



# Safe Routes to School

A Catalyst for Building Partnerships  
and Leveraging Resources





## Introduction

In 1969, according to the National Household Travel Survey, approximately 50 percent of children in the United States got to school by walking or bicycling.<sup>1</sup> By 2001, the numbers had plummeted with only about 15 percent of students traveling to school by walking or bicycling.<sup>2</sup> Over the past 40 years, rates of obesity have soared among children of all ages in the United States, and now approximately 25 million children and adolescents – more than 33 percent – are either overweight or obese.<sup>3</sup>

The increasing trend of driving children to school has implications for public health and safety. Fortunately, early results from Safe Routes to School (SRTS) programs being implemented throughout the country with new federal funds show that SRTS can be a catalyst for building partnerships, policy changes and leveraging resources that will provide long-term positive implications for improving safety and community health.

## Congress Approves Funding for Safe Routes to School

Concerned by the long-term health and traffic consequences of the decrease in walking and bicycling to schools, the U.S. Congress approved \$612 million in August 2005 for state implementation of SRTS programs. Section 1404 of SAFETEA-LU, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, is the authorizing provision for the legislation.

Each state and the District of Columbia is receiving a minimum of \$1 million/year through September 2009 and is charged with hiring a full-time SRTS Coordinator to build a state program that gets more children to walking and bicycling to schools safely. Each state must spend between 10 and 30 percent of their funds on non-infrastructure activities including encouragement, public awareness, enforcement and educational programs. In addition, 70 to 90 percent of the state funds must be spent on infrastructure near schools such as sidewalks, bike lanes, pathways and traffic calming activities.



As of the release of this report, all states have appointed a SRTS coordinator to manage the program in conjunction with the state Department of Transportation, and all states have now released at least one call for applications for the federal funding.

**See [www.saferoutespartnership.org](http://www.saferoutespartnership.org) for website links to each state's SRTS program.**

<sup>1</sup> Transportation Characteristics of School Children, Report No. 4. Washington, DC: Nationwide Personal Transportation Study, Federal Highway Administration, July 1972. Available at: [www.fhwa.dot.gov/ohim/1969/q.pdf](http://www.fhwa.dot.gov/ohim/1969/q.pdf)

<sup>2</sup> Travel and Environmental Implications of School Siting. U.S. Environmental Protection Agency, 231-R-03-004: 2003. Available at: [www.epa.gov/livability/school\\_travel.htm](http://www.epa.gov/livability/school_travel.htm)

<sup>3</sup> Obesity Still a Major Problem, National Center for Health Statistics, Centers for Disease Control and Prevention, April 14, 2006. Available at: [www.cdc.gov/nchs/pressroom/06facts/obesity03\\_04.htm](http://www.cdc.gov/nchs/pressroom/06facts/obesity03_04.htm)



## The 5Es and Building Community Partnerships

Safe Routes to School programs are built on collaborative partnerships among school personnel, elected officials, engineers, police officers, city planners, parents, students, non-profit organizations, and other community leaders. Due to the collaborative nature of SRTS, the program is leveraging community resources and long term policy changes that benefit the built environment and hold the promise to increase physical activity and public health.

Since SRTS programs are unique to the particular community in which they operate, the most successful programs bring together community stakeholders to create a “team” that devises a location-specific program for how to integrate the 5Es for Safe Routes to School, which include: Evaluation, Engineering, Education, Encouragement, and Enforcement. Each of these is described briefly below:

### Evaluation

In order to assess the effectiveness of a SRTS program, data is collected before and after interventions to monitor and document the outcomes and trends, ideally at the beginning and end of each school year. Find sample parent surveys and student tallies through the National Center for Safe Routes to School’s website: <http://www.saferoutesinfo.org/resources/index.cfm>.

### Engineering

SRTS programs often organize “walkabouts” so that parents and children can join city engineers, school staff and police officers in walking or bicycling the routes to school and identifying everyday problems that students encounter. Operational and physical changes to the built environment surrounding schools are then planned and implemented, such as reducing speeds and potential conflicts with motor vehicle traffic, and establishing safer and fully accessible crossings, walkways, trails and bikeways.



