



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

CHANGING ATTITUDES AND TRANSPORTATION CHOICES

2017 National Household Travel Survey

February 2019

The National Household Travel Survey (NHTS) is designed to provide a snapshot of demographic and travel behavior across the United States. While an essential part of the survey is to obtain details of daily person travel, it also includes an attitudinal component where respondents are given the opportunity to provide their opinions on several topics. These topics change in each NHTS, with the 2017 attitudinal questions focusing on the cost of travel and why people do not walk more.⁽¹⁾ Other questions ask about active travel, the use of ride-hailing services, and how one might travel if a vehicle were not available. Each of these topics is explored in this report.

Attitudes About Travel

Travel decisions are made based on a variety of factors. In the 2017 NHTS, respondents were asked a series of questions to identify their “cost consciousness” (i.e., their awareness of the cost of travel and how it affects their travel behavior). In a different section of the survey, they were asked about how they travel (i.e., their mode of travel) and what factors might influence them to walk more. Both of these are summarized in this section of the report.

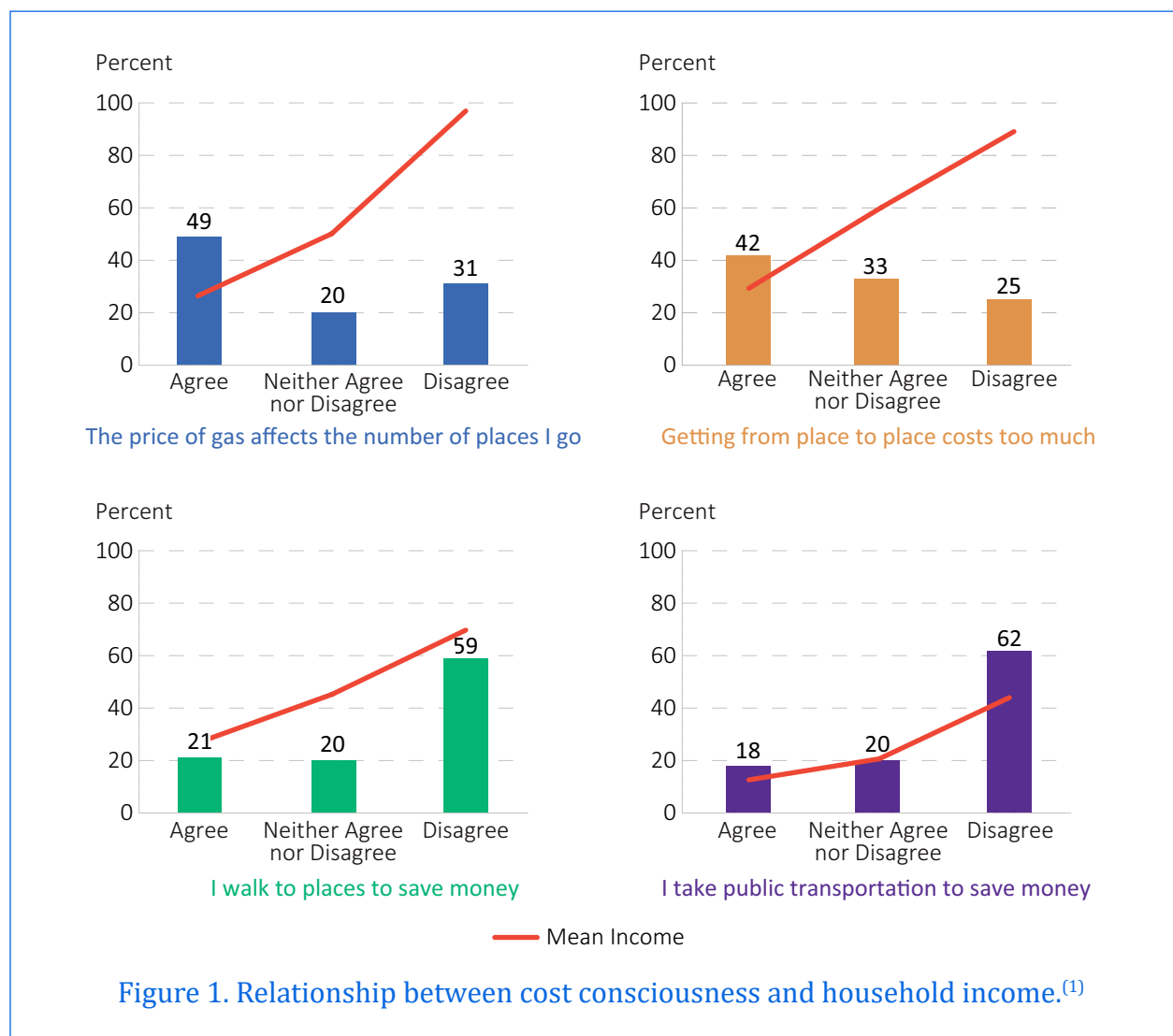
Cost of Travel

According to the 2017 NHTS (see figure 1), 49% of respondents indicated that the price of gas affected the number of places they travel to, while 42% responded that gas cost too much to get around. In addition,

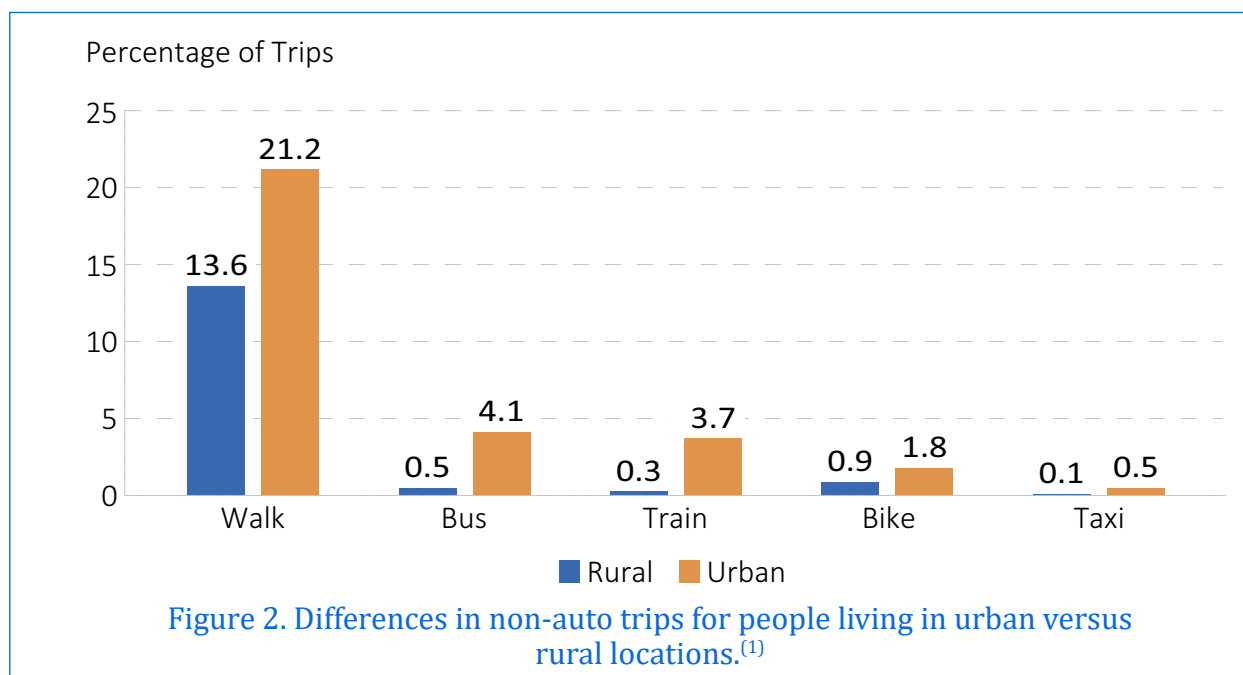
21% indicated that they walked places to save money, while 18% indicated that they took transit to save money. Not surprisingly, these attitudes about the cost of travel correlated with household income, where lower-income households were more likely to express being cost conscious regarding travel.

