

Advancing Transportation and Health

Approaches from the Federal Safe Routes to School Program
that offer broad application



Prepared by
National Center for Safe Routes to School
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Introduction

Safe transportation and the health benefits of active travel are at the core of the Federal Safe Routes to School (SRTS) Program. The Federal transportation legislation Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), passed in August 2005, established the national SRTS program to support projects to improve safety for walking and bicycling routes to school and to encourage children and families to travel to and from school using these modes.

The SRTS Program that SAFETEA-LU established – while small compared to other transportation programs – had resources to use innovative approaches to advance health and transportation goals and to establish a system that encouraged using data to inform decision-making at the local, state and national levels. This report reflects the approaches that the SRTS Program has used to advance transportation and health. It documents what was examined by the National Center for Safe Routes to School (National Center), which serves as the clearinghouse for the Federal SRTS Program, combined with input from State SRTS Coordinators and participants in the SRTS Roundtable on Transportation and Health. Lessons learned from the SRTS program could be useful to other agencies, both government and private, that are working to address how we travel in ways that are health promoting. State, regional and local organizations may also find these recommendations worthy of consideration.

The SRTS Program began as a \$612 million program (eventually \$1.146 billion through continuing resolutions through June 2012) that required a full-time SRTS coordinator in every participating state and established a national clearinghouse for SRTS information. The Federal Program also benefitted from a strong advocacy network, the SRTS National Partnership, which significantly advanced transportation and health. In July 2012, new transportation legislation Moving Ahead for Progress in the 21st Century (MAP-21) was enacted that no longer provided dedicated funding for the SRTS program. Instead, SRTS was integrated into a new program called the Transportation Alternatives Program (TAP). This report covers the SRTS Program as it functioned under SAFETEA-LU.

In August 2012, the White House Roundtable on Health and Transportation was convened to discuss the intersection of health and transportation and the challenges of implementation. The National Center director and FHWA's SRTS program manager participated in the roundtable. It became clear that the Federal SRTS Program has been able to use its unique purpose, which deliberately and consciously required both public health and transportation solutions, to successfully address many of the issues discussed. To build on the discussion from the White House Roundtable, the National Center convened a SRTS Roundtable on Transportation and Health in March 2013. The National Center invited transportation and health professionals to examine the contributions that SRTS has made, and can continue to make, to transportation and health programs, regardless of SRTS' place within transportation legislation and funding programs.

Representatives from the following organizations participated in the roundtable:

AARP
America Walks
American Association of State Highway and Transportation Officials
American Occupational Therapy Association, Inc.
American Planning Association
American Public Health Association
Arlington Co., Va., Department of Environmental Services
Bureau of Indian Education
CDC, Healthy Community Design Initiative
Congress for New Urbanism
Easter Seals
Federal Transit Administration
FHWA, Office of Legislative Affairs
FHWA, Office of Planning, Environment and Realty
FHWA, Office of Safety
FIA Foundation
Governors Highway Safety Association
League of American Bicyclists
Miami-Dade Metropolitan Planning Organization
National League of Cities
National Organizations for Youth Safety
National Parent Teacher Association
National Recreation and Park Association
New York City Department of Transportation
NHTSA, Safety Countermeasures Division
Pedestrian and Bicycle Information Center
President's Council on Fitness, Sports and Nutrition
Safe Kids Worldwide
Safe Routes to School National Partnership
State SRTS Coordinator, District Department of Transportation
State SRTS Coordinator, Pennsylvania Department of Transportation
Toole Design Group
US Department of Education, Office of Safe and Healthy Students
US DOT, Office of the Secretary
US EPA, Office of Air and Radiation
US EPA, Office of Children's Health Protection
US EPA, Office of Sustainable Communities

See the full list of representatives of the organizations in the Acknowledgments. The National Center already had established relationships with many of these groups as active members of its National Review Group.

Nine topics are addressed in the report. Each topic begins with recommendations and then describes ways in which the Federal SRTS program was successful in these efforts as well as ways in which these recommendations may be useful for other organizations tasked with integrating transportation and health.

