



POLICY PERSPECTIVE

SUPPORTING PHYSICAL ACTIVITY AMONG CHILDREN IS CRITICAL TO REVERSING THE CHILDHOOD OBESITY EPIDEMIC IN THE UNITED STATES. EXPERTS RECOMMEND 60 MINUTES OF DAILY MODERATE PHYSICAL ACTIVITY FOR CHILDREN AND SUGGEST THAT ENGAGING IN SEVERAL SHORT SESSIONS OF PHYSICAL ACTIVITY EACH DAY MAY HELP CHILDREN ACHIEVE THIS GOAL.¹ WALKING OR BIKING TO SCHOOL PRESENTS AN EXCELLENT OPPORTUNITY FOR INCREASING PHYSICAL ACTIVITY AMONG KIDS, BUT MANY COMMUNITIES LACK SAFE AND ACCESSIBLE ROUTES TO SCHOOL. POLICY-MAKERS AND COMMUNITY SUPPORT FOR IMPROVED SIDEWALKS, TRAFFIC SAFETY MEASURES AND SCHOOL-SITING POLICIES MAY HELP INCREASE PHYSICAL ACTIVITY AND REDUCE OBESITY AMONG CHILDREN.

Background

The number of overweight children and adolescents has steadily climbed over the past four decades and today an unprecedented number of youth have an unhealthy body weight. Current estimates show that one-third of children and adolescents—about 25 million kids—are overweight or obese. Research shows that today’s children and teens are consuming more calories than they are expending through physical activity and this energy imbalance can lead to unhealthy weight gain.² Lack of physical activity is a significant contributor to the childhood obesity epidemic and most kids do not meet the Surgeon General’s recommendation for 60 minutes of moderate physical activity most days of the week.³

Walking and biking to school is associated with higher energy expenditure in children and provides an opportunity for children to build physical activity into their every day routines.⁴ Today, a small percentage of children walk or bike to school compared to past generations. Using data collected from 1969 to 2001 as part of the National Personal Transportation Survey, Noreen McDonald, Ph.D., at the University of North Carolina at Chapel Hill, analyzed this decreasing trend in active transportation to school. This study advances what is known about this decline by examining how key factors, including distance to school and household characteristics, influenced this trend over time. The findings can help inform efforts that will support opportunities for children to safely walk and bike to school, such as Safe Routes to School initiatives, the Centers for Disease Control and Prevention’s KidsWalk and walking school bus programs.

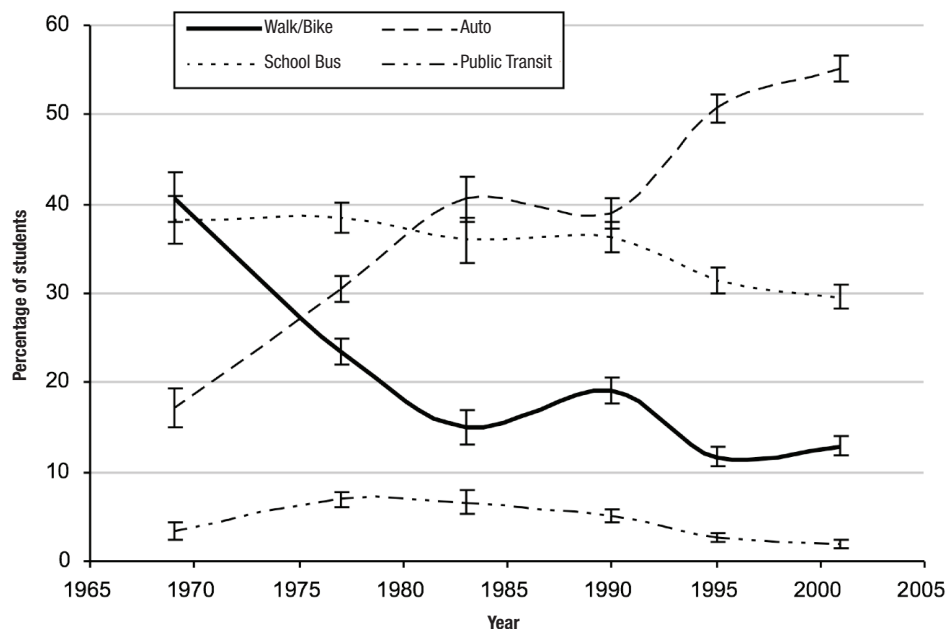
Key Findings

- **In 2001, only 13 percent of students walked or biked to school.**⁵ The most recent data on active transportation among school-age children represent a significant decrease since 1969. The number of students walking and biking to school has decreased more than three-fold over the past few decades, from 41 percent of students in 1969, to only 13 percent of students in 2001.

