

Commuting in America 2013

The National Report on Commuting Patterns and Trends

Brief 2. The Role of Commuting in Overall Travel



AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

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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.

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Brief 2. The Role of Commuting in Overall Travel

This brief is the second in a series of briefs that constitute a body of knowledge describing commuting in America. This body of work, sponsored by the 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* reports 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. Accompanying data tables and an executive summary complete the body of information known as *Commuting in America 2013 (CIA 2013)*.

This brief, *The Role of Commuting in Overall Travel*, sets work commuting in context with other aspects of travel, specifically other purposes for travel. America's transportation infrastructure and services address the needs of individuals for all their travel purposes and also serve the travel needs of commerce and government. Commuters' vehicles share the roadways with vehicles carrying persons who are traveling for school, shopping, personal business, social and recreational activities, and other purposes, and they also share the road with vehicles transporting freight and providing various services, from goods delivery to emergency response to service workers visiting customers. Visitors and tourists from other communities and countries also share the transportation facilities. Similarly, transit services transport work commuters but also travelers pursuing other activities.

Throughout history, as the human condition has evolved to include far greater specialization of labor compared to the days of a more insular rural or agrarian society, commuting to work has become a principal motivation for travel. With the growth of manufacturing in the last century and in recent decades strong growth in service employment, persons increasingly travel from their home to a place of employment where these specialized activities are carried out. The evolution of manufacturing, with its tremendous economies of scale, resulted in consolidation of employment sites and growing commuting. As urbanization continued, residential neighborhoods developed in outlying areas; first driven by the desire to escape the pollution, land cost, and congestion of the urban center

Commuting to work constitutes approximately 16% of all person trips and 19% of all person miles of travel. For roadway travel, commuting constitutes 28% of household vehicle miles of travel and, for transit systems, 39% of all transit passenger miles of travel.

and later fueled by the American culture of seeking more space and larger homes. Similarly, agglomeration economies fostered commuting to centralized office and service locations to efficiently conduct other business and commerce activities. In recent decades, more ubiquitous transportation and communication networks and changing economic conditions contributed to the dispersion of employment activities across broader urban and rural geographies. While work has remained a critical motivation for travel, over the past several decades the economic growth enabled by a productive working population has contributed to rapid growth in travel for other purposes. Social activities, education, health care, shopping, personal business, vacation, and other activities have been increasingly carried out away from home and require travel. Thus, both the share of travel for commuting and the nature of that travel have evolved and continue to do so.

Defining Work Travel— What’s In and What’s Out

In *Commuting in America*, work travel, sometimes referred to in technical literature as the “journey to work,” consists of the travel from a residence to and from a work place. In U.S. statistics, it does not include trips to school by students, as is the case in some countries. It also does not include workers going to a business meeting or trips by a worker to provide services to customers or any of the workday travel by those who travel as an essential part of their jobs, such as taxi, bus, or truck drivers. Although those who work at home technically are not making a journey, they constitute a rapidly-growing segment of workers and are included in statistical treatments of work travel for completeness and comprehensiveness.

Much of the data that warrants consideration at the national level is developed by the Bureau of the Census through the decennial census program long form and, since 2000, through the American Community Survey (ACS). The great benefit of this survey approach is its focus on the “worker.” The term “worker,” as used in the Census surveys, differs slightly from the definition of those who are employed—it excludes those who are still employed but have been laid off, are on vacation, or otherwise are not at work during the reference week, the week before the survey.

The data on place of work were derived from answers to ACS Question 30, which was asked of people who indicated in Question 29 that they worked at some time during the reference week.[†] Data were tabulated for workers ages 16 years and over—members

[†] 2011 Subject Definitions, American Community Survey.

of the Armed Forces and civilians who were at work during the reference week. Data on place of work refer to the geographic location at which workers carried out their occupational activities during the reference week. In the ACS, the exact address (number, street name, and city, town, or post office) of the place of work was asked, as was whether the place of work was inside or outside the limits of that city or town, and the county, state, or foreign country, and ZIP Code of the place.[‡]

The ACS addresses *only* travel that is journey-to-work travel, specifically the morning trip to work. The National Household Travel Survey (NHTS), therefore, is used for much of this discussion because of its coverage of travel by the U.S. population for *all* purposes. While fundamentally the same in its definition of a worker, the NHTS also includes as workers those who may have been temporarily absent from work on the travel date. The NHTS method of obtaining work travel varies in that it poses questions about people's actual travel activities "yesterday" or on a pre-selected travel date rather than asking about "usual" travel during a reference week. It obtains the specifics of the work-related travel activity in far greater detail than the ACS for the day of travel, including all modes used, stops along the way, characteristics of the vehicle used, etc. Importantly, it includes the work trips of those workers with multiple jobs as well as the work travel by persons whose principal activity is not that of worker, such as a student who works 10 hours a week.

[‡] Place-of-work data may show a few workers who made unlikely daily work trips (e.g., workers who lived in New York and worked in California). This result is attributable to people who worked during the reference week at a location that was different from their usual place of work.

Understanding the evolution in commuting is important to understanding transportation needs because work travel remains a significant share of the total amount of travel. The importance of this share is disproportionate due to (1) its critical influence on peak transportation infrastructure and service needs, and (2) the important role that access from home to work plays in influencing land-use development patterns.

Shares of Work Activity versus All Travel

The journey to and from work is only one of a large number of purposes that generate daily travel activity. It is a crucial part of passenger travel, but far from the entire picture of the use of the transportation system by travelers. Therefore, it is important to embed person travel and commuting analyses in an overall context, so that the material presented in the *Commuting in America* briefs can be properly understood.

In 1956, the landmark metropolitan transportation study that ushered in the

modern era of transportation studies, the Chicago Area Transit Study (CATS)¹, identified that work trips were approximately 40 percent of vehicle trips. More recently, nationwide total travel is just below four trips per day per capita and, despite substantial growth, work travel has declined in share to 15.6 percent of overall travel and 27.8 percent of vehicle miles of travel as other travel purposes have grown faster.

