

## Analysis of Household Vehicle Usage by Vehicle Type, Age and Area Type --- Applications of 2009 National Household Travel Survey

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Tracking the use and non-use of household vehicles is important for policy makers and transportation analysts. This study aims to analyze the national household vehicle use and non-use by vehicle type, age and metropolitan area (MSA) type by using data from the 2009 National Household Travel Survey (NHTS). Vehicles with reported travel time and distance are considered as „Vehicles Used’, all others are called „Vehicles Not Used’ in this analysis. We divided the Vehicles Not Used into 4 sets: (1) Used but no travel data, (2) Left at home while using other household vehicles, (3) Did not use because travelers used other modes, and (4) The household did not make any trips. The first set of “Used but no travel data” represent the vehicles used for travel, but because the respondents did not report travel information these vehicles are often excluded from travel related analysis. The second set represents vehicles that were left at home while residents drove other household vehicles to travel. The third set of “Used other modes” represents the vehicles left at home while household used other travel modes, such as public transit, car pooling, bicycle, or walk. The last set is the vehicles left at home because the household did not make any trip. For these five usage sets, vehicles were further subdivided by five vehicle types: car, van, SUV, pickup and others. Each vehicle type was further subdivided in two age groups, 10 years or less ( $\leq 10$ ) and over 10 years ( $> 10$ ). Further the vehicle usage was compared in both MSA and Non-MSA. Additionally, we also compared the vehicles usage in the 2001 NHTS using the same methodology to identify the possible trends. The study results can be used to help identify potential markets for advanced vehicle technologies, such as plug-in hybrid electric vehicles.