General Travel Modes With an Emphasis on Walking

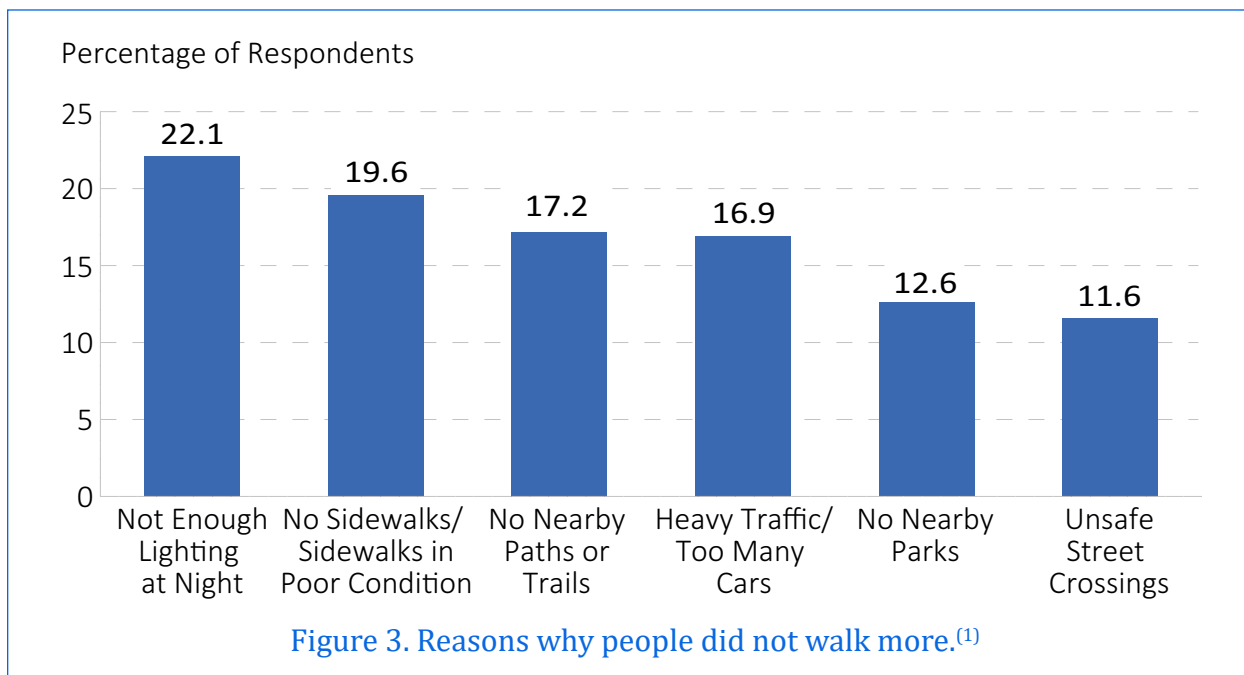
According to the 2017 NHTS, the modes of travel most commonly used by households largely depended on whether they were located in urban or rural settings. Rural households were more dependent on vehicles for travel, as evidenced by the fact that 3.1% of rural households reported having no vehicles available compared to 10.2% of urban households.



Related to the lower density of development, people in rural areas had higher overall vehicle-miles of travel (VMT) and longer commutes; the average one-way commute for workers in rural areas was 15.6 miles compared to 10.7 miles for those in urban areas. Figure 2 shows the common non-auto modes of travel for urban and rural households. As the dominant travel mode, private vehicle travel is not shown—75% of urban dwellers used a car daily compared to 80% of rural residents. People in urban areas were more likely to walk or bike. They were also more likely to take a bus, train, or taxi than rural residents, largely due to differences in travel options (urban areas with higher densities have different travel options compared to rural areas).



One of the attitudinal questions in the 2017 NHTS sought to obtain more information about factors that influence respondents’ amount of walking. Figure 3 shows the reasons people gave for why they did not walk more. The most common response was a lack of lighting at night (22.1%), followed by no sidewalks or sidewalks were in poor condition (19.6%), no nearby paths or trails (17.2%), and heavy traffic/too many cars (16.9%). The final two categories offered to respondents included no nearby parks and street crossings unsafe, which accounted for 12.6% and 11.6% of responses, respectively. These reasons provide important insights for policy and planning activities. Across the Nation, there is a growing interest in active travel (i.e., travel by walking or biking), which is explored in the next section.



