

Among the 128.3 million workers in the United States in 2000, 76 percent drove alone to work. In addition, 12 percent carpooled, 4.7 percent used public transportation, 3.3 percent worked at home, 2.9 percent walked to work, and 1.2 percent used other means (including motorcycle or bicycle).

This report, one of a series that presents population and housing data collected during Census 2000, provides information on the place-of-work and journey-to-work characteristics of workers 16 years and over who were employed and at work during the reference week.¹ Data are shown for the United States, regions, states, counties, and metropolitan areas.²

The questions on place of work and journey to work in Census 2000 ask about commuting patterns and

Figure 1.

Reproduction of the Questions on Journey to Work From Census 2000

22 At what location did this person work **LAST WEEK**? If this person worked at more than one location, print where he or she worked most last week.

a. Address (Number and street name)

(If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.)

b. Name of city, town, or post office

c. Is the work location inside the limits of that city or town?

- Yes
 No, outside the city/town limits

d. Name of county

e. Name of U.S. state or foreign country

f. ZIP Code

Source: U.S. Census Bureau, Census 2000 questionnaire.

characteristics of commuter travel, as illustrated in Figure 1.

Respondents' answers provide information about where people work, how they travel, what time they leave for work, and how long it takes them to get there. The place-of-work questions provide

¹ The reference week is the calendar week preceding the date on which the questions were answered.

² The text of this report discusses data for the United States, including the 50 states and the District of Columbia. Data for the Commonwealth of Puerto Rico are shown in Table 5 and Figure 4.

information that is used to understand the geographic patterns of commuter travel and the volume of travel in “flows” between origins and destinations (e.g., home in a suburban county to work in a central city). The 1960 census was the first to ask place-of-work questions, including the name of the city or town where the work takes place, whether it is inside or outside the city limits, the name of the county, and the name of the state. Beginning with the 1970 census, the place-of-work information was expanded to include the street address and ZIP code of the work location. This information provides more precise data for transportation planners to use to address the increasing pressure on the national transportation infrastructure.

The question on usual means of transportation to work identifies the various types of transportation people use to get to their jobs. The “usual means” is defined as the one used on the most days in the previous week. The 1960 census, which was the first to include this question, asked for the one type of transportation used over the longest distance. The transportation categories changed somewhat between 1960 and 2000, but the question has remained essentially the same. The question on the number of people in the vehicle measures the extent of carpooling and the number of cars, trucks, and vans used for travel to work. This question was first introduced in its present form in the 1980 census.

Information on the time the worker leaves home to go to work is used to estimate the volume of commuter travel at different time periods during a typical day, particularly peak hours of travel when traffic congestion is most severe. The departure time question was first

Figure 1.
Reproduction of the Questions on Journey to Work From Census 2000—Con.

23 a. How did this person usually get to work LAST WEEK? *If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.*

- Car, truck, or van
- Bus or trolley bus
- Streetcar or trolley car
- Subway or elevated
- Railroad
- Ferryboat
- Taxicab
- Motorcycle
- Bicycle
- Walked
- Worked at home → *Skip to 27*
- Other method

b. How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?

- Drove alone
- 2 people
- 3 people
- 4 people
- 5 or 6 people
- 7 or more people

If "Car, truck, or van" is marked in 23a, go to 23b. Otherwise, skip to 24a.

24 a. What time did this person usually leave home to go to work LAST WEEK?

: a.m. p.m.

b. How many minutes did it usually take this person to get from home to work LAST WEEK?

Minutes

:

Source: U.S. Census Bureau, Census 2000 questionnaire.

included in the 1990 census and was not changed on Census 2000. The question on the usual travel time to work asks for the amount of time in minutes that people regularly spend commuting to their daily

job. Increases in travel time may be due to increased congestion in particular areas or on particular roads, or to people traveling greater distances between home and work. Combined with departure time data, travel time information is used by

Table 1.
Means of Transportation to Work: 1990 and 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Means of transportation	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Pct. point
Workers 16 years and over	115,070,274	100.0	128,279,228	100.0	13,208,954	(X)
Car, truck, or van	99,592,932	86.5	112,736,101	87.9	13,143,169	1.3
Drove alone	84,215,298	73.2	97,102,050	75.7	12,886,752	2.5
Carpooled	15,377,634	13.4	15,634,051	12.2	256,417	-1.2
Public transportation	6,069,589	5.3	6,067,703	4.7	-1,886	-0.5
Bus or trolley bus	3,445,000	3.0	3,206,682	2.5	-238,318	-0.5
Streetcar or trolley car	78,130	0.1	72,713	0.1	-5,417	-
Subway or elevated	1,755,476	1.5	1,885,961	1.5	130,485	-0.1
Railroad	574,052	0.5	658,097	0.5	84,045	-
Ferryboat	37,497	-	44,106	-	6,609	-
Taxicab	179,434	0.2	200,144	0.2	20,710	-
Motorcycle	237,404	0.2	142,424	0.1	-94,980	-0.1
Bicycle	466,856	0.4	488,497	0.4	21,641	-
Walked	4,488,886	3.9	3,758,982	2.9	-729,904	-1.0
Other means	808,582	0.7	901,298	0.7	92,716	-
Worked at home	3,406,025	3.0	4,184,223	3.3	778,198	0.3

- Rounds to zero.
 (X) Not applicable.

Source: U.S. Census Bureau, 1990 Census Summary Tape File 3 and Census 2000 Summary File 3.

transportation planners to measure the efficiency of different modes of travel during peak (rush hour) and off-peak periods. Travel time also is a factor in determining the air quality attainment status for metropolitan areas and a measure that has been required since 1991 in the Inter-modal Surface Transportation Efficiency Act (ISTEA). This question was first included in the 1980 census and was substantially the same in 1990 and 2000.

