



New Mexico Safe Routes to School Handbook



New Mexico Safe Routes to School Program
www.nmsaferoutes.com

August 2008

New Mexico Safe Routes to School Handbook

Welcome to the New Mexico Safe Routes to School (SRTS) Program Handbook! The purpose of this Handbook is to help communities in New Mexico develop an Action Plan for a successful SRTS program. The Handbook is intended for use by parents, school staff, students, community leaders, local governments, and anyone else interested in encouraging safe walking and bicycling to school in New Mexico.

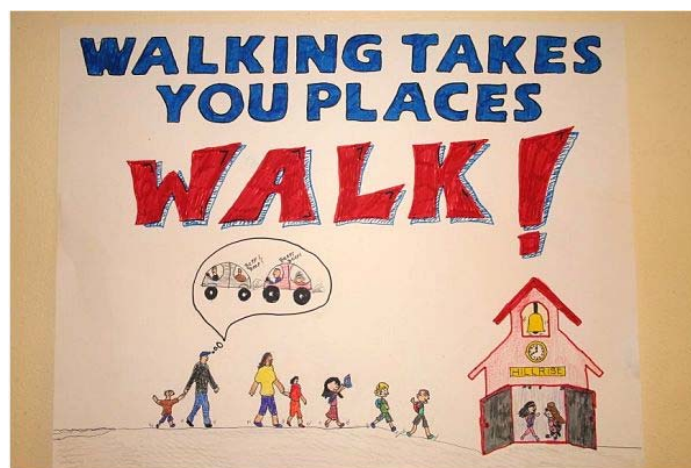
This Handbook describes steps for developing an Action Plan. Communities receiving SRTS funds from the NM Department of Transportation (NMDOT) are required to develop an Action Plan that meets the guidelines of this Handbook.

A summary of the steps for developing an Action Plan appears in Appendix M, inside the back cover of this Handbook, and

identifies which of these steps are required to qualify for additional NM SRTS funding. The Appendices also include a sample Action Plan worksheet, forms you can use to gather information, and additional information on SRTS program strategies.

“Web Resource” boxes are provided in every chapter. The boxes include web links for information related to that chapter. Appendix J provides a summary of these resources. Appendix K provides full citations of other materials referred to in the text.

For more information, please see the NM SRTS web site at www.nmsaferoutes.com, or contact the NM SRTS Coordinator at (505) 476-2155 with any questions that may arise as you develop your Action Plan.



Poster by student at Hillrise Elementary School, Las Cruces

Prepared for New Mexico Department of Transportation (NMDOT) by Community Partners LLC and the NMDOT Planning Division with acknowledgements to the Safe Routes to School Programs of Delaware, Georgia and Maryland and special thanks to the University of New Mexico Prevention Research Center.

Funded through Federal Highway Administration's Safe Routes to School Program.

Table of Contents

Chapter 1: Introduction 1

- What is Safe Routes to School (SRTS)?
- Why Start a SRTS Program?
- Benefits of SRTS Programs
- New Mexico's SRTS Program

Text Boxes in Chapter 1: *The 5 E's of SRTS, The Need for SRTS, SRTS Benefits to Schools, Addressing Liability Concerns, NM SRTS Funds Awarded by Mid-2008, Hillrise Elementary School Pilot Project, Ditch Banks as Safe Routes to School*

Chapter 2: Getting Started 11

- Form a SRTS Team
 - Step 1: Identify SRTS Team Members
 - Step 2: Hold the Kick-off Meeting

Text Boxes in Chapter 2: *Letting People Know: Publicity, Local Champion, Tips for Conducting Successful Meetings, School Health Advisory Councils & District Wellness Policies, Tips for a Successful Program, Working with School Communities*

Chapter 3: Gathering Information 19

- Step 1: Collect School Data
- Step 2: Get Input
 - Parent Surveys & Student Tallies
- Step 3: Consider Other Information
- Step 4: Prepare the Base Maps
- Step 5: Assess Walking and Bicycling Conditions

Text Boxes in Chapter 3: *Hazard Busing, Involving Students, Traffic Counts, Who Owns What?, "MUTCD"*

Chapter 4: Developing and Writing the Action Plan 29

- Step 1: Review and Organize Data
- Step 2: Develop Goals and Strategies
 - Engineering, Enforcement, Education, & Encouragement Strategies
- Step 3: Assign Tasks
- Step 4: Identifying Potential Funding Sources
- Step 5: Evaluation
- Step 6: Write the Action Plan
- Some Final Tips for Success

Text Boxes in Chapter 4: *Typical Action Plan Table of Contents, If You Think There is a Speeding Problem, School Location and School Site Design, New Mexico's Child Helmet Safety Law, Walk and Bike to School Maps*

Appendices

Appendix A	Sample Invitation to SRTS Team	A-1
Appendix B	Survey on Walking and Biking to School (Parent Survey)	A-2
Appendix C	Student Arrival and Departure Tally Sheet (Student Tally Sheet) ..	A-6
Appendix D	School Site Assessment	A-7
Appendix E	Neighborhood Assessment: Street Segments	A-9
Appendix F	Neighborhood Assessment: Intersections	A-11
Appendix G	Action Plan Worksheet (Blank)	A-13
Appendix H	Action Plan Worksheet (Completed Sample)	A-14
Appendix I	Engineering, Traffic Calming, and Pick-Up/Drop-Off Strategies...	A-16
Appendix J	Web Resources	A-30
Appendix K	References	A-31
Appendix L	Transportation Planning Contacts in New Mexico	A-32
Appendix M	Action Plan Development Checklist.....	A-33

Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
CDC	U.S. Centers for Disease Control and Prevention
CIP	Capital Improvement Program
COG	Council of Governments
EDD	Economic Development District
EPA	U.S. Environmental Protection Agency
ES	Elementary School
FHWA	Federal Highway Administration
K-8	Kindergarten through Eighth Grade
MPO	Metropolitan Planning Organization
MUTCD	Manual of Uniform Traffic Control Devices
NCSRTS	National Center for Safe Routes to Schools
NHTSA	National Highway Traffic Safety Administration
NMDOH	New Mexico Department of Health
NMDOT	New Mexico Department of Transportation
NMPED	New Mexico Public Education Department
PTA	Parent -Teacher Association
PTC	Parent-Teacher Committee
PTO	Parent-Teacher Organization
RPO	Regional Planning Organization
SHAC	School Health Advisory Council
SRTS	Safe Routes to School
STIP	Statewide Transportation Improvement Program
TE	Transportation Enhancements (federal funding category)

Introduction

What is Safe Routes to School?

Community leaders, parents and schools across the U.S. and around New Mexico are using Safe Routes to School (SRTS) programs to encourage and enable more children to safely walk and bike to school. SRTS programs support walking and bicycling as viable and healthy transportation options for children and families on their school journeys. The New Mexico Department of Transportation (NMDOT) developed this Handbook to help you establish a successful and sustainable SRTS program that will enhance the safety and health of your community.

Why start a SRTS program?

Have you ever seen a long line of cars clog the road in front of your child's school, engines idling as they inch their way forward, impatient children squirming in the back seat? Have you seen children on their way to school, walking in the road, scurrying across a major street, or dodging cars in the school driveway? While going to school is a basic part of family life, the simple act of getting to and from school has become increasingly difficult.

Thirty years ago, more than two-thirds of children in the U.S. walked or biked to school. Today, that proportion has dropped to just 13 percent (Centers for Disease Control and Prevention (CDC)) (*see Appendix K for full references*).

The "5 E's" of SRTS

SRTS programs use a comprehensive "5 E" approach that includes the following elements:

Education — Pedestrian and bicycle safety training for children and parents, and driver education targeting parents, neighbors and others in the community.

Encouragement — Fun, educational and motivational activities that promote walking and bicycling.

Enforcement — Legal enforcement of traffic laws and activities that help change unsafe behaviors of drivers, bicyclists and pedestrians.

Engineering — Improvements to infrastructure, such as streets, sidewalks, trails, and crosswalks, that facilitate safe walking and bicycling.

Evaluation — On-going information-gathering to determine what is working and what is not.

Considering the chaos around a school during the morning drop-off, it is not surprising that parents are reluctant to let their children walk or bicycle to school.

Development in our communities has focused on motorized vehicles for decades, resulting in a built environment that makes it a challenge to get around without a car. Sometimes sidewalks, crosswalks, trails, and other bicycle and pedestrian facilities do not exist or are not connected or maintained. New schools are often built on the fringes of developed areas, far from

(Continued on page 4)

The Need for Safe Routes to School

Safety

- ◆ In a nationwide survey of parents conducted in 2004, 30 percent indicated traffic danger as a barrier to allowing their children to walk or bike to school (CDC, 2005).
- ◆ Young children are at risk for pedestrian injury because they are impulsive and have difficulty judging speed, spatial relations, and distance. Auditory and visual acuity, depth perception, and proper scanning do not fully mature until at least age 10 (Safe Kids USA).
- ◆ Nationally, pedestrian injury is the second leading cause of unintentional injury death among children ages 5-14 (Safe Kids USA).
- ◆ Motor vehicle crashes in which children are passengers are the leading cause of death for school-age children (National Highway Traffic Safety Administration (NHTSA)).

Congestion

- ◆ Twenty to 25 percent of morning rush hour traffic is attributable to parents driving their children to school (NHTSA).

Health and Physical Activity

- ◆ Thirty years ago, about one half of all schoolchildren walked or bicycled to or from school, including 87 percent of those living within one mile of their school. Today fewer than 15 percent of all children and adolescents use active modes of transportation, such as walking or bicycling (CDC, 2005).
- ◆ In New Mexico, obesity affects 22 percent of adults and nearly 17 percent of youths ages 10-17. This proportion for New Mexico's youth is the tenth highest in the nation (Trust for America's Health (TFA), 2007).
- ◆ Children and adolescents who are overweight are more likely to be overweight or obese as adults; overweight adults are at increased risk for heart disease, high blood pressure, stroke, diabetes, some types of cancer, and gallbladder disease (CDC, 1997).
- ◆ The U.S. Surgeon General recommends at least 60 minutes of physical activity per day for children. Yet, among children 9 to 13 years of age, 62 percent do not engage in organized physical activity during non-school hours and 23 percent do not participate in any free-time physical activity (CDC, 2003).
- ◆ In a survey of New Mexico high school students conducted in 2005, 26.6 percent were either overweight or at risk for becoming overweight. Thirty-nine percent of students had not participated in recommended levels of either moderate or vigorous physical activity. No physical activity was reported by 12.1 percent of students (New Mexico Department of Health (NMDOH), 2005).

(See Appendix K for full citations)

The Need for Safe Routes to School

(Continued)

Environment

- ◆ Emissions from gas or diesel-powered engines in school buses, cars, and other motor vehicles and equipment are a significant source of pollution for school grounds and buildings. These emissions are a primary cause of air pollutants — carbon monoxide, hydrocarbons, nitrogen oxides, particulate matter and air toxins — that can be carcinogenic and affect human health (U.S. Environmental Protection Agency (EPA)).
- ◆ Air pollutants can be especially harmful to children because their respiratory systems are still developing. Children breathe more rapidly and inhale more pollutants per pound of body weight than adults (EPA).
- ◆ Air pollution can exacerbate chronic respiratory conditions, such as asthma. Asthma currently affects an estimated 6.8 million children under 18 years of age and is the third leading cause of hospitalizations among children under 15. Asthma accounts for 14 million days of school missed annually. (American Lung Association (ALA), CDC).
- ◆ More students arrive via bicycle and on foot at schools located in neighborhoods with a good street and sidewalk network. Air quality is measurably better at such schools (EPA, 2003).
- ◆ A four-mile round-trip bike ride can prevent 15 pounds of air pollution, factoring in pollution generated by starting and stopping (FHWA).

Economics

- ◆ In 2005, nationwide, student transportation was the third largest budget item for elementary and secondary education (National Center for Education Statistics (NCES)).
- ◆ In New Mexico, the average annual transportation cost per pupil is nearly \$575. Total K-12 transportation expenditures for the state amount to over \$100 million (School Transportation News (STN)).
- ◆ New Mexico spends an estimated \$324 million annually on direct adult medical services (preventive, diagnostic and treatment) that can be attributed to obesity. This includes \$51 million spent within the Medicare population and \$84 million within the Medicaid population (NMDOH, 2006).



Student Poster, Hillrise Elementary School, Las Cruces

where children live, where real estate that meets school site size requirements is affordable — but the direct and indirect costs of transporting children to and from school for years to come are not taken into account.

Another concern parents have is exposing their children to strangers. Add to all of this increased traffic near schools and it is certainly understandable that parents are concerned about the safety of their children. Nationally, fewer than 15 percent of all school trips are made by walking or bicycling, one quarter are made on a school bus, and over half of all children arrive at school in private automobiles (FHWA, 2001).

The high number of motor vehicle trips to school only adds to the traffic congestion around schools and creates long lines of traffic in school drop-off zones. Other drivers stuck in these traffic jams sometimes become angry and drive aggressively. This vicious cycle continues until fewer and fewer parents are comfortable with their children walking or bicycling to school.

Increased traffic congestion contributes to air pollution, impacting asthma rates among



Corrales

children. Childhood obesity rates have also risen dramatically in recent years, due in part to a lack of physical activity.

Benefits of SRTS Programs

Many of us remember a time when walking to school was part of everyday life. Many health professionals and educators agree that walking and biking to school provide important opportunities for children to explore their neighborhoods, develop social skills, experience a sense of responsibility and independence, and exercise their bodies. Some teachers report that students who walk and bike to school arrive more alert and ready to learn.

The benefits of SRTS programs are far-reaching. SRTS programs can increase the transportation opportunities available to children through the creation of safe walking and bicycling routes. Students who walk or bicycle to school on a regular basis increase their physical activity levels, which has many health benefits.

SRTS programs also bring about quality of life changes in communities. In many places, the local school system and the local

SRTS Benefits to Schools

- ◆ Increased physical activity for students
- ◆ Less traffic congestion in drop-off / pick-up zones
- ◆ Fewer conflicts between cars, buses and students
- ◆ Safer campus for walking and bicycling
- ◆ Students arrive at school energized and ready to learn
- ◆ Decreased demand for bussing

government interact very little. SRTS brings them together in dialogue and partnership. In some communities, many citizens are not involved in transportation issues. SRTS is a way for families, including students, to be directly and actively involved.

In many areas healthy transportation options such as walking and bicycling are seldom used. SRTS shines a spotlight on those options for children and adults beyond the journey to school and promotes making communities more accessible to everyone. When more individuals and families walk and bicycle, residents have more chances to get to know one another and can develop a greater sense of community.

SRTS programs in the U.S., Canada and Europe have produced results along these lines:

- ◆ In Marin County, California, student surveys conducted before and after the SRTS program showed that the number of students biking to school increased 114%, 64% more students walked to school, and carpooling increased 91% (*American Journal of Public Health* (AJPH), 2003).
- ◆ Another California study demonstrated that safety improvements along a child's usual route to school increased the proportion of children on that route who walked or biked to school (*American Journal of Preventive Medicine* (AJPM), 2005).
- ◆ Walking and biking to school have been shown to increase the total amount of physical activity among children in several countries (AJPM, 2005 & 2007).
- ◆ Youth who are physically active are more likely to maintain normal weight

Addressing Liability Concerns

As SRTS programs have developed, some people have wondered if encouraging walking and bicycling to school may increase a school's liability exposure. In general, the answer is no—a SRTS program that simply encourages or promotes bicycling and walking to school should not, in most cases, expose schools to increased liability risk, particularly where injuries occur off school property and parents have been reminded that the school is not responsible for supervising children who walk or bike to school. Taking concrete steps to make walking and bicycling safer will reduce the likelihood of injury, and thereby further minimize exposure to liability.

Of course, schools with SRTS programs must ensure they are meeting their responsibilities for children's safety just as they must routinely do with all other forms of school transportation and with other school activities. The school's responsibility for safety will vary according to the individual elements of the SRTS program and the local legal context. Most likely, your school district already has policies in place to help manage its liability for various school programs and activities. A SRTS program is no different—you should work closely with your school district's administrative and legal staff to identify any particular risk management and insurance needs based on your individual program and the relevant laws of your jurisdiction. For more information on addressing liability concerns, and key measures a school can take to minimize the risk of being held liable for negligence if a student is hurt while walking or bicycling to school, see "10 Tips for Safe Routes to School Programs and Liability" from the National Center for Safe Routes to School (NCSRTS) at www.saferoutesinfo.org/resources/collateral/liabilitytipsheet.pdf.

and avoid or delay the onset of diabetes and cardiovascular disease (*Cardiology Clinics* (CC), 2004).

- ◆ Regular physical activity in childhood and adolescence:
 - Improves strength and endurance
 - Helps build strong bones and muscles
 - Helps control weight
 - Reduces anxiety and stress and increases self-esteem
 - May improve blood pressure and cholesterol levels (CDC, 1997).
- ◆ Walking to school is associated with higher overall physical activity throughout the day (AJPH, 2003; BMJ, 2005).
- ◆ Research studies show that regular participation in physical activity is associated with improved academic performance (*Active Living Research* (ALR), 2007).
- ◆ During the 2004-2005 school year, research in Marin County, California indicated a 2.6 million mile reduction in vehicle miles traveled after implementation of their SRTS program. Fewer vehicle miles relates directly to the reduction of air pollutants that



Albuquerque

endanger public health and contribute to global warming (*Marin County Dept. of Public Works* (MCDPW), 2005).

- ◆ In Odense, Denmark, where the SRTS concept originated, traffic-related injuries among school children were reduced by 30 percent (Troels).

New Mexico's SRTS Program

In 2005, Congress established a national SRTS program as part of the federal transportation re-authorization legislation known as "SAFETEA-LU." This program dedicates a total of \$612 million from 2005 to 2009 to SRTS nationwide. The federal government distributes funds to states in proportion to the number of students enrolled in kindergarten through eighth-grade (K-8) in a given state. New Mexico is one of many states that receive the minimum allocation of roughly \$1 million per year.

The NMDOT created its SRTS Program in 2006. The New Mexico program seeks to:

- ◆ Enable and encourage children, including those with disabilities, to walk and bicycle to school safely;
- ◆ Make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a

NM SRTS Funds Awarded by mid-2008

Funding Cycle 1 (March 2007) - Five "Phase 1" awards at \$15,000 each, for a total of \$75,000

Funding Cycle 2 (March 2008) - Ten "Phase 1" awards at \$15,000 each, for a total of \$150,000; Two "Phase 2" awards totaling approximately \$275,000

healthy and active lifestyle from an early age; and

- ◆ Facilitate planning, development, and implementation of activities to improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (roughly two miles) of primary and middle schools (Grades K-8).

The NM SRTS program provides federal funds to eligible entities to develop and implement SRTS programs at one or more schools within a community. The program has two phases: Phase 1 provides funds to school districts and local, tribal or state entities to develop an Action Plan. These funds can be used to pay a Local Champion to coordinate and lead the planning effort, among other things. Phase 2 provides funds to implement communities' Action Plans. This Handbook outlines the process for developing a SRTS Action Plan that will meet the Phase 2 application requirements. Required elements are described in the Handbook and summarized in Appendix M.

If Phase 2 funding will be requested, the Action Plan must be approved by the NM SRTS Coordinator. A Phase 2 application can then be submitted to request SRTS funds for infrastructure projects and non-infrastructure activities. Local, tribal or state government entities must be the sponsor for all applications requesting infrastructure in the public right-of-way, such as sidewalks and crosswalks on public streets. The school district can sponsor requests for infrastructure on school property, such as bike racks or sidewalks or crosswalks on the school campus. Funding requests for non-infrastructure activities, such as education, encouragement or enforcement, may be submitted by a school district or local, tribal

or state entity. Infrastructure projects and non-infrastructure activities must be coordinated.

All NM SRTS applications must demonstrate community and school district support for the project, as well as a commitment from a partner school with students in the K-8 grade range. Infrastructure projects must be located within public right-of-way and within two miles of a school with students in grades K-8. Funding recipients must comply with all applicable state and federal requirements.

Who prepares the Action Plan?

You do! A SRTS program is a local, school- and community-based initiative that requires dedicated, motivated individuals who will work together to improve the safety of children walking or bicycling to and from school. The state developed this Handbook to provide practical guidance based on successful SRTS programs around the country as well as federal SRTS guidelines. The goal of the Handbook is to assist you with creating an Action Plan that will result in a comprehensive and long-lasting SRTS program at your school or at multiple schools in your community.



