



# Safe Routes to School

Increases Physical Activity  
and Improves Health



# Introduction



Physical inactivity and childhood obesity are at crisis proportions in America. Over the past 40 years, rates of obesity have soared among children of all ages in the United States, and approximately 25 million children and adolescents—more than 33%—are now overweight or obese.<sup>1</sup> The Surgeon General and the American Heart Association recommend that children and adolescents participate in at least 60 minutes of moderate to vigorous physical activity every day; yet, the activity level of more than 1,000 children dropped sharply between age nine and age fifteen, when most failed to reach the daily recommended activity level, according to the latest findings from a long-term study by the National Institutes of Health.<sup>2</sup> Combine this with the startling fact that physical education classes in school are getting fewer and farther between; Illinois is now the only state that has mandatory physical education classes for children grades kindergarten through twelve.<sup>3</sup>

These frightening trends are what Safe Routes to School programs work to reverse. 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 Safe Routes to School (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.

Every 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 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.

Developing close collaborations with state and local health departments and community partners is critical to the success of Safe Routes to School. Many state and local departments of



A family participates in Walk and Bike to School Day in Eau Claire, Wisconsin school.

transportation are not familiar with implementing community-based programs that encourage physical activity and behavior change; therefore, partnerships with public health officials and local community partners are critical to ensure that state SRTS programs are successful. It's also important that alterations are made to the built environment to encourage safe, active transportation.

The following four case studies showcase local communities that have successfully incorporated SRTS as a way to improve public health, and have institutionalized SRTS at select schools. Aspects of these case studies also address how health professionals are getting involved with SRTS efforts, how federally mandated Wellness Councils could be involved, and how these types of collaborations could be increased in the future.

<sup>1</sup> "Obesity Still a Major Problem." National Center for Health Statistics, Centers for Disease Control and Prevention, 14 April 2006. Available at [www.cdc.gov/nchs/pressroom/06facts/obesity03\\_04.htm](http://www.cdc.gov/nchs/pressroom/06facts/obesity03_04.htm).

<sup>2</sup> ScienceDaily, Children's Physical Activity Drops from Age 9-15, Study Indicates, 16 July 2008, The National Institutes of Health, <http://www.sciencedaily.com/releases/2008/07/080715161927.htm>.

<sup>3</sup> Smith, Emily, American's kids are more inactive than ever, The Partnership for a Walkable America, <http://www.tfhr.gov/safety/pedbike/articles/inactive.htm>.

<sup>4</sup> ScienceDaily, Children's Physical Activity Drops from Age 9-15, Study Indicates, 16 July 2008, The National Institutes of Health, <http://www.sciencedaily.com/releases/2008/07/080715161927.htm>.

<sup>5</sup> TV-Free America, Television & Health, <http://www.csun.edu/science/health/docs/tv&health.html>.



## Program Description

Benton County's Safe Routes to School program is located in the Willamette Valley in rural Oregon. The population of the county is approximately 80,000. Three school districts (Corvallis, Philomath and North Albany) within the county have been actively participating in SRTS since 2003. The Benton County SRTS program was initiated by the Benton County Healthy Weight and Lifestyle Coalition, which was supported by the Benton County Health Department's Health Promotion Unit. The coalition began by coordinating Walk to School Days in both the Corvallis and Philomath School Districts. In the 2007-08 school year, Corvallis School District, Benton County Public Works, and Philomath School District received SRTS funding through the Oregon Department of Transportation SRTS federal program for both non-infrastructure and infrastructure projects totaling \$183,089. The Corvallis School District contracted with Benton County Health Department to coordinate the SRTS education and encouragement components with Health Promotion Unit staff and interns, and the Philomath School District hired a half-time SRTS coordinator through the school district.

