their associated standard errors.

## HOUSEHOLD, INDIVIDUAL, AND VEHICLE CHARACTERISTICS

Nationwide, about 88 percent of persons 15 or older are reported as drivers (table A-1). Interestingly, while the mean number of vehicles in households is 1.9 personal vehicles, households in the United States on average have 1.8 drivers who are 15 years or older (table A-2). Thus, it appears that households on average have more vehicles than drivers. Not surprisingly, households with more members are likely to have more personal vehicles available for regular use. For example, single-person households average about one vehicle while households with two members average about two vehicles (figure 1, table A-3). However, households with seven or more members average about 2.8 personal vehicles. Not all households have vehicles—8 percent of households in the nation do not have a vehicle (figure 2, table A-4). Households without a vehicle are not spread uniformly across the population. For example, households with an annual income of less than \$25,000 are almost nine times as likely to be a

Figure 1  
**Mean Number of Vehicles by Household Size**

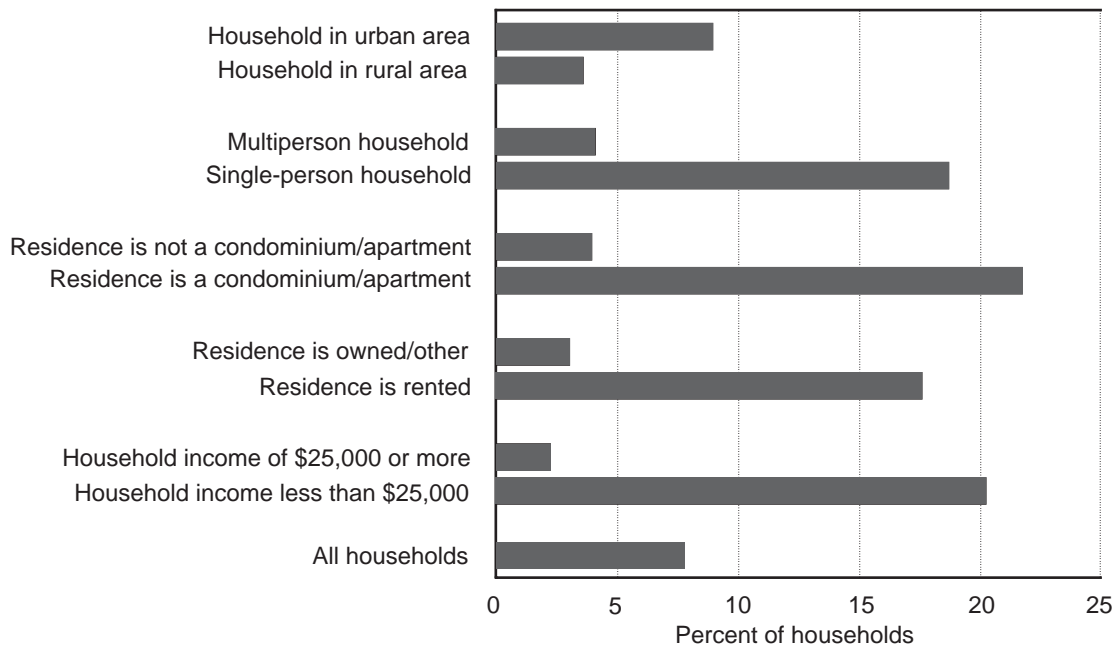


SOURCE: The 2001 National Household Travel Survey, household file, U.S. Department of Transportation.

zero-vehicle household than households with incomes greater than \$25,000. Though these measures are related, households living in a rented residence are almost six times as likely to be a zero-vehicle household compared to nonrenters. Similarly, households living in a condominium or

apartment are almost five times as likely to be a household with no vehicle compared to those living in single family or other nonapartment dwellings. Nineteen percent of the single-person households have no vehicles compared to 4 percent of the multiperson households. Households

Figure 2  
**Percent of Households with Zero Vehicles**

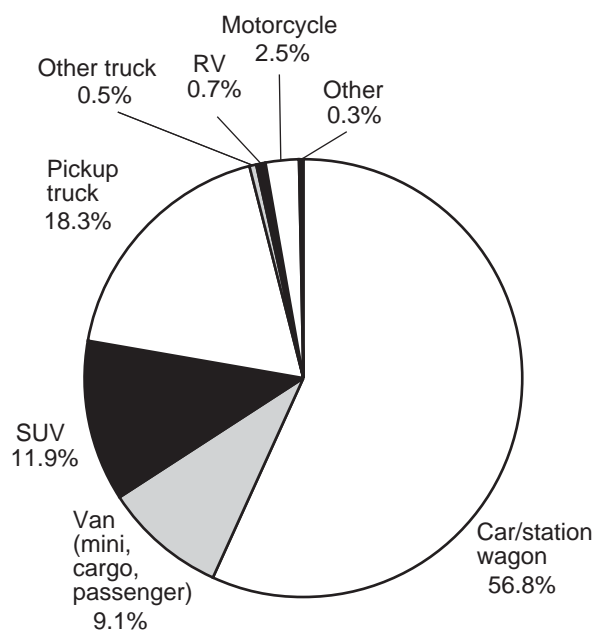


SOURCE: The 2001 National Household Travel Survey, household file, U.S. Department of Transportation.

in urban areas are also more than twice as likely to be zero-vehicle households as those in rural areas (figure 2, table A-4).

The NHTS data demonstrate a widespread prevalence of drivers and personal vehicle use in the nation. There are about 204 million personal vehicles available for regular use<sup>3</sup> in the United States, and over half (57 percent) of these vehicles are cars or station wagons (figure 3, table A-5). About a fifth (21 percent) of these vehicles are vans or sport utility vehicles (SUVs) and one-fifth (18 percent) of these vehicles are pickup trucks. Ninety-one percent of the adults commute to work using personal vehicles (table 1). In comparison, only 5 percent of adults nationwide commute to work regularly using public transit. Seventeen percent of adults report having used public transit in the last two months (table A-1). Despite the presence of almost one adult-size

Figure 3  
Proportion of Vehicles by Type



SOURCE: The 2001 National Household Travel Survey, vehicle file, U.S. Department of Transportation.

<sup>3</sup> This is not a measure of the total number of registered vehicles in the United States. Respondents to the household interview were asked about the number of vehicles that were owned, leased, or available for regular use by the people living in that household.

Table 1  
Mode of Transportation Used to Commute to Work in the Past Week

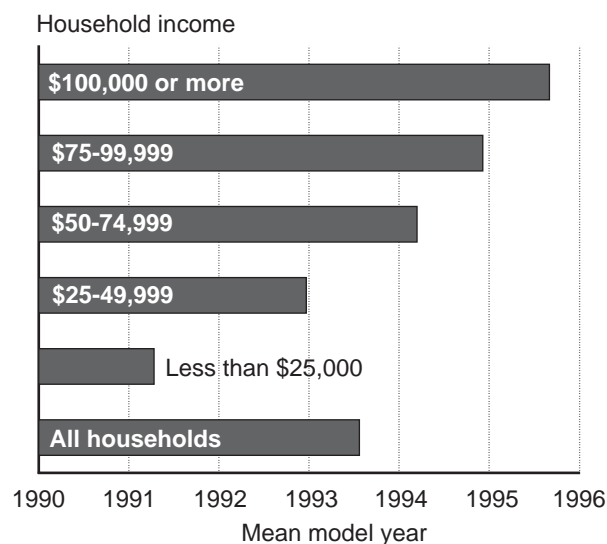
Transportation mode	Percent
Personal vehicle	91.2
Transit	4.9
Walk	2.8
Other	1.1
<b>Total</b>	<b>100</b>

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.  
See table A-6 for standard errors.

bicycle per household (table A-2), on average only about 8 percent of adults report taking a bicycle trip in the last week (table A-1).