Working on a Safe Routes to School Plan in Farmington

Anyone can develop the SRTS Action Plan, but to be successful, you will want to involve a wide range of participants, including parents, teachers, the principal, the school's parent-teacher organization, local government officials, neighborhood associations, law enforcement, health professionals, and other interested organizations and businesses. The SRTS Action Plan is usually developed by a mix of people from various groups working together as a SRTS Team.

Web Resources

- ◆ For more information on the NM SRTS program and how to apply for funds, please visit the NM SRTS website at www.nmsaferoutes.com.
- ◆ For more on the federal SRTS program established under SAFETEA-LU, see safety.fhwa.dot.gov/saferoutes.

Hillrise Elementary School Pilot Project

Las Cruces, NM

The Las Cruces Metropolitan Planning Organization (MPO) Transportation Plan, adopted in 2005, recognized the value of encouraging and enabling children to walk and bicycle to school by including policies to develop a district-wide or regional SRTS program in the Las Cruces area. The MPO organized a SRTS Steering Committee which decided to pursue a pilot project at Hillrise Elementary School during the 2006-2007 school year. Hillrise serves approximately 540 K-5 students, mostly from neighborhoods east of I-25 and south of Lohman and Foothills roads. It is one of the best examples of a neighborhood school in Las Cruces, serving a rapidly urbanizing area with a semi-rural population. MPO staff developed the pilot using SRTS guidelines set by FHWA, including the "5 E's."

The MPO first collected baseline data about the students' transportation habits and parents' concerns regarding walking and biking to school, using a survey sent out through the principal's office in September 2006. Of the 500 surveys, 299 were returned, a high rate of return attributable to an incentive program as well as student and parent concerns about dangerous walking and bicycling conditions. The survey found that over 85 percent of students were transported to school in the family car, only seven percent walked, and less than one percent bicycled.

The next step was a walking assessment of the area around the school to record existing conditions. The assessment identified several issues including high motor vehicle speeds and wide travel lanes on a nearby collector street, overgrown vegetation, lack of crosswalks, and missing or damaged sidewalks. Using this information, the SRTS Steering Committee developed a list of prioritized solutions.



One of the solutions was a city engineering project to re-stripe the collector street, decreasing the width of vehicle travel lanes to 13 feet and adding nine-foot parking lanes and six-foot bike lanes on

each side of the road. Studies performed before and several times after the striping indicate a dramatic change in driver behavior, with a 46 percent decline in the number of drivers exceeding the 30 mph speed limit by five mph or more. Thus the re-striping of the road, which involved nothing more than "painting white stripes," had a significant traffic calming effect. Other engineering activities included painting new crosswalks, relocating crosswalk signs, installing flashing beacons at the crosswalks, and repairing and installing sidewalks. More recently, the City installed ADA-accessible ramps, which had been identified as a long-term engineering improvement.

MPO staff worked with the City Traffic Engineer and police to address several enforcement issues as well. The City issued warnings and citations for driving violations in the crosswalk zones and for speeding. A new crossing guard assigned to the busiest intersection was seen by parents as the most significant improvement. The City also worked with property owners to trim vegetation back from sidewalks and signs in order to provide better sight distance for pedestrians and drivers.

The following educational and encouragement activities were also incorporated into the pilot project:

- ◆ A three-day bike rodeo held by the MPO and the City in conjunction with the 2006 "Walk to School Day" celebration, using bicycles donated from a local bike shop.
- ◆ Information on the SRTS program provided to parents by the MPO and school administration during school registration and at PTO meetings.
- ◆ Bicycling and walking tips and facts included in the school's monthly newsletter and 30 copies of a free FHWA bicycle and pedestrian safety CD provided to the school.
- ◆ A walking and bicycling map developed by the City for distribution to all students. Parents and students were encouraged to use the map to plan the student's route to school.
- ◆ A poster contest held by the school in conjunction with the 2006 "Walk to School Day," with awards handed out by the principal.

On the October 4, 2006, "Walk to School Day," 300 students walked or biked to school. The school administration commented that they had never before had a day without traffic snarls, upset parents and unsafe conditions due to poor motorist behaviors.

In May 2007, MPO staff conducted a follow-up survey to assess the initial outcomes of the program. Only 29 percent of the surveys were returned indicating perhaps that a lot of concerns had been addressed. The survey found that walking, biking and school bus trips

to and from school increased. The share of students walking to school increased to 11.4 percent and the share of students bicycling rose from 0.5 percent to 1.9 percent. The family car dropped to 78.1 percent of trips to school and 70.6 percent of trips from school.

While the levels of walking and bicycling for the Hillrise population are not near those seen a generation ago, the pilot project brought a great deal of attention to the issue and resulted in physical changes that were easy to implement and very cost effective. The Principal continues to promote walking and bicycling to school, and Hillrise recently received a Phase 2 award from the NM SRTS program to hire a school SRTS Coordinator and install bicycle racks.



Ditch Banks as Safe Routes to School

Many New Mexico communities offer unique opportunities for safe routes to school and walking school bus programs along irrigation ditches (*acequias*) and drainage canals. These linear corridors often pass near or adjacent to school grounds and have limited motor vehicle traffic issues. Current research shows that proximity to, views of, and daily exposure to natural settings increase children's ability to focus and enhance cognitive abilities – which could mean better grades in school. Ditch-bank trails offer exposure to natural settings and physical activity opportunities for students traveling to and from school on foot or bike.

Landmark legislation (SB 486) passed in 2007 by the NM legislature will allow more public access to ditch and levee systems owned by irrigation and conservancy districts in New Mexico. The bill changed state law to provide irrigation and conservancy districts with liability protection if they authorize the use of their property for trails to be established and managed by a local public body. Creating partnerships between school districts, irrigation districts, local governments and neighborhood associations is a good strategy to create safe routes along ditch banks. Together the partners can resolve trail design, management, and maintenance concerns, as well as safety and risk management issues.

User safety is addressed through a trail management and maintenance plan. These plans usually include trail design considerations such as stabilized surfaces for pedestrians, bicycles, wheelchairs and strollers; gates and other motorized vehicle barriers; signs and street crossing improvements; weed/vegetation management; risk assessment field evaluations; and neighborhood stewardship strategies for periodic clean-ups and “eyes on the trail” programs. A walking school bus program using ditch trails as a route to school is one way to address user safety and risk management. With adult supervision, children are taught how to safely travel along a ditch bank, how and where to cross streets, and how to avoid any potentially hazardous areas.

In Albuquerque, the “Ditches with Trails” project focuses on improving segments of ditch banks managed by the Middle Rio Grande Conservancy District. The Ditches with Trails Steering Committee is primarily addressing trail design and user safety issues along two ditch banks. At Valle Vista



Ditch-bank trail to Valle Vista Elementary School, Albuquerque

Elementary School in the South Valley of Albuquerque, the Vecinos del Bosque Neighborhood Association hopes to demonstrate through neighborhood clean-ups and a walking school bus program that a formal trail network is feasible on ditch-bank rights of way. As a result of the Ditches with Trails project, there have been two successful Walk and Roll to School events along the ditch banks to the school. Other communities with ditches are beginning to consider ditch banks as potential safe routes to school.

Getting Started

Now that you know what SRTS is, why you should have a program, and how it will benefit your community, it is time to get started. This chapter describes a process to start a SRTS program by developing an Action Plan that addresses the “5 E’s” described on page 1. Successful programs focus on the unique needs of an individual school community, so there is no single right way to develop a program. Steps in this handbook have worked well for others, but you may modify them as needed to suit your community.

Form a SRTS Team

The success of a SRTS program depends on the commitment and dedication of the SRTS team. It is essential that you establish a SRTS Team or committee that includes a broad range of community members and interested parties. The SRTS Team plans and guides the development of the Action Plan, as well as implementation of the SRTS activities for the school(s) in your program.

SRTS Process Overview

Form a SRTS Team (Ch. 2)

- Step 1: Identify team members
- Step 2: Hold a kick-off meeting

Gather Information (Ch. 3)

- Step 1: Collect school data
- Step 2: Get input from parents, students, etc.
- Step 3: Consider other information
- Step 4: Prepare base maps
- Step 5: Assess walking and biking conditions

Develop & Write the Action Plan (Ch. 4)

- Step 1: Review and organize data
- Step 2: Develop goals and strategies
- Step 3: Assign tasks
- Step 4: Identify potential funding sources
- Step 5: Define evaluation process
- Step 6: Write the plan

Letting People Know: Publicity

Getting the word out about your SRTS project is important. Provide regular updates on the SRTS project at parent-teacher organization meetings, at back-to-school events (if you are beginning the project at the start of the school year), and at community and neighborhood association meetings. Place a brief update in school and neighborhood newsletters or use e-mail lists to reach out to parents and community members. Keep in mind that your school may typically prepare announcements and newsletters in both English and in Spanish, so you may need assistance from the school’s translator. Local community newspapers are often interested in SRTS projects and these projects usually receive very positive press. With the permission of your school’s principal, contact the editor of your local paper and let them know about the project. Send them periodic updates as the project progresses. For more strategies on working with the media to promote your SRTS efforts, see the NCSRTS Guide’s section on “Media and Visibility” at www.saferoutesinfo.org/guide/media.

Step 1: Identify Team members

The first step for setting up your SRTS Team is to prepare a list of potential team members. Many individuals may be interested in helping even if they are not directly involved with the school. The following is a list of candidates to consider for your SRTS Team:

- ◆ School principal or assistant principal (principal's participation or approval is critical to success)
- ◆ Three or four interested parents
- ◆ Representative of the school's parent-teacher organization (PTA/PTC/PTO)
- ◆ One or two teachers - consider those with outside duty before or after school as well as those working in physical education or health
- ◆ School nurse or a representative from the school health advisory council (see text box on page 14)
- ◆ School district coordinators for transportation, health and wellness, and/or safety and security
- ◆ Neighborhood and community association members
- ◆ Local government professional, such as a transportation engineer, planner, or public works staff person



Los Alamos

- ◆ School resource officer
- ◆ School crossing guard
- ◆ Local bicycle and pedestrian clubs or advocates
- ◆ Local elected officials or their representatives
- ◆ Local law enforcement
- ◆ Public health professionals
- ◆ Representative from the local NMDOT District office
- ◆ Representative of the relevant MPO or RPO (see Appendix L)
- ◆ Nearby business owners
- ◆ Children who are already walking or bicycling to school

There may be other individuals or organizations that you would like to invite to serve on your SRTS Team. Chances are, you've already been in contact with one or more people about this idea and they should be the first names on your list. Once you've put the list together (i.e., names, phone numbers, mailing addresses, and email addresses), organize a kick-off meeting.

Local Champion

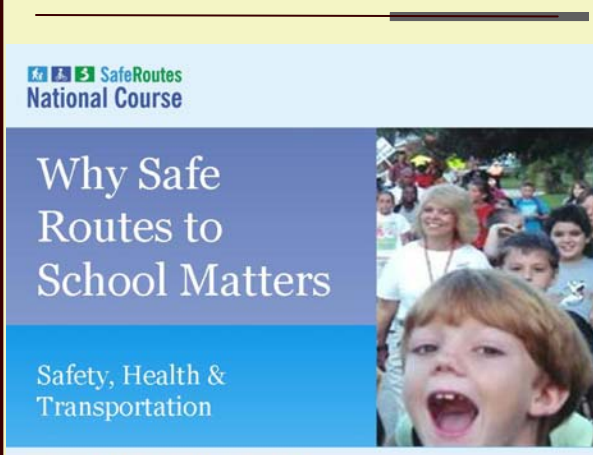
Many SRTS programs rely on the passion and enthusiasm of a volunteer often called the "local champion." Some champions are parents at the school, but they can also be members of the school staff or the broader community. This person (or persons) can take the lead in organizing, keeping the effort moving forward, making phone calls, setting meeting dates, and following up on tasks.

NM SRTS Phase 1 funds can be used to pay a local champion to coordinate the development of a SRTS Action Plan.

Send a letter of invitation or an e-mail to each person to attend a kick-off meeting. If you plan to meet at the school, which is a good idea, you need to have permission from the principal or assistant principal. Hopefully the principal is already involved in the project and eager to help. If the principal agrees, send the invitations on school letterhead (see Appendix A for a sample letter).

Allow three to four weeks of lead time between the day you mail the invitations and the kick-off meeting. Make the meeting date, time, and location as convenient as possible for everyone. The easier you make it for invitees to attend, the greater the chances are for a good turnout. If you can, make reminder calls a few days before the meeting.

It is a good idea to keep all the contacts on your mailing list, even if they do not respond. In the future you may need help from some, such as local transportation officials and neighborhood organizations, so



The slide features a blue header with the SafeRoutes National Course logo. The main title is 'Why Safe Routes to School Matters' in white text on a dark blue background. Below the title is a photograph of a group of diverse children, with a close-up of a young boy in the foreground who has his mouth open as if shouting or cheering. A blue box at the bottom of the slide contains the text 'Safety, Health & Transportation'. At the very bottom, a yellow box contains the text: 'You can download this presentation or video from www.nmsaferoutes.com to show at your first meeting.'

it is wise to keep them informed. You should strive to achieve broad-based community support for a walkable school neighborhood.

Ideally, your Team should include ten to fifteen people. Groups larger than fifteen are sometimes hard to manage, while having groups smaller than ten increases the workload on each person.

Tips for Conducting Successful Meetings

- ◆ Establish a regular time and meeting place.
- ◆ Send out reminders about meetings a few days in advance. Include in the reminders the discussion topics for the meeting.
- ◆ Set an agenda. Place items of most pressing importance about one-third of the way through the agenda; often people come late and others leave early.
- ◆ Have someone facilitate the meeting. The facilitator's job is to keep the group on track, progressing through the agenda in a timely and productive way.
- ◆ Have someone take minutes of the meeting. Send the minutes out soon after the meeting so that those who were unable to attend can stay informed.
- ◆ Schedule future meetings on regular days and times and in the same location to be consistent.
- ◆ Close the meeting with a review of task assignments and appreciation for everyone's time and efforts.



Farmington

Step 2: Hold the kick-off meeting

Hold the kick-off meeting for potential SRTS Team members. The purpose of the meeting is to gain support for a SRTS program, have people agree to serve on the SRTS Team, and define the next steps. The kick-off meeting is a very important event. It will set the tone, pace, and level of enthusiasm for the project. Prepare well for this meeting.

There are free resources to download from the NM SRTS website and other sites listed in the Web Resource Box on page 15 that can help explain SRTS programs and issues to participants. Consider showing the presentation “Why SRTS Matters,” available on DVD. If you prefer to narrate the presentation yourself, or if you do not have video equipment, there is also a SRTS PowerPoint presentation.

At the kick-off meeting you should:

- ◆ Set the scene. Talk about the school’s traffic problems and the issues children face during the journey to school. Explain the purpose of the SRTS program.
- ◆ Mention national trends. Talk about the growth in traffic, the decline in walking and bicycling among youth, and the increasing concern for children’s health.

School Health Advisory Councils (SHAC) and District Wellness Policies

The state Public Education Department (PED), through its “Wellness Policy Guidance,” requires every school district to have a School Health Advisory Council (SHAC) consisting of parents, school food personnel, school board members, school administrators, teachers and other school staff, students and community members. The purpose of the SHAC is to make recommendations to the school board on the development and implementation of the school district’s wellness policy.

Wellness policies are required under state law so that school districts develop physical activity guidelines for before, during and/or after school. A district-wide SRTS program implemented at the school level is one strategy for compliance. If safe walk and bike to school routes are identified, schools can encourage students to walk or bicycle to and from school along these routes. In addition, or if safe routes are not available, schools can conduct activities during the school day that promote pedestrian and bicyclist safety as well as physical activity. These could include activities such as bike rodeos and mileage contests where students track the number of laps walked and are rewarded for reaching set goals.

You may want to work with your local SHAC on setting up a SRTS Team, either as a sub-committee of the SHAC (with additional members) or by including the SHAC members on the SRTS Team. For more information on the PED school district wellness policy, visit www.ped.state.nm.us.

- ◆ Explain how SRTS will work and describe the likely benefits for children, parents, staff, and the community. You may want to provide handouts. If you would like to distribute this Handbook, you can request additional copies from NMDOT or download the document from the NM SRTS website.
- ◆ Give participants an opportunity to talk about their safety concerns. Keep a running list of problems and ideas for solutions.
- ◆ Discuss how to involve and inform the public and consider setting up committees for specific tasks.
- ◆ If your Team includes multiple schools, you may want to create subcommittees to manage some tasks by school. Sample tasks for subcommittees are collecting school data, putting notices in school newsletters, or maintaining communication with teachers and the principal.
- ◆ Ask for support and involvement from everyone and assign some responsibilities to be completed before the next meeting.



Alamogordo

- ◆ Set the dates and times for future meetings.

Plan for about 90 minutes for this first meeting and make sure everyone signs the attendance list. Subsequent meetings should be shorter, but the kick-off meeting usually takes longer. Remember that meetings should be enjoyable and easy to attend. Have childcare available, provide refreshments and keep the discussion lively. You may also need a language interpreter at the meeting.

Do not over-extend yourself by trying to do too much: focus your efforts on ensuring that the right people are involved and that the meeting runs smoothly.

Web Resources

- ◆ National Highway Safety Administration SRTS Toolkit, www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2002/.
- ◆ National Center for Safe Routes to School (NCSRTS), including an *On-line SRTS Guide*, as well as a video, "Why Safe Routes to School Matter," and a Powerpoint presentation highlighting the benefits of SRTS, all at www.saferoutesinfo.org/resources/marketing_presentations.cfm.
- ◆ NM SRTS, www.nmsaferoutes.com.

Tips for a Successful Program

- ◆ **Involve potential stakeholders early** and strive for their buy-in. Point out the various benefits of SRTS (see Web Resource Box on page 15 for presentations, talking points and handouts). Stakeholders include parents, teachers, law enforcement, community groups, health officials, and state and local transportation and public works agencies. Do not forget the students! SRTS is for their benefit and their enthusiasm will help generate success.
- ◆ **Elect a focused Team leader** who has the motivation and perseverance to keep the program moving and the other committee members excited.
- ◆ **Stick to the schedule, stand by your goals, and refer back to them regularly.** They will help guide you through the program.
- ◆ **Be efficient and organized in your meetings.** Short, well-organized meetings are better than long meetings. Use agendas and assign someone to take notes.
- ◆ **Hold open meetings.** Advertise meetings along with other school functions to invite the larger community. Include time in the meeting agenda for comments from those not on the SRTS Team to comment. Be receptive and responsive to those comments.
- ◆ **Remember to be persistent but patient.** Accomplishing your set goals will likely not come easily, so hang in there.
- ◆ **Celebrate successes along the way.** Recognize those that have invested their time and effort in the program. This attitude will knit the SRTS committee together and provide encouragement to stay the course.

Working with School Communities

Schools are, in many ways, like countries. Each school, for example, has a distinct ethnic, racial, and socioeconomic population make-up. Every school has its own surrounding geography. Each has its own system of organization, determined largely by the personality and style of its leader, the principal. Each school is unique. Working with and respecting the needs, style, and organization of a school is part of your “passport” to success with a SRTS program. Here are some tips for working with school communities.

1. **Get to know your school.** Start by building a good relationship with the principal, as s/he is the ultimate decision-maker. Know the school secretary, custodian, nurse, physical education teacher, and other teachers by name.
2. **Coordinate with other school groups.** Many groups are part of the school community, including the Parent Teacher Association (PTA), Parent Teacher Organization (PTO), or Parent Teacher Committee (PTC); the school health or wellness council, or the district’s School Health Advisory Council (SHAC) (see box on page 14); groups working on after-school programs; and 4-H Clubs, Boys and Girls’ Clubs, and scout troops. Talk with representatives of these groups to find out how SRTS might fit into their program. Find out if the school has business partners, and what commitments they have made, or may be willing to make, to the school.
3. **Learn and use channels of communication.** Ask about existing policies, procedures and resources for communication, such as:
 - ◆ sign-in procedures for visitors;
 - ◆ preferred methods of communication with school staff members and primary contact;
 - ◆ procedures for sending home information to parents;
 - ◆ other channels of communication, such as a weekly or monthly newsletter, parent e-mail list, website, closed circuit TV, etc.;
 - ◆ any language translation services for non-English-speaking families that are needed and/or available through the school; and
 - ◆ policies on working directly with children and/or photographing them.
4. **Respect the school culture.** Principals are very busy. Your principal may be supportive of SRTS but may not have time to respond immediately to phone calls or emails. However, it is critical to keep the principal informed and get his or her approval for every step of the program. Other school staff are also under pressure and time constraints so it is important to find ways for SRTS activities to support and complement what teachers already do. Making the connection between the existing school curriculum and SRTS is a great way to do this.
5. **Understand the school’s calendar.** Schools have their own unique yearly calendars, full of PTA events, book fairs, class trips, teacher planning days and standardized testing. To avoid conflicts, plan the full year of SRTS events early. You can also incorporate SRTS activities into other school activities, such as holding a Walk and Roll to School Day event as part of “Turn off the TV and Get Physically Active” week.