Thus, it is important to appreciate that commuting exists in a continuum of transportation activities. While we have the most data on commuting and it is a stable highly identifiable trip that often dominates public discussion about transportation, it is crucial to recognize that it is just part of the demands that are made on our transportation systems. Figure 2-1 presented a basic taxonomy of travel, identifying all the major components starting with three categories of household-based travel, then including government- and business-related travel.

Complexities and Work Trip Commuting

Work travel used to be a relatively simple activity to describe. The factory whistle blew (for some) and they went to work; the factory whistle blew and they went home. There are not a lot of factory whistles blowing anymore, and only a very small share of workers fall into that category. Most are engaged in service-oriented occupations in smaller units of activity. The geographic destinations have dispersed as has the temporal pattern of trip departure times. Work hours typically start later than in the former factory worker world, and they are more variable—and, importantly, more flexible. Both the hours worked during a week and the schedules may vary.

Other aspects of commuting are changing in ways that affect other parts of travel and the transportation system serving it. One of these is the tendency for many commuters to make some of their work trips as part of a trip chain—dropping off children, picking up necessities, and conducting household errands on the way to and from work. This is largely a product of the immense time pressures on workers, especially working women. Such a pattern increases the efficiency of overall travel but also has the effect of increasing the number of non-work-related trips occurring in the peak period. It can also militate against the use of carpooling or transit modes. For auto users, it does have the benefit of fuel and pollution savings from reduced travel and “cold starts,” as well as time savings, compared to making individual trips from home.

Trip chaining was first encountered in the 1970s and early 1980s as a result of the surge in multi-worker households requiring other activities to be coordinated with work travel, as workers planned their itineraries to meet household needs while minimizing time and

¹ Chicago Area Transportation Study, 1956 base year statistics, CATS, Vol.1.



Figure 2-1. Taxonomy of Travel

travel cost. Today, it is often time savings that are key, but fuel costs are also a factor. As a result, the trips to and from work can be complex. So, the answers to the questions “How long did it take you to get to work?” or “What is your work trip distance?” are not as clear-cut as in the past. Analysis of trip chaining provides insights into how work trips are combined with other trips.

Figure 2-2 shows the extent of trip chaining for work commuting. The data indicate that the extent of trip chaining has remained relatively stable since 1995. For work commuting in 2009, 84 percent of workers went directly to or from work without stopping, 12.5 percent of workers stopped once and 3.5 percent stopped more than once. Women commuters are more likely to stop than men—and they stop for different purposes. More insight into trip chaining is provided in *CIA Brief 8—Consumer Spending on Transportation*.

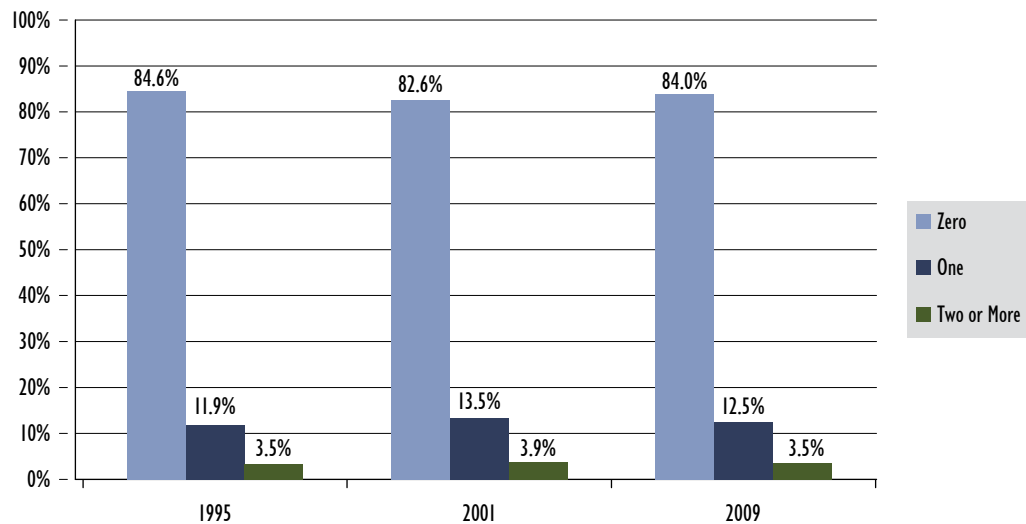


Figure 2-2. Trend in Trip Chaining (Stops on Commute)

Source: NHTS data series.

Today, workers may spend part of the week working from home. Aside from those who work from home and have no other work place, there are many on a schedule that permits them to work one or two days per week from home or even from an intermediate office.² This schedule may be fixed or variable. Family-friendly work policies, growth in service and retail employment with 7-day-per-week and up to 24-hour-per-day operations, multi-job workers, job sharing, and other changes in the relationship between workers and their jobs have resulted in complex and dynamic commuting behaviors. Congestion in many areas also influences the routes and times of departure for travel to work. Even the mode of travel may be more variable than in the past as options increase and economic, environmental, health, and other considerations factor into travel mode decisions. As a result, almost all of the attributes of worker travel to work are more variable today than in the past including: days and hours worked, time of departure, route of travel, stops along the way, mode of transportation employed, and whether one travels at all.

² The Census data upon which much of these briefs are based report “working at home” as only those who work at home with no other regular workplace, although in rare cases in which someone with a regular work location spent the census week working at home, the work trip would accurately be counted as “working at home.”

Thus, the interrelationship of commuting and other travel is complex and dynamic. Yet, work trip commuting remains the single most significant market for both roadway and public transit travel and one that is likely to continue to significantly influence transportation infrastructure and service needs.