The prevalence of personal vehicles makes it important to understand the nature of personal vehicle ownership as well. Not only is income related to the availability of household vehicles, but it is also related to the age of the vehicle. For example, households with a household income of \$100,000 or more had a vehicle with an average model year of 1996, while households with a household income of less than \$25,000 had a personal vehicle with an average model year of 1991 (figure 4, table A-7). Other factors appear to be related to the age of the household vehicle,

Figure 4  
Mean Model Year by Household Income



SOURCE: The 2001 National Household Travel Survey, vehicle file, U.S. Department of Transportation.



like the number of adults in the household. Single-adult households had a vehicle with an average model year of 1993 compared to the average model year of 1994 in households with two or more adults, regardless of the presence of children (table A-7).

The next sections focus on the nature of daily and long-distance trips in the nation.

## DAILY PASSENGER TRAVEL

The 2001 NHTS captures various aspects and characteristics of daily and long-distance travel in America. Data collected on daily trips include topics such as the purpose of the trip, the means or mode of transportation used, the duration and length of the trip, the time of day and day of the week when the trip took place, and the number of people in the vehicle during the trip. In the 2001 NHTS, a daily trip is one that occurred on the randomly selected travel day regardless of mode or distance traveled, as long as the person went from one address to another. This section focuses on daily passenger travel.

Results from the 2001 NHTS show that daily travel in the United States totaled about 4 trillion miles (table 2, table A-8), an average of 14,500 miles per person per year. On a daily basis, the average person traveled 40 miles, most of it (35 miles) in a personal vehicle. Because more than one person can travel in a personal vehicle, these 35 *person* miles amounted to about 23 *vehicle* miles traveled. Annually, the total number of vehicle miles traveled in 2001 was nearly 2.3 trillion.<sup>4</sup> In terms of number of trips, people took 411 billion daily trips in 2001, or about 1,500 trips per person in that year (table 2).

### Who Is Traveling?

On a daily basis, individuals averaged about four trips (figure 5, table A-9). Although there were no differences in the total number of trips taken based on gender, there were differences based on age. The total number of trips peaked among the working population aged 25 to 54 (4.6 trips on an

<sup>4</sup> This compares to 2.1 trillion vehicle miles (standard error 23.4 billion miles) traveled in 1995, an increase of about 11 percent between 1995 and 2001. (1995 Nationwide Personal Transportation Survey).

Table 2  
Total Daily Trips and Total Miles Traveled  
in Daily Trips

Type of trips	Total trips* (rounded to nearest billion)	Total miles** (rounded to nearest billion)
All person trips	411	4,012
Person trips by PV	356	3,552
Vehicle trips	235	2,298

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

\* In order to correctly calculate miles per trip, denominators of 403, 350, and 233 billion trips were used for all person trips, personal vehicle person trips and vehicle trips respectively since not all cases had reported mile values associated with them.

\*\* The total mileage represents daily household-based travel and therefore does not reflect a total of all passenger miles of travel in the United States. It does not include a) vehicle mileage from nondaily long-distance trips, b) noncommuting occupational trips (e.g., taxi cab driving), and c) is also subject to a small amount of nonresponse in trip mileage reporting by survey respondents. See table A-8 for standard errors.

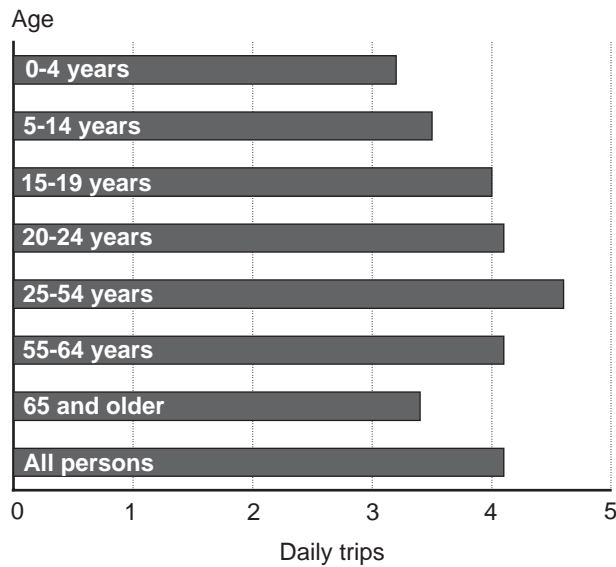
average day). Children under the age of 5 had the fewest trips on average (3.2 trips), followed by children between the ages of 5 and 14 and adults over the age of 65 (figure 5, table A-9). Not surprisingly, drivers and employed adults had a higher number of trips (4.5 trips for both groups) compared to nondrivers and unemployed adults (2.6 and 3.7 trips respectively) (table A-9). The NHTS also collected information on the travel behavior of persons 15 or older who have a medical condition that limits their travel. About 8.6 percent of persons report having a medical condition that limits their travel (table A-1).<sup>5</sup> As would be expected, these persons had lower trip rates (2.8 per day) than those who did not report any such medical condition (4.4 per day) (table A-9).

### How Do They Travel?

The majority of daily trips occurred in personal vehicles (87 percent) (figure 6, table A-10). About 38 percent of all trips were personal vehicle trips with a single occupant (driver only) while 49 percent of all trips were personal vehicle trips

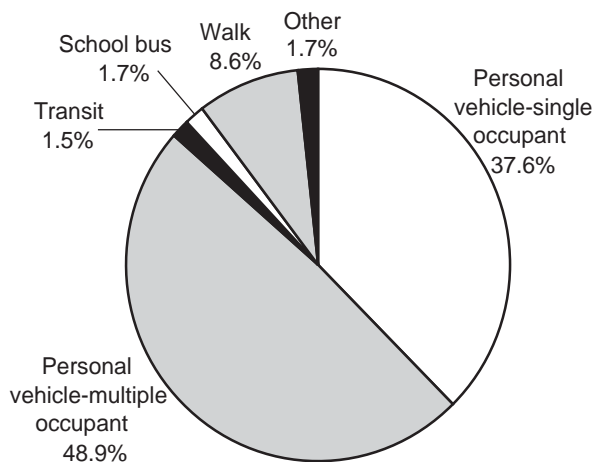
<sup>5</sup> Individuals 15 and older were asked if they had a medical condition that made it difficult to travel outside the home. This is a self reported condition, and does not correspond to the Americans with Disabilities Act of 1990 or other formalized definition of a person with a disability.

Figure 5  
Mean Daily Trips by Age



SOURCE: The 2001 National Household Travel Survey, person file, U.S. Department of Transportation.

Figure 6  
Proportion of Trips by Mode



SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

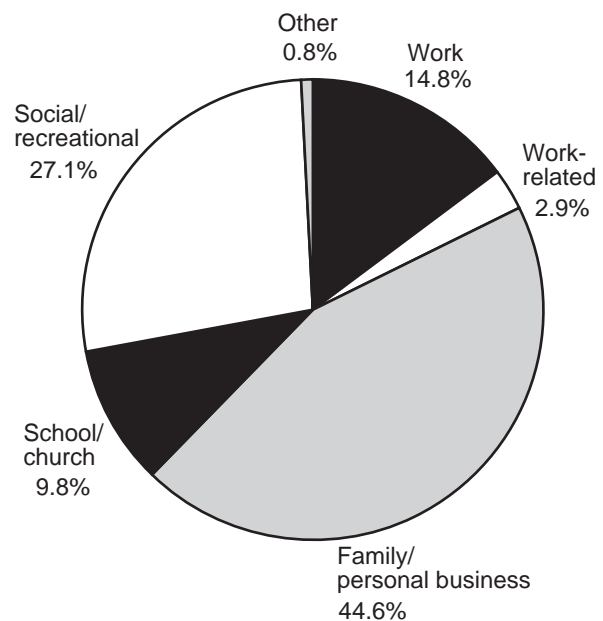
with more than one occupant. About two percent of all trips nationwide were transit trips.<sup>6</sup> School buses accounted for almost 2 percent of the trips, and walk trips accounted for almost 9 percent of all trips.

