## Chapter 8 <br> Household Vehicles and Characteristics

Summary Statistics from Tables/Figures in this Chapter

| Source |  |  |
| :---: | :---: | :---: |
| Table 8.2 | Vehicles per capita, 2010 | 0.777 |
|  | Vehicles per licensed driver, 2010 | 1.14 |
|  | Vehicles per household, 2010 | 1.79 |
| Table 8.3 | Average household transportation expense, 2010 | 16.0\% |
| Table 8.5 | Share of households owning 3 or more vehicles |  |
|  | 1960 | 2.5\% |
|  | 1970 | 5.5\% |
|  | 1980 | 17.5\% |
|  | 1990 | 17.3\% |
|  | 2000 | 18.3\% |
|  | 2010 | 19.5\% |
| Figure 8.1 | Average occupancy rates by vehicle type, 2009 |  |
|  | Pickup Truck | 1.49 |
|  | Car | 1.55 |
|  | Sports Utility | 1.90 |
|  | Van | 2.35 |
| Table 8.10 | Average annual miles per household vehicle, 2009 | 11,300 |
| Table 8.16 | Share of workers who car pooled, 2010 | 10.4\% |
| Table 8.21 | Long-distance trips in the United States, 2001 |  |
|  | Person-trips | 2,554 million |
|  | Person-miles | 1,138 billion |

The number of vehicles in the United States is growing faster than the population. The growth in vehicle-miles has slowed in recent years. See Table 8.2 for vehicles per capita and vehicle-miles per capita.

Table 8.1
Population and Vehicle Profile, 1950-2010

| Year | Resident population ${ }^{\text {a }}$ (thousands) | Total households (thousands) | Number of vehicles in operation (thousands) | Total vehiclemiles (millions) | Number of licensed drivers (thousands) | Number of civilian employed persons (thousands) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950 | 151,868 | 43,554 | 43,501 | 458,246 | 62,194 | 58,920 |
| 1955 | 165,069 | 47,874 | 56,540 | 605,646 | 74,686 | 62,171 |
| 1960 | 179,979 | 52,799 | 67,906 | 718,762 | 87,253 | 65,778 |
| 1965 | 193,526 | 57,436 | 82,066 | 887,812 | 98,502 | 71,088 |
| 1970 | 205,052 | 63,401 | 98,136 | 1,109,724 | 111,543 | 78,628 |
| 1975 | 215,973 | 71,120 | 120,054 | 1,327,664 | 129,791 | 85,846 |
| 1980 | 227,226 | 80,776 | 139,831 | 1,527,295 | 145,295 | 99,303 |
| 1985 | 238,466 | 86,789 | 157,048 | 1,774,826 | 156,868 | 107,150 |
| 1986 | 240,651 | 88,458 | 162,094 | 1,834,872 | 159,487 | 109,597 |
| 1987 | 242,804 | 89,479 | 167,193 | 1,921,204 | 161,975 | 112,440 |
| 1988 | 245,021 | 91,061 | 171,741 | 2,025,962 | 162,853 | 114,968 |
| 1989 | 247,342 | 92,830 | 175,960 | 2,096,487 | 165,555 | 117,342 |
| 1990 | 250,132 | 93,347 | 179,299 | 2,144,362 | 167,015 | 118,793 |
| 1991 | 253,493 | 94,312 | 181,438 | 2,172,050 | 168,995 | 117,718 |
| 1992 | 256,894 | 95,669 | 181,519 | 2,247,151 | 173,125 | 118,492 |
| 1993 | 260,255 | 96,391 | 186,315 | 2,296,378 | 173,149 | 120,259 |
| 1994 | 263,436 | 97,107 | 188,714 | 2,357,588 | 175,403 | 123,060 |
| 1995 | 266,557 | 98,990 | 193,441 | 2,422,696 | 176,628 | 124,900 |
| 1996 | 269,667 | 99,627 | 198,294 | 2,485,848 | 179,539 | 126,708 |
| 1997 | 272,912 | 101,018 | 201,071 | 2,561,695 | 182,709 | 129,558 |
| 1998 | 276,115 | 102,528 | 205,043 | 2,631,522 | 184,980 | 131,463 |
| 1999 | 279,295 | 103,874 | 209,509 | 2,691,056 | 187,170 | 133,488 |
| 2000 | 282,385 | 104,705 | 213,300 | 2,746,925 | 190,625 | 136,891 |
| 2001 | 285,309 | 108,209 | 216,683 | 2,797,287 | 191,276 | 136,933 |
| 2002 | 288,105 | 109,297 | 221,027 | 2,855,508 | 194,296 | 136,485 |
| 2003 | 290,820 | 111,278 | 225,882 | 2,890,450 | 196,166 | 137,736 |
| 2004 | 293,463 | 112,000 | 231,398 | 2,964,788 | 198,889 | 139,252 |
| 2005 | 296,186 | 113,343 | 237,697 | 2,989,430 | 200,549 | 141,730 |
| 2006 | 298,996 | 114,384 | 244,022 | 3,014,371 | 202,810 | 144,427 |
| 2007 | 302,004 | 116,011 | 248,701 | 3,031,124 | 205,742 | 146,047 |
| 2008 | 304,798 | 116,783 | 250,239 | 2,976,528 | 208,321 | 145,362 |
| 2009 | 307,439 | 117,181 | 248,460 | 2,956,764 | 209,618 | 139,877 |
| 2010 | 308,746 | 117,538 | 239,812 | 2,966,494 | 210,115 | 139,064 |
| Average annual percentage change |  |  |  |  |  |  |
| 1950-2010 | 1.2\% | 1.7\% | 2.9\% | 3.2\% | 2.0\% | 1.4\% |
| 2000-2010 | 0.9\% | 1.2\% | 1.2\% | 0.8\% | 1.0\% | 0.2\% |

## Sources:

Resident population and civilian employed persons - U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States-2012, Washington, DC, 2012, tables 1, 2, 59, 586, and annual. (Additional resources: www.census.gov)
Vehicles in operation - The Polk Company. FURTHER REPRODUCTION PROHIBITED. (Additional resources: www.polk.com)
Licensed drivers and vehicle-miles - U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2010, Tables DL-20 and VM-1, and annual. (Additional resources: www.fhwa.dot.gov)

[^0]Vehicle-miles per capita reached 10,000 miles in 2004 but have declined since then. There were 1.72 vehicles for every employed civilian in the United States in 2010.

