

# Appendix U

## Unique Challenges: SR2S for Everyone

Safe Routes to School programs can and should include all students and families that wish to participate, including students with special needs. Encourage the parents of students who have unique challenges to participate in your Safe Routes to School program.

The most common impairments involve:

- mobility
- vision
- cognition

### MOBILITY

Pedestrians with mobility impairments include those who use wheelchairs, crutches, or other devices to help them get from one place to another.

### VISION

Pedestrians who are blind or visually impaired rely primarily on information obtained through non-visual sources such as texture and sound, and may use a white cane or guide dog to help them navigate. Among the challenges people with visual impairments face when traveling independently are: limited perception of the path ahead; difficulty seeing pedestrian signals, signs and details; and navigating with limited information about their surroundings.

### COGNITION

Cognitive disabilities affect the way a person recognizes, understands, interprets and responds to information. Pedestrians with cognitive impairments may have a limited attention span or difficulty making judgments; be apprehensive in noisy environments and at busy intersections; be easily distracted; have difficulty navigating in complex environments; have decreased walking speed; and require additional processing time for decision-making.

### EXAMPLES OF WHAT TO LOOK FOR

Safe Routes to School teams need to be aware of the special requirements pedestrians with unique challenges have when assessing the routes to and from school. Look for the following conditions when assessing the school property and surrounding areas:

- 1) **The presence of sidewalks along the route.** A lack of sidewalks is a barrier for pedestrians with mobility impairments.
- 2) **Sidewalks that are wide enough.** Wheelchair users require a wider path and need extra space to turn around; mobility specialists recommend that sidewalks be at least 60 inches wide to enable wheelchair users to turn around or pass other pedestrians.
- 3) **Sidewalks that are well-maintained, in good repair, and are cleaned or cleared regularly.** Wheelchair and scooter users lose stability and control when navigating over rough, uneven surfaces. Also, the small front wheels of a wheelchair can be caught and turned by sidewalk cracks. In the winter, icy surfaces (especially on slopes) can be hazardous because they can cause wheelchair users to lose control.
- 4) **Sidewalks that have curb ramps at intersections.** Curb ramps (also known as “curb cuts”) allow wheelchair users to bypass curbs.

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# Appendix U

## Unique Challenges: SR2S for Everyone, cont.

- 5) **Sidewalks that have level landings at intersections.** Severe cross slopes at the top of curb ramps can cause wheelchairs to tip or become unstable. Level landings make it easier for wheelchair users to turn corners and maneuver.
- 6) **School zone markings that are legibly marked.** Legibility can be enhanced by good contrast and larger print.
- 7) **Sidewalks clear of hanging branches or overgrown shrubs.** Pedestrians with visual impairments may not detect branches, trees and other objects in the sidewalk area.
- 8) **Sidewalks that have good visibility at intersections.** Because they are in a seated position, wheelchair users have a different perspective and may not be able to see around obstacles.
- 9) **Traffic signal pushbuttons that are easily accessible and clearly marked.** Pedestrians with visual impairments are often not aware that an intersection is pushbutton-actuated and may have difficulty finding the pushbutton. Pedestrian pushbuttons should be easily accessible, and located not more than 42" above the sidewalk.
- 10) **Traffic signals that last long enough to allow safe crossings.** Because people who use walking aids tend to travel more slowly than other pedestrians, they benefit from longer pedestrian signal cycles.
- 11) **Pedestrian walk indicators that are visual and audible.** Pedestrian walk indications, unless audible, are inaccessible to pedestrians who are visually impaired.
- 12) **Intersection and crosswalk pavement with different colors or textures.** Pedestrians with visual impairments may have difficulty recognizing the street if the sidewalk and street blend together at curb ramps. Also, pedestrians with visual impairments may not recognize islands that are simply painted rather than raised.
- 13) **Crosswalks parallel to the traffic flow.** Pedestrians with impaired vision use the sound of traffic traveling parallel to their path to maintain alignment during street crossings. If the crosswalk is not parallel to traffic flow, a pedestrian with vision impairments might not cross within the crosswalk.