### Education

To improve safety and encourage physical activity, SRTS programs recruit trained adults to teach children about the broad range of transportation choices, instruct them in lifelong walking and bicycling safety skills, and launch driver safety campaigns in the vicinity of schools. The federal SRTS program also allows for instruction about the health and environmental outcomes that relate to our transportation choices.

### Encouragement

Families are busy, and it’s often hard to make a change in daily routines. However, many parents are willing to let their children participate in special events, such as “Walk and Bike to School Days” and this often leads to enthusiasm for long-term programs. SRTS programs create events and activities to promote walking and bicycling, and inspire parents and kids to become physically active on the way to school. Go to [www.saferoutesinfo.org](http://www.saferoutesinfo.org) for more sample activities.

### Enforcement

SRTS programs partner with local law enforcement to ensure that traffic laws are obeyed in the vicinity of schools. Enforcement can also include initiating community programs such as stationing crossing guards at busy corners to help children cross the street, or installing speed reader signs or trailers.



## Program Description

The Avondale, Arizona Safe Routes to School program began in the fall of 2005. The comprehensive program serves 16 schools and is managed by the City Engineer. Avondale received \$45,000 in federal SRTS funds in Arizona's Cycle 1 in Spring 2007 for a non-infrastructure grant to provide an education and encouragement program at elementary schools citywide. This is a joint grant with the City of Goodyear for a total of 20 area elementary schools, as school districts overlap in both cities. In Arizona's Cycle 2, announced in April 2008, the City of Avondale received an infrastructure grant of \$219,746 for three elementary school crossings to receive traffic calming features. Using funds from the City of Avondale, the SRTS program also undertakes an annual comprehensive safety study, a report is developed by the end of each school year, and schools are picked on a rotating basis; for this process, personnel from the City and each school evaluate on-site traffic operations such as drop-off and pick-up procedures, observations of walking routes from surrounding neighborhoods, bicycling to and from school, and many other issues. The City hired a consulting engineering firm to provide professional services as part of the SRTS evaluation team.

## Leveraging Resources

Due to increased awareness and program effectiveness, Avondale has seen support increase for SRTS initiatives in the City. The SRTS program has garnered additional government funding through a \$12,000 Transportation Enhancement Program grant from the Arizona Department of Transportation for a Pedestrian Safety Education Program to fund a mobile pedestrian signal and crosswalk, and a \$60,000 design assistance grant from Maricopa Association of Governments to fund the design of missing sidewalk links along a safe walking route for Garden Lakes Elementary School.

Community support has also helped leverage resources in the form of donations for special events. Specifically, the Healthy Avondale program has donated funds, prizes, healthy snacks, flyers, handouts, free giveaways, and staff time toward SRTS initiatives and efforts to increase physical activity among school children.

## Catalyst for Building Community Partners

The Avondale SRTS program has received support from a wide variety of partners throughout the local community. Elected



officials have supported budgets to continue SRTS engineering studies. The Police Department helps present at school pedestrian assemblies and assists with bicycle safety events. St. Joseph's Hospital Barrow Neurological Institute has been an on-going supporter of the City's SRTS program, attending many safety events to help teach the "Helmet Your Head" message. Inspired by SRTS, the Phoenix Children's Hospital also recently offered the Kids Rock Stars program as a tool to help encourage physical activity by starting mileage clubs where participants track the number of miles that they walk and bicycle. The local YMCA and the City's P.L.A.Y. after school program have also participated in SRTS by holding safety assemblies, and promoting International Walk to School Day. Some schools are now beginning to expand their programs into walk-and-bicycle to school events on a monthly basis. One homeowner's association has supported additional work and grant applications for multiple aspects of safety improvements surrounding a neighborhood elementary school.

## Outcomes

SRTS has served as a catalyst in the City of Avondale for generating community support for increased physical activity and safety. Organizers of the program report that SRTS provides a way to rally residents behind a community solution, and to educate neighborhoods as a whole, rather than addressing isolated concerns individually. A baseline study was done, and Avondale anticipates a change in mode shift as neighbors see more students walking. City officials look forward to continuing education, encouragement and enforcement efforts, and to raising the funds necessary to implement the infrastructure improvements that have been recommended through the City's safety studies. Avondale plans to raise funds through more SRTS grant applications, transportation enhancement funds, and CMAQ grants. SRTS is also being added to future Capital Improvement Program projects, which shows the ability of SRTS to inspire policy change.



