

# Commuting in America 2013

The National Report on Commuting Patterns and Trends

## Brief 6. Job Dynamics



AMERICAN ASSOCIATION OF  
STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHTO**  
THE VOICE OF TRANSPORTATION



JANUARY 2015

## **About the AASHTO Census Transportation Planning Products Program**

Established by the American Association of State Highway and Transportation Officials (AASHTO) and the U.S. Department of Transportation (U.S. DOT), the AASHTO Census Transportation Planning Products Program (CTPP) compiles census data on demographic characteristics, home and work locations, and journey-to-work travel flows to assist with a variety of state, regional, and local transportation policy and planning efforts. CTPP also supports corridor and project studies, environmental analyses, and emergency operations management.

In 1990, 2000, and again in 2006, AASHTO partnered with all of the states on pooled-fund projects to support the development of special census products and data tabulations for transportation. These census transportation data packages have proved invaluable in understanding characteristics about where people live and work, their journey-to-work commuting patterns, and the modes they use for getting to work. In 2012, the CTPP was established as an ongoing technical service program of AASHTO.

CTPP provides a number of primary services:

- **Special Data Tabulation from the U.S. Census Bureau**—CTPP oversees the specification, purchase, and delivery of this special tabulation designed by and for transportation planners.
- **Outreach and Training**—The CTPP team provides training on data and data issues in many formats, from live briefings and presentations to hands-on, full-day courses. The team has also created a number of electronic sources of training, from e-learning to recorded webinars to downloadable presentations.
- **Technical Support**—CTPP provides limited direct technical support for solving data issues; the program also maintains a robust listserv where many issues are discussed, dissected, and resolved by the CTPP community.
- **Research**—CTPP staff and board members routinely generate problem statements to solicit research on data issues; additionally, CTPP has funded its own research efforts. Total research generated or funded by the current CTPP since 2006 is in excess of \$1 million.

## **Staff**

- Penelope Weinberger, CTPP Program Manager
- Matt Hardy, Program Director, Policy and Planning
- Jim Tymon, Chief Operating Officer/Director of Policy and Management

## **Project Team**

- Steven E. Polzin, Co-Author, Center for Urban Transportation Research, University of South Florida
- Alan E. Pisarski, Co-Author, Consultant, Falls Church, Virginia
- Bruce Spear, Data Expert, Cambridge Systematics, Inc.
- Liang Long, Data Expert, Cambridge Systematics, Inc.
- Nancy McGuckin, Data Expert, Travel Behavior Analyst

## **Contact**

Penelope Weinberger, e-mail: [pweinberger@ashto.org](mailto:pweinberger@ashto.org), phone: 202-624-3556; or [CTPPinfo@ashto.org](mailto:CTPPinfo@ashto.org)

## Brief 6. Job Dynamics

This brief is the sixth in a series describing commuting in America. This body of work, sponsored by American Association of State Highway and Transportation Officials (AASHTO) and carried out in conjunction with a National Cooperative Highway Research Program (NCHRP) project that provided supporting data, builds on three prior *Commuting in America* documents that were issued over the past three decades. Unlike the prior reports that were single volumes, this effort consists of a series of briefs, each of which addresses a critical aspect of commuting in America. These briefs, taken together, comprise a comprehensive summary of American commuting. The briefs are disseminated through the AASHTO website ([traveltrends.transportation.org](http://traveltrends.transportation.org)). Accompanying data tables and an *Executive Summary* complete the body of information known as *Commuting in America 2013* (CIA 2013).

Brief 6 describes the changes taking place in employment practices and patterns in the U.S. from the perspective of how this might influence commuting. This brief builds on information about the workforce and employment presented in Briefs 4 and 5 and is complemented with additional data in Brief 15 Commuting Flow Patterns.

### The Changing Nature of Work

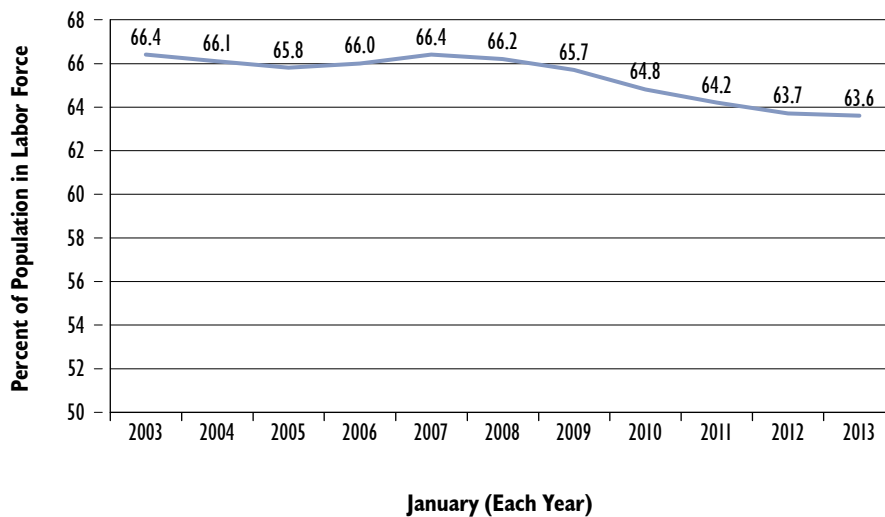
In 2013, four years after the official end of the recession, there are still very real differences in the nature and character of work in today's society relative to historical norms. These persisting changes raise the continuing question of what in the current character of work in society is a product of the cyclical nature of the economy and what is evidence of real structural change in jobs and, perhaps more significantly, change in the whole relationship of jobs to society. A host of factors contribute to changes in the nature of employment—demographics, the changing nature of the economy such as the distribution of employment opportunities across employment categories, technology, culture, and economic and political policies that govern such things as social program benefits and eligibility. Among the attributes of change with immense bearing on the future of commuting are:

