



FHWA NHTS REPORT

About the NHTS

Conducted periodically since 1969 by the Federal Highway Administration, the NHTS collects travel data from a sample of U.S. households. The information is used to understand trends in the Nation's trip-making and miles of travel by mode, purpose, and time-of-day for use in policy, planning, and safety.

Data are collected for household members for each day of the year, yielding a rich demographic profile linked to daily travel and vehicle characteristics.

For more information:
<http://nhts.ornl.gov>



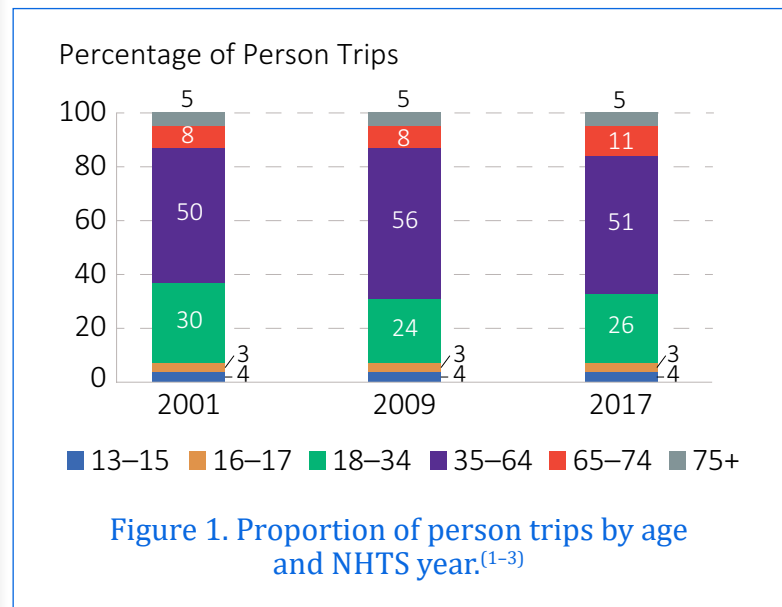
U.S. Department of Transportation
Federal Highway Administration

TRAVEL TRENDS FOR TEENS AND SENIORS

2017 National Household Travel Survey
February 2019

Introduction

Over the past 16 years, the proportion of trips reported by six age groups (i.e., 13–15, 16–17, 18–34, 35–64, 65–74, and 75+) has remained relatively stable. As shown in figure 1, according to the 2001, 2009, and 2017 National Household Travel Survey (NHTS), travel by teens (i.e., ages 13–17) has steadily accounted for 7% of all trips reported in each survey period, while that of seniors (i.e., ages 65+) has increased slightly from 13% of all trips in 2001 and 2009 to 16% in 2017.⁽¹⁻³⁾