While Figure 2-1 presented a basic taxonomy of travel, identifying all the major elements, Tables 2-1 and 2-2 provide a sense of scale by estimating the proportion of total travel for each of the major travel elements using various demand measures (trip rates, VMT, PMT, etc.). It should be noted that data gaps result in there being no clear and effective full accounting for all the elements of total travel at the national, state, or local levels.

Table 2-1. Commuting in Perspective

	Travel by All Modes 2009			Private Vehicle Travel 2009		
	Percent of Person Trips	Percent of Person Miles of Travel	Percent of Person Travel Time	Percent of Person Travel Time	Percent of Vehicle Miles Traveled	Percent of Total Roadway VMT
Household Travel						
Commuting ³	15.6	19.0	18.8	17.9	27.8	76 ^a
Work-Related/Business Travel	3.0	6.3	4.6	5.2	9	
Other Resident Travel	81.4	74.7	76.6	76.9	63.2	
Subtotal	100%	100%	100%	100%	100%	
Public and Commercial Travel						
Public Vehicle Travel						2 ^b
Utility/Service Travel						12 ^c
Freight and Goods Movement Travel						
						10 ^d
Total						100%

Sources: NHTS 2009, FHWA State Statistical Abstracts, FHWA.

^a FHWA estimate based on NHTS data.

^b FHWA estimate using vehicle registration data.

^c FHWA estimate based on HPMS data and NHTS.

^d FHWA estimate based on HPMS data.

It is more difficult to estimate the share of total roadway and transit activity represented by commuting because comprehensive data on overall travel, particularly for long-distance vacation and business travel and non-household-based vehicle travel, are limited.⁴ The best

³ Enumerating trips, miles of travel, and travel time for chained work trips requires assigning work as the principal purpose for these trip chains. Thus, estimates of travel time and distance are based on and include the circuitry associated with accomplishing other activities such as dropping off children or picking up a meal as part of the work commute.

⁴ This data void was originally noted in *Commuting in America II* and remains unresolved.

available data from the National Household Travel Survey (NHTS) are used in conjunction with industry-derived count data to develop the estimates shown in Table 2-2. Based on NHTS estimates of total household travel, household-based person travel constitutes approximately 76 percent of total roadway vehicle volumes. The remaining approximately 24 percent comprises freight and commercial travel, public vehicle travel, and some person travel, such as tourist and visitor travel that may not be captured in NHTS. Thus, commuting constitutes 27.8 percent of person vehicle travel which, when factored to reflect total vehicle travel, results in commuting representing approximately 21 percent of total roadway vehicle travel volumes.

Table 2-2 presents similar information for public transit travel. These data are reported in person miles of travel and represent the utilization of public transportation capacity by trip purpose.⁵ Public transit, biking, walking, and other travel is also included above in Table 2-1, under Travel by All Modes. Commuting is a less critical purpose for walk and bike travel, with the percent of all trips that are to and from work by walking and by bike being 4.5 and 10.9 percent, respectively.

Table 2-2. Transit Commuting in Perspective

Public Transit Travel 2009			
Household Travel	Percent of Total Annual Transit Trips	Percent of Total Annual Transit Travel Time	Percent of Total Annual Transit PMT
Commuting	30	34.0	39
Work-Related/Business Travel	3.5	3.8	4.5
Other Purpose Household and Tourist/Visitor Travel	66.5	62.2	56.5
Total	100%	100%	100%

Source: NHTS 2009.

With respect to public transportation, annual NHTS data indicate that approximately 30 percent of trips on transit and 39 percent of all passenger miles of travel on transit are to and from work. In addition, approximately 3.5 percent of transit trips are work-related business, accounting for 4.5 percent percent of transit passenger miles. Interestingly, this differs dramatically from some industry-sourced, passenger-survey-based estimates that suggest that commuting constitutes more than half of all travel on public transit.⁶ What

⁵ For purposes of tabulation of work trips mileage and travel time, the time and distance are determined for trips whose “main purpose” was work. For trip purpose, each trip or trip tour segment is counted and attributed to its non-home end or destination activity.

⁶ American Public Transportation Association, *A Profile of Public Transportation Passenger Demographics and Travel Characteristics*, May 2007.



Commuting to work constitutes approximately 28% of all person VMT, and 39% of all transit person miles of travel.

is clear is that commuting is a significantly larger share of travel on public transit than its share of all travel. This is logical based on the fact that, historically, transit service targeted activity concentrations, typically job-rich downtowns and employment clusters. Commuting remains a significant component of the demand for public transportation infrastructure and service.

In terms of trips, based on the NHTS purpose delineation, work constitutes roughly 16 percent of all trips (by any mode of travel) made each day. Because work trip lengths, with an average of more than 13 miles, tend to be longer than the average for all trips, of just below 10 miles, the work share of passenger miles of travel is a bit greater at 19 percent. In both cases, this excludes the work-connected business trip category provided by the NHTS, consisting of people traveling as part of their daily job for meetings, deliveries, visits to clients, etc. Figure 2-3 provides greater detail on the purpose distribution for 2009, the most recent year of the NHTS.

It is extremely helpful that the latest NHTS was conducted fairly recently (2009) and that the previous survey interval covers roughly the past decade such that there is some comparability and potential for consistent analysis of commuting in the context of other passenger travel demand.⁷ The 2009 NHTS, indicating that work travel constitutes 15.6 percent of all person trips (more precisely 15.6 percent for persons age 5 and older), as seen in the first column of Table 2-1, actually showed a slight increase in share from the 14.9 percent observed in 2001. The slight increase in share may seem surprising in that unemployment would seem to reduce work travel. While that is true, in difficult financial times, other discretionary trip purposes such as social and recreational travel also declined markedly, affecting the percentages. Similarly, the work share of passenger miles of travel rose from 18.1 percent in 2001 to 19.0 percent in 2009.