Active Travel

Overview

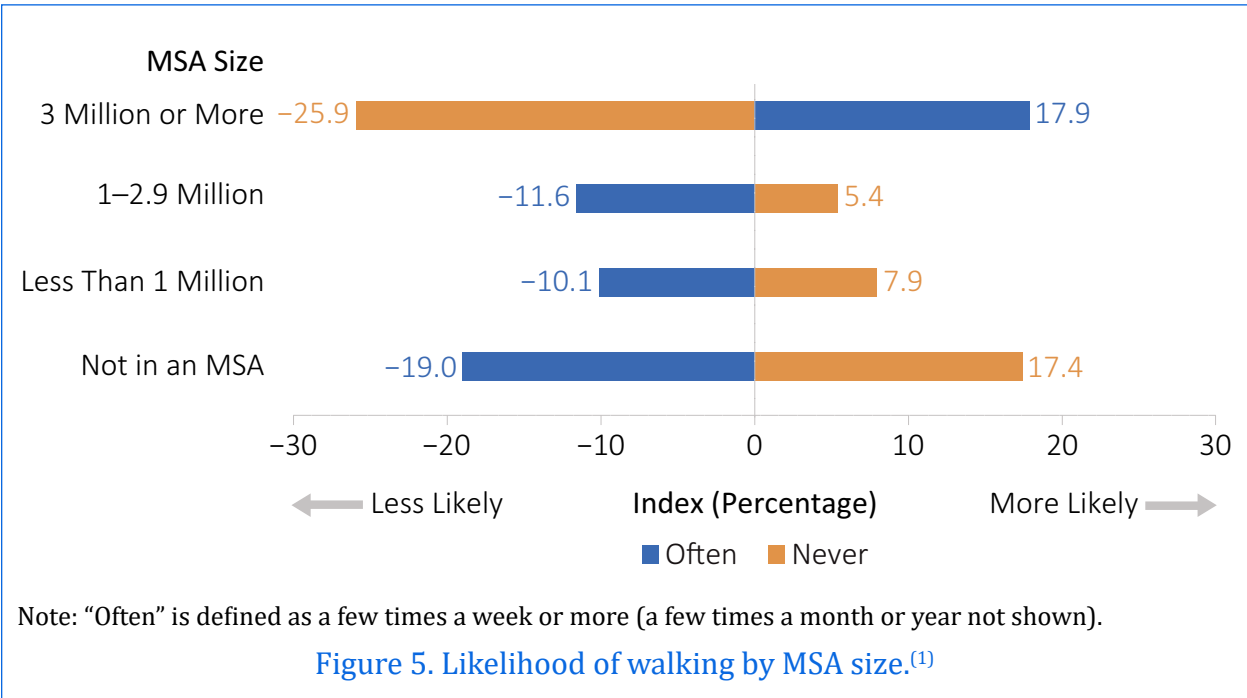
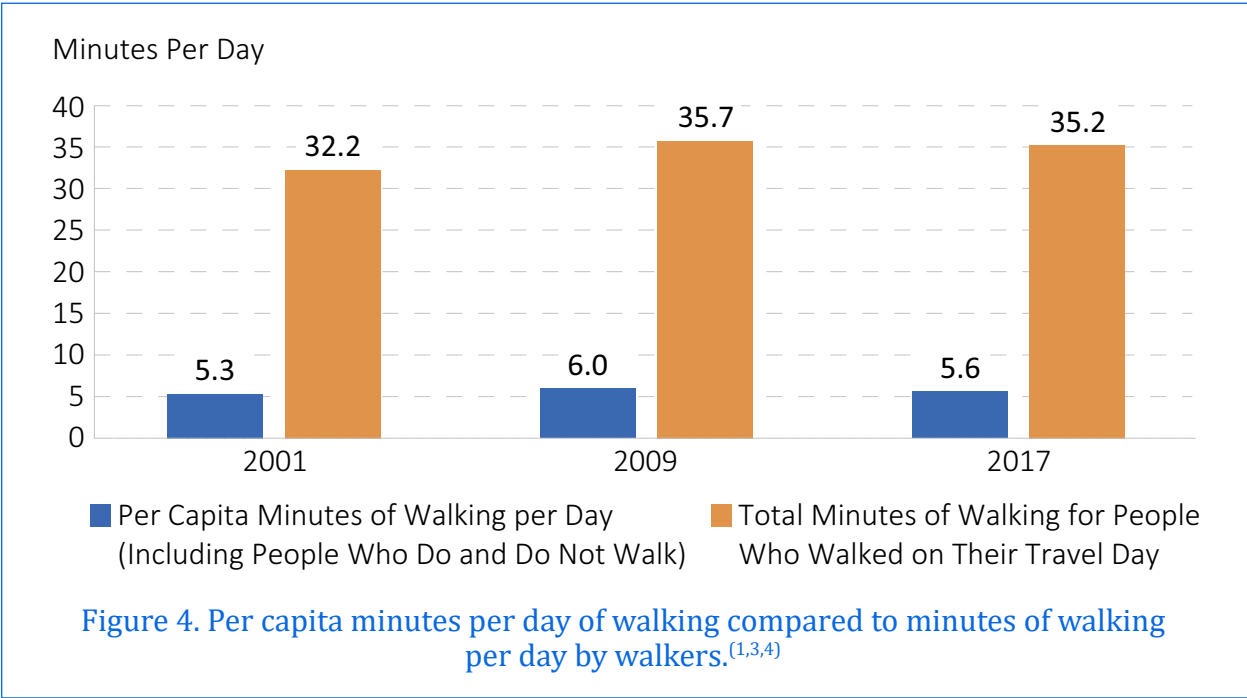
The 2017 NHTS estimated that about 16% of the U.S. population walked on their assigned travel day for any reason.¹ The estimates of walking were about the same (within the margin of error) across the three most recent surveys, as shown in figure 4. The per capita minutes of walking (i.e., the reported number of minutes of walking per day divided by all persons regardless of whether they walked) was 5.6 minutes per day. The amount of walking for people who reported walking on their assigned travel day was just over 35 minutes per day, which slightly exceeded the Centers for Disease Control and Prevention’s suggestion that Americans get 30 minutes or more of moderate activity every day.⁽²⁾

