

SUPPORTING STATEMENT
2020 National Household Travel Survey

This is a request for an Office of Management and Budget (OMB) approved clearance for the reinstatement of a periodic information collection entitled “National Household Travel Survey” (NHTS).

PART A.
JUSTIFICATION

1. Circumstances that make collection of information necessary.

The NHTS is the U.S. Department of Transportation’s (USDOT) nationally representative data source for daily local and long-distance passenger travel. This inventory of travel behavior reflects travel mode (private vehicle, public transportation, pedestrian and cycling) and trip purpose (travel to work, school, recreation, and personal/family trips) by U.S. household residents. Survey results are used by federal, state and local agencies to monitor the performance and adequacy of current facilities and infrastructure, and to plan for future needs. Data from the NHTS are included in broader, bi-annual reports to Congress on the performance of the surface transportation system.

The collection and analysis of national transportation data has been of critical importance for nearly half a century. Previous surveys were conducted in 1969, 1977, 1983, 1990, 1995, 2001, 2009, and 2017. The current survey will be the ninth in this series, and allow researchers, planners, and officials at the state and federal levels to monitor travel trends. The NHTS is the only national source of data on how the travel behavior of the American public is changing as demographic, economic and cultural changes are taking place in our country.

Title 23, United States Code, Section 502 authorizes the USDOT to carry out advanced research and transportation research to measure the performance of the surface transportation systems in the US, including the efficiency, energy use, air quality, congestion, and safety of the highway and intermodal transportation systems. The USDOT is charged with the overall responsibility to obtain current information on national patterns of travel, which establishes a database to better understand travel behavior, evaluate the use of transportation facilities, and gauge the impact of the USDOT’s policies and programs.

Data from the NHTS are widely used to support research needs within the USDOT, and State and local agencies, in addition to responding to queries from Congress, the research community and the media on important issues. Current and recent topics of interest include:

- Travel to work patterns by vehicle mode for infrastructure improvements and congestion reduction,
- Access to public transit, paratransit, and rail services by various demographic groups,
- Incidence of vehicle ownership at various income levels,

- Measures of travel by mode to establish exposure rates for highway safety analyses,
- Bike and walk travel for safety, health measures, and environmental concerns,
- Emerging travel modes such as dockless bikeshares, e-scooters, and other urban-mobility devices,
- The proliferation of internet-enabled ride-hailing apps,
- The increase in online home delivery services for food, groceries and households good and their impact on travel behavior
- Support for Federal, State, and local planning activities and policy evaluation. Within the USDOT, the Federal Highway Administration (FHWA) holds responsibility for technical and funding coordination. The National Highway Traffic Safety Administration (NHTSA), Federal Transit Administration (FTA), and the Bureau of Transportation Statistics (BTS) are also primary data users and have historically participated in project planning and financial support.

2. How, by whom, and for what purpose is the information used

The National Household Travel Survey is the source of the nation’s personal travel information and is used by the Administration, Congress, national and local policy makers, and transportation planners to study the extent and type of daily travel in the United States. Recent changes in travel behavior combined with the transportation community’s emphasis on performance measurement underscore the importance of reliable data for evidence-based decisions. The diversity of information needed to support the wide range of transportation decisions in the current environment is challenging. The NHTS provides critical data on individual travel behavior trends linked to economic, demographic, and geographic factors that influence travel decisions and help predict travel demand.

The NHTS data are unique and not available from any other source since they are collected directly from a stratified random sample of U.S. households. They describe travel behavior that informs research and policy initiatives on safety, congestion, finance, mobility, accessibility, and forecasted demand.

Appendix 1, “National Household Travel Survey, Bibliography, contains the table of contents for research published, January 2019 - December 2019.” The research papers were grouped into 11 categories that were created based on the subject areas and index terms identified in each abstract as well as category titles used in previous NHTS compendium databases. The categories are as follows:

1. Bicycle and pedestrian studies.
2. Energy consumption.
3. Environment.
4. Health.
5. Policy and mobility.
6. Special population groups.
7. Survey, data synthesis, and other applications.
8. Traffic safety.

9. Transit planning.
10. Travel behavior.
11. Trend analysis and market segmentation.

This listing demonstrates the broad spectrum of topics that NHTS data are used to investigate. To view the full compendia for prior years which contains a one-page abstract of each entry, go to <http://nhts.ornl.gov> and click on Publications and scroll down to the compendium for the year desired. Note, that the various Compendia have citations going back to research conducted using the 1969 NPTS (the forerunner of the NHTS).

The Office of the Secretary (OST) of Transportation, FHWA, FTA, NHTSA and BTS use NHTS data to address a number of issues in the Department's Strategic Plan. Specific applications are outlined below.