6. **Parents are essential!** Parents are the ultimate decision-makers about how their children get to school. Parents can act as effective advocates for implementation of a SRTS Action Plan. As residents of an area, they can be the strongest voices for legal enforcement or infrastructure changes. It is important to encourage parent involvement at many different levels. There are leadership roles and “star volunteer” roles but, unlike many activities in schools, parents can also get involved without having to go to meetings or even speak English: all they have to do is walk or bicycle with their children to school or hand out stickers or refreshments.
7. **Involve the students.** Once they are familiar with SRTS, students can be your most enthusiastic supporters. Seeking student input is an excellent way to build interest and excitement in SRTS. Children also have a unique perspective on their routes to school and can be excellent sources of information about hazards, short cuts, and “secret” routes to the school. SRTS provides many levels of involvement for children – from basic participation in SRTS activities to special involvement as volunteers.
8. **Make your program inclusive.** Do your best to reach out and make your SRTS program as inclusive as you possibly can. The school community is more likely to integrate your program if you include everyone in the process. Here are some suggestions for reaching out:
 - ◆ Send written communications home to all families regardless of how likely they are to participate.
 - ◆ Be sure that all communications with families are translated into appropriate languages.
 - ◆ Use a wide variety of communication tools.
 - ◆ Develop activities that can incorporate as many students as possible.
 - ◆ Continuously offer ways for school community members to get involved and avoid the perception that there is a certain SRTS “in-crowd.”
 - ◆ Communicate with the full school staff, not just the teachers and administration. With permission from the principal, call upon the cafeteria staff, the custodian, the band teacher, the school nurse, the school counselor, the school secretary, or many other school staff members that are also part of the school community – they may be delighted to be included!
 - ◆ Find ways to periodically thank and honor all participants in your program, especially those who are often overlooked. This can include planned events, such as a volunteer appreciation breakfast, a “thank you” poster in the hallway, a personal note, or a bouquet of flowers.

Gathering Information

Before making a list of projects or activities for the SRTS Action Plan, the SRTS Team needs to gather information and observe behavior around the school. This chapter describes the kinds of information you will need to describe safety concerns and other barriers to walking and bicycling, other information you are required to have in order to qualify for NM SRTS funding, and recommended methods for collecting this data. This chapter also explains how the information you gather will help you evaluate success after you implement the Plan.

Step 1: Collect School Data

Enrollment

Find out what the school population is at the start of your program, and how many students live within the school walking boundary, as defined by the school or school district. The principal or school district can provide this information.

School Transportation

School district transportation staff can provide information about how many students are eligible to ride the bus to school, and how many actually ride the bus on most days. Find out if the school makes any students eligible to ride the bus based on identified hazards rather than distance (see box). If identified hazards are addressed, these students may be able to walk to school.

Each school has its own arrival and dismissal procedures. Find out where the

SRTS Process Overview

Form a SRTS Team (Ch. 2)

Step 1: Identify team members

Step 2: Hold a kick-off meeting

Gather Information (Ch. 3)

Step 1: Collect school data

Step 2: Get input from parents, students, etc.

Step 3: Consider other information

Step 4: Prepare base maps

Step 5: Assess walking and biking conditions

Develop & Write the Action Plan (Ch. 4)

Step 1: Review and organize data

Step 2: Develop goals and strategies

Step 3: Assign tasks

Step 4: Identify potential funding sources

Step 5: Define evaluation process

Step 6: Write the plan

school directs walkers and bicyclists when they arrive. Ask about the school's dismissal procedures.

Some school systems require parents to submit forms indicating the mode(s) of transportation their children will use during

Hazard Busing

NM law prohibits establishing bus routes for distances less than one mile one way from school for students in grades K-6, one and one-half miles for grades 7-9, or two miles for students in grades 10-12—unless the school district indicates that "hazardous walking conditions" exist. Specific criteria to meet the definition of "hazardous" conditions are spelled out in the law (6.41.3 NMAC). Find out if any students at your school are transported by bus due to hazardous conditions.

the school year. Often a student is not allowed to leave school on foot or bicycle if the parent has not previously registered him or her as a walker or bike-rider. This data may provide the number of potential walkers/bike-riders, but may not reflect actual numbers walking or biking on a daily basis.

Find out if the school(s) included in the Action Plan have policies requiring students to use a certain type of transportation, or prohibiting them from using others. Some schools do not allow children to ride bikes to school, for example.

Obtain a map showing the school attendance and walking boundaries. You will use this information to help create your base map (see Step 4). Occasionally it may be possible to adjust school attendance boundaries to encourage or allow more walking, but this has to be done at the school district level.

Step 2: Get Input

The most effective SRTS programs take full advantage of the first-hand experience of students, parents, and teachers at the school. These are the people who witness safety problems on a daily basis, and their opinions



Assessing routes in Corrales

are important. It is also essential to gather input from the broader neighborhood community. Residents will want a say in what happens in their neighborhood.

You can collect some of this information before assembling a SRTS Team if you think it will help convince officials, school administrators, and others of the project's importance. But you may want to wait until after the kick-off meeting, when you know there is a team of people willing to make SRTS a reality.

Discuss the Project with Teachers and School Staff

Find a convenient time, such as a school staff meeting, to make a presentation to teachers and other staff about the SRTS project. Ask about student attitudes, unsafe behaviors, and other concerns. Ask the teachers if they teach pedestrian and bicycle safety skills and if so, to whom, how often, how many hours of instruction, etc. This is a good time to find out if they are interested in teaching more lessons on bicycle and pedestrian safety.

Conduct Parent Surveys and Student Tallies

The NM SRTS program provides two forms to assist with the collection of data on students' transportation choices and parents' concerns about school transportation issues. The *Survey on Walking and Biking to School* ("Parent Survey") and the *Student Arrival and Departure Tally Sheet* ("Student Tally Sheet") are both available in Appendices B and C and on the NM SRTS website.

You must conduct surveys using these forms if you wish to be eligible for NM SRTS

funding. The information gathered in these surveys will:

- ◆ Establish baseline data for the numbers of students currently walking and bicycling to school, before your program begins.
- ◆ Provide a better understanding of the current situation and issues.
- ◆ Help you evaluate program success once your program is established.

Parent Survey: The Parent Survey collects parents' perceptions and opinions of conditions near the school, as well as what types of improvements would be needed for them to feel comfortable enough to let their child walk or bicycle to school. The Parent Survey asks how children get to school and why families choose the travel mode they do. The survey also asks parents to identify any safety concerns along the school route and barriers to walking and bicycling. The survey targets families who live within a two-mile radius of the school.

There are different options for distributing the Parent Surveys. The SRTS Team should select the option that is most convenient but will generate the highest rate of return. Some options are:

- ◆ Send Parent Survey forms home with students. Many schools send information home to parents on a particular day of the week.
- ◆ Mail surveys directly to parents. This is an option if you have access to addresses and funds for mailing costs.
- ◆ Distribute surveys at the beginning of the school year in school welcome packets.

Include clear instructions about returning the survey (to the child's teacher, to the school office, to a drop box, etc.). Tell parents when the completed survey form is due and give them ten days to two weeks to fill it out. Including a letter from the principal with the Parent Survey can also serve as a school-wide introduction to your SRTS program. If the survey goes out to parents of all students at the school, you may want to provide incentives to students who return the survey. Stickers, pencils or other prizes motivate students to ask their parents to complete the survey. You can also offer a reward to the class with the highest rate of return.

Student Tally Sheet: The Student Tally Sheet is a record of how children get to school. It provides tallies of how many walk, bicycle, ride the bus, are driven by their parents, or use some other transportation mode. The Student Tally Sheet is filled out by classroom teachers, usually in the first class of the day. Teachers ask students to raise their hands to show how they got to school and how they plan to go home. Tallies are conducted on any two days between Tuesday, Wednesday and Thursday of one week.

Compile the Survey Data

The National Center for Safe Routes to School (NCSRTS) provides data entry services at no charge to anyone using the Parent Survey and Student Tally Sheets in any state, including New Mexico. The data is entered into an on-line national database which is used to track the progress and success of SRTS programs on national and state levels. While your data will be included in this database, only you, others you designate, and the NM SRTS coordinator

Involving Students

You may want to provide opportunities for student input and involvement in the process. Here are some suggestions:

- ◆ Have students develop and fill out their own survey. This encourages children to think about transportation as an issue in which they can be involved. Because surveys require reading and writing, this tool is most appropriate for students in grades 3 and up. Students can tally the survey data as a social science project.
- ◆ Have students create a map showing where they live and the route they walk to school. Ask students to show where safety improvements are needed along their route and why. Ask them to draw the things they like about their walking route, such as a pretty yard, a park, or a friend's house, as well as what they don't like, such as a mean dog or a busy intersection. Have students who arrive by bus or car focus on traffic safety issues at the school site.

will have direct access to your school data. See www.saferoutesinfo.org/data for more information. Instructions for using this service are on the NM SRTS website.

You may also decide to record and analyze the survey data yourself. Computerized spreadsheets can be helpful. Be prepared to record more data than you actually need. For example, sometimes parents use the survey as an avenue to vent about bus routes or other school issues that may not seem pertinent. It is best to keep all the information, in case it becomes useful later. The data entry may be tedious, but the surveys yield a lot of useful information.

Ask the Community

Ideally, you included representatives of a local community group or neighborhood organization on your SRTS Team. If not, it will be particularly important that you gather input from them during this phase of the project. They may already be working to address some of the problems you identify and they may have strong opinions about what should happen on their neighborhood streets. There are many ways to get input from the neighborhood. Some ideas include:

- ◆ Make a presentation at a local association meeting, and follow with discussion of issues.
- ◆ Talk to local environmental or other advocacy groups.
- ◆ Have volunteers knock on doors to get input about the project (“Knock and Talk”).



Student Route Map, Valle Vista Elementary School, Albuquerque

- ◆ Invite neighborhood residents to participate in a workshop about the SRTS program.

If you decide to hold a SRTS workshop, you can begin with the same presentation you made to the SRTS Team. Then invite participants to work on a copy of the base map (see Step 4), marking where they feel improvements may be needed and why. Let participants know how you intend to use the information they provide and how they can stay informed about your progress. This may be a good opportunity to ask for volunteers to help at special SRTS event days or other activities.

Step 3: Consider Other Information

Other information that may contribute to your SRTS Action Plan include planned improvements, the number of vehicles using the roadways during school hours, traffic speeds, and crashes.

Planned Improvements

Find out if improvements are planned on streets within two miles of the schools in your Plan, and if funds are available to construct the planned projects within the next five years. Sometimes pedestrian improvements are included in street projects. For example, if the pavement on a street is replaced, the project will usually include curb ramps and other sidewalk upgrades required by the Americans with Disabilities Act (ADA). Create a list of these projects and mark the improvements on the base maps (described under Step 4). The purpose of collecting this research is to avoid duplication of efforts. If a project to install sidewalks on one of the routes to school has

already been funded, perhaps your SRTS Team can request funds for other improvements.

Your local planning, public works or streets departments are the best sources of information on planned and programmed roadway improvements. If the school is near a state highway, you may also need to contact the NMDOT district office. Another source of information is the Regional Planning Organization (RPO) or Metropolitan Planning Organization (MPO), agencies that oversee regional transportation improvement plans in your area. For contact information for your area, please see Appendix L.

Count Motorized Vehicles

Counting the number of motorized vehicles at a few key locations can help provide a picture of traffic safety conditions for

Traffic Counts

Traffic counts are rough estimates at best. Motor vehicle traffic as well as pedestrian and bicycle traffic can vary greatly depending on a variety of factors. Here are some variables that can impact your data:

- ◆ weather – rain or threat of rain, cold, or extreme heat
- ◆ time of year
- ◆ time of sunrise / sunset
- ◆ road construction in the area
- ◆ before- and after-school clubs and activities
- ◆ days on which students have to carry large musical instruments or homework projects
- ◆ community activities

Who Owns What?

When discussing engineering changes, you need to know who owns or maintains the roads, sidewalks, and any land you may want to alter. Having representatives of the relevant agencies on your SRTS team can help speed up the process of understanding your options and opportunities.

- ◆ Some roads are state highways and fall under the jurisdiction of the NMDOT. These roads are typically identified with NM or US route numbers. The SRTS Team should address requests for changes on or around these roads to the appropriate NMDOT District Office (see Appendix L for contact information).
- ◆ Local roads are typically owned and maintained by a municipality (city, town, or village), county, or tribal government. In some cases, local governments have assumed responsibility for urban segments of state highways; sometimes several entities own and maintain different portions of the same road.
- ◆ School districts are usually responsible for school grounds and school driveways.
- ◆ Public right-of-way typically includes the paved portion of the road as well as some width of adjacent land on either side. There is usually enough right-of-way for sidewalks, power poles, fire hydrants, etc. Find out how wide the right-of-way is and how much of that is paved.
- ◆ You may also need to find out whether a public entity or a private individual owns land where you would like to locate sidewalks, trails, or other improvements.
- ◆ Your local planner, traffic engineer or public works department can help answer roadway and land ownership questions.

walkers and bike-riders. Observations should focus on points where students must cross the path of motorized traffic. Choose locations, such as crosswalks, near the school or on major routes to school. Station observers for one-hour observation periods during peak school travel time. Observers should count and record motorized vehicles as they pass a particular point. If the road is heavily traveled in both directions, station an observer on each side, and have each observer record vehicles passing only on their side. Your local road department, NMDOT District Office, RPO, or MPO may already have traffic counts that you can use.

The NMDOT counts traffic on state roads. Many local transportation departments also have vehicle counts in the form of Average Daily Traffic (ADT). This data may be useful, but keep in mind that these numbers are counts over a 24-hour period. SRTS data should focus on peak school travel hours when student walkers and bike-riders are actually traveling to and from school.

Your SRTS Team may want to count the number of motorized vehicles on the school campus, such as private vehicles in the drop-off/pick-up zones and the number of buses. If you want to reduce traffic congestion around the school or decrease the number of students arriving by car, this information

will help you evaluate the impact of your efforts later in the process.

Speed Data

If speeding is a concern in a particular location, you can ask your local police department about speed surveys to record the average speed of motorized vehicles there. The numbers of speeding tickets written is another way to document speeding issues in a particular location. Some communities support a “Neighborhood Speed Watch” through radar-lending programs. Residents use radar to measure speeds after receiving training from the police.

Crash Data

Crash data can be obtained from your local police department. If an intersection in your study area has a history of crashes, particularly involving pedestrians or bicyclists, this information helps illustrate the problem that needs to be addressed. However, crash data should not be relied on to measure your program’s success. Crashes are usually infrequent, and one crash alone can skew statistical analysis.

Step 4: Prepare the Base Maps

Maps provide an important tool for studying current and potential walking and bicycling routes to school. You will need to have two base maps for the SRTS Team: a *School Neighborhood Map* and a *School Site Map*.

There are a few elements common to both base maps. It’s best to use aerial maps that show actual photographed features. A local government traffic engineer, public works official, or planner may be able to help you create the base maps. If the school is adjacent to a state highway, the NMDOT district traffic

engineer may also be able to help. You can also use on-line mapping tools, such as Google Maps (www.google.com/maps).

The maps should be produced at a sufficient scale for people to add notes and sketches. They should have a north arrow and a scale in feet or miles. There should be an area for a legend of markings and symbols used. Some features may be hand drawn on the map.

The *School Neighborhood Map* should show the following features:

- ◆ Location of the school and the area around it within a two-mile radius
- ◆ School attendance boundary
- ◆ School walking boundary
- ◆ Street names
- ◆ Sidewalks and formal or informal paths
- ◆ Marked crosswalk locations
- ◆ On-street bicycle facilities such as bike lanes, paved shoulders, or wide curb lanes
- ◆ Traffic calming features

The *School Site Map* is a larger-scale aerial map of the school property and streets immediately surrounding the school campus. Use this map to show:



Corrales

- ◆ Bus and parent drop-off and pick-up zones
- ◆ Sidewalks
- ◆ Parking areas
- ◆ Bike rack locations

Identify traffic circulation patterns, such as how buses and private vehicles enter and exit the property, as well as walking and bicycling routes. Other information you can add to both maps as it is gathered includes:

- ◆ Road configurations (two-lane, four lane with median, etc.)
- ◆ Traffic and/or pedestrian controls (stop signs, traffic signals, etc)
- ◆ Posted speed limits
- ◆ Crossing guard locations
- ◆ School zone sign type and location

The base maps will be used later in the Action Plan process to develop “Walk and Bike to School Maps” (see pages 38-39) and to study issues and select strategies.

Step 5: Assess Walking and Bicycling Conditions

Your next step is to assess existing conditions at the school site and along the walking/bicycling routes. The main goals of assessments are:

1. To make a list of specific locations on the school site and surrounding streets that need improvements; and

2. To develop a “Walk and Bike to School Map,” once routes are considered safe.

You will assess conditions on the school site, at adjacent intersections, and on streets and key intersections in surrounding neighborhoods. The process focuses on identifying problems and opportunities. Solutions will come later.

NM SRTS funds can be used to pay a consultant to help conduct the assessments, provided that you have received approval from the NMDOT for this expense. However, the SRTS Team members should participate in the process because assessing conditions is one of the best ways to learn about issues around a school and along the routes to school. Include key agency experts who can inform observations and help formulate strategies to address issues that arise.

You can record observations on maps, note paper, or on a variety of different forms or checklists. These include “Bikeability and Walkability Checklists” (see Web Resource Box), “School Site Assessment,” “Neighborhood Assessment: Street Segments,” and “Neighborhood Assessment: Intersections.” The latter three forms are available in Appendices D-F of this Handbook and on the NM SRTS website.

School Site Assessment

The school site is assessed by walking the school site and observing traffic flow and behaviors during arrival and dismissal time. Position SRTS Team members or other volunteers at different locations so they are able to observe children arriving and leaving all around the school.

Web Resources

The National Center for Safe Routes to School provides Bikeability and Walkability Checklists at www.saferoutesinfo.org/resources.

Assign at least one person to take photographs. Digital photography of problems and opportunities is a good way to record data. You will probably refer to the pictures many times as the SRTS Team discusses the issues.

Plan your walking assessment so it includes time to watch what happens at the school during the morning drop-off and the afternoon pick-up periods. Traffic conditions at these two times of day differ widely, so you should evaluate the area at least twice. If possible, observe on more than one day. Talk to parents, teachers, students, and crossing guards about the issues.

Measure sidewalks and watch to see if they are wide enough for students. Review and record parking restriction signs and bus or private vehicle loading signs around the school. Watch to see if motorists are obeying the signs. Also, note street light locations around the school. Use the intersection assessment forms described below for each street intersection adjacent to the school.

When you finish, summarize the problems and opportunities. One way to do this is to make notes and sketches on the School Site Map described on pages 25-26. Another method is to make a list on a flip chart and invite everyone to add their comments.

Neighborhood Assessment

The purpose of a neighborhood assessment is to identify the best routes for walking or biking to school and back, and to identify improvements needed along those routes. The SRTS Team needs to assess routes from every residence within the school walking boundary, whether or not a student currently



SRTS Team members and other volunteers doing assessments can use maps, checklists, or assessment forms in Appendices D-F to record field observations.



During assessments, observers are stationed at all entrances and exits while children arrive and depart.



Conditions to watch for include obstacles on the sidewalk that might force children into the street.



Observers should talk with crossing guards and driveway monitors to learn more about the issues. They should note if the guards have proper equipment (see "MUTCD" text box on next page) and are well-trained.

lives there. Students may not live in some of the homes now, but they could move in later.

Two Neighborhood Assessment forms are available in this document to help: One focusing on street segments (Appendix E) and the other on intersections (Appendix F). The recommended process for conducting the neighborhood assessment is:

- ◆ Divide the SRTS Team and other volunteers into groups.
- ◆ Provide each group with a camera for photographing deficiencies.
- ◆ Give each group an aerial map showing the school and their assigned route to assess.
- ◆ Provide each group with a clipboard and forms (if you are using them) for each

intersection and roadway segment in their assigned route.