The topics:

- Training Model
- Events as Tools for Change
- Branding and Marketing
- Support for Data-based Decision-making
- Combining Infrastructure and Non-infrastructure
- The Value of Focusing on Children
- Strategies for Serving the Underserved
- State Program Leadership
- Ability to Quickly Understand Uptake of Program



1. Training Model

Recommendations:

- Develop trainings that build a shared understanding of health and transportation issues and potential solutions among participants.
- Integrate health and transportation every step of the way: Physically place individuals of both disciplines in the room together.

One of the ways in which SRTS has had success with integrating transportation and health is with its Safe Routes to School National Course. The SRTS National Course details reasons why SRTS is important from both a health and transportation perspective and it serves as a context for convening many disciplines at the local, state and national levels.

The course development was funded by the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), the Center for Disease Control and Prevention (CDC) and the U.S. Environmental Protection Agency (EPA). The University of North Carolina Highway Safety Research Center (which houses the National Center for Safe Routes to School) began with a broad vision of the course and refined specifics as each agency contributed subject matter expertise. Additionally, each agency's monetary contributions to the project as a whole were carefully tracked to apply to a specific module or set of modules, so each agency was fully aware both of its content additions as well as where its funding made a difference. Each agency's logo on the opening slides made it clear to participants and to the contributing subject matter experts that transportation safety, public health and the environment were being represented.

The National Center has hosted 18 instructor trainings over eight years, which have resulted in 255 instructors (including 24 State SRTS Coordinators) located throughout the nation. The course is updated annually in order to remain accurate and relevant as statistics, issues and opportunities change. Each instructor receives an updated copy of the course slides and speaker notes, as well as a guide to what has changed.

Typical audiences for the SRTS National Course include representatives from the school, parent-teacher association, law enforcement, public health, school district transportation office and municipality. Such a mix integrates a variety of experiences, expertise and perspectives into the location-specific course and can aid participants in making the transportation-health connection.





2. Events as Tools for Change

Recommendation:

- Hold annual or one-time events to give target audiences a way to “try out” a behavioral change.

The UNC Highway Safety Research Center (HSRC), which houses the National Center, has been fortunate to have led the establishment of two national events. The first is Walk to School Day in 1997, begun through an HSRC project for NHTSA that established the Partnership for a Walkable America and Walk to School Day. The second is Bike to School Day, established in 2012 by the National Center for Safe Routes to School with funding from FHWA. Each year the number of schools registering Walk to School Day events outnumbers preceding participation amounts. This pattern continues with Bike to School Day: the first Bike to School Day was in May 2012 with 950 registered events; there was an 81% increase in registered Bike to School Day events in May 2013.

From its annual post-event survey for Walk to School Day, the National Center hears consistently how first-time events lead to regularly-scheduled walk/roll to school programs. Between 2006 and 2012, 50% – 75% of events have led to policy and/or engineering changes^{1,2,3,4,5,6,7}. Examples of such changes include adding the promotion of walking and bicycling to existing school policies; adding crossing guards; adding signage; increasing traffic enforcement near the school; and constructing sidewalks, paths, and crosswalks.

While these changes are primarily about safety, event organizers report a broad range of motivations for organizing the events. Between 2004 and 2012, the most common motivator for holding a Walk to School Day event was “physical activity/obesity prevention.”^{6,7} Two motivators tied for second during this time were “pedestrian safety” and “support[ing] a SRTS program.”^{6,7}

Overall, the one-day events promote active transportation and the motivators and the results center around physical health and safety.

The message is twofold: one-day events can be popular tools for encouraging behavior change to a potentially-interested audience and transportation and health are natural partners in practitioners’ minds.

¹ 2006 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

² 2007 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

³ 2008 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

⁴ 2009 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

⁵ 2010 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

⁶ 2011 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

⁷ 2012 Walk to School Day Report, National Center for Safe Routes to School. www.walkbiketoschool.org, accessed September 2013.

3. Branding and Marketing

Recommendations:

- Create a unifying brand for all written and visual communications.
- Logos of transportation and health agencies should be used together to emphasize combined efforts.