- Lower levels of workers as a share of the population
- Continued work activity after “traditional” retirement age
- Changes in hours of work and work schedules
- Changes in traditional male–female roles with women now constituting nearly half of the workforce
- Changes in disability status of traditionally labor-force-oriented populations
- Changes in working at home
- Changes in multi-job holding
- Changes in full-time/part-time job holding

These all have potential, at a minimum, for generating changes in the volumes, times, and frequencies of work travel. Moreover, they could affect modes of travel, trip lengths, trip chaining, and the home-to-work pattern of travel as well. For example, in the latest Bureau of Labor Statistics (BLS) reports, comparing May 2013 to May 2012, the civilian non-institutional population grew 2.4 million, but the civilian labor force increased by only 660,000. As a result, despite an increase of 1.6 million in employment, the overall participation rate—those who are working or looking for work—as a percentage of the working-age population declined from 63.8 to 63.4 percent, contrasted to the range of 66+ percent in 1993 and 2003. Part of this can be attributed to the number of persons reaching retirement age, but there are other factors at work as well, such as discouraged workers and increasing numbers of labor-force-age persons on disability.

**A host of factors all contribute to changes in the nature of employment—demographics, the changing nature of the economy such as the distribution of employment opportunities across employment categories, technology, culture, and economic and political policies that govern such things as social program benefits and eligibility.**

Figure 6-1 presents that trend from 2003 to 2013.

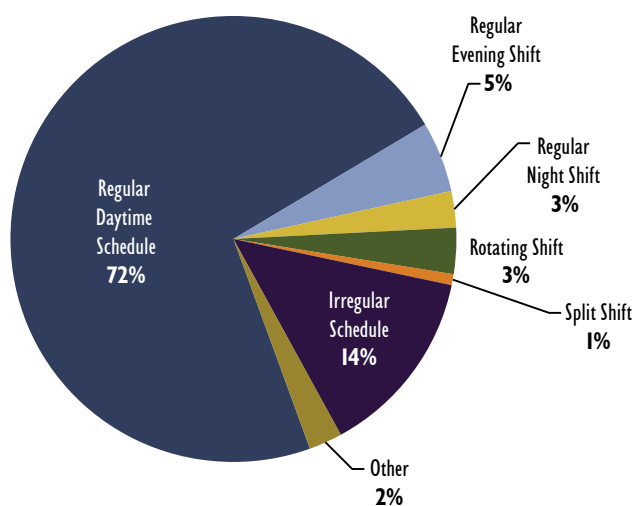


**Figure 6-1.** Trend in Labor Force Participation

Source: BLS data series

## Work Force Participation and Schedules

With a working population in the range of 144 million, one tends to think of a rush of workers to their place of employment in the morning and a rush to home in the evening. But many parts of the work force do not fully participate in that diurnal work flow. Figure 6-2 provides fundamental information on the structure of the work force's daily comings and goings. First, 72 percent—about 102 million workers—work on what can be labeled a “regular” daytime work schedule. The others—approximately 42 million—have work schedules that typically would take them out of the usual traffic stream with regular evening or night-shift schedules or with irregular schedules of rotating or split-shift nature.



**Figure 6-2.** Workers' Work Schedules—All Workers

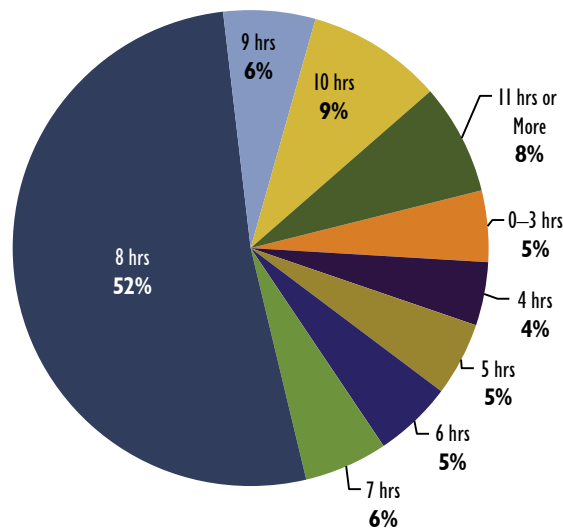
Source: Survey of Income and Program Participation (SIPP), 2010

Moreover, only about 94 million of the 102 million workers with regular daytime schedules work at an away-from-home work site each day. The balance either work at home (5.5 million) or are defined as mixed workers (2.7 million), those who work a schedule of at least one full day at home but also work at a regular away-from-home work site.<sup>1</sup> The Survey of Income and Program Participation (SIPP) of the U.S. Census Bureau cites that more than 116 million of the 142 million in their 2010 survey consider their schedule

<sup>1</sup> The subject of working at home often is presented with significantly varying statistics. This is typically a result of very different definitions and concepts being represented. One difference is the age criterion for defining a worker (age 16+ for ACS vs. age 15+ for SIPP). Another difference is the frequency criterion related to work-at-home. The SIPP survey has a rigorous definition that can be validated; in some statistical treatments, anyone bringing work home in the evening after a regular work day is considered working at home. A rigorous taxonomy of working at home is needed.