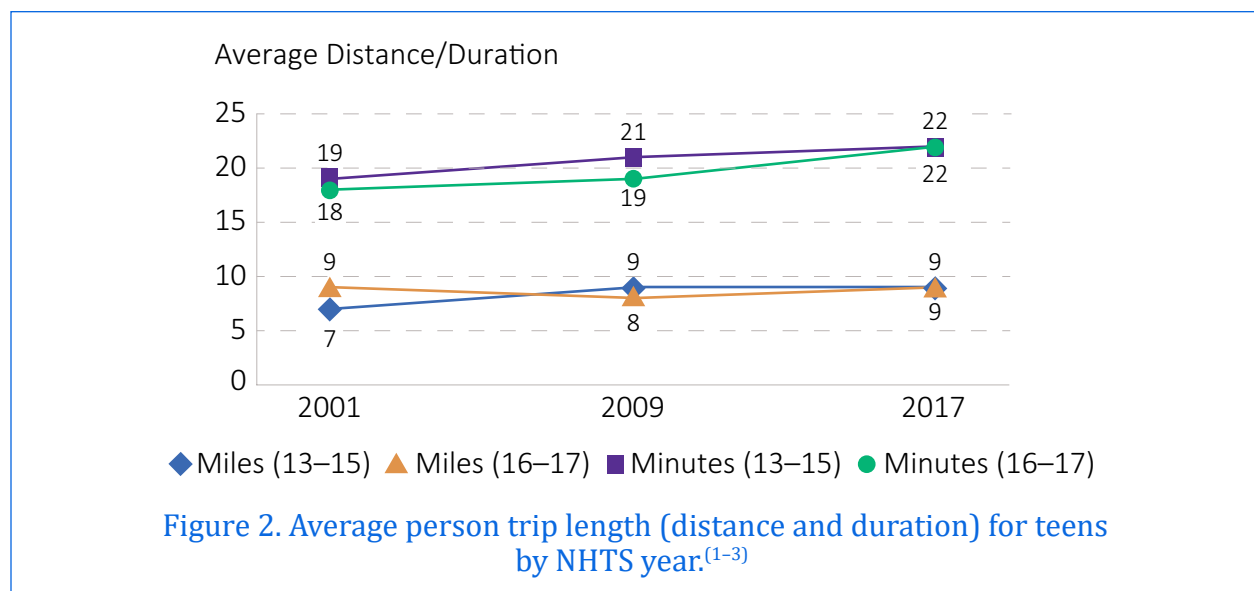


While the overall proportion of trips has generally been the same for the youngest (i.e., ages 13–17) and oldest (i.e., ages 65+) travelers, the purpose of this report is to explore where and how the composition of those trips has changed over time with respect to trip length, trip duration, trip purpose, and travel mode. For teens, there is significant interest in trend-related differences in travel patterns when school is in session versus out, reports of delays in driving, and related implications for travel mode patterns. For seniors, there are questions of trends and the resulting implications of seniors working and driving longer and possible changes in their ability to access medical care. This report provides insights into these age-related trends, as summarized in the next two sections. The final section of this report summarizes the results.

Travel Trends for Teens

Details regarding the travel behavior of teens are of interest to planners and policymakers for several reasons. First, although not yet adults, teens are generally believed to travel more independently of their parents as compared to younger children, with their travel patterns varying based on whether school is in session. Second, there is a question of whether those eligible to drive are waiting longer to do so and what implications that decision may have on mode choice. Finally, given the fact that teens have grown up in a society that is largely connected by technology, their travel patterns may be different in 2017 as compared to 2001. The goal of this section of the report is to explore these questions.

Data show that trip length varies by age group across NHTS years, as shown in figure 2. For teens ages 13–15, trip length increased each year, both in terms of average distance and duration. For teens ages 16–17, the trend is not so linear: average trip length decreased



from 2001 to 2009 and then increased in 2017 back to the 2001 average length. At the same time, trip duration increased steadily each survey period.

The average daily weekend trip was longer in terms of both miles and minutes for teens of all ages across the three survey years. With respect to trip purpose, weekday trips centered about school activities, while weekend trips were for social/recreation and errands. The patterns were the same for both age groups, although 16–17-year-olds reported an equal proportion of work trips during both weekdays and weekends.

A similar pattern was observed in the summer versus non-summer months, with summer months defined as June, July, and August. Teens ages 13–15 reported more social/recreation trips in the summer and more school trips in the non-summer months (see figure 3). The proportion of trips by purpose for summer months remained fairly steady from 2001 to 2009; however, from 2009 to 2017, the