## Integrating SRTS into Health

The SRTS program and the promotion of walking and bicycling to school are written into the Corvallis School District's wellness policy administrative rules developed in 2007. The district's wellness council has also developed goals and objectives for their 2008-09 Action Plan, which includes SRTS in the "physical activity before and after school" section. Promotion of walking and bicycling to school is part of the Wellness Council's new "Great Start" Initiative, to be implemented in the fall of 2008. Members of the SRTS Taskforce participate on the 20-member Wellness Council, including the Corvallis Transportation Bicycle and Pedestrian Coordinator, Benton County Health Promotion Unit staff, and Benton County School-Based Health program staff. The Philomath School District completed its School Wellness Policy Program and is currently working on administrative rules that will include SRTS.

## Institutionalizing SRTS

The institutionalization of SRTS can be seen through the Benton County Health Departments convening of a SRTS Taskforce. Members of the Taskforce have grown to include city and county transportation officials, law enforcement, school district facility staff, bicycle advocates, school nurses, public health and city council members, and city managers. Another strong indication

is the formation of the governmental Benton County Healthy Active Community Environment workgroup, made up of county department directors including Public Works, Public Health, Community Development, Parks and Open Spaces, and Sheriff's department. The workgroup received \$45,000 from county general funds to support environmental and policy changes to improve the health of Benton County residents for the last three and half years. The SRTS project has been one of the group's primary objectives.

## Outcomes

To date, Benton County's SRTS program has been focusing on collecting baseline information, building capacity and encouraging physical activity. The Oregon Department of Transportation-funded SRTS parent surveys and student travel surveys will be available in the 2008-09 school year for comparison to the prior year. SRTS program staff have been able to collect baseline body mass index data from the Corvallis School District Tobacco Prevention Education Prevention coordinator. Benton County Health Department has been the leading force in supporting the growth and expansion of SRTS and in building capacity among community partners through organization, coordination, and funding of the program. It has leveraged funding to support SRTS capacity building through private foundation grants, CDC Obesity Prevention funding, and local county general funds. It has used these resources to hire Oregon State University students to help coordinate the project for the last three years. In addition, Benton County staff has provided technical support to local schools to help them prepare and apply for future Oregon SRTS funding to sustain the program.



A Walking School Bus poses at school in Philomath, Oregon



## Program Description

Eau Claire's SRTS program, *Safe STEPS* (Safe Student Transportation – Every Possible Solution), is managed by the Eau Claire City/County Health Department. The City of Eau Claire has a population of 63,000 residents, and has grown to include many industrial and commercial areas. Some elementary schools are located along major highways and rural areas, but most are within residential neighborhoods, providing excellent opportunities for schoolchildren to walk and bicycle to school.

The *Safe STEPS* program began in 2002 and serves the Eau Claire Area School District (13 elementary schools, three middle schools, and two high schools). *Safe STEPS* received federal SRTS funds to plan for SRTS at the middle school, and co-wrote the infrastructure grants for the City of Eau Claire. *Safe STEPS* partners bring the expertise from their fields to help promote bicycling and walking to school. In addition to school principals, *Safe STEPS* coordinators and parents, *Safe STEPS* partners include people ranging from school nurses to student transit staff to public works staff.

The *Safe STEPS* workgroup was established in December of 2003. Each year, from October through April, the workgroup analyzes the data collected at each school from the SRTS surveys and plan for the next round of surveying. Workgroup members also advocate for infrastructure changes that improve street conditions for walking and bicycling to school. Then each year from May through September, the workgroup focuses intensively on schools that are establishing SRTS programs for the first time.

## Integrating SRTS into Health

Managed by the Eau Claire Health Department, *Safe STEPS* collaborates with school health and wellness programs to promote safe walking and bicycling practices for children and to encourage healthful snacking and meals for students. *Safe STEPS* also partners with the Safe Kids Coalition. Additionally, individual schools have wellness policies that refer to the school's SRTS program to encourage active transport to and from school. Three schools in Eau Claire are currently affiliated with the Alliance for a Healthier Generation's Healthy School program.