Branding is particularly important when creating and publicizing unity between health and safety organizations. Logos allow items and information about safety and health to be easily recognized as associated with one another.

As mentioned in the Training section, the SRTS National Course is an example of using organizations' logos to emphasize collaboration and joint buy-in for the content. The course was developed with support from NHTSA, FHWA, CDC and EPA. All logos, including the National Center for Safe Route to School's, were used to brand the course. Branding made it quickly evident that the topics of the course were important to organizations that care about transportation safety, public health and the environment.



4. Supporting Data-based Decision-making

Recommendations:

- Data collection is an important part of the earliest phases of planning.
- Upon launch of a new program:
 - Identify what data need to be collected and create data collection instruments and an accompanying data entry system.
 - Identify and standardize data collection periods so that information collected will provide a consistent snapshot of change over time.
 - Work with the program administrators to develop a system that fits their needs and to establish early buy-in for data collection.
 - Provide easy ways for users to get data into the data collection system.
- Require or strongly encourage local or state program administrators to collect and report data.
- Provide a mechanism to summarize data findings useful to local coordinators, program administrators, policymakers and funding agencies.

When local programs are able to use data to make decisions, they can create realistic goals and they are better able to determine which barriers they face and, in turn, can work to address those barriers. Continued data collection through the program's implementation enables local and state programs to adjust their efforts while their programs are underway.

Creating standardized data collection tools and a user-friendly data entry system during initial program development ensures that data collection methods can be standardized across the country, allowing for data comparison across specific locations and regions. The SRTS local data collection system has the added benefit of generating reports that inform the user of statistically significant changes in results from one time period to another.

Data entry can be a burden for local programs so offering a centralized data processing service can make data collection feel more possible. Such a solution can not only reduce the burden on local leaders, it can potentially remove barriers for low-resource communities that particularly may not have time for data entry access to a computer or convenient access to the internet.

Additionally, identifying regular data collection periods helps local, state and national leaders track, analyze and compare data collected consistently and under similar conditions. It may also help data collectors to integrate data collection into their set of annual or bi-annual standard procedures, as many of the local SRTS programs have done.

While using the data system was voluntary, twenty-seven State SRTS Coordinators required applicants and/or recipients of funding to collect school travel data. Such a requirement can help institutionalize data collection and encourage its use at the school or community level. This may in part be a result of how the coordinators were engaged in the development of the data system before many of their State programs were launched. The coordinators' need to understand the data at the state level was addressed, they reviewed draft protocols and received training in how to use the system.

Offering summarized data findings to share with funding agencies and/or other relevant stakeholders can be incredibly useful: quantifiable data that illustrate a program's progress over time can help funding agencies justify continuing or expanding funding for a program. Positive findings can also be used to galvanize community support, potentially starting discussions about integrating health and transportation goals with other land use and travel demand management (TDM) strategies.

Creating standardized tools, an online data entry system, data entry support and strongly encouraging practitioners to use the tools helped the National Center's data system become widely used. As of July 2013, the National Center's data system surpassed 1.22 million data records, including 1,031,362 Parent Attitude Surveys and 191,663 Student Travel Tally questionnaires from 8,740 schools.



5. Combining Infrastructure and Non-infrastructure

Recommendation:

- Combine infrastructure and non-infrastructure activities to maximize outcomes.

Under SAFETEA-LU legislation, State SRTS programs were required to spend 10-30% of their SRTS funds on projects (or elements of projects) that were not infrastructure construction and FHWA guidance strongly recommended that infrastructure and non-infrastructure activities be coordinated in order to achieve successful outcomes.

These non-infrastructure activities may include providing pedestrian and bicyclist safety education, engaging law enforcement and holding one-time or regularly-scheduled events to encourage students and parents to walk and bicycle to school. Evaluation can also be a component of a non-infrastructure project: monitoring before-, during- and after-conditions of one or more of the other elements and assessing the changes.