Active Travel by Metropolitan Statistical Area (MSA) Size

According to figure 5, MSA size has an effect on how often people walk to get from one place to another. Respondents who lived in larger metro areas with denser residential and commercial development walked more often. People in MSAs with a population size of 3 million people or more were 25% less likely to say they “never” walk to get from place to

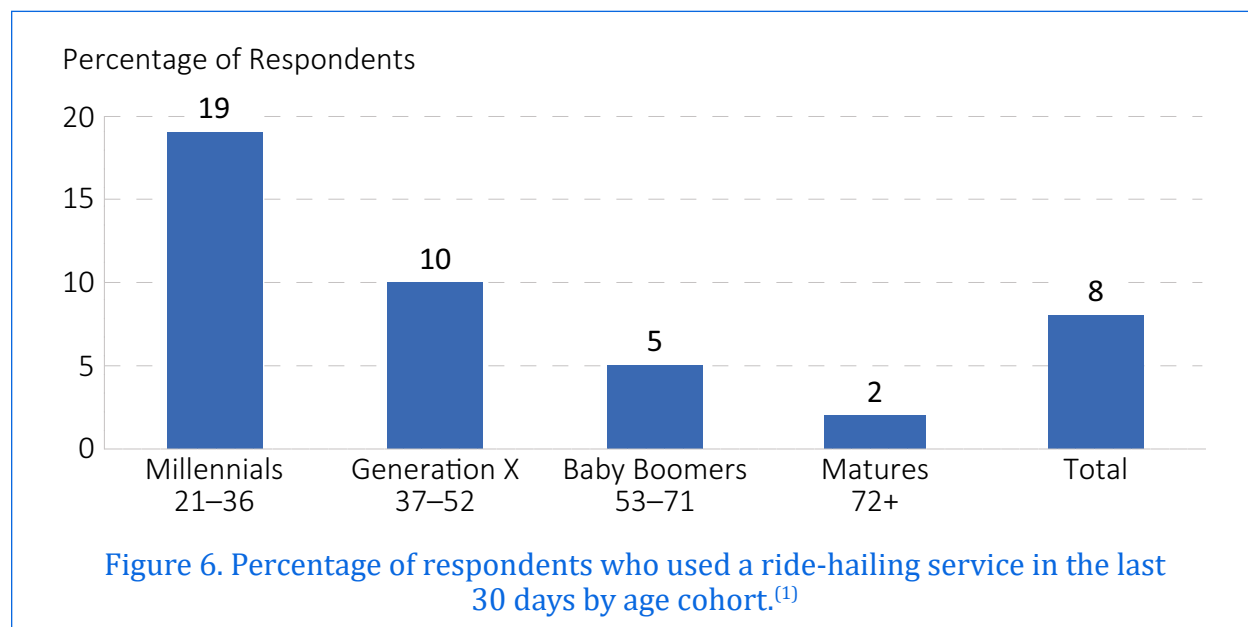
¹The sample size for biking was too small (i.e., 3%) to develop meaningful differences across age groups or trends across survey years. As a result, this section focuses on walking. The confidence intervals for trends in walking in this report were set at ±10%, or 90% confidence limits for significant differences between estimates to accommodate the larger error bars around this mode of travel. This is slightly more forgiving than the 95% confidence limits to develop significant findings used in other sections of this report.

place compared to the overall population. At the same time, this same group were 18% more likely to say they walked a few times a week or daily (often).