## Institutionalizing SRTS

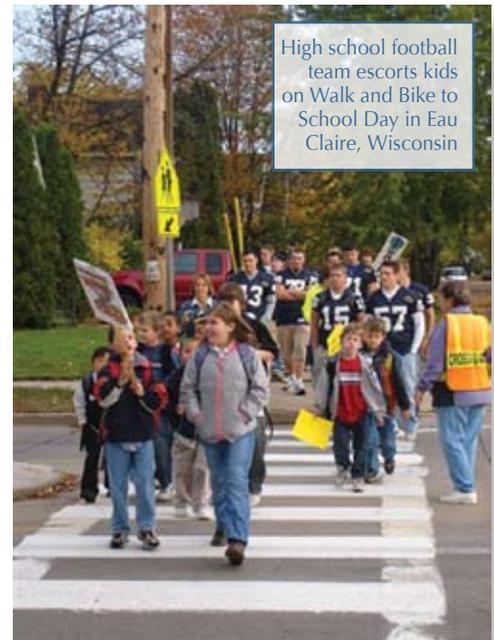
SRTS is being institutionalized in Eau Claire at many different levels. The Police Department and School District manage and pay for a student and adult safety patrol program to improve walking and bicycling safety. Additionally, the city's public

works' budget is used to make infrastructure improvements, and SRTS maps are used to plan infrastructure improvements within the City of Eau Claire. At the Health Department, office space and other resources are allocated for *Safe STEPS*. Each

school participating in a SRTS program contributes school funds to support their program. Overall, many different community and government partners have been extremely supportive of the *Safe STEPS* program in Eau Claire, which has significantly assisted in institutionalizing SRTS.

## Outcomes

Eau Claire's best gauge to measure health outcomes to date has been the level of participation in SRTS programs, and the corresponding increase in physical activity. For example, as part of their participation in the SRTS program, local schools participate in International Walk and Bike to School Day. This is the fifth year that Eau Claire has participated in the event. The first year, four schools (500 students) participated; this has now grown to nine schools (3,000 students) in 2007. Annual surveys are conducted at each school asking parents to respond to issues surrounding students' commutes to school. Results have led to better mapping, improved routes, increased bicycle parking, and better use of the student and adult crossing guards, thus contributing to an increase in walking and bicycling to school.



High school football team escorts kids on Walk and Bike to School Day in Eau Claire, Wisconsin



## Program Description

The Coconino County Health Department was awarded a \$39,000 Safe Routes to School (SRTS) federal grant for non-infrastructure activities in September 2007. The program, *Walk. Bike. Get Fit.*, focuses on two Title I elementary schools in Flagstaff, Arizona - Thomas and Kinsey Elementary Schools. Flagstaff is a small Arizona city with a population of roughly 50,000. *Walk. Bike. Get Fit.* addresses education, encouragement, and enforcement through classroom instruction on the benefits of alternative transportation and safety, a monthly punch-card incentive program, and personal as well as classroom fitness goals. All areas of the County Health Departments SRTS program are interactive and meet state health standards.

## Integrating SRTS into Health

The Coconino County Health Department SRTS program collaborates closely with other county programs, including Promoting Lifetime Activity for Youth, Building Better Bones, and the Arizona Nutrition Network. These three programs encourage and promote physical activity and proper nutrition through classroom-based lessons and activities. SRTS has also been integrated into health education at the school through *Walk. Bike. Get Fit.*'s development of classroom curriculum for the third through sixth grades on the benefits of alternative transportation. The curriculum meets the state academic standards in many areas, including health (measuring heart rates, pedestrian and bicycle safety, benefits of walking/bicycling), science (air pollution, energy usage), math (estimating distance, addition, multiplication), and geography (plotting/measuring distances on maps).

The Wellness Council for Flagstaff Unified School District was established two years ago. The focus of the council has been on

providing healthy food choices at lunch and in vending machines in schools. The physical activity portion has not been phased in yet; *Walk. Bike. Get Fit.* will be involved when this process begins.