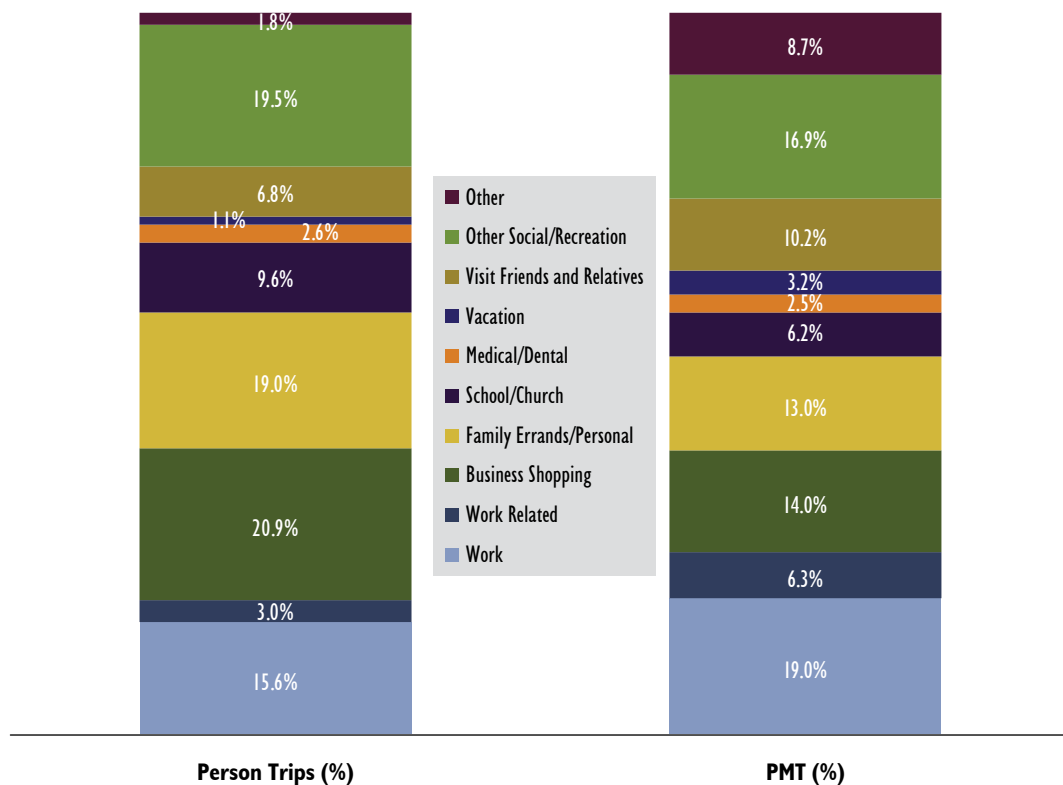


Figure 2-3. Person Trip and Person Miles of Travel by Purpose, 2009

Source: 2009 NHTS.

⁷ The NHTS, America's authoritative survey of household travel, was previously known as the National Personal Travel Survey, and was carried out in 1969, 1977, 1983, 1990, 1995, 2001, and 2009.

A sense of scale on the long-term patterns is provided by Figure 2-4, in which some of the main trip purposes are tracked in terms of actual trips per day, starting in 1977 through the survey years to 2009. Most notable in the pattern is that while work and school patterns tend to exhibit great stability over the decades, social/recreational travel and family/personal errands travel exhibit dramatic growth, at least in part a because of modern family lifestyles where out-of-home services are employed more extensively than in prior generations, particularly among multi-worker households.

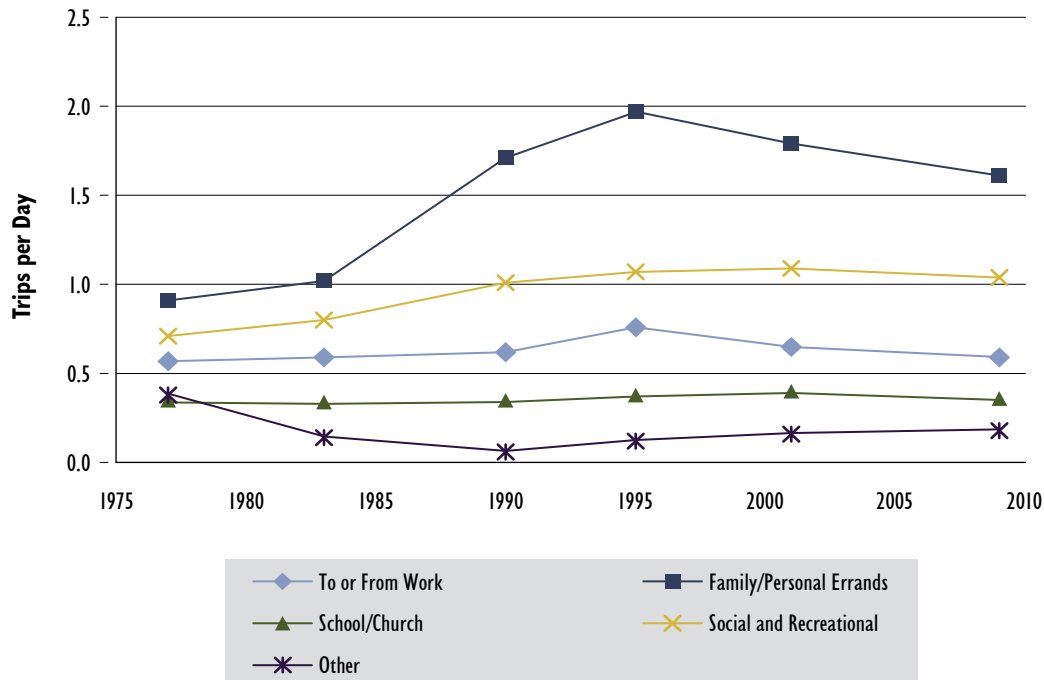


Figure 2-4. Trends in Trips per Day per Person by Purpose

Source: NHTS Series.