Three out of four workers drove alone to work.

The pattern of commuting to work did not change dramatically from 1990 to 2000. The vast majority of commuters drove alone to work, a trend that has been seen since the question was first asked in 1960. As illustrated in Table 1, the number of people who drove alone to work increased between 1990 and 2000, from 84 million to 97 million,

and rose from 73 percent to 76 percent of workers.³ Carpooling rose slightly, from 15.4 million to 15.6 million, but its share of commuters decreased from 13 percent to 12 percent. The number of workers using public transportation to get to work was 6.1 million in both 1990 and 2000, but dropped from 5.3 percent to 4.7 percent of workers. The number of people walking to work decreased from 4.5 million to 3.8 million and fell below the number working at home for the first time since the question was initially asked in 1960. The number of people working at home rose from 3.4 million in 1990 to 4.2 million in 2000 and increased

³ The estimates in this report are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual values because of sampling variation or other factors. All statements made in this report have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

from 3.0 percent to 3.3 percent of workers.

Means of transportation to work varies among racial and ethnic groups.

Census 2000 allowed respondents to choose more than one race. With the exception of the Two or more races group, all race groups discussed in this report refer to people who indicated *only one* racial identity among the six major categories: White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Some other race.⁴ The use of the single-race population in this report does not imply

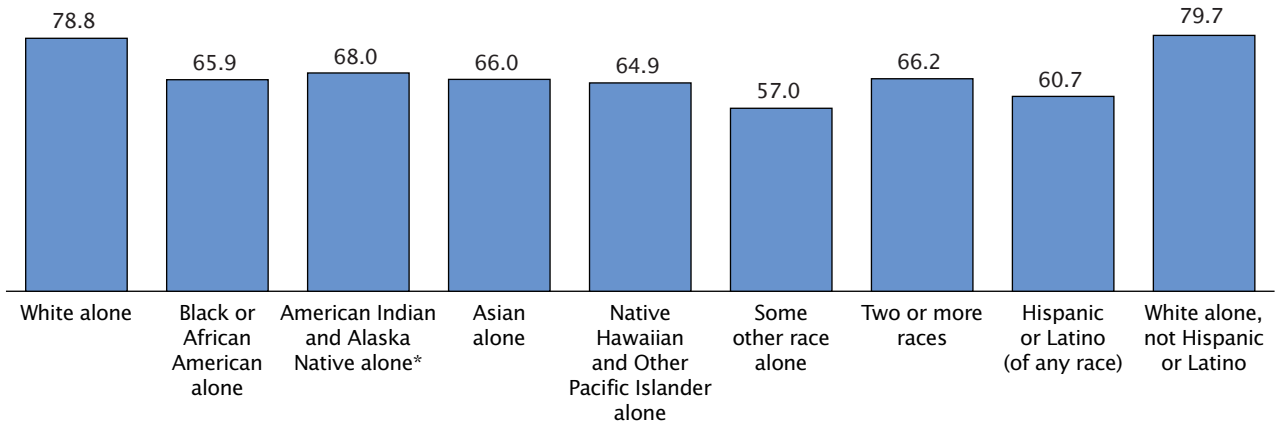
⁴ For further information on each of the six major race groups and the Two or more races population, see reports from the Census 2000 Brief series (C2KBR/01), available on the Census 2000 Web site at www.census.gov/population/www/cen2000/briefs.html.

Figure 2.

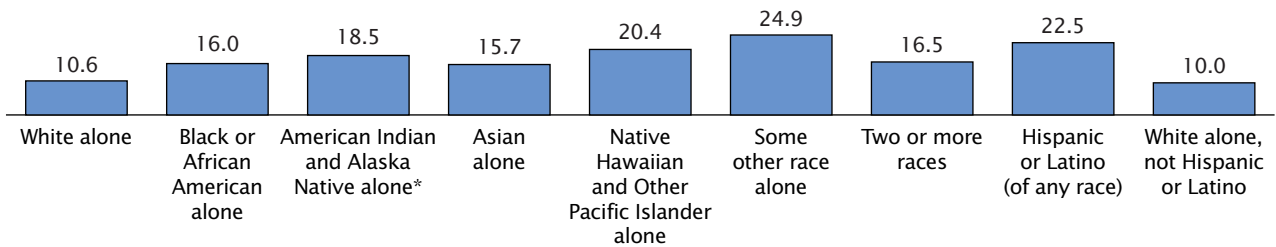
Means of Transportation to Work by Race and Hispanic Origin: 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

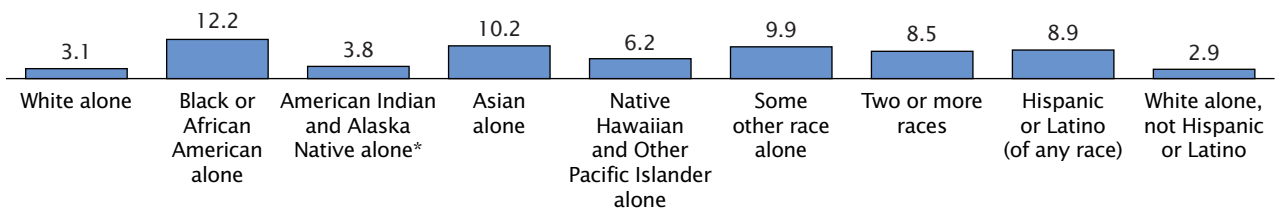
Drove alone (percent of workers 16 years and over)



Carpool (percent of workers 16 years and over)



Public transportation (percent of workers 16 years and over)



Source: U.S. Census Bureau, Census 2000 Summary File 3.