Usage of Ride-Hailing Services (Uber, Lyft, etc.)²

According to the 2017 NHTS, about 8% of the U.S. population used a ride-hailing service (i.e., services like Uber and Lyft) at least once in the last 30 days. The propensity to use a ride-hailing service differs by generation cohort, as shown in figure 6. The likelihood that millennials (ages 21–36 based on Pew Research Center definitions) used a ride-hailing service was twice as high as the national average, while respondents ages 72 and older were the least likely.^(5,1)



People who used ride-hailing services were less likely to own a personal vehicle. The mean number of household vehicles was lower for people who frequently used a ride-hailing service compared to respondents who never used such services, as shown in figure 7. People who never used these services averaged 2.2 vehicles compared to 1.5 vehicles in the households of people who frequently used ride-hailing services.

Effects of Ride-Hailing Services on Public Transit Usage

There is growing evidence that ride-hailing services are being used both in conjunction and as a substitute for transit.⁽⁶⁾ The 2017 NHTS data confirm that people often use both transit and ride-hailing services, and there is a strong correlation with age/generation cohort, as shown in figure 8. For example, a total of 8.6 million millennials (ages 21–36) in the largest metro areas used public transit within the last 30 days; 56% of them (i.e., 4.8 million) also used a ride-hailing service in the same time period.

²This section summarizes data collected under the attitudinal variable RIDESHARE, which considers services offered by companies like Uber and Lyft but does not include taxi service.

Mean Number of Household Vehicles

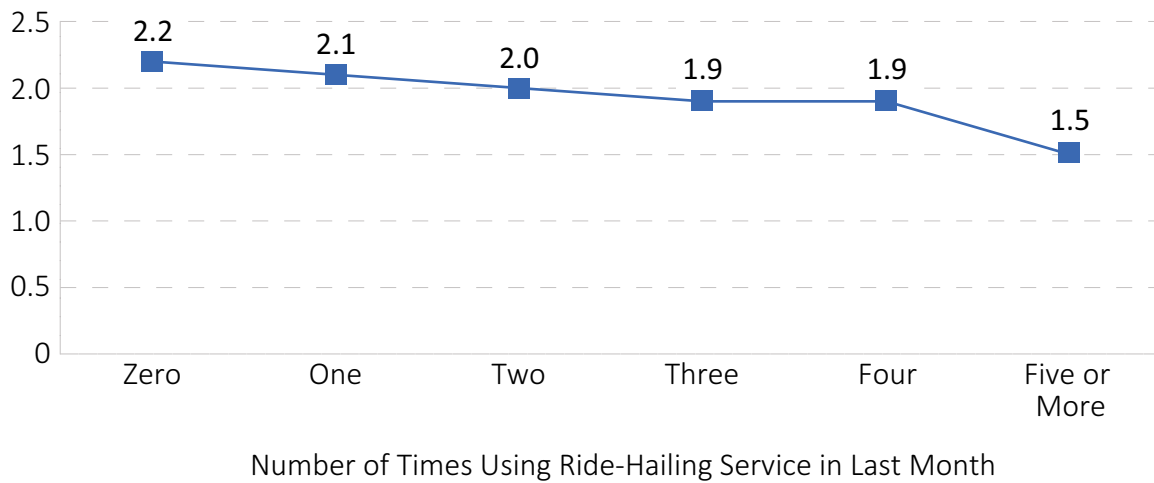
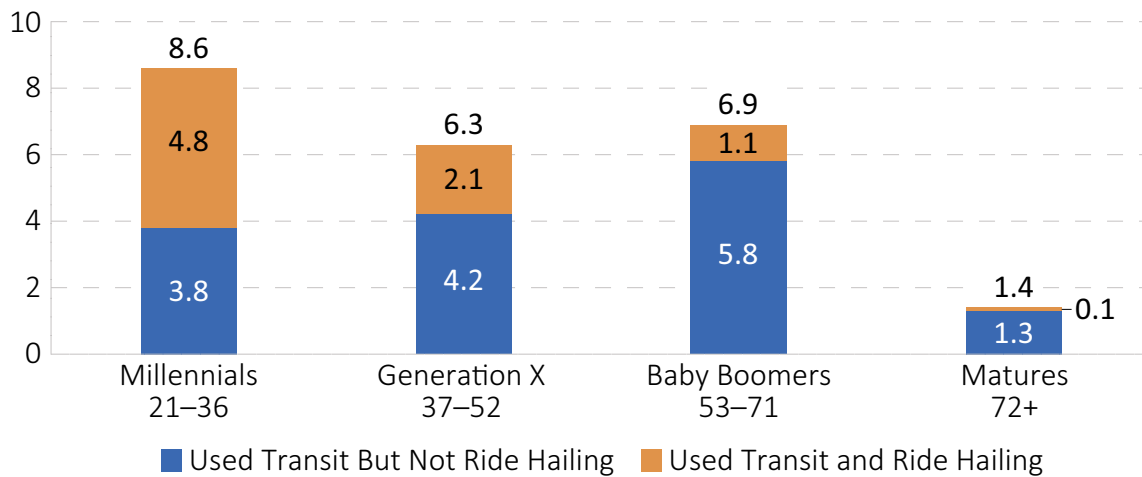