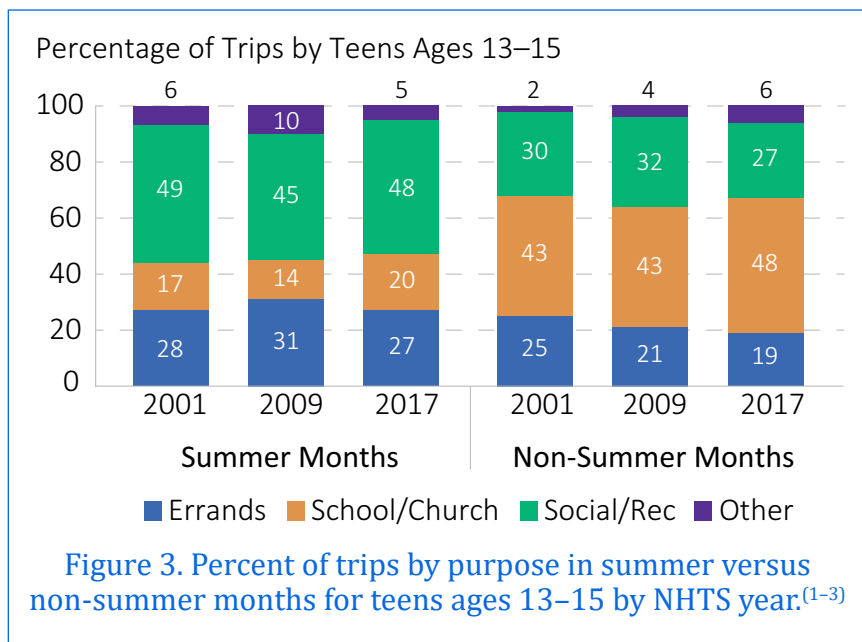
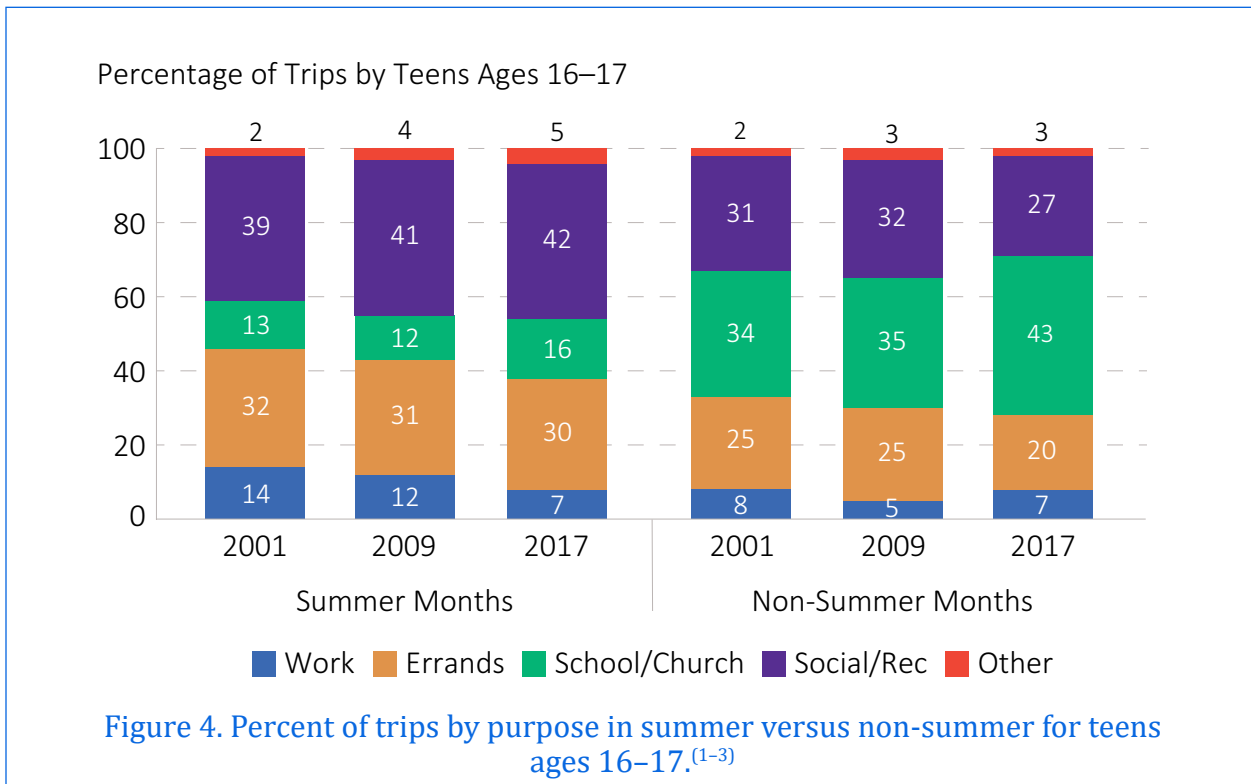


Figure 3. Percent of trips by purpose in summer versus non-summer months for teens ages 13–15 by NHTS year.^(1–3)

