

### SAFE ROUTES TO SCHOOL BRIEFING SHEETS

This series of briefing sheets provides a hands-on reference for transportation professionals initiating or engaged in implementing safe routes to school (SRTS). The briefing sheets will aid practitioners in addressing infrastructure changes and in implementing plan components as part of a SRTS team.

The content includes:

- Introduction
- School Site Selection and Off-site Access
- Walking and Bicycling Audits
- School Route Maps
- Strategies to Improve Traffic Operations and Safety
- School On-site Design
- School Area Traffic Control
- Reduced School Area Speed Limits
- The Use of Traffic Calming Near Schools

### THE SRTS PROGRAM

The program supports the planning, development, and implementation of projects and activities that improve the safety and accessibility of pedestrian and bicycle facilities to meet the needs of children travelers and to enhance understanding of safer walking and bicycling practices. Benefits of the program include promotion of more healthy and active lifestyles and reductions in traffic congestion, fuel consumption, and air pollution near schools.

The national SRTS program was established and funded under the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU) of 2005. It required each state and the District of Columbia to establish a full-time SRTS coordinator, and directed federal funding for both infrastructure and non-infrastructure projects. As established, the SRTS coordinator creates and implements the state program and administers the distribution of federal funds to local jurisdictions. Funding for SRTS programs may be pursued through federal programs that provide resources for pedestrian and bicycle programs. In addition, financial support may also be solicited via local capital and operating budgets, contributions from corporate or nonprofit foundations, and through grassroots fundraising activities.



Figure 1. SRTS Stakeholder Team. Source: David Parisi

In 2012, the program was modified in Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21). SRTS projects are now eligible for funding through a new Transportation Alternatives program. The SRTS coordinator position is now optional subject to each state's priorities. While Congress proscribed administrative and funding changes, the program's goals remain the same—to encourage communities to create safer walking and bicycling routes in the vicinity of schools.

### A TEAM EFFORT

A successful SRTS program is a multidisciplinary team effort that engages stakeholders early in the process. Stakeholders include school officials and staff, parents, students, public health professionals, law enforcement, transportation professionals, SRTS coordinators, community supporters, and municipal officials.

## COMPONENTS OF A SRTS PROGRAM

The five Es—Engineering, Education, Enforcement, Encouragement, and Evaluation—are the components of a successful SRTS program. The National Center for Safe Routes to Schools Program Tool Database provides resources, guides, and case studies that specifically address each E in context for transportation professionals.<sup>1</sup> This briefing sheet includes an overview of the five Es.

### Engineering

*Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds and potential conflicts with motor vehicle traffic, and establishing safer and fully accessible crossings, walkways, trails, and bikeways.<sup>2</sup>*

The top concerns often cited by parents regarding children walking and biking to school are safety at intersections, distance from school, speed of traffic, and amount of traffic.<sup>3</sup> As members of the stakeholder team, transportation professionals provide technical advice and identify engineering solutions to mitigate these concerns. The engineer's role may include:

- Creating school walking and bicycling route maps using a variety of assessment tools and exercises;
- Regulating traffic near schools;
- Providing solutions to common traffic problems at the school site;
- Providing and maintaining bicycle and pedestrian facilities along the school routes; and
- Minimizing conflicts to provide safer street crossings for bicyclists and walkers.

### Education

*Teaching children about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills, and launching driver safety campaigns in the vicinity of schools.<sup>2</sup>*

Transportation practitioners know the “rules of the road”; as such their role may include educating parents, students, drivers, and community members by providing:

- Tip sheets with guidelines for safer ways to travel to and from school;
- Success stories from other communities;
- Engineering insights and principles to the local SRTS coordinator to enhance outreach materials, including Americans with Disabilities Act requirements; and
- Presentations in classrooms.



Figure 2. Safer bicycle skills. Portland, TX, USA. Source: Michael J. Cynecki

### Encouragement

*Using events and activities to promote walking and bicycling.<sup>2</sup>*

Recognized annual activities such as International Walk to School Month (October) and International Bike to School Day (in May) are ideal times to initiate a SRTS program. Many SRTS programs have additional special events or incentives throughout the year to reward students and families for getting to school by foot or bicycle. These activities will often be initiated by the school or SRTS coordinator. The transportation professional can support these efforts by:

- Providing data and information unique to the community to support this activity;
- Preparing news releases to notify the public of infrastructure projects and their relation to the SRTS program; and
- Attending SRTS events to demonstrate local agency interest.

Facilitating participation in the national event and ongoing activities will create a more comprehensive approach to maintaining engagement in a SRTS program.

## Enforcement

*Partnering with local law enforcement to ensure traffic laws are obeyed in the vicinity of schools (this includes enforcement of speeds, yielding to pedestrians in crossings, and proper walking and bicycling behaviors), and initiating community enforcement such as crossing guard programs.<sup>2</sup>*

Enforcement of traffic laws at and around schools can help prevent a child from being involved in a traffic crash. Law enforcement officers and traffic engineers are a resource and critical partners to the SRTS team. Safer traffic conditions may encourage more parents to allow their children to walk and bike to school. However, to be effective, law enforcement must coordinate its activities with the traffic engineer and school officials. Traffic engineers can work with law enforcement to:

- Identify problem locations that could benefit from a stronger police presence and enforcement activity;
- Provide vehicle speed surveys on major streets to target where police could use radar to enforce speed limits;<sup>4</sup>
- Use innovative devices, such as in-roadway crosswalk signs to alert motorists that children may be crossing, or speed feedback signs that inform motorists of their current speed,<sup>5</sup> and
- Provide safety education and training support for student safety patrols and adult crossing guards.

## Evaluation

*Monitoring and documenting outcomes and trends through the collection of data, including the collection of data before and after the intervention(s).<sup>2</sup>*

Evaluation includes assessment of baseline conditions. This assessment phase includes team members working together to conduct walking and bicycling audits to identify barriers to safe walking and bicycling to school, surveying how students are traveling to and from school, and surveying parent and student opinion about walking and bicycling to school. It is important to know why students within close proximity of a school are not walking and what changes are needed to encourage walking and bicycling. Before-and-after documentation of the geometric and engineering changes on site, and assessments of behavioral and attitudinal changes once the program implementation is complete, are other components of evaluation. The results of these efforts are useful in maintaining engagement in the program, demonstrating success, and providing support for future funding requests.

These types of attitude and behavioral reviews should take place with the SRTS coordinator and other critical stakeholders to:

- Ensure that underlying problems are identified;
- Set reasonable expectations;
- Identify changes that can improve the program;
- Determine whether the program is meeting desired goals and allow for midcourse corrections; and
- Conduct before-and-after studies.

## RESOURCES

The package of briefing sheets provides guidance on specific areas of practice for the transportation practitioner engaged in a SRTS program. Working with parents, school and law enforcement stakeholders, public health officials, and transportation professionals can create a supportive and engaging environment for a successful SRTS program. For additional information, the following Web sites are useful resources:

Institute of Transportation Engineers—<http://www.ite.org/activeliving/index.asp> and  
<http://www.ite.org/childhoodobesity/default.asp>

National Center for Safe Routes to School—<http://www.saferoutesinfo.org>

Safe Routes to School National Partnership—<http://www.saferoutespartnership.org>

U.S. Department of Transportation—Federal Highway Administration Office of Safety—<http://safety.fhwa.dot.gov/saferoutes>

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### REFERENCES

1. <http://www.saferoutesinfo.org/program-tools/search-resources>
2. [SRTS Guidance: http://safety.fhwa.dot.gov/saferoutes/guidance](http://safety.fhwa.dot.gov/saferoutes/guidance)
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