<sup>6</sup> For the purpose of this report, transit is defined as including local public bus, commuter bus, commuter train, subway/elevated train, and street car/trolley.

## Why Do They Travel?

Knowing why people take trips helps urban planners lay out residential, work, and commercial structures that minimize travel times and distances. A large portion of trips were taken for family and personal reasons such as shopping and running errands (45 percent) (figure 7, table A-11) (See glossary for definitions). Social and recreation trips, such as vacations and visiting friends, accounted for 27 percent of the trips. Despite the strong focus on work and commuting trips by researchers and urban planners, commute trips<sup>7</sup> accounted for about 15 percent of all trips taken in the United States. Trips made for work, other than the commute to and from work, accounted for an additional 3 percent of trips. Trips to school and church accounted for about 10 percent of all trips.

Figure 7  
Proportion of Trips by Purpose



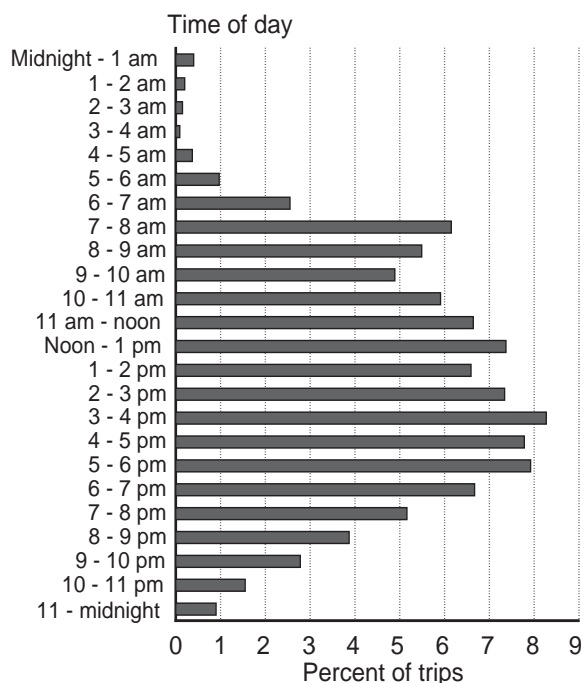
SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

<sup>7</sup> Commute trips are defined as those trips made for the purpose of going to or returning from work. However, given the definition of a daily trip, those reported as commuting trips were not necessarily anchored by the respondent's home or workplace (for return commutes). Therefore, care should be taken in analyzing work trip distances, recognizing that the distance for these trips is often, but not always, the distance from home to work.

## When Do They Travel?

Congestion is a concern for urban planners and drivers alike. Fifty percent of adults in the United States say that they are somewhat to severely concerned about highway congestion (table A-1). Daily trips (including nonpersonal vehicle trips) are not spread evenly across the time of day, however. Nor are strong peaks and valleys associated with the morning and evening commute periods (figure 8, table A-12). For example, more daily trips are taken between noon and 1 p.m. (7.4 percent) than between 8 and 9 a.m. (5.5 percent). Daily trips are spread more evenly across the days of the week. The fewest trips are taken on Sunday (13 percent) compared to Friday, when the most trips are taken (16 percent) (see table A-13).

Figure 8  
Percent of Trips by Time of Day



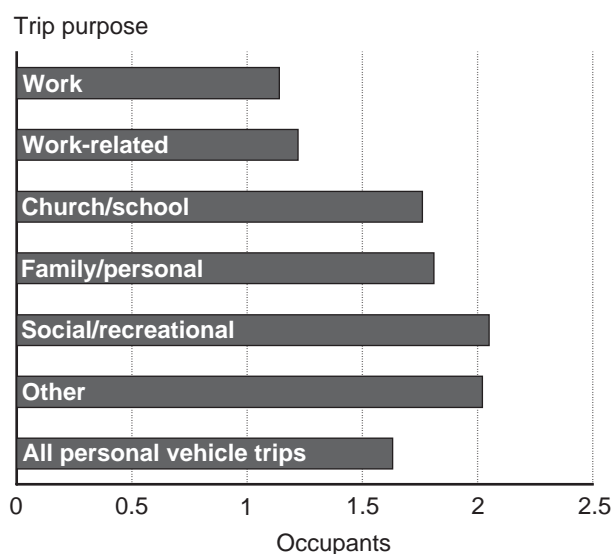
SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

## How Many People Are Traveling?

Vehicle occupancy can be conceptualized as a function of both the number of people in the vehicle and the distance traveled on the trip. Thus a trip of 12 miles has twice the weight of a 6-mile trip. In general, the weighted (by miles traveled

in trip) occupancy rates of personal vehicle trips in the nation is 1.6 persons per vehicle mile (figure 9, table A-14). There are differences in weighted occupancy based on the purpose of the trip. Trips for social or recreational purposes have an average weighted occupancy of 2.1 persons per vehicle mile compared to work trips (1.1 persons per vehicle mile) (figure 9, table A-14). Other factors affecting weighted occupancy rates are time and day of travel. Weekday trips have a weighted occupancy of 1.5 compared to 2 people per vehicle mile on weekend trips (table A-15).

Figure 9  
Mean Occupants by Trip Purpose



SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

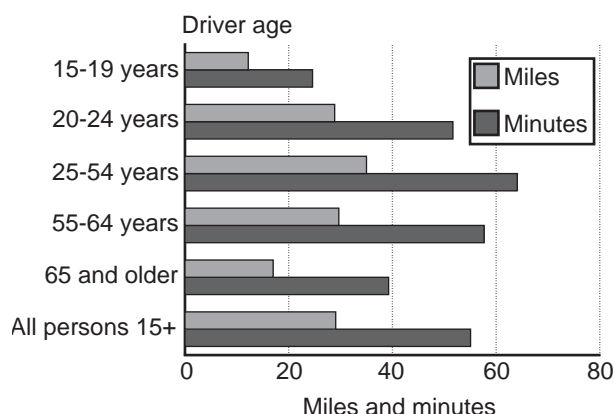
## Experiences Behind the Wheel

Given that a majority of daily trips are in personal vehicles, it is of interest to know how much of an adult's<sup>8</sup> day is spent behind the wheel driving a personal vehicle. Overall, for all adults, including nondrivers and those who may not have driven in a given day, 55 minutes are spent behind the wheel driving 29 miles a day (figure 10). There are differences based on adult demographic characteristics such as age, sex, and worker status. Even though men and women average the same number of trips

<sup>8</sup> In this case, adults include all individuals ages 15 and above, regardless of whether they are drivers or may have driven during a given day.

(4 trips) on each day, men drive further (38 v. 21 miles) and longer (67 v. 44 minutes) (table A-16 and A-17). Similarly, there are differences based on the age of the adult—these differences mimic the pattern of the overall total number of trips taken (figure 10). Teenagers drive the least on an average day—for about 25 minutes and 12 miles. Adults over the age of 65 also drive less on an average day compared to other adult age groups (20 to 64 years)—39 minutes and 17 miles. Adults between the ages of 25 and 54 drive the most—64 minutes and 35 miles a day. Workers drive further (36 v. 16 miles) and for longer (65 v. 35 minutes) compared to nonworkers (tables A-16 and A-17).