Safety

Ensuring the safety of the American public when traveling has been a long-standing mission of the USDOT. The NHTS is the only source of data available on the level of use of the transportation system by mode of travel and demographic group. Specifically, NHTS data are used by the Department, Administration, and transportation organizations for:

- Calculating exposure rates by age, gender, and vehicle type to compute risk for crashes and fatalities. These data are used to assess the composite impacts on the safety of the American public due to demographic shifts and vehicle technology changes. The risk assessment tool, Traffic STATS, developed by the AAA Traffic Safety Foundation is one example of this use (<http://www.aaafoundation.org>). Developing educational campaigns that reach target audiences. For example, understanding who is traveling at high accident times allows educational campaigns to target traveling market segments, including details on the age and gender of the driver, the number of people in the vehicle, the purpose of travel, and vehicle characteristics which can impact collision severity, such as vehicle age, type, etc.
- Analyzing the incidence of walk and bike trips, characteristics of those making these trips and the trips themselves, such as time of day, and trip purpose to establish baseline measures of exposure, demand for expanded facilities, and address high risk areas (e.g. rural roads) and demographic groups (e.g. Millennials, new immigrants).
- Gathering information on rare modes, such as motorcycle use, to help understand the persistent growth in motorcycle accidents and fatalities in recent years.
- Evaluating new safety initiatives such as Safe Routes to School to understand school aged travel and to help monitor special programs related to bike and walk trips of the student population.

Infrastructure

Investing in infrastructure to ensure safety, mobility, accessibility and to stimulate economic growth is a critical goal of the USDOT. NHTS data gives DOT an effective data source to provide State, local, Tribal, and private partners critical information to guide investments that stimulate economic growth, improve the condition of transportation infrastructure, and enable

the efficient and safe movement of people and goods. To achieve this goal, NHTS provides unique and valuable information in the following specific ways:

- Calculating the economic value to the community of following through with a bike plan. NHTS data allowed researchers to analyze the benefits from implementing a comprehensive urban bike plan, from lives saved to economic value to local businesses.
- Understanding changes in urban walking behaviors and the positive impact increased walking can have on reducing harmful greenhouse gas emissions. NHTS gives urban planners critical information on trip destination and proximity to help planned and assess the availability of infrastructure to facilitate more walking trips.
- Analyzing the use and preferences for electric vehicles related to the availability of public electric vehicle charging stations and explain household fuel type choices.
- Understanding the impact of increased electric vehicle usage on future collected gasoline taxes and the potential impact of reduced funding for public infrastructure projects.

Innovation

Lead in the development and deployment of innovative practices and technologies that improve the safety and performance of the nation's transportation system. Emerging technologies are transforming our transportation system. DOT seeks to continue its leadership role guiding research investments and facilitating the deployment of beneficial transportation technologies. To achieve this goal, NHTS provides unique and valuable information in the following specific ways:

- Forecasting future travel demand to understand new vehicle concepts, technological trends, and new business models that have the potential to change the mobility behavior of Americans.
- Understanding and planning for the impact of autonomous vehicles and autonomous fleets on future mobility trends and potential to improve the lives of vulnerable populations with little access to transit or other modes of travel.
- The impact of ride hailing services on urban mobility patterns and the impact on urban growth.

Private Vehicle Fleet Characteristics

The NHTS is a national source of data on the composition of the household vehicle fleet, particularly vehicle type and age, and how it has changed over time. In addition, the Energy Information Agency (EIA) partners with USDOT to append data on fuel efficiency, gas cost (at the household's location in the month of data collection), and annual fuel use. These data are critical for determining both trends in fuel use and understanding the changing types and levels of emissions. Important changes in the character of the vehicle fleet have been tracked using the NHTS data including:

- Increased ownership and use of SUVs and the impacts of that trend on fuel type and use and vehicle emissions,
- The relative cost of travel and fuel usage by the type of vehicles owned by the household and the household's location,
- Increased ownership and use of hybrid and electric vehicles,

- Baseline data for examining optimal charging schedules and grid utility for increasing electric vehicle use,
- Changes in the overall fuel efficiency of the residential vehicle fleet, and
- Changes in the overall age of the residential vehicle fleet and availability of safety features to key demographic groups.

Local Level Planning and Policy

In addition to USDOT policy issues and Strategic Plan goals, a key function of NHTS data is in the planning processes of States and Metropolitan Planning Organizations (MPOs). NHTS data are used to supplement, or even substitute for, local data on key variables needed in the policy and planning process. States and MPOs have used NHTS data as inputs into the travel demand forecasting, safety planning, and air quality analyses that are mandated by Congress. Since many large urban areas collect their own travel data, NHTS is most useful to small and mid-size MPOs with limited resources and/or to States who are piecing together data from a number of urban areas or require estimates of rural travel behavior to fill in State data gaps.