Table 2.
Travel Time to Work: 1990 and 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Travel time	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Pct. point
Workers 16 years and over	115,070,274	100.0	128,279,228	100.0	13,208,954	(X)
Did not work at home	111,664,249	97.0	124,095,005	96.7	12,430,756	-0.3
Worked at home	3,406,025	3.0	4,184,223	3.3	778,198	0.3
Did not work at home	111,664,249	100.0	124,095,005	100.0	12,430,756	(X)
Less than 5 minutes	4,314,682	3.9	4,180,407	3.4	-134,275	-0.5
5 to 9 minutes	13,943,239	12.5	13,687,604	11.0	-255,635	-1.5
10 to 14 minutes	17,954,128	16.1	18,618,305	15.0	664,177	-1.1
15 to 19 minutes	19,026,053	17.0	19,634,328	15.8	608,275	-1.2
20 to 24 minutes	16,243,343	14.5	17,981,756	14.5	1,738,413	-0.1
25 to 29 minutes	6,193,587	5.5	7,190,540	5.8	996,953	0.2
30 to 34 minutes	14,237,947	12.8	16,369,097	13.2	2,131,150	0.4
35 to 39 minutes	2,634,749	2.4	3,212,387	2.6	577,638	0.2
40 to 44 minutes	3,180,413	2.8	4,122,419	3.3	942,006	0.5
45 to 59 minutes	7,191,455	6.4	9,200,414	7.4	2,008,959	1.0
60 to 89 minutes	4,980,662	4.5	6,461,905	5.2	1,481,243	0.7
90 or more minutes	1,763,991	1.6	3,435,843	2.8	1,671,852	1.2
Average travel time (minutes)*	22.4	(X)	25.5	(X)	3.1	(X)

* Excludes workers who worked at home.
(X) Not applicable.

Source: U.S. Census Bureau, 1990 Census Summary Tape File 3 and Census 2000 Summary File 3.

that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches.⁵

Driving alone was by far the most prevalent means, followed by carpooling, regardless of race or Hispanic origin.⁶ Figure 2 shows how people of different racial and ethnic groups traveled to work in 2000. A much higher proportion of non-Hispanic White workers

drove alone to work than workers of other races or Hispanic origin. Hispanic workers were least likely to drive alone to work.⁷ People who were non-Hispanic White were least likely to take public transportation or to carpool.

Average travel time to work was about 26 minutes in 2000.

Average travel time increased from 21.7 minutes in 1980 to 22.4 minutes in 1990, and to 25.5 minutes in 2000, as shown in Table 2.⁸

However, the averages for 1990 and 2000 are not totally comparable. About 1 minute of the 3.1 minute increase between 1990 and 2000 was due to a change in

methodology.⁹ The increase in average travel time between 1990 and 2000 is reflected in the changes in the percentage distribution shown in Table 2. The proportions of trips in categories below 20 minutes all declined between 1990 and 2000, while the proportions in the categories of 25 minutes or more all increased. The proportion in the category 90 or more minutes nearly doubled, from 1.6 percent to 2.8 percent.

Men took longer to get to work than women.

Figure 3 shows how travel time to work differs for men and women. Traditionally, men have had longer commutes than women, and this continued to be true in 2000, with average commutes of 27.2 minutes

⁵ This report draws heavily on Summary File 3, a Census 2000 product that can be accessed through American FactFinder, available from the Census Bureau's Web site, www.census.gov. Information on people who reported more than one race, such as "White **and** American Indian and Alaska Native" or "Asian **and** Black or African American," is in Summary File 4, which is available through American FactFinder. About 2.6 percent of people reported more than one race.

⁶ Because Hispanics may be of any race, data in this report for Hispanics overlap with data for racial groups. Based on Census 2000 sample data, the proportion Hispanic was 97.1 percent for those reporting Some other race, 8.0 percent for Whites, 1.9 percent for Blacks, 14.6 percent for American Indians and Alaska Natives, 1.0 percent for Asians, 9.5 percent for Pacific Islanders, and 31.1 percent for those reporting Two or more races.

⁷ Hereafter, this report uses the term Black to refer to people who are Black or African American, the term Pacific Islander to refer to people who are Native Hawaiian and Other Pacific Islander, and the term Hispanic to refer to people who are Hispanic or Latino.

⁸ Data on average travel time in 1980 can be found on the Journey to Work and Place of Work page of the Census Web site at www.census.gov/population/www/socdemo/journey.html.

⁹ Prior to Census 2000, the questionnaire permitted respondents to mark no more than two digits for their travel time, limiting reported travel time to 99 minutes. Three digits were made available in the Census 2000 questionnaire, reflecting the greater frequency of extremely long commutes.

for men and 23.6 minutes for women. In general, a higher proportion of women than men made shorter commutes, particularly for trips that took from 5 to 24 minutes. Nearly equal proportions of men and women commuted between 25 and 29 minutes to work. For trips of 30 minutes or more, the proportion in each category was higher for men than women. The proportion working at home was also higher for men than for women: 3.7 percent compared with 2.9 percent. However, of the 4.2 million who worked at home, approximately 53 percent were women.

In 2000, about 53 percent of workers departed between 6:30 a.m. and 8:29 a.m. to go to work.