## Program Description

Miami-Dade County (MDC) has one of the highest incidence of pedestrian injuries and fatalities in Florida. In 2001 a multidisciplinary team of professionals under the leadership of the University of Miami Miller School of Medicine (UMMS)/ Jackson Memorial Hospital's Ryder Trauma Center (RTC) came together to study pediatric pedestrian trauma. As a result the team created WalkSafe™, an elementary school based pedestrian injury prevention program. The primary aim of the program is to increase traffic safety knowledge among children in order to reduce the number of injuries and fatalities. The secondary goal is to increase physical activity and encourage more children to walk to and from school safely.

The WalkSafe™ program has undergone many phases of development and evaluation in order to study "high risk" districts, where more children are injured as pedestrians and are faced with the rising epidemic of childhood obesity. WalkSafe™ received SRTS non-infrastructure funding for 2007 (15 schools) and 2008 (20 schools) to implement its educational curriculum and encouragement program. These components of the SRTS program are intended to provide the tools and opportunities for children to learn street crossing behaviors and practice them safely. The WalkSafe™ three-day educational curriculum is scheduled following the International Walk to School Day activities. Pedestrian safety videos complimented with teacher-lead discussions are shown to children on the first day. An outside simulation on the second day provides modeling and training by a physical education or classroom teacher. This enables the children to be active, while reiterating traffic safety skills through a hands-on experience. The final day involves having each child participate in a poster contest, thus providing a creative way for children to demonstrate what they have learned.

These non-infrastructure SRTS projects are matched by infrastructure funding allocated to complete engineering modifications at the targeted elementary schools in MDC. The engineering modifications are similar to those previously completed by WalkSafe™ in 46 schools, which include: new street signage for pedestrians, repaint pavement markings, new flashing signals, relocation of speed and loading zones, street maintenance, relocation of signals and crosswalks and others.

## Leveraging Resources

Over the years WalkSafe™ has been sponsored by UMMS/RTC and funded by multiple agencies such as The Florida Department



of Health, Florida Emergency Medical Services(FEMS), The Florida Department of Transportation, SRTS and Transportation Enhancement funds, FedEx, and The Children's Trust. The federal SRTS funds have assisted the WalkSafe™ team in focusing on specific high risk districts, allowing for additional momentum and support for their goals of reducing pedestrian injuries and deaths and increasing daily physical activity levels among elementary school age children.

## Catalyst for Building Community Partners

Through the use of SRTS funds WalkSafe™ is able to collaborate with multiple community agencies on the emphasis of both pedestrian safety and health concerns. WalkSafe™ staff have developed relationships with parents, teachers, and administrators. The WalkSafe™ program has gained support through its endorsement by the Miami-Dade County Public School Board, and as an active member of the Community Traffic Safety Team and Consortium for Healthier Miami-Dade. Team members present at health and safety fairs, and meet with policymakers and stakeholders.

## Outcomes

The WalkSafe™ educational curriculum was mandated by the MDC Public School Board in 2003, a notable policy change. The WalkSafe™ 'train-the trainer' curriculum is offered annually to the physical education teachers and assistant principals from all 232 elementary schools. In addition, the WalkSafe™ program educated approximately 118,000 students and 4,520 teachers at 180 schools in the 2007-2008 school year, utilizing SRTS federal funds. As a result, the Safe Routes to School program has made a significant impact and has contributed to decreasing pedestrian injuries and fatalities in Miami Dade County. From 2001 to the present, there has been a 41% decrease in the total amount of pedestrian injuries for children aged 0-14 in Miami Dade County, and crash rates continue to decline at a faster rate than in neighboring counties.