National Academies of Science

The NHTS is used in research conducted by the National Cooperative Highway Research Program (NCHRP) of the National Academies of Science. NCHRP research is highly respected and used widely by federal, state and local governments, travel modeling firms and the broader transportation research community.

3. Extent of automated information collection

The 2020 Next Generation Household Travel Survey (NHTS) represents a significant methodological change from prior program administrations. The 2020 NHTS will utilize a probability-based online survey panel and supplemental mail surveys to deliver the national and add-on data collection. Online probability panels represent the future of high-quality data collection in the United States. Importantly, probability panels provide a sustainable way to conduct NHTS into the future. Panels possess numerous advantages compared to other methods of survey administration. Some recent high-profile travel studies conducted in the US have abandoned probabilistic survey methods and utilized non-probability sampling methods due to the greatly increased cost of probability samples¹². In this context, surveys such as the NHTS can be conducted at greater frequency using probability panels, reduced cost, and without sacrificing the quality of estimates produced.

Current estimates state 81-90% of U.S. households have access to the Internet³⁴, representing a fundamental shift in how Americans connect with one another, gather information and conduct their day-to-day lives. The 2020 NHTS will leverage this shift in technology, in particular the move toward widespread internet access, to structure a survey design that uses web-based data collection modes.

¹ 2017 MAG Household Travel Survey: https://www.azmag.gov/Portals/0/Documents/MagContent/2017_MAG_HTS_Report_V1.pdf?ver=2019-02-06-121511-847

² Source: http://northfloridatpo.com/images/uploads/NorthFloridaHTS_FinalReport_07122018.pdf

³ Source: U.S. Census Bureau, Current Population Survey, Select Years, Internet Release date: August 2018.

⁴ Source: Pew Research Internet Fact Sheet: <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>

The drawback to the majority of online survey methods has been the limitations of available high-quality samples. Opt-in or convenience online samples are typically self-selected or recruited using a variety of online techniques, which results in a survey sample that does not represent the true U.S. population but over represents the younger, more active online population, while failing to capture those who are not active online or do not have access to the internet at home. While households without internet access are a declining portion of the total population, it does include many who are of significant interest to this program, namely rural and low to-moderate-income households⁵.

The solution to this problem is the development of true online probability samples. Leveraging a probability panel for the National Household Travel Survey and supplemental mail surveys for the add-on samples will provide accurate measurement of travel activity required by the program stakeholders on the most cost-effective basis possible and will provide the basis for generating accurate state and local level measurement. This approach will serve as the foundation for continuing the survey well into the future ensuring accurate trending of the results over time, with increased frequency of measurement.

The largest national online probability panel, known as KnowledgePanel®, will be used for the Next Generation Household Travel Survey (NHTS) National sample data collection. KnowledgePanel is unique in that the panel is recruited via postal mailing utilizing the United States Postal Service Computerized Delivery Sequence File. All US residential non-institutional addresses are eligible for selection. All households that do not maintain an internet connection at the time of recruitment are provided internet access and a tablet, free of charge, in order to take surveys. This expands population coverage to include non-internet households in KnowledgePanel. Since panel households have already consented to take surveys, a lengthy and burdensome recruitment process is not necessary to recruit households into the survey, and to complete a subsequent trip diary.