Additional information on conducting route assessments for students with mobility, visual or cognitive impairments can be found in the Safe Routes module.

Source: Easter Seals Project ACTION: Module 1—Pedestrian Accessibility: Introduction and Context. 2004.

# Appendix V

## Victories and Success Stories

Across Michigan, over 300 urban, rural, and suburban schools have begun safe routes to school initiatives since the launch of the state program in 2006. In 2007, over 400 schools participated in international Walk to School Day, with more than 80,000 school children and their families learning more about the value and obstacles associated with walking and bicycling to school. Hundreds of Michigan residents have attended regional training to learn about the safe routes to school planning process in order to actively support a local school/community team.

The short vignettes that follow are illustrative of achievements realized by many safe routes to school teams. The components of a successful initiative are the same (i.e., a multidisciplinary team, parent and student information, environmental information, a realistic action plan); however, every community effort is unique and success is defined according to the most pressing needs and priorities of the community. These stories describe successes in the areas of 1) infrastructure, 2) community teams, and 3) behaviors and attitudes.

### INFRASTRUCTURE

#### **Cherry Creek Elementary School, Lowell**

At Cherry Creek Elementary School, a strong community commitment to increase the walkability and bikeability of routes to school was in place before the SR2S initiative began. The diminishing availability of bussing was a contributing factor to the vision to walk and bike more. During the pilot project, a bridge along a main footpath to school was refurbished to make it safer for children to cross. In addition to a new bridge railing, lights were installed along the path to increase the safety of the morning commute to school. The Cherry Creek SR2S team recently submitted an application for a Michigan Safe Routes to School grant to continue their safe routes to school activities and projects.

#### **Clear Lake Elementary School, Oxford**

At Clear Lake Elementary School, parents, school administrators and teachers quickly identified the relevance of SR2S for their children. The school sits on a busy two-lane county road and heavy truck traffic is typical. Early on in the program, the team worked closely with its township office to ensure that the township provided regular snow removal

on a previously overlooked stretch of sidewalk used by students along this roadway. The Township also undertook projects to add curb cuts to existing sidewalk and install a higher visibility barrier between a section of the roadway and the sidewalk. Clear Lake was recently awarded a Michigan Safe Routes to School grant to continue their safe routes to school activities and projects.

#### **Frost Elementary School, Jackson**

At Frost Elementary School, the SR2S team worked closely with the City of Jackson to reconfigure the school's parking lot to improve pedestrian safety. This involved tearing up a section of concrete and planting grass in order to protect a section of sidewalk that crossed the parking lot. In addition, two "no turn on red" signs were installed at a busy intersection near the school and 12 new zebra crosswalks were painted at key intersections to increase pedestrian visibility. Frost Elementary School was recently awarded a Michigan Safe Routes to School grant to continue their safe routes to school activities and projects.

### COMMUNITY TEAMS

One of the great successes of SR2S initiatives is the increased sense of community that happens as parents, teachers, students, police officers, road experts, trail and bicycle group members and many others work together to encourage and enable walking and bicycling on safe routes.

As more people walk and bike, or think about what is needed to walk and bike safely, a spirit of "taking back the streets" blossoms. For many SR2S teams, the strengthening of neighborhoods is a valuable outcome of Safe Routes to School planning.

#### **Hamtramck Schools**

Safe Routes to School planning has emerged as a high priority in the City of Hamtramck. Home to eight schools within a 2-mile radius, and to a diverse population of ethnic groups and non-English language speakers, a local community group has taken the lead to bring the SR2S message to the school communities.

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# Appendix V

## Victories and Success Stories, cont.

The city is an older community, with intact sidewalk infrastructure. However, as with many schools in Michigan and elsewhere, families members typically drive students to school and create dangerous traffic and pedestrian conditions by doing so. Under the leadership of the local community group, a city-wide environmental audit and planning process has identified Action Plan objectives. A funding application budget is being prepared which will be submitted on behalf of the community.