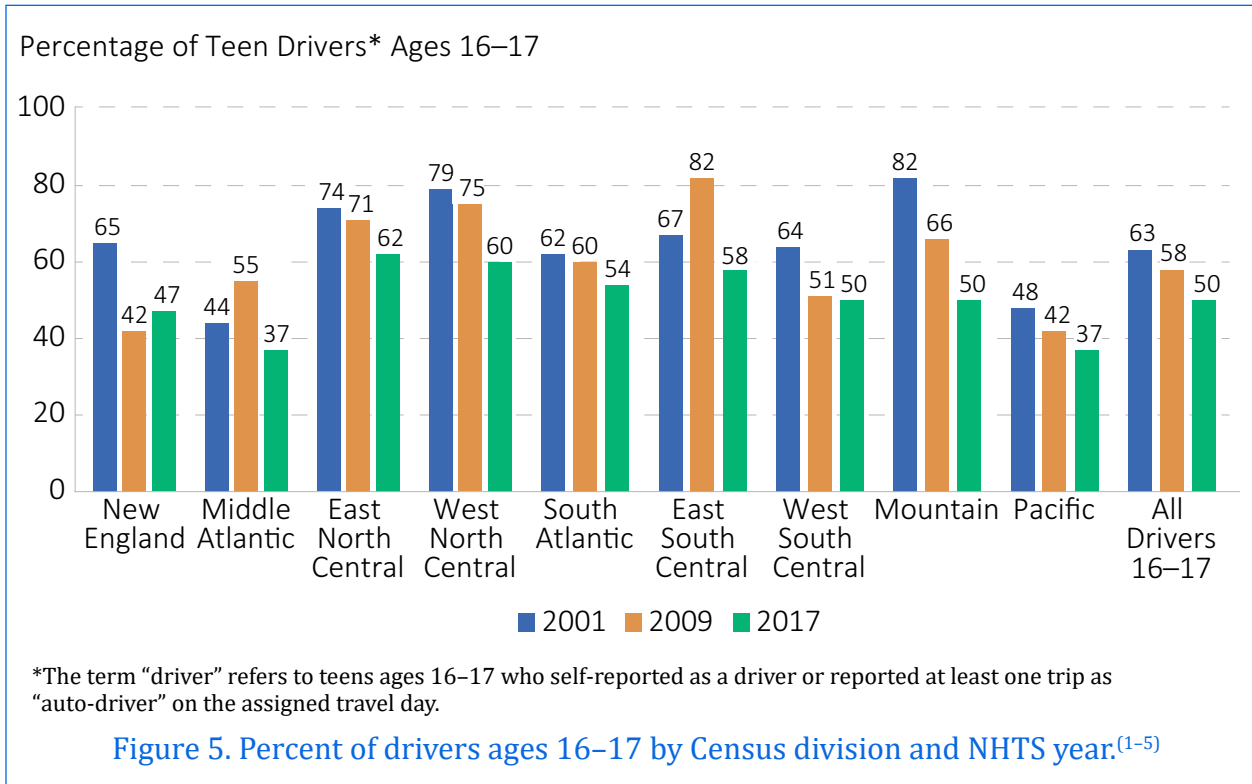
proportion of school/church trips increased, as did those for social/recreation, while trips for errands decreased. For trips during the non-summer months, the proportion of trips for school/church held steady from 2001 to 2009 and then increased in 2017. Trips for social/recreation first increased then decreased, while those for errands steadily decreased.

In general, summer travel for teens ages 16–17 was largely for social/recreation purposes and errands (see figure 4). During non-summer months, school dominated their travel day, with social/recreation and errands filling most of the remainder of their travel days. Proportions of trips by purpose for both summer and non-summer months remained fairly steady from 2001 to 2009. From 2009 to 2017, summer school/religious trips increased by 4 percentage points (from 12% to 16%), which is almost the same proportion by which work trips declined. For that same time period during the non-summer months, school trips increased from 35% to 43%, with those increases coming largely from declines in social/recreation and errand trips.