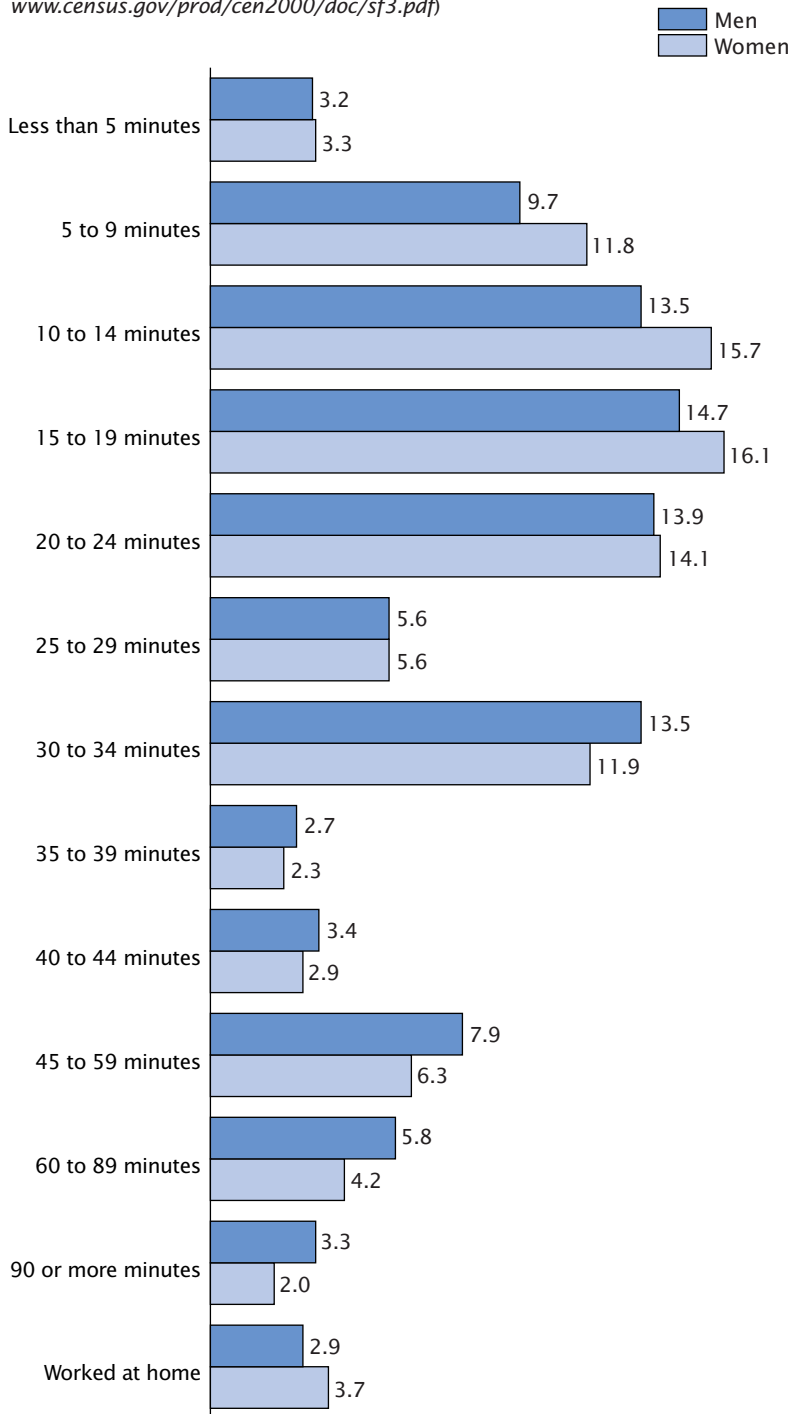
Table 3 shows the time period in which workers left home to go to work. The peak period was from 6:30 a.m. to 8:29 a.m., covering 55 percent of workers in 1990 and 53 percent in 2000. During the decade, the number departing from 12 midnight to 6:29 a.m. rose by nearly 4.8 million people, and increased from 18 percent to 20 percent of the total. Small changes occurred in the percentage of workers who left for work among the categories between 8:30 a.m. and 3:59 p.m. Additionally, the percentage did not show any statistical evidence of a change for those who departed between 4:00 p.m. and 11:59 p.m.

Fewer people worked in central cities than elsewhere in metropolitan areas in 2000.

Table 4 presents data on commuting patterns by place of residence and by place of work among central cities, the remainder of metropolitan areas (outside central cities), and nonmetropolitan areas for 1990 and 2000. The number of workers living in metropolitan areas

Figure 3.
Travel Time to Work by Sex: 2000

(Percent distribution of male workers and of female workers, 16 years and over. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)



Average travel time* for men = 27.2 minutes, women = 23.6 minutes

*Excludes workers who worked at home.
Source: U.S. Census Bureau, Census 2000.