### **Lincoln Elementary School, Cadillac**

Lincoln Elementary School began their SR2S initiative in 2004 as a participant in the Michigan pilot project. As with the other pilot schools, Lincoln's pilot project objectives included the development of a multidisciplinary team to lead their initiative, walking and bicycling routes to school.

During the first two years of their program, a diverse community group, whose members included a community non-profit leader, public health affiliate, city officials, and a landscape architect, aligned themselves in support of safer routes to school. Strong team leadership by the school's principal resulted in the completion of a funding application in 2007. Lincoln was recently awarded a Michigan Safe Routes to School grant to undertake sidewalk installation, and other activities, to create safer walking and bicycling routes to school.

### **Maybury Elementary School, Detroit**

At Maybury Elementary School, community partnership is very visible in the multidisciplinary team that has formed to lead the school's initiative and implement safer routes to school. Maybury is one of a number of Detroit schools that has on staff an individual whose charge is to increase positive learning outcomes for students. This individual leads the SR2S team. For many students in metropolitan areas such as Detroit, walking to school is the norm, often because there is no alternative. Having safe walking and/or bicycling routes for children is a critical factor in students arriving at school ready to learn. In addition to understanding the connection between environment and readiness to learn, Maybury's team draws support from a number of community advocates, including supporters of a local park, housing reinvestment leaders, faith-based leaders, and a nearby state university.

## **BEHAVIORS AND ATTITUDES**

### **Belmont Elementary School, Belmont**

At Belmont Elementary School, safe routes to school activities and projects were designed to emphasize the importance of physical activity for students and families. School assemblies and newsletters were used as tools to educate students on the benefits of physical activity and to encourage bicycling and walking to school. Within the first 1 ½ years of Belmont's program, walking and bicycling to school had increased. Also during this time, the Belmont bicycling audit resulted in a recommendation to connect the school property, student homes, and the existing White Pine Trail to further support bicycling to school. Belmont is preparing an application for a Michigan Safe Routes to School grant to continue their safe routes to school activities and pursue the trail connector.

### **Winans Elementary School, Lansing**

At Winans Elementary School, safe routes to school activities were focused on changing the attitudes and behaviors of students to encourage an increase in the amount of daily physical activity. Simultaneous with the collection of parent, student, and environmental information on barriers to safe walking and biking to school, the school instituted 1) lunch physical activity opportunities for all students; 2) a remote drop-off and Walking Fridays; 3) staff participation in physical activities to model good behavior for students. Winans was recently awarded a Michigan Safe Routes to School grant to continue their activities and projects, including developing new routes students can use to more safely travel to school by foot or bike.

Please read about other successes and victories in the Welcome to SR2S module and in Appendix E.



# Appendix W

## Walking Safety

Each year, an estimated 43,000 children are injured when hit by motor vehicles while walking. Yet walking, whether it's to school, a friend's house, or just around the neighborhood, is critical to children's health and fitness. That's why it's important to take the time to teach kids how to stay safe by following some simple guidelines.

### 1. Dress to be seen.

- Wear white or bright-colored clothing, footwear and accessories when walking during the day.
- Carry a flashlight when walking at night, dawn, dusk or in bad weather.
- Wear clothing, footwear and accessories with retroreflective material when walking at night, dawn, dusk or in bad weather.

### 2. Walk on the sidewalk, whenever possible.

- Always walk on the side of the street FACING traffic.
- Stay to the inside edge of the sidewalk or path.
- Be on the lookout for cars that are backing out of parking spaces and driveways.
- Don't play in driveways, streets or parking lots.

### 3. Learn where to cross a street safely.

- Cross only at corners or marked crosswalks. Stay within the lines of a crosswalk while crossing a street.
- Never cross mid-street or between parked cars.
- Do not cross behind a bus or directly in front of a bus (within 10 feet of the front).

### 4. Learn how to cross a street safely.

- Stop at the curb, or the edge of the road.
- Stop and look left, then right, then left again, before you step into the street.
- If you see a car, wait until it goes by. Then look left, right and left again until no cars are coming.
- If a car is parked where you are crossing, make sure there is no driver in the car. Then go to the edge of the car and look left-right-left until no cars are coming. Keep looking for cars while you are crossing, and remember, walk. Don't run.

