National Household Travel Survey (NHTS):
Travel Trends, Analysis and Data Tools

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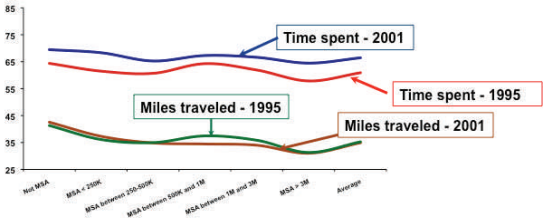
Policymakers rely on transportation statistics, including data on personal travel behavior to formulate strategic transportation policies and to improve the safety and efficiency of the U.S. transportation system. Data on personal travel trends are needed to examine the reliability, efficiency, capacity, safety, and flexibility of the nation's transportation system to meet current demands and accommodate future demands; to assess the feasibility and efficiency of alternative congestion alleviating technologies; to evaluate the merits of alternative transportation investment programs; and to assess the energy-use and air-quality impacts of various policies.

To address these data needs, the U.S. Department of Transportation (USDOT) initiated an effort in 1969 to collect detailed data on personal travel. The National Household Travel Survey (formerly known as the Nationwide Personal Transportation Survey) were implemented every 5 to 7 years: 1969, 1977, 1983, 1990, 1995, 2001, and 2008.

These surveys are the only data source in the country that link individual personal travel behavior, household demographic and socio-economic attributes, vehicle ownership, and vehicle characteristics. These powerful databases enable analysis of daily travel by all modes, including characteristics of the people traveling, their household, and their vehicles. For example:

Travel Trends Analysis

Compared to 1995, Americans in 2001 spent about 10% more time in their vehicles and traveled about the same distance – reflecting increasingly congested traffic conditions.

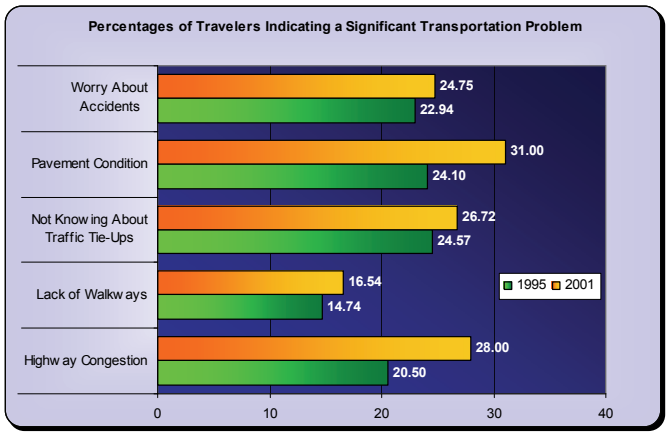


Comparative Analysis of Travel Trends of Special Population

To avoid congestion, the elderly took the majority of their daily travel between 9 o'clock in the morning and 1 o'clock in the afternoon, with the remaining one-quarter of their travel completed by 4 o'clock in the afternoon. This is in sharp contrast to the temporal patterns of trips taken by those between the ages of 5 and 64.

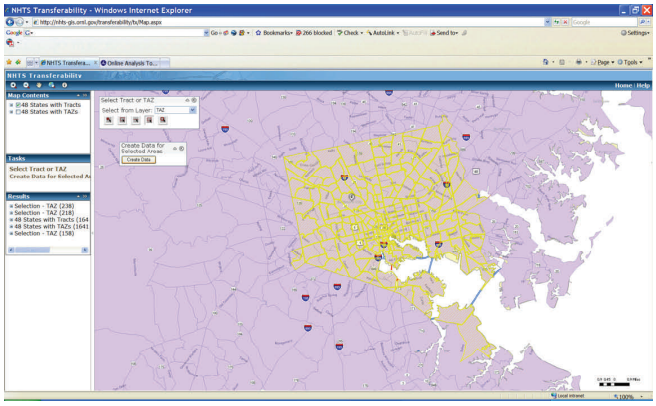
Evaluation of Satisfaction Level for Transportation Services

Between 1995 and 2001, the major concerns over the quality of our country's transportation services remained relatively similar. In 1995, Americans viewed pavement conditions and the lack of information on traffic tie-ups as significant transportation problems. The concern over the pavement conditions heightened in 2001. Although highway congestion became a bigger problem in 2001 than in 1995, this concern could be closely related to the lack of information on traffic tie-ups.



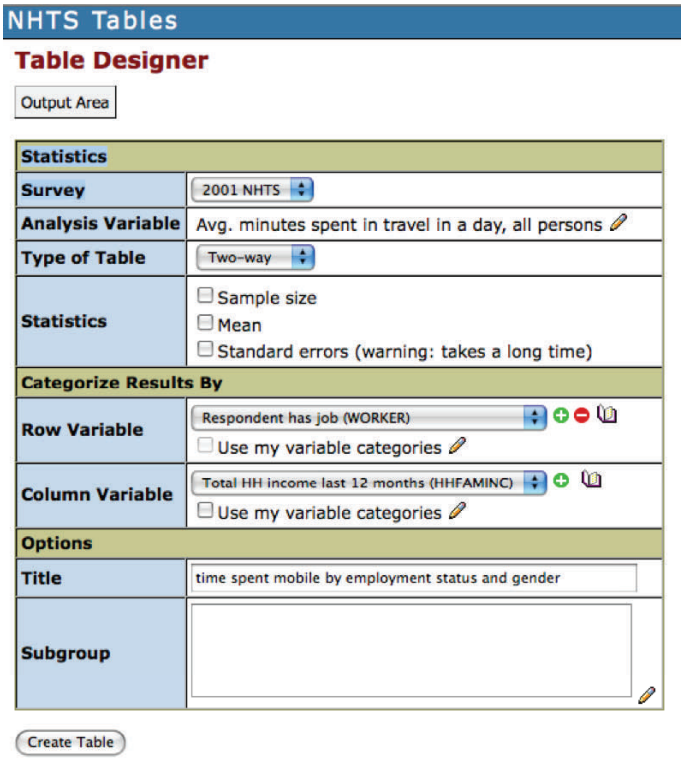
NHTS-Derived Database

Household travel parameters were estimated for every census tract and every Transportation Analysis Zone (TAZ) in the country. A map-based tool within the online data analysis engine can be used to retrieve jurisdiction-specific data.



Online Data Analysis Engine

An online data analysis engine makes accessing and using this powerful and complex data source easy. This tool allows the user to create customized tabular statistics using only a Web browser -- without requiring the user to possess any knowledge of statistical software or programming capability.



For more information on NHTS, visit the NHTS Website.

http://nhts.ornl.gov

For more information on this research contact Pat Hu, Center for Transportation Analysis, Oak Ridge National Laboratory, phone (865) 946-1349 or email hups@ornl.gov.