Table 8.2
Vehicles and Vehicle-Miles per Capita, 1950-2010 ${ }^{\text {a }}$

| Year | Vehicles per capita | Vehicle-miles per capita | Vehicles per household | Vehicles per licensed driver | Vehicles per civilian employed persons |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1950 | 0.286 | 3,017 | 1.43 | 0.70 | 0.74 |
| 1955 | 0.343 | 3,669 | 1.56 | 0.76 | 0.91 |
| 1960 | 0.377 | 3,994 | 1.65 | 0.78 | 1.03 |
| 1965 | 0.424 | 4,588 | 1.71 | 0.83 | 1.15 |
| 1970 | 0.479 | 5,412 | 1.76 | 0.88 | 1.25 |
| 1975 | 0.556 | 6,114 | 1.82 | 0.92 | 1.40 |
| 1980 | 0.614 | 6,707 | 1.80 | 0.96 | 1.41 |
| 1985 | 0.659 | 7,443 | 1.81 | 1.00 | 1.47 |
| 1986 | 0.674 | 7,625 | 1.80 | 1.02 | 1.48 |
| 1987 | 0.689 | 7,913 | 1.81 | 1.03 | 1.49 |
| 1988 | 0.701 | 8,269 | 1.79 | 1.05 | 1.49 |
| 1989 | 0.711 | 8,476 | 1.78 | 1.06 | 1.50 |
| 1990 | 0.717 | 8,573 | 1.79 | 1.07 | 1.51 |
| 1991 | 0.716 | 8,568 | 1.79 | 1.07 | 1.54 |
| 1992 | 0.707 | 8,747 | 1.81 | 1.05 | 1.53 |
| 1993 | 0.716 | 8,824 | 1.80 | 1.08 | 1.55 |
| 1994 | 0.716 | 8,949 | 1.81 | 1.08 | 1.53 |
| 1995 | 0.726 | 9,089 | 1.78 | 1.10 | 1.55 |
| 1996 | 0.735 | 9,218 | 1.80 | 1.10 | 1.56 |
| 1997 | 0.737 | 9,387 | 1.81 | 1.10 | 1.55 |
| 1998 | 0.743 | 9,531 | 1.80 | 1.11 | 1.56 |
| 1999 | 0.750 | 9,635 | 1.80 | 1.12 | 1.57 |
| 2000 | 0.755 | 9,728 | 1.82 | 1.12 | 1.56 |
| 2001 | 0.759 | 9,804 | 1.77 | 1.13 | 1.58 |
| 2002 | 0.767 | 9,911 | 1.78 | 1.14 | 1.62 |
| 2003 | 0.777 | 9,939 | 1.76 | 1.15 | 1.64 |
| 2004 | 0.789 | 10,103 | 1.78 | 1.16 | 1.66 |
| 2005 | 0.803 | 10,093 | 1.77 | 1.19 | 1.68 |
| 2006 | 0.816 | 10,082 | 1.77 | 1.20 | 1.69 |
| 2007 | 0.824 | 10,037 | 1.77 | 1.21 | 1.70 |
| 2008 | 0.821 | 9,766 | 1.78 | 1.20 | 1.72 |
| 2009 | 0.808 | 9,617 | 1.79 | 1.19 | 1.78 |
| 2010 | 0.777 | 9,608 | 1.79 | 1.14 | 1.72 |
| Average annual percentage change |  |  |  |  |  |
| 1950-2010 | 1.7\% | 1.9\% | 0.4\% | 0.8\% | 1.4\% |
| 2000-2010 | 0.3\% | -0.1\% | -0.2\% | 0.2\% | 1.0\% |

## Sources:

Resident population and civilian employed persons - U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States-2012, Washington, DC, 2012, Tables 2 and 586.
(Additional resources: www.census.gov)
Vehicles in operation - The Polk Company. FURTHER REPRODUCTION PROHIBITED. (Additional resources: www.polk.com)
Vehicle-miles - U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2010, Table VM-1 and annual. (Additional resources: www.fhwa.dot.gov)

[^1]Table 8.3
Average Annual Expenditures of Households by Income, 2010 ${ }^{\text {a }}$

|  | All <br> households | Income before taxes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Less than } \\ \$ 5,000 \end{array}$ | $\begin{gathered} \$ 5,000- \\ \$ 9,999 \end{gathered}$ | $\begin{gathered} \$ 10,000- \\ \$ 14,999 \end{gathered}$ | $\begin{array}{r} \text { \$15,000- } \\ \$ 19,999 \end{array}$ |
| Total expenditures | \$48,109 | \$20,748 | \$18,297 | \$19,909 | \$24,935 |
|  | Percentage of total expenditures ${ }^{\text {b }}$ |  |  |  |  |
| Food ${ }^{\text {c }}$ | 12.7\% | 16.0\% | 16.8\% | 15.7\% | 14.8\% |
| Housing | 34.4\% | 41.6\% | 41.7\% | 41.9\% | 40.3\% |
| Apparel and services | 3.5\% | 3.1\% | 5.3\% | 3.0\% | 3.6\% |
| Transportation | 16.0\% | 12.2\% | 12.6\% | 13.1\% | 15.3\% |
| Vehicle purchases (net outlay) | 5.4\% | 2.8\% | 2.5\% | 2.6\% | 3.5\% |
| Gasoline and motor oil | 4.0\% | 4.2\% | 4.9\% | 4.9\% | 5.0\% |
| Other vehicle expenditures | 5.1\% | 4.5\% | 4.4\% | 4.9\% | 6.1\% |
| Public transportation | 1.0\% | 0.7\% | 0.8\% | 0.6\% | 0.7\% |
| Health care | 6.6\% | 6.4\% | 5.2\% | 8.4\% | 8.2\% |
| Entertainment | 5.2\% | 5.0\% | 4.7\% | 4.9\% | 4.8\% |
| Personal Insurance \& pensions | 11.2\% | 1.7\% | 1.5\% | 2.1\% | 3.1\% |
| Others ${ }^{\text {d }}$ | 9.6\% | 12.8\% | 11.4\% | 10.2\% | 9.1\% |
| Households ${ }^{\text {e }}$ (thousands) | 121,107 | 4,858 | 5,280 | 8,114 | 8,177 |
| Percentage of households | 100\% | 4.0\% | 4.4\% | 6.7\% | 6.8\% |
| Average number of vehicles in HH | 1.9 | 0.8 | 0.8 | 0.9 | 1.2 |
|  | Income before taxes |  |  |  |  |
|  | $\begin{array}{r} \hline \$ 20,000- \\ \$ 29,999 \end{array}$ | $\begin{array}{r} \$ 30,000- \\ \$ 39,999 \end{array}$ | $\begin{array}{r} \$ 40,000- \\ \$ 49,999 \end{array}$ | $\begin{array}{r} \hline \$ 50,000- \\ \$ 69,999 \end{array}$ | $\$ 70,000$ <br> and over |
| Total expenditures | \$29,158 | \$35,556 | \$40,616 | \$47,966 | \$80,708 |
|  | Percentage of total expenditures ${ }^{\text {b }}$ |  |  |  |  |
| Food ${ }^{\text {c }}$ | 13.7\% | 13.7\% | 13.6\% | 13.1\% | 11.7\% |
| Housing | 37.9\% | 36.0\% | 35.3\% | 34.9\% | 32.2\% |
| Apparel and services | 3.9\% | 3.5\% | 3.4\% | 3.2\% | 3.6\% |
| Transportation | 16.7\% | 17.5\% | 17.5\% | 16.2\% | 15.7\% |
| Vehicle purchases (net outlay) | 5.4\% | 6.0\% | 5.6\% | 5.0\% | 5.8\% |
| Gasoline and motor oil | 5.3\% | 5.3\% | 5.3\% | 5.1\% | 3.8\% |
| Other vehicle expenditures | 5.2\% | 5.4\% | 5.8\% | 5.3\% | 4.9\% |
| Public transportation | 0.8\% | 0.8\% | 0.7\% | 0.8\% | 1.3\% |
| Health care | 9.1\% | 8.2\% | 7.2\% | 7.1\% | 5.5\% |
| Entertainment | 4.7\% | 4.8\% | 4.7\% | 5.1\% | 5.5\% |
| Personal Insurance \& pensions | 4.7\% | 6.6\% | 8.2\% | 10.2\% | 15.1\% |
| Others ${ }^{\text {d }}$ | 8.6\% | 8.8\% | 9.3\% | 9.1\% | 9.8\% |
| Households ${ }^{\text {e }}$ (thousands) | 14,729 | 13,022 | 11,446 | 17,368 | 38,113 |
| Percentage of households | 12.2\% | 10.8\% | 9.5\% | 14.3\% | 31.5\% |
| Average number of vehicles in HH | 1.5 | 1.7 | 2.0 | 2.2 | 2.7 |

## Source:

U.S. Department of Labor, Bureau of Labor Statistics, Web site: www.bls.gov/cex/, April 2012. (Additional resources: www.bls.gov)
${ }^{\text {a }}$ Public assistance monies are included in reported income. Data for those reporting income.
${ }^{\mathrm{b}}$ Percentages may not sum to totals due to rounding.
${ }^{\mathrm{c}}$ Includes alcoholic beverages.
${ }^{\mathrm{d}}$ Includes personal care, reading, education, tobacco and smoking supplies, cash contributions, and miscellaneous items.
${ }^{\mathrm{e}}$ The term household refers to a "consumer unit," which is defined differently than households on Table 8.1.