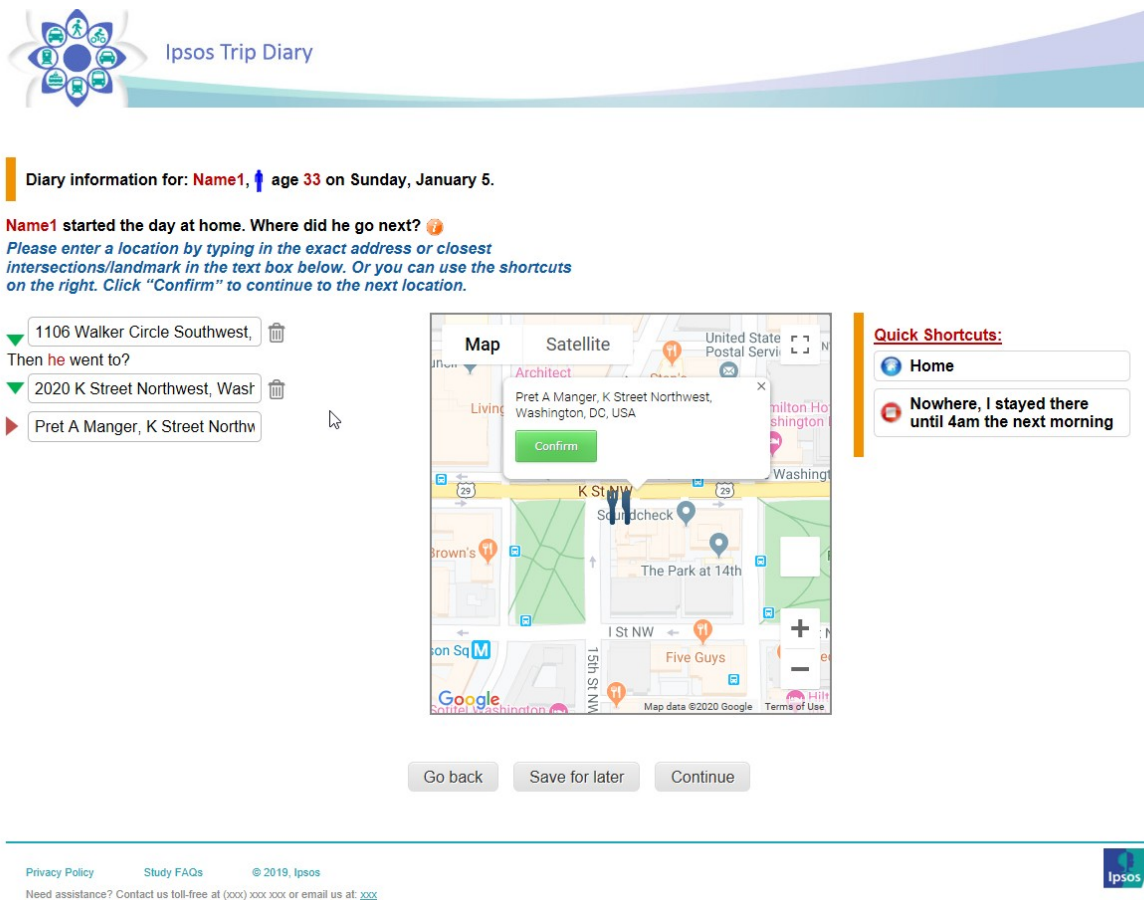
NHTS data will be conducted over 12 data collection periods, 365 days a year to provide total coverage of an entire year of travel behavior. Each monthly sample release will be further targeted to provide complete coverage of all 7 days of the week.

Data collected using the web-based instrument will be processed through commercial, off-the-shelf (COTS) software and proprietary trip logging software. Unlike previous iterations of the NHTS, the 2020 survey will rely exclusively on internet data collection for the national survey. The NHTS contractor will use an approach that allows respondents to only be presented with questions that are necessary and appropriate for that respondent. The NHTS will use the Ipsos Trip Diary survey engine to implement the majority of the online instrument and its travel data retrieval tool to collect all places visited on each assigned travel date. This dedicated website and custom software enable respondents to self-report their travel activity and provides appropriate prompts and sophisticated question branching and skip patterns to facilitate accurate trip reporting. Look up tables are available to allow respondents to insert correct vehicle make and model information, and Google Maps API-enabled search engines will assist in identifying specific place names and locations. Household rostering (the listing of all vehicles and persons in the household) allows a trip report from one household member that includes another (e.g. spouses who travel to dinner together) to be inserted into

⁵ Source: <https://www.pewresearch.org/internet/fact-sheet/internet-broadband>

the second person's record, reducing reporting burden by not requiring respondents to report trips already reported by another household member.

Figure 1. Ipsos Trip Diary sample screenshot



An example of an Ipsos Trip Diary screen is presented in Figure 1. It is important to note that major issues with accurate geocoding of locations which were prevalent in travel surveys of the past, are virtually nonexistent when using Ipsos Trip Builder, where every reported destination is geocoded as the travel behavior details are captured.

The web-based geocoding user interface (UI) allows respondents to enter address and place name information using free-form text (i.e., it is not required to type in address components into separate fields).

The address input is capable of processing street address and intersection information, and examples are provided as part of the UI to assist respondents in the process. The address and place name information entered is then sent to the Google Maps geocoding and Google Places Search application-programming interface (API).

The address data are used to search for geocode matches, while the place name is used to search for points of interest (POI) locations around the provided addresses. This design ensures 100

percent geocoding of the home, work, and school locations of households that complete the retrieval interview. This will also make it possible to compute “as crow flies” distances between all reported places. In addition, Ipsos Trip Builder will save shortest path routes between these places, whenever a routing solution is possible, as well as shortest path route distances. Together, these two sources of travel distance information will provide FHWA new alternatives for deriving Vehicle Miles Traveled (VMT) estimates from the 2017 NHTS.