The combination of the "5 Es" – education, enforcement, encouragement, engineering and evaluation – creates an effective intervention by addressing all major aspects of an issue. The "5 E" combination, while used traditionally for pedestrian and bicycle travel, is effective for health programs that deal with the built environment to help ensure that these programs are well-rounded and multi-pronged.

6. The Value of Focusing on Children



Recommendation:

- Where it fits, focus on children first.

Many highway safety initiatives, such as occupant protection and bicycle helmet use, started with addressing children's safety because focusing on children was widely supported. When it comes to safety, children are developing the physical and mental abilities needed for safe walking and bicycling and they should be a priority for environments and education and enforcement initiatives that provide maximum safety. When it comes to healthy living, children were a great place to start since the outcomes of sedentary lifestyles are affecting children at early ages. The National Center focus group tested and used the message "A lifetime of being active can begin on the way to school."

7. Serving the Underserved

Recommendations:

- Include representatives from underserved populations in national or statewide advisory groups, as co-authors in written resources and as presenters/co-presenters at conferences and on web events.
- Take steps to ensure equal access to funding and technical assistance. Include additional points in Federal- or state-level funding applications for implementation in low-income communities and/or other underserved applicant groups.
- If a requirement for matching funds is a barrier for low-income communities, search for ways at the national or state level to address this barrier.

People who have low household incomes, people with disabilities, seniors and children may have unique transportation and physical health and safety needs. For various reasons, these groups may not be able to drive or may not have access to a vehicle and they have few other transportation options. The roundtable presenter with Easter Seals Transportation Group spoke passionately about building an accessible transportation continuum for students with disabilities to support a continuum of transportation services to ultimately affect students' transitions to post-school settings.

Under SAFETEA-LU, SRTS funds were 100% reimbursement monies and no match was required. This situation greatly increased the ability of lower-income communities to participate. The SRTS Program Guidance noted that having lower income communities participate is particularly important because these communities represent a disproportionate amount of child pedestrian injuries. According to the Federal Safe Routes to School Progress Report (National Center for Safe Routes to School, August 2011), schools benefitting from announced SRTS SAFETEA-LU funds mirrored national levels of schools with high, medium and low percentages of eligibility to the Federal Free and Reduced Price Meal Program. When the Federal SRTS program was integrated into MAP-21's TA program, the match requirement for most states rose to 20%. Some states have responded by using toll revenues, allowing in-kind donations, or encouraging public-private partnerships to offset the match.



8. State Program Leadership

Recommendation:

- Establish full-time State-level Coordinators whose emphasis is on integrating transportation and health issues for applicable programs.

In addition to providing dedicated program funds to each state that opted into the Federal SRTS program, SAFETEA-LU legislation provided another important component: a requirement for full-time SRTS Coordinators in each participating state. The requirement for dedicated coordinators for a program is not new, but most state-level coordinators are not required by law to be full-time. MAP-21 continues to require that each state have a Pedestrian and Bicycle Coordinator and, though not required by legislation, most states have had Transportation Enhancements/ Transportation Alternatives Coordinators. The majority of these positions, including State SRTS Coordinators, have been housed in State Departments of Transportation.

To support State SRTS Coordinators, the National Center established a listserv, three conference calls per year and annual in-person meetings. Full funding for travel to annual meetings enabled approximately 95% of State SRTS Coordinators to attend. The Pedestrian and Bicycle and Transportation Enhancements/Transportation Alternatives Coordinators also have regularly scheduled conference calls and annual meetings, although travel has never been fully or partially funded and therefore in-person participation has been much smaller than with the SRTS Program.



Ohio SRTS State Coordinator Julie Walcoff (far right) helps recognize the 2012 Oberstar SRTS Award winners in Chagrin Falls, Ohio.

Funding for travel to the annual in-person meeting was crucial in enabling the State SRTS Coordinators to share their States' program strategies and issues, gain a broader perspective of the ways in which States viewed SRTS and strengthen relationships with peers from States with similar and very different SRTS programs. The closed listserv and conference calls continued the relationships developed at the in-person meetings. Using these peer-to-peer efforts, the State SRTS Coordinators have continued to share barriers and solutions for State and local issues and have continued to tap into a rich and nuanced set of policies, procedures, visions, strategies and tactics for improving the safety and ability of children to walk or bicycle to school.