The average amount of money that a household spends in a year has gone from $\$ 23,976$ in 1985 to $\$ 48,109$ in 2010. Expenditures on transportation were $19.4 \%$ of the total in 1985, but were $16.0 \%$ in 2010 . Vehicle purchases made up one-third of transportation expenditures in 2010, while gas and oil were $27.8 \%$.

Table 8.4
Annual Household Expenditures for Transportation, 1985-2010
(constant 2010 dollars)

| Year | Transportation expenditures |  |  |  |  | Average annual household expenditures | Transportation share of annual expenditures |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vehicle purchases | Gas \& Oil | Other vehicle expenses ${ }^{\text {a }}$ | Public transportation | Total transportation |  |  |
| 1985 | 4,181 | 2,120 | 2,586 | 537 | 9,421 | 48,588 | 19.4\% |
| 1986 | 4,652 | 1,836 | 2,734 | 497 | 9,719 | 48,623 | 20.0\% |
| 1987 | 3,870 | 1,691 | 2,747 | 497 | 8,807 | 47,558 | 18.5\% |
| 1988 | 4,402 | 1,722 | 2,863 | 490 | 9,474 | 48,641 | 19.5\% |
| 1989 | 4,129 | 1,736 | 2,926 | 489 | 9,280 | 49,806 | 18.6\% |
| 1990 | 3,622 | 1,758 | 2,783 | 506 | 8,669 | 48,486 | 17.9\% |
| 1991 | 3,449 | 1,598 | 2,843 | 493 | 8,381 | 48,810 | 17.2\% |
| 1992 | 3,368 | 1,512 | 2,807 | 446 | 8,132 | 47,445 | 17.1\% |
| 1993 | 3,492 | 1,474 | 2,849 | 480 | 8,294 | 47,438 | 17.5\% |
| 1994 | 3,977 | 1,457 | 2,927 | 578 | 8,940 | 48,172 | 18.6\% |
| 1995 | 3,829 | 1,451 | 2,952 | 525 | 8,758 | 48,071 | 18.2\% |
| 1996 | 4,061 | 1,537 | 2,984 | 595 | 9,175 | 49,464 | 18.5\% |
| 1997 | 3,880 | 1,508 | 3,141 | 530 | 9,061 | 49,108 | 18.5\% |
| 1998 | 4,071 | 1,378 | 3,057 | 571 | 9,077 | 49,845 | 18.2\% |
| 1999 | 4,459 | 1,402 | 3,056 | 534 | 9,453 | 51,233 | 18.5\% |
| 2000 | 4,389 | 1,666 | 2,969 | 558 | 9,583 | 50,953 | 18.8\% |
| 2001 | 4,652 | 1,588 | 3,013 | 499 | 9,750 | 50,968 | 19.1\% |
| 2002 | 4,579 | 1,518 | 3,091 | 490 | 9,677 | 51,583 | 18.8\% |
| 2003 | 4,587 | 1,603 | 2,863 | 474 | 9,529 | 50,653 | 18.8\% |
| 2004 | 3,921 | 1,845 | 2,730 | 509 | 9,005 | 50,093 | 18.0\% |
| 2005 | 3,957 | 2,248 | 2,612 | 500 | 9,316 | 51,816 | 18.0\% |
| 2006 | 3,700 | 2,409 | 2,547 | 546 | 9,202 | 52,349 | 17.6\% |
| 2007 | 3,412 | 2,507 | 2,726 | 566 | 9,211 | 52,203 | 17.6\% |
| 2008 | 2,790 | 2,750 | 2,655 | 520 | 8,714 | 51,132 | 17.0\% |
| 2009 | 2,701 | 2,019 | 2,578 | 487 | 7,784 | 49,872 | 15.6\% |
| 2010 | 2,588 | 2,132 | 2,464 | 493 | 7,677 | 48,109 | 16.0\% |

## Source:

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, www.bls.gov/cex, May 2012. (Additional resources: www.bls.gov)
${ }^{a}$ Other vehicle expenses include vehicle finance charges, maintenance and repairs, insurance, licenses, and other vehicle charges.

Household vehicle ownership shows a dramatic increase from 1960 to 1990. In 1960, nearly $79 \%$ of households owned less than two vehicles; by 1990, it declined to $45 \%$. Census data prior to 1990 indicated that the majority of households owned one vehicle; in 1990 that changed to two vehicles.

Table 8.5
Household Vehicle Ownership, 1960-2010 Census
(percentage)

|  | No <br> vehicles |  |  |  |
| :---: | ---: | :---: | :---: | :---: |
| 1960 | $21.5 \%$ | One <br> vehicle | Two <br> vehicles | Three or <br> more <br> vehicles |
| 1970 | $17.5 \%$ | $56.9 \%$ | $19.0 \%$ | $2.5 \%$ |
| 1980 | $12.9 \%$ | $35.5 \%$ | $29.3 \%$ | $5.5 \%$ |
| 1990 | $11.5 \%$ | $33.7 \%$ | $34.0 \%$ | $17.5 \%$ |
| 2000 | $9.4 \%$ | $33.8 \%$ | $37.4 \%$ | $17.3 \%$ |
| 2010 | $9.1 \%$ | $33.8 \%$ | $38.6 \%$ | $18.3 \%$ |

## Source:

U. S. Department of Transportation, Volpe National Transportation Systems Center, Journey-to-Work Trends in the United States and its Major Metropolitan Area, 1960-1990, Cambridge, MA, 1994, p. 2-2.
2000 data - U.S. Bureau of the Census, American Fact Finder, factfinder.census.gov, Table QT-04, August 2001. (Additional resources: www.census.gov)
2010 data - U.S. Bureau of the Census, American Community Survey, Table CP04, 2010.

## 2009 National Household Travel Survey Daily Trip Data

The Department of Transportation (DOT) collected data on daily trips in 1969, 1977, 1983, 1990 and 1995 via the Nationwide Personal Transportation Survey (NPTS). For 2001, the DOT combined the collection of long trip and daily trip data into one survey - the 2001 National Household Travel Survey (NHTS). The long trip data were not included in the 2009 NHTS.

The NHTS is the nation's inventory of daily travel. The survey includes demographic characteristics of households, people, vehicles, and detailed information on daily travel for all purposes by all modes. NHTS survey data are collected from a sample of U.S. households and expanded to provide national estimates of trips and miles by travel mode, trip purpose, and a host of household attributes.