In addition to the range, edit, and consistency checks in the Ipsos Trip Diary online retrieval instrument, Ipsos Trip Diary will integrate several travel data consistency checks within its user interface. These will ensure that collected places pass basic data completeness and consistency requirements. One of these checks includes the requirement that all visited places be associated with a geocoded location. This will ensure that all records deemed complete at the end of the retrieval instrument will have all destinations geocoded. Other checks built into the Ipsos Trip Diary user interface include:

- All places must have valid arrival and departure times (i.e., times must increment)
- All places after the first one must have an inbound travel mode associated with them
- Places with an inbound travel mode of private vehicle must identify which vehicle was used to complete the trip (an option for non-household vehicle is provided)
- First trip of the day, which must take place after 4 a.m.
- Last trip of the day, which must be completed by 3:59 a.m. of the following day.

4. Efforts to identify duplication

The NHTS is not only the sole source of information on mode use for all purposes by the American public, but it is also a key component of the major federal datasets that were designed to maximize information utility while identifying and eliminating duplication. The complementary data collection programs frequently used in concert with the NHTS include the Highway Performance Monitoring System (HPMS), American Community Survey (ACS), and tourism and traveler surveys such as those collected by the Travel Industry Association (TIA).

Estimates of passenger and commercial vehicle miles travelled on various roadways are the focus of the HPMS. The FHWA aggregates local vehicle count data from all 50 states, the District of Columbia, and Puerto Rico to measure the use of the highway system and the volume of travel. These data are enhanced by the ability of the NHTS to estimate the proportion of all roadway travel that is generated by personal passenger travel versus commercial or freight. The NHTS also enhances HPMS data through its ability to describe the demographics of travelers, trip purpose, and travel party size. Such information cannot be collected from the simple travel counts generated through the HPMS.

The NHTS program and the Census Bureau closely collaborate, especially in developing the Journey to Work data that are part of the ACS. The Census Bureau has collected data limited to “typical” work trip mode and travel time since 1960. The work trip data collected by the NHTS include actual travel time and mode characteristics on the assigned travel day. The NHTS also collects descriptive information on all other types of trips – data not available from any other source. Previous NHTS surveys indicate that work trips account for about 17 percent of all trips

for all people; even for adults in the workforce, the trip to work is only one of four trips made on an average day.

The American Time Use Survey (ATUS) conducted by the Bureau of Labor Statistics does collect some travel information as it estimates the type and time spent by people on various activities. The NHTS survey collects a level of travel detail not available in the ATUS and is used to benchmark those data.

Tourist and travel surveys can provide national estimates of recreational travel, with a focus on long distance trips (100 miles or more). The NHTS obtains information on long distance travel (if such a 50-mile or greater on-way trip was taken by a household member on an assigned travel day, within the past 4 weeks, or most recent trip). However, the primary focus of the NHTS is not on tourism but on the routine long-distance travel of the American public.

5. Efforts to minimize the burden on small businesses

Small businesses are not being recruited to participate in this study. No information will be collected from small businesses.

6. Consequences of the data not being collected or of less frequent data collection

As NHTS is the only source of national data on the travel of the American public by all modes and for all purposes, the Administration, Congress, and the USDOT would be missing essential information regarding key transportation indicators. These include mode share, travel demand, trip purpose distribution, and exposure levels that feed directly into transportation and safety planning, program evaluation, highway finance, performance measurement, and policy development. Without the next survey in the series, the transportation community will have no information on:

- Changes in the purpose and type of travel related to decreases/increases in fuel costs. The EIA appends current fuel data onto the NHTS, but changes in behavior related to the price of fuel require new travel information. In addition, the vehicle fleet is changing, and tracking the penetration and use of alternate fuel vehicles is important in revenue forecasting for the Department,
- Vehicle miles of travel by drivers by age, sex, ethnicity, and time of day. This has been used in applications from safety measures and program evaluation to outreach targeting to evaluating the occurrence of racial profiling,
- The travel behavior of Millennials as a group is much different from previous generational waves. This group tends to live and work in the city and rely on walking, public transportation and new services, such as ZipCar, Car2Go, Uber and Bikeshare. Their rate of driver licensing and vehicle use is lower than previous demographic waves. Monitoring such trends is important to the environmental effects of transportation and to the potential future funding stream of the Highway Trust Fund.
- Impact of baby-boomers retirement and working past traditional retirement age. Important demographic changes are occurring in the users of the transportation system, affecting congestion, trip purpose and time of day of travel, and other information important to policy analysis,