Figure 10  
**Mean Minutes and Miles Spent Driving  
by Driver Age**



SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

## LONG-DISTANCE TRAVEL

Long-distance trips in the 2001 NHTS are defined as trips of 50 miles or more from home to the farthest destination traveled.<sup>9</sup> For a long-distance trip, this includes both the portion of the trip to

<sup>9</sup> Although the definitions for daily trips and long distance trips differ, it is important to note that trips made as part of daily travel are not mutually exclusive from long-distance travel. That is, daily trips—or combinations of daily trips into home-to-home journeys—can result in travel of more than 50 miles or more away from home. Therefore, these trips would be included in both the estimates for daily travel, as well as long-distance travel. Care should therefore be exercised when using estimates for daily and long-distance travel together. This is especially true of trip rates and trip miles since simply combining would provide an overestimation of total household travel.

reach the farthest destination, as well as the return trip home and any overnight stops made along the way or stops to change transportation modes. Similar to daily trips, long-distance travel includes trips made by all modes, including personal vehicle, airplane, bus, train, and ship; and for all purposes, such as commuting, business, pleasure, and personal or family business.

In addition, the long-distance trip definition has changed from the long-distance definition used in the 1995 American Travel Survey (ATS), where long-distance trips were defined as trips of 100 miles or more and excluded trips for the purpose of commuting. Therefore, estimates provided in this report cannot be directly compared to estimates resulting from the 1995 ATS.

## Who Is Traveling?

Of all long-distance trips made in the United States in 2001, fewer than half (43 percent) were made by women (table 3). Furthermore, within any given mode men made as many or more trips than women, with the exception of travel by bus. Women made 55 percent of all bus trips (out of a total of approximately 55 million bus trips, see table A-18b).

The majority of long-distance trips, approximately 55 percent, were made by individuals living in households with total household incomes of \$50,000 or more per year (table A-19). (Households with \$50,000 or more in total income represent 43 percent of the population.<sup>10</sup>) Fewer

Table 3  
**Long-Distance Trips by Mode  
and Sex, in Percent**

	Female	Male
Personal vehicle	42%	58%
Air	43%	57%
Bus	55%	45%
Train*	42%	58%
Other*	30%	70%
Total	43%	57%

\*Differences are not significant at  $\alpha=0.05$ .

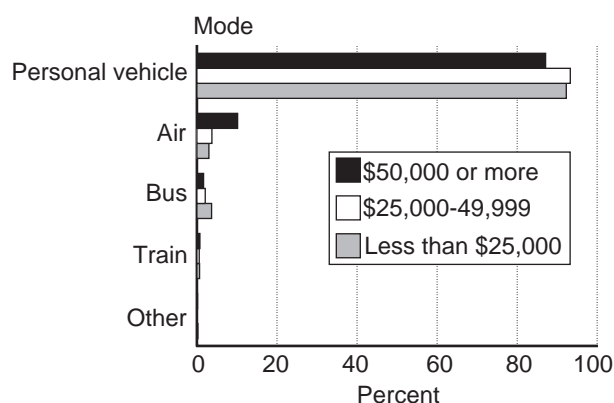
See table A-18a for standard errors.

SOURCE: The 2001 National Household Travel Survey, preliminary long distance file, U.S. Department of Transportation.

<sup>10</sup> Household income estimates as of March 2001, Current Population Survey, March Supplement 2002.

person trips from these households were likely to be made in personal vehicles (87 percent) compared to person trips from lower income households (figure 11). For the higher income households there were significantly more trips by air. About 10 percent of person trips by households with an income of at least \$50,000 were made by air, compared to around 4 percent in households with an income between \$25,000 and \$49,999 and less than 3 percent for households of less than \$25,000 (table A-20).

Figure 11  
**Proportion of Long-Distance Trips by Mode and Household Income**



SOURCE: The 2001 National Household Travel Survey, preliminary long distance file, U.S. Department of Transportation.

Nearly two-thirds of all long-distance trips were made by persons aged 25 to 64 (table A-21). This group represents approximately half (52 percent) of the U.S. population as of 2001.<sup>11</sup> One-quarter of long-distance trips were made by persons under the age of 25 (35 percent of the U.S. population), and only about 8 percent by those 65-years-old or older (12 percent of the population).

### How Are They Traveling on Long-Distance Trips?

Nine out of 10 long-distance trips were taken in a personal vehicle, such as a car, pickup truck, or sports utility vehicle. In 2001, Americans took a

total of 2.3 billion long-distance trips in personal vehicles, resulting in just over 760 billion miles of travel on the nation's roads (table A-22). Personal vehicles were used for nearly 97 percent of long-distance person trips of less than 300 roundtrip miles (table 4). On the other hand, personal vehicle trips comprised a much smaller percentage of longer distance trips, representing a little more than half of trips with roundtrip distances of 1,000 to less than 2,000 miles, and less than one-quarter of trips 2,000 miles or greater. The median distance for all long-distance trips taken in personal vehicles was 194 miles (table A-22).

Air travel was the second most utilized transportation mode for long-distance travel, accounting for over 7 percent of long-distance person trips. Not surprisingly, trips by air were much more likely for trips of longer distances, accounting for 42 percent of trips between 1,000 and 2,000 roundtrip miles, and three-quarters of trips over 2,000 roundtrip miles (table 4). Meanwhile, air travel comprised less than half a percent of trips of less than 500 roundtrip miles. The median distance for air trips was 2,068 miles, 10 times that of personal vehicle trips (table A-22).

Travel by bus was the third most popular choice for long-distance travel, yet accounted for only 2 percent of all long-distance trips. Similarly, train was the next most used mode but accounted for less than 1 percent of all long-distance trips. The median length of a bus trip was 287 miles, and 192 miles for train trips (table A-22).

### Why Are Americans Traveling Long Distances?

Of all long-distance travel in 2001, over half of the trips (56 percent) were made primarily for pleasure purposes (figure 12, table A-24a). Pleasure trips consisted of vacations and sightseeing excursions, as well as trips taken for the purposes of rest and relaxation, visiting friends and family, and outdoor recreation. More than 90 percent of pleasure trips were by personal vehicles, another 7 percent were by air, and less than 3 percent were by bus, train, boat, or other mode combined (table A-24b).

<sup>11</sup> Population estimates as of July 1, 2001. Table NA-EST2002-ASRO-01—National Population Estimates—Characteristics, Population Division, U.S. Census Bureau (June 18, 2003) URL: [http://ferret.bls.census.gov/macro/032002/hhinc/new01\\_001.htm](http://ferret.bls.census.gov/macro/032002/hhinc/new01_001.htm).

Table 4  
Percent of Long-Distance Trips by Mode and Roundtrip Distance

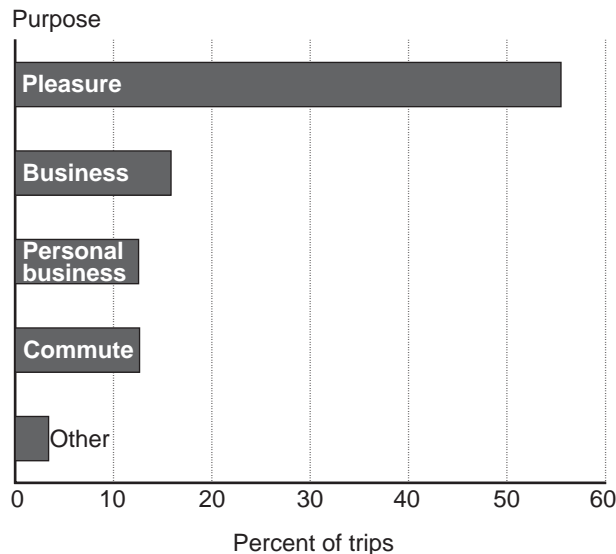
Miles	100-299	300-499	500-999	1000-1999	2000+	Total
Personal vehicle	97.2%	94.3%	85.9%	53.9%	22.2%	89.5%
Air	0.2%	1.5%	10.3%	42.4%	74.8%	7.4%
Bus*	1.6%	3.4%	3.2%	2.6%	1.4%	2.1%
Train*	0.9%	0.7%	0.6%	0.9%	0.8%	0.8%
Other*	0.2%	0.1%	0.0%	0.1%	0.8%	0.2%

See table A-23 for standard errors.