Being full-time employees dedicated to SRTS also gave State Coordinators time to form State-level partnerships with a variety of other agencies and organizations, including:

- Other State departments, such as Public Health, Education, Environment and Natural Resources, etc.
- State representatives from Federal agencies such as FHWA divisions, Indian Health Service, HUD programs for Indian housing and CDC and EPA regions and programs
- Advocacy organizations, such as those focusing on bicycle and pedestrian transportation or public health
- Local chapters of national organizations such as the American Alliance for Health, Physical Education and Dance (AAPHERD), and National Parent Teacher Association (PTA).

Through these partnerships, State SRTS Coordinators were able to disseminate information and noteworthy practices about SRTS programs and partners were able to share public health and environmental information with local SRTS practitioners.

9. Ability to Quickly Understand Uptake of Program

Recommendations:

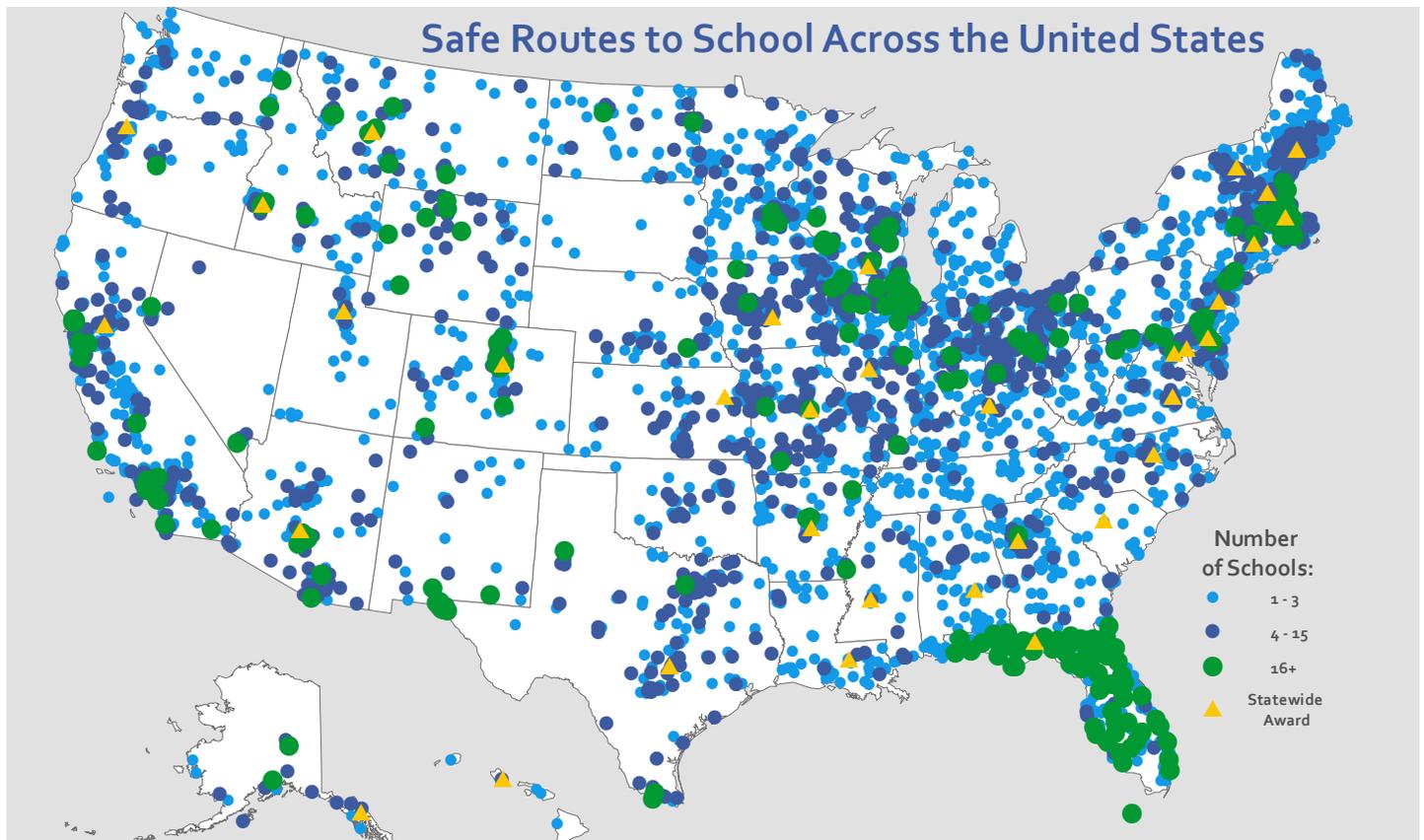
- Track announced funding to understand program uptake and demographics of award recipients.
- Map locations of announced funding in order to provide transparency and inform taxpayers about the source of funding used for local improvements.



