



# NHTS BRIEF

## National Household Travel Survey

April 2007

### Congestion: Non-Work Trips in Peak Travel Times

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. According to the 2001 NHTS, 85 million workers (two-thirds of all commuters) usually leave for work between 6:00 and 9:00 am, and over 88 percent of these workers travel in private vehicles. However, as shown in Exhibit 1, 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.

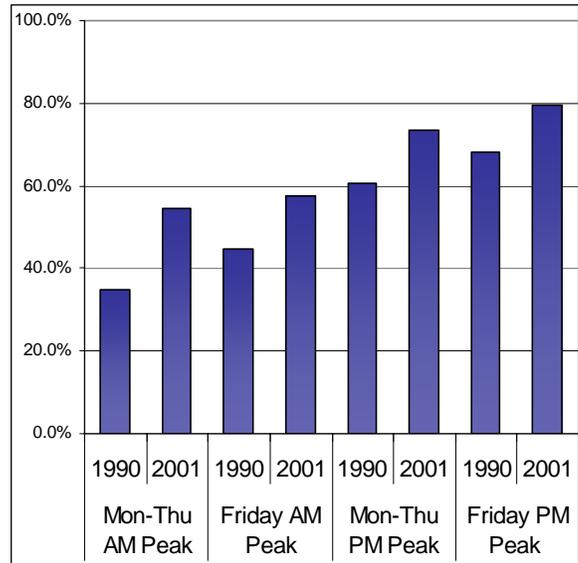
Understanding the overlap of work and non-work travel during the peak travel periods is critical for finding cures for congestion. Primarily these non-work trips are to drop or pick-up a passenger, shop or run errands.

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 since 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.

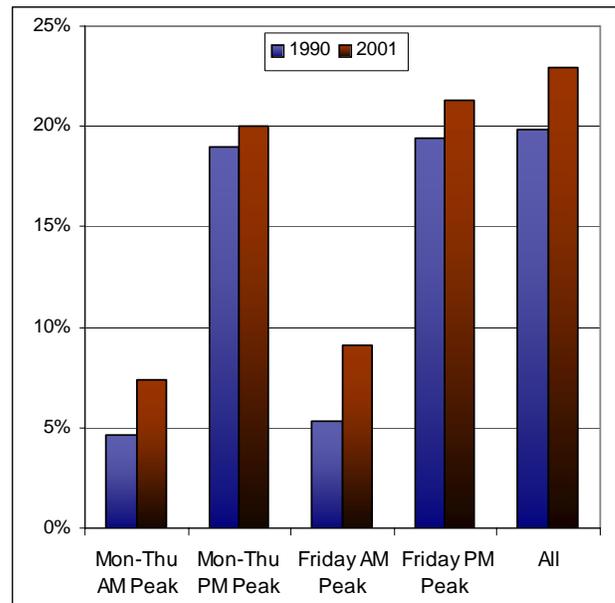
In addition to these separate peak period shopping trips, a number of workers stop to shop, including getting coffee or a meal, during the commute—and this behavior (trip-chaining) is increasing.

Exhibit 1 – Non-Work Trips at Peak Periods (as a percent of all peak period trips)



Source: National Household Travel Survey Data Series

Exhibit 2 – Percent of Trips for Shopping During Peak Periods



Source: National Household Travel Survey Data Series

Time Periods:  
AM Peak: 6:30-9:00 AM  
PM Peak: 4:00-7:00 PM

Just since 1995, 25 percent more commuters stop for incidental trips during their commutes to or from work, and stopping along the way is especially prevalent among workers with the longest 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 did not generate a trip.

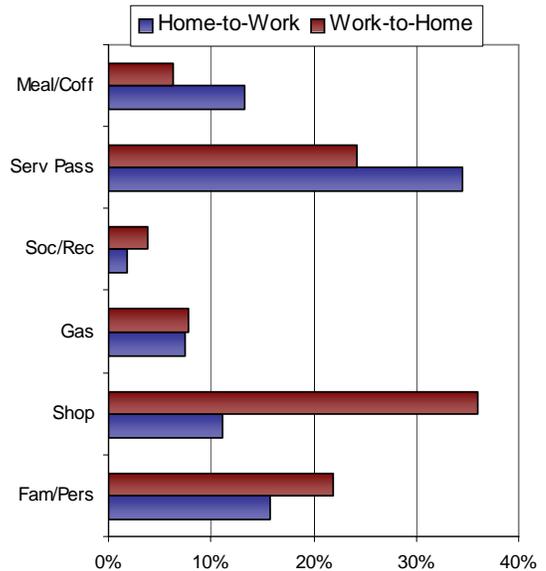
The overall growth in travel for shopping, family errands, and social and recreational purposes reflect the busy lives and rising affluence of the traveling public. The growth in non-work travel is adding not only to the peak periods but expanding congested conditions into the shoulders of the peak and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

On an average weekday, the number of trips for family and personal errands, including shopping, is far more numerous than commutes or trips for school. This is true 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 urban congestion is complex and effective solutions cannot be realized by focusing on the work trip alone. A comprehensive policy response is required. Understanding the determinants of travel demand provides a basis for developing effective congestion relief strategies.

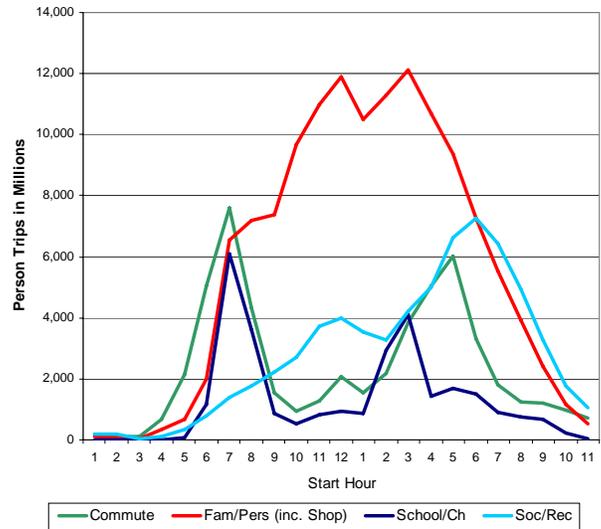
***Look for our next brief in this series titled “Congestion: Who’s Traveling in Peak Periods?”***

**Exhibit 3 – Percent of Stops by Purpose During Weekday Commutes**



Source: National Household Travel Survey

**Exhibit 4 – Number of Person Trips by Start Hour**



Source: National Household Travel Survey

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

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- “Is Congestion Slowing us Down?”
- “Rising Fuel Costs—A Big Impact”
- “Immigration’s Effect on Travel”