

Advancing transportation through research and education since 1991

Assessing the Relative Risks of School Travel in Rural Communities

Principal Investigator

Kevin Chang, Civil and Environmental Engineering

Sponsor

Center for Safety Equity in Transportation (CSET)



ESET

Description

Throughout the United States, millions of boys and girls between the ages of six and seventeen attend school every Monday through Friday, five days a week, for nine months during an academic year. These students will walk, bicycle, get a ride from a parent or sibling or family friend, or make their way to a bus stop and then take a yellow school bus or public transportation. In rural communities where the family home may be a considerable distance from the neighborhood or community school, utilizing a motorized mode of travel will be more likely. The risks associated with these modes naturally deserves further study.

National research has shown that in the span of one generation, the percentage of children walking or bicycling to school has dropped precipitously, from approximately 50% in 1969 to just 13% in 2009. This decrease in walking and bicycling has resulted in American families driving thirty billion miles and making 6.5 billion vehicle trips to take their children to and from schools, contributing to an increase of traffic congestion levels near schools and approximately fourteen percent of traffic on the road during the morning commute. There are many reasons that can be associated with this decline, including more dual-parent income households, concerns about student safety in the form of "stranger danger" or abductions, and concerns associated with walking or bicycling safety due to fast-moving vehicles or heavy traffic volumes along busy streets. In rural communities, schools are frequency sited along or in the immediate vicinity of a high-volume, high-speed state highway. This roadway environment introduces several safety challenges for school-aged children, parents, the local community, and commuters, particularly during morning arrival and afternoon dismissal periods when pedestrian and vehicular traffic and pedestrian-vehicle interaction are at its highest.

National Institute for Advanced Transportation Technology (NIATT) University of Idaho, 115 Engineering Physics Building, Moscow ID 83844 208-885-0576 niatt@uidaho.edu