See Appendix O—Order Resources for more walking and biking safety resources.

Source: *Cyrus the Centipede's Pedestrian Safety Program*. National SAFE KIDS Campaign. Washington, D.C.



# Appendix X

## X marks the Spot: School Location Matters

The location of a school within the community it serves dramatically affects the ability of students to walk and bike to the school. Obviously, schools located far from school students' homes require students to take a school bus, city bus or be driven there in an automobile. In many, many schools, traffic congestion around a school at the beginning and end of the school day presents serious safety hazards for children entering and leaving cars, as well as for motorists who often end up backed up on adjoining roadways.

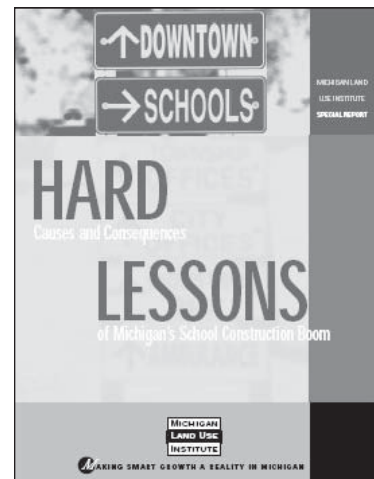
A nationwide trend has been to build schools in surrounding rural areas, sometimes so remote that busing or driving the majority of students becomes the only option. This trend too often results in isolating students from their school. Trails, pathways and sidewalks that connect the school to population centers are essential if it becomes necessary to construct a new school or school campus.

Many times the construction of a remote school coincides with the closing of neighborhood schools that are in need of repair or located in areas of declining population. When a school closes a vital community resource is lost, and a vicious cycle of blight and further loss of neighborhood can ensue. Historically, schools have been centers of community life, providing citizens of all ages access to a variety of after-school opportunities such as adult education, youth clubs, and family services. As schools close, community life is negatively impacted.

A new trend is emerging: community members and leaders are realizing the economic and social benefits of renovating existing neighborhood schools located close to population centers. By keeping neighborhood schools alive when possible, students (and community members) continue to enjoy the benefits of a nearby school, including being able to walk and bicycle to the school.

In 2004, the Michigan Land Use Institute (MLUI) published a special report titled, "Hard Lessons: Causes and Consequences of Michigan's School Construction Boom." The report concludes with 10 recommendations to make Michigan schools places that school children can walk and bicycle to.

Safe Routes to School team members are encouraged to obtain a copy of the report by visiting the MLUI website, [www.mlui.org](http://www.mlui.org), or contacting the MLUI office at (231) 882-4723. SR2S teams can learn how school location decisions are made and how to become involved in decision-making locally by reading the report. Also visit the Safe Routes to School website at [www.saferoutemichigan.org](http://www.saferoutemichigan.org) to keep abreast of changing policies affecting school location.



# Appendix Y

## Your Role in Safe Routes to School

Every school community is unique. Safe Routes to School team composition and roles reflect the character and needs of the community. Teams may want to use this appendix as they think about the tasks that are most important in their community and which team member is the right person to tackle that task. The “Who’s Missing Checklist” in the SR2S Team module is a quick way to see if the team has the community representation necessary. The following description of roles focus on necessary roles once the team has formed and is beginning activities such as Walk to School Day, surveying parents and students, conducting the route safety assessment, and developing the action plan.

### SR2S Champion

It is essential to have a SR2S champion. This person is passionate about SR2S and determined to advance SR2S objectives. They are often the lead spokesperson for the initiative and should be comfortable talking about SR2S when asked to do so. Their passion galvanizes the school community and inspires citizens and community leaders to join the Safe Routes to School movement.

### SR2S Team Leader

It is essential to have a SR2S leader. This person is an organizer and makes sure that the team meets regularly and that members are kept informed of activities. They may or may not be the same person as the SR2S champion, since the skills needed for these two roles are quite different. The team leader is critical to making sure that planning and follow-up occurs. It is great to have co-leaders who can share this job.

