

CALL TO ACTION

For the past five years, SAFE KIDS and FedEx Express have teamed up to bring national and local attention to child pedestrian safety issues. The *SAFE KIDS Walk This Way* program has been instrumental in educating local communities about safe pedestrian behaviors and the need to create safe routes to school for child pedestrians. Now they are calling upon the 600 SAFE KIDS coalitions and chapters, concerned FedEx Express employees, transportation and law enforcement officials, and other safety advocates to heighten local awareness of environmental and behavioral hazards at intersections.

Education

- Create and distribute public awareness tools like public service announcements and brochures to raise awareness of traffic laws and penalties for violations
- Conduct media campaigns to help drivers learn about safe behaviors
- Encourage parents to walk or bike with their children to school, if possible, to decrease traffic congestion and increase safety
- Provide ongoing drivers' education through state motor vehicle departments
- Promote programs that encourage more walking, such as the Partnership for a Walkable America's International Walk to School Day
- Develop Safe Routes to School programs to bring key stakeholders together to work toward strategic educational, environmental, and behavioral objectives for child pedestrian safety

Enforcement and Enactment

- Conduct routine, targeted traffic enforcement campaigns for motorists and pedestrians
- Advocate for stricter penalties and increased fines for violators of traffic laws
- Designate federal funding to support Safe Routes to School through the Pedestrian and Cyclist Equity Act of 2003

Engineering

- Include consideration of child pedestrians in the routine planning, design and operation of all public roadways, especially around schools and residential areas
- Dedicate funds to upgrading the visibility of traffic signs, signals and markings
- Evaluate the effectiveness of existing traffic-calming markings, signals and signs

ENDNOTES

ⁱ Beschen D. Nationwide personal transportation study: Transportation characteristics of school children. Washington (DC): U.S. Department of Transportation, Federal Highway Administration; 1972.

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^{ix} Cody BE, Hanley MP. Stop sign violations put child pedestrians at risk: a national survey of motorist behavior at stop signs in school zones and residential areas. Washington (DC): National SAFE KIDS Campaign; October 2003.

^x Dunne RG, Asher KN, Rivera FP. Behavior and parental expectations of child pedestrians. *Pediatrics* 1992;89:486-90.

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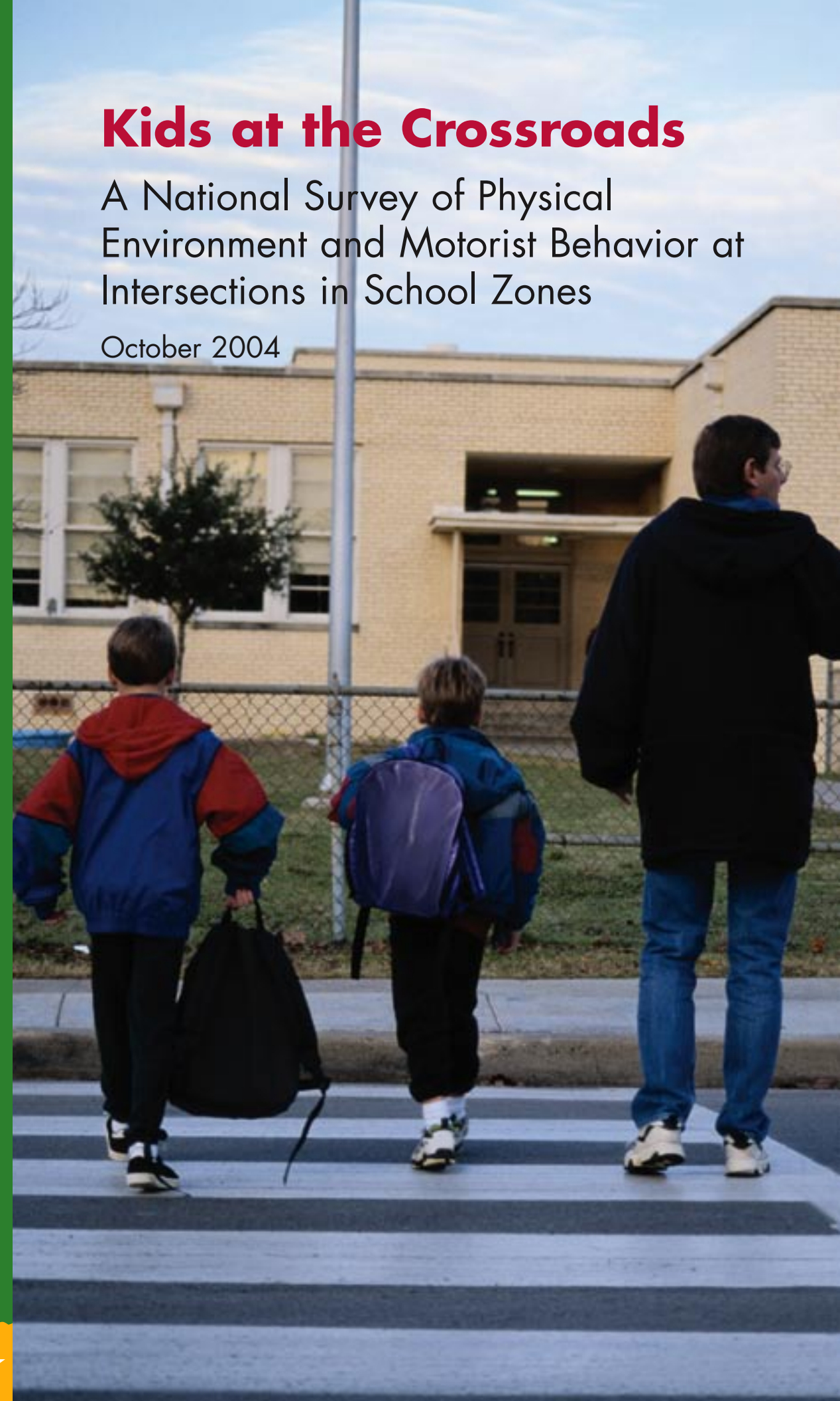
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Kids at the Crossroads