The NHTS was designed to continue the NPTS series, but as with all data surveys, caution should be used when comparing statistics from one survey to another due to changes in terminology, survey procedures, and target population. The 2001 and 2009 surveys collected data on trips of children under 5 years of age, while the previous NPTS did not. Improved methodologies first used in the collection of trip information in the 1995 NPTS make it difficult to compare these data with past NPTS survey data. Thus, the 1990 NPTS trip data have been adjusted to make it comparable with the later surveys.

Table 8.6
Demographic Statistics from the 1969, 1977, 1983, 1990, 1995 NPTS and 2001, 2009 NHTS
$\left.\begin{array}{lcccccccc}\hline & & & & & & & \begin{array}{c}\text { Percent } \\ \text { change }\end{array} \\ & 1969 & 1977 & 1983 & 1990 & 1995 & 2001 & 2009 & 1969-2009\end{array}\right]$

## Sources:

U.S. Department of Transportation, Federal Highway Administration, 1990 Nationwide Personal Transportation Survey: Summary of Travel Trends, FHWA-PL-92-027, Washington, DC, March 1992, Table 2. Data for 1995, 2001 and 2009 were generated from the Web site nhts.ornl.gov. (Additional resources: www.fhwa.dot.gov)

Note: Average vehicle trip length for 1990 and 1995 is calculated using only those records with trip mileage information present. The 1969 survey does not include pickups and other light trucks as household vehicles. Data on vehicles per household and licensed drivers per household will not match Table 8.2.

Due to methodology improvements in collecting trip information, the 2001 and 1995 data should be compared only to the 1990 adjusted data. The original 1990 data are comparable to all previous surveys; however, comparisons should always be made with caution because of differing survey methodologies.

Table 8.7
Average Annual Vehicle-Miles, Vehicle Trips and Trip Length per Household 1969, 1977, 1983, 1990, 1995 NPTS and 2001, 2009 NHTS

| Journey-to-work ${ }^{\text {a }}$ |  | All trips |
| :---: | :---: | :---: |
| Average annual vehicle-miles per household |  |  |
| 1969 | 4,183 | 12,423 |
| 1977 | 3,815 | 12,036 |
| 1983 | 3,538 | 11,739 |
| 1990 original | 4,853 | 15,100 |
| 1990 adjusted | 4,853 | 18,161 |
| 1995 | 6,492 | 20,895 |
| 2001 | 5,724 | 21,171 |
| 2009 | 5,513 | 19,850 |
| Average annual vehicle trips per household |  |  |
| 1969 | 445 | 1,396 |
| 1977 | 423 | 1,442 |
| 1983 | 414 | 1,486 |
| 1990 original | 448 | 1,702 |
| 1990 adjusted | 448 | 2,077 |
| 1995 | 553 | 2,321 |
| 2001 | 479 | 2,171 |
| 2009 | 457 | 2,068 |
| Average vehicle trip length (miles) |  |  |
| 1969 | 9.4 | 8.9 |
| 1977 | 9.0 | 8.4 |
| 1983 | 8.5 | 7.9 |
| 1990 original | 11.0 | 9.0 |
| 1990 adjusted | 11.0 | 8.9 |
| 1995 | 11.8 | 9.1 |
| 2001 | 12.2 | 9.9 |
| 2009 | 12.2 | 9.7 |

## Sources:

U.S. Department of Transportation, Federal Highway Administration, 1990 Nationwide Personal Transportation Survey: Summary of Travel Trends, FHWA-PL-92-027, Washington, DC, March 1992, Table 7. 1990 adjusted data - Oak Ridge National Laboratory, Oak Ridge, TN, August 1998. 1995 NPTS, 2001, 2009 NHTS data were generated from the Web site nhts.ornl.gov. (Additional resources: www.fhwa.dot.gov, nhts.ornl.gov)

[^2]In 2001 and 2009 vehicle-miles traveled (vmt) for a three-person household is around 28,000 miles. The number of drivers in a household makes a big difference in vmt, as does the presence of children in the household. Households with children have more than double the vmt of households without children.

Table 8.8
Average Number of Vehicles and Vehicle Travel per Household, 1990 NPTS and 2001 and 2009 NHTS

|  | Average <br> number of vehicles <br> per household |  | Average <br> vehicle-miles traveled <br> per household |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of licensed | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 9}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 9}$ |
| drivers | 1.5 | 1.2 | 1.1 | 15,200 | 9,700 | 8,800 |
| 1 | 2.1 | 2.2 | 2.2 | 22,900 | 25,800 | 23,500 |
| 2 | 2.9 | 3.0 | 3.0 | 29,400 | 37,900 | 37,700 |
| 3 | 3.8 | 3.8 | 3.9 | 40,500 | 47,200 | 55,200 |
| 4 or more |  |  |  |  |  |  |
| Household size | 1.2 | 1.0 | 1.0 | 11,400 | 7,500 | 7,100 |
| 1 person | 1.9 | 2.0 | 2.0 | 19,300 | 21,200 | 17,500 |
| 2 persons | 2.2 | 2.3 | 2.3 | 23,700 | 28,400 | 27,900 |
| 3 persons | 2.4 | 2.4 | 2.4 | 25,300 | 28,600 | 33,200 |
| 4 persons | 2.4 | 2.4 | 2.4 | 24,900 | 33,200 | 33,700 |
| 5 persons | 2.7 | 2.5 | 2.4 | 29,200 | 33,800 | 33,600 |
| 6 or more persons |  |  |  |  |  |  |
| Household urban status | 1.9 | 1.8 | 1.7 | 19,000 | 19,300 | 17,600 |
| Urban | 2.1 | 2.3 | 2.4 | 22,200 | 28,400 | 27,700 |
| Rural |  |  |  |  |  |  |
| Household composition | 2.2 | 2.2 | 2.2 | 24,100 | 28,300 | 30,400 |
| With children | 1.8 | 1.7 | 1.7 | 17,600 | 16,700 | 14,400 |
| Without children | $\mathbf{1 . 8}$ | $\mathbf{1 . 9}$ | $\mathbf{1 . 9}$ | $\mathbf{1 8 , 3 0 0}$ | $\mathbf{2 1 , 2 0 0}$ | $\mathbf{1 9 , 9 0 0}$ |
| All households |  |  |  |  |  |  |

## Source:

Generated from the Department of Transportation, Federal Highway Administration, Nationwide Personal Transportation Survey Public Use Files, Washington, DC, 2000 and the National Household Travel Survey Web site: nhts.ornl.gov. (Additional resources: nhts.ornl.gov)

In 2009, $22 \%$ of vehicle trips were traveling to and from work. Another $22 \%$ of trips were for shopping. Shopping is done close to home, as the average trip length for shopping was only 6.5 miles.