It is also worth noting that the actual commuting trips made per worker exhibit considerable stability over the years. Private vehicle trips to/from work per worker per year have varied in a very narrow range, from 342 in 1977, 1983, and 2009 to a high of 368 in 1969.⁸ Work trips per worker per year by all modes have averaged about 10 percent higher than vehicle trips per worker, with very little variation over the years.

⁸ In 1995, vehicle trips per worker reached a high of more than 400 per year, but this was in a year when issues with the work-trip measurements were discovered.

A more-detailed long-term indication of the commuting role is shown in Figure 2-5, in which the trends for person trips and person miles, shown earlier, are traced from 1969, the first year of the survey.⁹ In addition, the trend in vehicle trips (trips made in private passenger vehicles) and vehicle miles of travel share for work travel is also shown. Their trend patterns parallel those of the overall passenger measures. The 40-year period documents the decline in the share of total travel obtained by work travel in all of the key measures of travel. For example, the share of vehicle miles of travel for commuting declined from about one-third of travel in 1969 to below 28 percent in 2009. The relatively more moderate decline in work trip share versus work-trip vehicle mile share indicates that the ratio of work trip length to non-work trip length is increasing. The significant difference between work travel's share of person miles and vehicle miles is a result of the fact that work trips have far lower vehicle occupancy than do other trip purposes. Average occupancy for work trips was 1.13 in 2009 versus 1.67 for non-work trips.¹⁰ The result is that work travel's demands on transportation infrastructure capacity remain significant.

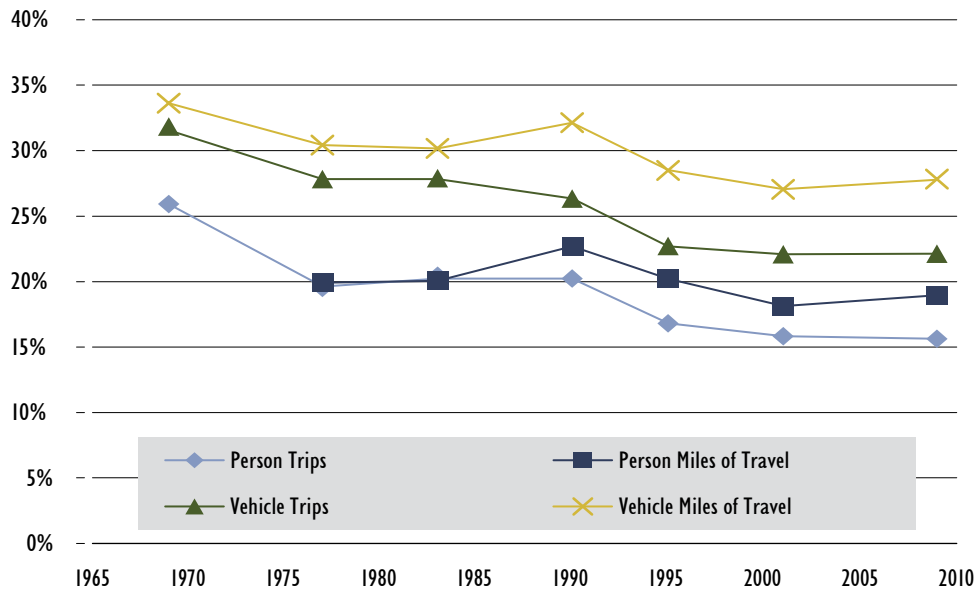


Figure 2-5. Work Travel as a Percentage of Total Travel Using Key Travel Measures¹¹

Source: NHTS Series.

⁹ Person miles of travel were unobtainable in 1969.

¹⁰ While work trip occupancy is 1.13, the passengers are not necessarily traveling to work.

¹¹ The percent of vehicle miles of travel measures privately-operated vehicle commuting mileage as a share of total household personal vehicle miles of travel. Transit vehicle miles are not counted in the numerator or denominator.

Figure 2-6 presents transit travel for commuting as measured by person trips and person miles of travel. As is the case for auto travel, the work travel share of overall transit use has been declining over time, as reported by NHTS survey data. As work trips on transit are longer than non-work trips, transit's share of person miles of travel is slightly higher than the share of trips.

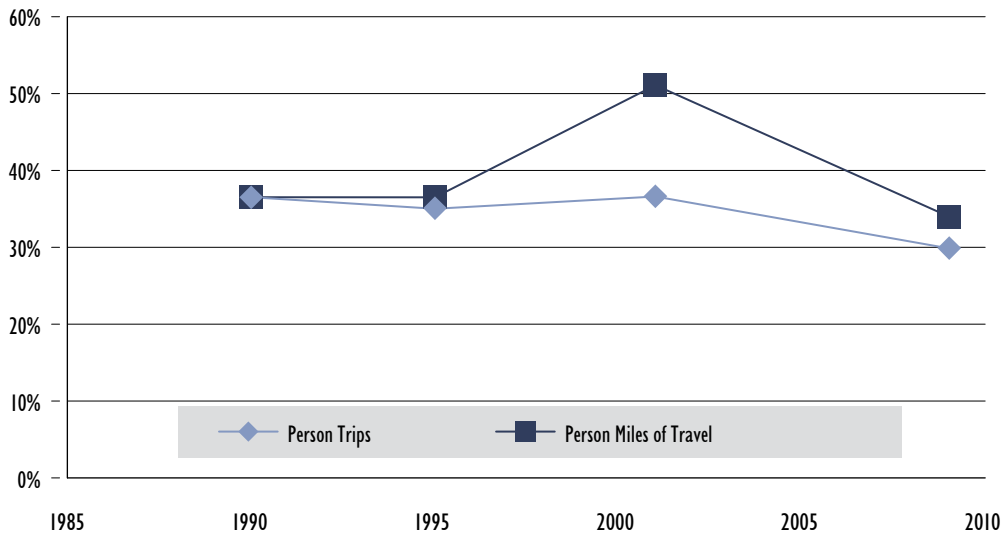


Figure 2-6. Transit Commute Travel Percentages of Transit Trips and Miles

Source: NHTS Series.