- Measures of peak spreading and increases in midday and weekend travel. For many areas around the country, vehicle starts on Saturday afternoon are higher than any peak period during the weekday (except Friday afternoon),
- Travel by special populations, such as the disabled, new immigrants, poor, and people without cars. These data are vital for evacuation planning, mobility, and safety,
- Effects of graduated licensing programs on teen driving. As more and more states use graduated licensing, the effect on vehicle occupancy, age, purpose, and time of day of travel are important to track,
- Updates to the default air-quality and trip generation parameters used by local planners. These data feed local models that forecast travel demand for major investment studies, congestion pricing, new transit starts, and other local transportation improvements, and
- Travel by recent vehicle and bike sharing uses can reflect the trends in vehicle ownership and impact the economic transportation trends.

As a data driven agency, FHWA needs to continue its leadership in collecting and disseminating information that support sound planning and policies at all levels of government. FHWA's continued leadership at the Federal, State, and local level will have an enormous impact on the safety, reliability, and accessibility of our system in the future. The NHTS provides data that inform USDOT and FHWA on travel behavior that impacts our decisions and programs related to USDOT's strategic goals. The NHTS is a critical data program. For the upcoming reauthorization, the NHTS will be an important resource in confirming national strategies and priorities.

7. Special circumstances

There are no special circumstances.

8. Compliance with 5 CFR 1320.8

Docket number FHWA–2019–0035 was established as a repository for comments received in response to the Federal Register 60 Day Notice and Request for Comments (Appendix 2) published on November 18, 2019 at Volume 84, Number 222, and Page 63713. Two comments were submitted to the docket during this period.

The Federal Register 30 Day Notice (Appendix 3) was published on February 4, 2020. Two comments were submitted to the docket during this period.

Efforts to consult with persons outside the agency

The NHTS and its predecessor, the NPTS (National Personal Transportation Survey) have been in existence since the first survey in the series, conducted in 1969. Over that span of time, the NHTS user community has grown significantly. FHWA and the users have made use of technological changes to increase our points of contact, coordination, feedback and input to the next survey in the series.

In an August 2018 meeting at the Keck Center, in Washington, one hundred and four

attendees of the National Household Travel Survey (NHTS) Workshop shared their experiences with the 2017 NHTS dataset. Researchers and practitioners presented preliminary findings from their research for feedback, insights, and suggestions for future NHTS deployments. The feedback from these sessions are summarized in Transportation Research Circular E-C238 (Appendix X). Feedback from this diverse set of data users shaped the future of the NHTS, and included a panel on the Next Gen NHTS. One important finding from the meeting was the validity of new survey approaches for national travel surveys where large organizations could invest resources to establish sizable representative panels of individuals/households, recruited and maintained from ABS samples, similar to the methods proposed for this Next Gen NHTS. In December 2019, DOT convened a meeting of the NHTS Technical Advisory committee in Phoenix Arizona to discuss the Next Gen NHTS and solicit important input and feedback about the 2020 NHTS approach. Diverse attendees from state departments of transportation (Arizona DOT, Georgia DOT, Maryland DOT, Michigan DOT, New York State DOT), North Carolina DOT, Ohio DOT, Oklahoma DOT, Oregon DOT, South Carolina DOT, Tennessee DOT, Virginia DOT), local agencies and MPOs (Atlanta Regional Commission, Oahu MPO, Washington COG, and Maricopa Association of Governments) and Federal agencies (EPA, Oak Ridge National Laboratory).

Likewise, there is coordination with private groups and associations. The AARP Policy Institute is a strong user of the NHTS data for various analyses of senior mobility issues. AAA and The Insurance Institute for Highway Safety (IIHS) are data users. Other organizations the NHTS coordinate with include the American Association of State Highway and Transportation Officials (AASHTO) and the Census CTPP and the American Public Transit Association (APTA).

Over the 51 years of its existence, the NHTS has developed an extensive network of public and private users through the interactive website and the User Support staff and we are constantly receiving input from our very broad user community.

9. Payments or gifts to respondents

Incentives are an essential component of survey research. Determining a responsible level of incentives is vital to the success of the project. The incentive plan is designed to incrementally reward participation, which will lead to higher response rates and lower survey costs. In the proposed design, each selected household will receive a \$2 cash equivalent incentive for completing the recruitment survey. Further, each selected household will receive an additional \$5-\$10 for successfully completing the reporting of household travel, depending on household size.