Table 3.
Time Leaving Home to Go to Work: 1990 and 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Time leaving home	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Pct. point
Workers 16 years and over	115,070,274	(X)	128,279,228	(X)	13,208,954	(X)
Did not work at home	111,664,249	97.0	124,095,005	96.7	12,430,756	-0.3
Worked at home	3,406,025	3.0	4,184,223	3.3	778,198	0.3
Did not work at home	111,664,249	100.0	124,095,005	100.0	12,430,756	(x)
12:00 a.m. to 6:29 a.m.	19,699,963	17.6	24,487,991	19.7	4,788,028	2.1
12:00 a.m. to 4:59 a.m.	2,747,488	2.5	4,237,970	3.4	1,490,482	1.0
5:00 a.m. to 5:29 a.m.	2,724,375	2.4	3,763,208	3.0	1,038,833	0.6
5:30 a.m. to 5:59 a.m.	4,421,571	4.0	5,677,113	4.6	1,255,542	0.6
6:00 a.m. to 6:29 a.m.	9,806,529	8.8	10,809,700	8.7	1,003,171	-0.1
6:30 a.m. to 8:29 a.m.	61,194,181	54.8	65,101,888	52.5	3,907,707	-2.3
6:30 a.m. to 6:59 a.m.	13,013,935	11.7	13,386,429	10.8	372,494	-0.9
7:00 a.m. to 7:29 a.m.	17,745,201	15.9	18,640,062	15.0	894,861	-0.9
7:30 a.m. to 7:59 a.m.	17,601,419	15.8	19,665,861	15.8	2,064,442	0.1
8:00 a.m. to 8:29 a.m.	12,833,626	11.5	13,409,536	10.8	575,910	-0.7
8:30 a.m. to 11:59 a.m.	30,770,105	13.7	34,505,126	14.2	3,735,021	0.2
8:30 a.m. to 8:59 a.m.	6,033,700	5.4	6,528,339	5.3	494,639	-0.1
9:00 a.m. to 9:59 a.m.	5,792,355	5.2	6,835,549	5.5	1,043,194	0.3
10:00 a.m. to 10:59 a.m.	2,249,960	2.0	2,839,779	2.3	589,819	0.3
11:00 a.m. to 11:59 a.m.	1,167,633	1.0	1,360,775	1.1	193,142	0.1
12:00 p.m. to 3:59 p.m.	7,965,160	7.1	8,522,829	6.9	557,669	-0.3
4:00 p.m. to 11:59 p.m.	7,561,297	6.8	8,417,855	6.8	856,558	-

- Round to zero.
 (X) Not applicable.

Source: U.S. Census Bureau, 1990 Census Summary Tape File 3 and Census 2000 Summary File 3.

increased by 12.9 million (from 91.5 million to 104.4 million), while the number living outside metropolitan areas increased by only 340,000 (from 23.6 million to 23.9 million). As a result, the proportion of workers residing in metropolitan areas rose from 79.5 percent to 81.4 percent.

The number of workers who worked in metropolitan areas increased from 1990 to 2000 by 13.1 million (from 93.1 million to 106.3 million). Among workers in metropolitan areas, the number who worked in central cities rose by 2.7 million (from 47.9 million to 50.6 million), while the number who worked in the remainder, or suburbs, of metropolitan areas increased by 10.4 million (from 45.3 million to 55.7 million.) The changes in the numbers of workers

who worked in central cities compared with those who worked in the remainder of metropolitan areas continued trends seen over recent decades. For the first time, however, more than half of metropolitan area resident workers worked in the noncentral city portion of metropolitan areas, as the proportion rose from 48.6 percent in 1990 to 52.4 percent in 2000.

GEOGRAPHIC DISTRIBUTION OF COMMUTERS' JOURNEY TO WORK

Public transportation use was concentrated in the Northeast, and carpooling was concentrated in the South and the West.

As shown in Table 5, the means of transportation differed noticeably among the regions of the United

States.¹⁰ Specifically, public transportation usage was concentrated in the Northeast where about 50 percent of all workers who used public transportation resided. This group represented about 12 percent of workers in the Northeast, while less than 5 percent of workers in the other regions

¹⁰ The Northeast region includes the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Midwest region includes the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The South region includes the states of Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia, a state equivalent. The West region includes the states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Table 4.
Residence and Workplace by Metropolitan Status: 1990 and 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Year and place of residence	Workers 16 years and older		Workplace							
			In a metropolitan area						Outside metro area	
			Total		Central city		Remainder of metro area			
	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
1990										
Workers 16 years and over ..	115,070,274	100.0	93,117,895	80.9	47,861,224	41.6	45,256,671	39.3	21,952,379	19.1
In a metropolitan area	91,515,002	100.0	90,223,393	98.6	46,471,566	50.8	43,751,827	47.8	1,291,609	1.4
Central city	35,384,640	100.0	35,030,705	99.0	27,656,472	78.2	7,374,233	20.8	353,935	1.0
Remainder of metropolitan area ..	56,130,362	100.0	55,192,688	98.3	18,815,094	33.5	36,377,594	64.8	937,674	1.7
Outside any metropolitan area	23,555,272	100.0	2,894,502	12.3	1,389,658	5.9	1,504,844	6.4	20,660,770	87.7
2000										
Workers 16 years and over ..	128,279,228	100.0	106,264,817	82.8	50,601,339	39.4	55,663,478	43.4	22,014,411	17.2
In a metropolitan area	104,383,631	100.0	102,775,810	98.5	49,028,843	47.0	53,746,967	51.5	1,607,821	1.5
Central city	37,811,559	100.0	37,389,405	98.9	28,221,936	74.6	9,167,469	24.2	422,154	1.1
Remainder of metropolitan area ..	66,572,072	100.0	65,386,405	98.2	20,806,907	31.3	44,579,498	67.0	1,185,667	1.8
Outside any metropolitan area	23,895,597	100.0	3,489,007	14.6	1,572,496	6.6	1,916,511	8.0	20,406,590	85.4

Note: Workers who lived in a metropolitan area may work in any metropolitan area, whether they lived there or not. For full detail, see Table P-028 in Summary File 3.

Source: U.S. Census Bureau, 1990 Census SSTF20 Journey to Work in the United States and Census 2000 Summary File 3.

used public transportation. Lower proportions of workers drove alone to work in the Northeast (69 percent) and the West (73 percent) than in other regions. Carpooling was highest in the West and the South, used by 14.1 percent and 13.5 percent of workers respectively, and carpooling was employed the least in the Northeast, by only 9.8 percent of workers. However, 30 percent of those who walked to work lived in the Northeast, encompassing 5 percent of Northeast workers. Only 2 percent of workers in the South walked to work, but they accounted for 24 percent of walkers nationally due to the high number of workers residing in the South.