If work travel patterns are viewed on a daily basis, the NHTS reveals that, overall, Fridays are the busiest travel days of the week as a result of the greater activity in other purposes of travel. The work share starts the week at about 5 percent on Sundays, and rises to a range of typically close to 20 percent on weekdays, until Fridays, when the share drops to about 17 percent as weekend travel expands, and then drops to about 6 percent on Saturdays. As noted earlier, the average is just below 16 percent for the week, but is closer to 19 percent counting only the work week. Figure 2-7 presents the weekly pattern.

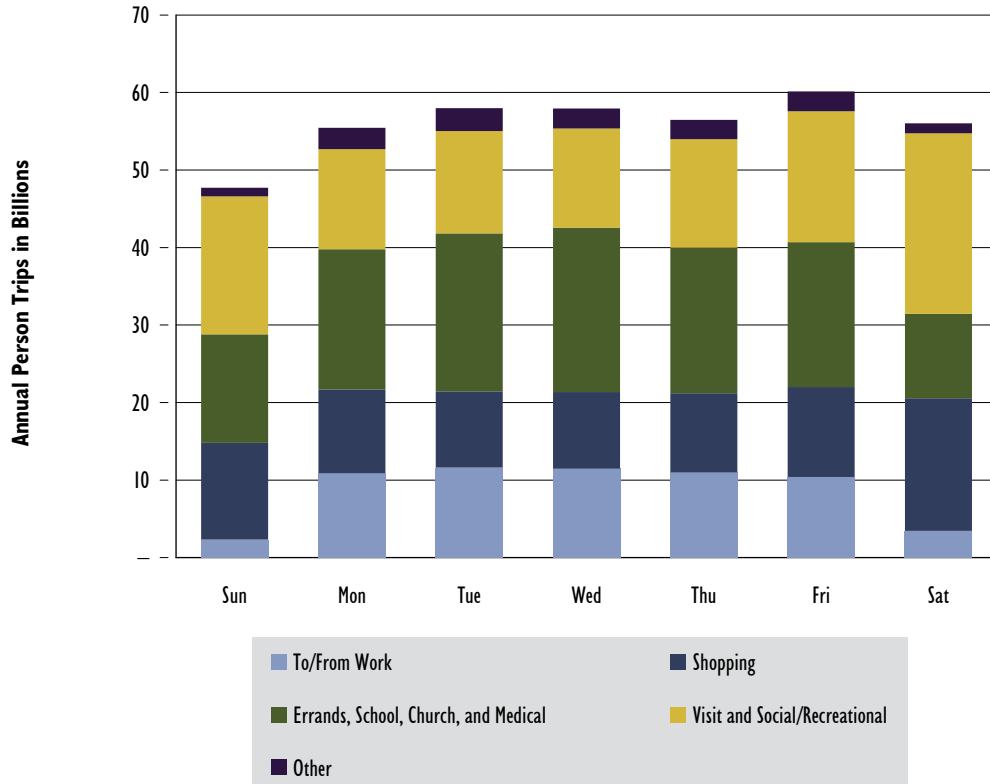


Figure 2-7. Daily Travel Patterns by Trip Purpose

Source: 2009 NHTS.

If we inspect overall purpose patterns, we see that most weekday work trip volumes are relatively constant, but other travel activities vary considerably—shopping, social and recreational activities, and general errands. As a result, Friday, the weekday with the lowest work travel, is the day with the most total travel.

Viewed on an hourly basis, the significance of work travel and the overall travel of workers is clear. Figure 2-8 shows the share of work trips per day by hour of day. With slightly more purpose detail than seen in Figure 2-7, it can be seen that work trips are an important but hardly dominant part of daily patterns even in the peak periods. In the early morning periods, school-related travel is almost as substantial as work travel. Shopping trips and family business or personal business trips are dominant in midday until late in the day. After 6 PM, social and recreational travel are the major part of travel. This, of course, includes only household passenger travel and does not include the other elements of the traffic stream indicated earlier in Table 2-1.

Commuting to work constitutes approximately 6% and 5% of trips on Saturdays and Sundays, respectively, and close to 20% on weekdays, until Fridays, when the share drops to about 17%.