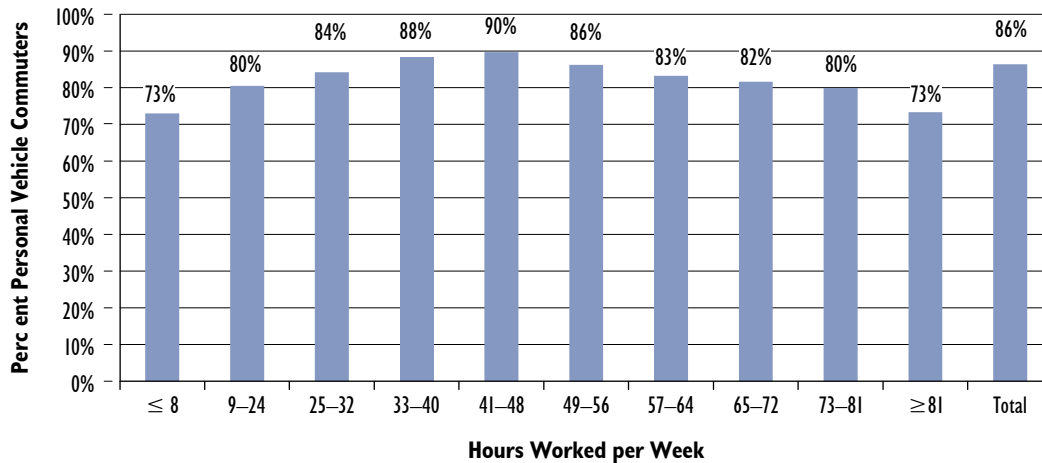
“involuntary” because the schedule was a condition of the job or they could not find any other job. This means that 25 million workers worked schedules they cite as “voluntary”—that is, selecting their schedule because it suited their preferences or needs for family care, school schedules, or better pay.

These variations on the standard work theme are further compounded by workers’ hourly schedules. The U.S. workforce worked the hourly schedule distribution shown in Figure 6-3, with 52 percent working a “regular” eight-hour day; an additional 23 percent work more than eight hours, and the remaining quarter work fewer. Those who work at work sites—that is, an away-from-home location—have a somewhat greater eight-hour share (54 percent). Those who work only at home have a tendency for more erratic hours, with only 32 percent indicating they worked a “regular” eight-hour day. Those with mixed work arrangements, at home and at an away-from-home site, tend to have the heaviest schedules, with more than 40 percent indicating schedules of more than eight hours per day.



**Figure 6-3.** Hours Worked per Day and Share of Workforce—All Employed Workers  
 Source: SIPP, 2010

These work hours have bearing on mode choice, in that workers who work “regular” hours are most oriented to personal vehicle use. Figure 6-4 shows that the highest personal vehicle share, 90 percent, is generated by those who work 41–48 hours per week, but perhaps more importantly, those working a 33–40 hour week—53 percent of workers—have a personal vehicle share of 88 percent, just below the highest share. Those with greater or fewer hours of work per week tend to have greater shares in walking and working at home.



**Figure 6-4.** Personal Vehicle Share by Hours Worked

Source: ACS Public Use Microdata Sample (PUMS), 2011

Table 6-1 introduces the role of part-time work for economic reasons rather than by worker choice. The trend data indicate that the total workers at work rose only slightly in the 2005–2012 period, from 134.1 to 135.2 million, an increase of 1.1 million. However, those who worked 35 hours or more, generally considered “regular work hours,” declined by 0.9 million in the period, whereas those working 1–34 hours, generally considered part-time, rose by 2.1 million, accounting for the overall increase. More importantly, those who indicated in the survey that they worked less than full-time hours for “economic reasons”<sup>2</sup> almost doubled, to 8 million in 2012, up from 4.3 million in 2005. Of significance, this is an area where sharp distinctions between men and women in the work force remain. While women typically work part time more than men—20.6 million part time versus 13.6 million in 2012, it is notable that women have greater shares in the older working age groups in part time. Overall, women are 46.9 percent of the workforce, but constitute just below 60 percent of part time workers and are 63.2 percent of part time workers in the prime working years of 25 to 54. In the recession women almost doubled in the percentage working part time for economic reasons since 2005, as men also saw sharp increases. Of the eight million working part time for economic reasons women and men were roughly equal in share. Actual average hours worked by the part-time group, in the range of 21–22 hours per week—whether working part-time for economic or non-economic reasons—changed insignificantly during the period. There is emerging speculation that the distribution of full-time and part-time employment may change meaningfully as a result of the competitive economy and employers positioning themselves to minimize fringe benefit costs. To the extent that speculation is borne out in workforce schedule changes sustained over time, it may

<sup>2</sup> Economic reasons include slack work or business conditions, could find only part-time work, seasonal work, and job started or ended in the week.

impact commuting temporal patterns. Similarly, the prospect that individuals may be coordinating multiple part-time jobs could influence both the total amount of commuting travel (more commute trips per hour worked) as well as the temporal distribution of work travel.

**The total workers at work rose only slightly in the 2005–2012 period, from 134.1 to 135.2 million. However, those who worked 35 hours or more declined by 0.9 million in the period, and those working 1–34 hours, generally considered part-time, rose by 2.1 million.**

**Table 6-1.** Change in Part-Time Work

|   | Total at Work | Worked 1–34 Hours |                      |                        |                          |                        | Worked 35 Hours or More |
|---|---------------|-------------------|----------------------|------------------------|--------------------------|------------------------|-------------------------|
|   |               | Total             | For Economic Reasons | For Economic Reasons % | For Non-economic Reasons |                        |                         |
|   |               |                   |                      |                        | Usually Work Full-Time   | Usually Work Part-Time |                         |
| 2005 total, non-agricultural industries | 134,115       | 31,717            | 4,271                | 13.47%                 | 8,313                    | 19,134                 | 102,397                 |
| 2012 total, non-agricultural industries | 135,235       | 33,852            | 8,003                | 23.64%                 | 7,404                    | 18,446                 | 101,383                 |
| <b>2005–2012 change</b>                 | <b>1,120</b>  | <b>2,135</b>      | <b>3,732</b>         |                        | <b>-909</b>              | <b>-688</b>            | <b>-1,014</b>           |

Source: Current Population Survey, BLS

The shift to part-time has obvious bearing on congestion issues in peak periods. These are clearly cyclical factors at work, at least in the views of the workers themselves. The number of workers working part-time for non-economic reasons such as health, school schedules, or family obligations actually declined. This might be affected by other family job changes in the period.