\*Differences are not significant at  $\alpha=0.05$ .

SOURCE: The 2001 National Household Travel Survey, preliminary long distance file, U.S. Department of Transportation.

Figure 12  
Proportion of Long-Distance Trips by Purpose



See table A-24a for standard errors.

SOURCE: The 2001 National Household Travel Survey, preliminary long distance file, U.S. Department of Transportation.

The second most common reason for long-distance travel was for business purposes—trips taken to attend conferences and meetings or for any other business purpose other than commuting to and from work. Business trips also include those trips where business was cited as a primary purpose, but the traveler also included sight-seeing, recreation, or other pleasure activities as part of the trip. Nearly 16 percent of all long-distance trips, or approximately 414 million trips, were made for business. A little less than 80 percent of these trips were by personal vehicle, while 18 percent used a commercial or charter airplane. Train travel accounted for about 1.6 percent and bus travel accounted for nearly 1 percent of business trips. All other modes combined accounted for less than 1 percent of business

travel. Meanwhile, nearly 13 percent of long-distance trips in 2001 were for commuting purposes, that is, travel of 50 miles or more away from home to go to work. Again, personal vehicles dominated the share of modes used for these trips at over 96 percent. Trips taken by train and airplane were the next most common, each representing approximately 1.5 percent of commuting trips.

Trips made for personal reasons or family business, such as shopping trips, medical visits, and providing rides for others, accounted for approximately 13 percent of all long-distance trips in the nation. Although personal vehicle trips again comprised the majority of these trips (slightly less than 90 percent), trips made by bus and air accounted for almost all the remaining trips at approximately 6 and 5 percent, respectively.

### Where Are Americans Traveling?

In 2001, Americans took about 2.6 billion long-distance trips. In total, over 1.3 trillion person miles were logged in long-distance travel (table A-22). The majority of these trips, about 98 percent, were to destinations in the United States (table 5). About 16 percent of long-distance person-miles were covered traveling to international destinations. A portion of these miles were spent traveling on or over U.S. soil. Miles traveled on or over U.S. soil to international destinations are not included in the estimate of domestic miles traveled.

Most long-distance trips (62 percent) were to destinations within the traveler's home state (intrastate). Intrastate travel generated 27 percent of all person miles for long-distance trips. Of the remaining trips, 17 percent were to destinations



Table 5  
Percent of Long-Distance Trips and  
Miles by Destination

	Trips	Miles
International	2%	16%
Different region	11%	33%
Different state, Different division, Same region	8%	10%
Different state, Same division	17%	14%
Same state	62%	27%
<b>Total</b>	<b>100%</b>	<b>100%</b>

See table A-25 for standard errors.

SOURCE: The 2001 National Household Travel Survey, preliminary long distance file, U.S. Department of Transportation.

within the same Census division and 8 percent were to destinations in a different division but within the same region. Eleven percent of long-distance trips were to destinations outside the home region. (See Appendix C – Census Regions and Divisions of the United States.)

## METHODOLOGICAL CONSIDERATIONS, DATA RELIABILITY, AND DATA COMPARABILITY

### Survey Methodology

The 2001 NHTS was conducted by Westat—a social science research firm in Rockville, Maryland—for the U.S. Department of Transportation. The NHTS is designed to provide detailed cross-sectional information on daily and long-distance passenger travel in the United States.

### Sample Design

A nationally representative sample of 60,000 individuals in 26,000 households participated in the 2001 NHTS. The sample included all members of the household, including children under the age of five. Sampling for the NHTS involved a random digit dial (RDD) telephone sampling design. 2001 NHTS data were collected from March 2001 to May 2002. Data were collected

about all household members either directly from the respondent or through a proxy.<sup>12</sup> A household where 50 percent of the adults completed the survey was considered a responding household and included in the data file. Individuals from sampled households were asked to complete a travel diary documenting their daily trips in order to aid in the recall process, and use the diary when responding to the interviewer. The overall response rate was 41 percent. (The household screener interview rate was 58 percent, and the useable household rate was 71 percent.)

### Data Reliability

Estimates produced using data from the NHTS are subject to two types of error, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population.

#### Nonsampling Errors

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations, as well as data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, and mistakes in data processing. In general, it is difficult to identify and estimate either the amount of nonsampling error or the

<sup>12</sup> In the NHTS data collection, an adult household member always served as the proxy for a child under age 14. Proxies were also requested for persons age 14 and 15 years. However, if an adult household member requested that the interviewer speak directly with these teenagers, the interview was conducted with the subject. Proxies were not initially requested for household members 16 years and older, but were allowed under limited conditions. Proxy interviews were conducted for 23.4 percent of the respondents 16 and older.

bias caused by this error. In the 2001 NHTS, design efforts were made to prevent such errors from occurring and to compensate for them where possible. For instance, a travel diary was used in order to aid with the recall of daily trips. In addition, details on the travel day were collected within six days of it occurring while events of that day were still relatively fresh in the minds of the respondents. Other more standard procedures, such as online, computer-assisted telephone interview (CATI) editing were used as well.

### Standard Errors and Weights

In order to produce national estimates from the 2001 NHTS data, the sample data were weighted. Weighting the data adjusts for selection probabilities at the household level and adjusts for household and individual nonresponse. The 2001 NHTS data files contain two kinds of weights;

1. from “usable” households in which person interviews were completed with at least 50 percent of adults in the household (26,038 households in the sample), and
2. “100 percent” households in which person interviews were completed with all adults in the household (22,178 households in the sample).

All estimates in this report are weighted.<sup>13</sup> In addition to properly weighting the responses, special procedures for estimating the statistical significance of the estimates were employed because the data were collected using a complex sample design. Complex sample designs, like that used in the NHTS and other large-scale federal surveys, result in data that do not comply with the assumptions normally required to assess the statistical significance of the results. Frequently, the standard errors of the estimates are larger than would be expected if the sample was a sim-

<sup>13</sup> Weights used in this report: The 50 percent daily travel and person weights (WTTRDFIN and WTPERFIN) and the 50 percent travel period weights (WTTPEFIN) were used. WTPERFIN sums to the population of all noninstitutionalized individuals in the United States while WTTRDFIN and WTTPEFIN sum to the annualized estimate of the total number of daily and long-distance trips taken by individuals in the nation.

ple random sample and the observations were independent and identically distributed random variables. Replication methods of variance estimation were used to reflect the actual sample design used in the 2001 NHTS. A form of the jackknife replication method (JK2) using 99 replicates was used to compute approximately unbiased estimates of the standard errors of the estimates in the report, using the statistical software WesVarPC. The jackknife methods were used to estimate the precision of the estimates of the reported national percentages and means.

### Statistical Procedures

Comparisons made in the text were tested for statistical significance to ensure that the differences are larger than might be expected due to sampling variation. All differences described in the text are statistically significant at a 0.05 level. When comparing estimates between categorical groups (e.g., sex, income), the difference in the estimates (mean or percent) was computed along with a confidence interval. If the confidence interval contained the value of zero, then the estimates had no detectable statistically significant difference.

The confidence interval of the difference of two proportions was computed as:

$$(\text{Est}_1 - \text{Est}_2) + /- (1.96 * \text{SQRT}[(\text{se}_1)^2 + (\text{se}_2)^2])$$

The confidence interval of the difference of two means was computed as:

$$(\text{Est}_1 - \text{Est}_2) + /- (1.96 * \text{SQRT}[((\text{se}_1)^2) + ((\text{se}_2)^2)])$$

where  $\text{Est}_1$  and  $\text{Est}_2$  are the independent estimates being compared, and  $\text{se}_1$  and  $\text{se}_2$  are their corresponding standard errors.