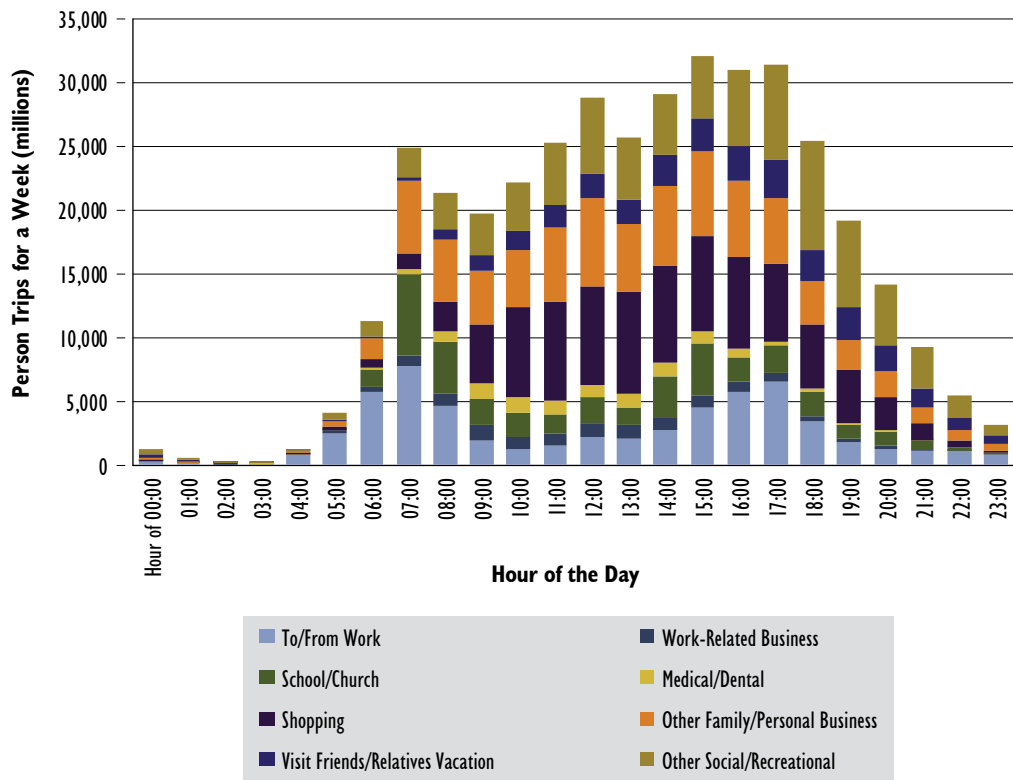


Figure 2-8. Hourly Trip Start Time by Trip Purpose

Source: 2009 NHTS.

A clearer picture emerges in Figure 2-9, where the share of hourly trips for commutes to and from work is shown. There are few hours of the typical day where work trips represent more than 50 percent of travel activity, as shown in Figure 2-9. Many of the hours where work trips dominate are the hours that most people would not consider to be a realistic travel period, i.e., from 3:00 to 6:00 a.m. Note that the amount of traffic in those time periods is very light, as shown in Figure 2-8. Also worth recognizing is that the morning work peak is more sharply peaked than the evening return trip in terms of work share because the evening travel period has many other activities, thus making the work share smaller.

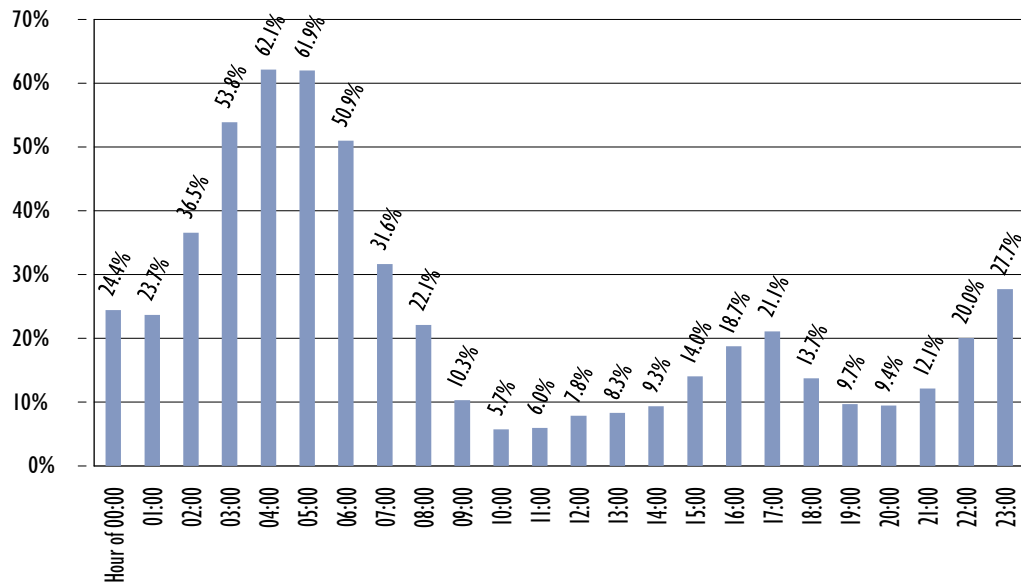


Figure 2-9. Work Trip Share of Trips by Hour of Day

Source: 2009 NHTS.

The Worker as Traveler

The working population is a majority of the overall population—workers were about 53 percent of the population in 2009. Workers are often active trip makers for other purposes as well as being the source of work trips. Figure 2-10 shows the passenger miles of travel per day by four main societal groups—workers, non-working adults, retirees, and children—for all trip purposes.

