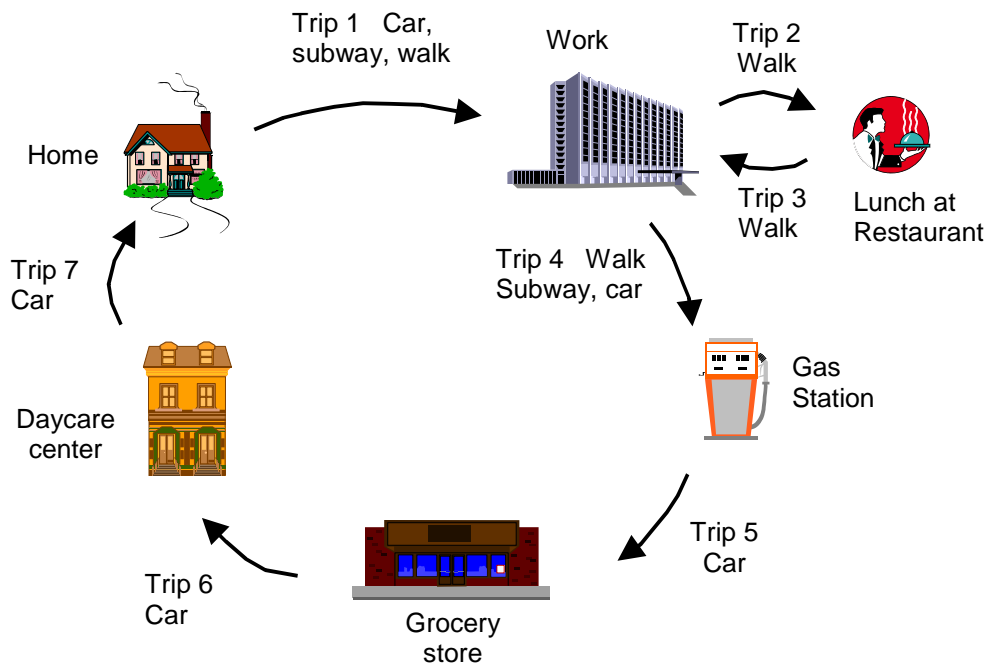


FAQ - What is trip chaining?

The 2001 National Household Travel Survey is an inventory of each movement by all members of each sampled household from one address to another (a trip). Each trip is recorded, with mode, purpose at destination address, and number of people on the trip, the departure and arrival times, trip duration, the household vehicle used, and other pertinent information about the trip. An example of one person's movements on the travel day is shown below:



This example respondent reported a total of 7 separate trips, according to the NHTS trip definition. Trip 1 was clearly a trip to work, but the trip from work to home was interspersed with stops for other purposes. The non-work stops along what is primarily a trip or tour between the residence and the workplace complicates the analysis of the work commute. If we use the traditional coding scheme of the NPTS/NHTS data series (Whytrp90) the miles and minutes of travel between the grocery store and the day care, for instance, are assigned to a non-work trip purpose. Therefore, if we tried to directly measure the miles and minutes workers spend commuting, these trips would not be included.

For at least the past 25 years transportation planners have focused on the commute as one of the major organizing elements of household travel. The falling share of travel that is

directly attributed to work has concerned planners and policy-makers. To obtain a more accurate estimate of the time and distance related to the commute, and to help researchers in their quest for a better understanding of travel behavior, including trip chaining, the FHWA created a chained trip file for the 2001 NHTS. The definition of a chained trip is any travel between two anchors (we call this a tour, such as between home and work) that is direct or has an intervening stop of 30 minutes or less.

The chained trip file captures more trips into the commute—but fewer miles than the earlier method (WHYTRP90). The reason is that WHYTRP90 (an earlier attempt to capture the miles and minutes related to work travel) coded any miles traveled, regardless of the amount of time spent at the intervening stop, as related to the commute. For instance, if a person left work to go to the movies with friends, and then out to dinner, the miles from the restaurant home at the end of the evening would be coded to work in Whytrp90, but not in the tour file, which includes stops of 30 minutes or less in the Home-to-Work chains. Table 1 and 2 and Figures 1 and 2 show the differences in using tour-level analysis on trips and miles for 1995 and 2001, for all interviewed persons and those 16 and older.

Table 1 – Percent of Person Trips for Commuting

Person Trips in Millions					
Person Trips by 16+		WhyTrp90	ChnTrp	% WhyTrp90	% ChnTrp
1995	Person Trips (5+)	379,000	379,000	100.0%	100.0%
	To/From Work	63,500	65,100	16.8%	17.2%
2001	Person Trips (all ages)	322,000	322,000	100.0%	100.0%
	To/From Work	59,700	63,000	18.5%	19.6%

Figure 1

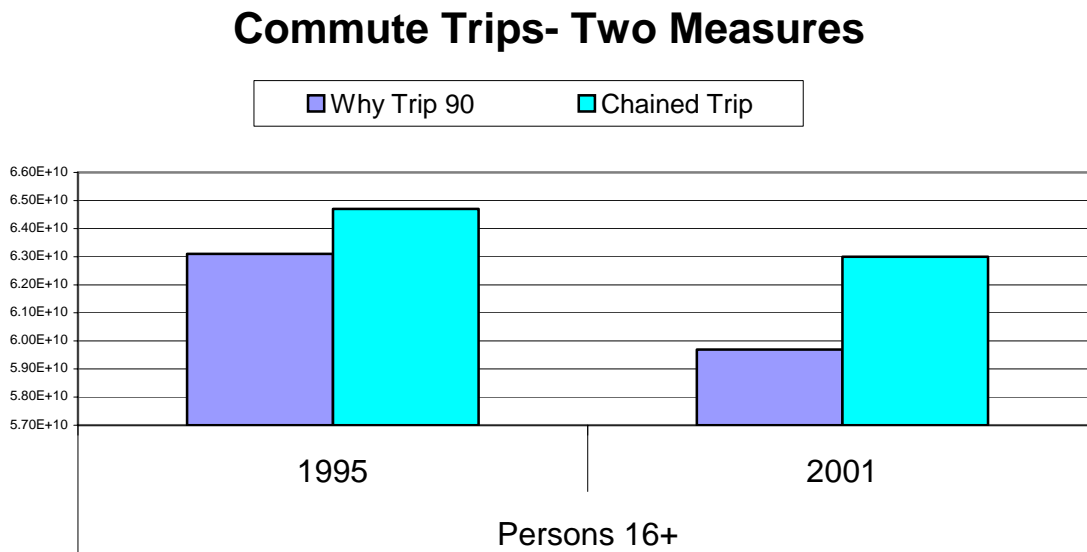


Table 2 – Percent of Person Miles of Travel for Commuting

Person Miles in Billions					
Person Trips by 16+		WhyTrp90	ChnTrp	% WhyTrp90	% ChnTrp
1995	Person Miles (16+)	3,017	3,017	100.0%	100.0%
	To/From Work	687	653	22.8%	21.6%
2001	Person Miles (16+)	3,132	3,132	100.0%	100.0%
	To/From Work	695	665	22.2%	21.2%

Figure 2

