



NHTS BRIEF

National Household Travel Survey

February 2007

The Other Side of Congestion

Travel to work has historically defined peak travel demand, and in turn influenced the design of the transportation infrastructure. Commuting is a major factor in metropolitan congestion—85 million workers (two-thirds of all commuters) usually leave for work between 6:00 and 9:00 am, and over 88 percent are in private vehicles. However, a significant number of non-work vehicle trips are made during peak periods, which complicates the issue of congestion management.

Importantly for understanding trends in congestion, the amount of travel for non-work purposes, including shopping, errands, and social and recreational activities, is growing faster than work travel. Growth in these kinds of trips is expected to outpace growth in commuting in the coming decades.

The overlap of work and non-work travel during the peak travel periods is a significant factor in understanding the causes and cures of congestion. Primarily these non-work trips are to drop or pick-up a passenger, shop or run errands.

Currently, more than half of peak period person trips in vehicles are not related to work (see Exhibit 1), and the balance has changed substantially during the 1990's. Looking at an average weekday, non-work travel constitutes 56 percent of trips during the AM peak travel period and 69 percent of trips during the PM peak.

After trips to work, and giving someone a ride, the next largest single reason for travel during the peak period is to shop, including buying gas and meals. In fact, as shown in Exhibit 2, over 20 percent of all of the trips made during peak travel periods are solely to shop, not shopping trips made during a commute.

In addition to these separate trips, a number of workers stop to shop, including getting coffee or a meal, during the commute—and this behavior (trip-chaining) is increasing. Just since 1995, 25 percent more commuters stop for incidental trips during their commutes to or from work, and stopping is especially prevalent among workers with the longest commutes.

Exhibit 1 – Percent of Trips during Peak Periods Not Related to Commuting

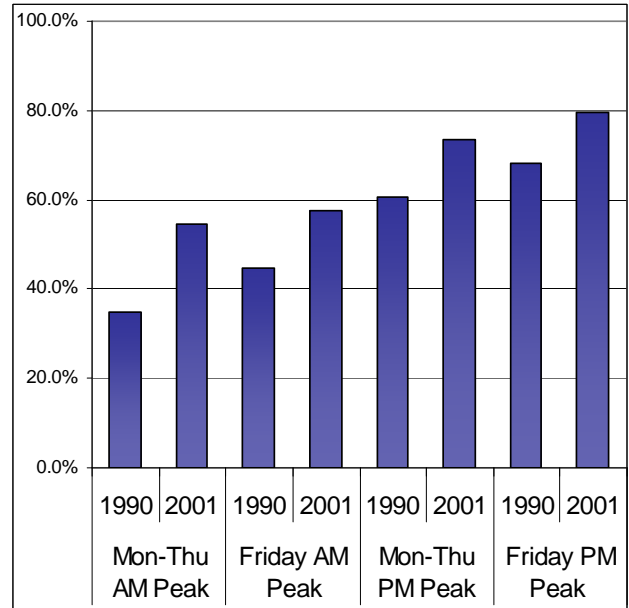


Exhibit 2 – Percent of Trips for Shopping During Peak Periods

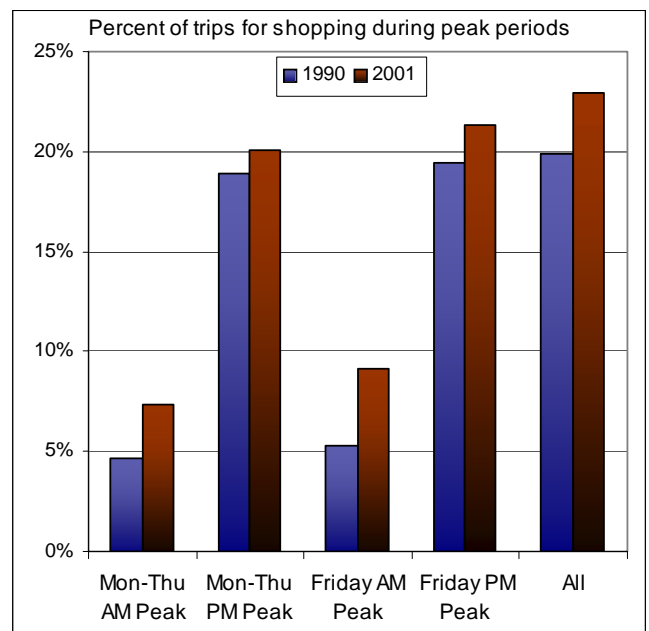


Exhibit 3 – Percent of Stops by Purpose During Weekday Commutes

Commuters stop for a variety of reasons, such as to drop children at school or to stop at the grocery store on the way home from work (Exhibit 3). Real life examples show that trip chaining is often a response to the pressures of work and home. But the data also show that some of the growth in trip chaining has been to grab a coffee or meal (the Starbucks effect); activities that historically were done at home and would not have generated a trip.