Table 8.9
Trip Statistics by Trip Purpose, 2001 and 2009 NHTS

| Trip purpose | Share of trips |  | Share of vehiclemiles traveled |  | Trip length (miles) |  | Trip length (minutes) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 | 2001 | 2009 |
| To/from work | 22.1\% | 22.3\% | 27.0\% | 28.7\% | 12.1 | 12.2 | 22.3 | 22.9 |
| Work-related business | 4.1\% | 3.9\% | 8.4\% | 7.2\% | 20.3 | 17.2 | 30.9 | 27.5 |
| Shopping | 21.1\% | 22.8\% | 14.5\% | 15.5\% | 6.7 | 6.5 | 14.4 | 14.4 |
| Other family/personal business | 24.7\% | 21.9\% | 18.7\% | 15.7\% | 7.5 | 6.8 | 15.2 | 14.8 |
| School/church | 4.9\% | 5.0\% | 3.7\% | 4.6\% | 7.5 | 8.8 | 15.8 | 17.5 |
| Medical/dental | 2.2\% | 2.6\% | 2.2\% | 2.6\% | 9.9 | 9.9 | 20.7 | 21.2 |
| Vacation | 0.4\% | 0.7\% | 1.8\% | 2.3\% | 47.4 | 31.4 | 59.6 | 41.3 |
| Visit friends/relatives | 6.3\% | 5.7\% | 9.4\% | 9.4\% | 14.9 | 15.7 | 24.4 | 24.6 |
| Other social/recreational | 13.7\% | 14.9\% | 13.2\% | 13.5\% | 9.6 | 8.6 | 18.2 | 17.2 |
| Other | 0.5\% | 0.3\% | 1.0\% | 0.6\% | 18.1 | 19.0 | 31.4 | 29.7 |
| All | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 9.9 | 9.7 | 18.7 | 18.6 |

## Source:

Generated from the National Household Travel Survey Web site: nhts.ornl.gov.
Note: The "All" category for average trip length and duration includes records for which trip purpose was not identified.

While car occupancy stayed nearly constant from 1995 to 2009, most other vehicle types showed increased occupancy. Vans and sport utility vehicles have higher vehicle occupancies than cars.

Figure 8.1. Average Vehicle Occupancy by Vehicle Type, 1995 NPTS and 2009 NHTS


## Sources:

U.S. Department of Transportation, Federal Highway Administration, 1995 Nationwide Personal Transportation Survey, Washington, DC, 1997, and 2009 National Household Travel Survey, Washington, DC. (Additional resources: www.fhwa.dot.gov, Web site: nhts.ornl.gov)

The average vehicle occupancy, calculated as person-miles per vehicle-mile, is highest for social and recreational purposes. The highest vehicle occupancy levels for all purposes were in 1977. The increase in number of vehicles per household and the decrease in average household size could have contributed to the decline since then.

Figure 8.2. Average Vehicle Occupancy by Trip Purpose 1977 NPTS and 2009 NHTS


## Sources:

U.S. Department of Transportation, Federal Highway Administration, 1990 Nationwide Personal Transportation Survey: Summary of Travel Trends, FHWA-PL-92027, Washington, DC, March 1992, Figure 6. Data from 2009 NHTS were generated from the Web site nhts.ornl.gov, March 2011. (Additional resources: www.fhwa.dot.gov, nhts.ornl.gov)

The 1990 household survey reports the highest average annual miles per vehicle and the 1983 survey reports the lowest. These data show that younger vehicles are typically driven more miles than older vehicles.

Table 8.10
Average Annual Miles per Household Vehicle by Vehicle Age

| Vehicle age <br> (years) | 1983 <br> self-reported | 1990 <br> self-reported | 1995 <br> self-reported | 2001 <br> self-reported | 2009 <br> self-reported |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Under 1 | 8,200 | 19,600 | 15,900 | 15,500 | 13,200 |
| 1 | 15,200 | 16,800 | 16,800 | 14,300 | 14,600 |
| 2 | 16,800 | 16,600 | 15,500 | 14,000 | 13,900 |
| 3 | 14,500 | 14,700 | 14,400 | 13,100 | 12,700 |
| 4 | 13,000 | 13,600 | 14,100 | 12,500 | 12,600 |
| 5 | 12,100 | 12,900 | 13,500 | 12,000 | 12,800 |
| 6 | 11,300 | 13,200 | 13,200 | 11,800 | 12,100 |
| 7 | 10,000 | 12,400 | 12,800 | 11,600 | 11,900 |
| 8 | 9,800 | 12,600 | 12,200 | 10,900 | 11,500 |
| 9 | 9,000 | 11,500 | 12,200 | 10,800 | 11,300 |
| 10 | 7,300 | 9,200 | 8,900 | 7,400 | 9,300 |
|  |  |  |  |  |  |
| All household | 10,400 | 12,500 | 12,200 | 11,100 | 11,300 |
| vehicles |  |  |  |  |  |

## Sources:

Nationwide Personal Transportation Study-1983: D. Klinger and J. Richard Kuzmyak, COMSIS Corporation, Personal Travel in the United States, Volume 1: 1983-84 Nationwide Personal Travel Study, prepared for the U.S. Department of Transportation, Washington, DC, August 1986, Table 4-22, p. 4-21. 1990: Generated from the 1990 Nationwide Personal Transportation Study Public Use Tape, March 1992. 1995, 2001 and 2009: Generated from the 2009 NHTS datasets, version 2, February 2011. (Additional resources: nhts.ornl.gov)

Note: Data include all household vehicles, and have been rounded to the nearest hundred.

Historically, the data from the Nationwide Personal Transportation Survey (NPTS) are based on estimates reported by survey respondents. For the 1995 NPTS and the 2001 National Household Travel Survey (NHTS), odometer data were also collected. The 1995 data indicate that respondents overestimate the number of miles they drive in a year, but the 2001 data do not show that same trend.

Table 8.11
Self-Reported vs. Odometer Average Annual Miles, 1995 NPTS and 2001 NHTS

| Vehicle age <br> (years) | 1995 <br> self-reported | 1995 <br> odometer | 2001 <br> self-reported | 2001 <br> odometer |
| :---: | :---: | :---: | :---: | :---: |
| Under 1 | 15,900 | 15,600 | 15,500 | 14,500 |
| 1 | 16,800 | 14,500 | 14,300 | 14,200 |
| 2 | 15,500 | 14,800 | 14,000 | 13,700 |
| 3 | 14,400 | 13,800 | 13,100 | 14,100 |
| 4 | 14,100 | 12,900 | 12,500 | 13,400 |
| 5 | 13,500 | 12,700 | 12,000 | 12,900 |
| 6 | 13,200 | 12,400 | 11,800 | 12,400 |
| 7 | 12,800 | 11,600 | 11,600 | 12,100 |
| 8 | 12,200 | 11,300 | 10,900 | 11,300 |
| 9 | 12,200 | 11,200 | 10,800 | 10,500 |
| 10 and older | 8,900 | 9,000 | 7,400 | 8,100 |
| All household |  |  |  |  |
| vehicles | 12,200 | 11,800 | 11,000 | 11,800 |

## Source:

Generated from the Web site: nhts.ornl.gov and 2001 NHTS public use file.
Note: The 2009 NHTS did not collect similar data. Survey methodology on odometer reading data differs from 1995 to 2001 data.

Figure 8.3. Share of Vehicle Trips by Trip Distance, 2009 NHTS


Source:
National Household Travel Survey, Web site nhts.ornl.gov.

Figure 8.4. Share of Vehicle Trips to Work by Trip Distance, 2009 NHTS


Source:
National Household Travel Survey, Web site: nhts.ornl.gov.

Nineteen percent of new vehicles ( 1 year old and under) travel over 20,000 miles per year. Almost half of the vehicles over 20 years old travel less than 4,000 miles in a year.