1 Centers for Disease Control and Prevention. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans 2005*, 6th ed., Washington: U.S. Government Printing Office, January 2005.
2 Wang YC, Gortmaker SL, Sobol AM and Kuntz KM. “Estimating the Energy Gap Among US Children: A Counterfactual Approach,” *Pediatrics*, 118(6), 1721–1733, December 2006.
<http://pediatrics.aappublications.org/cgi/reprint/118/6/e1721?maxtoshow=&HITS=10&hits=10&RESULTFORMA T=&fulltext=estimating+the+energy+gap&andorexactfulltext=and&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT>
3 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance—United States, 2005. Surveillance Summaries, *MMWR*, 55(SS- 5): 1–108, June 9, 2006.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5505a1.htm>
4 Tudor-Locke C, Ainsworth BE, Adair LS and Popkin BM. “Objective physical activity of Filipino youth stratified for commuting mode to school.” *Medicine and Science in Sports and Exercise*; 35: 465–471, March 2003.
<http://www.acsm-msse.org/pt/re/msse/abstract.00005768-200303000-00013.htm?jsessionid=H2fpkrTf421jG5wfRDmNwWfjgLIKZn1syGPP1cWyHxrTy51kzNNwQJ-2026113843118119562818091-1>
5 U.S. Department of Transportation, Federal Highway Administration. 2001 National Personal Transportation Survey: <http://www.fhwa.dot.gov/policy/ohpi/nhts/index.htm>

- **Increased distance between home and school is a significant barrier that accounts for nearly half of the decline in walking and biking to school from 1969 to 2001.** As a result, the primary mode of transportation to school has shifted from walking to traveling by car. A significant decrease in active transportation to school occurred between 1969 and 1983, with the sharpest change between 1969 and 1977. As shown in the graph below, this decreasing trend in walking and biking is mirrored by the rise in driving to school.

Trends in Mode of Transportation to School



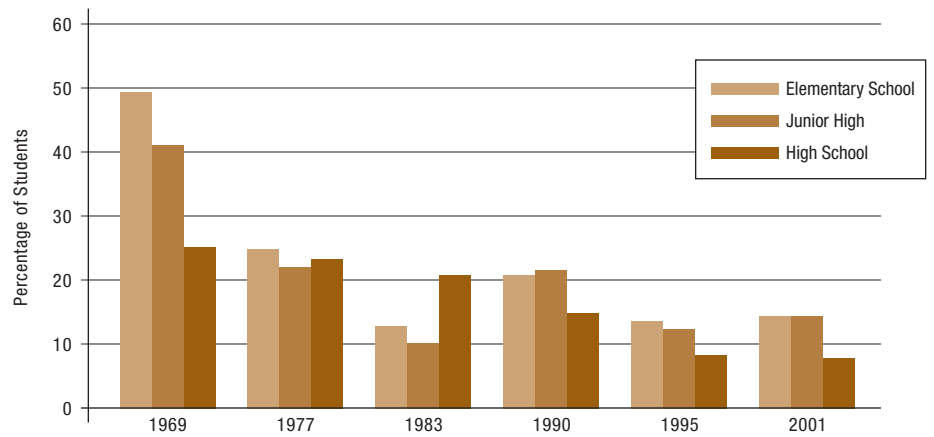
Standardized to 2001 age and race distribution
 Error bars represent the 95% confidence interval

- **Elementary students experienced the sharpest decline in walking and biking to school over the years studied.** While a higher percentage of families no longer live within walking distance to school, previous research also has identified safety as an issue that prevents parents from allowing their children to walk or bike to school. As illustrated in the following graph, elementary students experienced the sharpest decrease in active transportation from 49 percent in 1969 to 15 percent in 2001.

Resources

- U.S. Department of Transportation Federal Highway Administration National Center for Safe Routes to School, <http://www.saferoutesinfo.org/>
- Centers for Disease Control and Prevention, Kids Walk to School, <http://www.cdc.gov/nccdphp/dnpa/kidswalk/>

Percentage of Students Who Walk and Bike to School by Grade Level



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—Stephanie Weiss

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