Figure 7. Mean number of vehicles per household compared to the number of times a ride-hailing service was used in the last 30 days by household.⁽¹⁾

Number of Respondents (Millions)



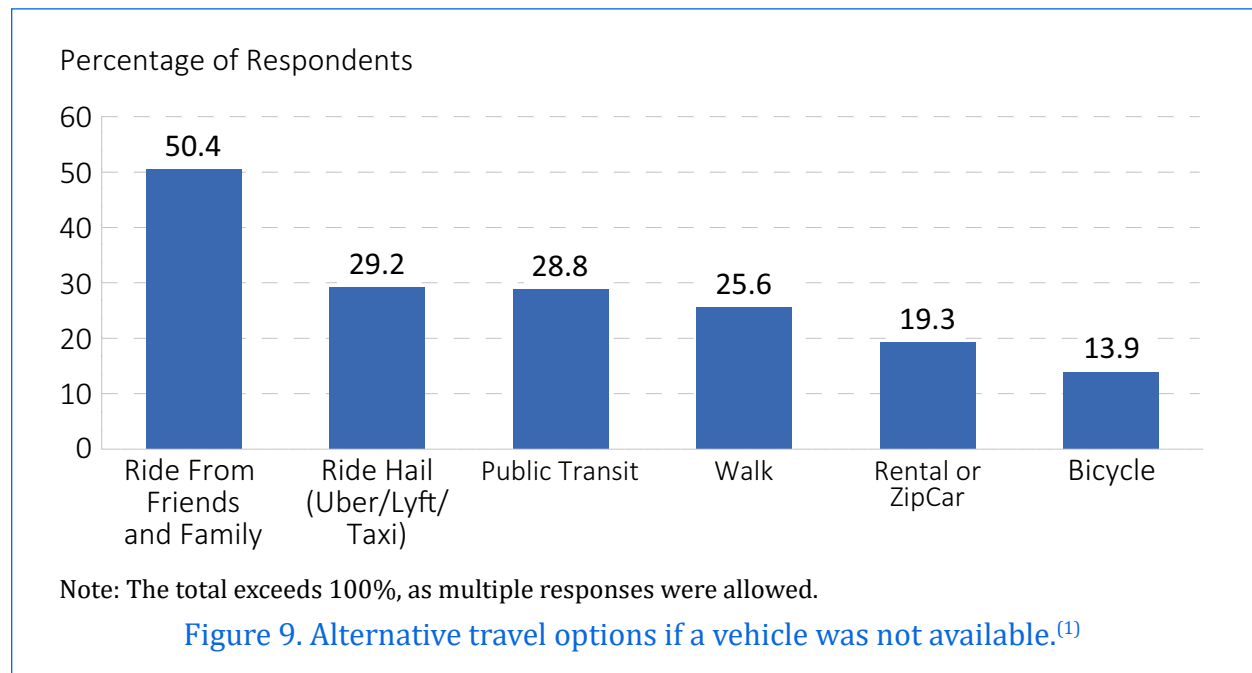
Note: These data are from MSAs with populations of 3 million or more people.

Figure 8. Number of respondents by age cohort who used public transit and a ride-hailing service in the last 30 days.⁽¹⁾

This replicates findings from recent research. According to a Pew Research Center study, people using ride-hailing services are significantly more likely to use a wide range of other personal transportation options in addition to ride hailing.⁽⁷⁾ Among daily or weekly ride-hailing users, 70% of the Pew study respondents reported that they regularly walked or ride a biked somewhere, 56% regularly took public transportation, 55% regularly used traditional taxi services, and 14% used bike-sharing services. In each instance, frequent ride-hailing users among the Pew study respondents were significantly more likely than other people to engage in the use of these alternative travel modes.