- ◆ Give each group a list of places and issues that have arisen in surveys, during meetings, or in other ways, so they can validate the issues in the field.
- ◆ Each group should walk the route assigned, filling out forms or taking notes as they proceed.
- ◆ Collect completed forms or notes.
- ◆ Create a summary of the information collected and/or indicate the issues on the School Neighborhood map. You will use this information when you identify concerns and when you create a Walk and Bike to School Map (see pages 38-39).

“MUTCD”

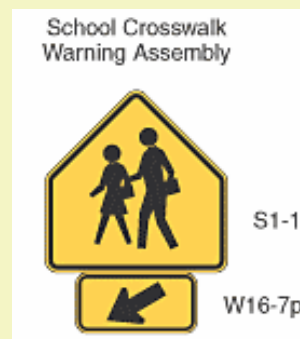
The Manual of Uniform Traffic Control Devices (MUTCD) is a detailed description of signs, pavement markings, and other traffic control devices developed by the Federal Highways Administration (FHWA) in order to standardize messages to users of our transportation system across the country. The current Manual (“2003 Edition with Revisions Number 1 and 2”), as well as revisions proposed for adaptation in 2008, are available on the FHWA website at <http://mutcd.fhwa.dot.gov>.

Part 7 of the MUTCD, entitled “Traffic Controls for School Areas,” includes detailed sections on signage, striping, signals and crossing supervision for areas around schools. According to the MUTCD Chapter 7E, vehicular and pedestrian traffic in school areas may be controlled by adult crossing guards or uniformed law enforcement. Student patrols may also be employed but only to control pedestrian traffic.



According to the MUTCD, adult crossing guards should be well-trained and should have:

- ◆ high-visibility retro-reflective safety apparel, and
- ◆ a hand-held STOP paddle in octagonal shape, at least 18 inches in size, with the word message STOP on both sides, in minimum six-inch white letters, on a red field with a white border.



Developing and Writing the Action Plan

Now that the SRTS Team has evaluated school site and route conditions, and received input from parents, teachers, students, and the community, it is time to create a SRTS Action Plan. This chapter guides you through steps that result in an Action Plan that summarizes current conditions and describes what the SRTS Team is going to do to change the situation.

The Action Plan Worksheet in Appendix G is an optional tool for organizing and tracking your Action Plan. See www.nmsaferoutes.com for a link to the electronic version of the Action Plan Worksheet. Appendix H provides an example of how to use the worksheet.

Typical Action Plan Table of Contents

- ◆ Introduction: “Snapshot” of the plan
- ◆ Background: Current situation
- ◆ Goals: What you want to change
- ◆ Strategies: Your approach to changes
- ◆ Tasks: What needs to be done
- ◆ Evaluation: Measuring progress toward goals
- ◆ Timeline: When the task will be completed
- ◆ How your efforts will be funded

Step 1: Review and Organize Data

The first step is to review and organize the data gathered. This process may give you new insights into the issues and potential solutions. Begin by transferring all site-specific issues onto the School

SRTS Process Overview

Form a SRTS Team (Ch. 2)

Step 1: Identify team members

Step 2: Hold a kick-off meeting

Gather Information (Ch. 3)

Step 1: Collect school data

Step 2: Get input from parents, students, etc.

Step 3: Consider other information

Step 4: Prepare base maps

Step 5: Assess walking and biking conditions

Develop & Write the Action Plan (Ch. 4)

Step 1: Review and organize data

Step 2: Develop goals and strategies

Step 3: Assign tasks

Step 4: Identify potential funding sources

Step 5: Define evaluation process

Step 6: Write the plan

Neighborhood and School Site base maps described in Chapter 3. Include issues discovered during assessments, concerns expressed by school staff or neighbors, comments received on surveys, and other sources.

Some issues may be behavioral, such as improper street crossings or illegal parking. Others may involve security—for example, Parent Surveys may reveal fears about someone living on one of the streets. Create a list of these concerns and combine them with issues noted on the base maps. This combined list of issues is the foundation for

your SRTS Action Plan and will help you define goals for your program.

Step 2: Develop Goals & Strategies

Goals describe what you hope to achieve in your program. There are two priority SRTS goals: 1) To create safe routes for walking and biking to and from school, and 2) To increase the number of children walking and biking to and from school.

You will want to discuss and develop strategies that address the issues you have

identified and can help you achieve your goals. Strategies can be grouped into the four “E’s” of engineering, education, enforcement, and encouragement. There may be several strategies for some issues. For example, if students are having problems crossing a highway or street, the SRTS Team might recommend looking into an engineering strategy, such as installing a “median refuge” island to protect pedestrians in mid-crossing, as well as an enforcement strategy, such as providing a crossing guard, or a strategy focusing on driver education.

If You Think There is a Speeding Problem...

- ◆ Talk to your police officers, neighbors, and community leaders to find out if they agree that speeding is a problem. If others support your concerns, you are more likely to be heard when you ask for help solving the problem. Your local police department may be able to monitor speeds using electronic devices. The most accurate data is collected when the devices are not noticed by drivers. “Speed trailers” can collect speed data, but they also influence behavior, so the data may not be the same as it would be when the trailer is not visible.
- ◆ To address a speeding problem, begin with education. Let people know why speeding is a problem. Include messages in community and school newsletters, on signs in the neighborhood, or on school or church marquees. You can also involve the media. The education campaign may not slow everyone, so at some point you will need enforcement to step in. For more details, see the “Enforcement” Chapter of the Online SRTS Guide at www.saferoutesinfo.org. The National Highway Traffic Safety Administration (NHTSA) offers a free 2007 Speed Campaign Tool Kit at www.nhtsa.dot.gov, including media releases, public service announcements, and video clips for television.
- ◆ Speed trailers or speed signs show passing drivers their speeds and the posted speed. They help reduce speeds, but the effect is usually temporary. They are most effective when used with enforcement. For example, the speed trailer could be displayed for three days and on the fourth day, police ticket speeders.
- ◆ Traffic calming measures are physical changes to streets that are intended to slow drivers. These measures can be the most effective long-term strategy to reduce motor vehicle speeds. They will have the most impact on people who live in the immediate area. For example, if a speed hump is installed on a street near the school, the people who live on that street or use it to access their street must drive over the hump each time they leave and return. To get their support, you will need to include them when you gather the information described in Chapter 3. An open public process will allow them to share their concerns and help decide what steps are needed to fix the problems. To learn more about traffic calming, see pages A26-A27 in Appendix I.

The SRTS Team should discuss various strategies, and then pick one or more to address each issue.

Engineering Strategies

Engineering strategies focus on physical changes to the walking and bicycling environment, including major infrastructure improvements in the neighborhood or on the school site as well as relatively minor changes to signage and pavement markings.

Some basic engineering improvements you might be able to make to the streets around the school are installing or updating signs, improving markings at crosswalks and in school zones, and installing flashing school zone signs. Larger projects might include building or improving sidewalks, creating safer street crossings, providing neighborhood trail connections, or changing pick-up and drop-off patterns on the school grounds. Appendix I includes details on these and other engineering strategies.

Engineering measures proposed by the SRTS Team should follow standard practices or guidelines established by AASHTO, the MUTCD, or another reliable



Engineering strategies include efforts to slow traffic, such as the traffic calming circle shown above. For more on traffic calming, see box on page 30 and see pages A-26-27 in Appendix I.

Web Resources

Professional guidance relating to engineering strategies is available through the following sites:

- ◆ Manual of Uniform Traffic Control Devices (MUTCD), <http://mutcd.fhwa.dot.gov>.
- ◆ Institute of Transportation Engineers (ITE), www.ite.org.
- ◆ Publications from the American Association of State Highway and Transportation Officials (AASHTO) (see page A-20) are not available on line but can be ordered at www.transportation.org.

NMDOT's Bicycle, Pedestrian, Equestrian (BPE) Program, working with your local NMDOT District Office, can assist with design and policy issues relating to non-motorized modes within the state transportation system. For more, see <http://nmshtd.state.nm.us/main.asp?secid=11190>.

source of guidance such as the Institute of Transportation Engineers (ITE) (see Web Resource Box and text box on p. 28). Perhaps an engineer on your team can take the lead in recommending these strategies, or you may have other members who can explain the pros and cons of proposed engineering measures. You can also ask for help from staff at agencies that have jurisdiction over the street or property that you want to improve.

Some engineering strategies, such as changes to on-street parking rules or traffic signal timing, may involve adjusting school or local government policies. Be sure to address smaller issues too, such as overgrown trees and brushes, trash cans, snow and ice, and utility guy wires that force pedestrians to step into the street. Some of

School Location and School Site Design

School location and site design are key factors in creating safe routes to school. The school site includes the physical location of the school and the school property around it. Many state and local policies favor construction of new schools outside of residential areas over renovation of existing neighborhood schools. This can have enormous impact on students' ability to walk or ride a bicycle to school.

Seven interrelated elements of the site affect school trip safety: buildings, buses, private vehicles, service vehicles, pedestrians/bicyclists, utilities, and playgrounds. If you are designing a new school, redesigning an existing school, or making minor changes such as redesigning the drop-off/pick-up zone, design for the safety and convenience of **all** users. Strategies to consider include:

- ◆ Separate uses. Separate bus driveways and parking lots from car driveways and parking. Separate pedestrian and bicyclist routes from motor vehicle routes.
- ◆ Design bus and vehicle loading areas for one-way, counter-clockwise circulation so the passenger door will be on the building or curb side.
- ◆ Keep children away from the edge of sidewalks in bus loading areas by painting "stand-back" lines or by providing a buffer area between the bus and waiting area.
- ◆ Provide vehicle access to the school from at least two different streets. More access points result in less congestion and more efficient traffic flow.
- ◆ Provide a driveway long enough to accommodate all cars waiting to pick-up or drop-off students to avoid backing up into the street. Place the pick-up/drop-off zone at the far end of the parking lot or driveway to maximize on-site vehicle storage.
- ◆ Provide pedestrian and bike access points from all points around the school.
- ◆ Minimize road, driveway, and parking lot crossings by students and staff. When crossings are necessary, consider using raised crosswalks.
- ◆ Lay out sidewalks in the most direct route possible and connect buildings with short, direct walkways. Pedestrians, especially children, will choose the shortest, most direct route between Points A and B.
- ◆ Provide all-weather paved walkways and sidewalks on the school site that connect with local sidewalks around the school and adjacent streets. Ideally sidewalks should be 8 to 10 feet wide near the school.
- ◆ Provide adequate lighting at entrances, and along sidewalks to promote safety and enhance the appearance and security of the building(s).
- ◆ Provide adequate fencing, railings, and/or bollards (posts) to protect pedestrians from movements by service vehicles, such as food delivery trucks.
- ◆ Prohibit curb parking near crosswalks, at driveways, and at building entrances to maximize visibility of pedestrians and other vehicles.

For more information, see sources listed in the Web Resource Box on page 33.

Web Resources

- ◆ Safe Routes to School National Partnership, "School Siting: Location affects the potential to walk or bike," www.saferoutespartnership.org/state/5638/5652.
- ◆ Arizona's Traffic Safety for School Areas Guide, www.azdot.gov/Highways/traffic/standards/School_Safety/Schoolsafety.pdf.
- ◆ Safe Routes to School Guide, Student drop-off and Pick-up, www.saferoutesinfo.org/guide/pdf/SRTS-Guide_Dropoff-Pickup.pdf.

the solutions for these issues may take less time and money than major infrastructure projects. This makes them rewarding because you can quickly see the results of your efforts. But they are often recurring problems and your SRTS Team may need to work persistently with the appropriate partner(s) to address them.

Enforcement Strategies

If your list of concerns includes unsafe behaviors such as speeding, illegal turns, passing stopped school buses, or neighborhood crime, you may want to include enforcement in your strategies. If your police or sheriff's office is not already involved with your SRTS program, you need to ask for their help now. Explain your concerns and let them tell you how they can help. They may be willing to partner with you to implement some of your ideas, or they may have other ideas.

A sample of enforcement ideas for SRTS programs includes:

- ◆ "Corner Captains" — volunteer parents or citizens positioned at specific locations along a school route each day. They provide an adult presence in the neighborhood and monitor the safety of

children as they walk to and from school.


- ◆ "Paperwork Patrol" — Police often spend time in their vehicles completing paperwork. Several communities have started programs where police park on the street in front of local schools to complete their paperwork. Even though they may not be writing tickets, their presence often helps reduce speeding.
- ◆ "Cops on Bikes" — Bicycle-mounted police are highly visible. They can provide added safety and security for children walking or bicycling to and from school. They are also role models for children who ride bicycles.

Education Strategies

All SRTS programs should include education. Strategies might include teaching students how to safely walk or bike, or

Tips for Parents and Other Adults
For Teaching Pedestrian Safety to Children

SafeRoutes
National Center for Safe Routes to School



TIP SHEET


Walking is a fun and healthy way to spend time with your children while teaching them skills that can serve them well throughout life. The walk to school is a great time to use these safety tips.

Be a walking role model

Children learn through experience. Walking with parents or another caregiver is an important way for children to practice crossing real streets and picking safe places to walk. There is no magic age when children are old enough to walk without an adult. But, as a parent, you should decide when your child has the skills and experience to deal with traffic safely without you.

As you walk with your child, remember these safety tips:

- Wear bright-colored clothes, and carry flashlights or wear reflective gear if it is dark or hard to see.
- Look for traffic at every driveway and intersection. Be aware of drivers in parked cars that may be getting ready to move.
- Obey all traffic signs and signals.
- Cross the street safely:
 1. Stop at the curb or edge of the street.
 2. Look left, right, left and behind you and in front of you for traffic.
 3. Wait until no traffic is coming and begin crossing.
 4. Keep looking for traffic until you have finished crossing.
 5. Walk, don't run across the street.



Choose the safest route to school

Select a walking route with less traffic and intersections.

- Pick places where there are sidewalks or paths separated from traffic. If there are no sidewalks or paths, walk as far from the motor vehicles as possible and, if possible, on the side of the street facing traffic.
- Limit the number of street crossings. When available, cross at a location with an adult school crossing guard.
- Avoid crossing busy or high-speed streets.

Understand your child's limitations

Children are not small adults. It will take time and practice for a child to develop the ability to deal with lots of traffic. Over time, children develop the ability to accurately judge the speed and distance of oncoming traffic. Young children may think that a car is able to stop, when in fact, it is not. Also, children may think that if they can see a driver, the driver can see them. But, children are smaller and harder for drivers to see. Get down to a child's height to experience their perspective and see what they see.

For more resources and information on Safe Routes to School, please visit the National Center for Safe Routes to School Web site at www.saferoutesinfo.org.

Flyers and other downloadable resources available at www.saferoutesinfo.org can help you get started on education programs quickly.

reminding drivers to obey speed limits. Education might mean educating trash collectors not to place empty cans on the sidewalks or reminding neighbors not to block sidewalks with their cars. The educational strategy will be as unique as the issue.

Review your list of concerns and identify those you can address with education strategies. For example, if you observed during the walking assessments that neighbors often block sidewalks with their cars, education may be your first strategy. If they do not cooperate, you may need enforcement to follow up.

Often, education will be one of several strategies. For example, you may have a crosswalk where visibility is limited because drivers ignore parking restrictions. In the long term, you may want to install bulb-outs, which are extensions of the curb into the roadway to improve pedestrian visibility and shorten the crosswalk. While you work to get the bulb-outs funded and built, you could try to change driver behavior by making sure they know that parking on or near the corner is unsafe and not allowed. You could reinforce your educational message by providing more signs, painting the curb or using traffic safety cones to prevent parking.

The adult education method you choose depends on the issue. If you want to address a speeding problem, education will be the most effective if it is combined with enforcement measures (see “If You Think There is a Speeding Problem...” on page 30). If your program covers several schools or an entire community, you may want to use radio or television to promote your message.

If your program includes one school, the most effective approach may be to hand out flyers to drivers or to make presentations at school and neighborhood meetings.

Safety education for children should be part of your program. The National Center for Safe Routes to School (see Web Resource box on following page) recommends that education programs cover pedestrian and bicyclist safety skills, personal safety, and the health and environmental benefits of walking and bicycling. Education activities can include school-wide assemblies,



Assemblies like the one above reach many students at once. Above, students practice signaling a right turn. Hands-on training, as shown below, gives children an opportunity to practice (Hillrise Elementary School, Las Cruces).



New Mexico's Child Helmet Safety Law

In 2007, the New Mexico legislature passed the Child Helmet Safety Act into law, requiring that children and youth under 18 years of age to wear a helmet when using bicycles, tricycles, skateboards, scooters, or skates on public property in New Mexico. A violation could result in a fine issued to the child's parent or guardian. The law also requires that anyone renting bicycles, skates, scooters or skateboards must provide a helmet to a minor who will be an operator or passenger, if the minor does not already have a helmet in possession.

Now that we have a law, related educational efforts need to be increased. The NM SRTS Program has teamed up with the NM Department of Health, the NM Brain Injury Advisory Council and the University of New Mexico Prevention Research Center to create the "NM Helmets for Kids Coalition," whose goals are to increase awareness of the Child Helmet Safety Law and to make helmets and educational materials available to communities throughout the state. For more information, promotional materials, and other resources, see <http://nmchildhelmetlaw.com/>. For the full text of this and other state laws relating to bicycling and walking in New Mexico, see "Applicable State Laws" compiled by the NMDOT's BPE Program at <http://nmshtd.state.nm.us/main.asp?secid=15678>.

classroom presentations by outside sources, classroom lessons that support other learning areas, and skills events such as bicycle rodeos. The goal is to provide enough skills training so students can apply and practice the safety rules they learn. The SRTS Team should work with the school to develop a program that fits the school's curriculum and resources.

Some of the safety programs available are listed below. A web search will reveal many more, as new ideas are quickly emerging. Most program personnel freely share their materials, so do some research before developing new programs, brochures, lesson plans, or other educational materials. You may be able to obtain an original file and just add your school or program name.

The Maryland Pedestrian and Bicycle Safety Education Program includes pedestrian safety programs for kindergarten through second grade students, and a bicycle safety program for third through fifth grade students (see Web Resource Box). The pedestrian and bicycle sections each contain

four core lessons which teach safety skills. If teachers have time, they can use the classroom lessons to reinforce hands-on lessons. The program's multi-disciplinary "Learner Outcomes" include:

- ◆ Health, Safety and Injury Prevention (K-3): Take precautions and follow rules that are basic to safe daily living.
- ◆ Health, Health Behaviors (K-3): Demonstrate skills to improve or maintain personal health.
- ◆ Social Studies, Geography (PreK-3): Explain why some locations are better than others for specific human activities.

Web Resources

- ◆ National Center for Safe Routes to School: Education strategies are discussed in the Center's "SRTS Guide" at www.saferoutesinfo.org/guide/education/.
- ◆ Maryland Pedestrian and Bicycle Safety Education Program, Administrators' Guide, available at www.walktoschool.org/downloads/ped-bike-safety_admin.pdf.

- ◆ Writing, Writing to Inform (PreK-3): Develop and organize facts to convey information.
- ◆ Health, Safety and Injury Prevention (4-5): Eliminate or modify specific hazardous situations.
- ◆ Health, Goal-Setting and Decision-Making (4-5): Predict how decisions regarding health behaviors have consequences for self and others.
- ◆ Social Studies, Geography (4-5): Construct and interpret maps.

Encouragement Strategies

Children who do not usually walk or bicycle to school may not change their transportation habits without some encouragement. Or they might want to walk or bike, but have parents who prefer to drive them to school. Parents who find it more convenient to drop their children off rather than have them ride the school bus, walk, or bicycle may not realize they are contributing to safety and pollution problems.

Strategies to encourage walking and bicycling to school include events and activities that invite people to try a different form of transportation on selected days. For students who live far away, it may be



Hillrise Elementary School, Las Cruces

desirable to encourage carpooling or riding the school bus to a designated “remote” drop-off/pick-up point and walking from there. For students within the school walking boundaries, the strategy may be to encourage them to try walking or bicycling instead of riding in a vehicle with parents or siblings.

Encouragement activities often require many volunteers and a lot of planning. Many schools start by hosting a one-day event, such as the “International Walk to School Day” each October, which is promoted as “Walk and Roll to School Day” in New Mexico. After organizing one event, many schools expand the program to include events that occur more often, such as “Walking Wednesdays.”

Ideally, encouragement programs should not begin until after parents have received a Walk and Bike to School Map that designates recommended safe routes (see page 38-39). However, while you are working on making your school routes safer, you could encourage parents to let their children participate in a Walking School Bus or provide some other escort for students.