### Team Members

It is essential to have a SR2S team. Team members share the fun and challenge of creating safe routes to school and increasing the numbers of students that use them. Team member roles depend largely on the community setting, as well as on information learned from surveys and the route safety assessment (i.e., walking and/or biking audit).

Community characteristics and possible team member roles include:

- Traffic congestion and safety hazards in the school parking lot:  
Person to work with school district if parking lot needs to be modified
- Parents afraid to let children walk or bicycle to school:  
Person who understands parent concerns and can organize education and encouragement activities such as the walking school bus
- School located on or near a Michigan state highway:  
Person to work with Michigan Department of Transportation
- Students not using safe walking and bicycling practices when walking and biking to school:  
Person who understands how to work with children to create behavior change
- Traffic volume and speed create safety hazards around the school:  
Person to work with local road authority that controls the road
- Community leaders not aware of SR2S initiative and safety hazards for children walking or bicycling to school:  
Person who knows how to develop community awareness and has effective media relation skills

Recruit team members based on the walking and biking safety needs of your school community!

# Appendix Z

## Zebra Stripes and Other Easy Fixes

Zebra stripes to increase the visibility of a pedestrian crosswalk are an example of a low-cost safety improvement that is easy to accomplish. As such, zebra stripes are an “easy fix.”

### NOT EVERYTHING IS EASY

Before giving more examples of easy wins, it is important to mention that not all improvements are easy and difficult “fixes” may be absolutely essential for safe walking and biking to school. A change may be more difficult to make because it requires securing funding, takes more time to study and resolve, and/or requires educating decision makers as to why the change is needed.

Difficult problems that impact safety must be tackled. However, it is often easier to tackle difficult problems after some easier fixes have become visible to the wider community and there is a strong base of support. The following examples of easy fixes can be incorporated into a SR2S action plan as short-term objectives.



Photo courtesy of Governor's Council on Physical Fitness.

### EXAMPLES OF EASY WINS

#### Education

1. Work with the Coordinated School Health Team (CSHT) on Safe Routes to School activities. Share SR2S resources with the CSHT (see the materials mentioned below) and ask to have a representative from Safe Routes To School on their team.
2. Use SR2S pedestrian and bicycle safety materials (e.g., Michigan SAFE KIDS materials and Bicycle Safety Lessons) and ask school staff if they can be incorporated into the curriculum. Physical education, health, and safety grade level expectations may be met by these lessons. Information on these resources is located in Appendix O—Order Resources for SR2S.
3. Organize a SR2S assembly and include skits on good nutrition and sun safety.

#### Encouragement

1. Conduct Walk to School Day and start a Walking School Bus (see “Walk to School Day Ideas” in the Walk to School Day Module).
2. Involve older (middle school and high school) students in activities to encourage safe walking and bicycling to school.
3. Reward parents who follow the school's drop-off and pick-up rules.

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# Appendix Z

## Zebra Stripes and Other Easy Fixes, cont.

### Enforcement

1. Be sure to have a representative from the local law enforcement agency on the SR2S team.
2. Hand flyers to parents during drop-off and pick-up times that explain the “educate, warn, ticket” approach the SR2S team is taking. Note: proper signage must be in place (e.g., no stopping standing or parking).

Ask all team members and other volunteers to help monitor the drop-off and pick-up areas during this campaign.

Coordinate with the police department so that an officer is available for ticketing during that period. Tell parents in the flyer why their compliance is essential for student safety. Warn repeat offenders. Ticket those who continue to ignore rules.

3. Find out who provides crossing guards at your school. Obtain as many guards as needed, if possible. Ask to help train guards, who are required to attend training, so they know about SR2S.

### Engineering

1. Request zebra stripe crosswalks where students cross.
2. Change the timing of pedestrian signals at intersections students use, so there is plenty of time for children to make it across the street.
3. Install signs and paint curbs to designate where motorists may stop and drop-off or pick-up students. Do the same thing for bus drop-off and pick-up areas.