### Working at Home

It was noted earlier that the 2010 SIPP indicated that of those workers with regular schedules, there was a considerable number—5.5 million—who worked at home and another 2.7 million who had a mixed work schedule. However, it must be recognized that those who work at home exclusively or are on mixed schedules are far less likely to work regular hours; therefore, those numbers represent only a share of those who work at home or are on mixed schedules. Overall, the SIPP indicates that in addition to the 5.5 million workers who work regular schedules at home, another 2.9 million report “irregular” schedules and



a small group identify “other” schedules, for a total of 9.4 million workers.<sup>3</sup> At this level, the number of work-at-home “commuters” would put at-home workers at about 40 percent more than commuters who use transit, approaching the magnitude of carpooling commuters. In addition, more than 1 million workers with mixed schedules report irregular hours, for a total of about 4 million. Thus, the SIPP reports more than 13 million workers at home or with mixed schedules, roughly the same level as carpooling. Table 6-2 provides greater clarity to the overall structure.

**Table 6-2.** Workers by Schedule

|                                    |                            | Total                  | Total          | Regular Daytime Schedule | Other Regular Schedule: Nights, Evenings | Irregular Schedule | Other |
|------------------------------------|----------------------------|------------------------|----------------|--------------------------|--|--------------------|-------|
|                                    |                            | Workers (in thousands) |                |                          |  |                    |       |
| <b>Total Employed</b>              |                            | #                      | <b>141,646</b> | 101,977                  | 16,835                                   | 19,383             | 3,451 |
|                                    |                            | %                      | <b>100%</b>    | 72%                      | 12%                                      | 14%                | 2%    |
| <b>On-Site Workers<sup>1</sup></b> |                            | #                      | <b>128,244</b> | 93,766                   | 16,157                                   | 15,506             | 2,815 |
|                                    |                            | %                      | <b>100%</b>    | 73%                      | 13%                                      | 12%                | 2%    |
| <b>Work at Home</b>                | All                        | #                      | <b>13,401</b>  | 8,211                    | 678                                      | 3877               | 635   |
|                                    |                            | %                      | <b>100%</b>    | 61%                      | 5%                                       | 29%                | 5%    |
|                                    | Mixed Workers <sup>2</sup> | #                      | <b>4,028</b>   | 2,675                    | 219                                      | 1020               | 113   |
|                                    |                            | %                      | <b>100%</b>    | 66%                      | 5%                                       | 25%                | 3%    |
|                                    | Home Workers <sup>3</sup>  | #                      | <b>9,374</b>   | 5,536                    | 460                                      | 2,857              | 522   |
|                                    |                            | %                      | <b>100%</b>    | 59%                      | 5%                                       | 31%                | 6%    |

<sup>1</sup> Onsite workers are defined as those who did not work a full workday at home as part of their work schedule.

<sup>2</sup> Mixed workers are defined as those who worked at home at least one full day per week but also worked other days in a location outside of their home.

<sup>3</sup> Home workers are defined as those who worked exclusively at home (i.e., every day they worked, they worked at home).

Source: SIPP, 2010

Recognizing the now-larger scale of working at home indicates the need to better understand the attributes of those who work at home:

- The outstanding characteristic is that 45 percent of those who worked at home are self-employed. Another 46 percent are in the private sector, including unpaid family workers, usually farmers. The remainder are in government.

<sup>3</sup> The ACS reports only roughly 6 million workers exclusively working at home in 2010, but also shows a smaller base of workers. In percentage terms, the ACS shows about 4.3% of workers working at home; in contrast, the SIPP indicates 6.6%.

- Those who work at home are twice as likely to be in finance, insurance, real estate, or professional or scientific industries as the general workforce and twice as likely to be in management, business, and financial occupations.
- Home workers tend to be older, with 58 percent over age 45 compared to 45 percent for the general worker population.
- Home workers are slightly less likely to be male than the general work force, are substantially White Non-Hispanic, tend to be married, and have high family incomes.
- While the median family income for all workers is just above \$62,000, the income for the work-at-home group is almost \$71,000. The group highest in median income, however, is the mixed group, those who work at home at least one day a week, with a family income reaching almost \$91,000.
- As expected, education levels of home workers track closely with income medians.
- Significantly, home workers are more heavily centered in the West and represent a smaller share in all other regions.
- According to the BLS, 5 percent of all civilian workers have access to a flexible workplace, and the number rises to 9 percent of those working for employers with 500 workers or more.<sup>4</sup>

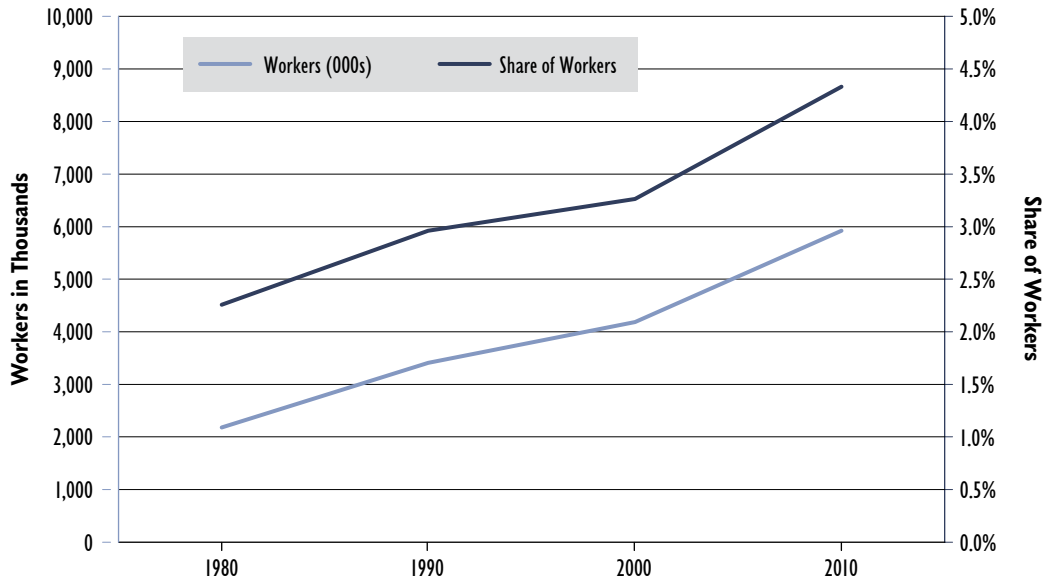
The 2012 American Time Use Survey (ATUS), released in June of 2013, indicates that 23 percent of employed persons did some work at home on days that they worked. This survey measures the actual expenditures of time by respondents over a 24-hour period and, therefore, it would appropriately include someone bringing home a briefcase of documents to review, accessing a work station remotely, grading papers, etc.<sup>5</sup>