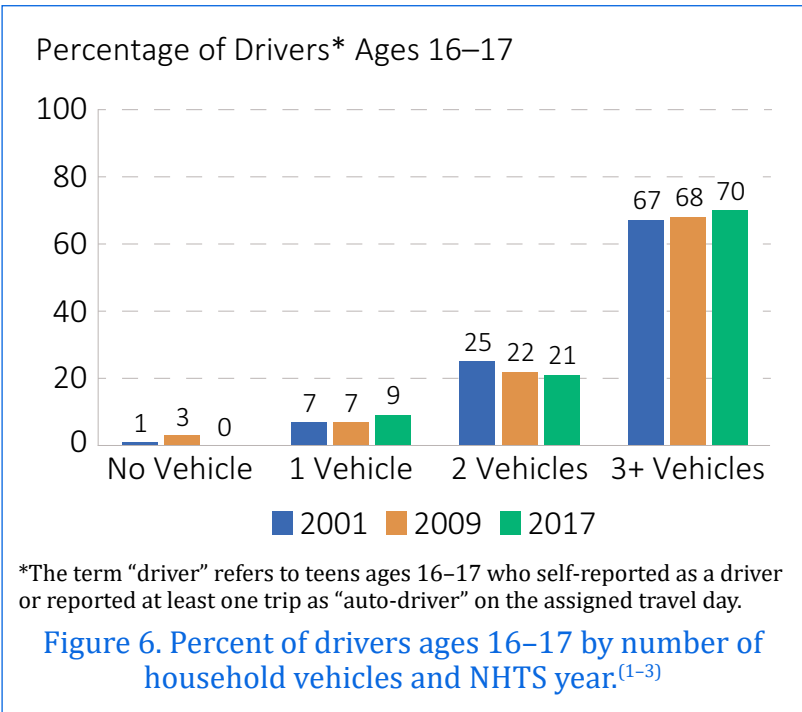
According to the NHTS, the percentage of 16–17-year-olds who self-reported as a driver or reported at least one trip as an auto driver (referred to as “driver” in this report) decreased from 63% in 2001, to 58% in 2009, to 50% in 2017. There was minimal difference in driver status based on gender: across the survey years, teen drivers ages 16–17 were 52% male and 48% female. The decline in the percentage of drivers ages 16–17 varied in terms of geography and vehicle ownership between 2001 and 2009 as compared to 2009 to 2017. It is important to note that these proportions are based on reports of driving in the 24-hour travel period and not related to whether or not the teens had a valid driver’s license (driver’s license status was not measured in the NHTS).

While the proportion of teen drivers declined overall, there were differences in proportion of teen drivers based on Census divisions.^(4,5) Figure 5 shows the percentage of teen drivers based on their home location (as defined by Census division) over NHTS years.⁽¹⁻⁵⁾ From 2001 to 2009, while the proportion of teen drivers overall declined, it increased in the Middle Atlantic and East South Central regions. Those regions also experienced the largest declines in 2017 when the proportions fell below 2001 levels. In addition, from 2009 to 2017, the proportion of teen drivers increased slightly in New England and remained the same in West South Central. Overall, the pattern of teen drivers in 2017 follows that of the 2001 NHTS, although at a lower level.



With respect to household vehicles, the proportion of drivers ages 16–17 for those living in households with two vehicles fell from 25% in 2001 to 21% in 2017, while it rose over time from 67% to 70% for those living in households with three or more vehicles (see figure 6).

Table 1 shows the percentage of teens traveling by mode across NHTS years. Teens ages 13–15 were most likely to travel as auto passengers (referred to as “passengers” in this report), accounting for two-thirds or more of their travel modes. Trips made by



walking was the next most frequent travel mode reported followed by taking the school bus. Generally, the proportion of travel by mode remained relatively steady across NHTS year for this age group, although the 2017 data showed a slight decline in non-motorized travel and a corresponding increase in passenger trips. Teens ages 16–17 showed more significant shifts from the proportion of driver to passenger trips from 2001 to 2017 as well as a slight increase followed by a stabilization of trips by walking, biking, or taking the school bus.

Table 1. Percentage of teens traveling by mode across NHTS years.⁽¹⁻³⁾

Travel Mode	Ages 13–15			Ages 16–17		
	2001	2009	2017	2001	2009	2017
Walk	16%	15%	12%	9%	12%	11%
Bike	3%	3%	2%	1%	1%	1%
Driver*	1%	1%	1%	40%	32%	29%
Passenger	65%	64%	69%	41%	44%	48%
Transit	2%	2%	1%	2%	3%	2%
School bus	12%	13%	14%	5%	7%	7%
All other modes	1%	2%	1%	2%	1%	2%

*The term “driver” refers to trips with a travel mode of “auto-driver” on the assigned travel day.