The Northeast had the longest average travel time, 28.2 minutes, nearly three minutes above the national average of 25.5 minutes. The Midwest had the shortest average travel time (23.2 minutes),

while the South and the West had travel times that were closer to the national average. Reflecting regional differences, average travel time varied from a low of 15.8 minutes in North Dakota in the Midwest to a high of 31.7 minutes in New York in the Northeast.

About one-third of all public transportation riders lived in New York State in 2000.

Additional variation across means of transportation appeared at the state level. The proportion of workers who drove alone ranged from a high of about 83 percent in Michigan, Alabama, and Ohio to a low of 56 percent in New York. Carpooling varied from 19 percent in Hawaii to 9 percent in Massachusetts. Public transportation use was highest in New York, with 24 percent of workers using public transportation to go to

work. The next highest state was New Jersey, with only 10 percent. Workers in other states with cities that offer major public transportation systems often used public transit. In the District of Columbia, 33 percent of workers used public transportation.¹¹ On the other hand, states not dominated by large metropolitan areas had high proportions walking to work. They included Alaska, Vermont, and Montana, with 7.3 percent, 5.6 percent, and 5.5 percent, respectively, but also high on the list was the District of Columbia (11.8 percent) and New York (6.2 percent).¹²

¹¹ The District of Columbia has a somewhat different pattern of means of transportation to work than the states because it is more comparable to large cities than to states.

¹² The rates in Vermont and Montana are not significantly different from one another.

Figure 4. Average Travel Time to Work: 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

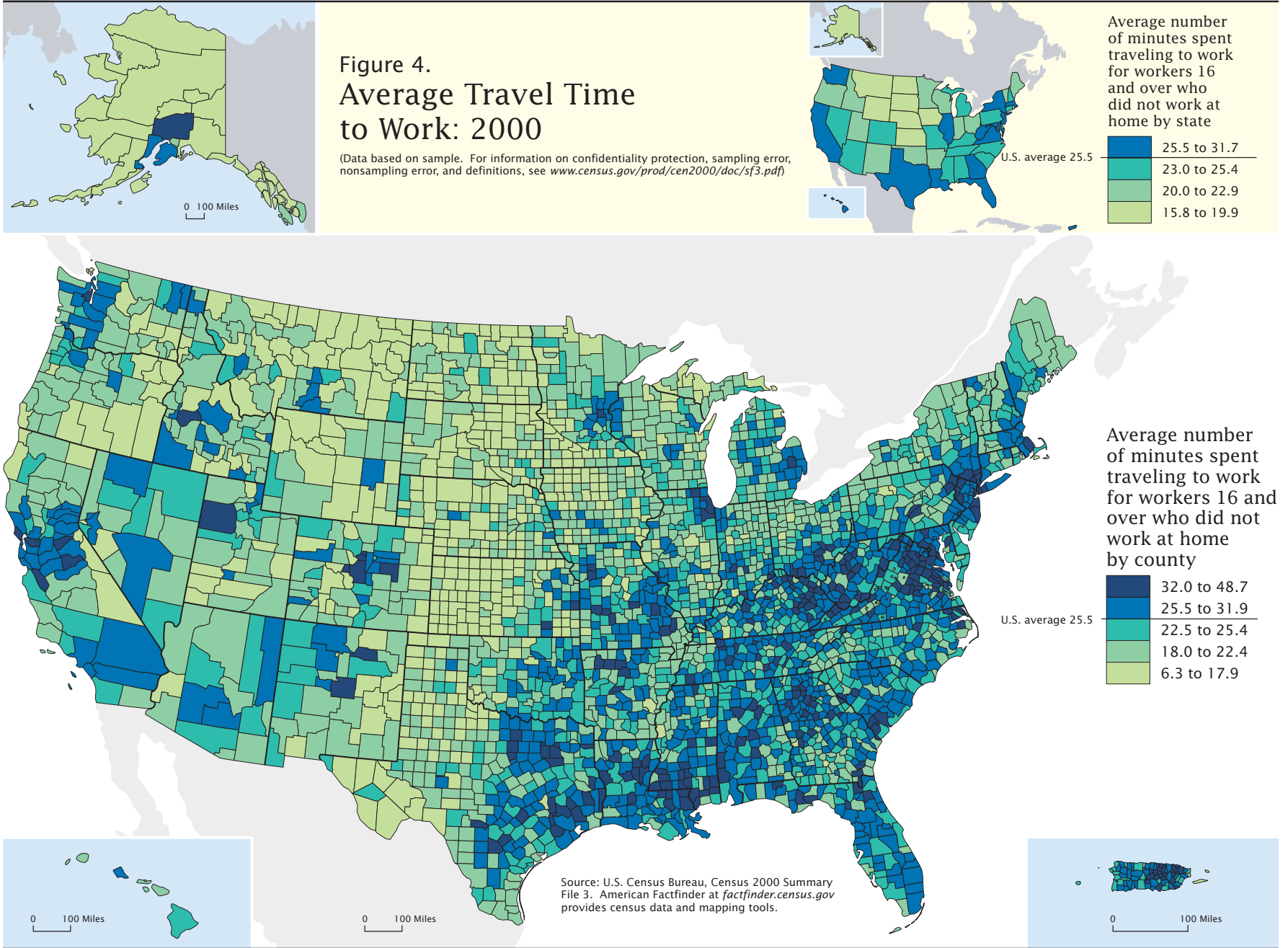


Table 5 shows also that states with high and low proportions of workers working at home tended to be primarily nonmetropolitan. States with the highest proportions were Montana, North Dakota, South Dakota, and Vermont; some of the states with low proportions of workers at home are Mississippi, Alabama, South Carolina, and Louisiana.

