



Florida Department of Transportation Research

Study of School Zones with Traffic Signals

C8L13

FDOT recently funded a study to determine the effectiveness of extending reduced speed school zones on state roads to include nearby traffic signals that have pedestrian crosswalks. The study also assessed whether extending the zone was effective in reducing student pedestrian and vehicular crashes depending on the grade level of the school.

FDOT may designate reduced speed school zones and school crossings on state highways adjacent to public or private elementary or middle schools or Headstart facilities. School zones are provided at high schools on a case-by-case basis.

Researchers reviewed literature to determine how other jurisdictions implement reduced speed school zones with signalized pedestrian crossings. They surveyed school safety personnel from 20 states and eight Florida counties and interviewed crossing guards. Researchers visited 14 Florida schools in session. Five were high schools, which shared their campuses with an elementary school, a middle school, or both. Crossing guards were present on shared campuses. Researchers observed pedestrian and traffic interactions, highway geometry, control devices, traffic conditions, pedestrian volume, and driver and pedestrian behavior. Researchers also studied accident data for the past three years.

Of the 14 schools, researchers found that between 2005 and 2007, four accidents occurred involving high-school age children, and one involved a crossing guard. Given the number of students of all ages attending the schools and the traffic volumes, researchers concluded that the presence of crossing guards contributed greatly to safety.



Reduced speed school zone

Crossing guards stated their belief that reduced speed zones enhance safety and allows them to better protect children. At sites with a combination of high school and lower grade level schools, researchers observed high school students jaywalking rather than crossing at designated crosswalks. Researchers concluded that slower moving traffic resulting from reduced speed school zones encouraged high school students to jaywalk.

Researchers concluded there was no correlation between the reduction of pedestrian accidents and the presence of a reduced speed school zone with a pedestrian crossing traffic signal. They also recommend that no changes are needed to FDOT procedures concerning establishing reduced speed school zones at high schools.