## Institutionalizing SRTS

SRTS is becoming institutionalized through the establishment of double fines for speeding in school zones within Flagstaff city limits. *Walk. Bike. Get Fit.* has collaborated with many agencies including the Flagstaff Police Department, City of Flagstaff Traffic Commission, and Pedestrian Advisory Committee on increasing and enforcing double fines for speeding in school zones. During 2008, *Walk. Bike. Get Fit.* staff diligently petitioned the Flagstaff Police Department and court system to adopt double fine enforcement, which was approved through Arizona State law in 2007.

SRTS has worked with SAFE KIDS Coconino County, SAFE KIDS Worldwide and Federal Express on walkability audits around schools and documenting the walking environment from a child's perspective. Additionally, the SRTS curriculum makes the important connection between a student's academic performance and their physical activity, which helps teachers recognize the value of SRTS and become supportive.

## Outcomes

At the start of the *Walk. Bike. Get Fit.* program, approximately 45 children reported they walked or bicycled to school at Kinsey Elementary School. At the conclusion of the 2008 school year, 110 children reported they walked or bicycled to school, a 144% increase. Kinsey Elementary School is unique in that the majority of its 448 students live five or more miles away from their school. Because these children cannot benefit from the exercise provided by walking or bicycling to school, SRTS staff, teachers, and the principal implemented an on-grounds walking program. The *Walk. Bike. Get Fit.* program has improved student health through its encouragement and incentive program. Coconino County Health Department staff monitor student progress throughout the school year, and have recorded an exponential increase in before - and during - school exercise.



Showing off their Walk and Bike to School Day t-shirts in Flagstaff, Arizona.



## Program Description

Garfield, New Jersey's Safe Routes to School (SRTS) program targets two schools, Woodrow Wilson #5 School and Roosevelt #7 School. Garfield, located less than twenty miles from New York City with a population of approximately 30,000, became involved in SRTS through the concern over the rise in childhood obesity. Recognizing this problem, the Garfield Health Department was inspired to create a community task force on childhood obesity in 2005. The task force soon led to a wider community health initiative called Garfield *F.U.N.* (Fitness, Unity, and Nutrition). *F.U.N.* works to build programs designed to promote activity in children with support from the Parks and Recreation Department, the Garfield YMCA, and the Garfield Boys and Girls Club. Garfield was one of the 29 recipients of 2007 federal SRTS funding through the New Jersey Department of Transportation.

## Integrating SRTS into Health

Garfield is using a combination of teacher-led and student-driven approaches to assist in integrating SRTS into health education. The *F.U.N.* initiative is supported by a strong and unique community partnership, which garnered \$18,000 in federal SRTS funding to support *F.U.N.* by launching "Get Up and Go." Get Up and Go is a series of curriculum-based SRTS activities that teachers use in their classrooms to teach students how to safely walk and bicycle to school. Developed in partnership with the YMCA of Garfield, *F.U.N.*, Bike New York, the Partnership for Community Health, Inc., and the NJ Department of Transportation, Get Up and Go features writing and math activities as well as puzzles, interesting facts, and web resources designed to teach lessons on bicycle and pedestrian safety, physical fitness, traffic safety, and student security issues.

SRTS is further integrated into health education through the Summer 2008 RAMS (Ramapo and Meadowlands Survival) Camp that Garfield middle school students can elect to attend. An important component of the health education is lessons about the benefits of walking and bicycling as physical activity. Upon completion of the camp, student participants become peer mentors, with guidance from two middle school teachers, who also attend the summer fitness and nutrition program. In this student-driven program, camp participants then teach the nutrition and fitness activities that they learned at RAMS Camp, completely aligned with SRTS, to their classmates during the school year. This peer-mentoring concept is supported by the middle school principal as well as the school superintendent.

Health partners include Ramapo College of New Jersey Nursing Program, the Garfield School nurses, a local physician, Garfield health and physical education teachers, and the before school and after care education directors from the Garfield YMCA and the Garfield Recreation Center.