Web Resources

- ◆ For more information on encouragement activities from the National Center for Safe Routes to Schools (NCSRTS), see www.saferoutesinfo.org/guide/encouragement.
- ◆ A Walking School Bus program guide is available from the NCSRTS at www.saferoutesinfo.org/guide/walking_school_bus/index.cfm,



Las Cruces

A Walking School Bus is a group of children walking to school accompanied by one or more adults. The Walking School Bus may be informal, such as when two families take turns walking their children to school, or it may be formal, with planned routes and meeting sites, a timetable, and a schedule of trained volunteers. A “how-to” guide is available from the National Center for Safe Routes to School (NCSRTS) in “The Walking School Bus: Combining Safety, Fun and the Walk to School.” Bicycle Trains are similar programs for bicyclists (see Web Resource box on page 36).

If you establish formal programs, make sure that volunteers are trained regarding pedestrian and bicycle safety and their responsibilities for ensuring that children are safe on their journey to and from school. Volunteers may also need to be screened if they will be supervising children as part of a SRTS activity. At a minimum, the school should follow the recommended procedures outlined by the NCSRTS, as well as any rules, policies, or protocols established by the school district for school-sponsored activities occurring off school property.

“Frequent Walker” and “Frequent Biker” contests provide students with an incentive to walk or bicycle to school. When frequent mileage cards are used, the student has a hole punched in the card each time he or she walks or bicycles to school. When the card is full, the student can trade it in for a prize, or use it to enter a contest for a bigger prize.

Prioritizing Strategies

Now that you have gone through these four E’s to compile your SRTS strategies, prioritize those strategies with safety as the first consideration. If there are no safe walking and bicycling routes yet, you should include encouragement programs in your Action Plan, but delay them until you have addressed safety problems. Identify any “quick wins” that can help generate enthusiasm early in the program. Make efforts to gain support and funding for some of your long-term strategies, such as engineering improvements, a high priority. Do not put those strategies that may take a long time to the bottom of your priority list just because they are long-term and challenging!

To be eligible for funds from the NM SRTS program, your Action Plan should address and discuss all five E’s—education, encouragement, engineering, and enforcement, plus evaluation (which is discussed under “Step 5” on page 43).

Step 3: Assign Tasks

Each strategy will require one or more tasks. How will the SRTS Team complete them? Who will do each one? When does each task need to be finished? Review the strategies for each issue. List the task(s) to perform,

(Continued on page 40)

Walk and Bike to School Maps

The purpose of the Walk and Bike to School Map is to identify the safest routes for children to use when they walk or bicycle to school. As shown in the sample on the opposite page, arrows on the map direct students to preferred streets and crossings.

Chapter 3 of this Handbook has the SRTS Team updating the base maps to include the issues identified as data was gathered. When the base maps reflect all site-specific issues, the SRTS Team should meet and decide which routes are most suitable for walking and bicycling to school. The SRTS Team may decide improvements are needed before any route is acceptable. In that case, finalizing the Walk and Bike to School Map can be included as a strategy to complete later. The SRTS Team should not finalize and distribute the Walk and Bike to School Map until it's decided that the safety level of the routes is adequate.*

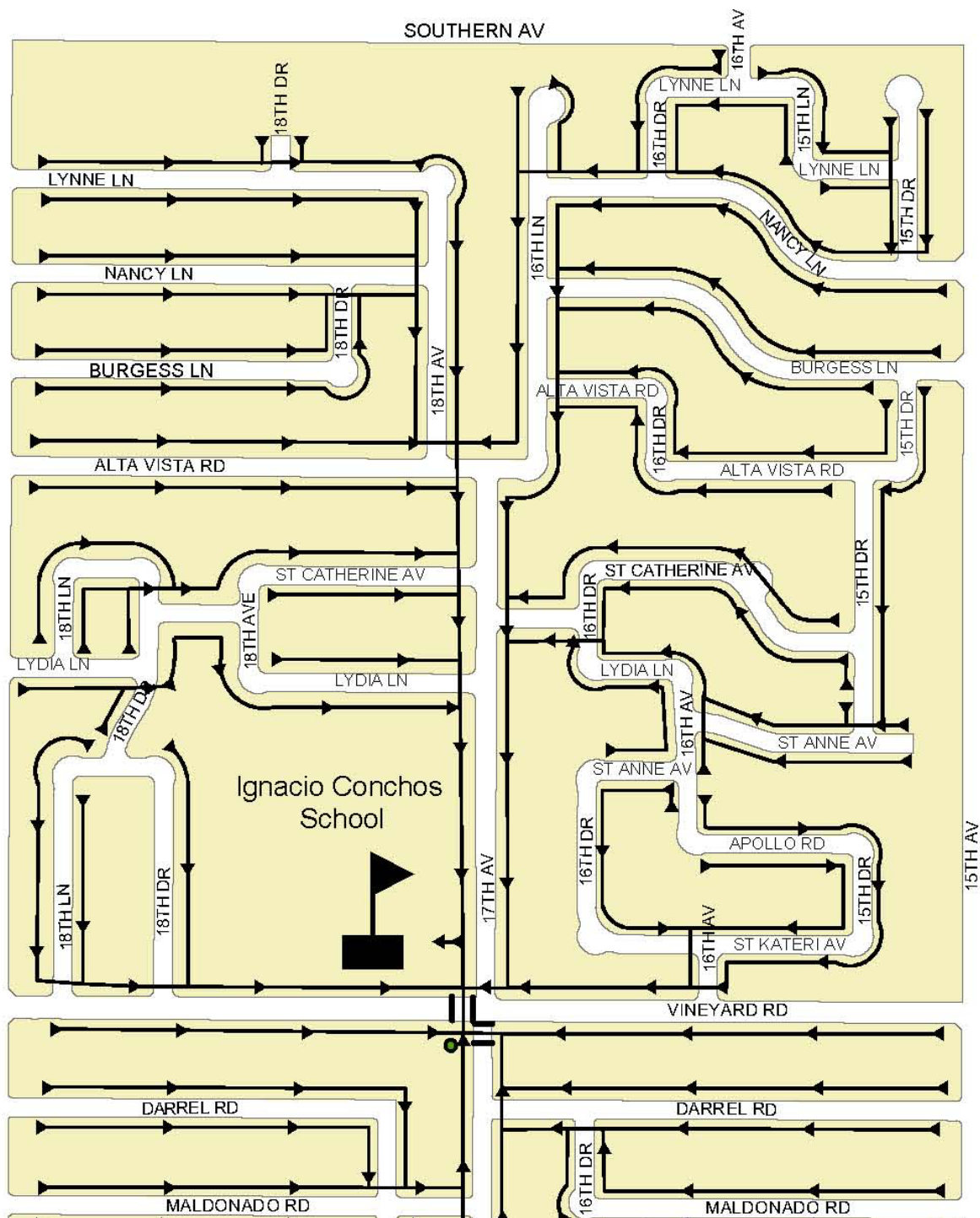
To develop the Map, team members need to delineate desirable walking routes using the following guidelines:

1. Draw lines and arrows showing the walking routes on each side of every street within the walking attendance boundary. The map should guide children to streets with sidewalks.
2. The arrows should show the direction of walking *toward* the school.
3. Start on the streets nearest the school and work out to include a route from ALL homes or apartments within the walking boundary.
4. Show the most appropriate places to cross each street based on points 5 and 6 below. Minimize the number of crossings and crossing locations.
5. Utilize existing school crosswalks, crossing guards, traffic signals, and stop signs to suggest where students should cross streets. In some cases crossing guards may need to be reassigned or added to a key crossing location.
6. The shortest route is not always the safest route. The goal is to identify the safest route. Avoid walking routes along busy streets when there is an alternate route inside the neighborhood.

A similar approach can be taken to identify desirable bicycle routes to school. Your local traffic engineer or public works official should review the map before it is finalized. Duplicate the final map and give copies to all families living within the walking attendance boundary. Consider developing a bilingual or a separate Spanish-language version of the map. Encourage parents to explain the walking and bicycling routes to their children. Parents should also conduct a test run by walking with their child on the selected route. The school should keep a large size map in the school office. Update the map when there is a significant change within the walking attendance boundary, such as a new segment of sidewalk or a change in intersection design, or when the boundary itself changes. The SRTS Team should periodically evaluate the walking and bicycling routes, preferably once a year.

** Students may currently be walking or bicycling along unsafe routes, and addressing safety issues on these routes may take a long time. Rather than discouraging students from walking or bicycling, the SRTS Team may want to establish a Walking School Bus program. See pages 36-37 for more information and a web resource.*

Sample Map



Follow the solid line in the direction of the arrows to get to school.
Siga la línea en la dirección de la flecha para llegar a la escuela.

Sample map from Phoenix, Arizona



Recreational trails like this one in Farmington can link schools to neighborhoods.

who will complete the task, and when you expect to do the work.

If you use the electronic version of the Action Plan Worksheet (as shown in Appendix G and available at www.nmsaferoutes.com) or a similar electronic form to organize information, you can update the status of each strategy and task without rewriting information. This will help you track progress.

Step 4: Identify Potential Funding Sources

In order to implement your strategies you will need to consider potential funding sources. Some of the strategies you identified may not be costly in terms of dollars but they may require other resources, such as volunteers or donations from your community. Review the following list of funding sources, explore other funding possibilities with your SRTS Team and other partners, and identify one or more possibilities for each strategy.

Safe Routes to School Funds

The NM SRTS Program provides federal funds on a cost reimbursement basis to help communities establish local SRTS Programs. New Mexico has been allocated roughly \$1,000,000 per year from the Federal Highways Administration (FHWA) for a five-year period to cover the costs of statewide and local activities. For more information and an application, see www.nmsaferoutes.com. Engineering and other program activities can be funded once communities have developed an SRTS Action Plan. Eligibility requirements are summarized in Appendix M.

Other Federal Transportation Funds

The federal government provides funds to states for transportation infrastructure

Web Resources

- ◆ For information on the use of federal Transportation Enhancements funding for bicycle and pedestrian facilities as well as safety education activities, see the National Transportation Enhancements Clearinghouse (NTEC) at www.enhancements.org.
- ◆ For more on New Mexico's federally-funded Recreational Trails Program, see New Mexico State Parks, www.emnrd.state.nm.us/PRD/rectrails.htm.
- ◆ For information on the federal Community Development Block Grant (CDBG) program, see www.hud.gov/offices/cpd/communitydevelopment/programs.
- ◆ For a listing of possible private grant funders, see The Foundation Center at <http://foundationcenter.org/findfunders>.
- ◆ For other fundraising and incentive ideas, see Fundsnet Services Online, www.fundsnet.com.

projects, including engineering improvements for bicyclists and pedestrian. Local jurisdictions in New Mexico can develop transportation plans and apply for these federal funds through their MPO or RPO (see Appendix L for contact information), which work with NMDOT to include proposed projects in the Statewide Transportation Improvement Program (STIP). The local jurisdiction usually must provide a match to the federal funds, typically 20 percent of the total cost.

Bicycle and pedestrian facilities may be proposed as a stand-alone project or they can be included as part of a larger road construction or other transportation project, if one is planned. Typically, stand-alone projects focusing on bicycle and pedestrian needs are supported through special federal funding streams administered by NMDOT, such as federal Transportation Enhancements (TE) (see Web Resource Box). But facilities for pedestrians and bicyclists qualify for almost all road funding categories, so their inclusion in larger projects should not be reliant on availability of special funding such as TE.

Some federal funds are available through competitive application processes, such as NMDOT's Highway Safety Improvement Program. SRTS Teams can work with their local jurisdiction, MPO, or RPO to include some of their recommended engineering strategies in these applications.

Recreational Trail Program

The federal Recreational Trails Program (RTP) is a potential funding source for trails that link neighborhoods and schools. In New Mexico, this program is administered by the New Mexico State Parks Division, which

provides successful applicants with up to 80 percent of project funds to develop, improve, and maintain trails. Eligible applicants include local, state, and federal agencies, Native American tribes and pueblos, and non-profit organizations in partnership with eligible agencies. In 2008, \$932,500 was available for non-motorized trails.

Community Development Block Grant (CDBG)

The CDBG program is a flexible program under the U.S. Department of Housing and Urban Development that provides communities with resources to address a wide range of unique community development needs. The program provides annual grants on a formula basis to 1180 state or local government entities.

Local Capital Improvement Program

The Capital Improvement Program (CIP) is a city or county plan that identifies projects programmed for construction over the next four to six years. The CIP provides a schedule and identifies options for financing each project.

During the data gathering steps described in Chapter 3, you identified who owns and manages roadways near your school. If your Action Plan includes engineering improvements that are not already in the local CIP, contact the applicable agency and ask about adding your project(s) to the CIP. The agency may commit to including some of your recommended improvements in the near future or your projects may be included in other long-term plans. The agency may respond that your proposed projects are not feasible for various reasons. Do not give up, because there may be other ways to fund the project.

Other Public Funding

There may be other sources of public funding unique to your area. Your local health department may have access to funds for physical activity programs. A local college or university may have research money to conduct a study on physical activity in children, or your local police department may have public safety funds for traffic efforts. Significant investment in transportation and safety in New Mexico comes through state legislative allocations such as “capital outlay projects.” Your partners and community leaders may know about other funding sources.

Private Grants

Private foundations and grant-making institutions can be excellent sources for non-profits and school systems to find funding for education and encouragement activities. There is a lot of interest among some grant providers to fund programs related to school health and physical activity. SRTS also addresses other common objectives in the areas of transportation, safety, environment, individual self-reliance, and community-building.

Local school systems, principals, and teachers often receive information about small grant opportunities that focus on schools. Local health, safety, transportation, and environmental organizations may also be aware of funding sources that fit a SRTS program.

Activity-Specific Funding

Local sources may provide limited funding for projects with specific goals. The school parent-teacher group, for example, might fund a Walk and Roll to School Day event, a Frequent Walker and Bike-Rider Program,

or an inexpensive improvement such as a sign or a bike rack. A local safety group, police department, or bicycle organization might help fund pedestrian or bicycle safety classes. Sometimes neighborhood or civic associations provide small grants for specific activities. Even an interested individual might make a donation earmarked for a particular project.

You can also approach local businesses or business groups for sponsorship of an event, promotional materials such as T-shirts, or a minor improvement. Bicycle shops and sporting good or “outdoors” stores are often excellent sources of support. Other local businesses may be able to provide refreshments for events, printing services, prizes for contests and events, equipment for safety classes, or other supplies that can reduce costs. Consult with school staff before asking for support from the business community. Schools have many needs and must prioritize their requests.

Fund-raising Events

School-based groups, such as parent-teacher groups, are often experts at fund-raising events. Bake sales, spaghetti suppers, silent auctions, “hat days,” and T-shirt sales are among the many techniques in the fund-raising toolkit. You may want to work on one of the events your school groups usually host and ask that a portion of the proceeds go to SRTS. You can also consider holding separate events that reinforce the SRTS concepts, such as a walkathon or a bike ride fund-raiser.

There may also be an opportunity to “piggy back” on another fund-raiser event. For example, if there is a diabetes walkathon, or a charity bike ride in your community, you

may be able to get some of the proceeds donated to your SRTS program, or at least be allowed to set up a table and solicit for donations.

In-Kind Support

In-kind support, such as volunteer hours or donated supplies, provides many benefits to SRTS programs. In-kind support reduces cash requirements and the interaction helps build and nurture community relationships. You can often use in-kind support to meet match requirements for other funding sources.

Many educational and encouragement strategies require little or no funding, but they do require lots of volunteer time. Talk to parents, teachers, and community members about helping. Contact organizations such as bike shops, travel associations such as the American Automobile Association (AAA), police, fire and emergency response services, hospitals, and public health or community health services. They can often provide incentives at little or no cost. Talk to local law enforcement about additional enforcement around the school, if needed.

Volunteers from your school's PTA, PTC, or PTO, health organizations, a biking or walking club, a local high school, or even a local business might assist with Walking School Bus or Bike Train programs. Volunteers can help staff events, make posters, conduct surveys, or fix bikes. Student intern programs through universities are excellent resources. Civic clubs or individuals who understand local government systems may help bring attention to needed traffic enforcement or



Dexter

infrastructure improvements around a school.

Parents and students can help with many of the activities involved in SRTS. Volunteer participation can get the work done while fostering deeper community involvement in the program. Often senior citizens are available and interested in participating. Be sure to check with the principal about procedures that apply when volunteers interact directly with students.

Step 5: Evaluation

Your SRTS program should also include a plan for evaluation. Evaluation is one of the five "E's" of a complete SRTS program. The purpose of evaluation is to assess the effectiveness of your strategies and measure your program's overall success. It will help you decide if what you are doing is working or if you need to change strategies. Evaluation will help answer the question of whether or not you have met your goals.

As a minimum, you should use the Student Tally and the Parent Survey to measure your success in achieving the two primary SRTS goals: 1) To create safe routes for walking and biking to and from school and 2) To increase the numbers of those walking and biking to and from school. As explained in

Web Resource

- ◆ Evaluation methods are covered in more detail in the National Center for Safe Routes to School's *On-line SRTS Guide* at www.saferoutesinfo.org/guide/evaluation.

Chapter 3, you should collect data using the Student Tally and Parent Survey forms at the beginning of the Plan development process and before you begin implementing your strategies. Collect the data again when you want to know if you have made progress toward your goal of increasing the number of children who walk and bike to and from school.

You can also evaluate each of your strategies to assess progress and effectiveness. For example, if one of your strategies to achieve the goal of increased walking is to start a Walking School Bus program, you could evaluate by answering questions such as: Was the program established as intended and by the time proposed? How many children signed up initially? How many children are participating after two months, four months, and six months? You could create a simple tally sheet for the Walking School Bus leaders to use to count the number of children participating on a daily, weekly, or monthly basis to collect data.

If you find that the number of participants is increasing over time, perhaps due to good advertising for the program and the effectiveness of your encouragement activities, then you can claim a success! You can use your data from the Walking School Bus tally sheets as a measure toward the achievement of one of your primary SRTS goals – increasing the number of

children walking to school. But if you find your participant numbers are dropping over time, you will probably want to try to figure out what you need to do to increase participation. For example, you might want to increase advertising, talk to parents to see what their concerns might be about using the Walking School Bus, or look into any problems with logistics or dependability of walk leaders.

When you write your evaluation strategy, it is helpful to be specific about what you want to achieve. If you write, “Start a Walking School Bus Program by September 2008, and recruit at least 20 students within the first month and 10 additional students for the next 3 months,” it makes your progress easier to monitor. If one of your strategies is to lower car speeds in the school zone, your strategy could be to, “Lower the speed of the cars traveling in the school zone so that at least 80 percent of the cars are traveling at the speed limit.” To evaluate this strategy, you will need speed data before starting education and enforcement activities, and some time after. You could ask your local traffic engineering or police departments if they will work with you to monitor before and after speeds. If results show that more cars in the school zone are traveling within the speed limit since you started your SRTS activities, it shows progress toward one of



Jemez Pueblo

your primary goals – to create safe routes to school!

See the sample Action Plan Worksheet in Appendix H for more examples on how to evaluate your strategies. For more information, see the NCSRTS link listed in the Web Resource Box.

Step 6: Write the Action Plan

When you have gathered the data, as described in Chapter 3, and completed steps 1-5 in this chapter, you are ready to write the Action Plan. You can use any format for the Action Plan, but you should consider including the following elements in your Plan:

Table of Contents

Identify key sections of the Plan.

Introduction

An introduction summarizes the main issues and strategies, along with some background information. It is best to write the introduction after writing the rest of the Plan and then you can “cut and paste” to create the one-to-two paragraph introduction.

Background

Describe the school(s) covered by your Plan, including the information described in Chapter 3. You should also include a description of the SRTS team and the planning process, addressing:

- ◆ Team members and their roles in developing the Action Plan.
- ◆ Other partners and their roles.

- ◆ Team history (for example, perhaps the team is a subcommittee of another committee).
- ◆ The process used to develop the Plan.
- ◆ A summary of Team meetings and events, such as bike rodeos, presentations at PTA/PTC/PTO meetings, or attendance at other neighborhood meetings.
- ◆ Community characteristics, such as population, history, economy, and other issues that relate to SRTS.

Goals

Describe the goals of your program, including the priority goals of creating safe routes and increasing the number of walkers and bicyclists.

Strategies and Tasks

List the strategies the SRTS Team selected and the tasks you will perform to implement the strategies. Include tasks and expected completion dates. If you used the Action Plan Worksheet, simply include the form. If you did not use the form, classify each strategy as one of the “E’s” - engineering, enforcement, education, or encouragement.