Perhaps the most notable attribute of working at home is its dramatic growth over the last three decades, as shown in Figure 6-5. It has almost tripled, from just above 2 million workers in 1980 to 6 million in 2010, its share almost doubling, from 2.3 to 4.3 percent.

---

<sup>4</sup> BLS National Compensation Survey, Bulletin 2773, Table 40, "Quality of Life Benefits: Access, Civilian Workers," from the National Compensation Survey, March 2012

<sup>5</sup> Data on how time is used by various market segments is available at: [http://www.nytimes.com/interactive/2009/07/31/business/20080801-metrics-graphic.html?\\_r=0](http://www.nytimes.com/interactive/2009/07/31/business/20080801-metrics-graphic.html?_r=0)



**Figure 6-5.** Long-Term Trend in Working at Home 1980–2010

Source: CIA3 and ACS 2010

Growth in working at home by Census Region indicates that rates of growth were substantial in all regions but most notably in the South and West, where overall worker growth was also greater. The South saw the greatest increase in share, a 45 percent increase from 2000 to 2010, while the West, with the highest share at 5.3 percent in 2010, increased its share by almost a third. The West’s share stands out because the other regions have roughly identical shares of work at home at 4 percent. One could speculate that a surge in working at home in the past decade could perhaps be expected as people lost jobs and decided to set up home-based work as consultants or other solo job roles. It is unclear whether the rate of increase in the past decade of 42 percent was a response to cyclical job losses or a resumption of the levels of growth in the 1980s when work at home grew by 56 percent. Even the “mild” growth of the 1990–2000 period registered 23 percent.

**Working at home had dramatic growth over the last three decades, almost tripling, from just above 2 million workers in 1980 to 6 million in 2010, and its share almost doubling, from 2.3 to 4.3 percent.**

Some insight into this question is provided by recent Census Bureau tabulations of work at home by metro area for 2000, 2005, and 2010. Table 6-3 shows the metropolitan areas that added more than 25,000 workers who worked at home between 2005 and 2010. The growth rates vary widely, from as low as 18 percent in New York to 72 percent in Austin, Texas. Comparison to 2000<sup>6</sup> data shows that the growth from 2000–2005 was on the order

<sup>6</sup> The 2005 and 2010 data are from the ACS, and the 2000 data are from the decennial census. While every effort has been made by the Census Bureau to establish continuity between these surveys, differences do exist.

of 3 percent for New York and 54 percent for Austin. Similarly, the Washington DC metro area showed growth rates of 30 percent from 2005–2010 and growth from 2000–2005 of 17 percent. All of this may suggest a stronger correlation with unemployment rates than in the past. Another strong factor could be the increases in retirees rejoining the work force as sole proprietors. The age-related data from the SIPP indicates that 10.4 percent of those who work at home were age 65 and over, contrasted to 4.6 percent in the general work force population.

**Table 6-3.** Significant Metropolitan Trends in Working at Home

| Metropolitan Area                                  | 2005    |     | 2010    |     |
|--|---------|-----|---------|-----|
|  | #       | %   | #       | %   |
| New York-Northern New Jersey-Long Island, NY-NJ-PA | 285,670 | 3.5 | 337,860 | 3.9 |
| Chicago-Joliet-Naperville, IL-IN-WI                | 141,614 | 3.3 | 193,266 | 4.5 |
| Los Angeles-Long Beach-Santa Ana, CA               | 231,796 | 4.1 | 281,778 | 5.0 |
| Phoenix-Mesa-Glendale, AZ                          | 72,648  | 4.2 | 106,373 | 6.0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV       | 109,072 | 4.2 | 141,634 | 4.9 |
| San Jose-Sunnyvale-Santa Clara, CA                 | 94,762  | 4.9 | 126,057 | 6.2 |
| Atlanta-Sandy Springs-Marietta, GA                 | 105,809 | 4.5 | 136,442 | 5.8 |
| Dallas-Fort Worth-Arlington, TX                    | 106,198 | 3.9 | 136,711 | 4.6 |
| Miami-Fort Lauderdale-Pompano Beach, FL            | 77,913  | 3.3 | 105,740 | 4.4 |
| Austin-Round Rock-San Marcos, TX                   | 35,981  | 5.0 | 61,911  | 7.3 |

Source: ACS

The role of improving computing and communications technology, which enables work at home, is also a factor. Arguably, the high rates of penetration of high-speed Internet capabilities, the moderate cost of home office capabilities, and changes in the federal tax code regarding home office deductions have also been factors in growing work-at-home participation. The ubiquitous availabilities of these capabilities for large shares of the working population may have removed an important constraint in work-at-home considerations.

### Employment Opportunities

The nature of employment can significantly influence characteristics of the job that impact commuting. Certain types of employment are more conducive to flexible schedules or work-at-home arrangements. Some types of employment can have dynamic locations—for example, painters moving from project to project. Certain types of employment tend to be highly concentrated in office locations, making them more likely to be served by transit,

bicycle, or pedestrian modes. The compensation levels associated with different types of employment can influence the willingness to commute longer distances to avail oneself of those opportunities. One way to understand changes in the nature of employment opportunities is to review the changes in occupations by industrial classification.