Workers east of the Mississippi River generally took longer to go to work than those west of the Mississippi River.

Figure 4 shows the average travel time to work by counties. Travel time varies by region of the country, and a major dividing line is the Mississippi River. East of the Mississippi, very few counties fit into the lowest category of less than 18 minutes, while a large number of counties west of the Mississippi fit into that category. Even though the Northeast had the overall highest regional travel time, the South contained more counties with higher travel times, reflecting the fact that there are more counties in the Southern region of the United States. The northern Midwest also had short travel times in comparison with other parts of the country. Most of the counties in the 6.3-to-17.9 minute category were located in the Midwest. The lower average travel time generally coincides with counties that have lower population densities. In Alaska, county equivalents, known as Boroughs or Census Areas, also fit the same pattern, with shorter travel times outside of the Anchorage MSA and surrounding area.

Metropolitan areas with high rates of carpool usage were concentrated in Texas and California.

Table 6 shows ten metropolitan areas with a high proportion of

workers who used the various types of transportation to work in 2000. Ten metropolitan areas with high percentages of commuters who drove alone were all east of the Mississippi River, concentrated in Ohio and Alabama.¹³ At the state level, these states also had high percentages of workers who drove alone, which contradicts the idea that driving alone to work characterizes only the newer metropolitan areas of the Southeast and the West. By contrast, the ten metropolitan areas where carpooling was frequent were located in the South and the West, primarily in Texas and California. A higher proportion of Hispanic workers than of other workers used carpools, and higher proportions of Hispanic workers reside in the South and the West than in other parts of the country.

On the other hand, different metropolitan areas have greater percentages of their workers utilizing means of transportation other than a car, truck, or van. For instance, the metropolitan areas that had a large share of people who walked to work were predominately college towns, such as the State College, PA, MSA. Two exceptions were the Jacksonville, NC, MSA and the Wichita Falls, TX, MSA, which contain large military bases. The New York-Northern New Jersey-Long Island, NY-NJ-CT-PA, CMSA, not surprisingly, had heavier-than-average use of public transportation. Most of the other areas in Table 6 that had high usage of public transportation also have large rail transit systems.

¹³ Metropolitan areas include consolidated metropolitan statistical areas (CMSAs), primary metropolitan statistical areas (PMSAs), and metropolitan statistical areas (MSAs). CMSAs, which are made up of at least two PMSAs, were used in this analysis rather than PMSAs. MSAs were used for metropolitan areas that do not have a CMSA.

ABOUT CENSUS 2000

Why Census 2000 asked about journey to work and place of work.

Commuting data are essential for planning highway improvements and developing public transportation services, as well as designing programs to ease traffic problems during peak hours, conserve energy, and reduce pollution. These data are used by state departments of transportation and more than 350 metropolitan planning organizations responsible for comprehensive transportation planning activities required by the Transportation Equity Act for the 21st Century (TEA21). Public transit agencies use these data to plan for transit investments, identify areas in need of better service, determine the most efficient routes, and plan for services for people with disabilities. Police and fire departments use data about where people work to plan emergency services in areas of high concentration of employment.

Accuracy of the Estimates

The data contained in this report are based on the sample of households who responded to the Census 2000 long form. Nationally, approximately 1 out of every 6 housing units was included in this sample. As a result, the sample estimates may differ somewhat from the 100-percent figures that would have been obtained if all housing units, people within those housing units, and people living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, and so forth. The sample estimates also differ from the values that would have been obtained from different samples of housing units, and hence of people living in those housing units, and people