Evaluation

Explain how you will evaluate the success of your strategies when they are completed. If you used the Action Plan Worksheet, you will have listed evaluation methods for your various strategies. Include a description of how you will use the Student Tally forms and the Parent Surveys to measure your priority goals.

Completing the Action Plan

Your Action Plan will serve as a guide for your activities and as a document for public reference. If you followed the steps and completed each of the tasks outlined in this Handbook, your Action Plan may qualify you for NM SRTS Phase 2 funds, which are intended to help you implement the Plan. You will need to submit your Plan to the NM SRTS Coordinator for approval. (For information on the application process, see www.nmsaferoutes.com.)

The Plan may be useful when applying for other sources of funds. It can help inform local officials and parents about the issues and build community support for your SRTS program. It also can serve as important documentation of your systematic efforts to take appropriate steps to address any safety issues that have been identified.

You will need more than one copy, so keep the Action Plan as concise as possible. Keep the backup information, such as walking assessment forms, base maps and parent surveys.

Some Final Tips for Success

Congratulations! You're on your way to starting an SRTS program that can make a big difference to the safety and physical health of your children and help strengthen your community's support for walking and bicycling. In addition to this handbook, there are many more resources that are listed in the appendices that will help you develop your program. Remember there is no specific "right way" to run your program—take the best ideas that are presented here and use your own creativity to develop a

program that works best for your school(s). Here are some final tips:

- ◆ Involve key stakeholders and get them to buy into the SRTS program
- ◆ Find one or more champions within the school, such as the principal, school nurse, or a teacher, who will help to sustain the program and make it an integral component of the school.
- ◆ Stick to the schedule and stand by your goals, referring back to them as you go.
- ◆ Be efficient in your SRTS meetings—short meetings are better than long meetings. Make the meetings “open.” Advertise them along with other school functions to let the larger community attend. Have a spot on the meeting agenda to allow for those not on the SRTS team to comment, and be receptive and responsive to those comments.
- ◆ Remember that persistence and patience will be required—accomplishing your set goals will likely not come easily.
- ◆ Finally, celebrate successes along the way and recognize those that have invested their time and effort in the Program. This is an important aspect of an SRTS program—it will knit the SRTS team together and provide encouragement and incentive to stay the course.
- ◆ Have fun!

Appendices

- Appendix A Sample Invitation to SRTS Team
- Appendix B Survey on Walking and Biking to School (Parent Survey)
- Appendix C Student Arrival and Departure Tally Sheet (Student Tally Sheet)
- Appendix D School Site Assessment
- Appendix E Neighborhood Assessment: Street Segments
- Appendix F Neighborhood Assessment: Intersections
- Appendix G Action Plan Worksheet (Blank)
- Appendix H Action Plan Worksheet (Completed Sample)
- Appendix I Engineering, Traffic Calming, and Pick-Up/Drop-Off Strategies
- Appendix J Web Resources
- Appendix K References
- Appendix L Transportation Planning Contacts in New Mexico
- Appendix M Action Plan Development Checklist

Appendix A Sample Invitation to SRTS Team

(School letterhead)

(DATE)

(TO: NAME, ADDRESS)

Re: Safe Routes to School Team

Dear (NAME):

You are invited to join the Safe Routes to School (SRTS) Team at _____ School. The purpose of the SRTS Team is to ensure that safer walking and bicycling routes to school are provided for our children and to educate our children and their parents about safe walking and cycling. Our goal is to develop a SRTS Action Plan that will 1) help create safe walking and bicycling routes to school and 2) encourage more students to walk and bike to school.

We have scheduled a SRTS Team kick-off meeting on (DATE) at (TIME). The meeting will be held at (PLACE). Refreshments and child care will be provided. Please RSVP to me at (PHONE # or E-MAIL ADDRESS) so I can plan accordingly. Thank you in advance for your help with this important program and we look forward to seeing you at the meeting!

Sincerely,

NAME
ADDRESS

Cc: Principal
(OTHERS)

**SURVEY ABOUT WALKING AND BIKING TO SCHOOL
- FOR PARENTS -**

Dear Parent or Caregiver,

Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school your children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.

After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results. **Thank you for participating in this survey!**

School Name:

Completing this form: Please write with CAPITAL letters. Mark boxes with "X" instead of "✓".

1. What is the grade of the child who brought home this survey? (K - 8) grade
2. Is the child who brought home this survey male or female? MALE FEMALE
3. How many children do you have in Kindergarten through 8th grade? children
4. What is the street intersection nearest your home? (provide the names of two intersecting streets)

AND

5. How far does your child live from school? (choose one and mark box with X)

- a. less than 1/4 mile
 c. 1/2 mile up to 1 mile
 e. More than 2 miles
 b. 1/4 mile up to 1/2 mile
 d. 1 mile up to 2 miles
 f. Don't know

6. On most days, how does your child arrive at school and leave for home after school? (select one choice per column, mark box with X)

Arrive at school	Leave for home
<input type="checkbox"/> a. Walk	<input type="checkbox"/> a. Walk
<input type="checkbox"/> b. Bike	<input type="checkbox"/> b. Bike
<input type="checkbox"/> c. School Bus	<input type="checkbox"/> c. School Bus
<input type="checkbox"/> d. Family vehicle (only with children from your family)	<input type="checkbox"/> d. Family vehicle (only with children from your family)
<input type="checkbox"/> e. Carpool (riding with children from other families)	<input type="checkbox"/> e. Carpool (riding with children from other families)
<input type="checkbox"/> f. Transit (city bus, subway, etc.)	<input type="checkbox"/> f. Transit (city bus, subway, etc.)
<input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)

7. How long does it normally take your child to get to/from school? (fill-in circle for one choice per column)

Travel time to school	Travel time from school
<input type="checkbox"/> a. Less than 5 minutes	<input type="checkbox"/> a. Less than 5 minutes
<input type="checkbox"/> b. 5 - 10 minutes	<input type="checkbox"/> b. 5 - 10 minutes
<input type="checkbox"/> c. 11 - 20 minutes	<input type="checkbox"/> c. 11 - 20 minutes
<input type="checkbox"/> d. More than 20 minutes	<input type="checkbox"/> d. More than 20 minutes
<input type="checkbox"/> e. Don't know / Not sure	<input type="checkbox"/> e. Don't know / Not sure

8. Has your child asked you for permission to walk or bike to/from school in the last year? (select one) YES NO

9. At what grade would you allow your child to walk or bike without an adult to/from school? (select a grade between K-8) grade (or I would not feel comfortable at any grade)

10. Which of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school? (select all that apply, mark with X in box)

- Distance
- Convenience of driving
- Time
- Child's before or after-school activities
- Speed of traffic along route
- Amount of traffic along route
- Adults to walk or bike with
- Sidewalks or pathways
- Safety of intersections and crossings
- Crossing guards
- Violence or crime
- Weather or climate

11. Would you probably let your child walk or bike to/from school if this problem were changed or improved? (select one choice per line) (My child already walks or bikes to/from school)

- | | | |
|------------------------------|-----------------------------|-----------------------------------|
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |

12. In your opinion, how much does your child's school encourage or discourage walking and biking to/from school? (select one, mark with X in box)

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Strongly Encourage | Encourage | Neither | Discourage | Strongly Discourage |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

13. How much FUN is walking or biking to/from school for your child? (select one)

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Very Fun | Fun | Neutral | Boring | Very Boring |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

14. How HEALTHY is walking or biking to/from school for your child? (select one)

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Very Healthy | Healthy | Neutral | Unhealthy | Very Unhealthy |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

15. What is the highest grade or year of school you completed? (select one, mark with X in box)

- | | |
|---|--|
| <input type="checkbox"/> Grades 1 through 8 (Elementary) | <input type="checkbox"/> College 1 to 3 years (Some college or technical school) |
| <input type="checkbox"/> Grades 9 through 11 (Some high school) | <input type="checkbox"/> College 4 years or more (College graduate) |
| <input type="checkbox"/> Grade 12 or GED (High school graduate) | <input type="checkbox"/> Prefer not to answer |

16. Please provide any additional comments below:

Thank you for participating in this survey!

Encuesta sobre ir caminando o andando en bicicleta a la escuela
- PARA PADRES -

Estimado Padre o Proveedor,

La escuela donde su hijo/hija asiste desea saber sus pensamientos sobre niños caminando y andando en bicicleta a la escuela. Esta encuesta tomará entre 5 y 10 minutos para completar. Le pedimos a las familias que completen sólo una encuesta por escuela a la que asisten sus niños. Si recibe más de un formulario de la misma escuela, por favor complete solo una encuesta, la del niño que cumpla años en la fecha más próxima al día de hoy.

Después de completar esta encuesta, devuélvala a la escuela a través de su hijo o entréguesela a la maestra. Sus respuestas se mantendrán confidencial y no se asociará su nombre ni el de su hijo a ningún resultado. ¡Gracias por participar en esta encuesta!

Nombre de la Escuela:	
------------------------------	--

¿Cómo llenar este formulario?: Escriba en letras **MAYUSCULAS**. Marque las cajas con "X" en vez de "✓".

1. ¿En qué grado esta el niño que trajo esta encuesta al hogar? (K – 8vo) grado
2. ¿El niño que trajo a casa la encuesta es varón o niña? Varon Niña
3. ¿Cuántos niños tiene usted entre Kindergarten y el 8vo grado? niños
4. ¿Cuál es la intersección más cerca de su casa? (el cruce de las dos calles)

	Y	
--	---	--

5. ¿A qué distancia vive su niño de la escuela? (elija uno y marque la caja con X)

<input type="checkbox"/> a. menos de 1/4 milla	<input type="checkbox"/> c. media milla hasta 1 milla	<input type="checkbox"/> e. Más de 2 millas
<input type="checkbox"/> b. milla de 1/4 milla el hasta 1/2	<input type="checkbox"/> d. 1 milla hasta 2 millas	<input type="checkbox"/> f. No lo sé

6. La mayoría de los días, ¿cómo va su niño a la escuela y cómo regresa a la casa después de la escuela? (una respuesta por columna con una "X" en la caja)

	Llega a la escuela	Llega a casa
<input type="checkbox"/> a. Caminando	<input type="checkbox"/> a. Caminando	<input type="checkbox"/> a. Caminando
<input type="checkbox"/> b. Bicicleta	<input type="checkbox"/> b. Bicicleta	<input type="checkbox"/> b. Bicicleta
<input type="checkbox"/> c. Autobús escolar	<input type="checkbox"/> c. Autobús escolar	<input type="checkbox"/> c. Autobús escolar
<input type="checkbox"/> d. Vehículo de la familia (solo con niños de la familia)	<input type="checkbox"/> d. Vehículo de la familia (solo con niños de la familia)	<input type="checkbox"/> d. Vehículo de la familia (solo con niños de la familia)
<input type="checkbox"/> e. Compartiendo el viaje en auto con niños de otras familias	<input type="checkbox"/> e. Compartiendo el viaje en auto con niños de otras familias	<input type="checkbox"/> e. Compartiendo el viaje en auto con niños de otras familias
<input type="checkbox"/> f. Tránsito (autobús de la ciudad, subterráneo, etc.)	<input type="checkbox"/> f. Tránsito (autobús de la ciudad, subterráneo, etc.)	<input type="checkbox"/> f. Tránsito (autobús de la ciudad, subterráneo, etc.)
<input type="checkbox"/> h. Otro (patineta, monopatin, patines, etc.)	<input type="checkbox"/> h. Otro (patineta, monopatin, patines, etc.)	<input type="checkbox"/> h. Otro (patineta, monopatin, patines, etc.)

7. ¿Cuánto tiempo le toma a su niño para ir y regresar de la escuela? (una respuesta por columna con una "X" en la caja)

Tiempo del recorrido a la escuela	Tiempo del recorrido para llegar a casa
<input type="checkbox"/> a. Menos de 5 minutos	<input type="checkbox"/> a. Menos de 5 minutos
<input type="checkbox"/> b. 5 a 10 minutos	<input type="checkbox"/> b. 5 a 10 minutos
<input type="checkbox"/> c. 11 a 20 minutos	<input type="checkbox"/> c. 11 a 20 minutos
<input type="checkbox"/> d. Más de 20 minutos	<input type="checkbox"/> d. Más de 20 minutos
<input type="checkbox"/> e. No lo sé / No estoy segura/a	<input type="checkbox"/> e. No lo sé / No estoy seguro/a

8. ¿En el último año, le ha pedido permiso su hijo para caminar o andar en bicicleta para ir o/regresar de la escuela? (marque una respuesta) Sí NO

9. ¿En qué grado permitiría que su hijo camine o ande en bicicleta solo a/o de la escuela? (seleccione un grado entre K y 8) grado (o No me sentiría cómodo/a en ningún grado)

10. ¿Cuáles de las siguientes situaciones afectaron su decisión permitir, o no permitir, que su niño camine o ande en bicicleta a/o de la escuela? (marque todas las que correspondan)

- Distancia
- Conveniencia de manejar
- Tiempo
- Actividades antes o después de la escuela
- Velocidad del tráfico en la ruta
- Cantidad de tráfico en la ruta
- Adultos que acompañen a su niño
- Aceras o caminos
- Seguridad de las intersecciones y cruces
- Guardias de cruce peatonal
- Violencia o crimen
- Tiempo o clima

11. ¿Probablemente dejaría que su hijo caminar o usara la bicicleta para ir a /regresar de la escuela si este problema cambiara o mejorara? (elijer una respuesta por línea)

(Mi niño camina o bikes ya a o desde escuela)

- | | | |
|-----------------------------|-----------------------------|--|
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |
| <input type="checkbox"/> Sí | <input type="checkbox"/> NO | <input type="checkbox"/> No estoy seguro/a |

12. En su opinión, ¿cuánto apoyo provee la escuela de su hijo a caminar y usar la bicicleta para ir o regresar de la escuela? (seleccione una opción por línea)

Anima Fuertemente Anima Ni uno ni otro Desaliente Desaliente Fuertemente

13. ¿Qué tan DIVERTIDO es caminar or andar en bicicleta a o desde la escuela para su niño? (seleccione uno)

Mismo Diversión Diversión Neutral El agujerear Muy Aburrido

14. ¿Qué tan SANO es caminar o andar en bicicleta a o desde la escuela para su niño? (seleccione uno)

Muy Sano Sano Neutral Malsano Muy Malsano

15. [opcional] ¿Cuál es el grado o el año más alto de la escuela que usted terminó? (seleccione uno)

- Grados 1 a 8 (Escuela primaria) Universidad 1 a 3 años (alguna universidad o escuela técnica)
- Grados 9 a 11 (alguna High School secundaria) Universidad 4 años o más (graduado de la universidad)
- Grado 12 o GED (graduado High School secundaria) Prefiera no contestar

16. Proporcione por favor cualquier comentario adicional abajo:

¡Gracias por participar en esta encuesta!

Appendix C Student Arrival and Departure Tally Sheet (Student Tally Sheet)

SAFE ROUTES TO SCHOOL STUDENT ARRIVAL AND DEPARTURE TALLY SHEET

School Name: Zip Code: -

Teacher: Grade (K-8)

Monday's Date / / 2 0 # of students enrolled in class

M M / D D / Y E A R

Teachers, here are simple instructions for using this form:

- Please conduct these counts **on any two days from Tuesday, Wednesday, or Thursday of the assigned week**. Only two days worth of counts are needed, but counting all 3 provides better data.
- **Please do not conduct these counts on Mondays or Fridays.**
- Before asking your students to raise their hands to indicate the *one answer* that is correct for them, read through all potential answers so they will know what the choices are.
- Ask your students as a group the question **"How did you arrive at school today?"**
- Read each answer and record the number of students that raised their hands for each.
- **Place just one character or number in each box.**
- Follow the same procedure for the question **"How do you plan to leave for home after school?"**
- Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).

Step 1. Fill in the weather conditions and number of students in class each day.			Step 2. Ask students "How did you arrive at school today?" and "How do you plan to leave for home after school?" (record number of hands for each answer)								
	Weather S= sunny R= rainy O= overcast Sn= snow	Number of Students (in class when count made)	Walk	Bike	School Bus		Family Vehicle (only with children from your family)	Carpool (riding with children from other families)	Transit (city bus, subway, etc.)	Other (skateboard, scooter, inline skates, etc.)	
SAMPLE	S	2 7	4	2	1 1	7	3	0	0		
Tues AM											
Tues PM											
Wed AM											
Wed PM											
Thur AM											
Thur PM											

Comments (List disruptions to counts or any unusual travel conditions to/from the school on the days of the tally):

Thank you for helping gather this information!

Appendix D School Site Assessment

School Site Assessment

Conduct assessment on streets adjacent to school during student arrival and departure. Each observer needs an assessment form and a map of the school site that shows adjacent streets.

Reviewer _____ School _____

Date _____ Day _____ Time _____ Weather Conditions _____

Area observed (description) _____

On your map, please note locations/description of any of the following:

School Advance Sign

Crosswalk

School Crossing Sign

In-road stencils (speeds, slow, etc)

School Speed Limit

Colored curbs (no parking, loading only, etc)

No Parking Sign

Flashing Beacons

No Standing Sign

Other pavement stencils (move forward, etc.)

Pick up/drop off Signs

Other signs or markings

Any traffic calming treatments such as speed humps, speed tables, or traffic circles

Sidewalks and Bicycle Facilities	Yes	No	N/A
Are walking and biking routes separated from traffic?			
Do students have to cross one or more busy school driveways to access the main entrance?			
If yes above, is there a school monitor to assist at these driveways?			
Do students have safe access from the sidewalk to the school door?			
Do the students have access to the school grounds from 3-4 sides of the property?			
Are there gaps in the sidewalk or biking routes?			
Sidewalk width _____ ft _____ inches			
Do poles, signs, shrubs or other items physically and/or visually block the walking/ biking routes? If yes, provide location.			
Are there curb ramps on all corners?			
Are walking and biking routes well maintained?			
Are there streetlights along the walking and biking routes?			
Are there marked bicycle lanes in the street?			
Do signs indicate the bicycle route?			
Is there safe and secure bike parking on the school grounds?			
Are bike racks designed to secure the bike frame, not just a wheel?			

Student pick-up and drop-off areas	Yes	No	N/A
Are there signs for the drivers?			
Are students exiting and entering cars protected from other vehicles?			
Is there a continuous raised curb separating vehicles from students?			
Are the sidewalks and waiting areas large enough for students?			
Is there a stand-back line in the student loading area?			
Are there one or more valets to assist students in or out of cars?			
Is the area lighted?			
Are there accessible curb ramps for wheel chair access?			
Do the ramps have tactile warning strips or textured concrete?			
Does traffic seem to move freely without congestion and backup?			
Bus Loading Zones	Yes	No	N/A
Are bus driveways separated from walking and biking routes by raised curbs or bollards?			
Are bus driveways separated from parent pick-up and drop-off areas?			
Are buses "double stacked" in loading areas?			
Does the bus loading zone operate as one-way traffic only?			
Does the bus zone meet the minimum width of 24' for drop-off/pull-out lanes?			
Is there a continuous curb and sidewalk adjacent to the drop-off/loading area leading to the school site?			
Visibility (adjacent to school site)	Yes	No	N/A
Do cars that are parked or waiting block the vision of other motorists, bicyclists, and pedestrians? If so, where?			
Do fences, walls, dumpster, or other barriers obscure visibility? If so, where?			
Do drivers have a clear line of sight at all crosswalks? If not, provide locations below.			
Traffic Signs, Speed Control, Signals, and Pavement Markings	Yes	No	N/A
What is the posted speed limit in front of the school?			
Is there a specified reduced speed school zone adjacent to the school?			
Do the majority of drivers appear to be complying with the speed limit?			
Was a police officer present during your observation?			
Were any school monitors or crossing guards present during your observation?			

Neighborhood Assessment: Street Segments

Please make a copy of this form for each street segment in the assessment. Conduct assessments during school arrival and departure so you can observe behavior.

Reviewer _____ School _____

Date _____ Day _____ Time _____ Weather Conditions _____

General Information

Street Name _____ Between _____ and _____

Length of segment _____ feet Curb-to-curb width _____ feet

Posted Speed Limit _____ Number of Lanes _____

Average daily traffic _____

Optional: Type and location of crashes along this segment _____

Sidewalks	Yes	No	Comments/Suggestions
Are there sidewalks on both sides of the street?			
Are portions of the sidewalk missing? If yes, provide location.			
Sidewalk width: _____ ft. _____ inches			
Do poles, signs, shrubs or other items physically and/or visually block the sidewalk? If yes, provide location.			
Is there litter or debris on the sidewalk?			
Is the sidewalk separated from traffic with a buffer (separation) between sidewalk and street? If yes, provide width: _____ ft _____ in			
Is sidewalk on a steep grade?			
Are there curb ramps on all corners?			
Are there many busy driveways that cross the sidewalk?			
Do drivers yield to pedestrians at driveways?			