The overall growth in travel for shopping, family errands, and social and recreational purposes reflect the busy lives and rising affluence of the traveling public. The growth in non-work travel is adding not only to the peak periods but expanding congested conditions into the shoulders of the peak and the midday (Exhibit 4).

On an average weekday, the number of trips for family and personal errands, including shopping, are far more numerous than commutes or trips for school from 8 in the morning and on throughout the rest of the day. The mountain of travel during the midday builds to the PM peak, where the commute home, errands, and social/recreational travel all intersect.

The issue of congestion is complex. Since non-work travel is dispersed, localized, and spread among purposes as well as origins and destinations, policies have focused on the work trip as an area of possible impact.

Going forward, understanding the growing segment of non-work travel and its impact on congestion, both during the traditional peak periods and in the midday, is vital to policies that help measure and reduce delays for the traveling public. Data that provides information on daily travel for all purposes is instrumental in helping understand the intertwined activities of travelers during congested peak periods.

Percent of Trips by Purpose Within Work Chains

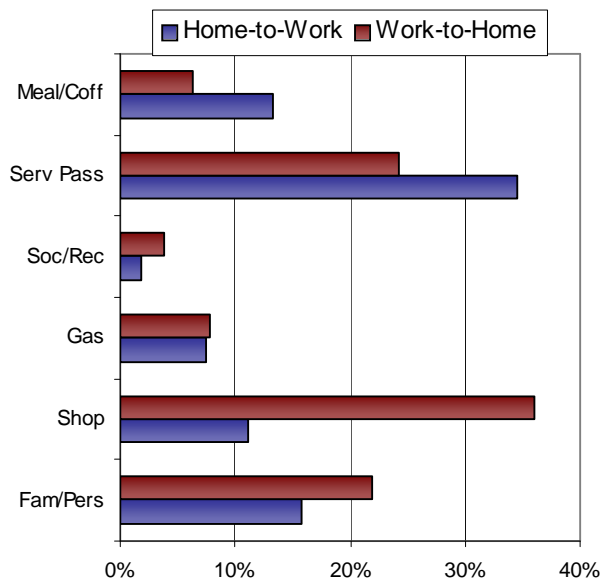
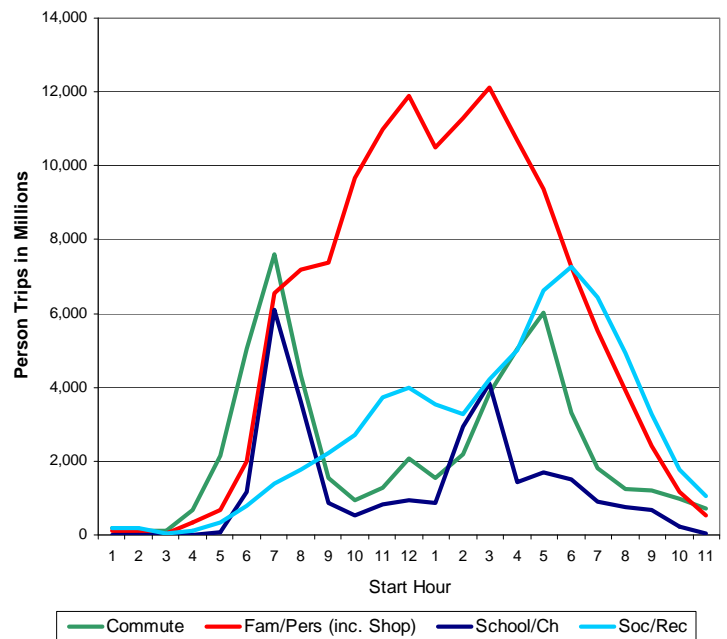


Exhibit 4 – Number of Person Trips by Start Hour



Data and Publications at your fingertips:

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

Be sure and check out our most recent topic briefs:

- “Commuting for Life”
- “Is Congestion Slowing us Down?”