The BLS provides an assessment of where occupational trends are going. Prepared in 2012, this set of projections for the period from 2010–2020 indicates that on the order of 20 million new jobs are expected, a level of growth of about 14 percent. Those areas projected to be above 20 percent growth are shown in Table 6-4. Note that the top four in percentage growth are all related to personal care in the health and social services areas, reflecting the age distribution of the population. The survey also indicates that, along with Construction and Extraction, occupations in the health and social services areas sustained themselves relatively well during the 2006–2010 downturn. These areas account for a very substantial portion of the total job increase projected for the period. Other occupations with high amounts of increase, although not in percentage terms, are Office and Administrative Support, with an increase of 2.3 million jobs; Education and Training, 1.4 million increase; Transportation and Materials, 1.3 million increase; Business and Financial, 1.2 million increase; and Food Preparation, 1.1 million increase.

**Table 6-4.** High Percentage Growth Occupations, 2010–2020 (thousands)

| Occupations                  | 2010  | 2020  | Change | Change % |
|------------------------------|-------|-------|--------|----------|
| Healthcare Support           | 4,190 | 5,634 | 1,444  | 34.5%    |
| Personal Care Services       | 4,995 | 6,331 | 1,337  | 26.8%    |
| Healthcare Practitioners     | 7,799 | 9,819 | 2,020  | 25.9%    |
| Community and Social Service | 2,403 | 2,985 | 582    | 24.2%    |
| Construction and Extraction  | 6,328 | 7,735 | 1,407  | 22.2%    |
| Computer and Mathematical    | 3,543 | 4,321 | 778    | 22.0%    |

Source: BLS Projections

While it is difficult to characterize these jobs in transportation terms, most would fall into the category of “population-following” activities rather than occupations in which the location is determined by local geographic attributes such as harbors, rivers, resource locations, etc. If, for example, the older population tended to prefer living in the South, then many of the services and activities would follow them. The science, technology, engineering, and mathematics (STEM) occupations will most likely follow where the highly-skilled work force is or wants to be. Most

**Most high growth service jobs fall into the category of “population-following activities.” If, for example, the older population tended to prefer living in the South, then many services and activities would follow them.**

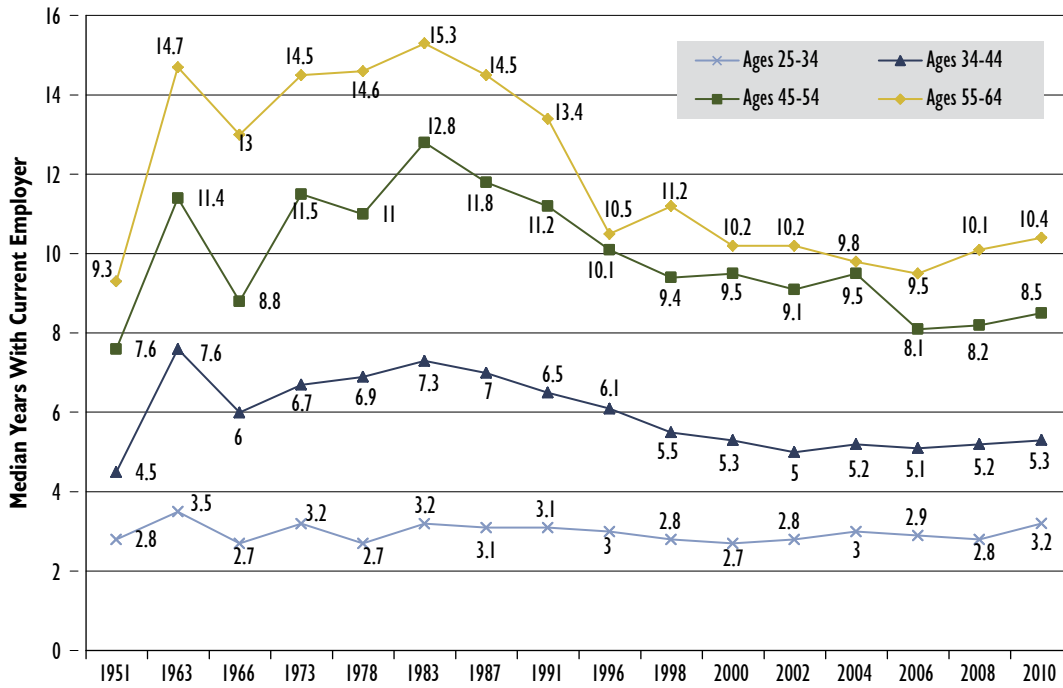
of these tend to be geographically-mobile activities that can be carried out almost anywhere with adequate communications and transportation. Thus, the emphasis may be on local amenities such as climate, culture, attractiveness, and, perhaps, critical mass or workforce to enable agglomeration economies for employers.

Another dynamic impacting employment trends and ultimately commuting is the relationship between the magnitude of employment opportunities for various occupations and the availability of the workforce to meet those needs. As society and the economy have become ever more complex and specialized, workforce skill requirements have followed. Specialization of employment requires access to not just a workforce but a workforce with the requisite skills to match those requirements. The need to match occupational requirements with workforce skills is among the factors that contribute to the patterns of commuting. Brief 15 describes these patterns in more detail.

## **Job Mobility**

Commuting revolves around traveling from home to work, and the significance of this trip often influences household location decisions as well as other trip-purpose travel patterns. However, with the increasingly common occurrence of multiple workers per household and cultural changes that result in workers being more likely to change jobs/employers more often during their careers, it is increasingly challenging to make household location decisions that minimize commute distances. As people change places of employment, their commute trip paths change, as might the viability of various modes for making that trip. High unemployment can impact the ability to consider commuting convenience as an important consideration in job selection decisions, and high job mobility can make it difficult to coordinate residential location decisions to complement work locations.