Effects of Number of Household Vehicles on Usage of Ride-Hailing Services

A question in the 2017 NHTS asked respondents in households with at least one available vehicle what means of travel they would use if their car was not available (see figure 9). While half (50.4%) responded that they would get a ride from family or friends, 29.2% indicated that they would use a ride-hailing service, followed by 28.8% who would use public transportation.



Overall, the growing use of ride-hailing services has major implications for travel patterns and revenue forecasts. On the one hand, drivers for ride-hailing services use their personal vehicles for commercial use, complicating the measurement of both personal travel and commercial travel. The drivers may also add more VMT and even congestion on the roadways by “cruising” for riders. On the other hand, their passengers will perhaps own fewer vehicles and will not need to pay to park, get parking tickets, or pay traffic fines when using ride-hailing services—all of which are all traditional municipal revenue streams.

Conclusions

The main findings from this report are as follows:⁽¹⁾

- People’s attitudes about the cost of travel were related to their income, but even people in lower-income households generally did not agree that they walked or took transit to save money.
- People in rural households were much more dependent on private vehicle travel, whereas people in urban households were more likely to walk or bike daily or use other modes of transportation such as a train, bus, or taxi.
- The 2017 NHTS estimated that about 16% of the U.S. population walked on their travel day for any reason.
- The most common reason people did not walk more was not enough light at night (22.1%), followed no sidewalks or sidewalks were in poor condition (19.6%), no nearby paths or trails (17.2%), and heavy traffic/too many cars (16.9%).
- People in the largest MSAs (population of 3 million or more people) were 18% more likely to report that they often walked compared to the national average.
- About 8% of the U.S. population has used a ride-hailing service in the last 30 days at least once. Millennials (ages 21–36) were twice as likely as the national average to use a ride-hailing service.
- People who used ride-hailing services were less likely to own a personal vehicle. People who never use these new services (which include older and rural households) averaged 2.2 vehicles per household compared to 1.5 vehicles per household for people who frequently used ride-hailing services.
- Well over half of millennials in large urban areas who used transit in the last 30 days also used a ride-hailing service.
- Drivers were asked what alternate means they would take were their cars not available. Getting a ride from a family or friends was the most common choice, but ride-hailing services and transit were virtually tied for second choice.

References

1. Federal Highway Administration. (2017). *2017 National Household Travel Survey*, U.S. Department of Transportation, Washington, DC. Available online: <https://nhts.ornl.gov>, last accessed October 15, 2018.
2. U.S. Department of Health and Human Services. (n.d.). “Physical Activity Guidelines for Americans,” (website) U.S. Department of Health and Human Services, Washington, DC. Available online: <https://www.hhs.gov/fitness/be-active/physical-activity-guidelines-for-americans/index.html>, last accessed November 9, 2018.
3. Federal Highway Administration. (2001). *2001 National Household Travel Survey*, U.S. Department of Transportation, Washington, DC. Available online: <https://nhts.ornl.gov>, last accessed October 15, 2018.

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4. Federal Highway Administration. (2009). *2009 National Household Travel Survey*, U.S. Department of Transportation, Washington, DC. Available online: <https://nhts.ornl.gov>, last accessed October 15, 2018.
 5. Pew Research Center. (2015). "The Generations Defined," (website) Pew Research Center, Washington, DC. Available online: http://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/ft_15-05-11_millennialsdefined/, last accessed November 9, 2018.
 6. Bliss, L. (2017). "Stop Asking Whether Uber is Transit's Enemy," *City Lab*, New York, NY. Available online: <https://www.citylab.com/transportation/2017/02/uber-lyft-transportation-network-companies-effect-on-transit-ridership-new-york-city/517932/>, last accessed November 9, 2018.
 7. Smith, A. (2016). "On-demand: Ride-Hailing Apps," (website) Pew Research Center, Washington, DC. Available online: <http://www.pewinternet.org/2016/05/19/on-demand-ride-hailing-apps/>, last accessed November 9, 2018.

Contact Information

For more information, please visit our website at <http://nhts.ornl.gov> or contact:

Daniel Jenkins
NHTS Program Manager
Federal Highway Administration
daniel.jenkins@dot.gov