

## **Using NHTS 2001 and 2009 to Analyze Intrapersonal Variability in Travel Behavior**

by

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### **Abstract:**

According to national statistics 87% of all trips in the U.S. are by automobile and 90% of commuters typically get to work by car. Statistics for individual trips or the main mode of commuting do not capture variability in individual travel behavior over time. This poster uses the 2001 and 2009 National Household Travel Surveys to analyze recent trends in the share of multimodal motorists who use a car and also walk, bicycle, or ride public transport during a day or week. The goals of this paper are to identify trends of multimodal behavior among car users in the U.S. and provide profiles of these multimodal motorists.

This analysis relied on data from the daily trip and person data files. The mode of transport used (foot, bicycle, transit, car) for individual trips was aggregated and matched to the trip maker and then added to the person data set. The person file also included data about the number of trips made by walking, cycling, or public transport during the previous week(s).

During a typical day about 15% of American car users make at least one trip by foot, bicycle, or public transport, while during a typical week almost 70% of motorists are multimodal. Additionally, 12.5% of motorists make at least 2 trips by foot, bicycle or public transport per day and 25.0% of American car users make at least 7 trips per week by means of transport other than the car. Trends over time suggest a significant shift toward multimodal behavior among motorists between 2001 and 2009. Multimodal motorists tend to be younger, educated beyond high school, and have higher incomes. They live in households without cars, in high-density neighborhoods, and in metropolitan areas with a rail system. Results suggest that planning for walking, cycling, and public transport benefits a larger proportion of the U.S. population than suggested by traditional trip based analysis.