

NHTS BRIEF

National Household Travel Survey

May 2006

Is Congestion Slowing Us Down?

The U.S. transportation system's quality and pervasiveness are almost transparent to us as we move between jobs, markets, education, healthcare, and leisure activities. But the transparency ends when congestion occurs—the system breaks down as too many vehicles try to move through at the same time. Congestion reduces mobility, increases auto-operating costs, adds to air pollution, and causes stress. Congestion is considered one of the major urban transportation problems.

Commuters know about congestion—work trips are particularly concentrated in time and space. Nearly 30 percent of the 130 million workers in the U.S. usually leave for work between 7:00 and 8:00 am. During the 80s and early 90s, due to a combination of decentralization of workplaces and the shift to driving alone to work, both commute distances and speed of travel to work increased. However, the 2001 NHTS data shows a leveling off of commuting distances, and a real decline in commute speeds (see Exhibit 1).

Not all of the vehicles on the road during the peak periods are headed for work, however. In fact, less than half of the vehicle trips in the peak periods are direct trips to or from work, as shown in Exhibit 2.

One reason for this is that fewer commuters are traveling directly between home and work. There has been a large increase in incidental stops during the commute, such as dropping the children at day care or school, or picking-up dinner on the way home, especially for workers with the longest commutes. Just since 1995, 25 percent more commuters stop for incidental trips during their commutes to or from work. The effect of these stops on congestion needs further study.

Exhibit 1 – Miles, Minutes, and Speed Changes in Daily U.S. Commutes, 1983-2001

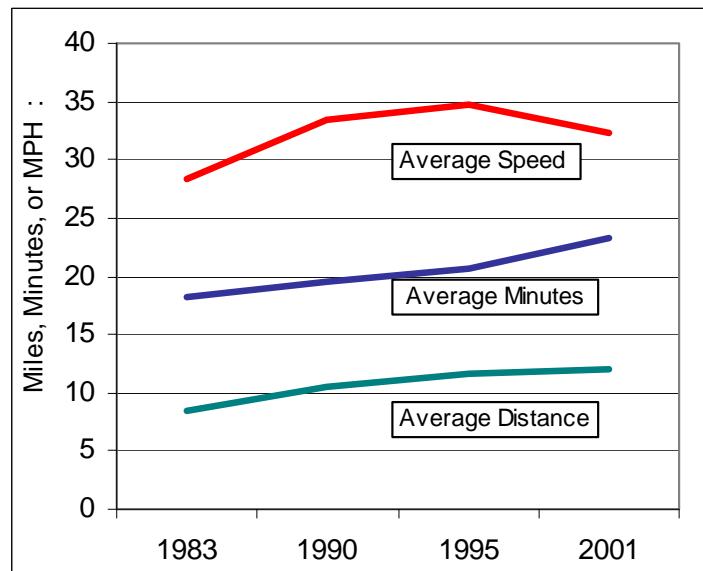
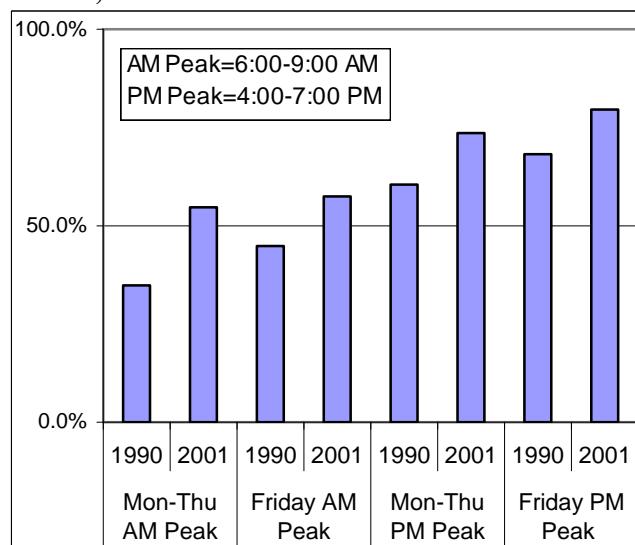


Exhibit 2 – Trends in the Percent of Travel that is NOT To or From Work During Weekday Peak Periods, 1990-2001



More importantly, non-work travel has increased faster than work travel. The growth in travel for shopping, family errands, and social and recreational purposes reflect the busy lives and rising affluence of the traveling public. But many times these non-work trips conflict with commute trips, such as weekend recreational trips that start Friday afternoon.

Since non-work travel has a different time-of-day profile than commuting, midday travel has grown substantially more than peak travel (Exhibit 3). One thing to keep an eye on is the changing daily pattern of travel as the baby-boomers move into retirement, the economy moves from manufacturing to services, and perhaps more workers spend more time telecommuting.

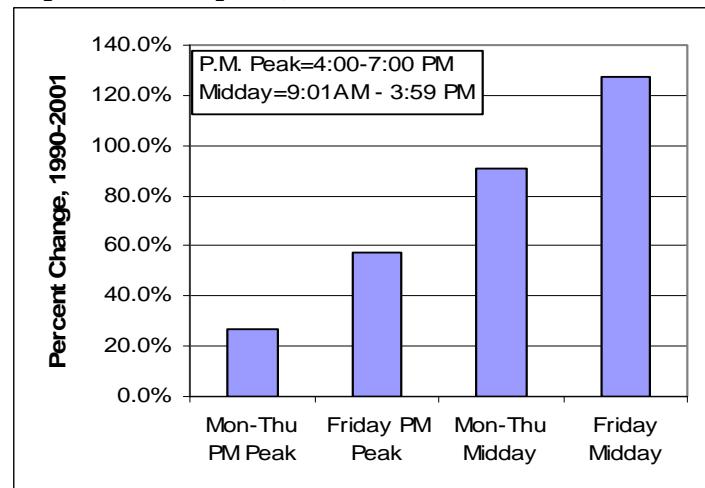
How Much of a Problem Is Congestion?

Half of the population lives in large metro areas, and four out of five workers in these areas think congestion is a problem, according to the NHTS. But people may care more about reliable travel time than unpredictable delay.

In addition, some of the impacts of congestion on the user have not been measured. These include economic impacts; such as shopping or recreational trips that are not taken because of expected congestion; social impacts, such as the impact on friend and family time; and information on the kinds of things people do in the vehicle, such as eat a meal or talk on the cell phone, that allows in-vehicle time to be productive.

In order to measure the impact of policies meant to mitigate the growth of congested travel, the individual's experience of congestion needs to be measured along with system-wide statistics. This kind of data is uniquely available from the NHTS.

Exhibit 3 – Percent Change in the Number of Vehicle Trips for All Purposes, 1990-2001



About the National Household Travel Survey

Conducted periodically by the USDOT since 1969, the survey collects travel data from a sample of U.S. households. The information has been used to understand trends in the nation's trip making and miles of travel by mode, purpose, and time-of-day for use in policy, planning, and safety.

Data is collected for all household members and for each day of the year, yielding a rich demographic profile linked to daily travel and vehicle characteristics. User's views of important topics, such as congestion and the price of gasoline, are also collected.

For more information about the study, contact Heather Contrino, NHTS Program Manager, at 202-366-5060 or Heather.Contrino@fhwa.dot.gov.

Data and Publications at your fingertips:

Website: <http://nhts.ornl.gov>

Be sure and check out our most recent topic briefs:

"Older Drivers: Safety Implications" 02/06

"Rising Fuel Costs—A Big Impact" To Be Released 06/06