



**Doing it right:
Leveraging data and evaluation to
develop pedestrian safety projects**

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Safe Kids Worldwide was founded in 1988 with a mission to keep all kids safe from preventable injuries – things like traffic injuries, fires, falls, and drowning.

Safe Kids Mid-South is part of a network of 600 local coalitions across the United States and 18 member countries who work everyday in their community to protect kids.

Locally, we're supported by **Le Bonheur Children's Hospital** and work primarily in Memphis and Shelby County, but extend our efforts to Nashville, West AR and North MS.

Safe Kids Mid-South and Safe Kids Worldwide are proud to be part of a movement that has worked to reduce the rate of unintentional injuries in children in the U.S. by 56% during the last twenty-five years.

But, there is still much more to be done.

The Risk Areas

Safe Kids Mid-South delivers community programs

Road Safety	Home Safety	School & Play
<ul style="list-style-type: none"> • Child Passenger • Teen Driving • Pedestrian Safety • Bike/ ATV and other wheeled sports • Distraction Prevention 	<ul style="list-style-type: none"> • Falls Prevention • Safe Sleep Environments • Fire and Burn Safety • Medication Safety • Water Safety 	<ul style="list-style-type: none"> • Playground Safety • Sports Safety • Water Safety

Emerging Issues
i.e.: Button Battery; Laundry Packets; TV Tip-overs

What is Safe Kids Walk This Way?


A Pedestrian Safety Program

- To teach safe behavior to motorists and child pedestrians
 - To create safer, more walkable communities



The Problem

- In the United States, pedestrian injury is a leading cause of injury and death for children ages 1 to 19. In 2012, an estimated 19,183 children were injured and a total of 444 child pedestrians lost their lives.
- Children of low-income, densely populated urban residential areas are at a high risk for pedestrian injury. *(Safe Kids Worldwide)*



When, Where, How?

- Locally, most crashes occur in April; Fewest occur in June, followed by December
- Number of crashes peaked on Fridays; Lowest on Sundays
- Hours of 2:00 pm and 6:59 pm saw the largest share of crashes overall
- Nearly a quarter involved pedestrians age 14 and younger; Ages 10- 14 appear to be the most overrepresented
- Most were males

Why?



- The maturity level of a child under 10 years of age makes him or her less able to correctly gauge road dangers and renders him or her at greater risk for injury and death.

- Distractors?



What?



Formed a Pedestrian Safety Task Force to make environmental changes at a selected school

With a \$40,000 grant award from FedEx!

The Initiative



- Held a Task Force Workshop
 - *engineers, urban planners, university, healthcare & police professionals, pedestrian & bike advocacy groups, school officials, coalition members*
- Analyzed Data at all elementary schools
 - *crash, speeds, pedestrian injuries & deaths*
- Selected "Top Ten" elementary schools
 - *made site visits to observe vehicular and pedestrian behaviors*
 - *utilized engineering principles to determine potential solutions*
 - *examined ways to implement improvements with the best "bang for the buck"*
 - *named our Intervention School*

The Principles

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Goals

- *Improve children's safety*
- *Improve accessibility*
- *Encourage increased walking*



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Rules


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- *Focus on easy to implement & low cost solutions*
- *Identify & program in longer-term improvement needs*
- *Match the treatment with the type of problem identified*
- *Provide & maintain facilities along the school route*
- *Provide safe street crossings*
 - Keep it simple
 - Shorten crossing distances
 - Carefully connect location & marked crosswalks
 - Create visible crosswalks
- *Slow down traffic speeds*

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Our Intervention School

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- Pre- Kindergarten through Grade 5
- 630 Students
- 28% Living below the poverty level
 - 77% African American
 - 20% Hispanic
- 350 Walkers



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Our Intervention


- **Pre-Intervention Data Collection**
 - *physical site assessment; vehicle numbers, travel patterns & speeds; pedestrian numbers & behaviors*
- **School Partnership**
 - *system administrators; principal & faculty; PTA; community*
- **Route Optimization Study**
 - *bus, child care vans, car pool, personal vehicle patterns*
- **Work Plan**
 - *environmental modifications; interactive pedestrian safety curriculum; WTW School Day*
 - *identified responsible persons and a time line*

The Specifics

- **Made Given a 2-Way Street**
 - *Striped the median, added turn arrows, added stop bar, striped and painted curb extension, added flexible vertical delineators, removed confusing signage*
- **Trimmed bushes at Given Street and Highland Avenue**
- **Installed 15 School Zone signs**
- **Painted 150 Yield lines**
- **Installed 8 Yield Here to Pedestrian signs**
- **Painted 240 Advanced Yield lines**
- **Painted 8 High Visibility Longitudinal crosswalks**
- **Painted 1 Standard crosswalk**

- **Rerouted vehicle traffic**
- **Added Crossing Guards and 'armed' them highly visible hand-held Stop Signs**
- **Taught grade-specific interactive pedestrian safety curriculum to students**
 - *Pedestrian Safety Jeopardy*
- **Hosted WTW Pedestrian Safety Days**
 - *Stations included The Pledge, Identification of potential hazards, Bean Bag Safety Rules game, Identifying blind spots*

• Installed 2 Rectangular Rapid Flashing Beacons (RRFBs)



RRFBs are user-actuated amber LEDs that supplement warning signs at un-signalized intersections or mid-block crosswalks:

- activated by pedestrians manually by a push button*
- use an irregular flash pattern that is similar to emergency flashers on police vehicles*

The **FIRST** in Tennessee!

• Post-Intervention Data Collection

- physical site assessment; vehicle numbers, travel patterns & speeds; pedestrian numbers & behaviors*

• Celebration!!!

- huge event*
- photo ops for Treadwell Elementary and the nearby community, school system, media*

Beyond The Intervention

- "Since the Treadwell Project's completion, the city has established new guidelines for managing the installation of crosswalks and Rapid Rectangular Flashing Beacons (RRFB's) in school zones that allow equitable analysis and installation protocols throughout the city.
- Additionally, the city performed a city-wide pedestrian study building upon the work started by the Safe Kids Mid-South analysis that to prioritize sidewalk investments where demand near access to schools is greatest."

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- Pre-Environmental Changes
 - Crashes 23
 - Under age 15 16
 - Fatalities under age 16 5
 - A clustering of serious injury or fatal crashes occurred near the school property
(2003-2011)
- Post- Environmental Changes
 - No accidents reported since the installation of "The Beacons"
(2016)

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Collaborative, Data-Driven Effort Focuses on Infrastructure Near Schools First

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MEMPHIS, TN — July 17, 2015 the City of Memphis releases its Pedestrian and School Safety Action Plan, the result of an 18-month planning process focused on prioritizing and constructing pedestrian infrastructure near schools in Memphis.

These projects were inspired by the Walk This Way pedestrian safety efforts of Safe Kids Mid-South and FedEx and will serve students walking to and from school, as well as residents accessing parks, libraries, community centers, transit stops, and other public resources often located near schools.

"This plan is one of the most comprehensive pedestrian planning documents I've seen used across the country, both in its intended scope of impact and its breadth of analysis", said Kyle Wagenschutz, Bicycle/Pedestrian Program Manager for the City of Memphis. "Implementation of this plan will allow us to redefine the experience of being a pedestrian in Memphis. We have the ability to make this city a national example of how transforming the streets to be safer for pedestrians is good for our health, economies, and neighborhoods."


The Commercial Appeal

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The Video

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- We filmed our progress from the beginning to the end of our 2 year effort.



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Thank You!



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