

NHTS BRIEF

January 2008

National Household Travel Survey

Travel to School: The Distance Factor

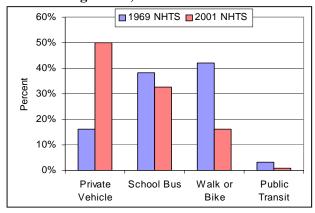
Like all trip-making, travel to school has changed dramatically over the last 40 years. The change that is most apparent is the increase in children being driven to school. In 1969, about 15 percent of school children ages 6-12 arrived at school in a private vehicle, in 2001 half of all school children were driven to school. Exhibit 1 shows the comparison of how children's' travel to school has changed since 1969.

One factor underlying this change is the increased distance children travel to school. In 1969, just over half (54.8 percent) of students lived a mile or more from their schools. By 2001, three-quarters of children traveled a mile or more to school. Exhibit 2 shows the dramatic change in the trip distance to school for children ages 6-12.

Some of the change in distance may be due to suburbanization and larger school districts. In 2001, 21.9 percent of students aged 6-12 live within a mile from school in urban areas* compared to just 2.7 percent of students in rural areas (20 percent of the U.S. population lives in rural areas).

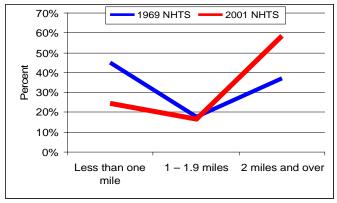
According to independent research using the NHTS data series, distance is one of the major factors in the shift in mode to private vehicle by schoolchildren**. This research also found that safety and security concerns are significant factors in parents' decision to let their children walk to school, especially girls.

Exhibit 1 –Mode of Arrival to School by Children Ages 6-12, 1969 and 2001 NHTS



Source: NHTS Data Series

Exhibit 2 -Percent of Children Ages 6-12 by Distance Traveled to School, 1969 and 2001



Source: NHTS Data Series

^{*} Urban areas are defined by the Census Bureau as one or more place ("central place") and the adjacent densely settled surrounding territory ("urban fringe") that together have a minimum of 50,000 personal. All other areas are "rural".

** Children's Mode Choice for the School Trip: The Role of Distance and School Locations in Walking to School, Noreen McDonald, Springer Science+Business Media B.V., 2007

Other possible factors impacting the percentage of children biking or walking to school include the use of before and after school child care, availability of sidewalks, and inclement weather. The importance of these issues is being examined in the Safe Routes to Schools Program and in the 2008 NHTS.

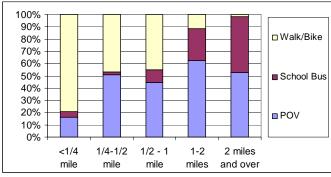
As children live further from school than in the past, it is not surprising that the mode of travel to school has changed. Exhibit 3 shows the mode of travel by distance for school trips in 2001.

The distribution of these major modes (transit and 'other' have been excluded) shows clearly that the majority of school trips of less than one-quarter mile are made by walk and bike. However, for trips between ¼ and ½ mile, the private vehicle accounts for half, and POV is the dominant mode for school trips over 1 mile (remember that in 2001, 75.4 percent of all school trips by children 6-12 were over 1 mile).

Looking at older students, school trips by students ages 16-18 also shows the predominance of private vehicle use. Over three-quarters (76.9 percent) of all trips to school for children ages 16-18 are by private vehicle. This age group travels further to school than younger children, with an average distance of 6 miles to school compared to 3.6 miles for children ages 6-12. Of those private vehicle trips, half were drive alone, 31.3 were two-party trips 13.4 had three and 6.6 had four or more people on the trip as shown in Exhibit 4.

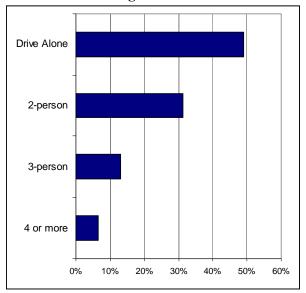
Policies and programs that encourage walking and biking to school, especially for grade school children, need to account for the number of eligible walkers and bikers (living within a mile of school) along with the barriers to walking and biking such as security concerns of parents.

Exhibit 3 – Mode of Travel to School by Distance for Children ages 6-12



Source: 2001 NHTS

Exhibit 4 – Percent of Private Vehicle Trips to School by Number of Persons on the Trip, Students ages 16-18



Source: 2001 NHTS

Data and Publications at your fingertips:

Website: http://nhts.ornl.gov

Be sure and check out our most recent topic briefs:

"Congestion – Peak Travelers" 08/07

"Non-Work Travel" 04/07

"Commuting for Life" 11/06