## Program Description

The Safe Routes to School program in Knoxville, Tennessee began in 2005 and is managed by the Knoxville Regional Transportation Planning Organization and Knox County Health Department. Between 2005 and 2007, annual Walk Our Children to School Day events were taking place at multiple schools and additional events took place at the two schools where a SRTS program was established. In 2007 the Tennessee Department of Transportation (TDOT) announced the first round of applications for federal funding. One of the two Knoxville schools that applied for funding in 2007 was approved for a grant; Beaumont Elementary will receive \$250,000 to repair a sidewalk gap, install several raised crosswalks, additional signage and striping projects, and implement educational and encouragement programs. As of May 2008, the City of Knoxville was in the process of finalizing its contract with TDOT for this grant.

## Leveraging Resources

The Knoxville program has leveraged local financial support in the form of spending by local governments to address safety concerns at several Safe Routes schools. For example, in 2006, at Beaumont Elementary, in response to safety concerns, the Knox County Engineering and Public Works Department striped a pedestrian pathway along the side of the school. They also placed a bollard in one of the vehicle access points to the parking lot to make it a pedestrian/bicycle-only access point, and they installed barriers along the edge of the striped pedestrian pathway to prevent people from driving or parking motorized vehicles in it. The Transportation Planning Organization and Knox County Health Department have also both provided small amounts of funding for encouragement programs and events at selected schools.

## Catalyst for Building Community Partners

Traffic safety concerns are probably the biggest factor garnering the support of parents in the Knoxville area. Knox County schools provide busing only to families that live outside of the “parental responsibility zone”, a 1-mile radius around elementary schools and 1.5 miles around middle and high schools. Few schools in Knoxville have a complete network of sidewalks on surrounding streets, and many schools in the region have few if any neighborhood sidewalks. At the schools with major roads nearby, the general lack of safe crossings makes those roads barriers to



walking or bicycling to school. Health issues are a growing area of concern, as the Knox County Health Department has found that 40 percent of students in Knox County schools are either overweight or obese.

The Knoxville SRTS program includes parents, representatives from the Knoxville Police Department, Knoxville Engineering Division and Knox County Engineering and Public Works Department. The Knox County Health Department is one of the organizing groups for the program, and Health Department staff help organize meetings and encouragement activities. Knoxville SRTS program committees consider programs and projects for each school’s program and then draft applications for funding. Local police and engineering staff are also involved in SRTS programs by assisting with evaluating conditions at the schools and with implementing programs.

In addition, the buy-in from school administrators and parent-teacher organizations has helped with every aspect of Knoxville’s Safe Routes to School programs.

## Outcomes

The 2005-2007 Walk Our Children to School Day events set the stage for school, community and City buy-in to collaborate and apply for federal SRTS grant money. Once the City of Knoxville receives authorization from TDOT to proceed with their SRTS grant, most likely in the summer of 2008, the SRTS program will organize regular Walk and Bike to School Day events at the participating schools, along with additional speeding enforcement actions and all of the other non-infrastructure elements of the 5E’s Safe Routes to School grant. The City of Knoxville will also begin implementing approved infrastructure projects at that time, to make changes to the built environment.



## Program Description

The Safe Routes to School program in Bozeman, Montana started with a pilot program at Emily Dickinson Elementary. In October 2006 the school conducted its first Walk to School Day, and in December 2006 the school's SRTS Task Force collaborated and wrote a SRTS grant for the school. In 2007, Emily Dickinson Elementary was awarded a grant for \$31,370 for non-infrastructure and \$24,952 for infrastructure from Montana's federally-funded SRTS program. Some of the infrastructure projects include signage and speed sentry radar units to monitor speeds on adjacent streets. The non-infrastructure money is being spent on education, encouragement and enforcement programs.

## Leveraging Resources

Excitement in the community for leveraging additional funding began with Emily Dickinson Elementary's success in securing the federal SRTS grant. As a result, in 2007 the City of Bozeman agreed to help support a SRTS Assessment Project for all six elementary schools as well as one new elementary school currently being planned. This additional \$20,000 in funding was approved unanimously by the Bozeman City Commission. Additional funds throughout the community were also committed in a show of support for the Safe Routes to School goals of improving safety and health, and reducing traffic. The Bozeman Area Bicycle Advisory Board elected to fund an additional \$9,730, the Montana Nutrition and Physical Activity Program supported a Community Workshop by providing \$1,500, the Downtown Tax Increment Finance Board contributed \$3,975, and private donations totaling \$4,125 from the community were raised to complete the needs assessment project for all seven elementary schools.