A National Survey of Physical Environment and Motorist Behavior at Intersections in School Zones

October 2004



INTRODUCTION

Walking is an important part of our children's development, health and well-being, and an integral part of our communities. Over the last 30 years, the number of children walking to school has plummeted from nearly half of all children in 1969 to just 10 percent in 1995ⁱ, ⁱⁱ. This decline can be attributed to many causes, including traffic threats and other hazards that make walking unsafe for children.ⁱⁱⁱ

Despite the fact that fewer children are walking to school, pedestrian injury remains a leading cause of unintentional injury-related death among children.^{iv} In 2001, 409 children ages 5 to 14 died in pedestrian crashes^v, and an estimated 31,400 were treated in hospital emergency rooms for pedestrian-related injuries in 2002^{vi}. The total annual cost of traffic-related pedestrian death and injury among children ages 14 and under is more than \$7.2 billion.^{vii}

For five years, SAFE KIDS and FedEx Express have worked together on the *SAFE KIDS Walk This Way* program, to draw attention to hazards that children face while walking to and from school and to promote national and local levels to improve child pedestrian safety. This observational study examines conditions at signalized intersections near our nation's elementary and middle schools.

METHODOLOGY

Data were collected by 52 SAFE KIDS coalitions representing 35 states and the District of Columbia. A total of 104 intersections, 208 crossings and 3,640 vehicles were observed, using instruments and protocols developed by the National SAFE KIDS Campaign with the input of a pedestrian safety expert advisory panel.

Each SAFE KIDS coalition selected a four-way signalized intersection for its proximity to either an elementary or a middle school. These intersections did not have crossing guards during school hours. If possible, coalition members identified sites where there was a history of pedestrian-related injuries or general concern about pedestrian safety. This was not a random or representative survey. A fatal or serious child pedestrian-related crash had occurred at 35 percent of the intersections observed.

Each intersection was observed for one hour by a minimum of two observers, who collected data on numerous variables in physical environment and driver behavior.

In order to understand how these elements affect a child's ability to cross the street, the observers determined the mostly likely path for a child navigating the intersection. This path included two legs, or *crossings*, of the intersection.

All coalitions submitted their surveys to the National SAFE KIDS Campaign for analysis. TELEform 7.0 software was used for data entry. Frequencies were generated using SPSS 12.0.

Photos courtesy of SAFE KIDS Baltimore and SAFE KIDS Alaska State.

Images from intersections included in the study.

Only fragments of the markings at this crosswalk, across from a school, are visible.

Vehicles blocking crosswalks force pedestrians closer to traffic and block their view of the crossing.

Pedestrian signals that are blocked, or don't function, leave pedestrians in the dark.