Travel Trends for Seniors

Today’s seniors (ages 65+) span both the silent and the baby boomer generational cohorts. Both generations have experienced significant changes throughout the course of their lifetime, which influence their travel behavior. Planners and policymakers are particularly interested in the travel patterns of seniors in that they are thought to be working and driving longer than their predecessors. In addition, some seniors are at a time of life when access to medical and social activities is an essential part of their daily activities and an indication of quality of life. The following is an analysis of the 2001, 2009, and 2017 NHTS that seeks to identify and define these trends as captured in each survey year.⁽¹⁻³⁾

The NHTS is a random sample of households residing in non-group quarters. The results presented in this section of the report exclude travel for seniors living in group quarters, such as nursing homes or assisted living facilities.

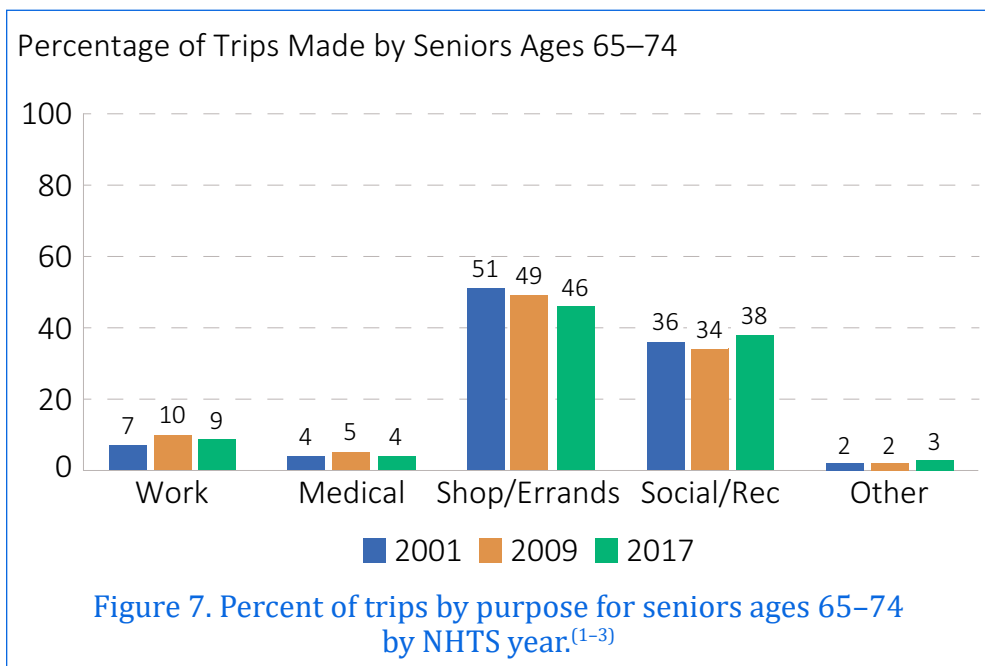
The proportion of seniors who reported making at least one driver trip on their assigned travel day increased slightly from 80% of all seniors in 2001 and 2009 to 82% in 2017. The increase comes from those ages 75+ reporting more driving trips in the 2017 NHTS. Despite this slight increase in drivers, the overall proportion of driver trips remained fairly steady across all survey years for seniors ages 65–74 and 75+, as shown in table 2.

Table 2. Percentage of seniors travel by mode across NHTS years.⁽¹⁻³⁾

Travel Mode	Ages 65–74			Ages 75+		
	2001	2009	2017	2001	2009	2017
Walk	8%	9%	10%	9%	9%	10%
Bike	0%	1%	1%	0%	0%	0%
Driver*	69%	69%	68%	61%	62%	62%
Passenger	21%	18%	18%	27%	25%	25%
Transit	1%	2%	1%	2%	1%	1%
All other modes	1%	1%	2%	1%	3%	2%

*The term “driver” refers to trips with a travel mode of “auto-driver” on the assigned travel day.