Street _____ Between _____ and _____

Roadway	Yes	No	
Are there many trucks? (more than 1 in every 20 vehicles)			
Are there blind curves?			
Are there marked crosswalks that are not at an intersection? If yes, provide location and type of control (none, traffic signal, etc.)			
Do students cross the street where crosswalks are not marked? If yes, provide location.			
Are there raised medians where pedestrians can wait in the middle of the roadway?			
Are there features such as speed humps or speed tables to slow traffic?			

Security Issues	Yes	No	
Are school fights or gang activity a problem along this segment? If yes, provide location.			
Is loitering a problem along this section? If yes, provide location.			
Is there adequate lighting? If not, provide location.			
Is this segment isolated from houses or commercial areas?			
Is this segment located in an industrial zone?			
Is this segment located in a commercial zone?			
Do crime and/or drug activity occur on this roadway?			
Do dogs frighten children along this section of the road? If yes, provide location.			

Appendix F Neighborhood Assessment: Intersections

Neighborhood Assessment: Intersections

Please make a copy of this form for each street intersection in the assessment. Conduct assessments during school arrival and departure so you can observe behavior.

Reviewer _____ School _____

Date _____ Day _____ Time _____ Weather Conditions _____

North-South Street

Name _____

Curb-to-curb width _____

Number of lanes northbound _____

Number of lanes southbound _____

Posted speed limit _____

Observed speed (if available) _____

Average Daily Traffic _____

East-West Street

Name _____

Curb-to-curb width _____

Number of lanes northbound _____

Number of lanes southbound _____

Posted speed limit _____

Observed speed (if available) _____

Average Daily Traffic _____

How is the intersection controlled? (check one)

Two-way stop ___ Three or four-way stop ___ Traffic Signal ___ Roundabout ___ Uncontrolled ___

How is the crosswalk controlled?

Flashing Light ___ Pedestrian activated signal ___ Stop Sign ___ Uncontrolled ___

All Intersections	Yes	No
Are crosswalks marked?		
Are high visibility crosswalk markings used?		
Are crosswalk markings in good condition?		
Does the intersection have a sidewalk leading up to it on all sides?		
Are there curb ramps on all corners?		
Is the landing at the crossing large enough for students to wait away from the curb?		
Is there a stand-back line to show students where to wait?		
Are there school zone signs, flashers or overhead signs at or near the intersection?		
Do drivers yield to pedestrians at the crosswalk?		
Are there places where pedestrians are not visible to drivers?		
Do parked cars, utility boxes or vegetation block the pedestrians' view of traffic while waiting to cross?		
Are there medians or islands where pedestrians can wait between traffic lanes?		

Page Two: Intersection Assessment

Signalized Intersections	Yes	No	
Are there pedestrian crossing signals?			
Is the road too wide to cross during the WALK phase (WALK + flashing DON'T WALK)?			
Do drivers run red lights or increase speed to catch green lights?			
Do many vehicles turn right during the red light?			

Where Crossing Guards are Present	Yes	No	
Is the guard an adult?			
Please note which part of the intersection the guard is working			
Does the guard have a STOP paddle?			
Is the guard wearing a bright vest?			

Optional: Crash history _____

Appendix G Action Plan Worksheet (Blank)

Action Plan Form

Name of School: _____

Issue #	Issue	Strategies				Tasks	When?	Who?	Potential Funding Source	Evaluation
		Description	Education	Encouragement	Enforcement					
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Appendix H Action Plan Worksheet (Completed Sample)

Action Plan Worksheet - SAMPLE

Sample Elementary
School

Name of School:

#	Issue	Strategies				Tasks	When?	Who?	Potential Funding Source	Evaluation
		Description	Education	Enforcement	Encouragement					
1	Traffic queue during pick up backs up into street	Educate parents about using school bus, car-pooling, or walking children to school.	X			Develop and hand out flyers.	Beginning of school year	Sally Smith	None required	How many flyers handed out and when?
		Lengthen off-street pickup/drop off lane.		X		Talk to school district superintendent.	12-24 months	School Transportation Rep	School District Improvement Bond	Date project completed?
		Use valet attendants in pickup during dismissal.		X		Find and train volunteers, purchase safety vests.	August 08	John Wright	NM SRTS for safety vests	# of students trained/working? When?
2	Only 1/3 of students in walking boundary are walking to school per Student Travel Tally.	Start Walking School Bus program.		X		Determine structure, recruit/train volunteers, select routes, send home flyers, sign up students.	Ongoing beginning Sept 08	Jill Sanchez	NMIDOT for incentive items	Date started? # of students participating?
		Educate students on bike/ped safety.	X			Work with Safe Kids and Fire Department to hold a bike rodeo.	Sept 08	Jill Sanchez	Fundraiser and local donations.	Date rodeo held? # of attendees?
		Hold Walk and Roll to School Day event.		X		Organize event--involve Safe Kids, Police, PTA.	October 8, 2008	John Wright	NM SRTS goodies	# of participants?
		Create Walk and Bike to School Map; update as routes are improved and/or on an annual basis.	X			Use data from assessments to determine if safe routes exist and to identify needed improvements; submit draft maps to principal and city engineer for approval.	Start mapping process in May 08 with draft to engineer by June 08.	Sally Smith; Jason Billings; Jill Sanchez	None required	Was mapping process accomplished and map created? Is there a process for updating the map?

3	Parked cars obscure visibility on NE corner of School Street and First; no curb ramps	Extend no parking zone; use cones to prevent parking during pick-up hours.		X	Ask city to install.	City to paint before school starts. Cones purchased by District.	Jason Billings	School District Maintenance Program	Date completed?
		Ask city to provide sporadic law enforcement to ticket cars parked in no parking zone.	X		Talk to police department.	After no parking zone is painted.	Jason Billings	None required	Is city providing this service and how often?
		Install bulb out with ADA curb ramps.		X	Meet with city and DOT engineers.	Estimated at 36 months to complete.	Jason Billings	ADA and SRTS funds.	Date completed?
4	Parent Survey indicates "stranger danger" concerns	Ask local law enforcement to provide presentation on stranger danger and safety.	X		Talk to police department community officer.	At Sept 08 PTA meeting.	Jill Sanchez	None required	Date presentation provided and # of parents who attended?
5	Students cant cross Elm Street due to short light	Retime traffic signal.		X	Ask city to check and possibly retime signal.	May 08	Jason Billings	City/DOT partnership: ADA/SRTS funds	Was signal timing changed? Is there enough time to cross?
6	Highway 000 is difficult to cross.	Discuss and explore traffic calming measures, possibly median "refuge island" with DOT district.		X	Make appointment with NMDOT district engineer or representative.	May 08	Jason Billings	Unknown at this time.	Did meeting occur? Who attended?
7	Students walking in road along Spring Street.	Sidewalks are needed but may not be possible for several years.	X		Check route map to see if alternative route available. Talk to city about cleaning shoulder. See if Public Works can include sidewalks in the Capital Improvement Program. Ask RPO about TE funds. Consider applying for Phase 2 SRTS funds.	Talk to city May 08	Jason Billings	Capital Outlay funds, Transportation Enhancement funds, SRTS Phase 2 funds, or other state/federal funds	Were shoulders cleared? Have funds been obtained for the sidewalks? Date sidewalks built?

Engineering Strategies

The following strategies may help your SRTS Team identify potential school-area engineering improvements. It is important to consult with a traffic engineer or staff from your local public works or streets department as you develop engineering design solutions.

Signs and Pavement Markings

Traffic signs and pavement markings inform drivers and pedestrians about traffic regulations, pedestrian crossings, and parking in and near the school. Some typical signs and markings are illustrated on this page. Signs and markings are low-cost strategies for managing traffic and improving safety around schools.

Signs and markings are regulated by the Manual on Uniform Traffic Control Devices (MUTCD) (see <http://mutcd.fhwa.dot.gov>). Chapter 7 of the MUTCD covers traffic control for school areas. Local practices and regulations can also affect the use of signs and markings on public streets. School district policies could influence sign use on school property. If new signs are part of your school site plan, you will need support from the entity that has jurisdiction for that street. For example, on a city or county street, the public works or streets department has jurisdiction. On state highways, the New Mexico Department of Transportation (NMDOT) must be involved. Work with the appropriate agency or agencies early in the process so they can offer their expertise when the SRTS Team is identifying problems and selecting solutions.

School Crossing Signs



The MUTCD designates school pentagon signs for use in advance of and at school crossings. While the MUTCD states that these signs may be placed at all types of school crossings, some communities more commonly use them at locations where the street that is being crossed does not have a traffic light or stop sign (“uncontrolled” crossings). Check the MUTCD and local regulations as to where they may be installed in your community. Consistency is important. The use of brighter fluorescent yellow-green signs provides greater visibility to drivers than standard yellow school signs. Signs should not be overused or underused; when installed, they need to be maintained.



Highly Reflective Plastic Post Inserts
These post covers increase sign visibility. In Phoenix, AZ, all school warning signs on arterial streets have these post covers and the signs are enlarged to 42” wide, the largest sign a U-channel post can handle without wind-load problems.



In-crosswalk Sign
In-street signs may be placed at crosswalks during student crossing times. Some come with handles for ease of placement and removal.



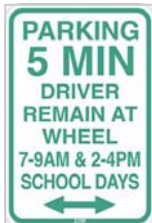
Speed Limit Signs

The MUTCD provides guidance for installing school area speed limit signs at the beginning of school property or at a specified distance in advance of marked school crosswalks. As shown on the left, this signage can both notify drivers that they are entering a school zone and display the posted speed limit, which typically ranges between 15 and 25 miles per hour in school zones. These devices are important but should not be overused, because excessive use will eventually lead motorists to ignore the devices. Driver feedback signs like those shown on the left can be used to remind drivers of their speed. The sign on the bottom left compares driver speed to the speed limit. The other feedback sign is solar-powered.



School Flashers

School flasher speed limit signs may be appropriate for some busy streets. These signs/flashers are expensive and require on-going maintenance. Timers should be checked periodically. Problems can occur with special school schedules (e.g., half days). With some timers, the entire school year schedule can be programmed into the flasher unit. Some flashers are solar-powered.



Parking and Traffic Circulation Signs



A variety of signs can be used to help guide and control traffic flow and parking on school property and adjacent streets. Parking restrictions are needed to regulate parent parking, but care must be taken to not push motorists into adjacent neighborhoods or deny parents appropriate and adequate space for parking and student drop-off and pick-up. Parking for after-school activities or for other, non-school activities (e.g. sports, recreation) should be provided. Signs can provide parking time limits to supplement curb markings. Care should be taken not to be overly restrictive or put too much information on the signs or they will be confusing to drivers and might be ignored.



STOP Signs

STOP signs are used at unsignalized intersections where right-of-way must be regulated due to busy traffic, high speeds, crash problems, or restricted driver visibility. The MUTCD states that STOP signs may be used to control vehicles as part of the school traffic plan. It also states that STOP signs should not be used for speed control. When a STOP sign is used, the MUTCD specifies that it should stop the street carrying the lowest amount of traffic. Multi-way STOP signs can be installed as mitigation for a pattern of right-angle crashes or to manage vehicle, pedestrian and bicycle traffic that exceeds minimum volumes specified by regulating agencies. Traffic should be about equal on both streets for multi-way STOP signs. STOP signs may be accompanied by a stop bar and pavement stencil in order to increase visibility and driver awareness.

Curb Markings

Painted curbs help inform drivers of parking or passenger loading regulations in and around the school. They may be used to restrict parking in loading zones, near corners or crosswalks, and in other locations as needed to improve visibility. At a minimum, 30 feet should be kept clear in advance of marked crosswalks; at times, 50 feet or more may be necessary. This will help pedestrians and drivers see each other better. More clear distance is better, but parking restrictions have to be balanced with the need for parent parking and drop-off zones. The MUTCD requires the use of signs with curb markings in areas where snow or ice could cover the markings.



Pavement Markings

Various pavement markings in the streets and on school property can help clarify driver requirements or alert drivers they are approaching a school. Markings in public rights-of-way must comply with MUTCD and local jurisdiction requirements.

Crosswalk Markings

Under New Mexico law, operators of vehicles must yield to pedestrians in crosswalks. Street crossings are legally considered to be crosswalks at ALL public street intersections, within the connections of the lateral lines of sidewalks on opposite sides of the street, ***regardless of whether a crosswalk is marked or not.*** Crosswalks are marked in order to indicate a preferred crossing location and to alert drivers to an often-used crossing. Where students are directed to a particular location, appropriate traffic control, including traffic signals and crossing guards, can be provided. “Walk and Bike to School” maps can aid in identifying which crosswalks should be marked. Marking crosswalks may facilitate pedestrian movements but in the absence of other measures, such as signage, signals, or crossing guards, will not necessarily slow traffic or reduce crashes.

There are various ways to mark a crosswalk. The highest-visibility markings include the “ladder” (above right) and “continental” (shown in image below) patterns. Some agencies use cold plastic or thermo-plastic markings instead of paint partly because of their longer life and lower maintenance costs. Ladder or continental markings can be spaced between tire tracks to increase longevity. Check with your local jurisdiction regarding policies for school-area crosswalk markings. Crosswalk markings should be applied consistently and the markings should be periodically maintained.



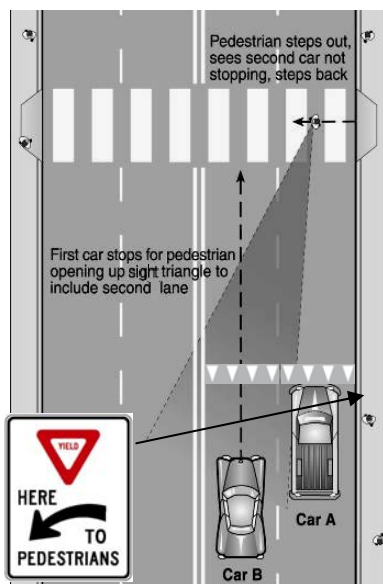
Ladder crosswalk marking



Parallel marking

Web Resource

For more information on where to mark crosswalks, see FHWA's "Safety Effects of Marked Vs Unmarked Crosswalks at Uncontrolled Locations" at www.tfhrc.gov/safety/pubs/04100/index.htm.



Advance Stop Bar or Yield Line

For crosswalks across four or more lanes of traffic without an accompanying crossing guard, traffic signal, and/or STOP sign, marking the crosswalk is generally not recommended (see Web Resource Box). A major reason for this is that vehicles in adjacent lanes tend to block visibility between motorists approaching the crosswalk and pedestrians entering the crosswalk. Where a crosswalk is marked at an uncontrolled location with multiple lanes (including those with a crossing guard), marking a yield line well in advance of the crosswalk can give pedestrians and motorists additional space and time to see each other. Marking an advance yield line works best when accompanied by a sign indicating “YIELD HERE TO PEDESTRIANS,” as provided for in the MUTCD. Advance stop bars are rarely used at traffic signals because they result in much longer clearance intervals for motorists.

Sidewalks and Paths

There are many resources available for the design of sidewalks and bike facilities. Key resources are two American Association of State Highway and Transportation Officials (AASHTO) publications: “Guide for the Planning, Design, and Operation of Pedestrian Facilities” and “Guidelines for the Development of Bicycle Facilities.”



Sidewalk Width

Sidewalks should be a minimum of four feet wide to meet AASHTO guidelines and five feet wide to meet ADA guidelines, but the preferred width is at least six feet. Sidewalks near schools should be eight-to-ten feet wide.

Buffer

Sidewalks should be separated from moving traffic by a buffer area. A buffer is the distance between the sidewalks and the roadway. Buffers can include a landscaped area as shown above, bike lanes as shown on the right, and/or on-street parking. AASHTO recommends buffers two-to-four feet wide on local and collector streets, and five-to-six feet wide on arterial streets.



Americans with Disabilities Act (ADA)

Pedestrian facilities should be designed to meet the needs of people of all ages and abilities. In general, if an able-bodied person has access, the Americans with Disabilities Act (ADA) requires access to also be available for people using wheelchairs, people with visual impairments, etc. The U.S. Access Board publishes recommendations and requirements for sidewalks and paths under their public rights-of-way rulings. See www.access-board.gov for more information.



When improvements are made to sidewalks or streets, ADA accessibility requirements must be met. Include costs for the installation of curb ramps for wheelchair users and truncated domes (shown at left) for people with visual impairments in your cost estimates.



Trails/Paths

Trails or paths are appropriate in some locations and can greatly shorten the distance for children to walk or bike to school. They must be designed properly where they intersect public roadways in order to minimize the risk of crashes. Alignments that are independent of roadways, such as rivers, arroyos, abandoned or active rail lines, and utility easements, can make excellent corridors for shared-use paths (see page 10 for information about trails along irrigation ditches in New Mexico). Trails using roadway alignments, known as “side-paths,” tend to create significant conflicts for bicyclists, particularly where crossing driveways and intersections. It is typically more desirable to build sidewalks rather than multi-use paths along roadways.

Under most conditions, the minimum recommended paved width for two-directional shared use paths is ten feet. When heavy traffic is expected, a path width of twelve to fourteen feet is preferred. Pavement can be asphalt or concrete. Bollards (posts) at trail or path entrances may be considered to prevent motor vehicle access. If bollards are used, one should be placed in the center of the trail to effectively separate directional traffic. Thus the number of bollards used at a given location should be an odd number, typically one or three. Spacing between bollards should not be less than four feet; five feet is the desirable minimum per AASHTO. Bollards should be brightly colored or have bright reflective strips. They can be locking to allow maintenance vehicle access.

Shoulders

AASHTO states that where rural highways enter small towns and pedestrian routes are needed, paved sidewalks should be provided. AASHTO also states sidewalks may not be needed on local streets with less than 400 vehicles per day, though it is not good practice to have an entire neighborhood without sidewalks. Providing shoulders is known to be safer than not having any space for pedestrians. If paved streets that lack sidewalks are unnecessarily wide, painting a stripe along the edge to visually narrow the vehicle space provides space for people to walk or ride a bike and may reduce vehicle speeds by a small amount. A shoulder may be marked as a bike lane if it is at least four feet wide, but in no circumstances should it be marked as a two-way bicycle facility.



Bike Lanes

Marked bicycle lanes may be appropriate on busy streets like collectors and arterials. On-street bike lanes promote bicycle use and provide a comfortable place for novice and experienced bicyclists to ride. They also may serve to provide a buffer between pedestrians on sidewalks and moving vehicles. The preferred width of marked bicycle lanes is at least five feet, though as an absolute minimum four feet may be adequate (excluding gutter apron). Bicycle lanes should be designated through the use of signs and painted symbols with a directional arrow. Bike lanes greater than seven feet wide may create problems, as sometimes motorists may try to use the bike lane as a travel lane.



Bike Racks

A good bike rack should hold the bike frame without bending the wheel, and it should have no moving parts. Bike racks should be placed in a convenient and visible location, such as near the school entrance, that will minimize vandalism and maximize use while avoiding conflicts with driveways, buses, and pedestrians. Recommended bike racks are discussed in “Bicycle Parking Guidelines” at www.apbp.org (see Appendix J). In some instances multiple bike racks may be used to prevent bicyclists from having to ride across the school campus.

Street Crossing Improvements

Strategies below and on the next page describe methods to shorten crossing distance, reduce pedestrian exposure to traffic, and improve visibility between pedestrians and drivers at crossing locations.



Curb Extensions / Bulb Outs

Curb extensions improve visibility at crossings by allowing pedestrians to see and be seen from behind parked cars. They also shorten crossing distances and reduce pedestrian exposure to moving traffic. The installation of a curb extension will prevent drivers from parking on the crosswalk, or within 30 feet of the crosswalk. Curb extensions must be designed to accommodate drainage but should not be used if they will block an on-street bike lane.



Crossing Islands

Crossing islands simplify crossings and reduce pedestrian exposure to traffic. By breaking the crossing into two stages, crossing islands allow pedestrians to focus on one direction of vehicle travel at a time. Slanting the pedestrian channel within the median to the right can help put pedestrians and bicyclists in the proper position — facing oncoming traffic. Crossing islands may not be desirable where they prevent left turns at driveways or intersections.