10. Assurance of confidentiality

To protect the identity of the respondents, the database will not contain names, addresses, telephone numbers, or other direct identifiers. Neither will the publicly available data files contain variables such as the collected latitude and longitude of locations that could be used to match records to an external file containing names and addresses. Further, potentially identifying information such as ownership of unique vehicle make-model combinations, ages of individuals above a certain cutoff and other like items will not be displayed on the public use data file.

Confidentiality procedures will also be applied rigidly to all electronic files. Password systems will be maintained to ensure that only authorized staff members can access the files. Furthermore, physical access to the computer equipment will be restricted to authorized systems operations personnel. The contractor requires all project staff members to participate in annual training on legislation and guidelines concerning protection of human subjects and their right to privacy.

Informed consent procedures will be implemented for the NHTS. The contractor will inform all survey respondents of the following: the enabling legislation for the study, the principal purposes for which the information is needed, the routine uses that will be made of the data collected, that their participation is voluntary. The respondents will also be told that their responses will be held in the strictest confidence and that reports from the survey data will be summaries that do not allow individuals to be identified. A statement to this effect will be included in the introduction to the NHTS questionnaire.

There are two phases in a single survey session during which information is collected. Respondents will provide data for the initial household recruitment items, roster all of the household members regardless of age, provide information about their own travel, and serve as proxy for providing data for other household members, including co-reporting trips of children 4 and younger. Combining recruitment and day of travel surveys into our survey experience reducing the burden on the public and decreases the cost of the NHTS.



Household Roster

Personal identification information will be necessary and used only for confirming that the respondents live at the sampled address. All household members will be enumerated, and the household respondent will be asked to provide their identities, age, gender and driving status. These will be recorded as first names, nicknames, initials, numbers, or whatever the respondent chooses. These identifiers are used solely to link travel information to specific demographics such as age and gender. All information will be collected on a secure Fed Ramp approved server hosted by the consultant during the survey.

Retrieval Travel Data Collection

Participant travel information will be collected via a dedicated survey website developed specifically for the NHTS. Access to the survey portal will be controlled via the consultants' online survey portal; only selected households can access the secure online travel diary.

11. Justification for collection of sensitive information

Every effort has been made to reduce the number of sensitive questions in the 2020 survey while maintaining the collection of information so vital to the program. There are several important questions that may be considered sensitive by some respondents.

An income question is included among other questions designed to identify socioeconomic characteristics that are essential to the travel analyses. It is necessary to collect income data because there is a direct correlation between travel behavior and the financial resources available to household members. The link between income and the amount of travel as well as the types of trips made is critical to analyzing current travel and projecting travel in the future. Travel forecasting models most often use household size and income as prime determinants of projected travel.

Verification and collection of home and workplace location is requested from respondents to the NHTS. The home location already will be available from the sample frame used to recruit the respondents. Primary work location will be asked for respondents indicating they are employed. These data allow for a connection with the Journey to Work data provided by the American Community Survey as part of the Census Transportation Planning Package, which is produced for and distributed to every state and Metropolitan Planning Organization (MPO) in the country. Journey to Work data have long been a staple of the transportation planning process and such a link is a necessary element supplementing travel to work data with non-work data available in NHTS.

Home and workplace location information also is needed to enhance the NHTS data with a profile of the home and workplace neighborhood characteristics from an outside source such as Nielson Claritas. The connection between land use and transportation is a recurring issue and providing outside data on the neighborhood characteristics of the residence and the workplace has been an effective tool in promoting use of the NHTS data for research on this topic.

12. Estimate of burden hours for information requested

The respondent burden for the NHTS will result from 1) the time spent responding to the questions in the survey household roster and completing the survey travel diary by recording details about each trip taken on an assigned day, and then reporting these data via the web.

The survey contains questions that include household information for rostering and enumeration, the household's owned motor vehicle information, and an interactive travel diary. The diary questions ask the respondent to record six items for each trip: where they went (e.g., home, work, other), why they went (work, shop, school, etc.), the times the trips began and ended, the means of transportation, and who traveled with the respondent. Completion of the survey is expected to take an average of 21 minutes for the primary household contact, and 14 minutes for each additional direct or proxy diary reported.