Table 6.
Selected Metropolitan Areas by Means of Transportation to Work: 2000

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Means of transportation and metropolitan area	Workers 16 years and over	Number	Percent	90-percent confidence interval on percent*
DROVE ALONE				
Saginaw-Bay City-Midland, MI MSA	177,490	153,396	86.4	86.1-86.8
Youngstown-Warren, OH MSA	256,048	220,686	86.2	85.9-86.5
Canton-Massillon, OH MSA	190,116	163,530	86.0	85.7-86.3
Florence, AL MSA	61,069	52,490	86.0	85.4-86.5
Steubenville-Weirton, OH-WV MSA	53,617	45,749	85.3	84.7-86.0
Decatur, AL MSA	64,248	54,762	85.2	84.7-85.8
Anniston, AL MSA	47,181	40,171	85.1	84.5-85.8
Owensboro, KY MSA	42,298	35,984	85.1	84.4-85.8
Evansville-Henderson, IN-KY MSA	143,722	122,135	85.0	84.6-85.4
Johnson City-Kingsport-Bristol, TN-VA MSA	211,953	180,091	85.0	84.7-85.3
CARPOOL				
Salinas, CA MSA	164,517	32,117	19.5	19.0-20.0
Brownsville-Harlingen-San Benito, TX MSA	106,769	20,742	19.4	18.8-20.1
Honolulu, HI MSA	412,250	80,009	19.4	19.1-19.7
Laredo, TX MSA	61,256	11,822	19.3	18.5-20.1
McAllen-Edinburg-Mission, TX MSA	176,308	33,671	19.1	18.6-19.6
Visalia-Tulare-Porterville, CA MSA	130,744	24,391	18.7	18.1-19.2
Merced, CA MSA	73,346	13,535	18.5	17.7-19.2
Bakersfield, CA MSA	229,733	42,220	18.4	18.0-18.8
Victoria, TX MSA	37,867	6,651	17.6	16.6-18.6
Jacksonville, NC MSA	79,399	13,629	17.2	16.6-17.7
PUBLIC TRANSPORTATION				
New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA	9,319,218	2,320,155	24.9	24.8-25.0
Chicago-Gary-Kenosha, IL-IN-WI CMSA	4,218,108	484,835	11.5	11.4-11.6
San Francisco-Oakland-San Jose, CA CMSA	3,432,157	325,212	9.5	9.4-9.6
Washington-Baltimore, DC-MD-VA-WV CMSA	3,839,052	361,877	9.4	9.3-9.5
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	2,898,680	261,862	9.0	8.9-9.1
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA	2,815,405	245,909	8.7	8.6-8.8
Honolulu, HI MSA	412,250	34,250	8.3	8.1-8.5
Seattle-Tacoma-Bremerton, WA CMSA	1,776,224	119,919	6.8	6.7-6.9
Pittsburgh, PA MSA	1,057,354	65,345	6.2	6.1-6.3
Portland-Salem, OR-WA CMSA	1,105,133	63,126	5.7	5.6-5.8
WALKED				
State College, PA MSA	63,097	7,844	12.4	11.9-13.0
Jacksonville, NC MSA	79,399	8,219	10.4	9.9-10.8
Iowa City, IA MSA	63,087	6,306	10.0	9.5-10.5
Bloomington, IN MSA	60,423	5,173	8.6	8.0-9.1
Champaign-Urbana, IL MSA	91,368	7,770	8.5	8.1-8.9
Corvallis, OR MSA	37,747	2,910	7.7	7.1-8.3
Flagstaff, AZ-UT MSA	56,904	4,246	7.5	7.0-7.9
Lawton, OK MSA	51,684	3,767	7.3	6.8-7.8
Wichita Falls, TX MSA	65,448	4,594	7.0	6.5-7.5
Lawrence, KS MSA	54,496	3,659	6.7	6.2-7.3
WORKED AT HOME				
Santa Fe, NM MSA	73,129	5,064	6.9	6.5-7.3
Medford-Ashland, OR MSA	79,197	4,441	5.6	5.3-6.0
San Luis Obispo-Atascadero-Paso Robles, CA MSA	107,807	6,028	5.6	5.2-6.0
St. Cloud, MN MSA	90,105	4,978	5.5	5.2-5.8
Grand Junction, CO MSA	54,101	2,854	5.3	4.9-5.7
Fort Collins-Loveland, CO MSA	134,615	6,855	5.1	4.8-5.4
Wausau, WI MSA	65,680	3,340	5.1	4.7-5.4
Barnstable-Yarmouth, MA MSA	72,154	3,668	5.1	4.7-5.5
Eugene-Springfield, OR MSA	152,737	7,763	5.1	4.9-5.4
Bellingham, WA MSA	79,263	3,998	5.0	4.6-5.4

*For the highest percentage of commuters, the 90-percent confidence interval applies to the percent.

Note: Because of sampling error, the estimates in this table may not be significantly different from one another or from rates for other geographic areas not listed in this table.

Note: Metropolitan Statistical Areas (MSAs) are used in conjunction with Consolidated Metropolitan Statistical Areas (CMSAs) for the purposes of reporting these means of transportation to work. For more complete information on metropolitan area definitions, see <http://www.census.gov/population/www/estimates/metroarea.html>.

Source: U.S. Census Bureau, Census 2000 Summary File 3.

living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error.

In addition to the variability that arises from the sampling procedures, both sample data and 100-percent data are subject to nonsampling error. Nonsampling error may be introduced during any of the various complex operations used to collect and process data. Such errors may include: not enumerating every household or every person in the population, failing to obtain all required information from the respondents, obtaining incorrect or inconsistent information, and recording information incorrectly. In addition, errors can occur during the field review of the enumerators' work, during clerical handling of the census questionnaires, or during the electronic processing of the questionnaires.

While it is impossible to completely eliminate error from an operation as large and complex as the decennial census, the Census Bureau attempts to control the sources of such error during the data collection and processing operations. The primary sources of error and

the programs instituted to control error in Census 2000 are described in detail in *Summary File 3 Technical Documentation* under Chapter 8, "Accuracy of the Data," located at www.census.gov/prod/cen2000/doc/sf3.pdf.

Nonsampling error may affect the data in two ways: (1) errors that are introduced randomly will increase the variability of the data and, therefore, should be reflected in the standard errors; and (2) errors that tend to be consistent in one direction will bias both sample and 100-percent data in that direction. For example, if respondents consistently tend to underreport their incomes, then the resulting estimates of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard errors.

More Information:

The Census 2000 Summary File 3 data are available from the American Factfinder on the Internet (factfinder.census.gov). They were released on a state-by-state basis during 2002. For information on

confidentiality protection, nonsampling error, sampling error, and definitions, also see www.census.gov/prod/cen2000/doc/sf3.pdf or contact the Customer Services Center at 301-763-INFO (4636).

Information on population and housing topics is presented in the Census 2000 Brief series, located on the Census Bureau's Web site at www.census.gov/population/www/cen2000/briefs.html. This series presents information on race, Hispanic origin, age, sex, household type, housing tenure, and social, economic, and housing characteristics, such as ancestry, income, and housing costs.

For additional information on Journey to Work and Place of Work, including reports and survey data, visit the Census Bureau's Internet site at www.census.gov/population/www/socdemo/journey.html. To find information about the availability of data products, including reports, CD-ROMs, and DVDs, call the Customer Services Center at 301-763-INFO (4636), or e-mail webmaster@census.gov.