Figure 6-6 provides data on the trend in male job mobility. The data indicate that, over time, median job tenure has tended to decline. In 2010, the most current year shown in the data, job tenure ticked up slightly, suggesting a reluctance or a lack of opportunity to change employment during the challenging economic times.

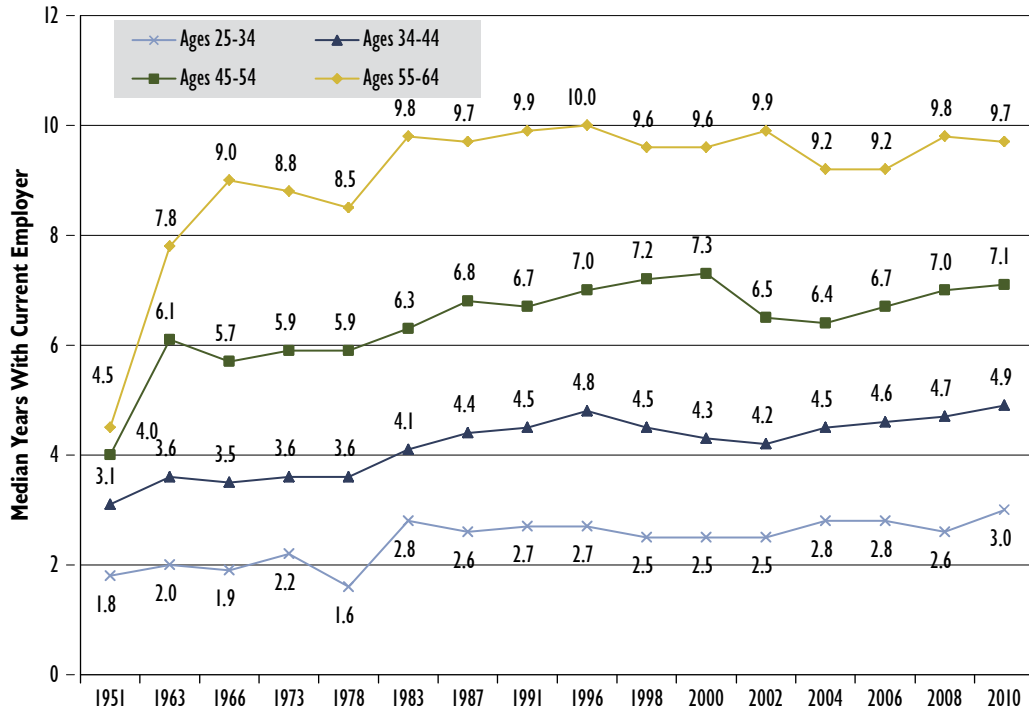


**Figure 6-6.** Trend in Job Mobility—Male

Source: Monthly Labor Review and information from U.S. Department of Labor, Bureau of Labor Statistics

Figure 6-7 provides data on the trend in female job mobility. The data indicate that, over time, female median job tenure has tended to increase—contrary to the trend for males. Female job tenure similarly showed the 2008–2010 uptick, suggesting a reluctance or a lack of opportunity to change employment during the challenging economic times.





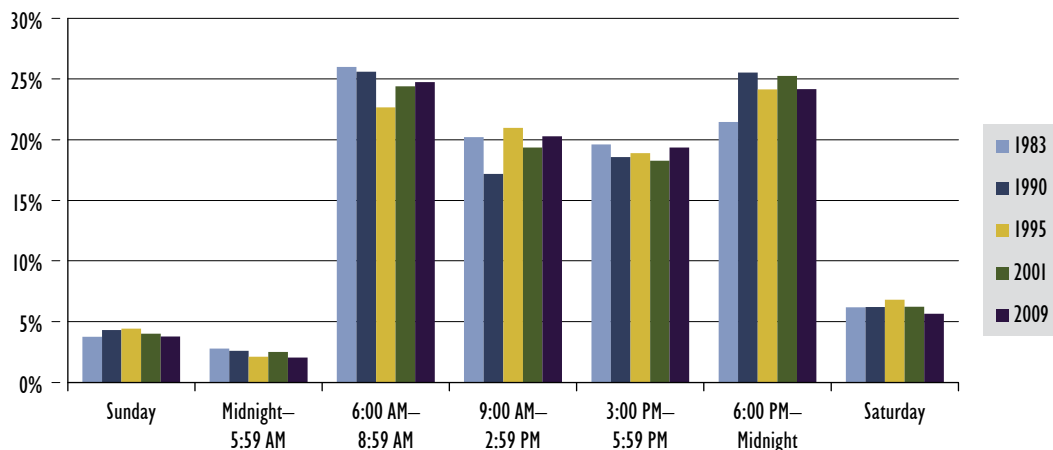
**Figure 6-7.** Trend in Job Mobility—Female

Source: Monthly Labor Review and information from U.S. Department of Labor, Bureau of Labor Statistics

## Work Schedules and Multiple Job Workers

The scheduled start and stop time of employment influences the commute trip departure time and the prospect that alternative modes such as transit or convenient carpooling opportunities are available to the traveler. As the nature of employment has shifted and the economy has created strong growth in the service and information industries, work schedules have changed to be responsive to customer needs. Understanding what share of commute travel occurs by day of week and time of day helps frame the importance of commuting in overall transportation planning and policy. Figure 6-8 details how departure times for work trips have changed over time throughout the week. Most notable in the graphic is the absence of dramatic change over time. The composite effect of changing demographics, culture, and time use; the changing mix of employment types; changes in roadway congestion; and other factors have collectively resulted in very little change in overall commuting departure times in the 30 years covered by the data.