The hourly value of time used here is the value of personal travel time as provided in the USDOT’s Revised *Departmental Guidance on the Valuation of Travel Time in Economic Analysis, 2016*⁶ adjusted to 2020 dollars. This value is being used because the opportunity cost of time spent on personal travel is some non-employment related activity (i.e., leisure activity), as is the opportunity cost for time spent in participating in this study. The 2020 adjusted hourly value is \$14.73 [2016 value is \$13.60]

Approximately 7,500 households are expected to complete the survey. We anticipate that the average household size will be 2.5 persons yielding 18,750 respondents. Each enumerated household member of age 5 or older will complete the travel diary. As indicated earlier, times to complete the survey are 21 minutes for the primary household contact and 14 minutes for each additional household member age 5 and above. The typical recruitment and retrieval response for each household is expected to take 42 minutes (.7 hours), resulting in a total of 5,250 hours over the course of data collection. The cost of the hourly burden is expected to be \$77,332.50. The table below displays these calculations clearly.

	n-size	Time per survey	Total Time(minutes)	Total time (hours)	Prevailing Wage	Total Burden
Primary HH member	7,500	21	157,500			
Additional HH Members	11,250	14	157,500			
			315,000	5,250	\$14.73	\$77,332.50

13. Estimate of total annual costs to respondents

There are no costs to respondents beyond the 21-minute burden of completing the survey and reporting their travel behavior.

14. Estimate of the cost to the Federal government

Contract GS-00F-123DA was awarded to Ipsos on September 29, 2019 to design and conduct the survey at a cost of \$1,223,891.48.

15. Explanation of program changes or adjustments

The proposed NHTS design is a single stage survey with an ABS-based online frame web-based survey, using email reminders at key points, and cash-equivalent incentives at key stages.

Online probability-based panels are an ideal instrument for collecting personal travel behavior core data distributed over the period of one year. Probability panels allow for an unmatched precision in releasing the sample to cover all seasons and all days of the week to provide a comprehensive picture of the Nation’s travel behavior. 12 data collection periods (sample selected once a month and collected continuously) provides total coverage of an entire year of

⁶ Source: <https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-valuation-travel-time-economic>

travel behavior. The consultant has extensive experience in scheduling its probability panel sample release to produce the needed number of completed interview per day.

Online survey instruments are excellent tools for collection of precise information about travel history. The travel diary software will flag inconsistencies or excessively large or small values and allow respondent to correct their numbers in the survey. Absence of interviewers eliminates any interviewer error in recording the data provided by the respondent.

Both the FHWA and Ipsos are sensitive to the potential impact a change in methodology could have on continuity and trend analysis in the long-standing NHTS program. For the 2020 NHTS, Ipsos plans a study design that makes use of the same ABS sample frame used in prior NHTS administrations. The current research plan includes processes for addressing continuity through the survey design and weighting methodology, and by means of analytical techniques to determine the impact of changes in survey methods

16. Publication of results of data collection

Congress requires the USDOT to report the state and performance of the surface transportation system every two years in the Conditions and Performance Report. The NHTS is used in this report. The NHTS is also used extensively in the existing National Surface Transportation Policy and Revenue Study Commission with regards to forecasted travel demand by geographic and demographic groupings. In addition, the NHTS data has informed on several policy and revenue areas through white papers on topics such as trends and forecasts in telecommuting, work and non-work travel, new immigrant travel, and older driver safety.

Other reports are compiled for the USDOT, state and local agencies, and the transportation research community. These reports provide key indicators of travel demand across trip, person, household, and vehicle characteristics. In addition, bi-monthly briefs on current transportation policy issues are provided to USDOT and outside parties. All reports and documentation from the 2017 NHTS and previous surveys can be found on our study website at <http://nhts.ornl.gov>.

One of the primary documents for the NHTS data series is the Summary of Travel Trends (STT) report. This overview of the NHTS survey findings is published by FHWA and provides basic travel indicators for each of the survey years, side-by-side with a short explanation of patterns and differences in the estimates. The report is widely used and cited often as the authoritative documentation of the survey findings.

The 2017 report includes a summary description of the survey protocols, a statement on the reliability and accuracy of the estimates, tables and figures with short narrative descriptions, and an appendix describing the changes in survey conduct over time.

The required final summary report for 2020 is designed to update the 2017 STT using the results from the 2020 NHTS. The descriptive sections, including the profile of the survey, the protocols used in data collection, and the appendices identifying key changes over time will be updated to include specific details of the 2020 survey.

The tabulation of the estimates from the 2020 NHTS will be constructed using the same or similar assumptions and exclusions as used for the earlier data to make the comparison to 2017 as stringent as possible. The final approved comments and conclusions will form the narrative portion of the report. As in the 2017 Summary of Travel Trends, the 2020 report will also display the 95 percent confidence interval for each 2020 data point. The consultant will compute the confidence interval, compare the results to the 2017 range of estimates, and identify areas where travel indicators have changed or remained statistically stable between 2017 and 2020. The final dataset and related metadata will be delivered to the FHWA in SAS format. All tables and figures will be provided in Excel formats.

17. Approval for not displaying the expiration date of OMB approval

Not applicable

18. Exceptions to certification statement

None