Waiting Areas and Stand-Back Lines

To keep children further back from busy streets while waiting to cross, larger waiting areas can be built and “stand-back” lines painted. This was done at the location in the picture on the right, where students previously had to wait on a five-foot wide sidewalk directly adjacent to the roadway. The stand-back line gives something for a crossing guard to point at when instructing students to stand back from the street.



Existing street



Graphic illustration of street after road diet

Road Diet

A “road diet” reduces the number of motor vehicle lanes. In the example on the left, before the road diet, pedestrians must cross four travel lanes, there is no buffer between the roadway and the sidewalk, and there is no designated place for bicyclists. It is also hard for motorists to make left turns into driveways and side streets.

The road diet illustrated at lower left changed the four-lane road to a three-lane road with on-street bikes lanes and a two-way center turn lane. Reducing the number of lanes improves pedestrian crossings along the entire corridor by halving the number of through lanes that must be crossed and facilitating the placement of crossing islands in some locations. Adjacent residents and businesses also benefit from this change because left turns into and out of their property are now easier. The bike lanes provide a buffer between moving traffic and pedestrians walking along the sidewalks and a place for bicyclists to ride. Road diets from four to three lanes can be done with daily traffic volumes up to 20,000 vehicles per day and are often associated with vehicle crash reductions of 50 percent.

Traffic Signals

Traffic signals are used at intersections that meet conditions established in the MUTCD. Their purpose is to assign right-of-way and provide for the orderly movement of traffic. They are sometimes used to interrupt heavy traffic to allow side-street traffic or pedestrians to cross. Poorly conceived or unjustified traffic signals can create excessive delay, contribute to red light running or other violations, cause diversion of traffic onto less adequate routes that have fewer stops, increase liability, and increase the frequency of collisions. New traffic signal installations are very expensive. Costs vary, but are likely to be in the range of \$150,000 to \$330,000,

Pedestrians at Signalized Intersections

Traffic signals are the highest form of traffic control. Providing for the safety and convenience of pedestrians at intersections requires the following considerations:



Restricting right turns on a red light can help reduce conflicts between pedestrians and drivers.



Pedestrian countdown signals provide pedestrians with information about time remaining in the crossing phase.
(photo: Oakland Metropolitan Transportation Commission)

- ◆ Mark pedestrian crosswalks on all sides of an intersection where pedestrian crossings are permitted. If a crossing is prohibited, it must be blocked in accordance with ADA requirements.
- ◆ Provide pedestrian signal indications (“WALK,” “DON’T WALK” symbols) at every crossing. Countdown signals providing pedestrians with information on how much time is left to cross may soon be required by the MUTCD (see bottom photo at left).
- ◆ Integrate the “WALK” signal into standard signal phases wherever possible, so that pedestrian pushbuttons are not needed. If pedestrian pushbuttons are needed to call for a “WALK” signal, they should be in clear view and must be wheelchair-accessible, close to the top of the wheelchair ramp.
- ◆ Fully accessible landings should be in place on all corners to provide a safe place for people to wait.
- ◆ Provide vehicle stop bars on all approaches to keep the crosswalk clear for pedestrians and to reduce conflicts between pedestrians in crosswalks and motorists attempting right turns at red lights.
- ◆ Provide adequate time for pedestrians to cross before the “DON’T WALK” (flashing raised hand symbol) is displayed. The flashing raised hand symbol needs to allow enough time to cross the entire street at a normal walking speed. Countdown signals are the best way to provide pedestrians with information they need about the time remaining in this phase.

Maintenance

Maintenance of sidewalks, traffic signs, crosswalk markings, traffic signals, street lights, street surfaces, and landscaping along sidewalks or at corners is essential. An annual maintenance program should be established for infrastructure around schools and in adjacent neighborhoods.



Worn signs, crosswalk markings, and other markings should be replaced.



Sidewalk sections should be replaced where tree roots or other problems have created irregular surfaces.



Overgrown landscaping can force children into the street. Temporary obstacles, such as those in the photos below, are also problems. These types of problems may require some effort to correct, but they are generally low-cost measures.



Traffic Calming Measures

Traffic calming is a way to design or re-design streets to promote slower speeds. Properly designed “calming” treatments create physical and visual cues that encourage drivers to travel at slower speeds. A traffic calmed roadway creates the desired effect without relying on traffic signs, signals, or police enforcement. Traffic calming can be controversial. Neighbors are sometimes concerned that traffic calming one street may move the faster traffic to their street. Some neighbors find the treatments like speed humps unsightly or noisy, and do not want them near their house. Collaborate with your neighbors about the problems and potential solutions to gain support before proposing changes. Traffic calming includes both speed reduction and volume control measures. Below and on the next page are example of traffic calming measures. For more information, see www.ite.org/traffic/tcdevices.asp.

Speed Humps

Speed humps are raised, rounded sections of pavement designed to slow vehicles on a roadway. They are about 3.5 to 4 inches high and 12 feet across, and are most suitable for use on residential or local streets rather than major streets or state roads. Many communities have found speed humps to be controversial due to concerns around noise, drainage, and effects on emergency vehicle response times. They should be installed only when a large degree of public support exists.



Speed hump



Chicane

Chicane

Chicanes are curb extensions that alternate from one side of the street to the other, forming S-shaped curbs, which produce a traffic slowing effect. They can be used in combination with median islands and center line markings to guide motorists through the serpentine path.

Speed Tables

Speed tables are similar to speed humps, however they have a flat section in the middle and ramps on the ends. They can have colored or textured pavements on the flat top, which is often used as a crosswalk. They are typically long enough for the entire wheelbase of a passenger car to rest on top.



Speed table



Choker



Neckdown in school zone



Curb extension at "T" Intersection

Lane Narrowing Measures

Neckdowns, chokers, and curb extensions as shown above are methods for slowing traffic by narrowing the curb-to-curb width of the roadway. Additional measures are painted lines for bike lanes or shoulders (shown on page A-21), bulb outs (shown on page A-22), and crossing islands (shown on page A-23). These measures can be combined with crosswalks to increase pedestrian visibility and create more comfortable pedestrian crossings.

Roundabouts

Modern roundabouts are an intersection control device, like a traffic signal or STOP sign, but they function quite differently. At a roundabout, vehicles move counterclockwise around a circular center island that is designed to slow traffic. Entering vehicles yield to circulating vehicles. Splitter islands at each entry point serve as pedestrian refuges where pedestrians only have to cross one direction of traffic at a time. Bicyclists can pass through the roundabout as vehicles or they can leave the roadway to use the sidewalks and crosswalks.



Roundabout (www.pedbikeimages.org / Portland Office of Transportation)

Traffic Calming Circles

Traffic calming circles are raised islands in the center of an unsignalized intersection. Drivers maneuver around the central island rather than proceeding straight. Large vehicles are permitted to turn left in front of the circle in some jurisdictions. In some cases, traffic calming circles can be converted to small roundabouts by adding painted or concrete splitter islands and roundabout signing and markings. Traffic calming circles can replace two- and four-way STOP controls on local streets. Roundabouts and smaller traffic circles must be designed to accommodate school buses and other large vehicles that will use it.



Traffic calming circle

Pick-up and Drop-Off Strategies

Drivers dropping off and picking up children at schools often create traffic chaos around schools. Reducing and managing traffic around schools makes it safer for students to walk and bicycle to school. Strategies for improving traffic flow around school are described on the next two pages. Some strategies, such as curb striping and signing, are also discussed above under “Engineering Strategies.”

Develop and enforce drop-off and pick-up rules

Give parents handouts with drop-off and pick-up rules. Include information about the SRTS program and the benefits of allowing children to walk or bicycle to school. Prepare maps showing pick-up and drop-off locations and routes of travel through the parking lot. Have school personnel, police and volunteers periodically monitor drop-off and pick-up conditions and provide guidance to drivers. Post signs to prohibit parking in pick-up and drop-off zones and require parents to stay in their vehicles. Mark the curb at the drop-off /pick-up locations.

Encourage Carpooling

Promote carpooling to help reduce the number of vehicles near the school. Incentives could include strategies such as drop-off and pick-up lanes for carpools only.

Create “Park and Walk” or Remote Pick-Up/Drop-Off Program

Identify parking areas further away from the school to drop-off and pick-up children. Examples are nearby parks, a community center, or church parking lot. Parents might want to join their students for the short walk to school from the parking location. For a school-wide plan, ask for permission to share nearby parking areas during arrival and dismissal. Children can walk between the school and parking area (s), escorted by school staff or volunteers, if needed.

Stagger Bell Times

Start and end different grade levels at different times, e.g., K-2 and 3-5. Staggering start and dismissal times by 20 to 30 minutes may be enough to eliminate traffic congestion.

Separate Uses

Paint, signs, and bumpers like those in the image on the right are simple and inexpensive ways to separate buses, drivers picking up or dropping off students, and students who are walking or bicycling. Inexpensive orange traffic cones can be used to keep drivers from entering bus-only areas. See text box School Site Design on page 32 for more information about separating uses.



Use a Valet

Cars pull up and a “valet” (school staff, parent volunteers or older students) opens the door to expedite pick-up and drop-off. Drivers remain in the vehicle. The valet should wear a bright safety vest to be more visible to drivers and to help identify themselves as a valet.

Cones

Orange traffic cones are portable and inexpensive. They can be used to prevent drivers from parking in or entering undesirable areas on school property, or to alert drivers to other conditions. Traffic cones can also be used to highlight crosswalk lines. Check with the jurisdiction in charge before placing cones on public streets.



Drop-off and Pick-up Lanes

Some schools create drop-off and pick-up lanes on streets adjacent to the school or on the school grounds. Drop-off/pick-up lanes established on public streets must be authorized by the local agency. These lanes can be established by paint, signs and/or orange traffic cones.

Multiple Drop-off and Pick-up Lanes Inside Parking Lots

To prevent parent drop-off and pick-up traffic from backing onto and blocking adjacent public streets, two or three lanes can be marked to store more cars in the parking lot and school drive-ways. The multiple drop-off lanes can be marked with paint or traffic cones. A parking lot attendant can be used to allow one car at a time to enter the loading area from alternating lanes. If multiple lanes of cars are loaded at the same time, both lanes must come to a complete stop while valets escort the children into or out of their cars. Parking lot attendants and valets should wear bright orange or fluorescent yellow-green safety vests.

Student Identification Placards in Cars for Pick-up

To speed up the student loading process, parents can place placards on the front passenger dashboard/windshield or passenger side window identifying the student name, grade, and teacher. The valet can call out students quicker and in a more orderly fashion.

Web Resource

For more on student drop-off and pick-up strategies, see the NCSRTS Online Guide at www.saferoutesinfo.org/guide/pdf/SRTS-Guide_Dropoff-Pickup.pdf.

Appendix J Web Resources

State of New Mexico

- NM Safe Routes to School Program www.nmsaferoutes.com
NM Public Education Department www.ped.state.nm.us
NM Department of Transportation <http://nmshtd.state.nm.us>
Bicycle, Pedestrian, Equestrian (BPE) Program .../main.asp?secid=11190
Applicable State Laws (BPE) [.../upload/images/Bicycle Pedestrian Esquestrian/Applicable%20State%20Laws.pdf](http://.../upload/images/Bicycle_Pedestrian_Esquestrian/Applicable%20State%20Laws.pdf)
NM Helmets for Kids Coalition <http://nmchildhelmetlaw.com>
NM State Parks, Recreational Trails Program www.emnrd.state.nm.us/PRD/rectrails.htm

National Center for Safe Routes to School (NCSRTS)

- NCSRTS www.saferoutesinfo.org
On-line Safe Routes to School Guide .../guide
Education strategies .../guide/education
Encouragement strategies .../guide/encouragement
Enforcement strategies .../guide/enforcement
Evaluation strategies .../guide/evaluation
Student drop-off and Pick-up Strategies [.../guide/pdf/SRTS-Guide Dropoff-Pickup.pdf](http://.../guide/pdf/SRTS-Guide_Dropoff-Pickup.pdf)
Walking School Bus program guide .../guide/walking_school_bus
Working with the Media .../guide/media
Resources (Checklists, Presentations, etc.) .../resources
Resources for Gathering and Using SRTS Data .../data
Ten Tips for SRTS Programs and Liability .../resources/collateral/liabilitytipsheet.pdf

Other National Resources

- American Assoc. of State Highway & Transp. Officials (AASHTO) www.transportation.org
Association of Bicycle and Pedestrian Professionals (APBP) www.apbp.org
APBP Bicycle Rack Guidelines .../pdfsanddocs/Resources/Bicycle%20Parking%20Guidelines.pdf
FHWA, National SRTS Program <http://safety.fhwa.dot.gov/saferoutes/>
FHWA, "Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations"
www.tfhrc.gov/safety/pubs/04100/index.htm
Manual of Uniform Traffic Control Devices (MUTCD) <http://mutcd.fhwa.dot.gov>
National Highway Traffic Safety Administration (NHTSA) www.nhtsa.dot.gov
NHTSA SRTS Toolkit www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2002/
Natl. Park Service: Rivers, Trails & Conservation Assistance www.nps.gov/nrcr/programs/rta/
National Transportation Enhancements Clearinghouse www.enhancements.org
Pedestrian and Bicycle Information Center www.pedbikeinfo.org
Safe Routes to School National Partnership www.saferoutespartnership.org
"School Siting: Location affects the potential to walk or bike." .../state/5638/5652
U.S. Access Board www.access-board.gov
U.S. Dept. of Housing and Urban Development, CDBG Program
www.hud.gov/offices/cpd/communitydevelopment/programs
U.S. Walk to School Information www.walktoschool.org

Other Resources

- Arizona Dept. of Transportation's "Traffic Safety for School Areas Guide"
www.azdot.gov/Highways/traffic/standards/School_Safety/Schoolsafety.pdf
The Foundation Center <http://foundationcenter.org/findfunders>
Fundsnet Services Online www.fundsnet.com
Google Maps www.google.com/maps
Institute for Transportation Engineers, Traffic Calming www.ite.org/traffic/tcdevices.asp
Maryland Pedestrian and Bicycle Safety Education Program, Administrators' Guide
www.walktoschool.org/downloads/ped-bike-safety_admin.pdf

Appendix K References

- ALA American Lung Association (www.lungusa.org).
- AJPH, 2003 Staunton CE, Hubsmith D, Kallins W. "Promoting safe walking and biking to school: The Marin County success story." *American Journal of Public Health* 93(9) (2003), pp. 1431-34.
- AJPM, 2003 Cooper AR et al. "Commuting to school: Are children who walk more physically active?" *American Journal of Preventive Medicine* 25(4) (2003).
- AJPM, 2005 Boarnet MG, Anderson CL, Day K, McMillan T, Alfonzo M. "Evaluation of the California safe routes to school legislation: Urban form changes and children's active transportation to school." *American Journal of Preventive Medicine* 28(2S2) (2005), pp. 134-140.
- AJPM, 2007 Martin SL, Lee SM, Lowry R. "National prevalence and correlates of walking and bicycling to school." *American Journal of Preventive Medicine* 33(2) (2007), pp. 98-105.
- ALR, 2007 Active Living Research. *Active Education: Physical Education, Physical Activity and Academic Performance*, 2007.
- BMJ, 2005 Alexander LM et al., "The broader impact of walking to school among adolescents: seven day accelerometry based study." *BMJonline*, 17 August 2005.
- CC, 2004 Mensah GA, et al. "Obesity, metabolic syndrome and type 2 diabetes: Emerging epidemics and their cardiovascular implications." *Cardiology Clinics* 22(4) (Nov 2004), pp. 485-504.
- CDC, 1997 *Morbidity and Mortality Weekly Report*, Mar. 7, 1997 ("Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People").
- CDC, 2003 *Morbidity and Mortality Weekly Report*, Sept. 22, 2003.
- CDC, 2005 *Morbidity and Mortality Weekly Report*, Sept. 30, 2005.
- EPA, 2003 *Travel and Environmental Implications of School Siting*, October 2003.
- FHWA, 2001 Federal Highway Administration, 2001 National Household Travel Survey.
- MCDPW, 2005 Marin County Department of Public Works. *Safe Routes to Schools Program Evaluation, 2004-2005*.
- NCES National Center for Education Statistics (<http://nces.ed.gov/>)
- NHTSA National Highway Traffic Safety Administration (www.nhtsa.dot.gov).
- NMDOH, 2005 *New Mexico Youth Risk and Resiliency Survey*, 2005.
- NMDOH, 2006 *The New Mexico Plan to Promote Healthier Weight, 2006-2015*
- TFAH, 2007 Trust for America's Health, *F as in Fat 2007*.
- Safe Kids USA Safe Kids USA (www.usa.safekids.org).
- STN School Transportation News (www.stnonline.com).
- Troel, 2006 Troel, A. "Safe Routes give healthy cycling children." *Cykelby* (www.cykelby.dk/eng_safe%20routes.asp), 2006.

Appendix L Transportation Planning Contacts in New Mexico

Metropolitan Planning Organizations

Farmington MPO – (505) 599-1466

Las Cruces MPO – (575) 528-3022

Mid-Region MPO (Albuquerque area) – (505) 247-1750

Santa Fe MPO – (505) 955-6614

El Paso MPO – (915) 591-9735

Regional Planning Organizations

Mid-Region RPO – (505) 247-1750

Northeast RPO:

- Guadalupe, Harding, Quay & Union Counties (Eastern Plains COG) – (575) 762-7714
- Colfax, Mora and San Miguel Counties (North Central NM EDD) – (505) 827-7313

Northern Pueblos RPO – (505) 827-7414

Northwest RPO – (505) 722-4327

South Central RPO – (575) 744-0039

Southeast RPO:

- Chaves, Eddy, Otero, Lincoln & Lea Counties (Southeast NM EDD) – (575) 624-6131
- Curry, De Baca, and Roosevelt Counties (Eastern Plains COG) – (575) 762-7714

Southwest RPO – (575) 388-1509

New Mexico Department of Transportation District Offices

NMDOT District 1 (Deming) – (575) 544-6530

NMDOT District 2 (Roswell) – (575) 637-7201

NMDOT District 3 (Albuquerque) – (505) 841-2700

NMDOT District 4 (Las Vegas) – (505) 454-3600

NMDOT District 5 (Santa Fe) – (505) 476-4200

NMDOT District 6 (Milan/Grants) – (505) 285-3206

Appendix M Action Plan Development Checklist

Page no.	Step in Action Plan	NM SRTS Phase 2 Eligibility Requirement	Completed
11	Form a SRTS Team	X	
12	◆ Identify team members	X	
12	◆ Identify a champion		
14	◆ Hold a kick-off meeting	X	
19	Gather Information	X	
19	◆ Enrollment data	X	
19	◆ School transportation policies	X	
20	◆ Input from teachers, students, community	X	
21	◆ Conduct and summarize Parent Surveys	X	
21	◆ Conduct and summarize Student Tallies	X	
23	◆ Improvements planned on nearby streets	X	
23	◆ Motor vehicle traffic counts at key locations		
25	◆ Driver speeds		
25	◆ Crash data		
25	Prepare Base Maps	X	
25	◆ Produce aerial or other map of neighborhood with: Street names Circle showing two mile radius around school Walking and attendance boundaries Sidewalk and/or path locations visible or added by hand Marked crosswalks visible or added by hand On-street bike lanes visible or added by hand Traffic calming features visible or added by hand	X	
25	◆ Produce larger-scale map of school property showing the above plus: Bus and parent drop-off / pick-up zones Parking areas Bike rack locations	X	
26	Assess Walking and Bicycling Conditions	X	
26	◆ Assess school site and adjacent intersections	X	
27	◆ Observe student arrival and departure	X	
27	◆ Assess neighborhood	X	
26-28	◆ Update base map by adding assessment information, including: Road configuration (two-lane, four-lane, medians, etc.) Traffic controls: STOP signs, traffic signals, etc. Posted speed limits Crossing guard locations School zone sign type and location	X	
29	Review and Organize Data	X	
29	◆ Transfer site-specific issues onto base maps		
30	◆ Develop goals and strategies	X	
37	◆ Prioritize strategies	X	
37	◆ Assign tasks and schedule due dates	X	
40	◆ Identify potential funding sources	X	
43	◆ Develop plan to evaluate success after strategies begin	X	
45	◆ Write plan	X	
38-39	◆ Develop Walk and Bike to School Maps <i>(if safe routes exist)</i>	X	



New Mexico Safe Routes to School Program

New Mexico Department of Transportation
Transportation Programs Division

PO Box 1149

Santa Fe, NM 87504-1149

tel. (505) 476-2155

www.nmsaferoutes.com