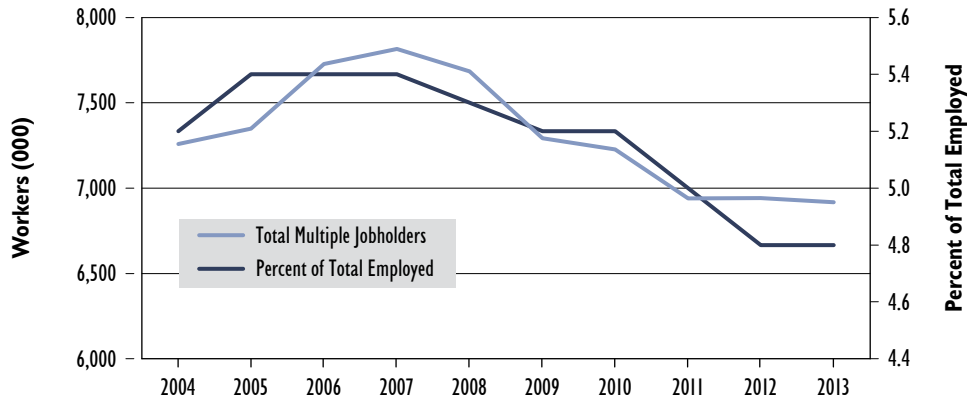
**Figure 6-8.** Trends in To/From Work Departure Time

Source: NPTS and NHTS

Multiple-job workers have been a response to challenging economic times and the growth in part-time employment. These multiple-job schedules can influence commute travel patterns and can result in the commute trip being less likely to be a home-based trip.

While the recent focus of employment statistics has been on unemployment, there still are workers in the labor force with multiple jobs. This may be a function of workers seeking out multiple part-time jobs to make ends meet or having the desire to earn extra income. The trend over the last 10 years, shown in Figure 6-9, indicates that the numbers of multi-job holders declines with unemployment growth, in effect tracking with total employment. This seems to be supported by the fact that the typical share of the employed who are working two jobs holds relatively steady in a narrow range, at about five percent, varying slightly in either direction but clearly declining with declining job availability.





**Figure 6-9.** Multiple Job Holder Patterns

Note: Data from May in reference year.

Source: BLS

## Summary

As the economy and technology continue to evolve, the nature of work continues to change. Global and national trends such as the movement of a large share of manufacturing to offshore locations, automation reducing the labor force involved in agriculture, multi-worker households forcing the service and retail sectors to offer 24/7 service to accommodate customer desires, and the geographic location of places of employment are factors that ultimately influence commuting. These changes can influence the number and schedule of commute trips, the propensity to use different modes, the prospect of trip chaining, or otherwise change behavior as it relates to commuting. One of the most visible of these changes has been the effect of technology and the continued growth in information-based employment, which enables workplace location flexibility and growth in work-at-home employment. Rapid growth in service sector employment has been more conducive to flexible scheduling and shifts.

Changes in employment tenure, residential location tenure, employment opportunity availability, and multi-worker household status influence the ability of individuals to optimize their commute patterns. While there is insufficient data to disentangle the relative influence of these myriad factors, the large fixed-asset base that comprises housing and workplace locations mitigates more rapid change in aggregate metrics for commuting. The fundamental commute trip travel time (CIA 2013, Brief 11) and pattern of commute traveling (CIA 2013, Brief 15) have remained remarkably stable.

However, the magnitude of changes that impact the nature of employment and, consequently, the nature of commuting continues to be in a dynamic period. Over time, these changes may continue to alter historic work-trip commuting trends.

## Commuting in America 2013 Briefs Series

The *CIA 2013* series will include the briefs listed below as well as a *CIA 2013* Executive Summary and supporting data files, all available at the *CIA 2013* website [traveltrends.transportation.org](http://traveltrends.transportation.org). The website also includes a glossary of terms, documentation of data sources, and additional resources. The series of briefs included in *CIA 2013* are:

1. **Overview**—establishes institutional context, objectives, importance, data sources, and products to be produced.
  2. **The Role of Commuting in Overall Travel**—presents national trend data on the relative role of commuting in overall person travel; explores commuting as a share of trips, miles of travel, and travel time at the national level.
  3. **Population and Worker Trends**—provides very basic and key national demographic data.
  4. **Population and Worker Dynamics**—focuses on the dynamics of the population and work-force, including data on migration, immigration, and differential rates of growth.
  5. **The Nature and Pattern of Jobs**—defines employment and describes it in terms of its temporal, geographic, and other features.

---

  6. **Job Dynamics**—looks at trends as they relate to jobs, including work at home, full-time versus part-time, job mobility, and changes in the nature and distribution of job types.

---

  7. **Vehicle and Transit Availability**—reports on vehicle ownership and licensure levels and the availability of transit services. It also references factors influencing the availability of bike, walk, and carpool commute options.
  8. **Consumer Spending on Transportation**—reports on various trends related to household spending on transportation.
  9. **How Commuting Influences Travel**—explores how commuting travel influences overall travel trends temporally and geographically.
  10. **Commuting Mode Choice**—provides a summary of mode choice for commuting (including work at home).
  11. **Commuting Departure Time and Trip Time**—reports descriptive information on travel time and time left home, including national and selected additional data for metro area sizes.
  12. **Auto Commuting**—addresses trends in privately-owned vehicle (POV) and shared-ride commuting.
  13. **Transit Commuting**—addresses transit commuting.
  14. **Bicycling and Walking Commuting**—addresses bicycling and walking as commuting modes.
  15. **Commuting Flow Patterns**—addresses commuting flow patterns for metro area geographic classifications.
  16. **The Evolving Role of Commuting**—synthesizes and interprets materials developed in the prior briefs to paint a picture of the current role of commuting in overall travel and evolving trends to watch going forward.
- ES. CIA 2013 Executive Summary**



**American Association of State  
Highway and Transportation Officials**  
444 North Capitol Street, N.W.; Suite 249  
Washington, DC 20001

[www.transportation.org](http://www.transportation.org)  
[ctpp.transportation.org](http://ctpp.transportation.org)  
[traveltrends.transportation.org](http://traveltrends.transportation.org)