The City of Bozeman also provides in-kind assistance through grant management by the Police Department, and through the initial purchases of necessary traffic enforcement items. Additional in-kind contributions in the form of installation and maintenance of speed sentry units by the City of Bozeman Street Department personnel have also been pledged.

## Catalyst for Building Community Partners

The Bozeman 2020 Growth Policy cites walkability as one of its goals to create a more livable Bozeman - a community where children can walk and bicycle safely is also a community where everyone can travel safely in the public right-of-way. Therefore,

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*"This grant was the first for Bozeman, but has led to several other schools applying for similar grants for the next school year, with a similar focus on integrating safety into the schools' weekly curriculum, encouraging walking, biking and wheeling to school and giving the students an exciting way to learn and develop good habits at an early impressionable age... **this program has been an incredible success for Bozeman.**"*

*- SRTS Program Grant Manager*

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SRTS helps move the community as a whole closer to this goal. The School District Wellness Advisory Council added SRTS to their list of strategic goals for the School District, and the School District fully endorsed SRTS. Also, the School Board approved a transition plan towards neighborhood schools, in part, to support children walking and bicycling to school, representing a policy change that SRTS helped to catalyze. All of the partners that provided matching funds for the project were catalyzed through the federal SRTS program.

## Outcomes

The SRTS Assessment Project resulted in six School Improvement Plans (SIP - [www.altaprojects.net/bozemanschools](http://www.altaprojects.net/bozemanschools)) as well as parent maps highlighting current recommended walking routes. The Project has been instrumental in gaining additional support from individual school principals to form teams and pursue future federal SRTS grant funding as well as a district-wide bicycle and pedestrian safety education program for all students. This policy achievement will ensure that all students will have the chance to receive traffic safety instruction at an early age. Another recommendation from the School Improvement Plan is for the City to pursue the possibility of adding selected infrastructure projects identified in the SIP to the City's Capital Improvement Plan, an important policy achievement catalyzed by SRTS efforts. Bozeman's SRTS Assessment Project has raised the awareness level in the community, formed partnerships, achieved multiple policy changes, and created a blueprint for moving forward and sustaining this community-wide SRTS project.

# Conclusion



Safe Routes to School programs are serving as a catalyst for building community partnerships and leveraging additional resources, as the case studies from Avondale, AZ; Bozeman, MT; Knoxville, TN; and Miami, FL demonstrate. SRTS programs are resulting in the implementation of infrastructure improvements that close gaps in the non-motorized transportation network. Coupled with traffic safety education and enforcement, this results in opportunities for safe physical activity that generates enthusiasm within communities for more walking and bicycling.

The \$612 million that the federal government allocated for SRTS in August 2005 is proving to leverage additional resources in the form of staff time from existing city, county and school personnel, as well as in-kind services and donations from non-profit and civic organizations. The program is also inspiring local governments and community organizations to dedicate discretionary funds toward SRTS projects from local, state and federal sources.

Additionally, local SRTS programs are documenting a huge demand for community programs and improvements to the built environment. Many states are reporting that they are receiving funding requests that are more than five times greater than the available funds. Through the development of community safety

plans and school travel plans that are emerging from local SRTS efforts, we expect that requests for SRTS funding will continue to grow in the coming years.

Because city and county governments are run separately from most school districts, with different governing bodies for each, the actions of one jurisdiction are often not coordinated with the others. SRTS programs, however, bring together municipal and school leaders to create mutual goals that improve community health, and rely on the resources of volunteers, such as parents, students and advocacy organizations. The collaborative nature of SRTS programs is thus helping to reframe community priorities so that children's health and safety is topping the list. Through SRTS programs, agencies, organizations and community members that have rarely worked together in the past are now joining forces to improve their neighborhoods and the health and safety of their children.

Safe Routes to School is an effective federal program that fosters unique agency collaborations and generates strong community volunteerism and support. By bringing people together from diverse perspectives, SRTS is leveraging additional resources to develop built environment, planning and policy changes that are improving community health and safety.

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