Table 8.12
Share of Vehicles by Annual Miles of Travel and Vehicle Age, 2009 NHTS

| Annual vehicle miles of travel | Vehicle age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 and under | 2 | 3 | 4 | 5 | 6 | 7 |
| < 1,000 miles | 2\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% |
| 1-2,000 miles | 2\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% |
| 2-4,000 miles | 5\% | 6\% | 7\% | 7\% | 6\% | 7\% | 9\% |
| 4-6,000 miles | 7\% | 10\% | 9\% | 8\% | 8\% | 10\% | 10\% |
| 6-8,000 miles | 10\% | 10\% | 11\% | 11\% | 10\% | 12\% | 12\% |
| 8-10,000 miles | 11\% | 11\% | 11\% | 11\% | 11\% | 12\% | 12\% |
| 10-12,000 miles | 9\% | 11\% | 11\% | 11\% | 12\% | 11\% | 11\% |
| 12-15,000 miles | 16\% | 15\% | 14\% | 15\% | 15\% | 14\% | 13\% |
| 15-20,000 miles | 18\% | 15\% | 17\% | 17\% | 16\% | 14\% | 14\% |
| 20-30,000 miles | 13\% | 11\% | 12\% | 11\% | 11\% | 10\% | 9\% |
| $>30,000$ miles | 6\% | 5\% | 4\% | 3\% | 4\% | 4\% | 3\% |
| All | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |
| Vehicle age (years) |  |  |  |  |  |  |  |
|  | 8 | 9 | 10 | 11-15 | 16-20 | Over 20 |  |
| < 1,000 miles | 4\% | 4\% | 4\% | 6\% | 9\% | 19\% |  |
| 1-2,000 miles | 4\% | 4\% | 4\% | 5\% | 7\% | 8\% |  |
| 2-4,000 miles | 9\% | 9\% | 10\% | 11\% | 16\% | 19\% |  |
| 4-6,000 miles | 11\% | 12\% | 12\% | 14\% | 14\% | 14\% |  |
| 6-8,000 miles | 12\% | 12\% | 11\% | 14\% | 13\% | 12\% |  |
| 8-10,000 miles | 13\% | 11\% | 12\% | 12\% | 10\% | 7\% |  |
| 10-12,000 miles | 11\% | 11\% | 11\% | 10\% | 8\% | 6\% |  |
| 12-15,000 miles | 13\% | 13\% | 12\% | 10\% | 8\% | 5\% |  |
| 15-20,000 miles | 12\% | 13\% | 14\% | 9\% | 7\% | 5\% |  |
| 20-30,000 miles | 9\% | 8\% | 7\% | 7\% | 4\% | 3\% |  |
| $>30,000$ miles | 3\% | 3\% | 3\% | 3\% | 2\% | 2\% |  |
| All | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |  |

## Source:

Generated from the Department of Transportation, Federal Highway Administration, 2009 National Household Travel Survey Web site: nhts.ornl.gov. (Additional resources: nhts.ornl.gov)

The average driver makes three trips per day with an average of 9.7 miles for each trip.

Table 8.13
Household Vehicle Trips, 2009 NHTS

|  | Number of daily <br> vehicle trips <br> (per driver) | Average <br> vehicle trip <br> length (miles) | Daily vehicle <br> miles of travel <br> (per driver) |
| :---: | :---: | :---: | :---: |
| 1990 | 3.3 | 8.9 | 28.5 |
| 1995 | 3.6 | 9.1 | 32.1 |
| 2001 | 3.4 | 9.9 | 32.7 |
| 2009 | 3.0 | 9.7 | 29.0 |

## Source:

National Household Travel Survey Web site: nhts.ornl.gov.

Figure 8.5. Average Daily Miles Driven (per Driver), 2009 NHTS


## Source:

National Household Travel Survey Web site: nhts.ornl.gov.

Table 8.14
Daily Vehicle Miles of Travel (per Vehicle) by Number of Vehicles in the Household, 2009 NHTS

|  | Daily miles per vehicle |  |
| :---: | :---: | :---: |
| Number of household vehicles | 2001 | 2009 |
| 1 | 25.6 | 29.1 |
| 2 | 27.5 | 32.7 |
| 3 | 24.2 | 31.3 |
| 4 | 23.0 | 30.2 |
| 5 | 21.1 | 27.6 |
| More than 5 | 18.4 | 27.2 |
| All | 25.2 | 31.1 |

Source:
2009 National Household Travel Survey, Web site: nhts.ornl.gov.

Table 8.15
Daily and Annual Vehicle Miles of Travel and Average Age for Each Vehicle in a Household, 2009 NHTS

| Vehicle number | Average <br> daily miles | Average <br> annual miles | Average age <br> (years) |
| :---: | :---: | :---: | :---: |
| One-vehicle household |  |  |  |
| 1 | 29.0 | 10,600 | 9.0 |
| Two-vehicle household | 43.6 | 15,900 | 7.6 |
| 1 | 21.4 | 7,800 | 9.0 |
| 2 | 50.7 | 18,500 | 7.9 |
| Three-vehicle household | 28.2 | 10,300 | 9.1 |
| 1 | 14.0 | 5,100 | 11.8 |
| 2 |  |  |  |
| 3 | 56.2 | 20,500 | 8.5 |
| Four-vehicle household | 33.2 | 12,100 | 8.8 |
| 1 | 20.3 | 7,400 | 11.4 |
| 2 | 9.9 | 3,600 | 13.2 |
| 3 | 57.8 | 21,100 |  |
| 4 | 34.0 | 12,400 | 8.5 |
| Five-vehicle household | 22.7 | 8,300 | 9.4 |
| 1 | 14.2 | 5,200 | 12.3 |
| 2 | 6.3 | 2,300 | 12.7 |
| 3 |  |  | 16.8 |
| 4 | 61.4 | 22,400 | 10.2 |
| 5 | 38.1 | 13,900 | 9.8 |
| Six-vehicle household | 96.3 | 9,600 | 12.2 |
| 1 | 17.5 | 6,400 | 12.5 |
| 2 | 10.4 | 3,800 | 14.5 |
| 3 | 4.4 | 1,600 | 17.9 |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
|  |  |  |  |

Source:
2009 National Household Travel Survey, Web site: nhts.ornl.gov.

Figure 8.6. Daily Vehicle Miles of Travel for Each Vehicle in a Household, 2009 NHTS


Source:
2009 National Household Travel Survey, Web site: nhts.ornl.gov.

Figure 8.7. Annual Vehicle Miles of Travel for Each Vehicle in a Household, 2009 NHTS


Source:
2009 National Household Travel Survey, Web site: nhts.ornl.gov.

According to the U.S. Census data, the percentage of workers who car pooled has dropped from $19.7 \%$ in 1980 to $10.4 \%$ in 2010. The percent of workers using public transit declined from $6.4 \%$ to $5.3 \%$ in the ten-year period between 1980 and 1990, but stayed relatively the same from 1990 to 2010 ( $\sim 5.0 \%)$. The average travel time increased by 3.6 minutes from 1980 to 2010. The American Community Survey (ACS) now collects journey-to-work data on an annual basis. It shows the average commute time as 25.3 minutes in 2010.