## Institutionalizing SRTS

Garfield has been extremely successful in institutionalizing SRTS at select schools and providing a mechanism to improve student and school health. In addition to being taught in the classroom, the "Get Up and Go" eight-part series of curriculum-based SRTS activities was featured in both *The Record* and *The Herald* newspapers in fall 2007. The "Get Up and Go" program not only helps students in Garfield, it is estimated that this special newspaper insert reached more than 30,000 students and their parents in the North Jersey area. Garfield also added a new partner, Rutgers 4 H extension through Rutgers University, and is presently working on a plan for a community gardening and nutrition project, which will combine physical activity and healthy lifestyle habits. These projects naturally align with SRTS, and provide opportunities to further institutionalize SRTS within the community.

## Outcomes

Garfield has been able to demonstrate success based on the increased participation in SRTS and all of the *F.U.N.* programs, including "Get Up and Go". The summer recreation program run by the City of Garfield has also implemented a fitness and nutrition program. It was Garfield's SRTS initiative, specifically a series of workshops and a community forum, conducted by the Active Living Resource Center/National Center for Bicycling and Walking in May 2007, that inspired the recreation program director to include fitness and nutrition as an ongoing part of the summer curriculum. Program partners assisted in collecting clinical data such as body mass index, heights, weights, blood pressure, and heart rate from children in the program. They also conducted a survey on physical activity at the beginning of the program and plan to complete a post survey at the end of the summer. Data from these studies is pending, but is expected to reveal an increase in student physical activity levels. Perhaps the most significant outcome of the Garfield SRTS program is the evidence that activities begun through SRTS often motivate communities like Garfield to begin incorporating health and nutrition activities into other community programs.



A Walking School Bus in Garfield, New Jersey pauses to smile at the camera

Safe Routes to School programs are being institutionalized at schools, and are providing mechanisms to improve student health, as evidenced by the community profiles from Benton County, OR; Eau Claire, WI; Flagstaff, AZ; and Garfield, NJ.

This institutionalization can be seen through the creation of community-wide task forces and workgroups, with active members ranging from public health departments to school district staff to city council and community members, through double fines for speeding in school zones, and through additional resources procured from schools, public works, and police departments. Activities begun through SRTS often inspire communities to begin incorporating other health and nutrition activities throughout the community.

The Safe Routes to School federal program productively brings together community partners to work towards common goals. The successful integration of SRTS into health has brought about great results in many communities, and has also assisted in the institutionalization of SRTS at different levels within those communities.

The case studies also provide examples of how collaborations with health departments and other health professionals can be increased in the future in communities across the country implementing SRTS. One key approach is to involve school wellness councils in SRTS programs and work to include Safe Routes to School in district and school wellness policies. Congress recognized the vital role that schools can play in ensuring the health and wellness of their students, through passage of the Child Nutrition and WIC Reauthorization Act. This law requires all local education agencies that participate in the Federal School Meal programs to create Local Wellness Policies.

Wellness policies must include: goals for nutrition education and physical activity; nutrition standards for foods sold in schools that are not federally reimbursable meals; plans for measuring implementation of the local wellness policies; and community involvement in the development of the policies. These mandated wellness policies provide an important opportunity to insert Safe Routes to School (SRTS) programs and goals into school district plans.

Safe Routes to School is also serving as a key mechanism to improve student and school health. Health professionals such as school nurses and public health departments are vital partners at each stage of a successful SRTS program. Their presence and active participation are important to establish the role SRTS can play in providing more opportunities for physical activity in a world where children's physical activity is rapidly vanishing. The American Heart Association recommends 420 minutes per week of moderate to vigorous physical activity for children and adolescents.<sup>4</sup> In comparison, the number of minutes per week that the average child watches television is 1,680.<sup>5</sup> SRTS can provide an easy, fun and relatively inexpensive way to get more exercise during a time of increasingly fewer physical education classes, more television watching, and the epidemic of childhood obesity in America.



A police officer helps teach a bicycle safety education class in Flagstaff, Arizona

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