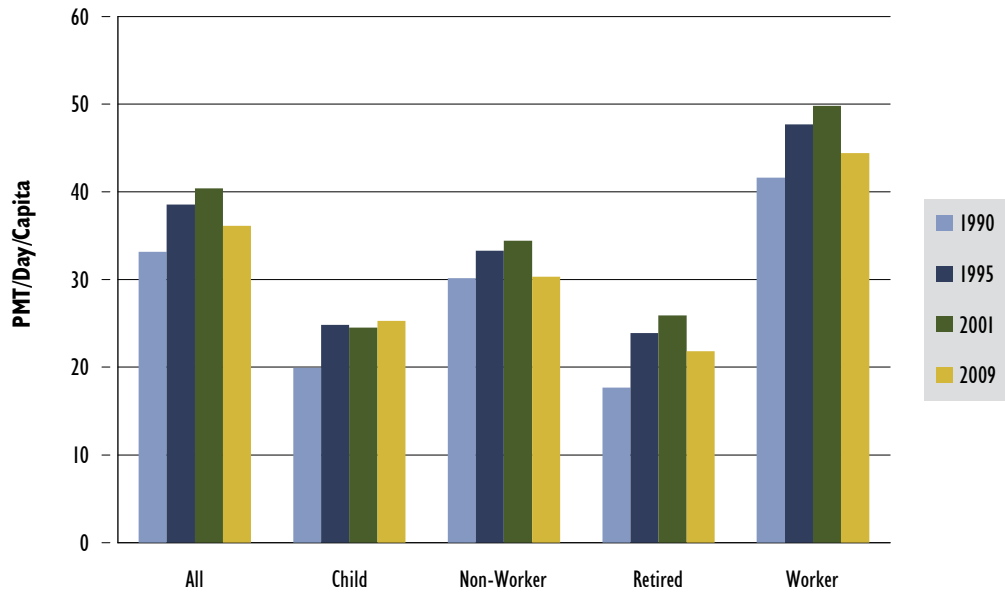
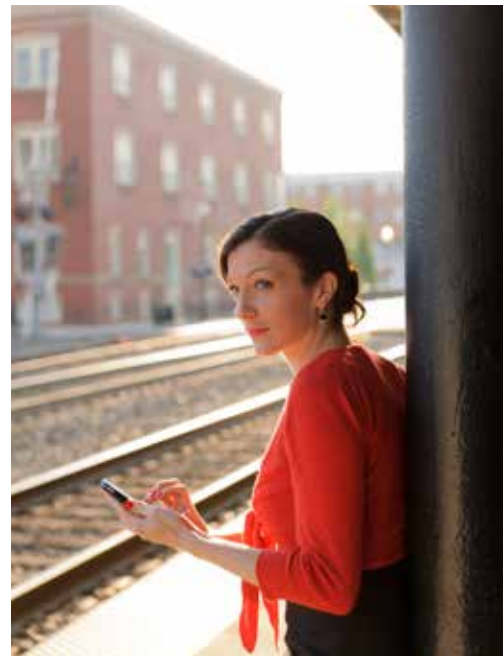


Figure 2-10. Trends in Daily Travel by Societal Group

Source: NHTS data series.

Travel growth appears to have risen steadily over most of the 20-year period but declined in the 2009 survey, returning to a travel level only slightly above that reported in 1990. Growth in per-person travel was only about 7 percent for workers over two decades, but growth was significant for children and retirees. All, except children, experienced around 9 percent declines in travel from 2001 to 2009.

As shown in Figure 2-11, workers are the main generators of travel in the population. Although representing just over half of the population in 2009, they accounted for about two-thirds of all passenger miles of travel and eight out of ten vehicle miles of travel. These percentages have remained roughly stable at those levels over time.



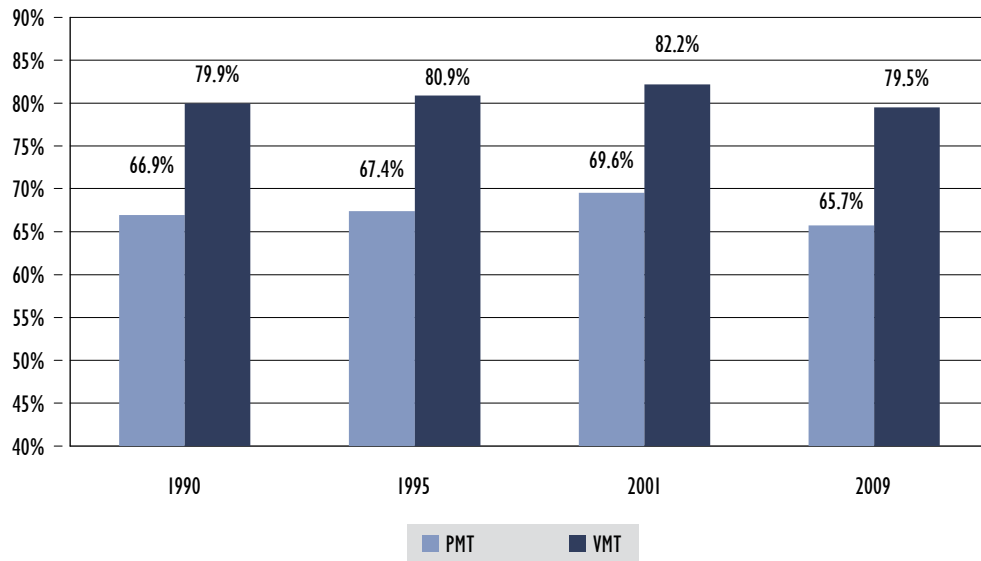


Figure 2-11. Trend in Workers' Share of Travel

Source: NHTS data series.

Workers as a group average about twice the level of overall travel and almost three times the level of auto travel as retirees. Workers also average significantly greater travel than non-workers. These facts are important to understand in considering the impacts of an aging population and possible changes in labor force participation.

National data are helpful in portraying the importance of commuting with respect to overall demand as well as temporal demand, but they do not enable one to fully understand the importance of commuting by geography. Specifically, commuting tends to be concentrated over time and space, with very high shares of work-trip commuting occurring on facilities serving as access to employment concentrations. Most obviously, radial commuting corridors on freeways and transit systems serving central business districts can have very high concentrations of work trip commuters in the respective inbound and outbound directions associated with peak periods. Local cordon line or travel survey data can be used to quantify the significance of commuting by time and geography for urban areas with quality data sets. It is not uncommon for work-trip commuting to be a strong majority of travel in the peak-period, peak-direction commuting corridors.

Workers were 53% of the population in 2009, but they accounted for about two-thirds of all passenger miles of travel and roughly 80% of vehicle miles of travel.



Summary

While it is undeniable that the dominance of the work trip in overall household travel has declined over time, the work trip remains a critical and highly-integrated element of all household travel. Work travel not only constitutes a very large share of vehicle travel, it shapes the physical and temporal pattern of travel. As household and personal activity patterns have changed due to the changing composition of households, the changing nature of work, and changes in technology, the nature of work travel is being impacted. However, work travel remains very significant, and understanding work travel remains critical to understanding transportation needs.

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. 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 Dynamic**—focuses on the dynamics of the population and workforce, 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**



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