

## **Teen driver driving patterns based on the National Household Travel Survey (NHTS)**

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Conducted periodically by the Federal Highway Administration, the NHTS provides data on household and individual travel for a representative sample of US households. The survey collects data on the characteristics of the household and trips taken (e.g., length, purpose, time of day); additional data are gathered on private trips, including driver characteristics, the type of vehicle, and the travel party. These data permit estimating crash risk per mile travelled for teen drivers. The latest survey was conducted during March 2008-April 2009; the weighting and preparation of the data set are still underway. Based on the 2001-02 survey results, the fatal crash rate per mile driven for teen drivers (defined here as ages 16-19) was higher than for all other age groups drivers ages 80 and older. The rate for crashes of all severities also was highest among teen drivers. Fatal and overall crash rates per mile traveled generally declined from age 16 to age 19. The fatal crash rate was higher for male teens than for female teens, but the rate for crashes of all severities varied little by gender. The number of miles travelled by teens was much higher during the day than at night, but the fatal and total crash rates were much higher at night. The fatal crash rate increased with each passenger transported.

## **Driving patterns of teenage participants in a study of an in-vehicle monitoring and feedback device**

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The Institute conducted a study of the effects of an in-vehicle monitoring and feedback device on teen driving behaviors. The device recorded miles driven and the time, location, and odometer reading for sudden braking and acceleration events, hard turns, driver seat belt non-use, and vehicle speeds above the posted speed limit. Families of 84 recently licensed 16-and 17-year-olds participated in the 24-week study. All teens were the primary driver of the monitored vehicle, and parents had Internet access. Families were randomly assigned to study and control groups. Institute researchers found that teen drivers reduced their risky behaviors with the monitoring device. The device worked best when teenagers first heard an alert in the vehicle, had a chance to correct their behavior before the parents were notified, and parents received periodic report cards on their teen's driving. The study also provided insights into the travel patterns of recently licensed teens. There were gender differences: male drivers averaged 162 miles per week, compared to 152 miles per week for female drivers. Drivers age 16 drove fewer miles, on average, than drivers age 17 (143 vs. 180 miles per week). Drivers licensed less than 1 month averaged 156 miles per week, compared to 157 miles per week for drivers licensed 1-3 months and 165 miles for drivers licensed 4 or more months. The drivers with in-vehicle alerts and parental notifications were traveling more than 10 mph above the posted speed limit for 10 percent of their miles. Drivers without feedback were speeding for 13 percent of their miles.