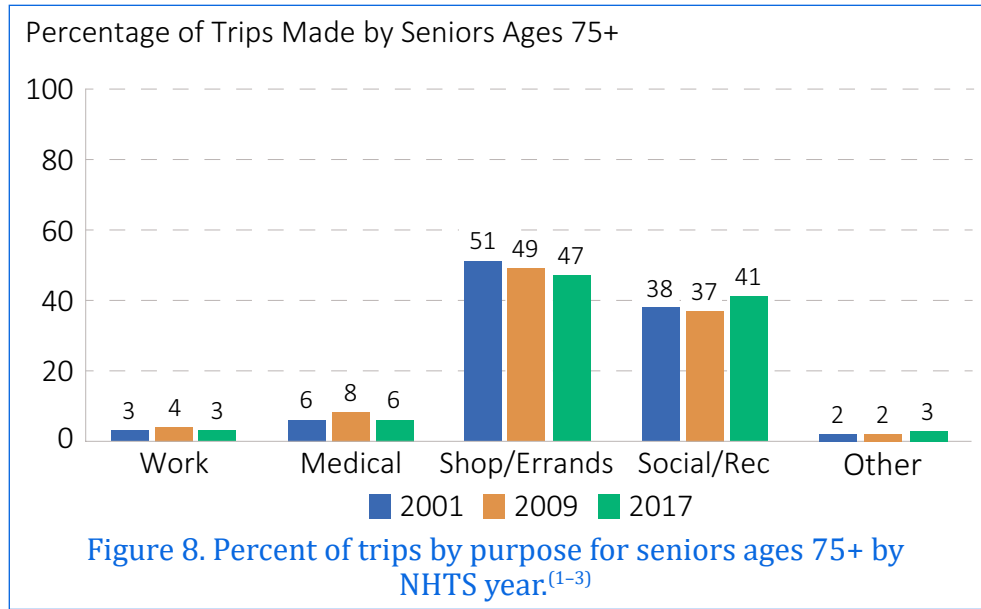
Across all survey years, the majority of trips reported by seniors were for shopping/errands or social/recreational purposes, as shown in figure 7. Seniors ages 65–74 reported more work trips than for those ages 75+ (see figure 7), while those ages 75+ reported more medical trips than



their younger counterparts (see figure 8). There were no differences in the distribution of trip purposes based on whether a senior’s home was located in an urban or rural area.

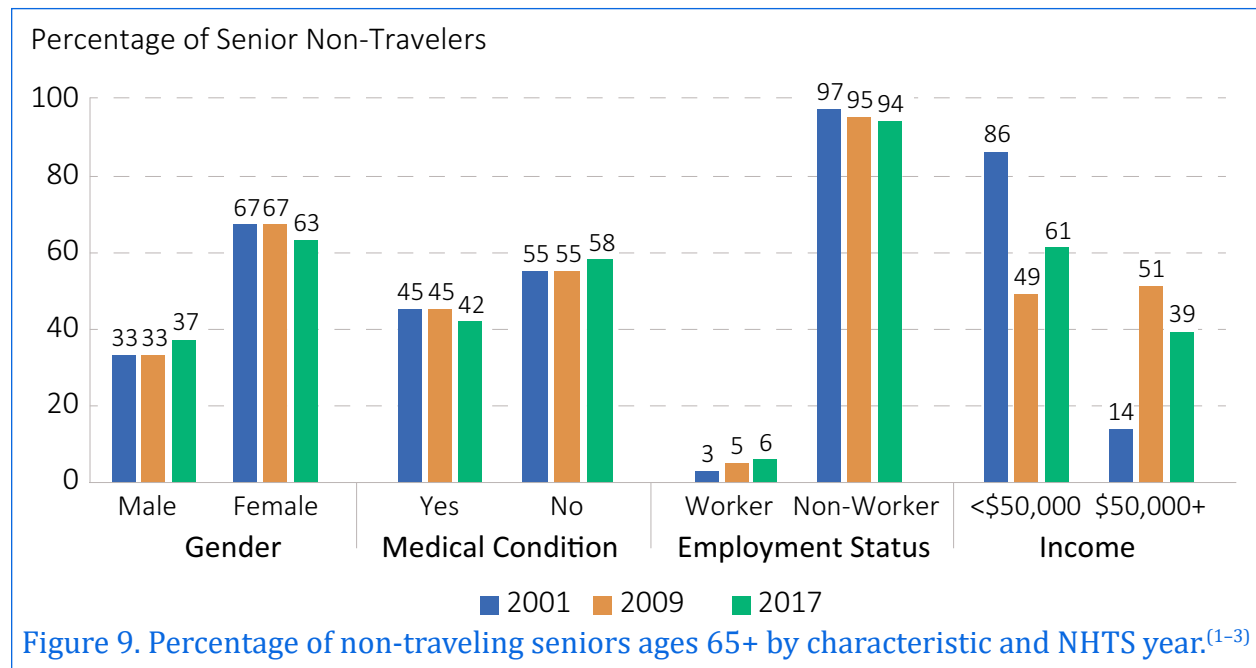
While the proportion of medical trips did not vary by survey year or urban/rural home location, trip lengths (distance and duration) did. In 2001 and 2009, medical trips made by seniors living in urban areas averaged 8 miles (or 23 minutes) as compared to 16 miles (or 31 minutes) for their rural counterparts. In 2017, urban-dwelling seniors traveled 8 miles (or 26 minutes) for their medical trips, while rural-dwelling seniors traveled 20 miles (or over 38 minutes).