### Data Comparability: Changes from Prior Surveys

The 2001 survey represents a combined survey of the National Personal Transportation Survey (NPTS) and the ATS (American Travel Survey). The ATS, conducted in 1995 by the Census Bureau for BTS, was a survey of trips of 100 miles or more taken over the course of a calendar year. There were methodological difficulties in trying to use the 1995 NPTS and the 1995 ATS together to form a picture of total household travel by the American public. The combined survey approach for the 2001 NHTS was designed to resolve this



by providing one data source for the full continuum of person travel. In addition to combining the two surveys, the threshold for longer trips was lowered to 50 miles or more to obtain a better sample of the often-overlooked trips in the 50- to 100-mile range.

For the first time in the NPTS series, travel data were collected for household members under the age of five years. All previous surveys collected travel only from household members age five and older, on the assumption that children under the age of five only made trips with other household members. However, this overlooked trips made by this young group with day care providers as part of a preschool activity, or with other nonhousehold members.

There are many differences in questionnaire format that affect estimates. For example, in the 2001 NHTS, a specific probe was included about walking trips to more accurately capture such trips. As a result, it is possible that the increase in the proportion of all trips that are walk trips compared to the 1995 NPTS may be due to this additional probe, rather than a true increase in the actual numbers of walk trips.

In addition to changes in the survey design and administration, other factors affected travel behavior and possibly data collection during the 2001 NHTS. The September 11, 2001 attacks on the World Trade Center Towers and the Pentagon, the security measures that followed, and the ensuing sense of insecurity in the nation severely disrupted travel in the United States for months, changing the amount and modes of travel during that period. In addition, during the last few months of 2001, the public's suspicion regarding unanticipated mail packages was heightened after letters containing anthrax were sent to individuals through the mail. Although the impact of this on travel is yet to be determined, it may have affected 2001 NHTS response rates because the survey had a mail component.

Further information on the survey, sample design, comparability with past surveys, data editing and process, data file structures, weight, etc. is available in the 2001 NHTS User's Guide that will be released with the data.



# Appendix A —Tables with Estimates Used in the Report and Standard Errors

The following tables show the estimates and their accompanying standard errors. **Standard errors (SE) are in the same metric as the estimates.** All

comparisons in the text are statistically significant at a 0.05 level unless otherwise noted.

## Section II. Household, Individual, and Vehicle Characteristics

Table A-1

**Travel Related Characteristics of Individuals 15 and Older, in Percent**

	Percent	SE
Drivers	88	0.18
Used public transit in last 2 months	17	0.23
Biked in the last week	8	0.18
Have travel-affecting medical condition	9	0.14
Are somewhat to severely concerned about highway congestion	50	0.35

NOTES: Percents do not total 100% since categories are not mutually exclusive. SE = standard error.

SOURCE: The 2001 National Household Travel Survey, person file, U.S. Department of Transportation.

Table A-2

**Mean Number of Drivers, Vehicles, and Bicycles per Household**

	Mean	SE
Drivers per household	1.75	0.005
Personal vehicles per household	1.90	0.007
Adult-size bicycles per household	0.86	0.009

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, household file, U.S. Department of Transportation.

Table A-3

**Mean Number of Personal Vehicles by Number of People in the Household**

(see Figure 1 in text)

	Mean	SE
One person	1.01	0.010
Two people	1.98	0.011
Three people	2.31	0.023
Four people	2.39	0.023
Five people	2.48	0.040
Six people	2.50	0.074
Seven or more people	2.76	0.113

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, household file, U.S. Department of Transportation.

Table A-4

**Percent and Characteristics of Zero-Vehicle Households**

(see Figure 2 in text)

	Percent	SE
All households	7.9	0.20
Household income less than \$25,000	20.3	0.62
Household income of \$25,000 or more	2.3	0.17
Residence is rented	17.6	0.52
Residence is owned/other	3.0	0.16
Residence is a condominium/apartment	21.8	0.69
Residence is not a condominium/apartment	4.0	0.17
Single-person household	18.7	0.59
Multiperson household	4.1	0.19
Household in rural area	3.6	0.35
Household in urban area	9.0	0.23

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, household file, U.S. Department of Transportation.

Table A-5

**Distribution of Household Personal Vehicles by Type, in Percent**

(see Figure 3 in text)

	Percent	SE
Car/station wagon	56.8	0.29
Van (mini, cargo, passenger)	9.1	0.14
Sport utility vehicle	11.9	0.16
Pickup truck	18.3	0.21
Other truck	0.5	0.04
Recreational vehicle	0.7	0.03
Motorcycle	2.5	0.08
Other	0.3	0.03
<b>Total</b>	<b>100.0</b>	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, vehicle file, U.S. Department of Transportation.

Table A-6

**Mode of Transportation Used to Commute to Work in the Past Week, in Percent**

	Percent	SE
Personal vehicle	91.2	0.25
Transit	4.9	0.19
Walk	2.8	0.12
Other	1.1	0.10
<b>Total</b>	<b>100.0</b>	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, person file, U.S. Department of Transportation.

Table A-7

**Mean Personal Vehicle Model Year by Household Income and Number of Adults in Household**

(see Figure 4 in text)

	Mean	SE
<b>All households</b>	<b>1993.6</b>	<b>0.035</b>
<b>Household income</b>		
Less than \$25,000	1991.3	0.098
\$25,000-\$49,999	1993.0	0.066
\$50,000-\$74,999	1994.2	0.089
\$75,000-\$99,999	1994.9	0.089
\$100,000 or more	1995.7	0.077
<b>Number of adults</b>		
Two or more adults	1993.7	0.037
One adult	1992.9	0.089

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, vehicle file, U.S. Department of Transportation.

## Section III. Daily Passenger Travel

Table A-8

**Total Daily Trips and Total Miles Traveled in Daily Trips, in Billions**

	Total trips*	SE	Total miles**	SE
All person trips	411	1.9	4,012	44.9
Person trips by personal vehicle	356	1.9	3,552	41.3
Vehicle trips	235	1.4	2,298	24.4

\* In order to correctly calculate miles per trip, denominators of 403, 350, and 233 billion trips were used for all person trips, personal vehicle person trips, and vehicle trips respectively because not all cases had reported mile values associated with them.

\*\* The total mileage represents daily household-based travel and therefore does not reflect a total of all passenger miles of travel in the United States. It does not include a) vehicle mileage from nondaily long-distance trips, b) noncommuting occupational trips (e.g., taxi cab driving), and c) is also subject to a small amount of nonresponse in trip mileage reporting by survey respondents.

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-9

**Mean Number of Trips by All Persons by Sex, Age, Driver Status, Worker Status, and Medical Condition**

(see Figure 5 in text)

	Mean	SE
<b>All persons</b>	4.1	0.02
<b>Sex</b>		
Male	4.1	0.02
Female	4.1	0.02
<b>Age</b>		
Less than 5 years	3.2	0.05
5-14 years	3.5	0.04
15-19 years	4.0	0.06
20-24 years	4.1	0.07
25-54 years	4.6	0.02
55-64 years	4.1	0.05
65 years and older	3.4	0.04
<b>Driver status*</b>		
Yes, a driver	4.5	0.02
Not a driver	2.6	0.04
<b>Employment status*</b>		
Employed	4.5	0.02
Not employed	3.7	0.03
<b>Medical condition*</b>		
Medical condition limits travel	2.8	0.06
No medical condition limiting travel	4.4	0.02

\*Asked of persons age 15 and older.

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, person file, U.S. Department of Transportation.