Table 8.16
Means of Transportation to Work, 1980, 1990, 2000, and 2010

|  | 1980 Census |  | 1990 Census |  | 2000 Census |  | 2010 ACS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Means of transportation | Number of workers (thousands) | Share | Number of workers (thousands) | Share | Number of workers (thousands) | Share | Number of workers <br> (thousands) | Share |
| Private vehicle | 81,258 | 84.1\% | 99,593 | 86.5\% | 112,736 | 87.9\% | 120,259 | 86.4\% |
| Drove alone | 62,193 | 64.4\% | 84,215 | 73.2\% | 97,102 | 75.7\% | 105,841 | 76.0\% |
| Car pooled | 19,065 | 19.7\% | 15,378 | 13.4\% | 15,635 | 12.2\% | 14,418 | 10.4\% |
| Public transportation | 6,175 | 6.4\% | 6,070 | 5.3\% | 6,068 | 4.7\% | 7,037 | 5.1\% |
| Bus or trolley bus ${ }^{\text {a }}$ | 3,925 | 4.1\% | 3,445 | 3.0\% | 3,207 | 2.5\% | 3,705 | 2.7\% |
| Streetcar or trolley car ${ }^{\text {a }}$ | $b$ | b | 78 | 0.1\% | 73 | 0.1\% | 90 | 0.1\% |
| Subway or elevated | 1,529 | 1.6\% | 1,755 | 1.5\% | 1,886 | 1.5\% | 2,294 | 1.6\% |
| Railroad | 554 | 0.6\% | 574 | 0.5\% | 658 | 0.5\% | 744 | 0.5\% |
| Ferryboat | $b$ | b | 37 | 0.0\% | 44 | 0.0\% | 40 | 0.0\% |
| Taxicab | 167 | 0.2\% | 179 | 0.2\% | 200 | 0.2\% | 164 | 0.1\% |
| Motorcycle | 419 | 0.4\% | 237 | 0.2\% | 142 | 0.1\% | 305 | 0.2\% |
| Bicycle | 468 | 0.5\% | 467 | 0.4\% | 488 | 0.4\% | 717 | 0.5\% |
| Walked only | 5,413 | 5.6\% | 4,489 | 3.9\% | 3,759 | 2.9\% | 3,962 | 2.8\% |
| Other means | 703 | 0.7\% | 809 | 0.7\% | 901 | 0.7\% | 1,216 | 0.9\% |
| Worked at home | 2,180 | 2.3\% | 3,406 | 3.0\% | 4,184 | 3.3\% | 5,760 | 4.1\% |
| Total workers | 96,617 | 100.0\% | 115,070 | 100.0\% | 128,279 | 100.0\% | 139,255 | 100.0\% |
| Average travel time (minutes) | 21.7 |  | 22.4 |  | 25.5 |  | 25.3 |  |

## Sources:

1980-1990 data - Provided by the Journey-to-Work and Migration Statistics Branch, Population Division, U.S. Bureau of the Census.
2000 data - U.S. Bureau of the Census, Journey to Work: 2000, Tables 1 and 2, 1990-2000, March 2004 (www.census.gov/population/www/socdemo/journey.html).
2010 data - U.S. Bureau of the Census, 2010 American Community Survey, Tables B08301 and S0802. (Additional resources: www.census.gov).

[^3]Table 8.17
Characteristics of U.S. Daily per Vehicle Driving vs. Dwelling Unit Type and Density

|  | Share of <br> vehicles in <br> density type | Hours per <br> vehicle <br> per day | Average vehicle <br> speed <br> (miles/hour) | Miles <br> per vehicle <br> per day |
| :--- | :---: | :---: | :---: | :---: |
| All classes detached single | $77.0 \%$ | 0.92 | 32.0 | 29.6 |
| All classes other | $23.0 \%$ | 0.99 | 27.7 | 27.4 |
| <1,000/sq. mile detached single | $81.6 \%$ | 0.91 | 34.7 | 31.6 |
| <1,000/sq. mile all other | $18.4 \%$ | 0.91 | 32.5 | 29.5 |
| 1,000-4,000/sq. mile detached single | $75.5 \%$ | 0.94 | 27.5 | 26.0 |
| 1,000-4,000/sq. mile all other | $24.5 \%$ | 1.03 | 25.1 | 25.9 |
| 4,000-10,000/sq. mile detached single | $42.5 \%$ | 0.96 | 26.1 | 25.1 |
| 4,000-10,000/sq. mile all other | $57.5 \%$ | 1.15 | 21.5 | 24.6 |
| 10,000-25,000/sq. mile detached single | $17.8 \%$ | 1.02 | 18.2 | 18.5 |
| 10,000-25,000/sq. mile all other | $82.2 \%$ | 1.05 | 21.3 | 22.3 |
| >25,000/sq. mile detached single | $9.8 \%$ | 0.72 | 20.5 | 14.8 |
| >25,000/sq. mile all other | $90.2 \%$ | 1.23 | 21.9 | 26.9 |

## Source:

Generated from the 2009 National Household Survey Web site: nhts.ornl.gov.

Table 8.18
Housing Unit Characteristics, 2009

|  | Share of occupied <br> housing units | $\%$ with garage or <br> carport |
| :--- | :---: | :---: |
| Type of housing unit |  |  |
| New construction (<=4 years) | $4.3 \%$ | $82.3 \%$ |
| Manufactured/mobile homes | $6.1 \%$ | $38.6 \%$ |
| Geographic location (Census Region) |  |  |
| Northeast | $18.3 \%$ | $52.5 \%$ |
| Midwest | $22.7 \%$ | $73.8 \%$ |
| South | $37.2 \%$ | $60.2 \%$ |
| West | $21.8 \%$ | $80.8 \%$ |
| Tenure |  |  |
| Owner | $68.4 \%$ | $79.8 \%$ |
| Renter | $31.6 \%$ | $37.5 \%$ |
| All occupied units | 111,806 units | $66.4 \%$ |

## Source:

U.S. Bureau of the Census, 2009 American Housing Survey, Table 2-7. (Additional information: www.census.gov/prod/2011pubs/h150-09.pdf.)

The average commute time increased to 25.3 minutes in 2010. Two thirds of workers travel less than 30 minutes to work. In 1990, $15.9 \%$ of workers commuted less than 15 minutes; in 2010, $28.1 \%$ enjoyed the short commute.

Table 8.19
Workers by Commute Time, 1990, 2000 and 2010

| Commute time | 1990 | 2000 | 2010 |
| :--- | :---: | :---: | :---: |
| Less than 15 minutes | $15.9 \%$ | $30.1 \%$ | $28.1 \%$ |
| $15-29$ minutes | $51.6 \%$ | $36.3 \%$ | $36.5 \%$ |
| $30-39$ minutes | $14.7 \%$ | $15.7 \%$ | $16.3 \%$ |
| $40-59$ minutes | $9.0 \%$ | $10.7 \%$ | $11.1 \%$ |
| 60 minutes or more | $5.9 \%$ | $7.3 \%$ | $8.0 \%$ |
| Average travel time (minutes) | 22.4 | 25.5 | 25.3 |

## Sources:

1990 - U. S. Department of Transportation, Volpe National Transportation Systems Center, Journey-to-Work Trends in the United States and its Major Metropolitan Area, 1960-1990, FHWA-PL-94-012, Cambridge, MA, 1994, p. 2-6.
2000 - U.S. Bureau of the Census, Journey to Work: 2000, Tables 1 and 2, 1990-2000, March 2004.
2010 - U.S. Bureau of the Census, 2010 American Community Survey, Tables S0802 and B08303. (Additional resources: www.census.gov)

Sales of bicycles with wheel sizes of 20 inches and over have grown at an average annual rate of $1.4 \%$ from 1981 to 2010. Bicycle sales experienced a large decline in 2009, which brought total sales to 14.9 million-a new low in the 18 -year series, but then sales rose to 19.8 million in 2010.