Tracking announced funding has allowed stakeholders and policymakers at the local, state and national levels to understand how quickly the SRTS program was being embraced at the statewide and local levels. It also allowed the National Center to analyze the demographics of the funded areas and report on whether the funds were being distributed equitably across areas of varying socio-economic status and according to population density. Having program stakeholders and policymakers gain insight into the local popularity of any transportation program could influence future program continuity and funding. The National Center also traced the number of applications and total requested dollar amounts versus the number and dollar amount of funded applications as a way to understand demand for the program. Understanding which demographic populations are affected is also important for Federal civil rights compliance.

Mapping the funded projects allows Federal, state and local officials the ability to visualize where projects are occurring and funds are being spent. Mapping provides program transparency for taxpayers and also helps to inform them about the funding source for local infrastructure improvements. The National Center created an online interactive map that showed all of the schools and school districts that benefited from the SRTS funds.

Given the lengthy process for project construction completion, tracking only obligation rates can mislead officials regarding the popularity of and/or the need for a particular program.





Conclusion

A roundtable presenter with the CDC used a hypothetical case study to drive home the importance of the partnership of transportation and health and the value of starting with youth. He talked about a 10 year old male brought to his physician by his parents because of difficulty in class. He was described as fidgeting, overweight, prehypertensive with no exercise, symptoms of depression and high daily intake of soda. The treatment plan included to join a sports team, meet with a nutritionist and have an ADHD assessment. Three months later there were no major improvements. Thirty years later he is on medications for hypertension, diabetes, cholesterol and he drives his kids to school.

The shared transportation and health goals of the SRTS program have made, and will continue to make, a difference in the outcome of that scenario.

The Federal Safe Routes to School program was funded through SAFETEA-LU legislation in a manner that allowed for many opportunities. The National Center for Safe Routes to School, FHWA's information clearinghouse, had funding to support training, to develop the local data collection system and to provide data entry into the data system for local programs. The National Center also had funding for State Coordinators to travel to annual, in-person meetings and to support two national annual events (Walk to School Day and Bike to School Day). State coordinators were required to be full-time on the SRTS program and the states were supported by a strong advocacy network, the SRTS National Partnership.

Although the Federal SRTS program functions quite differently under MAP-21 legislation, the recommendations in this report nonetheless make for stronger programs. Training, branding, events, combining infrastructure and non-infrastructure, strong state-level leadership and the rest of the Federal SRTS program's accomplishments have helped the program gain support at local, state and national levels. The local data collection system provides performance-based measures for planning and implementation, both of which are so much a part of how programs must operate in the future.

As the Federal program transitions, we are already noticing how communities and jurisdictions are finding innovative ways to embrace the health and safety concepts behind SRTS. For example, at the roundtable, a representative from Arlington, Virginia spoke about how they are integrating SRTS and transportation demand management policies into public school construction and expansion projects, including new school site selection. A key component in this integration is the development of a Transportation Demand Management Master Plan for the Arlington Public School division.

The National Center hopes that this analysis of the successes of the Federal SRTS program aids other national and state organizations in integrating health and transportation issues and interventions.

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