As noted previously in figure 1, the proportion of trips made by seniors ages 65+ increased slightly from 12% of all trips in 2001, to 13% of all trips in 2009, to 16% of all trips in 2017. Despite these increases, the proportion of seniors that reported no travel



on their travel day remained relatively the same. For seniors ages 65–74, the immobility rates were 19% in 2001, 20% in 2009, and 21% in 2017. For seniors ages 75+, the immobility rate was 32% in 2001 and 33% in both 2009 and 2017.

The characteristics of those who reported no travel were also consistent over time. As indicated in figure 9, non-travelers tended to be female, without a medical condition that limited travel, retired, and with a household income less than \$50,000.



Conclusions

The following travel trends were found for teens ages 13–17 across all three observed NHTS years:⁽¹⁻³⁾

- School and school-related activities formed the cornerstone of travel by teens. Weekday trips and trips during months when school was in session were dominated by school travel and tended to be shorter in length and duration than weekend and summer trips when travel was mainly related to social/recreational purposes.
- The NHTS data showed a decline in the proportion of teen drivers from 63% in 2001, to 58% in 2009, to 50% in 2017. Other observations include the following:
 - While the overall proportion of teen drivers declined, there was no difference in the distribution of teen drivers by gender.
 - There were significant differences in the proportions of teen drivers based on Census division in which they lived, with the 2017 NHTS showing that the proportion of teen drivers increased slightly in New England and remained the same in West South Central as compared to 2009.^(4,5) The overall distribution of teen drivers in 2017 based on Census division mirrored those in 2001, albeit at a lower level.
 - There were slight declines with respect to teen drivers living in households with two vehicles and increases for those living in households with three or more vehicles.
- Being a passenger remained the dominant teen travel mode regardless of age. The proportion of driver trips declined over the three NHTS years, which was consistent with the decline in driver status. Travel mode usage for teens ages 13–15 was more consistent over the three survey years, while that reported by teens ages 16–17 showed more significant shifts from the proportion of driver to passenger trips over time as well as a slight increase followed by a stabilization of trips by walking, biking, or taking a school bus.

The term “driver” refers to someone who self-reported as a driver or reported at least one trip as an auto driver and does not speak to whether or not that person was licensed to drive.

The following travel trends were found for seniors ages 65+ across all three observed NHTS years:⁽¹⁻³⁾

- The proportions of work trips for seniors ages 65–74 increased from 7% of all trips in 2001 to 10% of all trips in 2009, and then fell to 8% of all trips in 2017. A similar pattern was observed for seniors ages 65+, although they reported half the number of work trips as their younger counterparts. The decline in work trips between 2009 and 2017 suggests that seniors (at least those that participated in the NHTS)

were not working longer, or their work was less formal than documented within the survey.

- The proportion of seniors who reported driving for at least one trip increased from 80% in both 2001 and 2009 to 82% in 2017, with that increase coming from seniors ages 75+, suggesting that this age group is driving longer. However, the proportion of driver trips by survey year and by age group remained steady. This suggests that the number of trips per driver may be lower, maintaining the same mode choice patterns as in prior survey years.
- The proportion of trips for medical trips remained steady over all survey years and for both age groups living in both urban and rural settings. However, those trips have increased in both distance and duration from 2009 to 2017.
- The proportion of social/recreational trips has increased, following a slight decline in this type of trip in the 2009 NHTS. Generally, the changes in trip purpose for this group tended to return the proportions to the 2001 levels.
- There were no changes in demographic characteristics of seniors who reported no travel on their assigned travel day.

References

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