Table 8.20
Bicycle Sales, 1981-2010
(millions)

|  | Wheel <br> sizes under <br> 20 inches | Wheel sizes <br> of 20 inches <br> and over | All <br> wheel <br> sizes |
| :---: | :---: | :---: | :---: |
| 1981 | a | 8.9 | a |
| 1982 | a | 6.8 | a |
| 1983 | a | 9.0 | a |
| 1984 | a | 10.1 | a |
| 1985 | a | 11.4 | a |
| 1986 | a | 12.3 | a |
| 1987 | a | 1.6 | a |
| 1988 | a | 9.9 | a |
| 1989 | a | 10.7 | a |
| 1990 | a | 10.8 | a |
| 1991 | a | 11.6 | a |
| 1992 | 3.7 | 11.6 | 15.3 |
| 1993 | 3.8 | 13.0 | 16.8 |
| 1994 | 4.2 | 12.5 | 16.7 |
| 1995 | 4.1 | 12.0 | 16.1 |
| 1996 | 4.5 | 10.9 | 15.4 |
| 1997 | 4.2 | 11.0 | 15.2 |
| 1998 | 4.7 | 11.1 | 15.8 |
| 1999 | 5.9 | 1.6 | 17.5 |
| 2000 | 9.0 | 11.9 | 20.9 |
| 2001 | 5.4 | 11.3 | 16.7 |
| 2002 | 5.9 | 13.6 | 19.5 |
| 2003 | 5.6 | 12.9 | 18.5 |
| 2004 | 5.3 | 13.0 | 18.3 |
| 2005 | 5.8 | 14.0 | 19.8 |
| 2006 | 5.5 | 12.7 | 18.2 |
| 2007 | 5.4 | 12.8 | 18.2 |
| 2008 | 5.1 | 13.4 | 18.5 |
| 2009 | 4.7 | 10.2 | 14.9 |
| 2010 | 6.3 | 13.5 | 19.8 |
|  | Average annual percentage change |  |  |
| $1981-2010$ | a | $1.4 \%$ | a |
| $2000-2010$ | $-3.5 \%$ | $1.3 \%$ | $-0.5 \%$ |
|  |  |  |  |

## Source:

1981-1996: Bicycle Manufacturers Association. 1997-on: National Bicycle Dealers Association. (Additional resources: www.nbda.com)
${ }^{\text {a }}$ Data are not available.

In 2009, 4.5\% of walk trips and 10.9\% of bike trips were toffrom work. Forty-seven percent of all bike trips were for social/recreational purposes. Nearly $15 \%$ of walk trips were shopping trips.

Figure 8.8. Walk and Bike Trips by Trip Purpose, 2009 NHTS


## Source:

U.S. Department of Transportation, Federal Highway Administration, 2009 National Household Travel Survey Web site: nhts.ornl.gov.

In 2009 only data on daily trips were collected in the NHTS. The 2001 data are still the latest available on longdistance trips.

## Long Distance Trips - 2001 National Household Travel Survey

The 2001 National Household Travel Survey (NHTS) collected data on long-distance trips as well as everyday travel. The everyday travel data is a continuation of the Nationwide Personal Transportation Survey (NPTS), while the long-distance travel data is a continuation of the American Travel Survey (ATS) which was collected in 1977 and 1985. The survey collected trip-related data such as mode of transportation, duration, distance and purpose of trip. It also gathered demographic, geographic, and economic data for analysis purposes.

A long-distance trip is defined as a trip of 50 miles or more, one-way. Long-trip data from the 2001 NHTS were released in the summer of 2004. For additional information about the 2001 NHTS data, contact the Bureau of Transportation Statistics at 202-366-3282 or visit the following Web site: www.bts.gov/programs/national_household_travel_survey.

Table 8.21
Long-Distance Trip ${ }^{\text {a }}$ Characteristics, 2001 NHTS

| Trip characteristic | Person trips |  | Person miles |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (thousands) | (percent) | (thousands) | (percent) |
| Total | 2,554,068 | 100.0 | 1,138,322,697 | 100.0 |
| Principal means of transportation: |  |  |  |  |
| Personal use vehicles | 2,310,376 | 90.5 | 735,882,255 | 64.7 |
| Airplane | 165,039 | 6.5 | 367,888,741 | 32.3 |
| Commercial airplane | 158,880 | 6.2 | 361,717,015 | 31.8 |
| Bus ${ }^{\text {b }}$ | 52,962 | 2.1 | 23,747,433 | 2.1 |
| Intercity bus | 3,456 | 0.1 | 1,765,696 | 0.2 |
| Charter, tour, or school bus | 45,952 | 1.8 | 21,019,942 | 1.9 |
| Train | 20,672 | 0.8 | 9,266,373 | 0.8 |
| Round trip distance: |  |  |  |  |
| 100 to 300 miles | 1,688,358 | 66.1 | 284,586,370 | 25.0 |
| 300 to 499 miles | 373,550 | 14.6 | 143,571,597 | 12.6 |
| 500 to 999 miles | 261,802 | 10.3 | 180,669,482 | 15.9 |
| 1,000 to 1,999 miles | 125,665 | 4.9 | 178,629,838 | 15.7 |
| 2,000 miles or more | 104,694 | 4.1 | 350,865,409 | 30.8 |
| Mean (miles) | 446 | c | c | c |
| Median (miles) | 206 | c | c | c |
| Calendar quarter: |  |  |  |  |
| 1st quarter | 566,502 | 22.2 | 246,556,190 | 21.7 |
| 2nd quarter | 653,310 | 25.6 | 298,154,812 | 26.2 |
| 3 rd quarter | 734,878 | 28.8 | 341,021,290 | 30.0 |
| 4th quarter | 599,378 | 23.5 | 252,590,405 | 22.2 |
| Main purpose of trip: |  |  |  |  |
| Commuting | 329,395 | 12.9 | 65,877,968 | 5.8 |
| Other business | 405,866 | 15.9 | 242,353,212 | 21.3 |
| Personal/leisure | 1,406,411 | 55.1 | 667,471,358 | 58.7 |
| Personal business | 322,645 | 12.6 | 130,020,982 | 11.4 |
| Other | 88,230 | 3.5 | 32,031,679 | 2.8 |
| Nights away from home: |  |  |  |  |
| None | 1,454,847 | 57.0 | 304,469,524 | 26.8 |
| 1 to 3 nights | 808,281 | 31.7 | 414,219,147 | 36.4 |
| 4 to 7 nights | 214,464 | 8.4 | 269,265,597 | 23.7 |
| 8 or more nights | 76,475 | 3.0 | 150,368,429 | 13.2 |
| Destination: |  |  |  |  |
| Within Census division | 2,077,810 | 81.4 | 549,651,116 | 48.3 |
| Across Census division, within Census | 196,890 | 7.7 | 134,930,113 | 11.9 |
| Across Census region | 279,367 | 10.9 | 453,741,468 | 39.9 |

## Source:

U.S. Bureau of Transportation Statistics and the U.S. Federal Highway Administration, 2001 National Household Transportation Survey. (Additional resources: www.bts.gov/programs/national_household_travel_survey)

Note: Long-distance trips were not included in the 2009 NHTS.

[^4]
[^0]:    ${ }^{a}$ Estimates as of July 1. Includes Armed Forces in the United States.

[^1]:    ${ }^{\text {a }}$ Includes all vehicles (light and heavy).

[^2]:    ${ }^{\text {a }}$ It is believed that the methodology changes in the 1995 NPTS did not affect journey-to-work trips; therefore, no adjustment is necessary.

[^3]:    ${ }^{\text {a }}$ This category was "Bus or streetcar" in 1980.
    ${ }^{\mathrm{b}}$ Data are not available.

[^4]:    ${ }^{\text {a }}$ A long-distance trip is defined as a trip of 50 miles or more, one-way.
    ${ }^{\mathrm{b}}$ Includes other types of buses.
    ${ }^{\mathrm{c}}$ Not applicable.