Table A-10

**Distribution of Trips by Mode of Transportation, in Percent**

(see Figure 6 in text)

	Percent	SE
Personal vehicle (PV)	86.6	0.18
PV-single occupant	37.6	0.25
PV-multiple occupants	48.9	0.28
Transit	1.5	0.06
School bus	1.7	0.05
Walk	8.6	0.13
Other	1.7	0.07
<b>Total</b>	100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-11

**Distribution of Trips by Trip Purpose, in Percent**

(see Figure 7 in text)

	Percent	SE
Work	14.8	0.12
Work-related	2.9	0.08
Family/personal business	44.6	0.22
School/church	9.8	0.11
Social/recreational	27.1	0.21
Other	0.8	0.03
<b>Total</b>	100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-12

**Distribution of Trips by Time of Day, in Percent**  
(see Figure 8 in text)

Trip start time	Percent	SE
Midnight-1 a.m.	0.4	0.02
1 - 2 a.m.	0.2	0.01
2 - 3 a.m.	0.2	0.01
3 - 4 a.m.	0.1	0.01
4 - 5 a.m.	0.4	0.02
5 - 6 a.m.	1.0	0.03
6 - 7 a.m.	2.6	0.05
7 - 8 a.m.	6.2	0.08
8 - 9 a.m.	5.5	0.08
9 - 10 a.m.	4.9	0.07
10 - 11 a.m.	5.9	0.08
11 a.m - 12 p.m.	6.6	0.08
12 - 1 p.m.	7.4	0.08
1 - 2 p.m.	6.6	0.07
2 - 3 p.m.	7.3	0.09
3 - 4 p.m.	8.3	0.09
4 - 5 p.m.	7.8	0.08
5 - 6 p.m.	7.9	0.09
6 - 7 p.m.	6.7	0.09
7 - 8 p.m.	5.2	0.08
8 - 9 p.m.	3.9	0.07
9 - 10 p.m.	2.8	0.06
10 - 11 p.m.	1.6	0.05
11 - 12 p.m.	0.9	0.03
<b>Total</b>	<b>100.0</b>	

NOTES: More accurately the categories are Midnight to 00:59 a.m., 1 a.m. to 1:59 a.m., etc. SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-13

**Distribution of Daily Trips by Day of the Week, in Percent**

	Percent	SE
Sunday	12.9	0.16
Monday	13.8	0.16
Tuesday	14.0	0.15
Wednesday	14.7	0.16
Thursday	14.6	0.15
Friday	15.6	0.17
Saturday	14.5	0.18
<b>Total</b>	<b>100.0</b>	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-14

**Vehicle Occupancy Per Vehicle Mile by Daily Trip Purpose**

(see Figure 9 in text)

	Mean	SE
All personal vehicle trips	1.63	0.012
Work	1.14	0.007
Work-related	1.22	0.020
Family/personal	1.81	0.016
Church/school	1.76	0.084
Social/recreational	2.05	0.028
Other	2.02	0.130

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-15

**Vehicle Occupancy Per Vehicle Mile by Time of Day and Weekend Status**

	Mean	SE
<b>All personal vehicle trips</b>	1.63	0.010
<b>Trip start time</b>		
Midnight-1 a.m.	1.47	0.065
1 - 2 a.m.	1.54	0.108
2 - 3 a.m.	1.98	0.288
3 - 4 a.m.	1.26	0.109
4 - 5 a.m.	1.54	0.128
5 - 6 a.m.	1.30	0.047
6 - 7 a.m.	1.30	0.030
7 - 8 a.m.	1.33	0.020
8 - 9 a.m.	1.64	0.084
9 - 10 a.m.	1.58	0.043
10 - 11 a.m.	1.74	0.052
11 a.m. - 12 p.m.	1.66	0.028
12 - 1 p.m.	1.74	0.033
1 - 2 p.m.	1.69	0.043
2 - 3 p.m.	1.67	0.029
3 - 4 p.m.	1.65	0.025
4 - 5 p.m.	1.64	0.039
5 - 6 p.m.	1.62	0.033
6 - 7 p.m.	1.78	0.032
7 - 8 p.m.	1.86	0.042
8 - 9 p.m.	1.85	0.047
9 - 10 p.m.	1.84	0.057
10 - 11 p.m.	1.64	0.050
11 - 12 a.m.	1.63	0.042
<b>Weekend status</b>		
Weekend	2.00	0.030
Weekday	1.50	0.010

NOTES: More accurately the categories are Midnight to 00:59 a.m., 1 a.m. to 1:59 a.m., etc. SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.

Table A-16

**Minutes Spent Driving Daily by Persons 15 and Older by Sex, Age and Worker Status**

(see Figure 10 in text)

	Minutes	SE
<b>All persons 15 and older</b>	55.1	0.39
<b>Sex</b>		
Male	67.3	0.61
Female	43.8	0.41
<b>Age</b>		
15-19 years	24.6	0.91
20-24 years	51.7	1.48
25-54 years	64.1	0.58
55-64 years	57.7	0.90
65 years and older	39.3	0.76
<b>Worker status</b>		
Employed	65.1	0.51
Not employed	34.5	0.48

NOTE: These estimates include nondrivers and those who did not drive on a given travel day who were 15 years old and older. SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip and person file, U.S. Department of Transportation.

Table A-17

**Miles Driven Daily by Persons 15 and Older by Sex, Age and Worker Status**

(see Figure 10 in text)

	Miles	SE
<b>All persons 15 and older</b>	29.1	0.31
<b>Sex</b>		
Male	37.6	0.50
Female	21.2	0.28
<b>Age</b>		
15-19 years	12.2	0.51
20-24 years	28.9	1.21
25-54 years	35.0	0.48
55-64 years	29.7	0.61
65 years and older	17.0	0.45
<b>Worker status</b>		
Employed	35.5	0.41
Not employed	16.0	0.33

NOTE: These estimates include nondrivers and those who did not drive on a given travel day who were 15 years old and older. SE = standard error.

SOURCE: The 2001 National Household Travel Survey, daily trip file and person file, U.S. Department of Transportation.

## Section IV. Long-Distance Travel

Table A-18a

### Long-Distance Trips by Mode and Sex, in Percent

	<u>Female</u>		<u>Male</u>	
	Percent	SE	Percent	SE
Personal vehicle	42.3	0.52	57.7	0.52
Air	42.6	1.14	57.4	1.14
Bus	54.9	2.75	45.1	2.75
Train	42.3	6.73	57.7	6.73
Other	30.4	9.07	69.6	9.07

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of

Table A-18b

### Long-Distance Trips by Mode and Sex, in Millions

	<u>Female</u>		<u>Male</u>		<u>Total</u>	
	Trips	SE	Trips	SE	Trips	SE
Personal Vehicle	989.0	14.82	1,347.1	28.90	2,336.1	36.89
Air	82.3	3.59	111.0	4.07	193.3	6.28
Bus	30.4	2.41	25.0	2.19	55.4	3.45
Train	9.0	1.43	12.2	2.53	21.1	2.88
Other	1.8	0.34	4.0	1.38	5.8	1.45
<b>Total</b>	<b>1,112.4</b>	<b>15.49</b>	<b>1,499.3</b>	<b>29.45</b>	<b>2,611.7</b>	<b>37.70</b>

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-19

### Long-Distance Trips by Household Income, in Percent

	Percent	SE
Less than \$25,000	13.1	0.55
\$25,000-\$49,999	30.1	0.77
\$50,000 or more	56.7	0.77
<b>Total</b>	<b>100.0</b>	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.