RESULTS

OVERVIEW

- Nearly four-fifths (79.8 percent) of the intersections observed were within a quarter-mile of either an elementary or a middle school.
- The Campaign identified four common environmental and behavioral hazards:
 1. Crosswalks are in poor condition or not present
 2. Drivers fail to stop, or stop and then make illegal turns
 3. Posted speed limits during school hours are 35 mph or more
 4. Curb ramps are either outside the crosswalk or missing

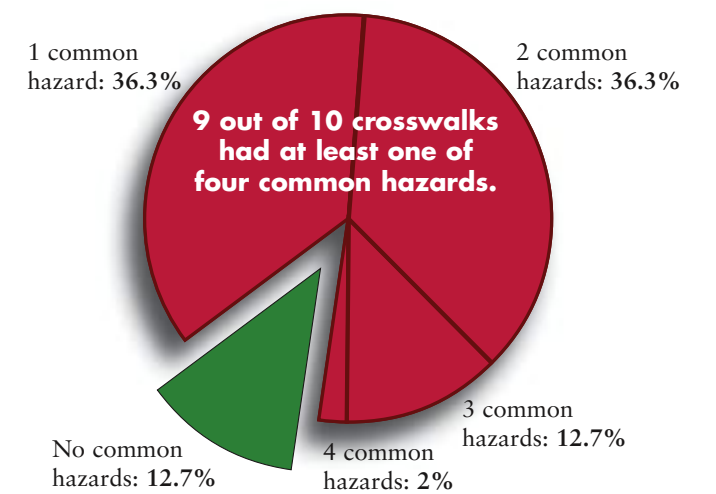
PHYSICAL ENVIRONMENT

- Nearly nine out of 10 (87.3 percent) of the observed intersections had at least one of the four common hazards.
- More than half (51.0 percent) of the observed intersections had two or more of the four common hazards.
- At nearly half (47.5 percent) of the observed intersections, crosswalk markings were judged to be in poor condition, with some markings missing, or not present at all.
- Among the intersections with reported fatal or serious pedestrian crashes, those with posted speed limits of 35 mph or more during school hours were twice as likely to have experienced a fatal crash.

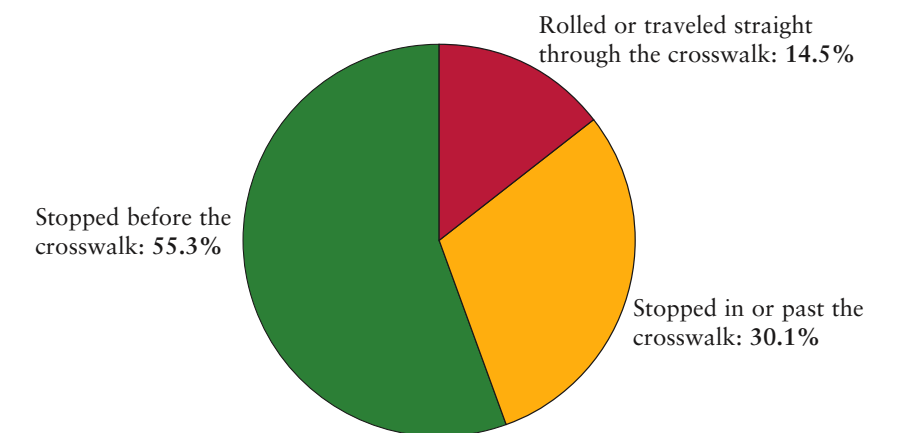
DRIVER BEHAVIOR

- When motorists approached intersections where the traffic light had turned red, their vehicles frequently blocked crosswalks, forcing pedestrians toward oncoming traffic.
 - More than one in ten (14.5 percent) observed drivers passed straight through the intersection, or stopped and made an illegal turn.
 - Nearly a third (30.1 percent) of observed drivers stopped within or past the boundaries of crosswalks, obstructing the pedestrian crossing.

Observations of Crosswalk Conditions



Observations of Crosswalk Violations



DISCUSSION

Observations of environmental and behavioral hazards at intersections reveal that child pedestrians are at risk every day while walking to and from school. Previous studies have indicated that these factors create significant danger for child pedestrians. In 1999, a National SAFE KIDS Campaign survey found that two-thirds of drivers exceeded the posted speed limit in school zones during peak walking periods.^{viii} In 2003, SAFE KIDS found that nearly half of drivers observed violated stop signs by not coming to a complete stop at intersections.^{ix} This year, SAFE KIDS finds that driver behavior continues to put child pedestrians at risk.

Teaching children pedestrian safety is not enough, especially since we know that children under age 10 are exposed to traffic threats that exceed their cognitive, developmental, behavioral, physical and sensory abilities. This is exacerbated by the fact that parents overestimate their children's pedestrian skills.^x

Child pedestrians cannot ensure their own safety. Parents and caregivers must understand the limitations and abilities of children walking with traffic. Drivers must understand the potential impact of even seemingly minor traffic violations, like stopping in a crosswalk. Elected officials and public agency staff must understand the impact of the planning, design and operation of transportation facilities on child pedestrians.