Table A-20

**Long-Distance Trips by Mode and Household Income, in Percent**

	<b>Less than \$25,000</b>		<b>\$25,000 to \$49,999</b>		<b>\$50,000 or more</b>		<b>Total</b>	
	<b>Percent</b>	<b>SE</b>	<b>Percent</b>	<b>SE</b>	<b>Percent</b>	<b>SE</b>	<b>Percent</b>	<b>SE</b>
Personal vehicle	92.3	0.81	93.3	0.40	87.1	0.43	89.7	0.33
Air	3.0	0.34	3.8	0.29	10.2	0.38	7.3	0.27
Bus	3.7	0.57	2.1	0.21	1.7	0.16	2.1	0.13
Train	0.7	0.22	0.6	0.18	0.8	0.13	0.7	0.09
Other	0.3	0.28	0.1	0.05	0.2	0.06	0.2	0.05
<b>Total</b>	100.0		100.0		100.0		100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-21

**Long-Distance Trips by Age, in Percent**

	<b>Percent</b>	<b>SE</b>
Under 25	25.7	0.49
25-64	65.8	0.52
65 or older	8.5	0.26
<b>Total</b>	100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-22

**Long-Distance Trips and Trip Miles by Mode, in Millions**

	<b>Total trips (Millions)</b>		<b>Median miles</b>		<b>Total miles (Millions)</b>	
		<b>SE</b>		<b>SE</b>		<b>SE</b>
Personal vehicle	2,336.1	36.89	194	3	760,324.7	11,695.33
Air	193.3	6.28	2,068	45	557,609.3	25,375.76
Bus	55.4	3.45	287	20	27,081.3	3,048.33
Train	21.1	2.88	192	26	10,546.0	1,998.44
Other	5.8	1.45	188	48	5,117.9	1,123.89
<b>Total</b>	2,611.7	37.70	210	3	1,360,679.1	28,295.42

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-23

**Long-Distance Trips by Mode and Distance, in Percent**

	<u>100-299 miles</u>		<u>300-499 miles</u>		<u>500-999 miles</u>		<u>1,000-1,999 miles</u>		<u>2,000+ miles</u>	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Personal vehicle	97.2	0.24	94.3	0.45	85.9	0.83	53.9	1.90	22.2	1.47
Air	0.2	0.05	1.5	0.27	10.3	0.78	42.4	1.91	74.8	1.54
Bus	1.6	0.15	3.4	0.35	3.2	0.37	2.6	0.60	1.4	0.42
Train	0.9	0.16	0.7	0.19	0.6	0.19	0.9	0.50	0.8	0.32
Other	0.2	0.07	0.1	0.08	0.0	0.03	0.1	0.08	0.8	0.24
<b>Total</b>	100.0		100.0		100.0		100.0		100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-24a

**Long-Distance Trips by Purpose, in Percent**

	Percent	SE
Commute	12.7	0.83
Business	15.9	0.50
Pleasure	55.5	0.76
Personal Business	12.6	0.41
Other	3.4	0.20
<b>Total</b>	100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-24b

**Long-Distance Trips by Mode and Purpose, in Percent**

	<u>Commute</u>		<u>Business</u>		<u>Pleasure</u>		<u>Personal business</u>		<u>Other</u>	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Personal vehicle	96.4	0.79	79.3	1.08	90.4	0.36	89.3	0.71	96.6	0.83
Air	1.5	0.35	17.8	0.94	6.7	0.29	4.7	0.44	1.9	0.64
Bus	0.5	0.25	0.8	0.25	2.2	0.19	5.6	0.53	0.5	0.25
Train	1.7	0.69	1.6	0.37	0.5	0.08	0.3	0.13	0.0	0.04
Other	0.0	0.00	0.5	0.28	0.2	0.04	0.1	0.05	1.0	0.53
<b>Total</b>	100.0		100.0		100.0		100.0		100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey, preliminary long-distance trip file, U.S. Department of Transportation.

Table A-25

**Long-Distance Trips and Miles by Destination,  
in Percent**

	<b>Trips (Percent)</b>	<b>SE</b>	<b>Miles (Percent)</b>	<b>SE</b>
International	2.2	0.15	16.4	1.29
Different region	10.9	0.36	33.3	0.98
Different state, different division, same region	7.5	0.29	9.9	0.42
Different state, same division	17.0	0.49	13.8	0.53
Same state	62.4	0.63	26.7	0.67
<b>Total</b>	100.0		100.0	

NOTE: SE = standard error.

SOURCE: The 2001 National Household Travel Survey,  
preliminary long-distance trip file, U.S. Department of  
Transportation.



# Appendix B—Glossary

**Census Division:** The classification is derived from the household's home address and is based on the 2000 Census definitions. The nine categories are:

1. New England (ME, NH, VT, CT, MA, RI)
2. Mid-Atlantic (NY, NJ, PA)
3. East North Central (IL, IN, MI, OH, WI)
4. West North Central (IA, KS, MO, MN, ND, NE, SD)
5. South Atlantic (DC, DE, FL, GA, MD, NC, SC, WV, VA)
6. East South Central (AL, KY, MS, TN)
7. West South Central (AR, LA, OK, TX)
8. Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)
9. Pacific (AK, CA, HI, OR, WA)

**Census region:** The classification is derived from the household's home address and is based on the 2000 Census definitions. The four categories are:

1. Northeast (CT, MA, ME, NH, NJ, NY, PA, RI, VT)
2. Midwest (IA, IL, IN, KS, MI, MO, MN, ND, NE, OH, SD, WI)
3. South (AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, WV, VA)
4. West (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY)

**Person miles of travel (PMT):** The number of miles traveled by all persons on the trip. For example, two people making a five-mile trip in one car would generate 10 person miles.

**Person trip:** A trip made by one person by any mode and for any purpose. (See definition of trip for differences between daily and long-distance trips.)

**Privately owned vehicle (POV) or Personal Vehicle (PV):** This mode of transportation includes all personal vehicles owned or available to the household such as cars, vans, pickup trucks, other trucks, recreational vehicles, and motorcycles. Private aircrafts or boats are not included in this category.

**Transit:** This category includes the following modes of transportation—local public transit buses, commuter buses, commuter trains, subway/elevated trains, street car/trolleys. Because of a detailed breakdown of categories available on the 2001 NHTS, the definition of transit no longer includes charter, tour, and courtesy buses.

**Trip:** Trips are defined differently in the daily and long-distance trip segments. Regular trips (more than 10 a day) that were part of a person's employment—e.g., trips by a taxi driver were not collected in either component.

**Daily trip:** On the daily travel component a trip is defined as going from one address to another, other than changing the mode of transportation. A daily trip does not have to originate from home, and can begin from the last address traveled.

**Long-distance trip:** In the travel period (long distance) component, a long-distance trip is defined as a trip of 50 miles or more away from home. This includes the portions of the trip from the home to farthest destination, as well as the return trip home and any overnight stops or changes in transportation made along the way.

**Trip purpose:** A trip purpose is the reason that motivates the travel. For this report, the following sets of trip categories were used for daily and long-distance trips respectively.

**Daily trip:**

*Family and Personal Business*—Includes trips for the purpose of window shopping or purchase of goods, doctor or dentist visits, picking up or dropping off someone else, and other personal reasons, such as the purchase of services, haircuts, banking, and car repair.

*School/Church*—Trips to school, college or university classes, or to attend religious activities.

*Social and Recreations*—Includes trips taken as vacation, to visit friends and relatives, and other activities such as participating in sports, and going to movies or other entertainment venues.

*Work*—Trips to and from one's place of work, or where one reports to work.

*Work Related*—Trips made for one's job, other than travel to and from the place of work. This may include going to a meeting, conference, or visiting clients.

**Long-distance trip:**

*Business*—This category includes trips taken to attend conferences and meetings or for any other business purpose other than commuting to and from work. Trips are classified as business so long as business is the primary purpose, even though the traveler may have done some sightseeing or other pleasure activities.

*Pleasure*—This category includes vacations, sightseeing excursions, as well as trips taken for the purposes of rest and relaxation, visiting friends and family or outdoor recreation.

*Personal and Family Business*—This category includes medical visits, shopping trips, and trips to attend weddings, funerals, etc.

*Work*—Trips to and from work, commonly referred to as commuting trips.

**Vehicle miles of travel (VMT):** Each mile traveled by a privately owned vehicle without regard to the number of occupants in the vehicle. For example, two people making a five-mile car trip would generate five vehicle miles of travel.

**Vehicle trips:** A vehicle trip includes all trips made by a privately owned vehicle without regard to the number of occupants in the vehicle.

# Appendix C—Census Regions and Divisions of the United States

